FINAL AGENDA

REGULAR COUNCIL MEETING
TUESDAY
JUNE 4, 2013

COUNCIL CHAMBERS
211 WEST ASPEN AVENUE
4:00 P.M. AND 6:00 P.M.

4:00 P.M. MEETING

Individual Items on the 4:00 p.m. meeting agenda may be postponed to the 6:00 p.m. meeting.

1. CALL TO ORDER

NOTICE OF OPTION TO RECESS INTO EXECUTIVE SESSION

Pursuant to A.R.S. §38-431.02, notice is hereby given to the members of the City Council and to the general public that, at this regular meeting, the City Council may vote to go into executive session, which will not be open to the public, for legal advice and discussion with the City's attorneys for legal advice on any item listed on the following agenda, pursuant to A.R.S. §38-431.03(A)(3).

2. ROLL CALL

NOTE: One or more Councilmembers may be in attendance telephonically or by other technological means.

MAYOR NABOURS
VICE MAYOR EVANS
COUNCILMEMBER BAROTZ
COUNCILMEMBER BREWSTER
COUNCILMEMBER ORAVITS
COUNCILMEMBER OVERTON
COUNCILMEMBER WOODSON

3. PLEDGE OF ALLEGIANCE AND MISSION STATEMENT

MISSION STATEMENT

The mission of the City of Flagstaff is to protect and enhance the quality of life of its citizens.

4. APPROVAL OF MINUTES FROM PREVIOUS MEETINGS

A. Consideration and approval of minutes: Flagstaff City Council Special Work Session of May 20, 2013; Regular Meeting of May 21, 2013; Special Meeting of May 28, 2013 (Executive Session); and Work Session of May 28, 2013.

RECOMMENDED ACTION:

Approve/amend the minutes of the Flagstaff City Council Special Work Session of May 20, 2013; Regular Meeting of May 21, 2013; Special Meeting of May 28, 2013 (Executive Session); and Work Session of May 28, 2013.

5. PUBLIC PARTICIPATION

Public Participation enables the public to address the Council about an item that is not on the agenda (or is listed under Possible Future Agenda Items). Comments relating to items that are on the agenda will be taken at the time that the item is discussed. If you wish to address the Council at tonight's meeting, please complete a comment card and submit it to the recording clerk as soon as possible. Your name will be called when it is your turn to speak. You may address the Council up to three times throughout the meeting, including comments made during Public Participation. Please limit your remarks to three minutes per item to allow everyone an opportunity to speak. At the discretion of the Chair, ten or more persons present at the meeting and wishing to speak may appoint a representative who may have no more than fifteen minutes to speak.

6. PROCLAMATIONS AND RECOGNITIONS

None

7. APPOINTMENTS

Pursuant to A.R.S. §38-431.02, notice is hereby given to the members of the City Council and to the general public that the City Council may vote to go into executive session, which will not be open to the public, for the purpose of discussing or considering employment, assignment, appointment, promotion, demotion, dismissal, salaries, disciplining or resignation of a public officer, appointee, or employee of any public body...., pursuant to A.R.S. §38-431.03(A)(1).

None

8. LIQUOR LICENSE PUBLIC HEARINGS

A. Consideration and Action on Liquor License Application: Andrea Lewkowitz, “The McMillan", 2 W. Route 66, Series 06 (bar- all spirituous liquor), Person and Location Transfer.

RECOMMENDED ACTION:

Open the public hearing.
Receive citizen input.
Close the public hearing.

The City Council has the option to:
1) Forward the application to the State with a recommendation for approval;
2) Forward the application to the State with no recommendation; or
3) Forward the application to the State with a recommendation for denial based on the testimony received at the public hearing and/or other factors.

B. Consideration and Action on Liquor License Application: Dorian Lenz, "Cheba Hut", 1411 S. Milton Rd., Series 12 (restaurant), New License.

RECOMMENDED ACTION:

Open the public hearing.
Receive citizen input.
Close the public hearing.

The City Council has the option to:
1) Forward the application to the State with a recommendation for approval;
2) Forward the application to the State with no recommendation; or
3) Forward the application to the State with a recommendation for denial based on the testimony received at the public hearing and/or other factors.

C. **Consideration and Action on Liquor License Application:** Navayogasingam Thuraisingam, "Modern Grove", 1020 S. Milton Rd., Suite 102, Series 12 (restaurant), New License.

RECOMMENDED ACTION:

Open the public hearing.
Receive citizen input.
Close the public hearing.

The City Council has the option to:
1) Forward the application to the State with a recommendation for approval;
2) Forward the application to the State with no recommendation; or
3) Forward the application to the State with a recommendation for denial based on the testimony received at the public hearing and/or other factors.

9. **CONSENT ITEMS**

All matters under Consent Agenda are considered by the City Council to be routine and will be enacted by one motion approving the recommendations listed on the agenda. Unless otherwise indicated , expenditures approved by Council are budgeted items.

A. **Consideration and Approval of Contracts**: Custodial Services Contracts.

RECOMMENDED ACTION:

1) Acceptance of the proposals (listed below) for custodial services under RFP No. 2013-23.
- Accurate Building Maintenance, LLC [seven (7) facilities]
- Carnation Building Service, Inc. [eight (8) facilities]
- Twilight Janitorial Service, Inc. [four (4) facilities]

2) Provide the Purchasing Director the authority to add or delete facilities as necessary during the term of the agreement.

B. **Consideration and Approval to enter into a property management agreement for the Lease of City-Owned Property:** Located at 311 W. Cherry Avenue.

RECOMMENDED ACTION:

Authorize staff to enter into an Agreement with Core Realty for property management and leasing services of a City-owned property located at 311 W. Cherry, Flagstaff, Arizona.

C. **Consideration and Approval of a Contract:** Pre-Hospital Care Emergency Service Agreement with Flagstaff Medical Center.

RECOMMENDED ACTION:

Consider an Agreement with Flagstaff Medical Center in the amount of $6,500 for Medical Direction of Flagstaff Fire Department Paramedics and Advance Life Support drug box rental.

D. **Consideration and Approval of Construction Manager at Risk Contract:** Westplex Taxi Lanes Reconstruction Project at Pulliam Airport.

RECOMMENDED ACTION:

1) Approve the Construction Manager at Risk Contract with J. Banicki Construction, Inc. in an amount not to exceed $4,556,796.16 for Guaranteed Maximum Price (GMP) # 1, contingent upon receipt of the grants from the Federal Aviation Administration and ADOT Multi-Modal and subsequently a grant offer which will be on a future agenda.
2) Authorize Change Order Authority of 5% in the amount of $ 227,839.81 to cover potential costs associated with unanticipated or additional items of work.
3) Authorize the City Manager to execute the necessary documents contingent upon receipt of the above-mentioned grants.

E. **Consideration and Approval of Construction Contract:** La Plaza Vieja 2010 Bond Project.

RECOMMENDED ACTION:

1) Award the construction contract to LP's Excavating, Inc. of Williams, Arizona in the total award amount of $1,741,893.15, which includes $80,000.00 in contract allowance. The contract period is 150 calendar days; and
2) Authorize Change Order Authority to the City Manager in the amount of $166,000.00 (10% of the bid contract amount, less contract allowance) for unanticipated additional costs; and
3) Authorize the City Manager to execute the necessary documents.

F. **Consideration and Approval of Consulting Contract:** Red Gap Ranch Water Resources Environmental Assessment.

RECOMMENDED ACTION:

Approve a Contract with Southwest Ground-water Consultants, Inc. to provide professional consulting services for a not-to-exceed amount of $276,210.

G. **Consideration of Construction Manager at Risk Contract:** Street Maintenance Program 2013: Cedar Avenue 2010 Bond Improvements.

RECOMMENDED ACTION:

1) Award Guaranteed Maximum Price Contract #4 (GMP #4) to the Construction Manager at Risk (CMAR) Contract with C and E Paving and Grading, LLC in an amount of $941,672.30. The contract period is 60 calendar days; and
2) Authorize the City Manager to execute the necessary documents.

H. **Consideration and Approval of Grant Agreements:** Arizona Deparartment of Homeland Security Subgrantee Agreements for the FFY 2010 and FFY 2011 Homeland Security Grant Program.

RECOMMENDED ACTION:

Approve the FFY 2011 and FFY 2010 Reallocation Subgrantee Agreement(s) with the AZ Department of Homeland Security (AZDOHS) for grant funds for the Fire Department **Special Operations Team Personal Protective Gear** in the amount of **$5,824**, and for the Police Department **Portable Radios** in the amount of **$10,978.81**, and Gas Masks and Replacement Filters in the amount of **$5,464.54**.

10. ROUTINE ITEMS

A. **Consideration of Marketing, RFP and Potential Sale of City-owned Property:** Fire Station No. 7 (west of Milton, south of Butler) APN's 103-06-019, 103-06-017A, 103-06-018A, 103-06-003B consisting of a total of 1.52 acres.

RECOMMENDED ACTION:

Authorize the City Manager and designated staff to market, issue a RFP and to accept proposals for purchase of Fire Station No. 7, located within the City limits.

B. **Consideration of a Resolution No. 2013-06:** Abandoning a portion of a public ingress and egress easement located at Pulliam Airport Airpark, a part of Track 5B near Shamrell Blvd.

RECOMMENDED ACTION:

1) Read Resolution No. 2013-06 by title only
2) City Clerk reads Resolution No. 2013-06 (if approved above)
3) Adopt Resolution No. 2013-06

C. **Consideration and Adoption of Resolution No. 2013-15:** A resolution of the City Council of the City of Flagstaff repealing Resolution No. 2013-02 adopted March 5, 2013, designating the "2013 City of Flagstaff Parks and Recreation Organizational Master Plan" as a Public Record and adopting the 2013 City of Flagstaff Parks and Recreation Organizational Master Plan.

RECOMMENDED ACTION:

1) Read Resolution No. 2013-15 by title only
2) City Clerk reads Resolution No. 2013-15 by title only (if approved above)
3) Adopt Resolution No. 2013-15

RECESS

6:00 P.M. MEETING

RECONVENE

NOTICE OF OPTION TO RECESS INTO EXECUTIVE SESSION

Pursuant to A.R.S. §38-431.02, notice is hereby given to the members of the City Council and to the general public that, at this regular meeting, the City Council may vote to go into executive session, which will not be open to the public, for legal advice and discussion with the City's attorneys for legal advice on any item listed on the following agenda, pursuant to A.R.S. §38-431.03(A)(3).

11. ROLL CALL

NOTE: One or more Councilmembers may be in attendance telephonically or by other technological means.

MAYOR NABOURS
VICE MAYOR EVANS
COUNCILMEMBER BAROTZ
COUNCILMEMBER BREWSTER
COUNCILMEMBER ORAVITS
COUNCILMEMBER OVERTON
COUNCILMEMBER WOODSON

12. CARRY OVER ITEMS FROM THE 4:00 P.M. AGENDA

13. PUBLIC HEARING ITEMS

None

14. REGULAR AGENDA

A. Consideration and Possible Adoption of Resolution No. 2013-12: Arizona State Parks FY 2013 Growing Smarter Grant Application.

RECOMMENDED ACTION:

1) Read Resolution No. 2013-12 by title only
2) City Clerk reads Resolution No. 2013-12 by title only (if approved above)
3) Adopt Resolution No. 2013-12

B. Consideration and Approval/Denial of Real Estate Purchase and Sale Agreement: Approve the Real Estate Purchase and Sale Agreement between the City of Flagstaff and Evergreen Devco, Inc. for the sale of approximately 33.5 acres of property consisting of three (3) parcels located at the southeast and southwest corners of the intersection of Fourth Street and Route 66, and the northwest corner of Fourth Street and Huntington Drive adjacent to the Fourth Street overpass.

RECOMMENDED ACTION:

Approve/deny the Real Estate Purchase and Sale Agreement between the City of Flagstaff and Evergreen Devco, Inc.; and, authorize the City Manager to execute all necessary documents to fulfill the intent of this Purchase and Sale Agreement.

C. Consideration and Adoption of Resolution No. 2013-13: A resolution of the Council of the City of Flagstaff, Arizona adopting the tentative estimates of the amounts required for the public expense for the City of Flagstaff for Fiscal Year 2013-2014; adopting a Tentative Budget; setting for the receipts and expenditures; the amount proposed to be raised by direct property taxation; giving notice of the time for hearing taxpayers, for adopting of Budget and for fixing the tax levies.

RECOMMENDED ACTION:

1) Read Resolution No. 2013-13 by title only
2) City Clerk reads Resolution No. 2013-13 by title only (if approved above)
3) Adopt Resolution No. 2013-13

D. Consideration and Adoption of Ordinance No. 2013-12: An ordinance of the City Council of the City of Flagstaff, Arizona, adopting the "2012 International Family of Codes, and the 2013 Amendments to City Code, Title 4, Building Regulations, and the ICC A117.1 Accessible and Usable Buildings and Facilities Standard, 2009 Edition" by reference and fixing the effective date thereof; repealing all sections of said code in conflict with this ordinance; preserving rights and duties that have already matured and proceedings that have already begun thereunder and providing penalties for the violation thereof.

RECOMMENDED ACTION:

1) Read Ordinance No. 2013-12 by title only for the first time.
2) City Clerk reads Ordinance No. 2013-12 by title only (if approved above).

E. **Consideration and Approval of Consulting Agreement**: With True Life Companies (TLC) D.B.A. Pine Canyon regarding change to zoning condition and disposition of fees.

RECOMMENDED ACTION:

Approve the Agreement between TLC PC Infrastructure, LLC and the City of Flagstaff, AZ and authorize the City Manager to sign the Agreement and any other necessary and appropriate documents; and authorize staff to take other actions as needed to further the Council direction.

F. **Consideration of Changing August City Council Meeting Date**: Tuesday, August 27, 2013, to Monday, August 26, 2013.

RECOMMENDED ACTION:

Authorize staff to move the August 27, 2013, Council Meeting to August 26, 2013.

15. DISCUSSION ITEMS

None

16. POSSIBLE FUTURE AGENDA ITEMS

Verbal comments from the public on any item under this section must be given during Public Participation (#5) near the beginning of the meeting. Written comments may be submitted to the City Clerk. After discussion and upon agreement of three members of the Council, an item will be moved to a regularly-scheduled Council meeting.

None

17. PUBLIC PARTICIPATION

18. INFORMATIONAL ITEMS AND REPORTS FROM COUNCIL AND STAFF, REQUESTS FOR FUTURE AGENDA ITEMS

19. ADJOURNMENT

CERTIFICATE OF POSTING OF NOTICE

The undersigned hereby certifies that a copy of the foregoing notice was duly posted at Flagstaff City Hall on _____ , at _____ a.m./p.m. in accordance with the statement filed by the City Council with the City Clerk.

Dated this _____ day of _____, 2013.

_____
Elizabeth A. Burke, MMC, City Clerk

4. A.

CITY OF FLAGSTAFF

STAFF SUMMARY REPORT

To:	The Honorable Mayor and Council
From:	Elizabeth A. Burke, City Clerk
Date:	05/29/2013
Meeting Date:	06/04/2013

TITLE

Consideration and approval of minutes: Flagstaff City Council Special Work Session of May 20, 2013; Regular Meeting of May 21, 2013; Special Meeting of May 28, 2013 (Executive Session); and Work Session of May 28, 2013.

RECOMMENDED ACTION:

Approve/amend the minutes of the Flagstaff City Council Special Work Session of May 20, 2013; Regular Meeting of May 21, 2013; Special Meeting of May 28, 2013 (Executive Session); and Work Session of May 28, 2013.

INFORMATION

Attached are copies of the minutes of the Flagstaff City Council Special Work Session of May 20, 2013; Regular Meeting of May 21, 2013; Special Meeting of May 28, 2013 (Executive Session); and Work Session of May 28, 2013 for amendment/approval.

Attachments: 05.20.2013.CCSWS.Minutes
05.21.2013.CCRM.Minutes
05.28.2013.CCSM.Minutes
05.28.2013.CCWS.Minutes

MINUTES

SPECIAL WORK SESSION
MONDAY, MAY 20, 2013
COUNCIL CHAMBERS
211 WEST ASPEN AVENUE
4:00 P.M.

1. Call to Order.

Mayor Nabours called the Flagstaff Special Work Session of May 20, 2013, to order at 4:02 p.m.

2. Roll Call

Councilmembers present:	**Councilmembers absent:**
MAYOR NABOURS	NONE
VICE MAYOR EVANS	
COUNCILMEMBER BAROTZ	
COUNCILMEMBER BREWSTER	
COUNCILMEMBER ORAVITS	
COUNCILMEMBER OVERTON	
COUNCILMEMBER WOODSON	

Others present: City Manager Kevin Burke; Interim City Attorney Michelle D'Andrea; Community Development Director Mark Landsiedel; Zoning Code Administrator Roger Eastman; Nat White, Flagstaff resident and former City councilor; Marilynn Weismann, Friends of Flagstaff's Future; Richard Bowen, ECONA; Julie Pastrick, Flagstaff Chamber of Commerce; Tad Riggs, Northern Arizona Builders Association and Northern Arizona Association of Realtors; David Carpenter, Chairman of Planning and Zoning Commission; Kent Hotsenspiller, Mogollon Engineering; Maury Herman, Flagstaff 40; Keri Sylvan, Attorney for Michael Manson.

3. Discussion/direction on the Zoning Map amendment (zone change) process, Division 10-20.50 of the Flagstaff Zoning Code.

Mayor Nabours explained that the last meeting concluded with the question of what degree of detail is acceptable to answer the certainty concern, at what time, and with what level of public input.

Zoning Code Administrator Roger Eastman presented a series of options that staff formulated for the group to review. The options could be combined to formulate a more acceptable solution. The options are as follows:

1) Do nothing
2) Redefine the requirements in the framework of what we do today.
3) Addition of new category for highly complex projects
4) Provide option of developer choice to go through expedited process or standard process based on level of detail provided.

5) Addition of an additional Planning and Zoning commission review after zone change.
6) Correctional zoning.

Nat White and Councilmember Barotz presented their idea of correctional zoning. The purpose of correctional zoning is to acknowledge that some properties are zoned wrong based on their location and neighboring parcels and offer a way to rezone quickly. The concept is an idea; staff would need to drill down the details on what the process would actually look like.

Mr. Eastman presented the idea of Concept Planning. With concept planning enough basic information would be necessary to assess impact without full blown design. At this stage the City can add conditions to the zoning to address any concerning impacts of extract possible uses not available. The City Council would have significant discretion at this stage. The burden is on the developer to offer as much detail as possible, the more the developer provides, the easier it is to get through the process but when there are a number of unknowns a concept plan may be all that is needed to move the process along.

There was concern expressed from the group about public participation and when that needs to occur. There has to be an appropriate balance for what the public needs to know and when. There is also concern about potentially lengthening the process with public participation; it has to be done is such a way that the discussion focuses on real concerns and not wished-for concerns.

A break was called from 5:47 p.m. to 5:55 p.m.

The following were the issues and concerns as defined by the group.

- Public Participation as part of zoning categories not just distance, also timing and how it is done.
- Can't go back if lessen restrictions, Prop 207 may not allow to reverse.
- No need for public input if no impact.
- Can require additional public input as a condition of rezoning.
    - After site plan approved by staff
    - Not hearing but informative public meeting
- Concept zoning plan may be too broad and untested.
- More definition to as needed
- Higher quality public participation.

At this time Mayor Nabours opened the floor for public participation.

Paul Moore, architect and Planning and Zoning member, addressed the group suggesting that it makes sense to think about doing work associated with the level to where the project is. Developers need to commit to an idea but not at the level of detail currently required. It is important to give the public a chance to see what is coming at a point that is appropriate.

Georgia Duncan, member of Friends of Flagstaff's Future and former Planning and Zoning Commission member, addressed the group offering that citizen participation is highly important.

David Monihan addressed the group and offered that he is attracted to the concept of correctional rezoning. Public input is necessary but should be done in a way that they understand.

After further discussion the group came to a consensus to direct staff to start looking at Option #4 with it stated that the City Council can require additional public meetings if Council names that as a condition. Additionally, look at Option #6 to see if it is even practical and how they might incorporate it into #4.

- Option 4 with 6 and public participation condition.
    - A factor to consider
    - Legal definition – keep it legal
    - Consistent with regional plan
    - Surrounded (define) by other use
    - Special consideration or problem
        - No use/user defined
    - Determine how correctional zoning could work
    - Master Plan/Highly Complex

The group also asked staff to compare Option 4 with the current process to see how it differs.

6. Adjournment

The Flagstaff City Council Special Work Session of May 20, 2013, adjourned at 6:48 p.m.

_____
MAYOR

ATTEST:

_____
CITY CLERK

MINUTES

REGULAR COUNCIL MEETING
TUESDAY, MAY 21, 2013
COUNCIL CHAMBERS
211 WEST ASPEN AVENUE
4:00 P.M. AND 6:00 P.M.

1. CALL TO ORDER

Mayor Nabours called the meeting to order at 4:03 p.m.

NOTICE OF OPTION TO RECESS INTO EXECUTIVE SESSION

Pursuant to A.R.S. §38-431.02, notice is hereby given to the members of the City Council and to the general public that, at this regular meeting, the City Council may vote to go into executive session, which will not be open to the public, for legal advice and discussion with the City's attorneys for legal advice on any item listed on the following agenda, pursuant to A.R.S. §38-431.03(A)(3).

2. ROLL CALL

Present:

MAYOR NABOURS
VICE MAYOR EVANS
COUNCILMEMBER BAROTZ
COUNCILMEMBER BREWSTER
COUNCILMEMBER ORAVITS
COUNCILMEMBER OVERTON
COUNCILMEMBER WOODSON

Others present: City Manager Kevin Burke; Interim City Attorney Michelle D'Andrea.

3. PLEDGE OF ALLEGIANCE AND MISSION STATEMENT

MISSION STATEMENT

The mission of the City of Flagstaff is to protect and enhance the quality of life of its citizens.

4. APPROVAL OF MINUTES FROM PREVIOUS MEETINGS

A. **Consideration and Approval of Minutes**: City Council Regular Meeting of May 7, 2013, and Work Session of May 14, 2013.

Councilmember Oravits moved to approve [the minutes of the City Council Regular Meeting of May 7, 2013, and Work Session of May 14, 2013] as presented; seconded; passed unanimously.

5. PUBLIC PARTICIPATION

Public Participation enables the public to address the Council about an item that is not on the agenda. Comments relating to items that are on the agenda will be taken at the time that the item is discussed. If you wish to address the Council at tonight's meeting, please complete a comment card and submit it to the recording clerk as soon as possible. Your name will be called when it is your turn to speak. You may address the Council up to three times throughout the meeting, including comments made during Public Participation. Please limit your remarks to three minutes per item to allow everyone an opportunity to speak. At the discretion of the Chair, ten or more persons present at the meeting and wishing to speak may appoint a representative who may have no more than fifteen minutes to speak.

Ann Doyle, Heritage Program Manager for the Museum of Northern Arizona, gave an update on current activities.

Mayor Nabours asked Utilities Director Brad Hill to come forward and said he was happy to read in his water bill this month that there were no violations of the Safe Drinking Water Act re potable water in 2012. Additionally, Councilmembers also congratulated Mr. Hill (on his recent appointment as the permanent Utilities Director for the City).

6. PROCLAMATIONS AND RECOGNITIONS

Week of May 19, 2013, as ***National Public Works Appreciation Week*** (to be read at the Public Works Equipment Show being held in the Wheeler Park Parking Lot between the 4:00 p.m. and 6:00 p.m. portions of the meeting)

This proclamation was read between the 4:00 p.m. and 6:00 p.m. portions of the Council Meeting in the Wheeler Park parking lot, with all Councilmembers present.

7. APPOINTMENTS

Pursuant to A.R.S. §38-431.02, notice is hereby given to the members of the City Council and to the general public that the City Council may vote to go into executive session, which will not be open to the public, for the purpose of discussing or considering employment, assignment, appointment, promotion, demotion, dismissal, salaries, disciplining or resignation of a public officer, appointee, or employee of any public body...., pursuant to A.R.S. §38-431.03(A)(1).

None

8. LIQUOR LICENSE PUBLIC HEARINGS

None

9. CONSENT ITEMS

*All matters under **Consent Agenda** are considered by the City Council to be routine and will be enacted by one motion approving the recommendations listed on the agenda. Unless otherwise indicated, expenditures approved by Council are budgeted items.*

Mayor Nabours reported that Item 9-A had been withdrawn from the agenda by staff.

A. **Consideration of Construction Manager at Risk Contract:** Street Maintenance Program 2013: Cedar Avenue 2010 Bond Improvements.

Removed from the agenda.

B. **Consideration of Approval of the Intergovernmental Agreement:** between the Governing Board of the Coconino County Community College District and City of Flagstaff for the East Flagstaff Community Library building rental agreement renewal.

Library Director Heidi Holland said that the amounts changed just slightly each year. She said that this was a nice collaboration and partnership with the Community College.

Councilmember Brewster moved to approve the Intergovernmental Agreement between the Governing Board of the Coconino County Community College District and City of Flagstaff for the East Flagstaff Community Library building rental agreement renewal; seconded; passed unanimously.

10. **ROUTINE ITEMS**

A. **Consideration and Adoption of Ordinance No. 2013-10:** An ordinance of the City Council of the City of Flagstaff approving the form and authorizing the execution and delivery of an Equipment Lease/Purchase Agreement for Renewable Energy Equipment; delegating authority to the Management Services Director of the City to determine certain matters and terms with respect to the foregoing; authorizing the taking of all other actions necessary to the consummation of the transactions contemplated by this ordinance; and authorizing clerical corrections.

Management Services Director Barbara Goodrich reviewed both items 10-A and 10-B as they both addressed the same project. She said that Item 10-A was changed from before to reflect a 2.88% interest rate, but that allowed them to extend the closing by 30 days, which over the period of the financing amounted to roughly $5,000.

She continued, stating that item 10-B was a reimbursement resolution which allowed the City to continue on with construction and close on their financing in mid June, and then reimburse themselves for any expenses incurred over the next 30 days.

Mayor Nabours said that he read in the Arizona Republic an article about a tariff that APS charges. He had asked Mr. Burke to look into that further and he asked staff to report on it.

Sustainability Manager Nicole Woodman explained that there was a Renewable Energy Adjustment tariff, and the City's is $142/month per meter, which amounts to about $5,000 annually, less than 1% of the City's cost of energy.

She said that with the particular case mentioned in that article, the system was a different dynamic than the City's system. She said that the City is capped at that $142/month for Calendar Year 2013. The 2014 tariffs have not yet been approved by the Arizona Corporation Commission, but as soon as they are staff will look at them, which they do every year. She confirmed that staff did take that into account with this project and it is reflected in the pro forma.

Ms. Woodman added, with regard to net metering, that the City's systems at Wildcat and elsewhere will not exceed the City's use, so they are very much buffered from that issue.

Councilmember Woodson moved to read Ordinance No. 2013-10 by title only for the final time; seconded; passed 6-1 with Councilmember Oravits casting the dissenting vote.

An ordinance of the City Council of the City of Flagstaff approving the form and authorizing the execution and delivery of an Equipment Lease/Purchase Agreement for Renewable Energy Equipment; delegating authority to the Management Services Director of the City to determine certain matters and terms with respect to the foregoing; authorizing the taking of all other actions necessary to the consummation of the transactions contemplated by this ordinance; and authorizing clerical corrections.

Councilmember Woodson moved to adopt Ordinance No. 2013-10; seconded; passed 6-1 with Councilmember Oravits casting the dissenting vote.

B. **Consideration and Adoption of Resolution No. 2013-11:** A resolution of the Mayor and Council of the City of Flagstaff, Arizona, declaring, for purposes of section 1.150.2 of the Federal Treasury Regulations, official intent to be reimbursed in connection with certain capital expenditures relating to the installation of three solar photo-voltaic systems.

Councilmember Woodson moved to read Resolution No. 2013-11 by title only; seconded; passed 6-1 with Councilmember Oravits casting the dissenting vote.

. *A resolution of the Mayor and Council of the City of Flagstaff, Arizona, declaring, for purposes of section 1.150.2 of the Federal Treasury Regulations, official intent to be reimbursed in connection with certain capital expenditures relating to the installation of three solar photo-voltaic systems.*

Councilmember Woodson moved to adopt Resolution No. 2013-11; seconded; passed 6-1 with Councilmember Oravits casting the dissenting vote.

C. **Consideration and Approval of Intergovernmental Agreement Amendment:** Amendment Two to the Intergovernmental Agreement (IGA)/Joint Project Agreement (JPA) 11-097I between the City of Flagstaff (City) and the Arizona Department of Transportation (ADOT) for the FY2013 Highway Safety Improvement Program (HSIP), Beulah Bike Lanes.

Councilmember Overton moved to approve [the IGA/JPA Amendment Two which will obligate additional FY2013 HSIP funding for design work for Beulah Bike Lanes in the amount of $45,000]; seconded; passed unanimously.

RECESS

At this time (4:22 p.m.) the Flagstaff City Council moved their meeting to the Wheeler Park Parking Lot for reading of the proclamation. The meeting recessed at 4:45 p.m.

6:00 P.M. MEETING

RECONVENE

Mayor Nabours reconvened the Meeting of May 21, 2013, at 6:03 p.m.

NOTICE OF OPTION TO RECESS INTO EXECUTIVE SESSION

Pursuant to A.R.S. §38-431.02, notice is hereby given to the members of the City Council and to the general public that, at this regular meeting, the City Council may vote to go into executive session, which will not be open to the public, for legal advice and discussion with the City's attorneys for legal advice on any item listed on the following agenda, pursuant to A.R.S. §38-431.03(A)(3).

11. ROLL CALL

NOTE: One or more Councilmembers may be in attendance telephonically or by other technological means.

Present:

MAYOR NABOURS
VICE MAYOR EVANS
COUNCILMEMBER BAROTZ
COUNCILMEMBER BREWSTER
COUNCILMEMBER ORAVITS
COUNCILMEMBER OVERTON
COUNCILMEMBER WOODSON

Others present: City Manager Kevin Burke and Interim City Attorney Michelle D'Andrea.

12. CARRY OVER ITEMS FROM THE 4:00 P.M. AGENDA

None

13. **PUBLIC HEARING ITEMS**

None

14. **REGULAR AGENDA**

A. **Presentation:** Northern Arizona Center for Entrepreneurship and Technology (NACET) periodic update.

Business Retention/Expansion Manager John Saltonstall introduced two representatives from NACET, Russ Yelton and Annette Zinky.

Ms. Zinky gave a PowerPoint presentation which addressed:

- NEW CLIENTS – 100% OCCUPIED
- HYPO2
  - Local Alternative
  - Electric Torque Machines
  - Localeikki
  - DBI, LLC
  - Comfort
  - Roots Composting Cooperative
  - My Barber

- PRE-INCUBATION
- PRE-REVENUE
- EARLY REVENUE
- SUSTAINABLE
- GRADUATION
- CLIENT NEWS
  - Hermes Commerce
  - ATC Materials
  - PathoGene
  - StatPhone.com
  - Localeikki

Ms. Zinky then introduced the following clients who gave a brief presentation regarding their companies:

- ROOFBRAIN
  - Merk (Jeanine) Perelstein
- CORE LAB EXPANSION
- STEM DAY AT NACET
- NACET CONNECTIONS IN THE CLASSROOM
  - Casey Hines, Northland Prep, re STEM Integration
- STEM CITY CENTER
- YOUNG ENTREPRENEURIAL SCHOLARS (YES) WEEK
- LAUNCHBOX UPDATE (Student Incubation process at NAU)
  - Snag-A-Note
  - Comfort Purse

Roots Composting Coop
My Barber

- EXTREME TOUR AND STARTUP WEEKEND
- COMFORT PILLOW, LLC
  Kristy Able
- MERCHANDISING RPODUCT PLAN
- MARKET ANALYSIS SUMMARY
- NACET
- BUSINESS PLAN COMPETITION
- GRAND CANYON TRUST – NATIVE AMERICAN INCUBATOR NETWORK
  Tony Skrelunas and Natasha Johnson
- MULTIPLE AWARDS AND RECOGNITIONS
- AZ BUSINESS INCUBATION ASSOCIATION

B. **Consideration and Approval of Amendments:** Flagstaff City Council Rules of Procedure.

Ms. Burke reviewed the changes that had been discussed by the Council during their recent Budget Retreat. After some discussion it was agreed that on page 4, under 4.01, second paragraph, the wording under the public participation section would read:

2*) written comment cards submitted to the City Clerk. After discussion and upon agreement of three members of the Council, the item will be moved to a regularly-scheduled Council meeting.*

Mayor Nabours moved to approve the proposed changes to Rules 4.01, 5.01, 10.9, 11.01, and 11.05 as amended; seconded; passed unanimously.

C. **Consideration and Adoption of Resolution No. 2013-10:** A resolution of the City Council of the City of Flagstaff, Arizona, declaring as a public record that certain documents filed with the City Clerk entitled the "2012 International Family of Codes, and the 2013 Amendments to City Code, Title 4, Building Regulations, and the ICC A117.1 Accessible and Usable Buildings and Facilities Standard, 2009 Edition" which includes the International Building Code 2012 Edition; International Residential Code, 2012 Edition; International Plumbing Code, 2012 Edition; International Mechanical Code, 2012 Edition; International Fuel Gas Code, 2012 Edition; International Existing Building Code, 2012 Edition; International Energy Code, 2012 Edition; ICC A117.1, Accessible and Usable Buildings and Facilities Standard, 2009 Edition; and providing for amendments, additions, and deletions thereto.

Mike Scheu, Building Official, gave a brief PowerPoint to address the following:

- BUILDING CODE HISTORY
- PROCESS
- CITY INSURANCE CLASSIFICATION RATING
- AMENDMENTS
- ENERGY CODE ALTERNATIVE

- OTHER ITEMS (to be addressed this fall)
  Unified Code for Abatement of Dangerous Buildings and Uniform Housing Self-Certification

Mayor Nabours clarified that the only action being taken this evening was adoption of the resolution making the Codes and proposed amendments a public record. The ordinance adopting these codes by reference would take place at a future meeting.

Mr. Scheu said that once this was adopted, he would have three sets available in the City Clerk's Office and Library.

Councilmember Overton apologized to missing the meeting last week. He said that he did go through the packet at length, primarily the Energy Code, and had some comments. He understands that what has been presented is a nationwide norm and as they do business they move toward best practices. He appreciated staff taking the time to meet with so many groups. He has always preferred having some amendments; it made sense for local regions to amend as needed. He was glad to see they had backed off of the blower door testing, but he still had concerns with regard to insulation.

Mr. Scheu said that the requirements for sprinkler systems in residential dwellings had already been removed. He said that the State has also made a requirement that single-family dwellings cannot require sprinkler systems.

Councilmembers asked to hear from those in the trades that were present. Councilmember Woodson noted that by taking the stand that the City would adopt updates every six years rather than three, they needed to recognize that those jumps will be greater than normal.

Mayor Nabours said that he assumed that NABA and the Chamber of Commerce would be appearing to say whether they like the proposed changes or wanted more amendments. Mr. Burke said that the first read of the ordinance and hearing would be held on June 4; additional work sessions could be scheduled if necessary. The second read and adoption could take place later in June, or on the 2nd or 16th of July.

Councilmember Oravits said that it was good they went the resolution route tonight. While most the amendments were best practices they needed to look further into the Energy Code. He said that he did not want to see the Council on the road of adopting things that were not even available for the public to view.

Mr. Scheu noted that he had also received a request for additional amendments to the 2012 Energy Code, as proposed by Capital Consulting, LLC on behalf of the Arizona Multi-housing Association, a copy of which had been placed on the dais. He added that staff supported that proposed amendment.

Jeff Knorr, Flagstaff resident, said that he would like to see good homes for a lot of people versus great homes for a few. Depending on how things were adopted,

these proposed changes could add another $7,000 to $10,000 to the cost of a home. He suggested that they let the market drive the issue—not legislation.

Mayor Nabours asked Mr. Knorr if his position was to keep the 2009 Energy Code. Mr. Knorr responded that he was for keeping the 2006 Code.

Councilmember Oravits said that he has seen numbers that the Energy Code alone will add to the cost of a home. He asked at what point they pass diminishing returns. Mr. Knorr said that he believed they had already passed that point, until the other industries catch up.

Councilmember Oravits asked Mr. Knorr if he could come to the meetings where they will be discussing these codes further and share information on the added expenses. Mr. Knorr said that he would do that, going back six years.

Further discussion was held on the HERS rating and insurance issues. Mr. Scheu said that the ISO rating was more interested in life-safety issues, the structural integrity and electrical. Councilmember Oravits asked if the ISO rating could get back to the Class 3 rating if they were to adopt all of the Code and amendments other than the Energy Code. Mr. Scheu said that based on the conversations he has had, he did not believe it would impact the ability to reach the Class 3 rating if they did not adopt the Energy Code.

Councilmember Overton cautioned the Council, noting that the House Bill on the floor would say the City has no right to do any amendments. Looking back to the arguments in 2008 they had the option to adopt the International Energy Code, but they made amendments. He was not happy with everything, but they came to agreement that was beneficial. Councilmember Oravits clarified that he was not endorsing the Legislature's model, he was suggesting that the City could adopt the HERS rating on their own.

Vice Mayor Evans said that there is a lot of talk about the adoption of the new Codes being related to the higher rates for homes. She asked if there was any type of study that shows a correlation between the two. She noted that there are other reasons, as well, for why housing was so expensive in Flagstaff.

Mayor Nabours moved to read Resolution No. 2013-10 by title only; seconded; passed unanimously.

A resolution of the City Council of the City of Flagstaff, Arizona, declaring as a public record that certain documents filed with the City Clerk entitled the "2012 International Family of Codes, and the 2013 Amendments to City Code, Title 4, Building Regulations, and the ICC A117.1 Accessible and Usable Buildings and Facilities Standard, 2009 Edition" which includes the International Building Code 2012 Edition; International Residential Code, 2012 Edition; International Plumbing Code, 2012 Edition; International Mechanical Code, 2012 Edition; International Fuel Gas Code, 2012 Edition; International Existing Building Code, 2012 Edition; International Energy Code, 2012 Edition; ICC A117.1, Accessible and Usable Buildings and Facilities Standard, 2009 Edition; and providing for amendments, additions, and deletions thereto.

Councilmember Woodson moved to adopt Resolution No. 2013-10; seconded; passed unanimously.

15. **DISCUSSION ITEMS**

None

16. **PUBLIC PARTICIPATION**

None

17. **INFORMATIONAL ITEMS AND REPORTS FROM COUNCIL AND STAFF, REQUESTS FOR FUTURE AGENDA ITEMS**

Councilmember Brewster reported that she had participated in AED use and instruction along with CPR training, and she also attended the Armed Force Parade with the Mayor, which had a good turnout. She said that she was involved with a group that would be touring NACET this week, and she reminded everyone of Goodwill's Grand Opening tomorrow.

Councilmember Barotz reported that NAIPTA just received notice that they were awarded a $755,000 grant from ADOT and they also won the State Award from Arizona Transit Authority for the 2013 Rural Transit System.

Mr. Burke reported that the Council should be receiving an abbreviated sheet that will show what is reported and when with regard to the ADEQ Consent Order.

Additionally, Mr. Burke noted that after the Summer Break, the Council would normally hold their August meeting on Tuesday, August 27; however, that is the same week of the League's Annual Conference so he will be bringing an item to the June 4, 2013, agenda suggesting that they schedule that meeting for Monday, August 26, 2013, for those that may be leaving on Tuesday to attend the conference.

18. **ADJOURNMENT**

The Regular Meeting of the Flagstaff City Council held May 21, 2013, adjourned at 7:35 p.m.

_____
MAYOR

ATTEST:

_____
CITY CLERK

CERTIFICATION

STATE OF ARIZONA)
ss.)
County of Coconino)

I, ELIZABETH A. BURKE, do hereby certify that I am the City Clerk of the City of Flagstaff, County of Coconino, State of Arizona, and that the above Minutes are a true and correct summary of the meeting of the Council of the City of Flagstaff held May 21, 2013. I further certify that the meeting was duly called and held and that a quorum was present.

Dated this 4th day of June, 2013.

_____
CITY CLERK

MINUTES OF THE SPECIAL MEETING (EXECUTIVE SESSION) OF THE FLAGSTAFF CITY COUNCIL HELD ON TUESDAY, MAY 28, 2013, IN THE STAFF CONFERENCE ROOM, SECOND FLOOR OF THE FLAGSTAFF CITY HALL, 211 WEST ASPEN, FLAGSTAFF, ARIZONA

1. Call to Order

Mayor Nabours called the meeting to order at 4:04 p.m.

2. Roll Call

Present:	Absent:
MAYOR NABOURS (left meeting during 4-A-i)	COUNCILMEMBER WOODSON
VICE MAYOR EVANS	
COUNCILMEMBER BAROTZ	
COUNCILMEMBER BREWSTER	
COUNCILMEMBER ORAVITS	
COUNCILMEMBER OVERTON	

Others present: City Manager Kevin Burke; Interim City Attorney Michelle D'Andrea.

3. Recess into Executive Session

Mayor Nabours moved to recess into Executive Session; seconded; passed unanimously. The Flagstaff City Council recessed into Executive Session at 4:04 p.m.

4. **EXECUTIVE SESSION:**

A. Discussion or consultation for legal advice with the attorney or attorneys of the public body, and discussions or consultations with designated representatives of the public body in order to consider its position and instruct its representatives regarding negotiations for the purchase, sale or lease of real property, pursuant to ARS §§38-431.03(A)(3) and (7), respectively.

i. 4 South San Francisco

Mayor Nabours left the meeting during discussion of this item due to a conflict of interest.

ii. Boys and Girls Club Lease

B. Discussion or consultation for legal advice with the attorney or attorneys of the public body, pursuant to ARS §38-431.03(A)(3).

i. Courthouse Facility

5. ADJOURNMENT

The Flagstaff City Council reconvened into Open Session at 5:13 p.m. at which time the Special Meeting of May 28, 2013, adjourned.

_____
MAYOR

ATTEST:

_____
CITY CLERK

MINUTES

WORK SESSION
TUESDAY, MAY 28, 2013
COUNCIL CHAMBERS
211 WEST ASPEN AVENUE
6:00 P.M.

1. Call to Order.

Mayor Nabours called the Work Session of May 28, 2013, to order at 6:12 p.m.

2. Pledge of Allegiance.

The City Council and audience recited the Pledge of Allegiance.

3. Roll Call

Councilmembers present:	**Councilmembers absent:**
MAYOR NABOURS	COUNCILMEMBER WOODSON
VICE MAYOR EVANS	
COUNCILMEMBER BAROTZ	
COUNCILMEMBER BREWSTER	
COUNCILMEMBER ORAVITS	
COUNCILMEMBER OVERTON	

Others present: City Manager Kevin Burke; Interim City Attorney Michelle D'Andrea

4. Public Participation (*Non-Agenda Items Only*):

*Public Participation enables the public to address the council about items that **are not** on the prepared agenda. Public Participation appears on the agenda twice, at the beginning and at the end of the work session. You may speak at one or the other, but not both. Anyone wishing to comment at the meeting is asked to fill out a speaker card and submit it to the recording clerk. When the item comes up on the agenda, your name will be called. You may address the Council up to three times throughout the meeting, including comments made during Public Participation. Please limit your remarks to three minutes per item to allow everyone to have an opportunity to speak. At the discretion of the Chair, ten or more persons present at the meeting and wishing to speak may appoint a representative who may have no more than fifteen minutes to speak.*

A. PICTURE CANYON UPDATES

Councilmember Barotz announced that the Picture Canyon Preservation project was awarded the 2013 Governor's Heritage Preservation Honor Award. As an award recipient the project is now eligible to receive the grand award. The grand award winner will be announced at an event on June 14th in Phoenix honoring all award recipients.

Councilmember Barotz invited Dr. Robert Bruenig, who wrote and submitted the nomination, to address the Council. Dr. Bruenig offered his congratulations to the Council. He said that making the case for the award was very easy because of the remarkable collaboration between the City of Flagstaff, Coconino County and the Picture Canyon working group; a great example of a public/private partnership and the City should be very proud.

Councilmember Brewster presented the Mayor with a Certificate of Appreciation to the City for its valuable contributions to the United Way.

Charlie Odegaard, resident, provided flyers and invited Council to attend a Democrats Against Agenda 21 lecture on June 5th at Cline Library.

5. <u>Preliminary Review of Draft Agenda for the June 4, 2013 City Council Meeting.</u> *

** Public comment on draft agenda items may be taken under "Review of Draft Agenda Items" later in the meeting, at the discretion of the Mayor. Citizens wishing to speak on agenda items not specifically called out by the City Council for discussion under the second Review section may submit a speaker card for their items of interest to the recording clerk.*

Mayor Nabours had questions on item 10A, the sale of the fire station, and asked about the plan for accepting bids. He asked if the bids would be sealed or open auction, if there would be a minimum bid and if there was an appraisal.

Jill Trompeter, Real Estate Manager, offered that there was an appraisal and the minimum bid would start there. Ms. Trompeter also stated that the response to the marketing will determine how the bid will be conducted; if there is a lot of response to the marketing it may be beneficial to hold an open auction.

Councilmember Barotz requested information on item 14D; it is requested that commentary be provided about the different options and alternative specifically, the cost implications of each option.

Mr. Burke stated that he needed clarification from Council on item 8B, liquor license for Cheba Hut.

Mr. Burke also informed Council that the Manager for Evergreen was present at the meeting, and if there were any questions about item 14B for the Manager to please address them tonight because the Manager would be unable to attend the meeting next week.

Mayor Nabours moved item 7 up in the agenda.

7. Discussion of Arizona Accord Resolution.

Vice Mayor Evans asked the City Council to support a resolution adopting elements of the Arizona Accord. Vice Mayor Evans and Councilmember Barotz worked together to draft two separate paragraphs that can be used for the resolution.

The following individuals addressed Council in favor of the resolution:

Roz Clark
Minesh Patel – representing the Flagstaff Lodging and Restaurant Association
Elizabeth Lavely
Lizzette Castruita

Councilmember Overton raised some concern about the language in the first paragraph of the Accord. Vice Mayor Evans responded that the resolution would not adopt the Accord, just the concepts so the language would not be included.

Mayor Nabours reminded Council about the letter that was sent to Senator McCain and Senator Flake from a number of local agencies offering support for the four legislative pillars and he was concerned that the City may be sending conflicting messages. Additionally, Mayor Nabours said that he does not presume to speak for the population of Flagstaff on state and political issues and, therefore, does not support resolutions such as this. As an alternative option individuals and groups can contact senators and express opinions.

Some members of the City Council expressed concern about supporting the five principles if they do not personally support some of them.

Vice Mayor Evans pointed out that the four pillars discussed in the letter almost directly align with the Arizona Accord.

Council discussed the possibility of incorporating the legislative pillars, other legislative actions, other ideas, thoughts and processes into the resolution so that it is not tied to a specific legislative action, essentially expanding the concept of immigration reform to fit Flagstaff's position.

Councilmember Barotz requested to work again with Vice Mayor Evans to draft a revision to incorporate some of the other ideas outside of just the Arizona Accord. This draft would be brought back as a draft resolution at a later meeting.

Mayor Nabours expressed concern with language in the Accord that directs local law enforcement and asked that it be considered when drafting the resolution. Additionally Councilmember Brewster asked that staff have input on the resolution as well.

6. Discussion of Recreation User Fees.

Brian Grube, Recreation Services Director, provided a PowerPoint presentation on Recreation Services Users and Program Fees.

Council discussed the issue of comparing useable field hours with Jay Lively useable hours; they are two completely different situations. The ballfields are used less frequently than Jay Lively and this skews the overall calculation of an hourly cost. It is difficult to compare a field that is available and not used to a facility that is available and used consistently.

Mr. Burke pointed out that the dilemma is to what degree these parks are available for the drop-by user. Fields are built with drop-by, non-organized play in mind as opposed to a facility that provides oversight entrance. The City spends $681,000 for the fields whether they are used or not, the City pays $500,000 to have Jay Lively open every day for 10 hours, the difference is that any variation to Jay Lively's cost or hours would have a significant effect on the hourly rate.

Council asked for Recreation to provide information about income; how much of the cost the City was recouping for Jay Lively and the fields.

Council discussed taking a different approach and look at what would be a reasonable fee for the participant and for the city, look at what other cities charge and come up with something that is reasonable to the user. Mr. Burke offered that this approach has been tried but the results were not satisfactory either.

Kevin Tye, resident, addressed Council about his concerns with equity. Mr. Tye is ok with the 17% increase now but asked Council to look at it from an equitable standpoint, 17% to a field user is completely different than 17% to a rink user, $2.75 increase vs. $40 increase.

Council consensus was to move forward with the 17% increase but they would like to have future discussion about cost recovery. The goal was to make sure that people from all income levels have the ability to participate.

Council requested more information on the dasher board advertising. Mr. Grube explained that recreation has been working on this and is close to having an RFP ready to put out.

A break was held from 7:56 pm to 8:07 pm.

8. Secondhand Pawn Ordinance Review.

Police Chief Kevin Treadway introduced Lieutenant Scott Mansfield and Detective Adrian Barreras. Detective Barreras provided a PowerPoint Presentation on the Pawn/Secondhand Program.

He said that when someone wants to pawn or sell an item he or she is required to provide identification and a fingerprint. The item is entered into the leads online database that the police department has the ability to search when looking for stolen property. The stores in town have been on board with the process and have open communication with the police department if they suspect things might be stolen.

Lieutenant Mansfield offered that this program has been a good tool in combating the property crimes in town. Chief Treadway added that in order to combat crime the police department has to partner with the community; this is a fine example of how they have partnered with the community to build positive relationships.

9. Review of Draft Agenda Items for the June 4, 2013 City Council Meeting.*

** Public comment on draft agenda items will be taken at this time, at the discretion of the Mayor.*

Mr. Burke informed Council that on item 8B, liquor license application for Cheba Hut, there is no manager listed on the application. Chief Treadway reported that the current manager is on his way out and the new manager has not been appointed. Sergeant Matt Wright contacted the state liquor board to check on how to best handle this; the state indicated that the business must provide a manager within 30 days. At this time the state performs the necessary background checks on the individual. The state will not grant the liquor license until the background check is completed.

Mayor Nabours stated that the Council could make the recommendation of approval conditional on the state approving the manager.

12. Public Participation

None.

13. Informational Items To/From Mayor, Council, and City Manager.

Councilmember Oravits reported that he went to the new Twin Arrows Casino and said it was quite an impressive facility.

Councilmember Oravits also complimented the Parks staff on their excellent service at Fox Glenn Park during the elementary school barbeque.

Councilmember Brewster distributed a newspaper publication and indicated that it contains science related articles about Flagstaff and promotes the City as being a STEM city.

Councilmember Barotz stated that four Flagstaff firefighters had been selected as firefighters of the year; she asked that they be invited to a future meeting so they can be publically recognized.

Mayor Nabours reported that he was present and spoke at a Memorial Day function at the Citizen Cemetery, and it was a nice presentation.

Mayor Nabours also greeted a number of motorcycle riders from Paraguay riding across the United States.

Councilmember Overton reported that he would not be present for the June 17th meeting and that he would be calling in on June 18th for the budget meeting.

Vice Mayor Evans reported that she had the opportunity last week to go to Sedona to attend the O'Connor House Speak Out Civic Engagement Workshop for Northern Arizona hosted by Mrs. Coor, wife of Dr. Coor. Also, Dr. Coor will be in Flagstaff tomorrow as a guest of Flag 40 at the High Country Conference Center to discuss the Arizona We Want 2.0.

Vice Mayor Evans also had the opportunity to speak with a business owner on Phoenix Avenue about the different street lights on that street. She would like more information about the lights, the cost to maintain the lights, and why they were installed. The business owner is willing to offer his roof top to house solar panels to run the lights, potentially saving the City money.

14. Adjournment

The Work Session of the Flagstaff City Council held May 28, 2013, adjourned at 8:33 p.m.

_____
MAYOR

ATTEST:

_____
CITY CLERK

CITY OF FLAGSTAFF

STAFF SUMMARY REPORT

To:	The Honorable Mayor and Council
From:	Stacy Saltzburg, Deputy City Clerk
Date:	05/29/2013
Meeting Date:	06/04/2013

TITLE:

Consideration and Action on Liquor License Application: Andrea Lewkowitz, “The McMillan", 2 W. Route 66, Series 06 (bar- all spirituous liquor), Person and Location Transfer.

RECOMMENDED ACTION:

Open the public hearing.
Receive citizen input.
Close the public hearing.

The City Council has the option to:
1) Forward the application to the State with a recommendation for approval;
2) Forward the application to the State with no recommendation; or
3) Forward the application to the State with a recommendation for denial based on the testimony received at the public hearing and/or other factors.

Policy Decision or Reason for Action:

Series 06 (bar- all spirituous liquor) licenses are obtained through the person transfer and location transfer of an existing license from another business. The license is being transferred from James Pitts with Cattle Barons Cowboy Saloon located at 1501 S. Milton Road, Flagstaff, Arizona.

Financial Impact:

There is no budgetary impact to the City of Flagstaff as this is a recommendation to the State.

Connection to Council Goal:

Effective governance - regulatory action.

Has There Been Previous Council Decision on This:

Not applicable.

Options and Alternatives:

1) Table the item if additional information or time is needed.
2) Make no recommendation.
3) Forward the application to the State with a recommendation for approval.
4) Forward the application to the State with a recommendation for denial, stating the reasons for such recommendation.

Background/History:

An application for a person and location transfer Series 06 liquor license was received from Andrea Lewkowitz for The McMillan at 2 W. Route 66. The person and location transfer is from James Pitts for Cattle Barons Cowboy Saloon located at 1501 S. Milton Rd., Flagstaff, Arizona.

A background investigation performed by Sgt. Matt Wright of the Flagstaff Police Department resulted in a recommendation for approval.

A background investigation performed by Gregory Brooks, Code Compliance Officer II, resulted in no active code violations being reported.

Sales tax and licensing information was reviewed by Ranbir Cheema, Tax, Licensing & Revenue Manager, who stated that the business is in compliance with the tax and licensing requirements of the City.

Key Considerations:

Because the application is for a person and location transfer, consideration may be given both to the applicant's personal qualifications, and the location.

A Series 06 (bar - all spirituous liquor) allows a bar retailer to sell and serve spirituous liquors, primarily by individual portions, to be consumed on the premises and in the original container for consumption on or off the premises.

The deadline for issuing a recommendation on this application is July 1, 2013.

For a Series 06 liquor license, the applicant is required to provide the distance between the applicant’s business and the nearest church or school; the State does not require a geological map or list of licenses in the vicinity for any license series.

Expanded Financial Considerations:

This business will contribute to the tax base of the community. We are not aware of any other relevant considerations.

Community Benefits and Considerations:

The application was properly posted on May 8, 2013. No written protests have been received to date.

Expanded Options and Alternatives:

1) Table the item if additional information or time is needed.
2) Make no recommendation.
3) Forward the application to the State with a recommendation for approval.
4) Forward the application to the State with a recommendation for denial, stating the reasons for such recommendation.

Attachments:

The McMillan - Letter to Applicant
Hearing Procedures
Series 06 Description
The McMillan - Section 13
The McMillan - PD Memo
The McMillan - Code Memo

The McMillan - Tax Memo

OFFICE OF THE CITY CLERK

May 21, 2013

The McMillan
Attn: Andrea Lewkowitz
2600 N. Central Ave., Suite 1775
Phoenix, AZ 85004

Dear Ms. Lewkowitz:

Your application for a Series 06 person and location transfer liquor license for The McMillan at 2 W. Route 66 was posted on May 8, 2013. The City Council will consider the application at a public hearing during their regularly scheduled City Council Meeting on **Tuesday, June 4, 2013 which begins at 4:00 p.m.**

It is important that you or your representative attend this Council Meeting and be prepared to answer any questions that the City Council may have. Failure to be available for questions could result in a recommendation for denial of your application. We suggest that you contact your legal counsel or the Department of Liquor Licenses and Control at 602-542-5141 to determine the criteria for your license. To help you understand how the public hearing process will be conducted, we are enclosing a copy of the City's liquor license application hearing procedures.

The twenty-day posting period for your liquor license application will expire on May 28, 2013 and the application may be removed from the premises at that time.

If you have any questions, please feel free to call me at 928-213-2077.

Sincerely,

Stacy Saltzburg
Deputy City Clerk

Enclosure

City of Flagstaff

Liquor License Application
Hearing Procedures

1. When the matter is reached at the Council meeting, the presiding officer will accept a motion to open the public hearing on the item.

2. The presiding officer will request that the Applicant come forward to address the Council regarding the application in a presentation not exceeding ten (10) minutes. Council may question the Applicant regarding the testimony or other evidence provided by the Applicant.

3. The presiding officer will then ask whether City staff have information to present to the Council regarding the application. Staff should come forward at this point and present information to the Council in a presentation not exceeding ten (10) minutes. Council may question City staff regarding the testimony or other evidence provided by City staff.

4. Other parties, if any, may then testify, limited to three (3) minutes per person. Council may question these parties regarding the testimony they present to the Council.

5. The Applicant may make a concise closing statement to the Council, limited to five (5) minutes. During this statement, Council may ask additional questions of the Applicant.

6. City staff may make a concise closing statement to the Council, limited to five (5) minutes. During this statement, Council may ask additional questions of City Staff.

7. By motion, Council will then close the public hearing.

8. By motion, the Council will then vote to forward the application to the State with a recommendation of approval, disapproval, or shall vote to forward with no recommendation.

License Types: Series 06 Bar (all spirituous liquor)

Transferable (From person to person and/or location to location within the same county only)
On & off-sale retail privileges
Note: Terms in **BOLD CAPITALS** are defined in the glossary.

PURPOSE:
Allows a bar retailer to sell and serve spirituous liquors, primarily by individual portions, to be consumed on the premises and in the original container for consumption on or off the premises.

ADDITIONAL RIGHTS AND RESPONSIBILITIES:
A retailer with off-sale privileges may deliver spirituous liquor off of the licensed premises in connection with a retail sale. Payment must be made no later than the time of **DELIVERY**. The retailer must complete a Department approved "Record of Delivery" form for each spirituous liquor retail delivery.

On any original applications, new managers and/or the person responsible for the day-to-day operations must attend a basic and management training class.

A licensee acting as a **RETAIL AGENT**, authorized to purchase and accept delivery of spirituous liquor by other licensees, must receive a certificate of registration from the Department.

A **PREGNANCY WARNING SIGN** for pregnant women consuming spirituous liquor must be posted within twenty (20) feet of the cash register or behind the bar.

A log must be kept by the licensee of all persons employed at the premises including each employee's name, date and place of birth, address and responsibilities.

Off-sale ("To Go") package sales of spirituous liquor can be made on the bar premises as long as the area of off-sale operation does not utilize a separate entrance and exit from the ones provided for the bar.

A hotel or motel with a Series 06 license may sell spirituous liquor in sealed containers in individual portions to its registered guests at any time by means of a minibar located in the guest rooms of registered guests. The registered guest must be at least twenty-one (21) years of age. Access to the minibar is by a key or magnetic card device and not furnished to a guest between the hours of 2:00 a.m. and 6:00 a.m. Monday through Saturday and 2:00 a.m. and 10:00 a.m. on Sundays.

Bar, beer and wine bar, and restaurant licensees must pay an annual **SURCHARGE** of $20.00. The money collected from these licensees will be used by the Department for an auditor to review compliance by restaurants with the restaurant licensing provisions of ARS 4-205.02.

SECTION 12 Location to Location Transfer: (Bars and Liquor Stores ONLY)

APPLICANTS CANNOT OPERATE UNDER A LOCATION TRANSFER UNTIL IT IS APPROVED BY THE STATE

1. Current Business: (Exactly as it appears on license) Name Cattle Barons Cowboy Saloon
   Address 1501 S. Milton Road, Flagstaff, AZ 86001
2. New Business: (Physical Street Location) Name The McMillan
   Address 2 W. Route 66, Flagstaff, AZ 86001
3. License Type: Series #6 License Number: 06030033
4. If more than one license to be transferred: License Type: N/A License Number: N/A
5. What date do you plan to move? When license issued What date do you plan to open? ~~When license issued~~ July 1, 2013

SECTION 13 Questions for all in-state applicants excluding those applying for government, hotel/motel, and restaurant licenses (series 5, 11, and 12):

A.R.S. § 4-207 (A) and (B) state that no retailer's license shall be issued for any premises which are at the time the license application is received by the director, within three hundred (300) horizontal feet of a church, within three hundred (300) horizontal feet of a public or private school building with kindergarten programs or grades one (1) through (12) or within three hundred (300) horizonal feet of a fenced recreational area adjacent to such school building. The above paragraph DOES NOT apply to:

a) Restaurant license (§ 4-205.02)
b) Hotel/motel license (§ 4-205.01)
c) Government license (§ 4-205.03)
d) Fenced playing area of a golf course (§ 4-207 (B)(5))

13 MAY 2 Liq. Lic. W1156

1. Distance to nearest school: 1,056 ft. Name of school San Francisco de Asis Catholic School
   Address 320 N. Humphrey's Street, Flagstaff, AZ 86001
   City, State, Zip
2. Distance to nearest church: 1,056 ft. Name of church Flagstaff Christian Fellowship
   Address 123 S. Beaver Street, Flagstaff, AZ 86001
   City, State, Zip
3. I am the: ☐ Lessee ☒ Sublessee ☐ Owner ☐ Purchaser (of premises)
4. If the premises is leased give lessors: Name Linger Longer, LLC
   Address 5716 E. Calle Tuberia, Phoenix, AZ 85018
   City, State, Zip

4a. Monthly rental/lease rate $ 1,500.00 What is the remaining length of the lease 5 yrs. 0 mos.

4b. What is the penalty if the lease is not fulfilled? $_____ or other Termination / monetary penalties
(give details - attach additional sheet if necessary)

5. What is the total **business** indebtedness for this license/location excluding the lease? $ 0
   Please list lenders you owe money to.

Last	First	Middle	Amount Owed	Mailing Address	City State	Zip

(ATTACH ADDITIONAL SHEET IF NECESSARY)

6. What type of business will this license be used for (be specific)? Bar

SECTION 13 - continued

7. Has a license or a transfer license for the premises on this application been denied by the state within the past one (1) year?

☐ YES ☒ NO If yes, attach explanation.

8. Does any spirituous liquor manufacturer, wholesaler, or employee have any interest in your business? ☐ YES ☒ NO

9. Is the premises currently licensed with a liquor license? ☐ YES ☒ NO If yes, give license number and licensee's name:

License #_____(exactly as it appears on license) Name _____

SECTION 14 Restaurant or hotel/motel license applicants:

1. Is there an existing restaurant or hotel/motel liquor license at the proposed location? ☐ YES ☐ NO
   If yes, give the name of licensee, Agent or a company name:

   _____ and license #: _____
   Last First Middle

2. If the answer to Question 1 is YES, you may qualify for an Interim Permit to operate while your application is pending; consult A.R.S. § 4-203.01; and complete SECTION 5 of this application.

3. All restaurant and hotel/motel applicants must complete a Restaurant Operation Plan (Form LIC0114) provided by the Department of Liquor Licenses and Control.

4. As stated in A.R.S. § 4-205.02.G.2, a restaurant is an establishment which derives at least 40 percent of its gross revenue from the sale of food. Gross revenue is the revenue derived from all sales of food and spirituous liquor on the licensed premises. By applying for this ☐ hotel/motel ☐ restaurant license, I certify that I understand that I must maintain a minimum of 40 percent food sales based on these definitions and have included the Restaurant Hotel/Motel Records Required for Audit (form LIC 1013) with this application.

   _____
   applicant's signature

   As stated in A.R.S § 4-205.02 (B), I understand it is my responsibility to contact the Department of Liquor Licenses and Control to schedule an inspection when all tables and chairs are on site, kitchen equipment, and, if applicable, patio barriers are in place on the licensed premises. With the exception of the patio barriers, these items are not required to be properly installed for this inspection. Failure to schedule an inspection will delay issuance of the license. If you are not ready for your inspection 90 days after filing your application, please request an extension in writing, specify why the extension is necessary, and the new inspection date you are requesting. To schedule your site inspection visit www.azliquor.gov and click on the "Information" tab.

   _____
   applicants initials

'13 MAY 2 Liq. Lic. Dep.

SECTION 15 Diagram of Premises: (Blueprints not accepted, diagram must be on this form)

1. Check **ALL** boxes that apply to your business:

   ☒ Entrances/Exits ☒ Liquor storage areas Patio: ☐ Contiguous
   ☐ Service windows ☐ Drive-in windows ☐ Non Contiguous

2. Is your licensed premises currently closed due to construction, renovation, or redesign? ☒ YES ☐ NO
   If yes, what is your estimated opening date? July 1, 2013
   month/day/year

3. Restaurants and hotel/motel applicants are required to draw a detailed floor plan of the kitchen and dining areas including the locations of all kitchen equipment and dining furniture. Diagram paper is provided on page 7.

4. The diagram (a detailed floor plan) you provide is required to disclose only the area(s) where spiritous liquor is to be sold, served, consumed, dispensed, possessed, or stored on the premises unless it is a restaurant (see #3 above).

5. Provide the square footage or outside dimensions of the licensed premises. Please do not include non-licensed premises, such as parking lots, living quarters, etc.

As stated in A.R.S. § 4-207.01(B), I understand it is my responsibility to notify the Department of Liquor Licenses and Control when there are changes to boundaries, entrances, exits, added or deleted doors, windows or service windows,or increase or decrease to the square footage after submitting this initial drawing.

_____
applicants initials

MEMORANDUM

Memo # 13-057-01

TO: **Chief Kevin Treadway**

FROM: **Sgt. Matt Wright**

DATE: **May 15, 2013**

REF **Series 6 Liquor License Person and Location Transfer for "The McMillan"**

On May 15, 2013, I initiated an investigation into an application for a series 06 (bar) liquor license person to person and location transfer. The liquor license application has been filed by Andrea Lewkowitz the listed agent on behalf of, Robert Tucker Woodbury, George Turner, and Mark Matsock new owners of The McMillan. The McMillan will be located at 2 West Route 66, in downtown Flagstaff. The bar location is currently under renovation and not open for business yet. The license number being applied for is 06030033 a full bar license.

I conducted a query through local systems and public access on Robert Tucker Woodbury, George Turner, and Mark Matsock (Controlling persons) and no derogatory records were found in the last ten (10) years. In 2011, Robert Woodbury was fined by the Arizona Department of Liquor License and Control for failing to have a manager listed on a liquor license. This occurred at one of his several businesses he owns and operates liquor licenses at in the Phoenix area. No other liquor law violations were located on any of the applicants.

In speaking with Andrea Lewkowitz I confirmed Robert Woodbury had purchased the series 6 license from Kenneth Lee. This license was originally owned by James Pitts (Cattle Barons) and it changed hands several times before the most recent sale. I spoke with Andrea who stated the manager has not yet been hired so none was listed on the application. I confirmed Robert Woodbury has completed the mandatory liquor law training course as required and was able to provide proof. I also confirmed the bar is outside of 300 feet from any school or church.

As a result of the investigation, I can find no reason to oppose the series 06 application for person and location transfer. Recommendation to council would be for approval.

Planning and Development Services Memorandum

May 14, 2013

TO: Stacy Saltzburg, Deputy City Clerk

THROUGH: Roger E. Eastman, AICP, Comprehensive Planning and Code Administrator

FROM: Gregory Brooks, Code Compliance Officer II

RE: Application for Liquor License #06030033
2 W. Rt. 66, Suite 102, Flagstaff, Arizona 86001
Assessor's Parcel Number 100-20-018
Andrea Lewkowitz on behalf of Bar 66, LLC

This application is a request for a Series 6 (Bar) new liquor license from Andrea Lewkowitz on behalf of Bar 66, LLC, located in the Central Business (CB) Zone. This zone allows for bars.

There are no active Zoning Code violations associated with Andrea Lewkowitz or Bar 66, LLC.

This liquor license is recommended for approval.

Memo

To: Stacy Saltzberg, Deputy City Clerk

From: Ranbir Cheema - Tax, Licensing & Revenue Manager

Date: April 23, 2013

Re: Series 6 Liquor License – Person and Location Transfer – The McMillan

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Bar 66 LLC DBA The McMillan does not plan to open until July 1st, 2013. They are currently in process of remodeling the building. Their decision to open this business would be based on approval of the liquor license. If approved, they plan to comply with all requirements of the City Sale Tax Section. At this time, I do not have a reason to hold up this liquor license approval.

/liquor licenses/The McMillan.doc

CITY OF FLAGSTAFF

STAFF SUMMARY REPORT

To:	The Honorable Mayor and Council
From:	Stacy Saltzburg, Deputy City Clerk
Date:	05/29/2013
Meeting Date:	06/04/2013

TITLE:

Consideration and Action on Liquor License Application: Dorian Lenz, "Cheba Hut", 1411 S. Milton Rd., Series 12 (restaurant), New License.

RECOMMENDED ACTION:

Open the public hearing.
Receive citizen input.
Close the public hearing.

The City Council has the option to:
1) Forward the application to the State with a recommendation for approval;
2) Forward the application to the State with no recommendation; or
3) Forward the application to the State with a recommendation for denial based on the testimony received at the public hearing and/or other factors.

Policy Decision or Reason for Action:

Dorian Lenz is the agent for a new Series 12 (restaurant) liquor license for Cheba Hut.

Financial Impact:

There is no budgetary impact to the City of Flagstaff as this is a recommendation to the State.

Connection to Council Goal:

Effective governance (Regulatory action)

Has There Been Previous Council Decision on This:

Not applicable.

Options and Alternatives:

1) Table the item if additional information or time is needed.
2) Make no recommendation.
3) Forward the application to the State with a recommendation for approval.
4) Forward the application to the State with a recommendation for denial, stating the reasons for such recommendation.

Background/History:

An application for a new Series 12 liquor license was received from Dorian Lenz for Cheba Hut.

A background investigation performed by Sgt. Matt Wright of the Flagstaff Police Department resulted in a recommendation for approval.

A background investigation performed by Gregory Brooks, Code Compliance Officer resulted in no active code violations being reported.

Sales tax and licensing information was reviewed by Ranbir Cheema, Tax, Licensing & Revenue Manager, who stated that the business is in compliance with the tax and licensing requirements of the City.

Key Considerations:

Because the application is for a new license, consideration may be given to both the location and the applicant's personal qualifications.

A Series 12 license allows the holder of a restaurant license to sell and serve spirituous liquor solely for consumption on the premises of an establishment which derives at least forty percent (40%) of its gross revenue from the sale of food.

The deadline for issuing a recommendation on this application is June 11, 2013.

The applicant is not required to provide the distance between the applicant’s business and the nearest church or school for government; and the State does not require a geological map or list of licenses in the vicinity for any license series.

Expanded Financial Considerations:

This business will contribute to the tax base of the community.

Community Benefits and Considerations:

The application was properly posted on April 30, 2013.

No written protests have been received to date.

Expanded Options and Alternatives:

1) Table the item if additional information or time is needed.
2) Make no recommendation.
3) Forward the application to the State with a recommendation for approval.
4) Forward the application to the State with a recommendation for denial, stating the reasons for such recommendation.

Attachments:

Cheba Hut - Letter to Applicant
Hearing Procedures
Series 12 Description
Cheba Hut - PD Memo
Cheba Hut - Code Memo
Cheba Hut - Tax Memo

OFFICE OF THE CITY CLERK

May 21, 2013

Cheba Hut
Attn: Dorian Lenz
7849 S. 170th St.
Queen Creek, AZ 85142

Dear Mr. Lenz:

Your application for a new Series 12 liquor license for Cheba Hut at 1411 S. Milton was posted on April 30, 2013. The City Council will consider the application at a public hearing during their regularly scheduled City Council Meeting on **Tuesday, June 4, 2013 which begins at 4:00 p.m.**

It is important that you or your representative attend this Council Meeting and be prepared to answer any questions that the City Council may have. Failure to be available for questions could result in a recommendation for denial of your application. We suggest that you contact your legal counsel or the Department of Liquor Licenses and Control at 602-542-5141 to determine the criteria for your license. To help you understand how the public hearing process will be conducted, we are enclosing a copy of the City's liquor license application hearing procedures.

The twenty-day posting period for your liquor license application expired on May 20, 2013 and the application may be removed from the premises at any time.

If you have any questions, please feel free to call me at 928-213-2077.

Sincerely,

Stacy Saltzburg
Deputy City Clerk

Enclosure

City of Flagstaff

Liquor License Application
Hearing Procedures

1. When the matter is reached at the Council meeting, the presiding officer will accept a motion to open the public hearing on the item.

2. The presiding officer will request that the Applicant come forward to address the Council regarding the application in a presentation not exceeding ten (10) minutes. Council may question the Applicant regarding the testimony or other evidence provided by the Applicant.

3. The presiding officer will then ask whether City staff have information to present to the Council regarding the application. Staff should come forward at this point and present information to the Council in a presentation not exceeding ten (10) minutes. Council may question City staff regarding the testimony or other evidence provided by City staff.

4. Other parties, if any, may then testify, limited to three (3) minutes per person. Council may question these parties regarding the testimony they present to the Council.

5. The Applicant may make a concise closing statement to the Council, limited to five (5) minutes. During this statement, Council may ask additional questions of the Applicant.

6. City staff may make a concise closing statement to the Council, limited to five (5) minutes. During this statement, Council may ask additional questions of City Staff.

7. By motion, Council will then close the public hearing.

8. By motion, the Council will then vote to forward the application to the State with a recommendation of approval, disapproval, or shall vote to forward with no recommendation.

License Types: Series 12 Restaurant License

Non-transferable
On-sale retail privileges
Note: Terms in **BOLD CAPITALS** are defined in the glossary.

PURPOSE:
Allows the holder of a restaurant license to sell and serve spirituous liquor solely for consumption on the premises of an establishment which derives at least forty percent (40%) of its gross revenue from the sale of food.

ADDITIONAL RIGHTS AND RESPONSIBILITIES:
An applicant for a restaurant license must file a copy of its restaurant menu and Restaurant Operation Plan with the application. The Plan must include listings of all restaurant equipment and service items, the restaurant seating capacity, and other information requested by the department to substantiate that the restaurant will operate in compliance with Title 4.

The licensee must notify the Department, in advance, of any proposed changes in the seating capacity of the restaurant or dimensions of a restaurant facility.

A restaurant licensee must maintain complete restaurant services continually during the hours of selling and serving of spirituous liquor, until at least 10:00 p.m. daily, if any spirituous liquor is to be sold and served up to 2:00 a.m.

On any original applications, new managers and/or the person responsible for the day-to-day operations must attend a basic and management training class.

A licensee acting as a **RETAIL AGENT**, authorized to purchase and accept **DELIVERY** of spirituous liquor by other licensees, must receive a certificate of registration from the Department.

A **PREGNANCY WARNING SIGN** for pregnant women consuming spirituous liquor must be posted within twenty (20) feet of the cash register or behind the bar.

A log must be kept by the licensee of all persons employed at the premises including each employee's name, date and place of birth, address and responsibilities.

Bar, beer and wine bar, and restaurant licensees must pay an annual surcharge of $20.00. The money collected from these licensees will be used by the Department for an auditor to review compliance by restaurants with the restaurant licensing provisions of ARS 4-205.02.

MEMORANDUM

Memo # 13-052-01

TO: **Chief Kevin Treadway**

FROM: **Sgt. Matt Wright**

DATE: **May 6, 2013**

RE: **LIQUOR LICENSE APPLICATION – SERIES 12- FOR "Cheba Hut"**

On May 1, 2013, I initiated an investigation into an application for a series 12 (restaurant) liquor license filed by Dorian Lenz and Kathleen Lenz owners of the Cheba Hut restaurant. The Cheba Hut is located at 1411 S. Milton Road in Flagstaff. This is an application for a new series 12 license #12033344.

I conducted a query through local systems and public access on Dorian and Kathleen Lenz. No derogatory records were found on the listed applicants. I spoke with Dorian who stated he and Kathleen own other Cheba Hut restaurants in Mesa and Tempe. Dorian said he is applying for a series 12 license but has no plans to sell anything other than beer. Dorian said he and Kathleen have completed the mandatory liquor license training course. Dorian said he did not list a manager on the application because the current manager plans to leave Flagstaff soon and has not hired a new manager yet. Dorian said he will ensure the new manager completes the liquor law training course.

As a result of this investigation, I can find no reason to oppose this series 12 liquor license application. Recommendation to Council would be for approval.

Planning and Development Services Memorandum

May 2, 2013

TO: Susan Alden, City Records Technician

THROUGH: Roger E. Eastman, AICP, Comprehensive Planning and Code Administrator

FROM: Gregory Brooks, Code Compliance Officer II

RE: Application for Liquor License #12033344
1411 S. Milton Rd., Flagstaff, Arizona 86001
Assessor's Parcel Number 103-20-058D
Dorian Lenz on behalf of Cheba Hut

This application is a request for a Series 12 (Restaurant) new liquor license from Dorian Lenz on behalf of Cheba Hut, located in the Highway Commercial (HC) Zone. This zone allows for restaurants.

There are no active Zoning Code violations associated with Dorian Lenz or Cheba Hut.

This liquor license is recommended for approval.

Memo

To: Stacy Saltzberg, Deputy City Clerk

From: Ranbir Cheema - Tax, Licensing & Revenue Manager

Date: April 23, 2013

Re: Series 12 Liquor License – New License – Cheba Hut

Kool Running LLC DBA Cheba Hut with Dorian Lenz as its Managing Member is licensed with the City of Flagstaff for the Sales Tax purposes and is current on their tax return filing. At this time, I do not have a reason to hold up this liquor license approval.

/liquor licenses/Cheba Hut - 2.doc

CITY OF FLAGSTAFF

STAFF SUMMARY REPORT

To:	The Honorable Mayor and Council
From:	Stacy Saltzburg, Deputy City Clerk
Date:	05/29/2013
Meeting Date:	06/04/2013

TITLE:

Consideration and Action on Liquor License Application: Navayogasingam Thuraisingam, "Modern Grove", 1020 S. Milton Rd., Suite 102, Series 12 (restaurant), New License.

RECOMMENDED ACTION:

Open the public hearing.
Receive citizen input.
Close the public hearing.

The City Council has the option to:
1) Forward the application to the State with a recommendation for approval;
2) Forward the application to the State with no recommendation; or
3) Forward the application to the State with a recommendation for denial based on the testimony received at the public hearing and/or other factors.

Policy Decision or Reason for Action:

Navayogasingam Thuraisingam is the agent for a new Series 12 (restaurant) liquor license for Modern Grove.

Financial Impact:

There is no budgetary impact to the City of Flagstaff as this is a recommendation to the State.

Connection to Council Goal:

Effective governance (Regulatory action)

Has There Been Previous Council Decision on This:

Not applicable.

Options and Alternatives:

1) Table the item if additional information or time is needed.
2) Make no recommendation.
3) Forward the application to the State with a recommendation for approval.
4) Forward the application to the State with a recommendation for denial, stating the reasons for such recommendation.

Background/History:

An application for a new Series 12 liquor license was received from Navayogasingam Thuraisingam for Modern Grove.

A background investigation performed by Sgt. Matt Wright of the Flagstaff Police Department resulted in a recommendation for approval.

A background investigation performed by Gregory Brooks, Code Compliance Officer resulted in no active code violations being reported.

Sales tax and licensing information was reviewed by Ranbir Cheema, Tax, Licensing & Revenue Manager, who stated that the business is in compliance with the tax and licensing requirements of the City.

Key Considerations:

Because the application is for a new license, consideration may be given to both the location and the applicant's personal qualifications.

A Series 12 license allows the holder of a restaurant license to sell and serve spirituous liquor solely for consumption on the premises of an establishment which derives at least forty percent (40%) of its gross revenue from the sale of food.

The deadline for issuing a recommendation on this application is June 18, 2013.

The applicant is not required to provide the distance between the applicant’s business and the nearest church or school for government; and the State does not require a geological map or list of licenses in the vicinity for any license series.

Expanded Financial Considerations:

This business will contribute to the tax base of the community.

Community Benefits and Considerations:

The application was properly posted on May 3, 2013.

No written protests have been received to date.

Expanded Options and Alternatives:

1) Table the item if additional information or time is needed.
2) Make no recommendation.
3) Forward the application to the State with a recommendation for approval.
4) Forward the application to the State with a recommendation for denial, stating the reasons for such recommendation.

Attachments:

Modern Grove - Letter to Applicant
Hearing Procedures
Series 12 Description
Modern Grove - PD Memo
Modern Grove - Code Memo

Modern Grove - Tax Memo

OFFICE OF THE CITY CLERK

May 21, 2013

Modern Grove
Attn: Navayogasingam Thuraisingam
450 N. McClintock Dr., Suite 102
Chandler, AZ 85226

Dear Mr. Thuraisingam:

Your application for a new Series 12 liquor license for Modern Grove at 1020 S. Milton Rd, Suite 102 was posted on May 3, 2013. The City Council will consider the application at a public hearing during their regularly scheduled City Council Meeting on **Tuesday, June 4, 2013 which begins at 4:00 p.m.**

It is important that you or your representative attend this Council Meeting and be prepared to answer any questions that the City Council may have. Failure to be available for questions could result in a recommendation for denial of your application. We suggest that you contact your legal counsel or the Department of Liquor Licenses and Control at 602-542-5141 to determine the criteria for your license. To help you understand how the public hearing process will be conducted, we are enclosing a copy of the City's liquor license application hearing procedures.

The twenty-day posting period for your liquor license application will expire on May 23, 2013 and the application may be removed from the premises at that time.

If you have any questions, please feel free to call me at 928-213-2077.

Sincerely,

Stacy Saltzburg
Deputy City Clerk

Enclosure

City of Flagstaff

Liquor License Application
Hearing Procedures

1. When the matter is reached at the Council meeting, the presiding officer will accept a motion to open the public hearing on the item.

2. The presiding officer will request that the Applicant come forward to address the Council regarding the application in a presentation not exceeding ten (10) minutes. Council may question the Applicant regarding the testimony or other evidence provided by the Applicant.

3. The presiding officer will then ask whether City staff have information to present to the Council regarding the application. Staff should come forward at this point and present information to the Council in a presentation not exceeding ten (10) minutes. Council may question City staff regarding the testimony or other evidence provided by City staff.

4. Other parties, if any, may then testify, limited to three (3) minutes per person. Council may question these parties regarding the testimony they present to the Council.

5. The Applicant may make a concise closing statement to the Council, limited to five (5) minutes. During this statement, Council may ask additional questions of the Applicant.

6. City staff may make a concise closing statement to the Council, limited to five (5) minutes. During this statement, Council may ask additional questions of City Staff.

7. By motion, Council will then close the public hearing.

8. By motion, the Council will then vote to forward the application to the State with a recommendation of approval, disapproval, or shall vote to forward with no recommendation.

License Types: Series 12 Restaurant License

Non-transferable
On-sale retail privileges
Note: Terms in **BOLD CAPITALS** are defined in the glossary.

PURPOSE:
Allows the holder of a restaurant license to sell and serve spirituous liquor solely for consumption on the premises of an establishment which derives at least forty percent (40%) of its gross revenue from the sale of food.

ADDITIONAL RIGHTS AND RESPONSIBILITIES:
An applicant for a restaurant license must file a copy of its restaurant menu and Restaurant Operation Plan with the application. The Plan must include listings of all restaurant equipment and service items, the restaurant seating capacity, and other information requested by the department to substantiate that the restaurant will operate in compliance with Title 4.

The licensee must notify the Department, in advance, of any proposed changes in the seating capacity of the restaurant or dimensions of a restaurant facility.

A restaurant licensee must maintain complete restaurant services continually during the hours of selling and serving of spirituous liquor, until at least 10:00 p.m. daily, if any spirituous liquor is to be sold and served up to 2:00 a.m.

On any original applications, new managers and/or the person responsible for the day-to-day operations must attend a basic and management training class.

A licensee acting as a **RETAIL AGENT**, authorized to purchase and accept **DELIVERY** of spirituous liquor by other licensees, must receive a certificate of registration from the Department.

A **PREGNANCY WARNING SIGN** for pregnant women consuming spirituous liquor must be posted within twenty (20) feet of the cash register or behind the bar.

A log must be kept by the licensee of all persons employed at the premises including each employee's name, date and place of birth, address and responsibilities.

Bar, beer and wine bar, and restaurant licensees must pay an annual surcharge of $20.00. The money collected from these licensees will be used by the Department for an auditor to review compliance by restaurants with the restaurant licensing provisions of ARS 4-205.02.

MEMORANDUM

Memo # 13-054-01

TO: **Chief Kevin Treadway**

FROM: **Sgt. Matt Wright**

DATE: **May 6, 2013**

RE: **LIQUOR LICENSE APPLICATION – SERIES 12- FOR "Modern Grove"**

On May 6, 2013, I initiated an investigation into an application for a series 12 (restaurant) liquor license filed by Navayogasingam Thuraisingam, Candace Snorgrass, Miriam Hayenga, Lubertus Hayenga, James Klusman and listed manager Alicia Kress of the Modern Grove Restaurant. The Modern Grove is located at 1020 S. Milton Road Suite 102, in Flagstaff. This is an application for a new series 12 license #12033345.

I conducted a query through local systems and public access on Navayogasingam Thuraisingam, Candace Snorgrass, Miriam Hayenga, Lubertus Hayenga, James Klusman and Alicia Kress. I found Candace Snorgrass was arrested for DUI of which she plead guilty in June of 2012. No other derogatory records were found on the listed applicants. I spoke with Alicia Kress who stated she would operate the day to day operations. Alicia said she has taken the mandatory liquor law training course and provided proof. Alicia confirmed the restaurant is not open yet but they have plans to open sometime this summer.

As a result of this investigation, I can find no reason to oppose this series 12 liquor license application. Recommendation to Council would be for approval.

Planning and Development Services Memorandum

May 14, 2013

TO: Stacy Saltzburg, Deputy City Clerk

THROUGH: Roger E. Eastman, AICP, Comprehensive Planning and Code Administrator

FROM: Gregory Brooks, Code Compliance Officer II

RE: Application for Liquor License #12033345
1020 S Milton Rd., Suite 102, Flagstaff, Arizona 86001
Assessor's Parcel Number 103-04-013A
Navayogasingam Thurasingam on behalf of Modern Grove

This application is a request for a Series 12 (Restaurant) new liquor license from Navayogasingam Thurasingam on behalf of Modern Grove, located in the Highway Commercial (HC) Zone. This zone allows for restaurants.

There are no active Zoning Code violations associated with Navayogasingam Thurasingam or Modern Grove.

This liquor license is recommended for approval.

Memo

To: Stacy Saltzberg, Deputy City Clerk

From: Ranbir Cheema - Tax, Licensing & Revenue Manager

Date: April 23, 2013

Re: Series 12 Liquor License – New License – Modern Grove

Modern Grove Flagstaff LLC DBA Modern Grove with Thuraisingam Navayogasingam as its representative does not plan to open until July 4th 2013. Their decision to open this business in Flagstaff would be based on the approval for the liquor license. If approved, he plans to comply with all requirements of the City Sale Tax Section. At this time, I do not have a reason to hold up this liquor license approval.

/liquor licenses/Modern Grove.doc

CITY OF FLAGSTAFF

STAFF SUMMARY REPORT

To: The Honorable Mayor and Council

From: Amy Hagin, Senior Procurement Specialist, Management Services

Co-Submitter: Sergio Enriquez

Date: 05/29/2013

Meeting Date: 06/04/2013

TITLE:

Consideration and Approval of Contracts: Custodial Services Contracts.

RECOMMENDED ACTION:

1) Acceptance of the proposals (listed below) for custodial services under RFP No. 2013-23.
   - Accurate Building Maintenance, LLC [seven (7) facilities]
   - Carnation Building Service, Inc. [eight (8) facilities]
   - Twilight Janitorial Service, Inc. [four (4) facilities]

2) Provide the Purchasing Director the authority to add or delete facilities as necessary during the term of the agreement.

Policy Decision or Reason for Action:

To provide clean and presentable City facilities for use by both the public and City employees.

Financial Impact:

The expenditure will be charged to the appropriate division's budget for each facility. The cost of supplies will be the responsibility of the City.

For the nineteen (19) facilities, the total annual contract amount is $350,812.08 between the three (3) recommended Proposers. The total annual contract amount is approximately 17% less than FY13 contracted costs due to staff making appropriate changes to the scope of work as well as cost savings with new vendors to the City. Please see the attached Proposal Cost Analysis for the cost by facility.

Connection to Council Goal:

Effective governance

Previous Council Decision on This:

None

Options and Alternatives:

• Approve the recommended action
• Approve each facility contract to the lowest responsive Proposer out of the top three (3) ranked Proposers
• Approve each facility contract to the lowest responsive Proposer out of the short-listed five (5) Proposers
• Internal custodial services with City staff

Background/History:

The current custodial services agreements expire in June 2013. Proposals were received and evaluated for custodial services for an original twenty-one (21) facilities; of which an award for both the Prosecutor's Building and City Warehouse will not be sought, resulting in a total of nineteen (19) facilities. The Prosecutor's building and the City Warehouse will receive service through internal staff and/or a light duty employee.

The proposal for custodial services outlines a clear and concise scope of work which identifies the frequencies, service levels and functions for each facility. In the Request for Proposal, the evaluation criteria utilized included: presented approach, qualifications and experience, references and past performance, and pricing structure/submittals. Also, please note that not all proposers were required to provide a cost at all facilities, as certain aspects of a facility, for example size or scope of work, may not meet the proposer's ability to provide the best service to the City.

There were a total of eight (8) proposals received for custodial services. The evaluation team reviewed the proposals and was able to short-list to five (5) Proposers. The five (5) Proposers were invited to a formal interview process with the Evaluation Committee where an established set of questions and new evaluation criteria were scored. The evaluation criteria included: pricing – best and final offer, training and implementation, references, equipment, and sustainable measures. The scoring tabulation from the interview process resulted in three (3) top Proposers: Accurate Building Maintenance, LLC, Carnation Building Service, Inc., and Twilight Janitorial Service, Inc.

Key Considerations:

The contract type is a firm-fixed fee with an initial three (3) year term. Upon mutual agreement between the City and the Vendor, the agreement may be renewed for a maximum of two (2) additional one (1) year terms. Price adjustments shall be based upon an increase in service level at the time of the offer and can be shown to directly affect the price of the item concerned. Purchasing Division will determine whether the requested price adjustment is in the best interest of the City.

Accurate Building Maintenance, LLC was founded in 1994 with offices in Prescott, Arizona, Scottsdale, Arizona and Las Vegas, Nevada. The proposer expanded into northern Arizona in 2011, obtaining twenty-three (23) facilities with the City of Cottonwood. Through the RFP and interview processes, the Proposer described their best tool, a website named CleanTelligent, which provides the City a cradle to grave interactive information tool to enhance team communication and provide a proactive approach to customer service and emergency situations. Accurate Building Maintenance, LLC, scored the highest with a score of 1820 out of a possible 2000 points.

Carnation Building Service, Inc. was founded in 1991 with providing custodial services regionally in Arizona, Colorado, New Mexico and Utah with many government clients. Carnation Building Services, Inc. scored the highest as well through the RFP and interview processes with a score of 1820 points out of a possible 2000. The highlights from the interview process were the Proposer's attention to a team-cleaning concept to reduce costs for the customer, and the extensive training for each of their employees.

Twilight Janitorial Service, Inc. was founded in 2004 and has been performing custodial services for the City since 2008 at two (2) of our facilities. The Proposer's performance has been great for the City, and the evaluation team provided a score that ranked Twilight Janitorial Services, Inc. as our third highest Proposer with a score of 1460 points out of a possible 2000. The Proposer embodies a training and safety program that was impressive to the evaluation committee as well as glowing references.

The proposal has an 'additions/deletions of service clause' which allows for addition or deletion of facilities. The clause reads:

Additional areas (sections or buildings) may be added from time to time. If this occurs, the Proposer will be requested to submit a negotiable maintenance cost quote for the additions. Upon approval of the City Council and authorization by the Purchasing Director such additions will be added to and become a part of the contract through properly executed forms. Should a section or building be deleted, payment to the Proposer will be reduced proportionally, to the amount of service reduced in accordance with the PROPOSAL price.

Purchasing is recommending authorization to add or delete services as necessary due to the cancellation or adjustment of services without presenting each change to Council upon occurrence. Council will be notified of the change during the recommendation to extend this service on an annual basis.

With the assistance of the facility site managers, a scope of work that allows for strict guidelines for the cleaning of each facility was created. The creation of "As Requested" types of services was created, such as, window cleaning and carpet shampooing, in an effort to establish a cost but to also provide those services on an as needed basis only. In the past, facilities were on a quarterly or semi-annual schedule for such services.

Each facility site manager will be providing direct day-to-day communication with the custodial service Vendor with the possibility that quarterly reviews may occur between the facility site manager, Facility Maintenance Superintendent, Purchasing and the vendor as needed and upon request by City staff.

Facilities recommends an award to multiple vendors to minimize risk should a vendor have performance issues.

The Purchasing Division and Sustainability and Environmental Management Section have worked together to require, as per the scope of work for each facility, the usage of "green seal" compliance products and recovering 100% of recyclable materials by ensuring that trash and recycling are not commingled and are properly placed in their respective dumpster for collection.

Expanded Financial Considerations:

The City evaluated five (5) areas including:

Best and Final Offer – 40%
Training and Implementation – 30%
References and Past Performance – 10%
Equipment Utilized – 10%
Sustainable Measures – 10%

Out of the nineteen (19) facilities, eleven (11) facilities are recommended approval to the Proposer with the lowest annual cost to the City. The other eight (8) facilities are not the lowest annual cost; however, the annual amount for each of the eight (8) facilities is under the FY14 budget and utilizing one of the top-evaluated proposers.

For the City Hall facility, the recommended approval amount is $643.80 higher (1.73% higher) annually than another Proposer. The Evaluation Committee along with staff have requested to use the marginally

higher Proposer based upon the presented training, implementation proposal, and communication tools (electronic software) for such a high visibility facility. The recommended approval amount is under budget.

For the Library facility, the recommended approval amount is $2,360.76 higher (6.73% higher) annually than another Proposer. Similarly, for the East Library facility, the recommended approval amount is $507.20 higher (3.69%) than another Proposer. The Evaluation Committee along with staff have recommended to use the slightly higher Proposer based upon the added-value communication tool, CleanTelligent, previously mentioned. The communication tool provides a 30-minute or less response to an inquiry which is very desirable to the public's high usage of the facilities. For example, recently the toddler space within the Library had to be vacated due to an emergency clean-up. The clean-up remediation consumed a much longer time period than anticipated, thus forcing the facility to reschedule numerous events. With a 30-minute or less response time with the recommended Proposer, the facility could have continued on with their normal scheduled events with an emergency clean-up as experienced. The recommended approval amount is under budget.

For the Airport facility, the recommended approval amount is $652.20 higher (1.15% higher) annually than the Proposer that was received the lowest overall score through the RFP process. The Evaluation Committee along with staff have recommended to use the marginally higher Proposer based upon the added-value communication tool (CleanTelligent), and the presented approach to training and implementation for a highly used public facility. The recommended approval amount is under budget.

For the Aquaplex facility, the recommended approval amount is $2,851.20 higher (4.38% higher) annually than the fourth rated Proposer through the RFP process. The Evaluation Committee along with staff have recommended to use the marginally higher Proposer based upon the added-value communication tool (CleanTelligent), and the presented approach to training and implementation for a highly used public facility. The recommended approval amount is under budget.

For the NACET Business Incubator facility, the recommended approval amount is $1,920.00 higher (25.35% higher) annually than the fourth rated Proposer through the RFP process. The Evaluation Committee along with staff have recommended to use the higher Proposer based upon the added-value communication tool (CleanTelligent), and the presented approach to training and implementation for a highly used public facility. The recommended approval amount is under budget.

For Municipal Court facility, the recommended approval amount is $4,856.00 higher (36.90% higher) annually than the fourth rated Proposer through the RFP process. The Evaluation Committee along with staff have recommended to use the higher Proposer based upon the added-value communication tool (CleanTelligent), and the presented approach to training and implementation for a highly used public facility. The recommended approval amount is under budget.

For the USGS #6 facility, the recommended approval amount is $1,284.00 higher (4.71% higher) than the fourth rated proposer through the RFP process. The Evaluation Committee and USGS staff have recommended using the marginally higher Proposer based upon logistics of using the same Proposer recommended for the other three (3) USGS facilities as well as one of the top ranked proposers. The recommendation approval amount is under budget.

For the Streets Section facility, the recommended approval amount is $115.00 higher (3.30% higher) than another Proposer. The Evaluation Committee and staff have recommended using the marginally higher Proposer based upon logistics of using the same Proposer for the facility adjacent to the Streets Section (Environmental Services). The recommended approval amount is under budget.

Community Benefits and Considerations:

Clean and presentable facilities for use by the public and City employees.

Community Involvement:

Inform

Expanded Options and Alternatives:

• Approve the recommended action
• Approve each facility to the lowest annual cost Proposer out of the three (3) top ranked Proposers which would include a recommendation change to City Hall, Library, and East Library facilities
• Approve each facility to the lowest annual cost Proposer out of the five (5) short-listed Proposers which would include a recommendation change to City Hall, Library, East Library, Airport, Aquaplex, NACET Business Incubator, Municipal Court, USGS #6, and Streets Division.
• Reject all proposals and perform an examination of providing custodial services with internal City staff. Additional time would be needed to thoroughly perform the analysis for each facility.

Attachments: Scoring Tab
Proposal Cost Analysis
Draft Agreement

CITY OF FLAGSTAFF
PURCHASING DIVISION
CUSTODIAL SERVICES, RFP NO. 2013-23

SCORING TABULATION - SHORT LISTED PROPOSERS

Evaluation Criterion #1-- (40%) Best and Final Offer					
	Accurate	***Carnation***	***IWC***	***Pinnacle Cleaning***	***Twilight***
Evaluator #1	160	200	120	120	120
Evaluator #2	160	200	120	120	120
Evaluator #3	160	200	120	80	160
Evaluator #4	200	200	80	120	160
*Evaluator #5**	N/A	N/A	N/A	N/A	N/A
Subtotal:	**680**	**800**	**440**	**440**	**560**
Criteria Ranking:	2	1	4	4	3

Evaluation Criterion #2-- (30%) Training & Implementation					
	Accurate	***Carnation***	***IWC***	***Pinnacle Cleaning***	***Twilight***
Evaluator #1	150	120	90	90	90
Evaluator #2	150	150	90	60	120
Evaluator #3	150	90	90	120	150
Evaluator #4	150	120	120	75	90
*Evaluator #5**	N/A	N/A	N/A	N/A	N/A
Subtotal:	**600**	**480**	**390**	**345**	**450**
Criteria Ranking:	1	2	4	5	3

Evaluation Criterion #3-- (10%) References & Past Performance					
	Accurate	***Carnation***	***IWC***	***Pinnacle Cleaning***	***Twilight***
Evaluator #1	50	50	40	10	50
Evaluator #2	40	40	20	20	50
Evaluator #3	50	40	30	20	50
Evaluator #4	50	30	30	20	50
*Evaluator #5**	N/A	N/A	N/A	N/A	N/A
Subtotal:	**190**	**160**	**120**	**70**	**200**
Criteria Ranking:	2	3	4	5	1

Evaluation Criterion #4-- (10%) Equipment Utilized					
	Accurate	***Carnation***	***IWC***	***Pinnacle Cleaning***	***Twilight***
Evaluator #1	50	50	40	30	50
Evaluator #2	50	50	40	40	30
Evaluator #3	40	50	20	40	30
Evaluator #4	40	50	20	40	20
*Evaluator #5**	N/A	N/A	N/A	N/A	N/A
Subtotal:	**180**	**200**	**120**	**150**	**130**
Criteria Ranking:	2	1	5	3	4

Evaluation Criterion #4-- (10%) Sustainable Measures					
	Accurate	***Carnation***	***IWC***	***Pinnacle Cleaning***	***Twilight***
Evaluator #1	50	50	30	30	30
Evaluator #2	40	50	30	30	40
Evaluator #3	40	40	30	30	30
Evaluator #4	40	40	30	10	20
*Evaluator #5**	N/A	N/A	N/A	N/A	N/A
Subtotal:	**170**	**180**	**120**	**100**	**120**
Criteria Ranking:	2	1	3	5	3
TOTAL SCORE:	**1820**	**1820**	**1190**	**1105**	**1460**
Total Criteria Ranking:	**1**	**1**	**4**	**5**	**3**

*Evaluator #5 was unable to evaluate due to being unable to attend the Proposer interview sessions on April 12th.

PROPOSAL COST ANALYSIS

NOTES:

ACCURATE BUILDING MAINTENANCE, LLC: RANKED #1, GREAT TRAINING/IMPLEMENTATION, REFERENCES, SOFTWARE WITH GREAT RESPONSE TIME, CUSTOMER SERVICE WOW

CARNATION BUILDING SYSTEM, INC: RANKED #1, GREAT TRAINING/IMPLEMENTATION, REFERENCES, FEDERAL GOVERNMENT WORK, GOOD CUSTOMER SERVICE

TWILIGHT JANITORIAL, INC.: RANKED #3, GOOD TRAINING/IMPLEMENTATION, SAFETY, GREAT REFERENCES, CURRENT VENDOR WITH CITY, GOOD CUSTOMER SERVICE

IWC MAINTENANCE, LLC: RANKED #4, HIGH PRICING WITH EXCEPTION OF 3 FACILITIES, MEDIOCRE REFERENCES, MEDIOCRE TRAINING, UNABLE TO MEET NEEDS OF LARGE FACILITIES WITH EQUIPMENT

PINNACLE JANITORIAL, INC.: RANKED #5, HIGH PRICING WITH EXCEPTION OF 1 FACILITY, POOR REFERENCES, MEDIOCRE TRAINING

COSTS BELOW IN BOLD AND BLUE FONT ARE THE SUGGESTED AWARD AMOUNTS

FIRM LISTED BY RANK ON EVALUATIONS	ACCURATE BUILDING MAINTENANCE, LLC		CARNATION BUILDING SYSTEM, INC.		TWILIGHT JANITORIAL, INC.		IWC MAINTENANCE, LLC		PINNACLE JANITORIAL, INC.		COMMENTS
FACILITY NAME	**BID**	**DELTA**	**BID**	**DELTA**	**BID**	**DELTA**	**BID**	**DELTA**	**BID**	**DELTA**	
CITY HALL	**$ 37,303.80**	$ 643.80	$ 36,660.00	$ -			$ 49,932.00	$ 13,272.00	$ 46,561.80	$ 9,901.80	RECOMMENDING 2ND LOWEST COST, SEE STAFF SUMMARY FOR REASON(S)
LIBRARY	**$ 35,072.76**	$ 2,360.76	$ 32,712.00	$ -			$ 66,097.20	$ 33,385.20	$ 47,292.00	$ 14,580.00	RECOMMENDING 2ND LOWEST COST, SEE STAFF SUMMARY FOR REASON(S)
EAST LIBRARY	**$ 13,761.00**	$ 507.20	$ 13,253.80	$ -			$ 21,796.80	$ 8,543.00	$ 15,224.04	$ 1,970.24	RECOMMENDING 2ND LOWEST COST, SEE STAFF SUMMARY FOR REASON(S)
AIRPORT	**$ 56,512.20**	$ 652.20	$ 62,179.12	$ 6,319.12			$ 57,627.00	$ 1,767.00	$ 55,860.00	$ -	RECOMMENDING 2ND LOWEST COST, SEE STAFF SUMMARY FOR REASON(S)
AQUAPLEX	**$ 65,152.20**	$ 2,851.20	$ 67,544.64	$ 5,243.64			$ 62,301.00	$ -	$ 71,856.00	$ 9,555.00	RECOMMENDING 2ND LOWEST COST, SEE STAFF SUMMARY FOR REASON(S)
VISITOR'S CENTER	**$ 23,616.00**	$ -	$ 28,200.00	$ 4,584.00			$ 39,900.00	$ 16,284.00	$ 27,077.52	$ 3,461.52	RECOMMENDING LOWEST COST
NACET BUSINESS INCUBATOR	**$ 7,574.40**	$ 1,920.00					$ 5,654.40	$ -	$ 16,440.00	$ 10,785.60	RECOMMENDING 2ND LOWEST COST, SEE STAFF SUMMARY FOR REASON(S)
MILLIGAN HOUSE			**$ 5,170.00**	$ -			$ 5,814.00	$ 644.00	$ 6,729.92	$ 1,559.92	RECOMMENDING LOWEST COST
CHERRY BUILDING	$ 2,664.00	$ 643.00	**$ 2,021.00**	$ -	$ 3,920.00	$ 1,899.00	$ 6,270.00	$ 4,249.00	$ 4,222.80	$ 2,201.80	RECOMMENDING LOWEST COST
MUNICIPAL COURT			**$ 13,160.00**	$ 4,856.00			$ 8,304.00	$ -	$ 14,574.60	$ 6,270.60	RECOMMENDING 2ND LOWEST COST, SEE STAFF SUMMARY FOR REASON(S)
USGS #3	$ 16,417.20	$ 4.98	**$ 16,412.22**	$ -			$ 16,872.00	$ 459.78	$ 19,500.00	$ 3,087.78	RECOMMENDING LOWEST COST
USGS #4	$ 29,188.80	$ 5,853.30	**$ 23,335.50**	$ -			$ 27,132.00	$ 3,796.50	$ 26,580.00	$ 3,244.50	RECOMMENDING LOWEST COST
USGS #5	$ 5,655.00	$ 15.00	**$ 5,640.00**	$ -			$ 14,592.00	$ 8,952.00	$ 6,252.00	$ 612.00	RECOMMENDING LOWEST COST
USGS #6	$ 27,544.80	$ 1,552.80	**$ 27,276.00**	$ 1,284.00			$ 25,992.00	$ -	$ 32,104.80	$ 6,112.80	RECOMMENDING 2ND LOWEST COST, SEE STAFF SUMMARY FOR REASON(S)
UTILITY SHOP			**$ 5,640.00**	$ -	$ 11,120.00	$ 5,480.00	$ 7,250.40	$ 1,610.40	$ 12,558.48	$ 6,918.48	RECOMMENDING LOWEST COST
CINDERLAKE LANDFILL			$ 5,930.00	$ 730.00	**$ 5,200.00**	$ -	$ 5,677.20	$ 477.20	$ 6,780.00	$ 1,580.00	RECOMMENDING LOWEST COST
HAZARDOUS WASTE CENTER			$ 1,128.00	$ 28.00	**$ 1,100.00**	$ -	$ 1,185.60	$ 85.60	$ 1,920.00	$ 820.00	RECOMMENDING LOWEST COST
STREETS DIVISION			$ 3,370.00	$ -	**$ 3,485.00**	$ 115.00	$ 4,742.40	$ 1,372.40	$ 3,656.76	$ 286.76	RECOMMENDING 2ND LOWEST COST, SEE STAFF SUMMARY FOR REASON(S)
ENVIRONMENTAL SERVICES			$ 4,463.00	$ 1,083.00	**$ 3,380.00**	$ -	$ 5,928.00	$ 2,548.00	$ 3,656.76	$ 276.76	RECOMMENDING LOWEST COST

RECOMMENDED CONTRACTED AMT	**$ 238,992.36**	**$ 98,654.72**	**$ 13,165.00**

TOTAL CONTRACTED AMT	**$ 350,812.08**

ATTACHMENT A

DRAFT AGREEMENT FOR CUSTODIAL SERVICES

CITY OF FLAGSTAFF
and

_____

This Agreement for a City of Flagstaff Custodial Services ("Agreement") is made by and between the City of Flagstaff ("City"), a municipal corporation with offices at 211 W. Aspen Avenue, Flagstaff, Coconino County, Arizona, and _____, with an office at _____("Provider"), effective as of the date written below.

RECITALS

A. The City desires to enter into this Agreement for custodial services for the City of Flagstaff; and

B. Provider has available and offers to provide the personnel necessary to organize and provide said services in accordance with the Scope of Work, attached to this Agreement as Exhibit A;

For the reasons recited above, and in consideration of the mutual covenants contained in this Agreement, the City and Provider agree as follows:

1. SERVICES TO BE PERFORMED BY PROVIDER

Provider agrees to provide the services, as set forth in detail in Exhibit "A" attached hereto and hereby incorporated as part of this Agreement and adopted by reference.

2. COMPENSATION OF PROVIDER

The City agrees to make payment, in the amount of $_____ for custodial services set forth in Exhibit "A".

3. RIGHTS AND OBLIGATIONS OF PROVIDER

3.1 Independent Contractor. The parties agree that Provider performs specialized services and that Provider enters into this Agreement with the City as an independent contractor. Nothing in this Agreement shall be construed to constitute Provider or any of Provider's agents or employees as an agent, employee or representative of the City. As an independent contractor, Provider is solely responsible for all labor and expenses in connection with this Agreement and for any and all damages arising out of Provider's performance under this Agreement. Provider is not obligated to accept all requests for services, depending on circumstances with other work being performed for other clients.

3.2 Provider's Control of Work. All services to be provided by Provider shall be performed as determined by the City in accordance with the Scope of Services set forth in Exhibit "A." Provider shall furnish the qualified personnel, materials, equipment and other items necessary to carry out the terms of this Agreement. Provider shall be responsible for and in full control of the work of all such personnel.

3.3 Reports to the City. Although Provider is responsible for control and supervision of work performed

under this Agreement, the services provided shall be acceptable to the City and shall be subject to a general right of inspection and supervision to ensure satisfactory completion. This right of inspection and supervision shall include, but not be limited to, all reports if requested by the City to be provided by Provider to the City and the right of the City, and the right of the City to audit Provider's records.

3.4 Compliance with All Laws. Provider shall comply with all applicable laws, ordinances, rules, regulations and executive orders of the federal, state and local government, which may affect the performance of this Agreement. Any provision required by law, ordinances, rules, regulations, or executive orders to be inserted in this Agreement shall be deemed inserted, whether or not such provisions appear in this Agreement.

4. NOTICE PROVISIONS

Notice. Any notice concerning this Agreement shall be in writing and sent by certified or registered mail as follows:

To the City's Authorized Representative: To Provider:

Amy Hagin
Senior Procurement Specialist
City of Flagstaff
211 W. Aspen
Flagstaff, Arizona 86001

5. INDEMNIFICATION

To the fullest extent permitted by law, Provider shall indemnify, defend, save and hold harmless the City of Flagstaff and its officers, officials, agents, and employees (hereinafter referred to as "Indemnitee") from and against any and all claims, actions, liabilities, damages, losses, or expenses (including court costs, attorneys' fees, and costs of claim processing, investigation and litigation) (hereinafter referred to as "Claims") for bodily injury or personal injury (including death), or loss or damage to tangible or intangible property caused, or alleged to be caused, in whole or in part, by the negligent or willful acts or omissions of Provider or any of its owners, officers, directors, agents, employees or subcontractors. This indemnity includes any claim or amount arising out of or recovered under the Workers' Compensation Law or arising out of the failure of such Provider to conform to any federal, state or local law, statute, ordinance, rule, regulation or court decree. It is the specific intention of the parties that the Indemnitee shall, in all instances, except for Claims arising solely from the negligent or willful acts or omissions of the Indemnitee, be indemnified by Provider from and against any and all claims. It is agreed that Provider shall be responsible for primary loss investigation, defense and judgment costs where this indemnification is applicable. Provider shall waive all rights of subrogation against the City, its officers, officials, agents and employees for losses arising from the work performed by Provider for the City.

6. INSURANCE

Provider and subcontractors, if any, shall procure and maintain until all of their obligations have been discharged, including any warranty periods under this Agreement are satisfied, insurance against claims for injury to persons or damage to property which may arise from or in connection with the performance of the work hereunder by Provider, its agents, representatives, employees or subcontractors.

The insurance requirements herein are minimum requirements for this Agreement and in no way limit the indemnity covenants contained in this Agreement. The City in no way warrants that the minimum limits contained herein are sufficient to protect Provider from liabilities that may arise out of the performance of

the work under this Agreement by Provider, its agents, representatives, employees or subcontractors and Provider is free to purchase additional insurance as may be determined necessary.

A. Minimum Scope and Limits of Insurance. Provider shall provide coverage at least as broad and with limits of liability not less than those stated below.

1. Automobile Liability - Any Auto or Owned, Hired and Non-Owned Vehicles
(Form CA 0001, ed. 12/93 or any replacement thereof.)
Combined Single Limit Per Accident for Bodily Injury and Property Damage $1,000,000

2. Professional Liability $1,000,000

B. SELF-INSURED RETENTIONS/DEDUCTIBLES: Any self-insured retentions and deductibles must be noted to the City. However, the Proposer shall be solely responsible for any self-insured and/or deductibles associated with the Proposer's insurance coverage.

C. OTHER INSURANCE REQUIREMENTS: The policies are to contain, or be endorsed to contain, the following provisions:

1. Commercial General Liability and Automobile Liability Coverages:

   a. The City of Flagstaff, its officers, officials, and employees are additional insureds with respect to liability arising out of: activities performed by, or on behalf of, the Provider; including the City's general supervision of the Provider; products and completed operations of the Provider: and automobiles owned, leased, hired or borrowed by the Provider.

   b. The Provider's insurance shall contain broad form contractual liability coverage.

   c. The Provider's insurance coverage shall be primary insurance with respect to the City, its, officers, officials, and employees. Any insurance or self-insurance maintained by the City, its officers, officials, employees, or volunteers shall be in excess to the coverage of the Provider's insurance and shall not contribute to it.

   d. The Provider's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

   e. Coverage provided by the Provider shall not be limited to the liability assumed under the indemnification provisions of this contract.

   f. The policies shall contain a waiver of subrogation (not including auto) against the City, its officers, officials, and employees for losses arising from work performed by the Provider for the City.

2. Workers' Compensation and Employer's Liability Coverage: The insurer shall agree to waive all rights of subrogation against the City, its officers, officials, employees and volunteers for losses arising from work performed by the Provider for the City.

6.1 Notice of Cancellation. Each insurance policy required by the insurance provisions of this Agreement shall provide the required coverage and shall not be suspended, voided or canceled except after thirty (30) days prior written notice has been given to the City, except when cancellation is for non-payment of premium, then at least ten (10) days prior notice shall be given to the City. Such notice shall be sent directly to:

Rick Compau, C.P.M., CPPO, CPPB
Purchasing Director
City of Flagstaff, Purchasing Division
211 W. Aspen Ave.
Flagstaff, Arizona 86001

6.2 Acceptability of Insurers. Insurance shall be placed with insurers duly licensed or authorized to do business in the State of Arizona and with an "A.M. Best" rating of not less than A- VII, or receiving prior approval by the City. The City in no way warrants that the above-required minimum insurer rating is sufficient to protect Provider from potential insurer insolvency.

6.3 Verification of Coverage. Prior to commencing work or services**,** Provider shall furnish the City with certificates of insurance (ACORD form or equivalent approved by the City) as required by this Agreement. The certificates for each insurance policy shall be signed by a person authorized by that insurer to bind coverage on its behalf.

All certificates and any required endorsements shall be received and approved by the City before work commences. Each insurance policy required by this Agreement shall be in effect at or prior to commencement of work under this Agreement and remain in effect for the duration of this Agreement. Failure to maintain the insurance policies as required by this Agreement or to provide evidence of renewal shall constitute a material breach of contract.

All certificates required by this Agreement shall be sent directly to **Rick Compau, C.P.M., CPPO, CPPB, Purchasing Director, City of Flagstaff, Purchasing Division, 211 W. Aspen Ave., Flagstaff, AZ**. **86001.** The City project/contract number and project description shall be noted on the certificate of insurance. The City reserves the right to request and receive within ten (10) days, complete, certified copies of all insurance policies required by this Agreement at any time**.** The City shall not be obligated, however, to review same or to advise Provider of any deficiencies in such policies and endorsements, and such receipt shall not relieve Provider from, or be deemed a waiver of the City's right to insist on, strict fulfillment of Provider's obligations under this Agreement.

6.4 Subcontractors. Providers' certificate(s) shall include all subcontractors as additional insureds under its policies **or** Provider shall furnish to the City separate certificates and endorsements for each subcontractor. All coverages for subcontractors shall be subject to the minimum requirements identified above.

6.5 Approval. Any modification or variation from the insurance requirements in this Agreement shall be made by the City Attorney's office, whose decision shall be final. Such action shall not require a formal amendment to this Agreement, but may be made by administrative action.

7. DEFAULT AND TERMINATION

7.1 Events of Default Defined. The following shall be Events of Default under this Agreement:

7.1.1 Any material misrepresentation made by Provider to the City;

7.1.2 Any failure by Provider to perform its obligations under this Agreement including, but not limited to, the following:

7.1.2.1 Failure to commence work at the time(s) specified in this Agreement due to a reason or circumstance within Provider's reasonable control;

7.1.2.2 Failure to perform the work with sufficient personnel and equipment or with sufficient equipment to ensure completion of the work within the specified time;

7.1.2.3 Failure to perform the work in a manner reasonably satisfactory to the City;

7.1.2.4 Failure to promptly correct or re-perform within a reasonable time work that was rejected by the City as unsatisfactory or erroneous;

7.1.2.5 Discontinuance of the work for reasons not beyond Provider's reasonable control;

7.1.2.6 Failure to comply with a material term of this Agreement, including, but not limited to, the provision of insurance; and

7.1.2.7 Any other acts specifically stated in this Agreement as constituting a default or a breach of this Agreement.

7.2 Remedies.

7.2.1 Upon the occurrence of any Event of Default, the City may declare Provider in default under this Agreement. The City shall provide written notification of the Event of Default and any intention of the City to terminate this Agreement. Upon the giving of notice, the City may invoke any or all of the following remedies:

7.2.1.1 The right to cancel this Agreement as to any or all of the services yet to be performed;

7.2.1.2 The right of specific performance, an injunction or any other appropriate equitable remedy;

7.2.1.3 The right to monetary damages;

7.2.1.4 The right to withhold all or any part of Provider's compensation under this Agreement;

7.2.1.5 The right to deem Provider non-responsive in future contracts to be awarded by the City; and

7.2.1.6 The right to seek recoupment of public funds spent for impermissible purposes.

7.2.2 The City may elect not to declare an Event of Default or default under this Agreement or to terminate this Agreement upon the occurrence of an Event of Default. The parties acknowledge that this provision is solely for the benefit of the City, and that if the City allows Provider to continue to provide the Services despite the occurrence of one or more Events of Default, Provider shall in no way be relieved of any of its responsibilities or obligations under this Agreement, nor shall the City be deemed to waive or relinquish any of its rights under this Agreement.

7.2.3 Any excess costs incurred by the City in the event of termination of this Agreement for default, or in the event the City exercises any of the remedies available to it under this Agreement, may be offset by use of any payment due for services completed before termination of this Agreement for default or the exercise of any remedies. If the offset amount is insufficient to cover excess costs, Provider shall be liable for and shall remit promptly to the City the balance upon written demand from the City.

8. GENERAL PROVISIONS

8.1 Headings. The article and section headings contained herein are for convenience in reference and are not intended to define or limit the scope of any provision of this Agreement.

8.2 Jurisdiction and Venue. This Agreement shall be administered and interpreted under the laws of the State of Arizona. Provider hereby submits itself to the original jurisdiction of those courts located within Coconino County, Arizona.

8.3 Attorney's Fees. If suit or action is initiated in connection with any controversy arising out of this Agreement, the prevailing party shall be entitled to recover in addition to costs such sum as the court may adjudge reasonable as attorney fees, or in event of appeal as allowed by the appellate court.

8.4 Severability. If any part of this Agreement is determined by a court to be in conflict with any statute or constitution or to be unlawful for any reason, the parties intend that the remaining provisions of this Agreement shall remain in full force and effect unless the stricken provision leaves the remaining Agreement unenforceable.

8.5 Assignment. This Agreement is binding on the heirs, successors and assigns of the parties hereto. This Agreement may not be assigned by either the City or Provider without prior written consent of the other.

8.6 Conflict of Interest. Provider covenants that Provider presently has no interest and shall not acquire any interest, direct or indirect, that would conflict in any manner or degree with the performance of services required to be performed under this Agreement. Provider further covenants that in the performance of this Agreement, Provider shall not engage any employee or apprentice having any such interest. The parties agree that this Agreement may be cancelled for conflict of interest in accordance with Arizona Revised Statutes § 38-511.

8.7 Authority to Contract. Each party represents and warrants that it has full power and authority to enter into this Agreement and perform its obligations hereunder, and that it has taken all actions necessary to authorize entering into this Agreement.

8.8 Integration. This Agreement represents the entire understanding of City and Provider as to those matters contained in this Agreement, and no prior oral or written understanding shall be of any force or effect with respect to those matters. This Agreement may not be modified or altered except in writing signed by duly authorized representatives of the parties.

8.9 Non-appropriation. In the event that no funds or insufficient funds are appropriated and budgeted in any fiscal period of the City for payments to be made under this Agreement, the City shall notify Provider of such occurrence, and this Agreement shall terminate on the earlier of the last day of the fiscal period for which sufficient appropriation was made or whenever the funds appropriated for payment under this Agreement are exhausted. No payments shall be made or due to Provider under this Agreement beyond these amounts appropriated and budgeted by the City to fund payments under this Agreement.

8.10 Mediation. If a dispute arises out of or relates to this Agreement, and if the dispute cannot be settled through negotiation, the parties agree first to try in good faith to resolve the dispute by mediation before resorting to litigation or some other dispute resolution procedure. Mediation shall take place in Flagstaff, Arizona, shall be self-administered, and shall be conducted under the CPR Mediation Procedures established by the CPR Institute for Dispute Resolution, 366 Madison Avenue, New York, NY 10017, (212) 949-6490, www.cpradr.org, with the exception of the mediator selection provisions, unless other procedures are agreed upon by the parties. Unless the parties agree otherwise, the mediator(s) shall be selected from panels of mediators trained under the Alternative Dispute Resolution Program of the Coconino County Superior Court. Each party agrees to bear its own costs in mediation. The parties shall not be obligated to mediate if an indispensable party is unwilling to join the mediation. This mediation provision shall not constitute a waiver of the parties' right to initiate legal action if a dispute is not resolved through good faith negotiation or mediation, or if a party seeks provisional relief under the Arizona Rules of Civil Procedure.

8.11 Compliance with Federal Immigration Laws and Regulations. Provider hereby warrants to the City that the Provider and each of its subcontractors ("Subcontractors") will comply with, and are contractually obligated to comply with, all Federal Immigration laws and regulations that relate to its employees and A.R.S. §23-214(A) (hereinafter "Provider Immigration Warranty").
A breach of the Provider Immigration Warranty shall constitute a material breach of this Agreement and shall subject the Provider to penalties up to and including termination of this Agreement at the sole discretion of the City.

The City retains the legal right to inspect the papers of any Provider or Subcontractor employee who works on this Agreement to ensure that the Provider or Subcontractor is complying with the Provider Immigration Warranty. Provider agrees to assist the City in regard to any such inspections.

The City may, at its sole discretion, conduct random verification of the employment records of the Provider and any of subcontractors to ensure compliance with Provider's Immigration Warranty. Provider agrees to assist the City in regard to any random verifications performed.

The provisions of this Article must be included in any contract the Provider enters into with any and all of its subcontractors who provide services under this Agreement or any subcontract. "Services" are defined as furnishing labor, time or effort in the State of Arizona by a contractor or subcontractor. Services include construction or maintenance of any structure, building or transportation facility or improvement to real property.

8.12 Subcontractors. This Agreement or any portion thereof shall not be sub-contracted without the prior written approval of the City. No Subcontractor shall, under any circumstances, relieve Provider of its liability and obligation under this Agreement. The City shall deal through Provider and any Subcontractor shall be dealt with as a worker and representative of Provider. Provider assumes responsibility to the City for the proper performance of the work of Subcontractors and any acts and omissions in connection with such performance. Nothing in the Contract Documents is intended or deemed to create any legal or contractual relationship between the City and any Subcontractor or Sub-Subcontractor, including but not limited to any third-party beneficiary rights.

8.13 Waiver. No failure to enforce any condition or covenant of this Agreement by the City shall imply or constitute a waiver of the right of the City to insist upon performance of the condition or covenant, or of any other provision of this Agreement, nor shall any waiver by the City of any breach of any one or more conditions or covenants of this Agreement constitute a waiver of any succeeding or other breach under this Agreement.

8.14 Business Operations in Sudan/Iran. In accordance with A.R.S. § 35-397, the Provider certifies that the Provider and its affiliates and subsidiaries do not have scrutinized business operations in Sudan or Iran. If the City determines that the Provider's certification is false, the City may impose all legal and equitable remedies available to it, including but not limited to termination of this Agreement.

9. DURATION

This Agreement shall become effective on and from the day and year executed by the parties, indicated below, and shall continue in force for an initial term of three (3) years, beginning [, 2013 through , 2016], unless sooner terminated as provided above. Upon mutual agreement between the City and Provider, this Agreement may be renewed for a maximum of two (2) additional one (1) year terms, upon mutual agreement from both parties. The Purchasing Director of the City has authority to bind the City only for the purpose of renewing the term of this Agreement as described in this section.

.

City of Flagstaff

_____
Kevin Burke, City Manager

Attest:

_____
City Clerk

Approved as to form:

_____
City Attorney

Provider

_____

Date of Execution:_____

CITY OF FLAGSTAFF

STAFF SUMMARY REPORT

To:	The Honorable Mayor and Council
From:	Jill Trompeter, Real Estate Manager
Date:	05/29/2013
Meeting Date:	06/04/2013

TITLE:

Consideration and Approval to enter into a property management agreement for the Lease of City-Owned Property: Located at 311 W. Cherry Avenue.

RECOMMENDED ACTION:

Authorize staff to enter into an Agreement with Core Realty for property management and leasing services of a City-owned property located at 311 W. Cherry, Flagstaff, Arizona.

Policy Decision or Reason for Action:

Through authorization of this agreement, the City will be able to lease this property through a property management broker allowing more ease of completing the application and qualification process in leasing this parcel as well as the management tenants/property and collection of rents.

Core Realty will comply with Charter regulations in the advertisement and leasing of this property.

The subject property is a three bedroom, two bath, one car garage, Single Family residence, located in the heart of downtown. This property was purchased in 2002 as part of the Rio De Flag project and remained vacant from 2002 until 2011. This is the second year this property will be leased.

Financial Impact:

All costs associated with the marketing and lease of this property will be offset through the lease.

Connection to Council Goal:

Effective governance

Has There Been Previous Council Decision on This:

Yes. 2011-2012 this property was leased through Catholic Social Services.

Options and Alternatives:

Option A –Authorize Core Realty to proceed in the marketing and lease of this property.
Option B – Directed Staff to conduct Property Management in-house.
Option C- Reject.

Background/History:

The property was purchased in 2002 as part of the relocation of the Rio De Flag. The property remained vacant from 2002 until 2011, when the parcel was leased to Catholic Social Services (CSS). The lease with CSS has since expired and CSS has chosen not to renew the lease.

By leasing this property through Core Realty, marketing, management and collection of rents will be handled by the property management company.

The term of this agreement is for five one year increments, with each year being renewable upon agreement of both parties. Depending on the season, the rental rents are expected to range from $1,650.00 to $1,800 per month.

Key Considerations:

Historically this property has remained vacant. Through this lease, the property is generating revenues and will be maintained by the lease.

Expanded Financial Considerations:

Historically, general annual maintenance of this building cost approximately $1,600.00. An additional fee of 10% of the lease amount will be charged for the management and marketing of this property. Through the proceeds of the lease income, any and all maintenance, marketing or management fees will be offset. Any remaining proceeds will be applied to the Rio de Flag account.

Community Benefits and Considerations:

With the exception of this being an income generating property, the hiring of a local realtor and paying into the tax base, there are no direct benefits to the community.

Community Involvement:

Inform

Attachments: Agreement

PROPERTY MANAGEMENT SERVICES AGREEMENT

This Services Agreement (the "Agreement") is entered into between the City of Flagstaff, a municipal corporation of the State of Arizona (the "City"), and Core Realty Professionals, LLC, an Arizona Limited Liability Corporation (the "Broker").

RECITALS

Whereas the City is in need of property-management services for its property known as Hunter House; and

Whereas the City desires to enter into this Agreement for Broker to provide property-management services and other such related duties upon the terms and conditions set forth herein (the "Services"); and

Whereas Broker desires to provide the Services upon the terms and conditions set forth herein;

AGREEMENT

Now, therefore, in consideration of the foregoing recitals, which are incorporated herein by reference, the mutual covenants set forth herein, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties agree as follows:

1. Services. The Broker will manage the property described as Hunter House, located at 311 W. Cherry Avenue, Flagstaff, Arizona (the "Property"), upon the terms hereinafter set forth herein.

2. Term. This Agreement shall commence on June 18, 2013, and end on June 30, 2018. Either party may terminate this Agreement by giving the other party thirty-days written notice of termination. Neither party will incur any penalties for exercising this termination provision. If the City terminates this Agreement and continues leasing to the tenants found by the Broker, a management fee is due to the Broker for either: 1) the management fee due for the period of the current tenants' occupancy under Section 3 of this Agreement, payable monthly until the tenants vacate the Property; or 2) the management fee due under Section 3 of this Agreement for one year from the date of termination, payable monthly; whichever occurs first.

3. Fees and Payment. In consideration of the Services to be rendered by Broker, the City shall pay to Broker the following fees:

   3.1. A management fee of 10% (ten percent) of the gross income received from the lease of the Property, to be deducted from the amount collected as rent in any rental period. No management fee is due if the Broker does not collect income from the lease of the Property.

4. Provision of Services. The Broker will perform the services as follows:

4.1. The Broker will act with due diligence and in accordance with the usual and customary standards of Realtors in good standing in the community.

4.2. The Broker will collect all monies due to the City under any lease or holdover tenancy of the Property.

4.3. The Broker will render a statement to the City not less often than once a month of all receipts, revenues, expenses, disbursements, and charges in connection with the management of said property, and to remit promptly to the City or pay to such person or corporation designated by the City all monies due not less than once a month.

4.4. The Broker will deposit and safeguard all monies collected for the City as security deposits in a non-interest-bearing trust account, separate from Broker's personal or business account; provided however, that Broker shall not be liable for loss due to bankruptcy or failure of a depository.

5. Authority of Broker. The City hereby gives and grants to the Broker the following authority:

5.1. Leasing, Notice and Advertising. As agent for City, to negotiate with prospective tenants for rental of the Property or a space therein, for lease of such Property or space therein, and to execute leases and renew leases for periods of one year or less, or for longer terms when so authorized by City, at rates and on such terms as may be approved by the City. The City will provide a standard form of lease to the Broker that will be used for the lease of the Property. Any changes to the terms of the standard form of lease must be negotiated between the Broker and the City before the publication of the notice. Each lease must contain the following provision: "government property that is leased for commercial purposes is subject to the commercial-general-property-lease excise tax. Failure of the City to pay the tax after notice and opportunity to cure is a default that could result in divesting the lessee of any interest in or right of occupancy of the government property improvement." The City Council delegates authority to the Assistant to the City Manager for Real Estate the authority to negotiate terms of leases of the Property as provided for in this subsection.

Broker shall follow the requirements of the City Charter for leasing City-owned property when performing these duties. Before leasing the Property, the Broker shall publish notice of the opportunity to lease the Property at least one time per week for two weeks in the Arizona Daily Sun. The City shall pay for this required notice. The notice must state the terms of the lease and the lowest acceptable offer. After publication is complete, the Broker will accept bids. The lease will be awarded to the highest responsible bidder. The City hereby delegates its authority to lease the Property and reject all bids for the Property to the Broker. The Broker will provide a copy of the fully executed lease to the City.

In addition to the notice specified above, the Broker will advertise the availability for rental of the Property and display signs thereon or elsewhere for the purpose of such advertisement. The City and Broker agree that the City will pay for any newspaper advertising up to one hundred fifty-five dollars ($155.00) for a one-month advertisement in the Arizona Daily Sun or elsewhere if approved by the City. The City Council delegates authority to the Assistant to the City Manager for Real Estate the authority to approve additional advertising or advertising by a method other than the newspaper advertising specified above.

5.2. Rents. To collect all rents due or that become due under such rental or lease agreements and give receipts therefore; to terminate tenancies and to sign and cause to be sent or served in the name of the City such notices as shall be required; to do any and all lawful acts and things necessary to enforce and collect rents or damages due to the City, except for the institution and prosecution of actions to evict tenants and for recovery of rents and other sums due including employment of attorneys for such purposes or for the preparation of any legal instruments, including lease or rental contracts; to settle, compromise and release any actions or controversies in connection with the management of the Property, which shall remain obligations of the City.

5.3. Repairs and Maintenance. To make or cause to be made to the Property or any part thereof any and all necessary and reasonable non-structural repairs or alterations, including but not limited to unclogging plumbing, repair to appliances, repairing or replacing locks, changing fuses, repairing cracked windows, and simple redecorating and landscape maintenance for purposes of marketing the property; provided, however, that Broker shall not incur any obligation in excess of two hundred fifty dollars ($250.00) per month or one thousand dollars ($1000.00) annually; nor undertake structural repairs, alterations, or improvements without obtaining City's specific approval. The City Council delegates authority to the Assistant to the City Manager for Real Estate the authority to approve obligations requiring City approval under this subsection. The Broker may make such emergency repairs as he reasonably deems necessary to protect the Property, whatever amount where such emergency results in sudden and unexpected events.

Major renovations/remodels/extreme water damage or mold remediation will be the responsibility of the City. Broker will not be responsible for the scheduling, payment, etc., of these renovations without a separate written agreement between Broker and the City for the payment of these additional services.

5.4. Agents and Employees of Broker. To hire, discharge, and supervise all labor and employees required for the operation and maintenance of the Property; all such employees shall be deemed employees of Broker; Broker may perform any duties and exercise any authority under this agreement through his attorney, agents or employees, and shall exercise due diligence and reasonable care in their appointment.

6. Responsibilities of the City. The City will:

6.1. Pay or cause to be paid all taxes, insurance premiums, mortgage payments or special assessments due or to become due in relation to the Property during the term of this Agreement. The City will record a memorandum of lease with the Coconino County Recorder and submit the lease to the Coconino County Treasurer and the Department of Revenue. Failure of the City to pay taxes after notice and opportunity to cure is a default that could result in divesting the lessee of any interest in or right of occupancy of the government property.

6.2. Broker is authorized and directed to deduct from any rents or revenues received from the Property all expenses incurred or funds disbursed by Broker for Services provided in accordance with the authority given Broker herein; Broker shall deduct from such receipts all commissions or fees authorized hereunder. If such expenses, disbursements, commissions or fees exceed the rents and revenues collected, City agrees to promptly pay authorized fees in excess to Broker upon demand.

7. Compliance with Law. Broker agrees to comply with the provisions of Federal law, State statutes, City Code, and any and all other applicable laws or City policies.

8. Insurance.

8.1. Broker agrees to procure and maintain in force during the term of this Agreement, at its own cost, the following coverages:

8.1.1. Commercial General or Business Liability Insurance with minimum combined single limits of ONE MILLION DOLLARS ($1,000,000.00) each occurrence and TWO MILLION DOLLARS ($2,000,000.00) general aggregate.

8.1.2. Professional Liability coverage with minimum limits of ONE MILLION DOLLARS ($1,000,000.00) each claim and TWO MILLION DOLLARS ($2,000,000.00) general aggregate. If approved by the City, evidence of qualified self-insured status may be substituted for one or more of the foregoing insurance coverages.

8.2. Broker shall procure and maintain the minimum insurance coverages listed herein. Such coverages shall be procured and maintained with forms and insurers acceptable to the City, acceptable of which shall not be unreasonably withheld. All coverages shall be continuously maintained to cover all liability, claims, demands and other obligations assumed by Broker pursuant this Agreement. In the case of any claims made policy, the necessary retroactive dates and extended reporting periods shall be procured to maintain such continuous coverage. The certificate will name the City, its officers, agents, employees, and volunteers as additional insured, except for workers compensation and professional liability insurance, and will specify that the insurance provided by Broker is primary insurance and any City insurance is excess coverage and not contributory insurance to that provided by Broker. The policy must contain a severability of

interest provision. The City reserves the right to continue payment of the premium for which reimbursement will be deducted from amounts due or subsequently due Broker.

8.3. A Certificate of Insurance shall be completed by Broker's insurance agent(s) as evidence that policies providing the required coverages, conditions, and minimum limits are in full force and effect. The Certificate shall identify this Agreement and shall provide that the coverages afforded under the policies shall not be canceled, terminated or limits reduced until at least thirty (30) days prior written notice has been given to the City. The completed Certificate of Insurance shall be sent or emailed to:

City of Flagstaff
Attn: Risk Manager
211 West Aspen Ave
Flagstaff, AZ 86001

9. Applicable Law; Venue. This Agreement shall be governed by the laws of Arizona and any suit pertaining to this Agreement may be brought only in courts in Coconino County, State of Arizona.

10. Miscellaneous.

10.1. Amendments. This Agreement may be modified only by a written amendment signed by persons duly authorized to enter into contracts on behalf of the City and Broker.

10.2. Severability. The provisions of this Agreement are severable to the extent that any provision or application held to be invalid by a court of competent jurisdiction shall not affect any other provision or application of the Agreement which may remain in effect without the invalid provision or application.

10.3. Entire Agreement; Interpretation; Parol Evidence. This Agreement represents the entire agreement of the parties with respect to its subject matter, and all previous agreements, whether oral or written, entered into prior to this Agreement are hereby revoked and superseded by this Agreement. No representations, warranties, inducements or oral agreements have been made by any of the parties except as expressly set forth herein, or in any other contemporaneous written agreement executed for the purposes of carrying out the provisions of this Agreement. This Agreement shall be construed and interpreted according to its plain meaning, and no presumption shall be deemed to apply in favor of, or against the party drafting the Agreement. The parties acknowledge and agree that each has had the opportunity to seek and utilize legal counsel in the drafting of, review of, and entry into this Agreement.

10.4. Attorneys' Fees and Costs. Should any legal action be necessary to enforce any term or provision of this Agreement or to collect any portion of the amount payable hereunder, then all expenses of such legal action or collection, including

witness fees, costs of the proceedings, and attorneys' fees, shall be awarded to the substantially prevailing party.

10.5. Notices and Requests. Any notice or other communication required or permitted to be given under this Agreement shall be in writing and shall be deemed to have been duly given if: (a) delivered to the party at the address set forth below; (b) deposited in the U.S. Mail, registered or certified, return receipt requested, to the address set forth below; or (c) given to a recognized and reputable overnight delivery service, to the address set forth below:

If to the CITY: If to BROKER:

Assistant to the City Manager
for Real Estate
City of Flagstaff
211 West Aspen Ave
Flagstaff, Arizona 86001

or at such other address, and to the attention of such other person or officer, as any party may designate in writing by notice duly given pursuant to this subsection. Notices shall be deemed received: (a) when delivered to the party; (b) three business days after being placed in the U.S. Mail, properly addressed, with sufficient postage; or (c) the following business day after being given to a recognized overnight delivery service, whichever is earliest, with the person giving the notice paying all required charges and instructing the delivery service to deliver on the following business day. If a copy of a notice is also given to a party's counsel or other recipient, the provisions above governing the date on which a notice is deemed to have been received by a party shall mean and refer to the date on which the party, and not its counsel or other recipient to which a copy of the notice may be sent, is deemed to have received the notice.

10.6. Confidentiality of Records. Broker shall establish and maintain procedures and controls that are acceptable to the City for the purpose of ensuring that information contained in its records or obtained from the City or from others in carrying out its obligations under this Agreement shall not be used or disclosed by it, its agents, officers, or employees, except as required to perform Broker's duties under this Agreement. Persons requesting such information should be referred to the City and handled according to Arizona public records law. Broker also agrees that any information pertaining to individual persons shall not be divulged other than to employees, officers, or professional advisors of Broker as needed for the performance of duties under this Agreement and for the management of Broker's business.

10.7. Discrimination. This agreement is subject to all applicable provisions of the Americans with Disabilities Act (Public Law 101-336, 42 U.S.C. 12101-12213) and all applicable federal regulations under the Act, including 28 CFF Parts 35 and 36. (Non-Discrimination: Broker shall comply with Executive Order 2009-09, which mandates that all persons, regardless of race, color, religion, sex, age,

national origin or political affiliation shall have equal access to employment opportunities, and all other applicable state and federal employment laws, rules and regulations, including the Americans with Disabilities Act. Broker shall take affirmative action to ensure that applicants for employment and employees are not discriminated against due to race, creed, color, religion, sex, age, national origin or political affiliation or disability.)

10.8. Compliance with Federal and State Laws. Broker understands and acknowledges the applicability to it of the Americans with Disabilities Act, the Immigration Reform and Control Act of 1986, and the Drug Free Workplace Act of 1989. The following is only applicable to construction contracts: Broker must also comply with A.R.S. § 34-301, "Employment of Aliens on Public Works Prohibited," and A.R.S. § 34-302, as amended, "Residence Requirements for Employees."

10.8.1. Under the provisions of A.R.S. § 41-4401, Broker hereby warrants to the City that Broker and each of its subcontractors will comply with, and are contractually obligated to comply with, all Federal Immigration laws and regulations that relate to their employees and A.R.S. § 23-214(A) (hereinafter "Contractor Immigration Warranty").

10.8.2. A breach of the Contractor Immigration Warranty shall constitute a material breach of this Agreement and shall subject Broker to penalties up to and including termination of this Agreement at the sole discretion of the City.

10.8.3. The City retains the legal right to inspect the papers of any contractor or subcontractor employee who works on this Agreement to ensure that the contractor or subcontractor is complying with the Contractor Immigration Warranty. Broker agrees to assist the City in regard to any such inspections.

10.8.4. The City may, at its sole discretion, conduct random verification of the employment records of Broker and any subcontractors to ensure compliance with Contractor's Immigration Warranty. Broker agrees to assist the City in regard to any random verification performed.

10.8.5. Neither Broker nor any subcontractor shall be deemed to have materially breached the Contractor Immigration Warranty if Broker or any subcontractor establishes that it has complied with the employment verification provisions prescribed by sections 274A and 274B of the Federal Immigration and Nationality Act and the E-Verify requirements prescribed by A.R.S. § 23-214, Subsection A.

10.8.6. The provisions of this article must be included in any contract that Broker enters into with any and all of its subcontractors who provide services under this Agreement or any subcontract. "Services" are defined as furnishing labor, time or effort in the State of Arizona by a contractor or subcontractor. Services include construction or maintenance of any

structure, building or transportation facility or improvement to real property.

10.9. Scrutinized Business Operations. In signing this Agreement, Broker certifies pursuant to ARS §35-391 that it does not have scrutinized business operations in the Sudan and pursuant to ARS §35-393 that it does not have scrutinized business operations in Iran.

10.10. No Kick-back Certification. Broker warrants that no person has been employed or retained to solicit or secure this Agreement upon an agreement or understanding for a commission, percentage, brokerage or contingent fee; and that no member of the City Council or any employee of the City has an interest, financially or otherwise, in Broker's firm. For breach or violation of this warranty, the City shall have the right to annul this Agreement without liability, or at its discretion to deduct from the compensation to be paid Broker hereunder, the full amount of such commission, percentage, brokerage or contingent fee.

10.11. Conflict of Interest. From the date of this Agreement through the termination of its service to City, Broker shall not accept, negotiate or enter into any contract or agreements for services with any other party that may create a substantial interest, or the appearance of a substantial interest in conflict with the timely performance of the work or ultimate outcome of this Agreement and/or adversely impact the quality of the work under this Agreement without the express approval of the Manager and the City Attorney. Whether such approval is granted shall be in the sole discretion of the Manager and the City Attorney. The parties acknowledge that this Agreement is subject to cancellation pursuant to the provisions of ARS § 38-511.

10.12. Third Party Beneficiaries. Notwithstanding any other language in this Agreement, the parties do not intend for this Agreement to benefit any third parties.

IN WITNESS WHEREOF, the parties have executed this Agreement, effective on this ___ day of _____, 201__.

CITY OF FLAGSTAFF	**CORE REALTY PROFESSIONALS, LLC**
_____	_____
Gerald W. Nabours, Mayor	James Robinson, Broker

Attest:

City Clerk

Approved as to form:

City Attorney

CITY OF FLAGSTAFF

STAFF SUMMARY REPORT

To:	The Honorable Mayor and Council
From:	Jerry Bills, Deputy Fire Chief
Date:	05/29/2013
Meeting Date:	06/04/2013

TITLE:

Consideration and Approval of a Contract: Pre-Hospital Care Emergency Service Agreement with Flagstaff Medical Center.

RECOMMENDED ACTION:

Consider an Agreement with Flagstaff Medical Center in the amount of $6,500 for Medical Direction of Flagstaff Fire Department Paramedics and Advance Life Support drug box rental.

Policy Decision or Reason for Action:

This action is required to allow the fire department to have the Medical Direction and oversight the State of Arizona requires to provide Advance Life Support service in the community. The agreement also provides 8 sets of medications to ensure all of our paramedic assigned apparatus have the ability to provide advanced cardiac life support services.

Financial Impact:

The agreement is funded through the Fire Department Budget and is require to maintain Paramedic services to the City's citizens and visitors.

Connection to Council Goal:

Effective governance.

Has There Been Previous Council Decision on This:

The agreement is renewed every five years and has been in place for a minimum of 20 years.This agreement has an increase in cost of $800 annually and this cost is locked in for the next 5 years.

Options and Alternatives:

1.) Approval continues Paramedic services.
2.) Non approval will stop Paramedic services on July 1, 2013.
3.) Seek another source for Medical Direction and drug box rental.

Background/History:

The Flagstaff Fire Department has provided Advanced Life Support services using Paramedics for over twenty years with the cooperation of Flagstaff Medical Center. The cooperation consists of an agreement allowing Fire Department paramedics to operate under the medical direction of FMC's doctor staff. Medical Direction is required by Arizona State Statutes in order to operate as an Advance Life Support provider.

Key Considerations:

In order to provide paramedic level services, this agreement is required.

Expanded Financial Considerations:

The cost of this agreement is budgeted in the Fire Department's operating budget. The cost is $50.00 per Paramedic for Medical Direction oversight and $625.00 for each drug box. This is a $100 increase per box from previous years. The Department has 8 drug boxes that reside on each fire unit. These drug boxes consist of all the medications the Paramedics are able to use through the Medical Directors oversight. The drugs are monitored, exchanged or refilled through the hospital pharmacy under this agreement, and there is no charge to the Department.

Community Benefits and Considerations:

The benefit to the community is the continuation of Paramedic services.

Community Involvement:

No community involvement in this process.

Expanded Options and Alternatives:

1.) Approval of the agreement will continue the Fire Departments Paramedic services.
2.) A Non Approved agreement will stop Paramedic services on July 1, 2013.
3.) Seek another Provider for these services.

Attachments: FMC Contract

AGREEMENT

DATE: July 1, 2013

PARTIES: **FLAGSTAFF MEDICAL CENTER, INC.**
an Arizona non-profit corporation
1200 North Beaver Street
Flagstaff, Arizona 86001
("FMC")

and

CITY OF FLAGSTAFF
Fire Department
211 W. Aspen
Flagstaff, AZ 86001
("Agency")

PURPOSE: Pre-Hospital Care Emergency Services Agreement

WHEREAS, FMC, as a full service medical and surgical facility licensed by the State of Arizona, desires to give pre-hospital care on-line medical supervision to Emergency Paramedics, Intermediate Emergency Medical Technicians, and Advanced Emergency Medical Technicians providing assistance to persons living, working or visiting within FMC's service area (all such emergency personnel will be collectively referred to herein as "ALS Providers"); and

WHEREAS, Agency desires to utilize FMC as Agency's Advanced Life Support ("ALS") Base Hospital for administrative medical control; and

WHEREAS, FMC and Agency desire to enter into an agreement for the mutual benefit of the parties, as well as for the benefit of the public at large;

NOW, THEREFORE, in consideration of the promises and the covenants herein set forth, the parties hereto agree as follows:

Section 1: Term.

(a) This agreement will commence on the 1st day of July, 2013, and will terminate on the 30th day of June, 2014. Thereafter, subject to annual review by both parties, the agreement will be automatically renewed for successive terms of one (1) year each, unless either party gives the other written notice of its intention not to renew the agreement at least thirty (30) days prior to the expiration date of the agreement or any renewal thereof.

(b) This agreement may be terminated by either party without cause upon thirty (30) days' written notice to the other party.

Section 2: Agreements By FMC.

(a) FMC will retain a licensed physician, experienced in the specialty of emergency medicine, to serve as Pre-Hospital Care Medical Director, responsible for administrative medical direction of all ALS Providers assigned to FMC.

(b) FMC will appoint a qualified individual as coordinator for all ALS pre-hospital activities and responsibilities of the ALS Base Hospital.

(c) FMC will provide an emergency physician who functions as medical control authority to be physically present at all times in the Emergency Department. Such physician will be knowledgeable of the capabilities and limitations of ALS Providers, as well as established standing orders, treatment, triage and communication protocols.

(d) FMC will maintain and staff an Emergency Department with appropriate medical, nursing and allied health personnel.

(e) FMC will b designated and referred to as "ALS Base Hospital" for purposes of being identified as the regional facility with primary responsibility for medical control with respect to the advanced life support services provided under its auspices.

(f) FMC will provide both administrative medical direction and on-line medical direction to Agency's ALS Providers who are administratively assigned to FMC.

(g) FMC will appoint a Quality Improvement Committee, who will:

(1) Establish and implement a system for evaluating the results of ALS Provider responses and for auditing the quality of medical care provided.

(2) Establish and implement a system for identifying continuing education needs of all ALS Providers assigned to FMC for administrative medical direction and on-line medical supervision.

(3) Perform case review of encounters which involved on-line medical supervision when requested by the Physician, ALS Providers, or Intermediary, as well as those cases which involved Do Not Resuscitate ("DNR") patients, patient refusal, medical or trauma codes, and diversion of patients to other facilities.

(4) Establish and implement written procedures for resolving problems which may arise concerning the performance, competence, or medical interrelationships of ALS Providers, medical control authorities, Intermediaries and Emergency Department personnel.

(h) FMC will provide adequate structural and facility resources to allow for didactic and/or clinical training of ALS Providers supervised by FMC.

(i) FMC will aid both administrative and medical staffs in supporting and participating in the continuing education of Agency's ALS Providers.

(j) FMC will maintain operational communications equipment and recording devices for direct communications with ALS Base Hospital.

(k) Upon the request of Agency's transporting unit, FMC will communicate, as soon as is practicably possible, all pertinent patient management information when a patient is to be transported to a receiving facility other than FMC. In such event, care of the patient and direct communication with ALS Providers rendering that care may be transferred to the medical control authority of said receiving facility, if it is also a certified ALS Base Hospital, at the discretion of FMC medical control authority.

(l) FMC will accommodate all requests for on-line medical direction by ALS Providers of Agency as promptly as possible in a cooperative and responsible manner.

(m) FMC will provide medical direction in accordance with Flagstaff Medical Center Medical Control Plans and the Arizona Department of Health Services Rules and Regulations. Suspension or withdrawal of medical direction, and notification thereof to Agency and the ALS Provider affected by such suspension or withdrawal, will be done in accordance with FMC's PHC Policy No. 1-12A.

(n) FMC will ensure that the disposal of contaminated waste meets federal and state requirements.

Section 3: Agreements by Agency.

(a) Agency will provide an emergency vehicle staffed by BLS Personnel (ALS whenever possible) twenty-four (24) hours per day for the purpose of delivering emergency medical care to the sick and injured at the scene of an emergency. Such vehicle need not be physically based at Agency.

(b) Agency will maintain all equipment in safe and reliable condition.

(c) Agency will be responsible for the procedures used in responding to and giving assistance at the scene of an emergency.

(d) Agency will require its ALS Providers to meet continuing education requirements for re-certification and performance improvement, including chart auditing at the agency level, and to cooperate with the Pre-Hospital Care Coordinator in the management of the Continuing Education program. Agency will also notify FMC of each Provider's recertification on or before expiration date.

(e) Agency will provide the Medical Director with adequate and appropriate access to advanced life support personnel in their working environment for purposes of performance evaluation and training.

(f) Agency acknowledges that all medical judgments relevant to the program embraced by this Agreement will be within the province of the Pre-Hospital Care Medical Director and his/her designated representative, and that judgments made by the Medical Director concerning the competency and/or continuing performance of any ALS Providers of Agency will be binding. However, any Agency personnel suspended by the Medical Director may seek administrative review of the Medical Director's decision in accordance with the procedures set forth by the Quality Improvement Committee (PHC Policy # 1-12A).

(g) Agency will provide working communication equipment to be available to ALS Providers at all times that will allow Base Hospital medical direction communication with ALS Providers in the field.

(h) Agency will establish a written policy that the ALS Provider with the highest skill level available during field calls will be in charge of patient care and will remain with the patient, even though being transported by another Agency's vehicle, until transfer of care to the staff of an emergency receiving facility or another comparably staffed ALS emergency vehicle.

(i) Agency will require its ALS Providers, upon arrival at FMC or other receiving facility, to promptly transfer the emergency medical patient(s), verbal report, and the care of the patient(s) to such facility's emergency medical staff.

(j) If Agency re-supplies drugs through FMC, Agency will provide FMC, at time of patient transfer, with an itemized list of all drugs used in the treatment of the patient(s).

(k) Agency will ensure that the disposal of contaminated waste meets federal and state requirements.

(l) Agency will ensure that its ALS Providers assigned to FMC will not be assigned concurrently to any other facility for administrative medical direction.

(m) Agency will assign a specific individual to assist in planning formal education programs to meet the needs of Agency.

(n) Agency will comply with applicable equal employment opportunity and affirmative action requirements.

(o) Agency will allow ride-along privileges to FMC medical control authorities and Intermediaries for on-vehicle experience and observation.

(p) Agency will ensure that all ALS Providers who receive clinical training and/or assessment on FMC's premises will meet the requirements set forth in Exhibit "A" attached hereto and made part hereof. Agency specifically agrees to provide any such employees with a copy of Exhibit "A," and to inform them of their responsibility for compliance therewith prior to the commencement of their clinical experience.

(q) Agency will ensure that only ALS Providers with current certification will be assigned to FMC for Pre-Hospital medical direction. Agency will provide FMC, concurrently with the execution of this Agreement, a list of the names of each ALS Provider assigned to FMC. Such list will be attached to this Agreement and made part hereof as Exhibit "B." Agency agrees to notify FMC in writing within ten (10) days of any termination or transfer of an ALS Provider, change in level of certification of a Provider, or any addition of an ALS Provider to FMC for medical direction. Such notification will include the name, certification expiration date of the ALS Provider, and the effective date of employment, transfer, or termination.

(r) Agency will designate a contact person with decision-making authority to be available to FMC by telephone 24 hours a day, 7days a week. Such contact person will appoint a backup individual with decision-making authority in his/her absence.

Section 4: Agency Fees

(a) Agency will pay FMC the sum of Fifty Dollars ($50.00) per year for each ALS Provider receiving pre-hospital care medical supervision under this agreement. Said amounts will be paid to FMC upon the execution of the agreement and on each annual renewal date thereafter.

(b) Agency will pay FMC the additional sum of One Hundred Dollars ($100.00) for each additional hour spent by FMC resolving conflicts pursuant to FMC's Pre-Hospital policies No. 1.12 and 1.12-A, as well as for each additional hour spent by FMC for expanded scopes of services requested by Agency.

Section 5: Ambulance Restocking.

(a) FMC will promptly re-supply Agency personnel, upon receipt of a properly completed supply form, with pharmaceutical supplies expended during pre-hospital patient treatment when a patient is transported to any facility. FMC will provide and replenish drug box items in accordance with the current and

approved Arizona Department of Health Services Drug Box List. FMC will also replace outdated drugs as needed.

(b) Agency will pay an annual restocking fee of Six Hundred Twenty-Five Dollars ($625.00) per drug box per year, payable within sixty (60) days after execution of this agreement, and within 60 days after the commencement of any renewal term. Failure to remit payment to FMC within said time period will result in termination of the agreement. The restocking fee is based on current ADHS-approved drug box list and is subject to change upon thirty (30) days' written notice to Agency in the event the drug box list is changed by ADHS.

(c) Agency agrees to comply with all federal health care program billing requirements for restocked drugs, in accordance with all applicable program payment and coverage rules and regulations. In no event will FMC bill any patient or third party payor for restocked drugs.

(d) FMC will generate restocking documentation and will provide Agency with a copy thereof at the time of restocking. Both FMC and Agency agree to maintain such documentation for a period of five (5) years.

(e) FMC and Agency specifically acknowledge that the restocking arrangement set forth in this agreement does not take into account the volume or value of any referrals or business otherwise generated between Agency and FMC for which payment may be made under any federal health care program.

Section 6: Miscellaneous.

(a) During the term of this agreement, FMC and Agency will each maintain adequate public and professional liability insurance with a company licensed to do business in the State of Arizona to cover personal injury and property damage caused by the acts or omissions of their respective personnel in an amount not less than $1,000,000.00 per occurrence. Further, FMC will save and hold Agency harmless for any damages caused by the fault or negligence of FMC arising out of the performance or nonperformance of the Agreement; and Agency will likewise save and hold FMC harmless for any damages caused by the fault or negligence of Agency arising out of the performance or nonperformance of this Agreement. Certificates of insurance will be provided by each to the other upon reasonable request.

(b) FMC and Agency agree that whenever Agency's ALS Providers are performing service on FMC's premises, such personnel will be considered as independent contractors and not as agents or employees of FMC taking direction from the physician on FMC staff.

(c) In the performance of their respective functions under this agreement, FMC and Agency agree to comply with the requirements of Arizona Revised Statutes Sections 36-2201, et seq., and Article 2, Chapter 25, Title 9, of the Department of Health Services Administrative Rules and Regulations, as well as any other applicable federal, state and local laws regulating ambulance services.

(d) FMC and Agency hereby adopt the conflict resolution procedures set forth in FMC's Pre-Hospital Policies No. 1.12 and 1.12-A. Agency acknowledges receipt of a copy of such policies from FMC.

(e) The parties hereto agree that nothing in this Agreement will prohibit FMC from entering into similar agreements with other parties.

(f) The parties hereto agree that this writing constitutes the entire agreement entered into by and between them, and supersedes any prior agreement or understanding of the parties, whether oral or written. Any modification of this agreement will be invalid unless stated in writing and signed by both parties hereto.

(g) All notices, requests and other communications hereunder will be in writing and mailed or delivered to the parties at their respective addresses set forth on the first page of this agreement.

(h) This agreement is executed in original and one or more counterparts, any of which may be considered an original agreement, if signed in original.

(i) This agreement has been executed in the State of Arizona, and the laws of the State of Arizona will apply to its validity and construction.

IN WITNESS WHEREOF, the parties have hereto set their hands on the day and year set forth on the first page of this agreement.

FLAGSTAFF MEDICAL CENTER, INC.

By: _____
Lynn Belcher
Vice President
Nursing Services/CNO

By: _____
Maura Mahoney, M.D.
Pre-Hospital Care Medical Director

AGENCY: CITY OF FLAGSTAFF

By: _____

Title: _____

Agreement between FMC and City of Flagstaff

ATTEST:

_____

CITY CLERK, City of Flagstaff

APPROVED AS TO FORM:

for

_____

CITY ATTORNEY, City of Flagstaff

Exhibit "A"
Health Standards and Accountabilities

(a) All Agency ALS Providers who receive clinical training and/or assessment on FMC's premises will, upon FMC's request, provide the following:

(i) Documentation of a negative PPD skin test ("TB test") performed within the previous twelve (12) months, and documentation of a negative PPD skin test at least annually during the term of the agreement.

(ii) If ALS Provider has either a history of previous positive PPD, or a history of BCG immunization, ALS Provider must have documentation of a negative chest x-ray within the previous twelve (12) months and complete a "Positive PPD Symptoms Checklist" affirming that PROVIDER has not noticed any new pulmonary symptoms since the date of the x-ray.

(iii) Documentation of one of the following:

- A case of Measles and Rubella (documented by a physician), OR
- A positive titer for Measles and Rubella (MR); OR
- Immunization for MR or Measles/Mumps/Rubella (MMR) beyond the infant series

(iv) Documentation of any FMC required vaccinations.

(b) If ALS Provider's services are to be performed on FMC's premises, ALS Provider will be issued an identification badge only after all requirements in this paragraph have been met. If issued, the badge is the property of FMC and will be returned to FMC upon the termination of this agreement.

(c) In the event of an emergency while ALS Provider is performing services at FMC, ALS Provider will follow the same protocol as any FMC employee and receive the same emergency care FMC provides its employees, and ALS Provider will be responsible for any charges thus incurred. It is specifically understood that no health insurance benefits are provided to ALS Provider under this agreement.

(d) In the event any ALS Provider is exposed to blood/body fluids during the course of providing services hereunder at FMC, ALS Provider will follow the same protocol as any FMC employee regarding initial evaluation and follow-up through the Emergency Department. ALS Provider will be responsible for any charges thus incurred, and any subsequent lab testing required will be arranged and paid for by ALS Provider.

Exhibit "B"

Agency's ALS Providers who may be assigned to FMC:

Name	ALS Certification
Paul Beitler	CEP
Katie Brown	CEP
Wade Carl	CEP
Tony Casali	CEP
Keith Cashatt	CEP
Tanner Callan	CEP
Daniel Chavez	CEP
Corey Coplea	CEP
Mark Delgiorgio	CEP
Dave Dobbs	CEP
Mike Felts	CEP
Wesley Forbach	CEP
Seth Gregar	CEP
Marc Goldberg	CEP
Chad Hiser	CEP
Mark Johnson	CEP
Russ Lane	CEP
Dave Manning	CEP
Jay McCullough	CEP
Brett Mierendorf	CEP
Bob Parker	CEP
Bob Romero	CEP
Chris Romero	CEP
Chris Samples	CEP
Matt Smyers	CEP
Chris Thomas	CEP
Joe Toth	CEP
Kevin Wiles	CEP
Kevin Wilson	CEP

Drug Box Verification

Agency: CITY OF FLAGSTAFF FIRE DEPARTMENT Date: _____

1. Total Number of Drug Boxes: 8

2. Are Agency's Drug Boxes Numbered? ☐Yes ☑ No

3. If answer to #2 is "yes" please list drug box numbers:

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

CITY OF FLAGSTAFF

STAFF SUMMARY REPORT

To:	The Honorable Mayor and Council
From:	Dan Holmes, PW Project Manager
Date:	05/29/2013
Meeting Date:	06/04/2013

TITLE:

Consideration and Approval of Construction Manager at Risk Contract: Westplex Taxi Lanes Reconstruction Project at Pulliam Airport.

RECOMMENDED ACTION:

1) Approve the Construction Manager at Risk Contract with J. Banicki Construction, Inc. in an amount not to exceed $4,556,796.16 for Guaranteed Maximum Price (GMP) # 1, contingent upon receipt of the grants from the Federal Aviation Administration and ADOT Multi-Modal and subsequently a grant offer which will be on a future agenda.
2) Authorize Change Order Authority of 5% in the amount of $ 227,839.81 to cover potential costs associated with unanticipated or additional items of work.
3) Authorize the City Manager to execute the necessary documents contingent upon receipt of the above-mentioned grants.

Policy Decision or Reason for Action:

Provide improved airport safety and infrastructure maintenance.

Financial Impact:

The project is budgeted in account number 270-3776-783 in the combined amount of $6,149,445 for FY 13 and FY 14. Based on bids, the FAA grant will provide 91.06% of total project funding, ADOT grant will provide 4.47% of funding with the City grant match of 4.47%. Based on bids the grant application was submitted on 5-15-13, approval of the Construction Manager at Risk (CMAR) contract is contingent upon receipt of the grants from the FAA and ADOT.

Connection to Council Goal:

Repair, replace, maintain infrastructure.

Has There Been Previous Council Decision on This:

Yes, Council approved engineering design services contract on December 4, 2012. Council approved the CMAR Design Phase Contract and the Construction Administration Contract on May 7, 2013.

Options and Alternatives:

1. Approve the CMAR Construction Phase Services Agreement as presented, contingent upon receipt of the FAA and ADOT grants.
2. Reject approval of the Agreement and direct staff to pursue traditional design-bid-build project delivery. This would effectively delay progress on the project by three months.

Background/History:

On December 4, 2012, City Council approved Supplemental Agreement Number 2 for Consulting Services with Kimley-Horn and Associates to provide design phase services for the Westplex Taxi Lanes Reconstruction project. On May 7, 2013, City Council approved the CMAR design phase services contract with J. Banicki Construction. Banicki has completed the design phase services and has provided a Guaranteed Maximum Price (GMP) to construct the project.

In recent years, the Arizona State Legislature has authorized the use of Alternative Project Delivery Methods (APDM) in lieu of the traditional design-bid-build method of project delivery. The Federal Aviation Administration has also authorized use of APDM. These alternative methods allow a contracting agency the opportunity to select a construction team utilizing a Qualifications Based Selection process to procure construction services from a firm deemed most qualified to perform the work.

On March 13, 2013, a Request for Statements of Qualifications for Construction Manager at Risk services was published in the Arizona Daily Sun and posted on the City's purchasing web site. On March 28, 2013, the City of Flagstaff received three Statements of Qualifications from firms wishing to provide CMAR services for the project. A selection committee of five members independently reviewed and evaluated those statements in accordance with guidelines established by the enabling legislation. Based on numerical evaluation of the statements received, the firm of Banicki Construction received the highest ranking and was deemed the most qualified among those submitting proposals to provide the desired design phase services.

The project consists of removal and replacement of taxi lane asphalt pavements between and around existing tee and shade hangars in the westplex area of Flagstaff Pulliam Airport. Work will include milling of existing pavement, excavation and disposal of existing soils, constructing sub-base, base and new asphalt pavements, pavement markings, tie-down installation, pavement marking and other related work. Existing asphalt pavements beneath three existing shade hangars will also be replaced with new concrete pavements. Design phase services are scheduled to begin immediately upon approval of the Agreement. Construction is scheduled to begin in June of 2013 and be completed by December 2013.

Key Considerations:

The pavements and aprons surrounding the existing "tee" and shade hangars are badly deteriorated and require extensive annual patching. Cracks in the pavements are in some cases obstructions to the safe movement of aircraft. These pavements have reached the end of their useful life and are in need of complete replacement.

Expanded Financial Considerations:

Funding for CMAR Construction Phase Services is to be provided by Federal Entitlement and Discretionary grant funds from the U. S. Department of Transportation, Federal Aviation Administration and ADOT Multi-Modal . The project is budgeted in FY 2013 and FY 2014 in account number 270-3776-783 in a combined amount of $6,149,445. Based on bids the FAA grant will provide 91.06% of total project funding, and ADOT grant will provide 4.47% of funding with the City grant match of 4.47%.

Community Benefits and Considerations:

Construction of the project will increase the utility and safety of operations at the airport. New pavements surrounding existing hangars will benefit general aviation tenants by providing improved access and easier maneuverability into leased storage units.

Use of the CMAR method of project delivery will eliminate the need for an advertisement/bid/award process and will cut approximately three months off the project development schedule. In addition, value engineering, constructibility reviews and design input conducted as part of this service agreement have the potential to realize significant construction cost savings over the traditional design-bid-build delivery method.

Community Involvement:

Involve - The project will require that tenants will not have access to their hangars during construction. To minimize that inconvenience, the project will be constructed in three phases, with access restrictions limited to several hangars in each phase. Tenants will be notified of the upcoming work by mail prior to construction. In addition, e-mails will be sent to all tenants advising of the upcoming work. During construction, weekly updates regarding progress and anticipated dates for reinstating hangar access will be posted on the City web site so that tenants may be advised of construction progress.

Expanded Options and Alternatives:

1. Approve the CMAR Construction Phase Services Agreement as presented, contingent upon receipt of the FAA and ADOT grants. This will allow the project to move forward in a timely manner and accelerate commencement of construction.

2. Reject approval of the Agreement and direct staff to pursue traditional design-bid-build project delivery. This would effectively delay progress on the project by three months.

Attachments: CM@R Construction Contract

City of Flagstaff, Arizona

WESTPLEX TAXI LANES RECONSTRUCTION PROJECT

CONSTRUCTION MANAGER AT RISK

CONSTRUCTION SERVICES

AIP NO. 3-04-0015-36
ADOT NO. E-3S3E
PROJECT NO. 01-12003
ACCOUNT NO. 270-3776-783

GMP Agreement Number: One

MAYOR
GERALD W. NABORS

CITY COUNCIL

KARLABREWSTER
SCOTT OVERTON
CORAL EVANS
CELIA BAROTZ
JEFF ORAVITZ
MARK WOODSON

CITY MANAGEMENT

City Manager
Kevin Burke

Utilities Director
Brad Hill

Community Development Director
Mark G. Landsiedel

Public Works Director
Erik Solberg

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CITY OF FLAGSTAFF, ARIZONA

WESTPLEX TAXI LANES RECONSTRUCTION PROJECT
CONSTRUCTION MANAGER AT RISK
CONSTRUCTION SERVICES AGREEMENT

PROJECT No. 01-12003; GMP Agreement No. One ; Agreement No. 2013-38

This Construction Services Agreement ("Agreement"), is made and entered into by and between the City of Flagstaff, an Arizona municipal corporation ("City"), and J. Banicki Construction, Inc. ("Construction Manager at Risk" or CM@Risk") on this ___ day of _____, 2013.

RECITALS

A. The City is authorized and empowered by provisions of the City Charter to execute agreements for construction services.

B. The City intends to construct the Westplex Taxi Lanes Reconstruction Project as more fully described in Exhibit "A" attached ("Project").

C. To undertake the construction administration of the Project the City has entered into a separate agreement with Kimley-Horn & Associates, Inc. ("Design Professional.")

D. CM@Risk has represented to the City that it has the ability to provide construction services for the Project, and based on this representation, the City hereby engages CM@Risk to provide these services and construct the Project.

E. Agreement # 2013-38 has been executed previously between the City and CM@Risk to perform design phase services for the Project. Those services may continue during the duration of this Agreement.

NOW THEREFORE, for and in consideration of the mutual covenants and considerations hereinafter contained, it is agreed by and between the City and CM@Risk as follows:

Article 1 - Definitions

"Agreement" - This written document signed by the City and CM@Risk covering the construction phase of the Project, and including other documents itemized and referenced in, or attached to, and made part of this Agreement.

"Change Directive" - A written order prepared and signed by the City, directing a change in the Work prior to agreement on an adjustment in the Contract Price and the Contract Time.

"Change Order" - A type of Contract amendment issued after execution of the Contract Documents or future GMP Amendments signed by the City and CM@Risk, agreeing to changes to a GMP, for substantial unanticipated alterations in the character of Work. The Change Order shall state the following: the addition, deletion or revision in the scope of Work; the amount of the adjustment to the Contract Price; and the extent of the adjustment to the Contract Times or other modifications to Agreement terms.

"The City ("Owner" or "OWNER") - The City of Flagstaff, a municipal corporation, with whom CM@Risk has entered into this Agreement and for whom the services are to be provided pursuant to said Contact. Regulatory activities handled by the City of Flagstaff Community Development, Fire and Planning Departments or any other City Department are not subject to the responsibilities of the City under this Agreement.

"City's Representative" - The person designated in Subsection 8.3.1.2.

"City's Senior Representative" - The person designated in Subsection 8.3.1.1.

"CM@Risk" - The firm selected by the City to provide construction services as detailed in this Agreement.

"CM@Risk's Contingency" - A fund to cover cost growth during the Project used at the discretion of CM@Risk usually for costs that result from project circumstances. The amount of CM@Risk's Contingency shall be negotiated as a separate line item in each GMP package. Use and management of CM@Risk's Contingency is described in Subsection 5.3.1.

"CM@Risk's Representative" - The person designated in Subsection 8.3.2.2.

"CM@Risk's Senior Representative" - The person designated in Subsection 8.3.2.1.

"Construction Documents" - Certain plans, specifications and drawings prepared by the Design Professional after correcting for permit review requirements or dated plans and specifications specifically identified as the "Construction Documents" herein or in an Exhibit or Addendum which is attached hereto.

"Construction Fee" - CM@Risk's administrative costs, home office overhead, and profit as applicable to this Project whether at CM@Risk's principal or branch offices.

"Contract Documents" - The following items and documents in descending order of precedence executed by the City and CM@Risk: (i) all written modifications, amendments and Change Orders; (ii) this Agreement, including all exhibits and attachments; (iii) Construction Documents; (iv) GMP Plans and Specifications.

"Contract Price" - The amount or amounts set forth in Article 5.

"Contract Time" - The days, as set forth in Article 4, the period of time, including authorized adjustments, allotted in the Contract Documents for Substantial Completion of the Work.

"Cost of the Work" - The direct costs necessarily incurred by CM@Risk in the proper performance of the Work. The Cost of the Work shall include direct labor costs, subcontract costs, costs of materials and equipment incorporated in the completed construction, costs of other materials and equipment, temporary facilities, permit and license fees, materials testing, and related items. The Cost of the Work shall not include CM@Risk's Construction Fee, General Conditions Costs, and taxes.

"Critical Path Method" - A scheduling technique used to predict project duration by analyzing which sequence of activities has the least amount of scheduling flexibility thus identifying the path (sequence) of activities which represent the longest total time required to complete the Project. Delay in completion of the identified activities shall cause a delay in achieving Substantial Completion.

"Day(s)" - Calendar days unless otherwise specifically noted in the Contract Documents.

"Design Phase Contract" - The agreement between the City and CM@Risk for Services provided by CM@Risk during the design phase which may include the following: design recommendations, Project scheduling, constructability reviews, alternate systems evaluation, cost estimate, Minority Business Enterprise/Woman's Business Enterprise/Small Business Enterprise **("MBE/WBE/SBE")** utilization, subcontractor bid phase services, GMP preparation and other services set forth in this Agreement or reasonably inferable therefrom.

"Design Professional" - A qualified, licensed design professional who furnishes, design, construction documents, and/or construction administration services required for the Project.

"Differing Site Conditions" - Concealed or latent physical conditions or subsurface conditions at the Site that, (i) materially differ from the conditions indicated in the Contract Documents or (ii) are of an unusual nature, differing materially from the conditions ordinarily encountered and generally recognized as inherent in the Work.

"Final Completion" - 100% completion of all construction Work noted in or reasonably inferred from the Contract Documents, including but not limited to all Punch Lists work, all record and close-out documents specified in Owner's Project specifications and Owner training/start up activities.

"Float" - The number of Days by which an activity can be delayed without lengthening the Critical Path and extending the Substantial Completion date.

"General Conditions Costs" - Includes, but is not limited to the following types of costs for CM@Risk during the construction phase: (i) payroll costs for Project manager or CM@Risk for work conducted at the Site, (ii) payroll costs for the superintendent and full-time general foremen, (iii) payroll costs for other management personnel resident and working at the Site, (iv) workers not included as direct labor costs engaged in support (e.g. loading/unloading, clean-up, etc.), (v) costs of offices and temporary facilities setup solely for this Project including office materials, office supplies, office equipment and minor expenses, (vi) cost of utilities, fuel, sanitary facilities and telephone services at the Site, (vii) costs of liability and other applicable insurance premiums not included in labor burdens for direct labor costs, (viii) costs of bond premiums, (ix) costs of consultants not in the direct employ of CM@Risk or Subcontractors.

"Guaranteed Maximum Price" or "GMP" - The sum of the maximum Cost of the Work; the Construction Fee; General Conditions Costs, taxes, and CM@Risk's Contingency.

"GMP Plans and Specifications" - The plans and specifications upon which the Guaranteed Maximum Price proposal is based.

"Legal Requirements" - All applicable federal, state and local laws, codes, ordinances, rules, regulations, orders and decrees of any government or quasi-government entity having jurisdiction over the Project or Site, the practices involved in the Project or Site, or any Work.

"Notice to Proceed" or "NTP" - The directive issued by the City, authorizing CM@Risk to start Work.

"Owner's Contingency" - A fund to cover cost growth during the project used at the discretion of the Owner usually for costs that result from Owner directed changes or unforeseen Site conditions. The amount of the Owner's contingency shall be set solely by the Owner and shall be in addition to the Project costs included in CM@Risk's GMP packages. Use and management of the Owner's contingency is described in Section 5.3.2.

"Performance Period" - The period of time allotted in the Contract Documents to complete the Work comprised within a GMP. The Performance Period shall be stated with each GMP and shown on the Project Master Schedule.

"Payment Request" - The City form used by CM@Risk to request progress payments for Work in accordance with Article 7.

"Product Data" - Illustrations, standard schedules, performance charts, instructions, brochures, diagrams and other information furnished by CM@Risk to illustrate materials or equipment for some portion of the Work.

"Project" - The work to be completed in the execution of this Agreement as amended and as described in the Recitals above and in Exhibit "A" attached.

"Project Record Documents" - The documents created pursuant to Section 2.10.

"Samples" - Physical examples, which illustrate materials, equipment or workmanship and establish standards by which the Work shall be evaluated.

"Schedule of Values" - A statement furnished by CM@Risk to the City's Representative for approval, reflecting the portions of the GMP allotted for the various parts of the work and used as the basis for evaluating CM@Risk's applications for progress payments.

"Shop Drawings" - Drawings, diagrams, schedules and other data specially prepared for the Work by CM@Risk or a Subcontractor, manufacturer, supplier or distributor to illustrate some portion of the Work.

"Site" - Land or premises on which the Project is located.

"Specifications" - The part(s) of the Contract Documents for the construction phase consisting of written technical descriptions of materials, equipment, construction systems, standards and workmanship as applied to the Work and certain administrative details applicable thereto.

"Subcontractor" - An individual or firm having a direct Agreement with CM@Risk or any other individual or firm having an Agreement with the aforesaid Contractors at any tier, who undertakes to perform a part of the construction phase Work for which CM@Risk is responsible.

"Submittals" - Documents and/or things that may be produced or presented by one party for consideration review or such other actions as may be required by this Agreement by another party, entity or person. Examples of Submittals include, but are not limited to, preliminary or evolving drafts, product data samples, etc.

"Substantial Completion" - The established date when the Work or designated portion thereof is sufficiently complete, in accordance with the Contract Documents so that the Owner may occupy the Work, or designated portion thereof, for the use for which it is intended. This may include, but is not limited to: (i) Approval by the City or State Fire Marshall and/or other state or local authorities having jurisdiction over the Work or a portion thereof (Certificate of Occupancy); (ii) all systems in place, functional, and displayed to, and accepted by, the City or it's representative; (iii) City operation and maintenance training complete; (iv) HVAC test and balance completed with reports provided to the Design Professional for review; (v) Operational and Maintenance manuals and final Project Record Documents delivered to the City or Design Professional for review.

"Supplier" - A manufacturer, fabricator, supplier, distributor, material man or vendor having a direct agreement with CM@Risk or any Subcontractor to furnish materials or equipment to be incorporated in the construction phase Work by CM@Risk or any Subcontractor.

"Work" - The entire completed construction or the various separately identifiable parts thereof, required to be furnished during the construction phase. Work includes and is the result of performing or furnishing labor and furnishing and incorporating materials, resources and equipment into the construction, and performing or furnishing services and documents as required by the Contract Documents for the construction phase.

Article 2 - CM@Risk's Services and Responsibilities

2.0 CM@Risk shall furnish any and all labor, materials, equipment, transportation, utilities, services and facilities required to perform all Work for the construction of the Project, and to completely and totally construct the same and install the material therein for the City. All Work shall be performed in a good and workmanlike and substantial manner and within the care and skill of a qualified CM@Risk in Flagstaff, Arizona. The Work shall be to the satisfaction of the City and strictly pursuant to and in conformity with the Project's Contract Documents. It is not required that the services be performed in the sequence in which they are described.

2.1 General Services

2.1.1. CM@Risk's Representative shall be reasonably available to the City and shall have the necessary expertise and experience required to supervise the Work. CM@Risk's Representative shall communicate regularly with the City but not less than once a week and shall be vested with the authority to act on behalf of CM@Risk. CM@Risk's Representative may be replaced only with the written consent of the City.

2.2 Government Approvals and Permits

2.2.1 Unless otherwise provided, CM@Risk shall obtain all applicable and/or necessary permits, approvals and licenses required for the prosecution of the Work from any government or quasi-government entity having jurisdiction over the Project. CM@Risk is specifically reminded of the need to obtain the applicable and/or necessary environmental permits or file the applicable and/or necessary environmental notices.

2.2.2 Copies of these permits and notices must be provided to the City's Representative prior to starting the permitted activity. In the case of Fire Department permits, a copy of the application for permit shall also be provided to the City's Representative. This provision does not constitute an assumption by the City of an obligation of any kind for violation of said permit or notice requirements.

2.2.3 City shall be responsible for City of Flagstaff review and permit(s) fees for building and demolition permits. City shall also pay review fees for grading and drainage, water, sewer, and landscaping. City shall also pay for utility design fees for permanent services.

2.2.4 CM@Risk shall be responsible for all other permits and review fees not specifically listed in Subsection 2.3.3 above.

2.2.5 CM@Risk is responsible for the cost of water meter(s), water and sewer taps, fire lines and taps, and all water bills on the project meters until Substantial Completion of the Project. Arrangements for construction water are CM@Risk's responsibility.

2.3 Pre-construction Conference

2.3.1 Prior to the commencement of any Work, the City's Representative or designee shall schedule and conduct a Pre-construction conference.

2.3.2 The purpose of this conference is to establish a working relationship between CM@Risk, utility firms, and various City agencies. The agenda shall include critical elements of the work schedule, submittal schedule, cost breakdown of major lump sum items, Payment Requests and processing, coordination with the involved utility firms, the level of Project Record Documents required and emergency telephone numbers for all representatives involved in the course of construction.

2.3.3 The Notice to Proceed date shall be concurred with by the parties or set by the City at the Preconstruction Conference. After the meeting and upon receipt of a signed Agreement and delivery of the required bonds and insurance in a City approved format, a Notice to Proceed letter shall be issued confirming the construction start date, Performance Period and if applicable, the Substantial Completion date. If a Substantial Completion date is established the conditions of the Substantial Completion shall be listed and/or as set forth in Article 1 herein. Failure by CM@Risk to provide the properly executed bond and insurance forms in a timely manner may delay the construction start date; however, it shall not alter the proposed Substantial Completion date nor be a basis for any time extension request or other claims.

2.3.4 CM@Risk shall provide a Schedule of Values based on the categories used in the buy out of the Work but not greater than the approved GMP and identifying CM@Risk's Contingency. The Schedule of Values shall subdivide the Work into all items comprising the Work. The Schedule of Values shall contain sufficient detail to identify each individual element of the Work and shall relate to the approved GMP Schedule. The Schedule of Values shall be subject to approval by the City's representative.

2.3.5 Minimum attendance by CM@Risk shall be CM@Risk's Representative, who is authorized to execute and sign documents on behalf of the firm, the job superintendent, and CM@Risk's safety officer.

2.4 Control of the Work

2.4.1 Unless otherwise provided in the Contract Documents to be the responsibility of the City or a separate Contractor, CM@Risk shall provide through itself or Subcontractors the necessary supervision, labor, inspection, testing, start-up, material, equipment, machinery, temporary utilities and other temporary facilities to permit CM@Risk to complete the Work consistent with the Contract Documents.

2.4.2 CM@Risk shall perform all construction activities efficiently and with the requisite expertise, skill and competence to satisfy the requirements of the Contract Documents. CM@Risk shall at all times exercise complete and exclusive control over the means, methods, sequences and techniques of construction.

2.4.3 CM@Risk's Representative or CM@Risk's Superintendent shall be present at the Site at all times that construction activities are taking place.

2.4.3.1 All elements of the Work shall be under the direct supervision of a foreman or his designated representative on the Site who shall have the authority to take actions required to properly carry out that particular element of the work.

2.4.3.2 In the event of noncompliance with this Section, the City may require CM@Risk to stop or suspend the Work in whole or in part.

2.4.4 Where the Contract Documents require that a particular product be installed and/or applied by an applicator approved by the manufacturer, it is CM@Risk's responsibility to ensure the Subcontractor employed for such work, is approved by the manufacturer.

2.4.5 Before ordering materials or doing work, CM@Risk and each Subcontractor shall verify measurements at the Site and shall be responsible for the correctness of such measurements.

No extra charge or compensation shall be allowed because of differences between actual dimensions and the dimensions indicated on the drawings; differences, which may be found, shall be submitted to the City for resolution before proceeding with the work.

2.4.6 CM@Risk shall take field measurements and verify field conditions and shall carefully compare such field measurements and conditions and other information known to CM@Risk with the Contract Documents before commencing activities. Errors, inconsistencies or omissions discovered shall be reported to the City at once.

2.4.7 CM@Risk shall establish and maintain all building and construction grades, lines, levels, and bench marks, and shall be responsible for accuracy and protection of same. This Work shall be performed or supervised by a civil engineer or surveyor licensed as such in the State of Arizona.

2.4.8 Any person employed by CM@Risk or any Subcontractor who, in the opinion of the City, does not perform his work in a proper, skillful and safe manner or is intemperate or disorderly shall, at the written request of the City, be removed from the Work by CM@Risk or Subcontractor employing such person, and shall not be employed again in any portion of Work without the written approval of the City. CM@Risk or Subcontractor shall keep the City harmless from damages or claims, which may occur in the enforcement of this Section.

2.4.9 CM@Risk assumes responsibility to the City for the proper performance of the work of Subcontractors and any acts and omissions in connection with such performance. Nothing in the Contract Documents is intended or deemed to create any legal or contractual relationship between the City and any Subcontractor or Sub-Subcontractor, including but not limited to any third-party beneficiary rights.

2.4.10 CM@Risk shall coordinate the activities of all Subcontractors. If the City performs other work on the Project or at the Site with separate contractors under the City's control, CM@Risk agrees to reasonably cooperate and coordinate its activities with those of such separate contractors so that the Project can be completed in an orderly and coordinated manner without unreasonable disruption.

2.5 Control of the Work Site

2.5.1 Throughout all phases of construction, including suspension of Work, CM@Risk shall keep the Site reasonably free from debris, trash and construction wastes to permit CM@Risk to perform its construction services efficiently, safely and without interfering with the use of adjacent land areas. Upon Substantial Completion of the Work, or a portion of the Work, CM@Risk shall remove all debris, trash, construction wastes, materials, equipment, machinery and tools arising from the Work or applicable portions thereof to permit the City to occupy the Project or a portion of the Project for its intended use.

2.5.2 CM@Risk shall take whatever steps, procedures or means to prevent any dust nuisance due to construction operations. The dust control measures shall be maintained at all times to the satisfaction of the City and in accordance with the requirements of the Arizona Department of Environmental Quality rules and regulations.

2.5.3 CM@Risk shall maintain ADA, ADAAG and ANSI accessibility requirements during construction activities in an occupied building or facility. ADA, ADAAG and ANSI accessibility requirements shall include, but not be limited to, parking, building access, entrances, exits, restrooms, areas of refuge, and emergency exit paths of travel. CM@Risk shall be responsible for the coordination of all work to minimize disruption to building occupants and facilities.

2.5.4 Only materials and equipment, which are to be used directly in the Work, shall be brought to

and stored on the Site by CM@Risk. When equipment is no longer required for the Work, it shall be removed promptly from the Site. Protection of construction materials and equipment stored at the Site from weather, theft, damage and all other adversity is solely the responsibility of CM@Risk.

2.6 Shop Drawings, Product Data and Samples

2.6.1 Shop Drawings, Product Data, Samples and similar Submittals are not Contract Documents. The purpose of their submittal is to demonstrate, for those portions of the Work for which Submittals are required, the way CM@Risk proposes to conform to the information given and the design concept expressed in the Contract Documents.

2.6.2 CM@Risk shall review, approve, verify, and submit to the City five copies of each Shop Drawing, Product Data, Sample, and similar Submittals required by the Contract Documents in accordance with the approved GMP schedule as shown in Exhibit "B" as to cause no delay in the Work or in the activities of the City or of separate contractors. Submittals made by CM@Risk, which are not required by the Contract Documents, may be returned without action.

2.6.3 CM@Risk shall perform no portion of the Work requiring submittal and review of Shop Drawings, Product Data, Samples, or similar Submittals until the respective submittal has been approved by the City or City's designee. Such Work shall be in accordance with approved Submittals.

2.6.4 By approving, verifying and submitting Shop Drawings, Product Data, Samples and similar Submittals, CM@Risk represents that CM@Risk has determined and verified materials, field measurements and field construction criteria related thereto, or shall do so, and has checked and coordinated the information contained within such Submittals with the requirements of the Work and of the Contract Documents.

2.6.5 CM@Risk shall not be relieved of responsibility for deviations from requirements of the Contract Documents by the City 's approval of Shop Drawings, Product Data, Samples or similar Submittals unless CM@Risk has specifically informed the City in writing of such deviation at the time of submittal and the City has given written approval to the specific deviation. CM@Risk shall not be relieved of responsibility for errors or omissions in Shop Drawings, Product Data, Samples, or similar Submittals by the City's approval thereof.

2.6.6 CM@Risk shall direct specific attention, in writing or on resubmitted Shop Drawings, Product Data, Samples, or similar Submittals, to revisions other than those requested by the City on previous Submittals.

2.6.7 Informational Submittals upon which the City is not expected to take responsive action may be so identified in the Contract Documents.

2.6.8 When professional certification of performance criteria of materials, systems or equipment is required by the Contract Documents, the City shall be entitled to rely upon the accuracy and completeness of such calculations and certifications.

2.7 Quality Control, Testing and Inspection

2.7.1 All materials used in the Work shall be new and unused, unless otherwise noted, and shall meet all quality requirements of the Contract Documents.

2.7.2 All construction materials to be used on the Work or incorporated into the Work, equipment, plant, tools, appliances or methods to be used in the Work may be subject to the inspection and approval or rejection by the City. Any material rejected by the City shall be removed immediately and replaced in an acceptable manner.

2.7.3 The procedures and methods used to sample and test material shall be determined by the City. Unless otherwise specified, samples and tests shall be made in accordance with the most recently adopted edition of the City of Flagstaff Engineering Division Design and Construction Standards and Specifications.

2.7.4 The City shall select a City or Independent Testing Laboratory and shall pay for initial City Acceptance Testing.

2.7.4.1 When the first and/or subsequent tests indicate noncompliance with the Contract Documents, the cost associated with that noncompliance and the cost of all tests, except the first test, shall be paid for by CM@Risk. CM@Risk's Contingency cannot be utilized for the cost of re-testing.

2.7.4.2 When the first and/or subsequent tests indicate noncompliance with the Contract Documents, all retesting shall be performed by the same testing agency.

2.7.5 CM@Risk shall cooperate with the selected testing laboratory and all others responsible for testing and inspecting the work and shall provide them access to the Work at all times.

2.7.6 At the option of the City, materials may be approved at the source of supply before delivery is started.

2.7.7 Code compliance testing and inspections required by codes or ordinances, or by a plan approval authority, and which are made by a legally constituted authority, shall be the responsibility of and shall be paid by CM@Risk, unless otherwise provided in the Contract Documents.

2.7.8 CM@Risk's convenience and quality control testing and inspections shall be the sole responsibility of CM@Risk and paid by CM@Risk.

2.8 Trade Names and Substitutions

2.8.1 Unless indicated that no substitutions are permitted, CM@Risk may request a substitution or alternative to Contract Document references to equipment, materials or patented processes by manufacturer, trade name, make or catalog number, subject to the following:

2.8.2 The substitution shall be submitted by CM@Risk in writing to the City.

2.8.3 CM@Risk shall certify that the substitution shall perform the functions and achieve the results called for by the general design, be similar and of equal substance, and be suited to the same use as that specified.

2.8.4 The submittal shall state any required changes in the Contract Documents to adapt the design to the proposed substitution.

2.8.5 The submittal shall contain an itemized estimate of all costs and credits that will result directly and indirectly from the acceptance of such substitution, including cost of design, license fees, royalties, and testing. Also, the submittal shall include any adjustment in the Contract Time created by the substitution.

2.8.6 CM@Risk if requested by the City shall submit Samples or any additional information that may be necessary to evaluate the acceptability of the substitution.

2.8.7 The City shall make the final decision and shall notify CM@Risk in writing as to whether the substitution has been accepted or rejected.

2.8.8 If the City does not respond in a timely manner, CM@Risk shall continue to perform the Work in accordance with the Contract Documents and the substitution shall be considered rejected.

2.9 Project Record Documents

2.9.1 During the construction period, CM@Risk shall maintain at the Site a set of blueline or blackline prints of the Construction Document drawings and shop drawings for Project Record Document purposes.

2.9.1.1 CM@Risk shall mark these drawings to indicate the actual installation where the installation varies appreciably from the original Construction Documents. CM@Risk shall give particular attention to information on concealed elements, which would be difficult to identify or measure and record later. Items required to be marked include but are not limited to:

- Dimensional changes to the drawings.
- Revisions to details shown on Drawings
- Depths of foundations below first floor
- Locations and depths of underground utilities
- Revisions to routing of piping and conduits.
- Revisions to electrical circuitry.
- Actual equipment locations.
- Duct size and routing.
- Locations of concealed internal utilities.
- Changes made by Change Order, Change Order Directive, Field Order, Record of Field Change, ASI's and RFI's.
- Addenda and other details not on original Agreement Drawings.

2.9.1.2 CM@Risk shall mark completely and accurately Project Record Drawing prints of Construction Documents or Shop Drawings, whichever is the most capable of indicating the actual physical condition. Where Shop Drawings are marked, show cross-reference on the Construction Documents location.

2.9.1.3 CM@Risk shall mark Project Record Drawings sets with red erasable colored pencil.

2.9.1.4 CM@Risk shall note RFI Numbers, ASI Numbers and Change Order numbers, etc., as required to identify the source of the change to the Construction Documents.

2.9.1.5 CM@Risk shall, as a condition of Substantial Completion, submit Project Record Drawing prints and Shop Drawings to the City or its representative for review and comment.

2.10.2 Upon receipt of the reviewed Project Record Drawings from the City, CM@Risk shall correct any deficiencies and/or omissions to the drawings and prepare the following for submission to the City within 14 Days:

2.10.2.1 CM@Risk shall provide a complete set of electronic Project Record Drawings prepared in AutoCAD format compatible with City of Flagstaff CADD technology. The Design Professional shall provide files of the original Construction Documents to CM@Risk for the use of preparing these final Project Record Drawings or CM@Risk may contract with the Design Professional to revise and update the electronic drawing files. Each drawing shall be clearly marked with "As-Built Document."

2.10.2.2 CM@Risk shall provide a complete set of reproducible mylars from the final AutoCAD drawings.

2.10.2.3 CM@Risk shall provide the original copy of the Project Record Drawings (redline mark-ups).

2.10 Project Safety

2.11.1 CM@Risk recognizes the importance of performing the Work in a safe manner so as to prevent damage, injury or loss to (i) all individuals at the Site, whether working or visiting, (ii) the Work, including materials and equipment incorporated into the Work or stored on-Site or off-Site, and (iii) all other property at the Site or adjacent thereto.

2.11.2 CM@Risk assumes responsibility for implementing and monitoring all safety precautions and programs related to the performance of the Work.

2.11.3 CM@Risk shall, prior to commencing construction, designate a Safety Representative with the necessary qualifications and experience to supervise the implementation and monitoring of all safety precautions and programs related to the Work. Unless otherwise required by the Contract Documents, CM@Risk's Safety Representative shall be an individual stationed at the Site who may have other responsibilities on the Project in addition to safety.

2.11.4 The Safety Representative shall make routine daily inspections of the Site and shall hold weekly safety meetings with CM@Risk's personnel, Subcontractors and others as applicable.

2.11.5 CM@Risk and Subcontractors shall comply with all Legal Requirements relating to safety, as well as any City-specific safety requirements set forth in the Contract Documents, provided that such City-specific requirements do not violate any applicable Legal Requirement.

2.11.6 CM@Risk shall immediately report in writing any safety-related injury, loss, damage or accident arising from the Work to City's Representative and, to the extent mandated by Legal Requirements, to all government or quasi-government authorities having jurisdiction over safety-related matters involving the Project or the Work.

2.11.7 CM@Risk's responsibility for safety under this Section is not intended in any way to relieve Subcontractors and Sub-Subcontractors of their own contractual and legal obligations and responsibility for (i) complying with all Legal Requirements, including those related to health and safety matters, and (ii) taking all necessary measures to implement and monitor all safety precautions and programs to guard against injury, losses, damages or accidents resulting from their performance of the Work.

2.11 Warranty

2.12.1 CM@Risk warrants to City that the construction, including all materials and equipment furnished as part of the construction, shall be new unless otherwise specified in the Contract Documents, of good quality, in conformance with the Contract Documents and free of defects in materials and workmanship.

2.12.2 CM@Risk's warranty obligation shall be for one (1) year, except for such greater period as may be required by the technical specifications.

2.12.3 Nothing in this warranty is intended to limit any manufacturer's warranty which provides The City with greater warranty rights than set forth in this Section or the Contract Documents. CM@Risk shall provide City with all manufacturers' warranties upon Substantial Completion.

2.12.4 Nothing in this warranty is intended to limit any other remedy at law that may be available to the City.

2.13 Correction of Defective Work

2.13.1 CM@Risk agrees to correct any Work that is found to not be in conformance with the Contract Documents, including that part of the Work subject to Section 2.12 above, within a period of one (1) year from the date of Substantial Completion of the Work or any portion of the Work, or within such longer period to the extent required by the Contract Documents, or as may be available to the City by law. A progress payment, or partial or entire use or occupancy of the Project by the City, shall not constitute acceptance of Work not in accordance with the Contract Documents.

2.13.2 During the performance of the Work, CM@Risk shall take meaningful steps to commence correction of such nonconforming Work as notified by the City or as discovered by CM@Risk. This includes the correction, removal or replacement of the nonconforming Work and any damage caused to other parts of the Work affected by the nonconforming Work. If CM@Risk fails to commence the necessary steps during the performance of the Work, City, in addition to any other remedies provided under the Contract Documents, may provide CM@Risk with written notice that City shall commence correction of such nonconforming Work with its own forces.

2.13.3 CM@Risk shall, take meaningful steps to commence correction of nonconforming Work subject to Section 2.12 and/or Section 2.13.1 above, within seven (7) days of receipt of written notice from City. This includes the correction, removal or replacement of the nonconforming Work and any damage caused to other parts of the Work affected by the nonconforming Work. If CM@Risk fails to commence the necessary steps within such seven-day period, City, in addition to any other remedies provided under the Contract Documents, may provide CM@Risk with written notice that City shall commence correction of such nonconforming Work with its own forces.

2.13.4 If City does perform such corrective Work, CM@Risk shall be responsible for all reasonable costs incurred by City in performing such correction.

2.13.5 For nonconforming Work that creates an emergency requiring an immediate response, CM@Risk shall respond and initiate corrections within twenty-four hours.

2.13.6 The one year period referenced in Subsection 2.13.1 above applies only to CM@Risk's obligation to correct nonconforming Work relative to the warranty set forth in that section and is not intended to constitute a period of limitations for any other rights or remedies the City may have regarding CM@Risk's other obligations under the Contract Documents or as may be allowed by law.

Article 3 - The City's Services and Responsibilities

3.1 Duty to Cooperate.

3.1.1 City shall, throughout the performance of the Work, cooperate with CM@Risk and perform its responsibilities, obligations and services in a timely manner to facilitate CM@Risk's timely and efficient performance of the Work and so as not to delay or interfere with CM@Risk's performance of its obligations under the Contract Documents.

3.1.2 City shall furnish at CM@Risk's request, at no cost to CM@Risk, a CADD file of the Construction Documents in AutoCAD format compatible with The City of Flagstaff CADD technology.

3.2 The City's Representative

3.2.1 City's Representative shall be responsible for providing City (as defined in Article I) supplied information and approvals in a timely manner to permit CM@Risk to fulfill its obligations under the Contract Documents.

3.2.2 City's Representative shall also provide CM@Risk with prompt notice if it observes any failure on the part of CM@Risk to fulfill its contractual obligations, including any default or defect in the project or non-conformance with the drawings and specifications.

3.2.3 The City may utilize field inspectors to assist the City's Representative during construction in observing performance of CM@Risk. The inspector is for the purpose of assisting the City's Representative and should not be confused with an inspector with a City regulatory agency or with an inspector from a City laboratory pursuant to Section 2.8.4.

3.2.3.1 The field inspector shall be authorized to inspect all Work and materials furnished. Such inspection may extend to all or part of the Work and to the preparation, fabrication or manufacture of the materials to be used.

3.2.3.2 The field inspector shall not be authorized to issue instructions contrary to the Construction Documents or to act as foreman for CM@Risk.

3.2.3.3 The field inspector shall have the authority to reject work or materials until any questions at issue can be decided by the City's Representative.

3.2.3.4 The furnishing of such services for the City shall not make the City responsible for or give the City control over construction means, methods, techniques, sequences or procedures or for safety precautions or programs or responsibility for CM@Risk's failure to perform the work in accordance with Contract Documents.

3.3 Design Professional Services

3.3.1 The City may contract separately with one or more Design Professionals to provide construction administration of the Project. The Design Professional's Agreement as well as other firms hired by the City shall be available for review by CM@Risk. CM@Risk shall not have any right however, to limit or restrict any contract provisions and/or modifications that are mutually acceptable to the City and Design Professional.

3.3.2 The City may contract with the Design Professional to provide some or all of the following services during the performance of the Work.

3.3.2.1 Provide oversight of the Work. The City and CM@Risk shall endeavor to communicate through the Design Professional. Communications by and with the Design Professional's consultants shall be through the Design Professional.

3.3.2.2 Conduct Site visits at intervals appropriate to the stage of construction to become generally familiar with the progress and quality of the completed Work and to determine in general if the Work is being performed in accordance with the Contract Documents. The Design Professional shall keep the City informed of progress of the Work and any noted defects and deficiencies of the Work, and shall endeavor to guard the City against defects and deficiencies in the Work. The Design Professional may have authority to reject construction, which does not conform to the Construction Documents and to require additional inspection or testing of the construction in accordance with Section 2.8.

3.3.2.3 Review and recommend approval of Payment Requests.

3.3.2.4 Review and approve or take other appropriate action upon CM@Risk's Submittals such as Shop Drawings, Product Data and Samples in accordance with Section 2.7.

3.3.2.5 Interpret and decide matters concerning performance under and requirements of the Contract Documents on written request of either the City or CM@Risk. The Design Professional's response to such requests shall be made with reasonable promptness and within any time limits agreed upon.

3.3.2.6 Prepare Change Orders, and may authorize minor changes in the Work as provided in Section 6.6.1.

3.3.2.7 Conduct inspections to determine Substantial Completion and Final Acceptance.

3.3.2.8 Receive and forward to the City for the City's review and records written warranties and related documents required by the Contract Documents and assembled by CM@Risk.

3.4 **City's Separate Contractors**. City is responsible for all work performed on the Project or at the Site by separate contractors under City's control. City shall contractually require its separate contractors to cooperate with, and coordinate their activities so as not to interfere with CM@Risk in order to enable CM@Risk to timely complete the Work consistent with the Contract Documents.

3.5 **Permit Review and Inspections**

3.5.1 If requested by CM@Risk, the City's Representative shall provide assistance and guidance in obtaining necessary reviews, permits and inspections, however, the responsibility for obtaining the necessary reviews, permits and inspections remains with CM@Risk.

3.5.2 Regulating agencies of the City, such as Community Development, Fire, Planning, Building Inspection, Environmental Services, and Engineering Departments, enforce Legal Requirements. These enforcement activities are not subject to the responsibilities of the City under this Agreement.

Article 4 - Contract Time

4.0 **Contract Time.**

4.0.1 Contract Time shall start with the Notice to Proceed ("NTP") with construction services and shall end with Substantial Completion.

4.0.2 Where there is more than one GMP, each GMP shall establish a separate NTP date and a Performance Period. The Performance Periods for individual GMPs may be sequential or concurrent as established in the individual Notices to Proceed. The Performance Period for the GMP under this Agreement shall be 210 days starting with the NTP.

4.0.3 CM@Risk agrees that it shall commence timely performance of the Work and shall achieve substantial completion within the Performance Periods and Contract Time.

4.0.4 All of the times set forth in this Article 4 shall be subject to adjustment in accordance with Article 6.

4.0.5 Time is of the essence, for times and time matters set forth in Article 4 and the rest of this Agreement.

4.1 Substantial Completion

4.1.1 Substantial Completion shall be for the entire Project unless a partial Substantial Completion is identified in the approved GMP schedule and stated in the Notice to Proceed letter or as may be mutually agreed by the parties in writing. Substantial Completion shall be in accordance with its definition in Article 1 and with the criteria set forth in the Notice to Proceed.

4.1.2 Prior to notifying the City in accordance to Section 4.1.3 below, CM@Risk shall inspect the Work and prepare and submit to the City a comprehensive list of items to be completed or corrected. CM@Risk shall proceed promptly to complete and correct items on the list. Failure to include an item on such list does not alter the responsibility of CM@Risk to complete all Work in accordance with the Contract Documents.

4.1.3 CM@Risk shall notify City when it believes the Work, or to the extent permitted in the Contract Documents, a portion of the Work, is substantially complete.

4.1.4 Within five (5) days of City's receipt of CM@Risk's notice, the City and CM@Risk shall jointly inspect such Work to verify that it is substantially complete in accordance with the requirements of the Contract Documents.

4.1.5 If such Work is substantially complete, City shall prepare and issue a Certificate of Substantial Completion that shall set forth (i) the date of Substantial Completion of the Work or portion thereof, (ii) the remaining items of Work that have to be completed within thirty (30) calendar days before Final Acceptance, (iii) provisions (to the extent not already provided in the Contract Documents) establishing City's and CM@Risk's responsibility for the Project's security, maintenance, utilities and insurance pending Final Acceptance and (iv) an acknowledgment that warranties commence to run on the date of Substantial Completion, except as may otherwise be noted in the Certificate of Substantial Completion.

4.1.6 City, at its option, may use a portion of the Work which has been determined to be substantially complete, provided, however, that (i) a Certificate of Substantial Completion has been issued for the portion of Work addressing the items set forth in Section 4.1.5 above, (ii) CM@Risk and City have obtained the consent of their sureties and insurers, and to the extent applicable, the appropriate government authorities having jurisdiction over the Project, and (iii) City and CM@Risk agree that City's use or occupancy shall not interfere with CM@Risk's completion of the remaining Work.

4.2 **Final Completion**. Upon receipt of written notice that the Work or identified portions of the Work is ready for final inspection and acceptance, City and CM@Risk shall jointly inspect to verify that the remaining items of Work have been completed as set forth in Section 4.1.5. The City shall issue a Final Completion Letter and payment pursuant to Section 7.5.

4.3 Liquidated Damages

4.3.1 CM@Risk understands that if Substantial Completion is not attained within the Contract Time as adjusted, the City shall suffer damages, which are difficult to determine and accurately specify. CM@Risk agrees that if Substantial Completion is not attained within the Contract Time as adjusted, CM@Risk shall pay the City $ 1,070.00 per day as liquidated damages for each Day that Substantial Completion extends beyond the date determined by the Contract Time as adjusted and further agrees that such amount is reasonable under the circumstances.

4.3.2 CM@Risk understands that if Final Completion is not attained within the Contract Time as adjusted, the City shall suffer damages, which are difficult to determine and accurately specify. CM@Risk agrees that if Final Completion is not attained within the Contract Time as adjusted, CM@Risk shall pay the City $ 1,070.00 per day as liquidated damages for each Day that Final

Completion extends beyond the date determined by the Contract Time as adjusted and further agrees that such amount is reasonable under the circumstances.

4.4 Project Master Schedule

4.4.1 The Project Master Schedule approved as part of a GMP shall be updated and maintained throughout the Work by CM@Risk.

4.4.2 The Project Master Schedule shall be revised by CM@Risk as required by conditions and progress of the Work, but such revisions shall not relieve CM@Risk of its obligations to complete the Work within the Contract Time, as such dates may be adjusted in accordance with the Contract Documents.

4.4.3 Updated Project Master Schedules shall be submitted monthly by CM@Risk to the City as part of the Payment Request.

4.4.3.1 CM@Risk shall provide City with a monthly status report with each Project Master Schedule detailing the progress of the Work, including: (i) if the Work is proceeding according to schedule, (ii) any discrepancies, conflicts, or ambiguities found to exist in the Contract Documents that require resolution, and (iii) other items that require resolution so as not to jeopardize ability to complete the Work as presented in the GMP and within the Contract Time.

4.4.3.2 With each schedule submittal CM@Risk shall include a transmittal letter including the following:

- Description of problem tasks (referenced to field instructions, requests for information (RFI's), as appropriate.
- Current and anticipated delays including:
  - Cause of the delay
  - Corrective action and schedule adjustments to correct the delay
  - Known or potential impact of the delay on other activities, milestones, and/or the date of Substantial Completion.
- Changes in construction sequence
- Pending items and status thereof including but not limited to:
  - Time Extension requests
  - Other items
- Substantial Completion date status:
  - If ahead of schedule, the number of calendar days ahead.
  - If behind schedule, the number of calendar days behind.
- Other project or scheduling concerns

4.4.4 City's review of and response to the Project Master Schedule is only for general conformance with the scheduling requirements of the Contract Documents. The review shall not relieve CM@Risk from compliance with the requirements of the Contract Documents or be construed as relieving CM@Risk of its complete and exclusive control over the means, methods, sequences and techniques for executing the Work.

4.4.5 The Project Master Schedule shall include a Critical Path Method (CPM) diagram schedule that shall show the sequence of activities, the interdependence of each activity and indicate the Critical Path.

4.4.5.1 The CPM diagram schedule shall be in Days and indicate duration, earliest and latest start and finish dates for all activities, and total Float times for all activities except critical activities.

The CPM diagram shall be presented in a time scaled graphical format for the Project as a whole.

4.4.5.2 The CPM diagram schedule shall indicate all relationships between activities.

4.4.5.3 The activities making up the schedule shall be in sufficient detail to assure that adequate planning has been done for proper execution of the Work and such that it provides an appropriate basis for monitoring and evaluating the progress of the Work.

4.4.5.4 The CPM diagram schedule shall be based upon activities, which would coincide with the Schedule of Values.

4.4.5.5 The CPM diagram schedule shall show all Submittals associated with each work activity and the review time for each submittal.

4.4.5.6 The schedule shall show milestones, including milestones for Owner-furnished information, and shall include activities for Owner-furnished equipment and furniture when those activities are interrelated with CM@Risk activities.

4.4.5.7 The schedule shall include a critical path activity that reflects anticipated weather delay during the performance of the Agreement. The duration shall reflect the average climatic range and usual industrial conditions prevailing in the locality of the Site. Weather data shall be based on the information set forth on the City of Flagstaff's Table of "Monthly Anticipated Adverse Weather Calendar Days" and the explanatory paragraphs attached thereto.

4.4.6 The Project Master Schedule shall consider the City's and the tenants' occupancy requirements showing portions of the Project having occupancy priority, and Contract Time.

4.4.7 Float time shall be as prescribed below:

4.4.7.1 The total Float within the overall schedule, is not for the exclusive use of either the City or CM@Risk, but is jointly owned by both and is a resource available to and shared by both parties as needed to meet Agreement milestones and the Project completion date.

4.4.7.2 CM@Risk shall not sequester shared Float through such strategies as extending activity duration estimates to consume available Float, using preferential logic, or using extensive crew/resource sequencing, etc. Since Float time within the schedule is jointly owned, no time extensions shall be granted nor delay damages paid until a delay occurs which extends the Work beyond the Substantial Completion date and then only if any such extensions or damages are shown to be justified under the Contract Documents.

4.4.7.3 Since Float time within the schedule is jointly owned, it is acknowledged that City-caused delays on the Project may be offset by City-caused time savings (i.e., critical path Submittals returned in less time than allowed by the Agreement, approval of substitution requests and credit changes which result in savings of time to CM@Risk, etc.). In such an event, CM@Risk shall not be entitled to receive a time extension or delay damages until all City-caused time savings are exceeded, and the Substantial Completion date is also exceeded.

Article 5- Contract Price

5.0 CM@Risk agrees at his own cost and expense, to completely construct and install all Work and materials as called for by this Agreement, free and clear of all claims, liens and charges

whatsoever, in the manner and under the conditions specified in the Contract Documents, within the time or times stated in the approved Guaranteed Maximum Price (GMP).

5.1 Contract Price

5.1.1 The Contract Price shall be as approved in the Guaranteed Maximum Price Proposal # One attached as Exhibit "B" and an amount of $ 4,456,796.16 with an additional $100,000.00 allowed for Owner's Contingency.

5.1.2 The Cost of the Work is actual costs and is a not-to-exceed reimbursable amount.

5.1.3 The General Conditions Costs and the Construction Fee are firm fixed lump sums delineated in the GMP.

5.1.4 Taxes are deemed to include all sales, use consumer and other taxes, which are legally enacted when negotiations of the GMP were concluded, whether or not yet effective, or merely scheduled to go into effect. Taxes are actual costs and are a not-to-exceed reimbursable amount.

5.2 Guaranteed Maximum Price

5.2.1 The Guaranteed Maximum Price is composed of the maximum Cost of the Work; the Construction Fee; General Conditions Costs; taxes; and, CM@Risk's contingency all of which are not-to-exceed cost reimbursable or lump sum amounts defined in Articles 5.1 and 5.3. CM@Risk is at risk to cover any additional Project costs. If the Cost of Work amount, set forth in the GMP, is in excess of the actual Cost of Work and/or CM@Risk's Contingency, said amount by which the Cost of Work set forth in the GMP is in excess of the actual Cost of Work and/or CM@Risk's Contingency, shall revert to the City.

5.2.2 The GMP is subject to adjustments made in accordance with Article 6 and by GMP amendments to this Agreement.

5.2.3 GMP amendments are cumulative except for CM@Risk's Contingency. The amount of CM@Risk's Contingency for each GMP shall be negotiated separately.

5.2.4 If the GMP requires an adjustment due to changes in the scope of the Work the cost of such changes is determined subject to Article 6. The markups that may be allowed on such changes shall be no greater than the markups delineated in the approved GMP.

5.3 Contingencies

5.3.1 CM@Risk's Contingency is an amount CM@Risk may use at its sole discretion for, an increase in the Cost of Work , and may use for increases in General Conditions Costs with written approval of the City. CM@Risk's Contingency is assumed to be a direct Project cost and all applicable markups shall be applied at the time of GMP submission.

5.3.1.1 When CM@Risk utilizes CM@Risk's Contingency funds, CM@Risk shall make the appropriate changes to the Schedule of Values with the next regular progress payment request. CM@Risk shall deduct the amount of CM@Risk's Contingency funds used from CM@Risk's Contingency line item and add the same amount to the line item on the Schedule of Values where the funds were used. If CM@Risk's contingency funds are used for a new line item that was not given with the original Schedule of Values, these shall be so indicated.

5.3.2 Owner's Contingency are funds to be used at the sole discretion of the Owner to cover any increases in Project costs that result from Owner directed changes or unforeseen Site conditions. Owner's Contingency shall be added to the GMP amount provided by CM@Risk, the sum of which shall be the full Contract Price for construction. At the time that Owner's Contingency is used the appropriate markups shall be applied.

5.4 **Open Book.** CM@Risk shall submit to the City upon request all payrolls, reports, estimates, records and any other data concerning the Work performed or to be performed or concerning materials supplied or to be supplied, as well as Subcontractor or Consultant payment applications or invoices and such Subcontractor's or Consultant progress payment checks. The requirements of this Section shall be included in all Agreements between CM@Risk and its Subcontractors and Consultants. The City may exercise its rights under this Section as often as reasonably necessary in the City's sole judgment to assure the City has a complete and accurate understanding of all Project costs.

Article 6 - Changes to the Contract Price and Time

6.0 Delays to the Work

6.0.1 If CM@Risk is delayed in the performance of the Work that shall cause a change in the date of Substantial Completion due to acts, omissions, conditions, events, or circumstances beyond its control and due to no fault of its own, or, those for whom CM@Risk is responsible, the Contract Times for performance shall be reasonably extended by Change Order.

6.0.2 CM@Risk shall request an increase in the Contract Time by written notice including an estimate of probable effect of delay on progress of the Work within three (3) days of the occurrence of the delay. In the case of a continuing delay only one request is necessary.

6.0.3 By way of example, events that shall entitle CM@Risk to an extension of the Contract Time include acts or omissions of City or anyone under City's control (including separate Contractors), changes in the Work, Differing Site Conditions, Hazardous Conditions, delays by regulating agencies, wars, floods, labor disputes, unusual delay in transportation, epidemics abroad, earthquakes, adverse weather conditions not reasonably anticipated, and other acts of God.

6.0.4 If adverse weather conditions are the basis for a request for additional Contract Time, such requests shall be documented by data substantiating that weather conditions were abnormal for the period of time and could not have been reasonably anticipated, and that weather conditions had an adverse effect on the scheduled Substantial Completion. All terms, conditions and definitions necessary for the application of this paragraph shall be as set forth on the City of Flagstaff's Table of "Monthly Anticipated Adverse Weather Calendar Days" and the explanatory paragraphs attached thereto.

6.0.5 It is understood, however, that permitting CM@Risk to proceed to complete any Work, or any part of the Work, after the date to which the time of completion may have been extended, shall in no way act as a waiver on the part of the City of any of its legal rights herein.

6.0.6 In addition to CM@Risk's right to a time extension for those events set forth in this Section, CM@Risk shall also be entitled to an appropriate adjustment of the Contract Price provided, however, that the Contract Price shall not be adjusted for those events set forth in this Section that are beyond the control of both CM@Risk and City, including the events of war, floods, labor disputes, earthquakes, epidemics, adverse weather conditions not reasonably anticipated, and other acts of God and shall not be adjusted absent a showing of actual damage.

6.1 Differing Site Conditions

6.1.1 If CM@Risk encounters a Differing Site Condition, CM@Risk shall be entitled to an adjustment in the Contract Price and/or Contract Times to the extent CM@Risk's cost and/or time of performance are actually adversely impacted by the Differing Site Condition.

6.1.2 Upon encountering a Differing Site Condition, CM@Risk shall provide prompt written notice to City of such condition, which notice shall not be later than seven (7) days after such condition has been encountered. CM@Risk shall, to the extent reasonably possible, provide such notice before the Differing Site Condition has been substantially disturbed or altered.

6.2 Errors, Discrepancies and Omissions

6.2.1 If CM@Risk observes errors, discrepancies or omissions in the Contract Documents, he shall promptly notify the Design Professional and request clarification.

6.2.2 If CM@Risk proceeds with the Work affected by such errors, discrepancies or omissions, without receiving such clarifications, CM@Risk does so at its own risk. Adjustments involving such circumstances made by CM@Risk prior to clarification by the Design Professional shall be at CM@Risk's risk.

6.3 The City Requested Change in Work

6.3.1 The City reserves the right to make, at any time during the progress of the Work, such alterations as may be found necessary or in the City's best interest.

6.3.2 Such alterations and changes shall not invalidate this Agreement nor release the surety and CM@Risk agrees to perform the Work as altered, the same as if it has been a part of the original Contract Documents.

6.3.3 The City shall request a proposal for a change in Work from CM@Risk, and an adjustment in the Contract Price and/or Contract Times shall be made based on a mutual agreed upon cost and time.

6.4 **Legal Requirements**. The Contract Price and/or Contract Times shall be adjusted to compensate CM@Risk for the effects of any changes in the Legal Requirements enacted after the date of their Agreement or the date of the GMP, affecting the performance of the Work

6.5 Change Directives and Change Orders

6.5.1 City and CM@Risk shall negotiate in good faith and as expeditiously as possible the appropriate adjustments for a Change Directive if any adjustments are appropriate. Upon reaching an agreement, the parties shall prepare and execute an appropriate Change Order reflecting the terms of the adjustment.

6.5.2 All changes in Work authorized by Change Directives and/or Change Orders shall be performed under the conditions of the Contract Documents.

6.6 Minor Changes in the Work

6.6.1 The City has authority to order minor changes in Work that do not materially and adversely affect the Work, including the design, quality, performance and workmanship required by the Contract Documents. Such changes shall be affected by written order and shall be binding on the City and CM@Risk. CM@Risk shall carry out such written orders promptly.

6.6.2 CM@Risk may make minor changes in Work, provided, however that CM@Risk shall promptly inform City, in writing, of any such changes and record such changes, if appropriate, on the Project Record Documents maintained by CM@Risk.

6.6.3 Minor changes in Work shall not involve an adjustment in the Contract Price and/or Contract Times.

6.7 Contract Price Adjustments

6.7.1 The increase or decrease in Contract Price resulting from a change in the Work shall be determined by one or more of the following methods:

6.7.1.1 Unit prices set forth in this Agreement or as subsequently agreed to between the parties;

6.7.1.2 A mutually accepted, lump sum, properly itemized and supported by sufficient substantiating data to permit evaluation by City; and

6.7.1.3 Costs, fees and any other markups.

6.7.2 The markups that shall be allowed on such changes shall be no greater than the markups delineated in the approved GMP as shown on Exhibit “B”.

6.7.3 If an increase or decrease cannot be agreed to as set forth in Sections 6.7.1.1 through 6.7.1.3 above and City issues a Change Directive, the cost of the change of the Work shall be determined by the reasonable expense and savings in the performance of the Work resulting from the change, including a reasonable overhead and profit, as may be set forth in their Agreement. CM@Risk shall maintain a documented, itemized accounting evidencing the expenses and savings associated with such changes.

6.7.4 If unit prices are set forth in the Contract Documents or are subsequently agreed to by the parties, but application of such unit prices shall cause substantial inequity to City or CM@Risk because of differences in the character or quantity of such unit items as originally contemplated, such unit prices shall be equitably adjusted.

6.7.5 If City and CM@Risk disagree upon whether CM@Risk is entitled to be paid for any services required by City, or if there are any other disagreements over the scope of Work or proposed changes to the Work, City and CM@Risk shall resolve the disagreement pursuant to Article 8 hereof.

6.7.5.1 As part of the negotiation process, CM@Risk shall furnish City with a good faith estimate of the costs to perform the disputed services in accordance with City's interpretations.

6.7.5.2 If the parties are unable to agree and City expects CM@Risk to perform the services in accordance with City's interpretations, CM@Risk shall proceed to perform the disputed services, conditioned upon City issuing a written order to CM@Risk (i) directing CM@Risk to proceed and (ii) specifying City's interpretation of the services that are to be performed.

6.7.6 **Emergencies**. In any emergency affecting the safety of persons and/or property, CM@Risk shall act, at its discretion, to prevent threatened damage, injury or loss. Any change in the Contract Price and/or Contract Time resulting from emergency work under this Section shall be determined as provided in this Article.

Article 7- Procedure for Payment

7.0 For and in consideration of the faithful performance of the work herein embraced as set forth in the Contract Documents, which are a part hereof and in accordance with the directions of the City and to the City's satisfaction, the City agrees to pay CM@Risk the actual Cost of the Work and any applicable General Conditions Costs including, insurance and bonding, taxes and CM@Risk's Construction Fee, but no more than the GMP as adjusted by any change orders. Payment for the specific work under this Agreement shall be made in accordance with payment provisions detailed below.

7.1 GMP Payment Request

7.1.1 At the pre-construction conference prescribed in Section 2.4, CM@Risk shall submit for City's review and approval a Schedule of Values. The Schedule of Values shall serve as the basis for monthly progress payments made to CM@Risk throughout the Work.

7.1.2 At least five (5) working days prior to the date established for a Payment Request, CM@Risk shall submit an updated Project Master Schedule and meet with the City's Representative to review the progress of the Work as it shall be reflected on the Payment Request.

7.1.3 The Payment Request shall constitute CM@Risk's representation that the Work has been performed consistent with the Contract Documents, has progressed to the point indicated in the Payment Request, and that title to all Work shall pass to City free and clear of all claims, liens, encumbrances, and security interests upon the incorporation of the Work into the Project.

7.1.4 The Payment Request may request payment for stored equipment and materials if construction progress is in reasonable conformance with the approved schedule.

7.1.4.1 For equipment and materials suitably stored at the Site, the equipment and materials shall be protected by suitable insurance and City shall receive the equipment and materials free and clear of all liens and encumbrances.

7.1.4.2 For materials and equipment stored off the Site, the City must approve the storage. The material and equipment must be stored within Coconino County or other Sites as may be approved and be accessible for City's inspection. CM@Risk must establish City title to such materials and equipment or otherwise protect the City's interest and shall include applicable insurance, bonding, storage and transportation to the Site.

7.1.4.3 All bonds and insurance required for stored materials shall name the City as the loss payee to the extent of its interest in the stored materials.

7.1.5 CM@Risk shall submit to City on a monthly basis either on the first of the month for payment on the 15th or on the 19th of the month for payment on the 30th or 31st. If the payment date is on a Saturday, payment shall be on Friday. If the payment date is on a Sunday, payment shall be on Monday.

7.2 Payment of GMP

7.2.1 City shall make payment in accordance with A.R.S. §34-607. Payment shall be made no later than fourteen (14) days after the Payment Request is certified and approved, but in each case less the total of payments previously made, and less amounts properly retained under Section 7.3 below.

7.2.2 City shall pay CM@Risk all amounts properly due. If City determines that CM@Risk is not entitled to all or part of a Payment Request, it shall notify CM@Risk in writing within (7) days after the date Payment Request is received by the City. The notice shall indicate the specific amounts City intends to withhold, the reasons and contractual basis for the withholding, and the specific measures CM@Risk shall take to rectify City's concerns. CM@Risk and City shall attempt to resolve City's concerns. If the parties cannot resolve such concerns, CM@Risk may pursue its rights under the Contract Documents, including those under Article 8 hereof.

7.3 Retention on GMP

7.3.1 City shall retain ten percent (10%) of each Payment Request amount provided. When fifty percent (50%) of the Work has been completed by CM@Risk, upon request of CM@Risk, City may reduce the amount retained to five percent (5%) from CM@Risk's subsequent Payment Requests if CM@Risk's performance of Work has been satisfactory.

7.3.2 In lieu of retention, CM@Risk may provide as a substitute, an assignment of time certificates of deposit (CDs) from a bank licensed by the State of Arizona, securities of or guaranteed by the United States of America, securities of counties, municipalities and school districts within the State of Arizona or shares of savings and loan institutions authorized to transact business in Arizona.

7.3.2.1 CDs assigned to the City must be maintained at the City's single servicing bank, currently Wells Fargo, in the form of time deposit receipt accounts.

7.3.2.2 Securities depoSited in lieu of retention must be depoSited into a separate account with a bank within the State of Arizona.

7.3.2.3 CDs and Securities shall be assigned exclusively for the benefit of the City of Flagstaff pursuant to the City's form of Escrow Agreement. Escrow Agreement forms may be obtained from the Contracts Department by calling (928) 779-7685, extension 7318.

7.4 **Substantial Completion**. Upon Substantial Completion of the entire Work or, if applicable, any portion of the Work, City shall release to CM@Risk all retained amounts relating, as applicable, to the entire Work or completed portion of the Work, less an amount up to two and one-half (2.5) times the reasonable value of all remaining or incomplete items of Work as noted in the Certificate of Substantial Completion.

7.5 Final Payment

7.5.1 After receipt of a final Payment Request, City shall make final payment within sixty (60) days after receipt by the City, provided that CM@Risk has completed all of the Work in conformance with the Contract Documents and a Final Completion Letter has been issued by the City.

7.5.2 At the time of submission of its final Payment Request, CM@Risk shall provide the following information:

7.5.2.1 An affidavit affirming that there are no claims, obligations or liens outstanding or unsatisfied for labor, services, material, equipment, taxes or other items performed, furnished or incurred for or in connection with the Work which shall in any way affect City's interests;

7.5.2.2 A general release executed by CM@Risk waiving, upon receipt of final payment by CM@Risk, all claims, except those claims previously made in writing to City and remaining unsettled at the time of final payment; and

7.5.2.3 Consent of CM@Risk's surety, if any, to final payment.

7.6 Payments To Subcontractors or Suppliers

7.6.1 CM@Risk shall pay its Subcontractors or suppliers within seven (7) calendar days of receipt of each progress payment from the City. CM@Risk shall pay for the amount of Work performed or materials supplied by each Subcontractor or supplier as accepted and approved by the City with each progress payment. In addition, any reduction of retention by the City to CM@Risk shall result in a corresponding reduction to Subcontractors or suppliers who have performed satisfactory work. CM@Risk shall pay Subcontractors or suppliers the reduced retention within fourteen (14) calendar days of the payment of the reduction of the retention to CM@Risk. No agreement between CM@Risk and its Subcontractors and suppliers may materially alter the rights of any Subcontractor or supplier to receive prompt payment and retention reduction as provided herein.

7.6.2 If CM@Risk fails to make payments in accordance with these provisions, the City may take any one or more of the following actions and CM@Risk agrees that the City may take such actions:

7.6.2.1 To hold CM@Risk in default under this Agreement;

7.6.2.2 Withhold future payments including retention until proper payment has been made to Subcontractors or suppliers in accordance with these provisions;

7.6.2.3 Reject all future offers to perform work for the City from CM@Risk for a period not to exceed one (1) year from Substantial Completion date of this Project; or

7.6.2.4 Terminate this Agreement.

7.6.3 If CM@Risk's payment to a Subcontractor or supplier is in dispute, it shall act in compliance with A.R.S. § 32-1129.02(D) and related statutes as amended, and shall further hold the City harmless from any ensuing damages, claims or costs.

7.6.4 Should the City fail or delay in exercising or enforcing any right, power, privilege, or remedy under this Section, such failure or delay shall not be deemed a waiver, release, or modification of the requirements of this Section or of any of the terms or provisions thereof.

7.6.5 CM@Risk shall include these prompt payment provisions in every subcontract, including procurement of materials and leases of equipment for this Agreement.

7.7 Record Keeping and Finance Controls

7.7.1 Records of CM@Risk's direct personnel payroll, reimbursable expenses pertaining to this Project and records of accounts between the City and CM@Risk shall be kept on a generally recognized accounting basis and shall be available for three (3) years after Final Completion of the Project.

7.7.2 The City, its authorized representative, and/or the appropriate federal agency, reserve the right to audit CM@Risk's records to verify the accuracy and appropriateness of all pricing data, including data used to negotiate Contract Documents and any Change Orders.

7.7.3 The City reserves the right to decrease Contract Price and/or payments made on this Agreement if, upon audit of CM@Risk's records, the audit discloses CM@Risk has provided false, misleading, or inaccurate cost and pricing data.

7.7.4 CM@Risk shall include a similar provision in all of its agreements with Subconsultants and Subcontractors providing services under the Contract Documents to ensure the City, its authorized representative, and/or the appropriate federal agency, has access to the Subconsultants' and Subcontractors' records to verify the accuracy of cost and pricing data.

7.7.5 The City reserves the right to decrease Contract Price and/or payments made on this Agreement if the above provision is not included in Subconsultant's and Subcontractor's Agreements, and one or more Subconsultants and/or Subcontractors do not allow the City to audit their records to verify the accuracy and appropriateness of pricing data.

Article 8- Claims and Disputes

8.0 Requests for Agreement Adjustments and Relief.

8.0.1 If either CM@Risk or City believes that it is entitled to relief against the other for any event arising out of or related to Work, such party shall provide written notice to the other party of the basis for its claim for relief.

8.0.2 Such notice shall, if possible, be made prior to incurring any cost or expense and in accordance with any specific notice requirements contained in applicable sections of the Agreement.

8.0.3 In the absence of any specific notice requirement, written notice shall be given within a reasonable time, not to exceed fourteen (14) days, after the occurrence giving rise to the claim for relief or after the claiming party reasonably should have recognized the event or condition giving rise to the request, whichever is later.

8.0.4 Such notice shall include sufficient information to advise the other party of the circumstances giving rise to the claim for relief, the specific contractual adjustment or relief requested and the basis of such request.

8.1 Dispute Avoidance and Resolution

8.1.1 The parties are fully committed to working with each other throughout the Project and agree to communicate regularly with each other at all times so as to avoid or minimize disputes or disagreements. If disputes or disagreements do arise, CM@Risk and City each commit to resolving such disputes or disagreements in an amicable, professional and expeditious manner so as to avoid unnecessary losses, delays and disruptions to the Work.

8.1.2 CM@Risk and City shall first attempt to resolve disputes or disagreements at the field level through discussions between CM@Risk's Representative and City's Representative.

8.1.3 If a dispute or disagreement cannot be resolved through CM@Risk's Representative and City's Representative, CM@Risk's Senior Representative and City's Senior Representative, upon the request of either party, shall meet as soon as conveniently possible, but in no case later than thirty (30) days after such a request is made, to attempt to resolve such dispute or disagreement. Prior to any meetings between the Senior Representatives, the parties shall exchange relevant information that shall assist the parties in resolving their dispute or disagreement.

8.1.4 If a dispute arises out of or relates to this Agreement and if the dispute cannot be settled through negotiation, the parties agree first to try in good faith to resolve the dispute by mediation before resorting to litigation or some other dispute resolution procedure. Mediation shall take place in Flagstaff, Arizona, be self-administered and be conducted under the CPR Mediation Procedures established by the CPR Institute for Dispute Resolution, 366 Madison Avenue, New York, New York 10017, (212) 949-6490, www.cpradr.org, with the exception of the mediator selection provisions, unless other procedures are agreed upon by the parties.

1. Mediator Selection. Unless the parties agree otherwise, the mediator(s) shall be selected from the roster of attorney mediators trained under the Alternative Dispute Resolution Program of the Coconino County Superior Court. If the parties are unable to agree upon a mediator within 10 business days, each party shall independently inform the Director of the Alternative Dispute Resolution Program of the Coconino County Superior Court (the "Director") of three attorney mediators from that roster that are acceptable to the party, and further, inform the Director of any preference as to matters such as the candidate's mediation style, subject matter expertise, or other factors pertinent to the case. The Director shall then select an attorney mediator from the parties' lists or such other attorney mediator from the above noted roster, as the Director may deem, in the Director's sole discretion, appropriate under the circumstances.

2. Fees and Costs. Each party agrees to bear its own fees and costs in mediation.

3. Subsequent or Contemporaneous Agreements. The parties shall include this provision in all subsequent or contemporaneous agreements relative to this matter, absent specific written agreement of the parties otherwise.

4. Participation in Mediation. The parties agree to encourage participation in mediation by all relevant parties. The parties shall not be obligated to mediate if an indispensable party is unwilling to join the mediation.

5. Waiver. This Section shall not constitute a waiver of the parties' right to arbitrate or initiate legal action if a dispute is not resolved through good faith negotiation or mediation, or if provisional relief is required under the Arizona Rules of Civil Procedure.

8.1.5 Except as otherwise agreed by the parties, any litigation brought by either party against the other to enforce the provisions of this Agreement shall be filed in the Coconino County Superior Court and Arizona law shall apply and control. In the event any action at law or in equity is instituted between the parties in connection with this Agreement, the prevailing party in the action shall be entitled to its costs including reasonable attorneys' fees and court costs from the non-prevailing party.

8.2 **Duty to Continue Performance**. Unless provided to the contrary in the Contract Documents, CM@Risk shall continue to perform the Work and City shall continue to satisfy its payment obligations to CM@Risk, pending the final resolution of any dispute or disagreement between CM@Risk and City.

8.3 Representatives of the Parties

8.3.1 The City's Representatives

8.3.1.1 City designates the individual listed below or his designee as its Senior Representative ("City's Senior Representative"), which individual has the authority and responsibility for avoiding and resolving disputes under Section 8.1.3:

Erik Solberg, Division Head
211 West Aspen Avenue
Flagstaff, AZ 86001
(928)-213-2105

8.3.1.2 City designates the individual listed below as its City's Representative, which individual has the authority and responsibility set forth in Section 8.1.2:

Dan Holmes, Sr. Project Manager
211 West Aspen Avenue
Flagstaff, AZ 86001
(928) 213-2108

8.3.2 CM@Risk's Representatives

8.3.2.1 CM@Risk designates the individual listed below as its Senior Representative ("CM@Risk's Senior Representative"), which individual has the authority and responsibility for avoiding and resolving disputes under Section 8.1.3:

Mike Abraham, President
6423 South Ash Avenue
Tempe, Arizona 85283
(480)-921-8016.

8.3.2.2 CM@Risk designates the individual listed below as its CM@Risk's Representative, which individual has the authority and responsibility set forth in Section 8.1.2:

Melissa Holper, Vice President
6423 South Ash Avenue
Tempe, Arizona 85283
(480)-921-8016.

Article 9 – Suspension and Termination

9.0 City's Right to Stop Work

9.0.1 City may, at its discretion and without cause, order CM@Risk in writing to stop and suspend the Work. Such suspension shall not exceed one hundred and eighty (180) consecutive days.

9.0.2 CM@Risk may seek an adjustment of the Contract Price and/or Contract Time if its cost or time to perform the Work has been adversely impacted by any suspension or stoppage of Work by City.

9.1 Termination for Convenience

9.1.1 Upon receipt of written notice to CM@Risk, City may, at its discretion and without cause, elect to terminate this Agreement. In such event, City shall pay CM@Risk only the direct value of its completed Work and materials supplied as of the date of termination. CM@Risk shall be entitled to profit and overhead on completed Work only, but shall not be entitled to anticipated profit or anticipated overhead.

9.1.2 If the City suspends the Work for one hundred eighty-one (181) consecutive days or more, such suspension shall be deemed a termination for convenience.

9.1.3 Upon such termination, CM@Risk shall proceed with the following obligations.

9.1.3.1 Stop Work as specified in the notice.

9.1.3.2 Place no further subcontracts or orders.

9.1.3.3 Terminate all subcontracts to the extent they relate to the work terminated. CM@Risk shall ensure that all subcontracts contain this same termination for convenience provision set forth in Section 9.1 et seq.

9.1.3.4 At the City's sole discretion and if requested in writing by the City, assign to the City all right, title and interest of CM@Risk under the subcontracts subject to termination.

9.1.3.5 Take any action that may be necessary for the protection and preservation of the property related to this Agreement that is in the possession of CM@Risk and in which the City has or may acquire an interest.

9.1.4 CM@Risk shall submit complete termination inventory schedules no later than one hundred twenty (120) days from the date of the notice of termination.

9.1.5 The City shall pay CM@Risk the following:

9.1.5.1 The direct value of its completed Work and materials supplied as of the date of termination.

9.1.5.2 The reasonable and direct, actual costs and expenses attributable to such termination. Reasonable costs and expenses shall not include, among other things, anticipated profit, anticipated overhead, or costs arising from CM@Risk's failure to perform as required under this Agreement.

9.1.5.3 CM@Risk shall be entitled to profit and overhead on completed Work only, but shall not be entitled to anticipated profit or anticipated overhead. If it is determined that CM@Risk would have sustained a loss on the entire Work had they been completed, CM@Risk shall not be allowed profit and the City shall reduce the settlement to reflect the indicated rate of loss.

9.1.6 CM@Risk shall maintain all records and documents for three (3) years after final settlement. These records shall be maintained and subject to auditing as prescribed in Section 7.7.

9.2 The City's Right to Perform and Terminate for Cause

9.2.1 If the City provides CM@Risk with a written order to provide adequate maintenance of traffic, adequate cleanup, adequate dust control or to correct deficiencies or damage resulting from abnormal weather conditions, and CM@Risk fails to comply in a time frame specified, the City may have work accomplished by other sources at CM@Risk's sole expense.

9.2.2 If CM@Risk persistently fails to (i) provide a sufficient number of skilled workers, (ii) supply the materials required by the Contract Documents, (iii) comply with applicable Legal Requirements, (iv) timely pay, without cause, Subconsultants and/or Subcontractors, (v) prosecute the Work with promptness and diligence to ensure that the Work is completed by the Contract Time, as such times may be adjusted, or (vi) perform material obligations under the Contract Documents, then City, in addition to any other rights and remedies provided in the Contract Documents or by law, shall have the rights set forth in Subsections 9.2.3 and 9.2.4 below.

9.2.3 Upon the occurrence of an event set forth in Subsection 9.2.2 above, City may provide written notice to CM@Risk that it intends to terminate this Agreement unless the problem cited is cured, or commenced to be cured, within seven (7) days of CM@Risk's receipt of such notice.

9.2.3.1 If CM@Risk fails to cure, or reasonably commence to cure, such problem, then City may give a second written notice to CM@Risk of its intent to terminate within an additional seven (7) day period.

9.2.3.2 If CM@Risk, within such second seven (7) day period, fails to cure, or reasonably commence to cure, such problem, then City may declare this Agreement terminated for default by providing written notice to CM@Risk of such declaration.

9.2.4 Upon declaring this Agreement terminated pursuant to Subsection 9.2.3.2 above, City may enter upon the premises and take possession, for the purpose of completing the Work, of all materials, equipment, scaffolds, tools, appliances and other items thereon, which have been purchased or provided for the performance of the Work, all of which CM@Risk hereby transfers, assigns and conveys to City for such purpose, and to employ any person or persons to complete the Work and provide all of the required labor, services, materials, equipment and other items.

9.2.5 In the event of such termination, CM@Risk shall not be entitled to receive any further payments under the Contract Documents until the Work shall be finally completed in accordance with the Contract Documents. At such time, CM@Risk shall only be entitled to be paid for Work performed and accepted by the City prior to its default.

9.2.6 If City's cost and expense of completing the Work exceeds the unpaid balance of the Contract Price, then CM@Risk shall be obligated to pay the difference to City. Such costs and expenses shall include not only the cost of completing the Work, but also losses, damages, costs and expense, including attorneys' fees and expenses, incurred by City in connection with the reprocurement and defense of claims arising from CM@Risk's default.

9.2.7 If City improperly terminates the Agreement for cause, the termination for cause shall be converted to a termination for convenience in accordance with the provisions of Section 9.1.

Article 10 - Insurance and Bonds

10.0 Insurance Requirements

10.0.1 CM@Risk and Subcontractors shall procure and maintain until all of their obligations have been discharged, including any warranty periods under this Agreement are satisfied, insurance against claims for injury to persons or damage to property which may arise from or in connection with the performance of the Work hereunder by CM@Risk, its agents, representatives, employees or Subcontractors.

10.0.2 The insurance requirements herein are minimum requirements for this Agreement and in no way limit the indemnity covenants contained in this Agreement.

10.0.3 The City in no way warrants that the minimum limits contained herein are sufficient to protect CM@Risk from liabilities that might arise out of the performance of the work under this Agreement by CM@Risk, its agents, representatives, employees, or subcontractors. CM@Risk is free to purchase such additional insurance as may be determined necessary.

10.1 **Minimum Scope And Limits Of Insurance**. CM@Risk shall provide coverage with limits of liability not less than those stated below:

10.1.1 Commercial General Liability – Occurrence Form
Policy shall include bodily injury, property damage, broad form contractual liability and XCU coverage.

• General Aggregate/for this Project	$2,000,000/$1,000,000
• Products – Completed Operations Aggregate	$1,000,000
• Personal and Advertising Injury	$1,000,000
• Each Occurrence	$1,000,000
• Fire Damage	$ 100,000

The policy shall be endorsed to include the following additional insured language: **"The City of Flagstaff shall be named as an additional insured with respect to liability arising out of the activities performed by, or on behalf of CM@Risk".**

10.1.2 Automobile Liability **-** Bodily injury and property damage for any owned, hired, and non-owned vehicles used in the performance of this Agreement.

Combined Single Limit (CSL)	$1,000,000

The policy shall be endorsed to include the following additional insured language: **"The City of Flagstaff shall be named as an additional insured with respect to liability arising out of the activities performed by, or on behalf of CM@Risk, including automobiles owned, leased, hired or borrowed by CM@Risk".**

10.1.3 Worker's Compensation and Employers' Liability

Workers' Compensation	Statutory
Employers' Liability	
Each Accident	$500,000
Disease - Each Employee	$500,000
Disease – Policy Limit	$500,000

10.1.4 **Builders' Risk Insurance or Installation Floater** $ N/A

In an amount equal to the initial Contract Amount plus additional coverage equal to Contract Amount for all subsequent change orders.

10.1.4.1 The City of Flagstaff, CM@Risk, Subcontractors, Design Professional and Design Professional's consultant and any others with an insurable interest in the Work shall be **Named Insured's** on the policy**.**

10.1.4.2 Coverage shall be written on an all risk, replacement cost basis and **shall include coverage for soft costs, flood and earth movement**.

10.1.4.3 Coverage shall be maintained until whichever of the following shall first occur: (i) final payment has been made; or, (ii) until no person or entity, other than the City of Flagstaff, has an insurable interest in the property required to be covered.

10.1.4.4 Coverage shall be endorsed such that the insurance shall not be canceled or lapse because of any partial use or occupancy by the City.

10.1.4.5 CM@Risk shall provide coverage from the time any covered property becomes the responsibility of CM@Risk, and continue without interruption during construction, renovation, or installation, including any time during which the covered property is being transported to the construction installation Site, or awaiting installation, whether on or off Site.

10.1.4.6 Coverage shall contain a **waiver of subrogation** against the City of Flagstaff.

10.1.4.7 CM@Risk is responsible for the payment of all policy deductibles.

10.2 **Additional Insurance Requirements.** The policies shall include, or be endorsed to include, the following provisions:

10.2.1 The City, its officers, officials, agents, employees and volunteers shall be additional insured to the full limits of liability purchased by CM@Risk even if those limits of liability are in excess of those required by this Agreement.

10.2.2 CM@Risk's insurance coverage shall be primary insurance and non-contributory with respect to all other available sources.

10.2.3 Coverage provided by CM@Risk shall not be limited to the liability assumed under the indemnification provisions of this Agreement.

10.2.4 The policies shall contain a waiver of subrogation against the City, its officers, officials, agents, and employees for losses arising from work performed by the CM@Risk for the City.

10.3 **Notice Of Cancellation.** Each insurance policy required by the insurance provisions of this Agreement shall provide the required coverage and shall not be suspended, voided, canceled, reduced in coverage or endorsed to lower limits except after thirty (30) days prior written notice has been given to the City. Such notice shall be sent directly to the City Contracts Division and shall be sent by certified mail, return receipt requested.

10.4 **Acceptability Of Insurers.** Insurance is to be placed with insurers who are duly licensed companies in the State of Arizona with an "A.M. Best" rating of A-,7, or as approved by the City and licensed in the State of Arizona with policies and forms satisfactory to the City. The City in no way warrants that the above-required minimum insurer rating is sufficient to protect CM@Risk from potential insurer insolvency.

10.5 **Verification Of Coverage**

10.5.1 CM@Risk shall furnish the City with Certificates of Insurance (ACORD form or equivalent approved by the City) as required by this Agreement. The Certificates for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf.

10.5.2 All Certificates of Insurance and endorsements are to be received and approved by the City before work commences. Each insurance policy required by this Agreement shall be in effect at or prior to commencement of Work under this Agreement and remain in effect for the duration of the Project. Failure to maintain the insurance policies as required by this Agreement or to provide evidence of renewal is a material breach of contract.

10.5.3 All Certificates of Insurance required by this Agreement shall be sent directly to City's Contracts Division. The City project/contract number and project description shall be noted on the Certificate of Insurance. The City reserves the right to require complete, certified copies of all insurance policies required by this Agreement at any time.

10.5.4 **If the Certificate of Insurance reflecting policy coverage and cancellation notice does not conform to the City's requirements, the CM@Risk must:**

- **Submit a current Certificate of Insurance (dated within fifteen (15) days of the payment request submittal) with each payment request form. The payment request shall be rejected if the Certificate of Insurance is not submitted with the payment request.**

10.6 **Subcontractors.** CM@Risks' Certificate(s) of Insurance shall include all Subcontractors as additional insured's under its policies. All coverage's for Subcontractors shall be subject to the minimum requirements identified above.

10.7 **Approval.** Any modification or variation from the insurance requirements in this Agreement shall be made by the City's Legal Department, whose decision shall be final. Such action shall not require a formal contract amendment, but may be made by administrative action.

10.8 **Bonds and Other Performance Security.**

10.8.1 Prior to execution of this Agreement, CM@Risk shall provide a performance bond and a labor and materials bond, each in an amount equal to the full amount of the GMP.

10.8.2 Each such bond shall be executed by a surety company, or companies, holding a Certificate of Authority to transact surety business in the State of Arizona, issued by the Director of the Arizona Department of Insurance. A copy of the Certificate of Authority shall accompany the bonds. The Certificate shall have been issued or updated within two (2) years prior to the execution of this Agreement.

10.8.3 The bonds shall be made payable and acceptable to the City of Flagstaff.

10.8.4 The bonds shall be written or countersigned by an authorized representative of the surety who is either a resident of the State of Arizona or whose principal office is maintained in Arizona, as by law required, and the bonds shall have attached thereto a certified copy of Power of Attorney of the signing official.

10.8.4.1 If one Power of Attorney is submitted, it shall be for twice the total GMP amount.

10.8.4.2 If two Powers of Attorney are submitted, each shall be for the total GMP amount. Personal or individual bonds are not acceptable.

10.8.5 Upon the request of any person or entity appearing to be a potential beneficiary of bonds covering payment of obligations arising under the Contract Documents, CM@Risk shall promptly furnish a copy of the bonds or shall permit a copy to be made.

10.8.6 All bonds submitted for this project shall be provided by a company which has been rated AM Best rating of "A-,7, or better for the prior four quarters" by the A.M. Best Company.

Article 11 - Indemnification

11.1 CM@Risk's Liability and Indemnification.

11.1.1 To the fullest extent permitted by law, CM@Risk shall defend, indemnify and hold harmless the City, its agents, representatives, officers, directors, officials and employees from and against all claims, damages, losses and expenses (including but not limited to attorney fees, court costs, and the cost of appellate proceedings), relating to, arising out of, or alleged to have resulted from the acts, errors, mistakes, omissions, work or services of CM@Risk, its employees, agents, or any tier of subcontractors in the performance of this Agreement. CM@Risk's duty to defend, hold harmless and indemnify the City, its agents, representatives, officers, directors, officials and employees shall arise in connection with the claim, damage, loss or expense that is attributable to bodily injury, sickness, disease, death, or injury to, impairment, or destruction of property including loss of use resulting therefrom, caused by any acts, errors, mistakes, omissions, work or services in the performance of this Agreement including any employee of CM@Risk or any tier of subcontractor or any other person for whose acts, errors, mistakes, omissions, work or services CM@Risk may be legally liable.

The amount and type of insurance coverage requirements set forth herein shall in no way be construed as limiting the scope of the indemnity in this paragraph.

Article 12 – General Provisions

12.1 Contract Documents

12.1.1 Contract Documents are as defined in Article 1. This Agreement, Plans, Standard Specifications and Details, Special Provisions, Addenda (if any) dated "None" and used as the basis for the Guaranteed Maximum Price Proposal and Guaranteed Maximum Price Proposal,

as accepted by the Mayor and Council per Council Minutes 17th day of April, 2012, Performance Bond, Payment Bond, Certificates of Insurance, Construction Documents and Change Orders (if any) are by this reference made a part of this Agreement to the same extent as if set forth herein in full.

12.1.2 The Contract Documents are intended to permit the parties to complete the Work and all obligations required by the Contract Documents within the Contract Times for the Contract Price. The Contract Documents are intended to be complementary and interpreted in harmony so as to avoid conflict, with words and phrases interpreted in a manner consistent with construction and design industry standards.

12.1.3 In the event of any inconsistency, conflict, or ambiguity between or among the Contract Documents, the Contract Documents shall take precedence in the order in which they are listed in the definition of Contract Documents in Article 1.

12.1.3.1 On the drawings, given dimensions shall take precedence over scaled measurements, and large-scale drawings over small-scale drawings.

12.1.3.2 Specifications take precedence over Plans.

12.1.3.3 In the event of any inconsistency, conflict, or ambiguity between the Contract Documents and the Design Phase Agreement, the Contract Documents take precedence over the Design Phase Agreement

12.1.4 The headings used in this Agreement, or any other Contract Documents, are for ease of reference only and shall not in any way be construed to limit or alter the meaning of any provision.

12.1.5 The Contract Documents form the entire agreement between City and CM@Risk and by incorporation herein are as fully binding on the parties as if repeated herein. No oral representations or other agreements have been made by the parties except as specifically stated in the Contract Documents.

12.2 **Amendments.** The Contract Documents may not be changed, altered, or amended in any way except in writing signed by a duly authorized representative of each party.

12.3 **Time is of the Essence.** City and CM@Risk mutually agree that time is of the essence with respect to the dates and times set forth in the Contract Documents.

12.4 **Mutual Obligations.** City and CM@Risk commit at all times to cooperate fully with each other, and proceed on the basis of trust and good faith, to permit each party to realize the benefits afforded under the Contract Documents.

12.5 **Cooperation and Further Documentation.** CM@Risk agrees to provide the City such other duly executed documents as shall be reasonably requested by the City to implement the intent of the Contract Documents.

12.6 **Assignment.** Neither CM@Risk nor City shall, without the written consent of the other assign, transfer or sublet any portion of this Agreement or part of the Work or the obligations required by the Contract Documents.

12.7 **Successorship.** CM@Risk and City intend that the provisions of the Contract Documents are binding upon the parties, their employees, agents, heirs, successors and assigns.

12.8 **Third Party Beneficiary.** Nothing under the Contract Documents shall be construed to give any rights or benefits in the Contract Documents to anyone other than the City and CM@Risk, and all duties and responsibilities undertaken pursuant to the Contract Documents shall be for the sole and exclusive benefit of City and CM@Risk and not for the benefit of any other party.

12.9 **Governing Law.** This Agreement and all Contract Documents shall be deemed to be made under, and shall be construed, in accordance with and governed by the laws of the State of Arizona without regard to the conflicts or choice of law provisions thereof. Any action to enforce any provision of this Agreement or to obtain any remedy with respect hereto shall be brought in the Superior Court, Coconino County, Arizona, and for this purpose, each party hereby expressly and irrevocably consents to the jurisdiction and venue of such Court.

12.10 **Severability.** If any provision of the Contract Documents or the application thereof to any person or circumstance shall be invalid, illegal or unenforceable to any extent, the remainder of the Contract Documents and the application thereof shall not be affected and shall be enforceable to the fullest extent permitted by law.

12.11 **Compliance with All Laws.** CM@Risk will comply with all applicable Federal, State, County and City laws, regulations and policies, including but not limited to the mandatory statutory provisions in Exhibit __, attached and made a part of this Agreement. CM@Risk understands and acknowledges the applicability of the Americans with Disabilities Act, the Immigration Reform and Control Act of 1986 and the Drug Free Workplace Act of 1989. CM@Risk agrees to comply with these laws in performing the Contract Documents and to permit the City to verify such compliance.

12.12 **Employment of Aliens.** CM@Risk shall comply with A.R.S. § 34-301, which provides that a person who is not a citizen or ward of the United States shall not be employed upon or in connection with any state, county or municipal public works project.

12.13 **Compliance with Federal Immigration Laws and Regulations.** Vendor warrants that it complies with all Federal Immigration laws and regulations that relate to its employees and complies with A.R.S. 23-214.A. Vendor acknowledges that pursuant to A.R.S. 41-4401 a breach of this warranty is a material breach of this contract subject to penalties up to and including termination of this contract, and that the City retains the legal right to inspect the papers of any employee who works on the contract to ensure compliance with this warranty.

12.14 **Business Operations in Sudan/Iran.** In accordance with A.R.S. § 35-397, the Provider certifies that the Provider and its affiliates and subsidiaries do not have scrutinized business operations in Sudan or Iran. If the City determines that the Provider's certification is false, the City may impose all legal and equitable remedies available to it, including but not limited to termination of this Agreement.

12.15 **Legal Requirements.** CM@Risk shall perform all Work in accordance with all Legal Requirements and shall provide all notices applicable to the Work as required by the Legal Requirements.

12.16 **Construction Documents.** It is not CM@Risk's responsibility to ascertain that the Construction Documents are in accordance with applicable laws, statutes, ordinances, building codes, rules and regulations. However, if CM@Risk recognizes that portions of the Construction Documents are at variance therewith, CM@Risk shall promptly notify the Design Professional and City in writing, describing the apparent variance or deficiency.

12.17 **Independent Contractor.** CM@Risk is and shall be an independent contractor. Any provisions in the Contract Documents that may appear to give the City the right to direct CM@Risk as to the details of accomplishing the Work or to exercise a measure of control over the Work means that CM@Risk shall follow the wishes of the City as to the results of the Work only. These results shall comply with all applicable laws and ordinances.

12.18 **The City's Right Of Cancellation.** All parties hereto acknowledge that this Agreement is subject to cancellation by the City pursuant to the provisions of Section 38-511, Arizona Revised Statutes.

12.19 **Survival.** All warranties, representations and indemnifications by CM@Risk shall survive the completion or termination of this Agreement.

12.20 **Covenant Against Contingent Fees**. CM@Risk warrants that no person has been employed or retained to solicit or secure this Agreement upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, and that no member of the City Council, or any employee of City has any interest, financially, or otherwise, in the firm. For breach or violation of this warrant, the City shall have the right to annul this Agreement without liability, or at its discretion to deduct from the Contract Price or consideration, the full amount of such commission, percentage, brokerage, or contingent fee.

12.21 **No Waiver.** The failure of either party to enforce any of the provisions of the Contract Documents or to require performance of the other party of any of the provisions hereof shall not be construed to be a waiver of such provisions, nor shall it affect the validity of the Contract Documents or any part thereof, or the right of either party to thereafter enforce each and every provision.

12.22 **Notice.**

12.22.1 Unless otherwise provided, any notice, request, instruction or other document to be given under this Agreement by any party to any other party shall be in writing and shall be delivered in person or by courier or facsimile transmission or mailed by certified mail, postage prepaid, return receipt requested and shall be deemed given upon (a) confirmation of receipt of a facsimile transmission, (b) confirmed delivery by hand or standard overnight mail or (c) upon the expiration of three (3) business days after the day mailed by certified mail, as follows:

to CM@Risk:

Melissa Holper, Vice President
6423 South Ash Avenue
Tempe, Arizona 85283
(480)-921-8016.

to City:

City of Flagstaff
211 West Aspen Avenue
Flagstaff, Arizona 86001
Attn: Erik Solberg, Division Head
Phone: (928) 213-2105
Fax: (928) 913-3200

With a copy to:

City of Flagstaff
211 West Aspen Avenue
Flagstaff, Arizona 86001
Attn: Dan Holmes, Sr. Project Manager
Phone: (928) 213-2108
Fax: (928) 913-3200

Design Professional:

Kimley-Horn & Associates, Steve Reeder, Project Manager
7740 North 16th Street, Suite 300
Phoenix, Arizona 85020
(602)-944-5500

or to such other place and with such other copies as either Party may designate as to itself by written notice to the other Party. Rejection, any refusal to accept or the inability to deliver because of changed address of which no notice was given shall be deemed to be receipt of the notice as of the date of such rejection, refusal or inability to deliver.

12.22.2 Notices Related to Payment, Securities-in-lieu, Bonds. Any notice, request, instruction or other document to be given under this Agreement by any party to any other party related to payment, securities-in-lieu, bonds or other instrument securing the performance of this Agreement, including but not limited to, bid bonds, performance bonds, payment bonds or letters of credit, shall be in writing and shall be delivered in person or by courier or facsimile transmission or mailed by certified mail, postage prepaid, return receipt requested and shall be deemed given upon (a) confirmation of receipt of a facsimile transmission, (b) confirmed delivery by hand or standard overnight mail or (c) upon the expiration of three (3) business days after the day mailed by certified mail, as follows:

to Contractor:

Melissa Holper, Vice President
6423 South Ash Avenue
Tempe, Arizona 85283
(480)-921-8016.

to City:

City of Flagstaff
211 West Aspen Avenue
Flagstaff, Arizona 86001
Attn: Rick Compau, Purchasing Director
Phone: (928) 213-2275
Fax: (928) 213- 2209

With copies to:

City of Flagstaff
211 West Aspen Avenue
Flagstaff, Arizona 86001
Attn: Patrick Brown, C.P.M., Senior Procurement Specialist
Phone: (928) 213-2277
Fax: (928) 213-2209

City of Flagstaff
211 West Aspen Avenue
Flagstaff, Arizona 86001
Attn: Dan Holmes, City Representative (Sr. Project Manager)
Phone: (928) 213-2108
Fax: (928) 913-3200

or to such other place and with such other copies as either Party may designate as to itself by written notice to the other Party. Rejection, any refusal to accept or the inability to deliver because of changed address of which no notice was given shall be deemed to be receipt of the notice as of the date of such rejection, refusal or inability to deliver.

12.23 Confidentiality of Plans and Specifications

12.23.1 Any plans or specifications regarding this Project shall be for official use only. CM@Risk shall not share them with others except as required to fulfill the obligations of this Agreement with the City.

12.23.2 All Record Documents, Shop Drawings and other plans or drawings prepared or submitted by CM@Risk shall include the following language: "These plans are for official use only and may not be shared with others except as required to fulfill the obligations of the Street Maintenance Program 2011 Project Agreement with the City of Flagstaff."

12.24 CM@Risk and Subcontractor Employee Security Inquiries. The parties acknowledge that security measures required in this Section are necessary in order to preserve and protect the public health, safety and welfare. In addition to the specific measures set forth below, CM@Risk shall take such other measures, as it deems reasonable and necessary to further preserve and protect the public health, safety and welfare.

12.24.1 Security Inquiries. CM@Risk acknowledges that all of the employees that it provides pursuant to this Agreement shall be subject to background and security checks and screening ("Security Inquiries"). CM@Risk shall perform all such security inquiries and shall make the results available to City for all employees considered for performing work (including supervision and oversight) under this Agreement. City may make further security inquiries. Whether or not further security inquires are made by City, City may, at its sole, absolute and unfettered discretion, accept or reject any or all of the employees proposed by CM@Risk for performing work under this Agreement. Employees rejected by City for performing services under this Agreement may still be engaged by CM@Risk for other work not involving the City. An employee rejected for work under this Agreement shall not be proposed to perform work under other City Agreements or engagements without City 's prior approval.

12.24.2 Criteria for Evaluating Security Inquiries. Once formally adopted by City, criteria for excluding an individual from performing work under this Agreement shall be communicated by City to CM@Risk and used by CM@Risk as a factor in making its decision. Prior to such adoption, CM@Risk shall use its best judgment in making its decision using, among other criteria, applicable law, administrative regulations of federal, state and local agencies concerned with work performed under this Agreement, specific local concerns that deal with the specific work and work location(s) of the Project, and standards used by City in evaluating its own personnel.

12.24.3 Additional City Rights Regarding Security Inquiries. In addition to the foregoing, City reserves the right to: (1) have an employee/prospective employee of CM@Risk be required to provide fingerprints and execute such other documentation as may be necessary to obtain criminal justice information pursuant to A.R.S. § 41-1750(G)(4); (2) act on newly acquired information whether or not such information should have been previously discovered; (3) unilaterally change its standards and criteria relative to the acceptability of CM@Risk 's employees and/or prospective employees; and, (4) object, at any time and for any reason, to an employee of CM@Risk performing work (including supervision and oversight) under this Agreement.

12.24.4 Background and Security-Contracts and Subcontracts. CM@Risk shall include the security inquiry terms of this Section for employee background and security checks and screening in all contracts and subcontracts for work performed under this Agreement, including supervision and oversight.

12.24.5 Materiality of Security Inquiry Provisions. The security inquiry provisions of this Agreement, as

set forth above, are material to City 's entry into this Agreement and any breach thereof by CM@Risk may, at City's sole and unfettered discretion, be considered to be a breach of contract of sufficient magnitude to terminate this Agreement. Such termination shall subject CM@Risk to liability for its breach of this Agreement.

12.25 Hazardous Materials

12.25.1 Unless included in the Work, if CM@Risk encounters material on the Site which it reasonably believes to contain asbestos, polychlorinated biphenyl (PCB), or other hazardous substances or materials regulated by applicable law, it shall immediately stop work and report the condition to the City.

12.25.2 If the material is found to contain asbestos, PCB or other hazardous substances or materials regulated by applicable law, CM@Risk shall not resume work in the affected area until the material has been abated or rendered harmless. CM@Risk and the City may agree, in writing, to continue work in non-affected areas on the Site.

12.25.3 An extension of Contract Time may be granted in accordance with Article 6.

12.25.4 CM@Risk shall comply with all applicable laws/ordinances and regulations and take all appropriate health and safety precautions upon discovery.

12.26 Computer Systems. CM@Risk shall warrant fault-free performance in the processing of date and date-related data including, but not limited to calculating, comparing, and sequencing by all equipment and software products, individually and in combination, from the commencement of the Work. Fault-free performance shall include the manipulation of data when dates are in the 20th or 21st centuries and shall be transparent to the user. Failure to comply with "Year 2000" requirements shall be considered a breach of this Agreement.

12.27 Traffic Control. CM@Risk shall comply with all provisions of the latest version of the Manual on Uniform Traffic Control Devices and any other traffic control provisions as may be provided in the technical specifications.

[Signature page follows.]

THE CITY OF FLAGSTAFF, ARIZONA

Westplex Taxi Lanes Reconstruction Project

Project No. 01-12003; GMP Number One; Agreement No. 2013-38

IN WITNESS WHEREOF, two (2) identical counterparts of this Agreement each of which shall for all purposes be deemed an original thereof, have been duly executed by the parties herein above named, on the date and year first above written.

CM@Risk agrees that this Agreement, as awarded, is for the stated Work and understands that payment for the total Work shall be made on the basis of the indicated amount(s), per the terms and conditions of this Agreement.

Guaranteed Maximum Price One

Four Million Five Hundred Fifty Six Thousand Seven Hundred Ninety Six Dollars and Sixteen Cents

$ 4,556,796.16

THE CITY OF FLAGSTAFF, ARIZONA

By:_____
Kevin Burke, City Manager

J. Banicki Construction, Inc.

By:_____

Title:_____

(Corporate Seal)

ATTEST:

_____
City Clerk

_____
ATTEST: (Signature and Title)

APPROVED AS TO FORM:

_____
City Attorney

EXHIBIT A - PROJECT DESCRIPTION

The project consists of removal and replacement of taxi lane asphalt pavements between and around existing tee and shade hangars in the wesplex area of Flagstaff Pulliam Airport. Work will include milling of existing pavement, excavation and disposal of existing soils, constructing sub-base, base and new asphalt pavements, pavement markings, tie-down installation, pavement marking and other related work. Existing asphalt pavements beneath three existing shade hangars will be replaced with new concrete pavements.

One key element of the project will be the requirement to maintain airport safety and security at all times during construction. Appropriate security badges will be required for key contractor staff. Obstructions to the safe movement of aircraft must be avoided. A contractor safety and security plan will be required prior to construction. In addition, the construction area is within the security area of the airport. Access for personnel and equipment will be restricted by FAA and airport regulations.

EXHIBIT B – APPROVED GMP PROPOSAL

PROJECT #: 01-12003 **DATE:**

PROJECT NAME: Westplex Taxi Lanes Reconstruction Project

Attached

Flagstaff-Pulliam Airport
Westplex Taxi Lanes Reconstruction Project
GMP1

Project Numbers:

AIP 3-04-0015-36, ADOT E-3S3E, COF 01-12003, Acct 270-3776-783

Kimley-Horn and Associates, Inc.

Banicki Construction

A Division of Sterling Construction Company, Inc.

Submitted by:

J BANICKI CONSTRUCTION, INC

6423 S. ASH AVENUE, TEMPE, AZ 85283

PH: (480) 921-8016 FAX: (480) 921-9456

www.banicki.com

Banicki Construction
A Division of Sterling Construction Company, Inc.

J. Banicki Construction, Inc.
6423 S. Ash Avenue
Tempe, AZ 85283

480-921-8016 (phone)
480-921-9456 (fax)

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Section 1 - SCOPE OF WORK

1. Scope of Work
Flagstaff Airport Westplex Taxilanes Reconstruction GMP1
AIP 3-04-0015-36, ADOT E-3S3E, COF 01-12003, Acct 270-3776-783

The project consists of removal and reconstruction of existing taxilanes between and surrounding general aviation hangars in the Westplex area of Flagstaff Pulliam Airport. Existing asphalt pavements in these areas are in poor condition and require expensive annual maintenance in order to remain usable.

The project consists of removal and replacement of taxi lane asphalt pavements between and around existing T-shade hangars in the Westplex area of Flagstaff Pulliam Airport. Work will include milling of existing pavement, excavation and disposal of existing soils, constructing sub-base, base and new P-403 asphalt pavements, pavement markings, tie-down installation, pavement marking, hydroseeding and other related work. Existing asphalt pavements beneath three existing shade hangars will be replaced with new Portland Cement Concrete Pavements.

Section 2 – SUMMARY OF THE GMP

J. Banicki Construction, Inc.
GMP Summary

Project #: **01-12003**
Account#: **270-3776-783**

AIP #: **3-04-0015-36**
ADOT #: **E-3S3E**

Project Name: **Flagstaff Airport Westplex Taxilanes Reconstr. GMP1**

Date: **5/8/2013**

GMP SUMMARY					AMOUNT
A.	Cost of the Work (Labor, Materials, Equipment, Warranty)				$ 3,520,248.38
B.	CM@Risk's Allowance				$ 87,500.00
	INDIRECT COSTS			RATE	
C.	Construction Fee			7.15%	$ 318,500.00
D.	General Conditions			5.86%	$ 266,947.78
	D1	Payment and Performance Bond	$ 30,132.00	0.66%	
	D2	Insurance	$ 35,300.00	0.77%	
E	Sales Taxes			5.9146%	$ 263,600.00

F. TOTAL GMP	$ 4,456,796.16
G. Owner's Allowance	$ 100,000.00
H. Contract Amount	$ 4,556,796.16

5/9/2013, 7:33 AM

Section 3A – SCHEDULE OF VALUES

Schedule of Values
Flagstaff Airport Westplex Taxilanes Reconstruction GMP1
AIP 3-04-0015-36, ADOT E-3S3E, COF 01-12003, Acct 270-3776-783

ITEM#	SPEC#	BID ITEM DESCRIPTION	QTY	UNIT	BANICKI TOTAL AMOUNT	COMPETITIVE BID AMOUNT	TOTAL	
							UNIT PRICE	TOTAL AMOUNT
		General Items						
1	P-101	Mobilization / Demobilization (NTE 5%)	1	LS	$40,538.00	$61,740.00	$102,278.00	$102,278.00
2	P-156	AZPDES / SWPPP	1	LS	$21,279.16	$600.00	$21,879.16	$21,879.16
3	M-002	Engineers Field Office	1	LS	$16,425.00	$375.00	$16,800.00	$16,800.00
4	M-003	Airport Safety & Security	1	LS	$153,996.04	$43,470.00	$197,466.04	$197,466.04
5	U-200	Locating of Underground Utilities	1	LS	$5,120.00	$0.00	$5,120.00	$5,120.00
6	NA	Union Labor Subsistence	1	LS	$75,195.00	$0.00	$75,195.00	$75,195.00
7	NA	Water Buy & Haul	1	LS	$155,435.36	$27,500.00	$182,935.36	$182,935.36
		Subtotal			**$467,988.56**	**$133,685.00**		**$601,673.56**
		Work Items						
8		Contractor Quality Control (Allowance)	1	LS	$0.00	$48,080.00	$48,080.00	$48,080.00
9		Construction Layout Staking	1	LS	$0.00	$24,155.00	$24,155.00	$24,155.00
10	P-104	Saw Cut Asphalt Concrete, 2"	3320	LF	$0.00	$1,660.00	$0.50	$1,660.00
11	P-104	Remove Existing Asphalt, 4" Depth	48800	SY	$19,945.50	$63,990.50	$1.72	$83,936.00
12	P-104	Remove Existing Tie-Downs	252	CY	$12,590.28	$4,077.00	$66.14	$16,667.28
13	P-152	Excavation & Disposal	19400	CY	$44,548.50	$245,287.50	$14.94	$289,836.00
14	P-152	Unsuitable Excavation (Allowance)	5820	CY	$53,791.80	$217,362.00	$46.59	$271,153.80
15	P-152	Subgrade Preparation	39475	SY	$37,896.00	$0.00	$0.96	$37,896.00
16	P-154	Subbase Course, Place Millings, 10"	12200	CY	$32,652.00	$28,714.00	$5.03	$61,366.00
17	P-208	ABC, 6" Depth	7100	CY	$42,207.00	$264,655.00	$43.22	$306,862.00
18	P-208	ABC, 1" depth on Cargo Ramp (Allowance)	250	CY	$966.50	$10,701.00	$46.67	$11,667.50
19	P-208	Recondition Existing ABC - Phase 1	9325	SY	$7,087.00	$0.00	$0.76	$7,087.00
20	P-208	ABC, Variable depth Base/Subbase (Allowance)	5900	CY	$47,700.00	$219,924.00	$45.36	$267,624.00
21	P-403	Bituminous Surface Course	11000	TN	$98,010.00	$987,250.00	$98.66	$1,085,260.00
22	P-501	Portland Cement Concrete Pavement, 6" Depth	4330	SY	$0.00	$281,450.00	$65.00	$281,450.00
23	P-610	Tie-Down in Asphalt	54	EA	$0.00	$29,430.00	$545.00	$29,430.00
24	P-610	Tie-Down in PCCP	114	EA	$0.00	$22,800.00	$200.00	$22,800.00
25	P-610	Reconstruct Storm Drain Inlet Apron	2	EA	$0.00	$7,900.00	$3,950.00	$7,900.00
26	P-620	Taxiway Marking	13900	SF	$0.00	$13,344.00	$0.96	$13,344.00
27	P-620	Pavement Marking Obliteration	250	SF	$0.00	$7,000.00	$28.00	$7,000.00
28	SP-001	Concrete Pavement Pipe Cap	160	LF	$0.00	$18,400.00	$115.00	$18,400.00
29	T-901	Hydroseeding	4	AC	$10,890.24	$14,110.00	$6,250.06	$25,000.24
		Subtotal			**$408,284.82**	**$2,510,290.00**		**$2,918,574.82**
		Total			**$876,273.38**	**$2,643,975.00**		**$3,520,248.38**

Banicki Construction

General Items
Flagstaff Airport Westplex Taxilanes Reconstruction GMP1
AIP 3-04-0015-36, ADOT E-3S3E, COF 01-12003, Acct 270-3776-783

BID ITEM DESCRIPTION	QTY	UNIT	UNIT PRICE	TOTAL AMOUNT
Mobilization				
JBCI	1	LS	$38,572.00	$38,572.00
D6 Bulldozer	2	EA	$983.00	$1,966.00
Concrete Sub	3	EA	$2,800.00	$8,400.00
Milling Sub	3	EA	$1,800.00	$5,400.00
Sawcut Sub	3	EA	$450.00	$1,350.00
Hydroseed Sub	1	DA	$750.00	$750.00
Striping Sub	6	EA	$800.00	$4,800.00
Trucking Sub	3	EA	$13,680.00	$41,040.00
Subtotal				**$102,278.00**
AZPDES / SWPPP				
NOI Permit	1	LS	$350.00	$350.00
Dust Permit/SWPPP/NOI Development	1	LS	$800.00	$800.00
SWPPP Bi-Monthly Inspection	8	EA	$100.00	$800.00
Dewater	1	LS	$8,687.00	$8,687.00
140H Grader / Operator Gr3	20	HR	$113.80	$2,276.00
950 Loader / Operator Gr2	20	HR	$92.45	$1,849.00
710 Backhoe / Operator Gr 2	4	HR	$92.59	$370.36
Flatbed	40	HR	$38.00	$1,520.00
Laborer Gr2	80	HR	$24.46	$1,956.80
Haul Off & Dump Fees	1	LS	$650.00	$650.00
Misc SWPPP Buy	1	LS	$500.00	$500.00
Drainage Rock for Construction Entrance	50	TN	$7.50	$375.00
Geotextile Fabric for Valley Gutter	300	SY	$1.00	$300.00
12x10 Sediment Log for Drainage Inlets / Valley Gutter	85	EA	$17.00	$1,445.00
Subtotal				**$21,879.16**
Engineer's Field Office				
Office Trailer Rental	4	MO	$1,000.00	$4,000.00
Office Trailer/Utilities Setup & Removal	1	LS	$5,500.00	$5,500.00
Monthly Utility Bill	4	MO	$650.00	$2,600.00
Copier/Furniture/Office Equipment	4	MO	$350.00	$1,400.00
Supplies Field Office Misc	4	MO	$150.00	$600.00
Weekly Cleaning/Janitorial Service	16	WK	$75.00	$1,200.00
Daily Sanitary Facilities Cleaning	60	DA	$25.00	$1,500.00
Subtotal				**$16,800.00**

General Items
Flagstaff Airport Westplex Taxilanes Reconstruction GMP1
AIP 3-04-0015-36, ADOT E-3S3E, COF 01-12003, Acct 270-3776-783

BID ITEM DESCRIPTION	QTY	UNIT	UNIT PRICE	TOTAL AMOUNT
Airport Safety & Security				
Gate Guard / Flagging	960	HR	$27.39	$26,294.40
Escort Vehicle	720	HR	$37.39	$26,920.80
Broom	720	HR	$110.69	$79,696.80
Low Level Barrier Rental (Phase 1 -60 x 30 days, Phase 2 & 3 - 120 x 90 days)				
Low Level Barrier Rental	12600	ED	$3.45	$43,470.00
Light Replacement at 10% Loss	42	EA	$49.00	$2,058.00
Maintenance of Traffic Control				
Pickup/Laborer Gr2	60	HR	$40.29	$2,417.40
Low Level Barrier Set, Maintain & Remove				
Flatbed	64	HR	$38.00	$2,432.00
Water Truck / Operator Gr2	64	HR	$83.16	$5,322.24
950 Loader / Operator Gr2	64	HR	$83.57	$5,348.48
Laborer Gr2	128	HR	$27.39	$3,505.92
Subtotal				**$197,466.04**
Locating of Underground Utilities				
Pothole Utilities	40	HR	$128.00	$5,120.00
Subtotal				**$5,120.00**
Union Labor Subsistence				
Laborers Subsistence (Total Days for all Employees)	767	DA	$45.00	$34,515.00
Operators Subsistence (Total Days for all Employees)	678	DA	$60.00	$40,680.00
Subtotal				**$75,195.00**
Water Buy & Haul				
Laborer Gr 6 / Water Truck 4000 gal	1928	HR	$80.62	$155,435.36
Water Buy	5000	MG	$5.50	$27,500.00
Subtotal				**$182,935.36**
General Items				
Total				**$601,673.56**

Banicki Construction

General Conditions, Bonds and Insurance
Flagstaff Airport Westplex Taxilanes Reconstruction GMP1
AIP 3-04-0015-36, ADOT E-3S3E, COF 01-12003, Acct 270-3776-783

BID ITEM DESCRIPTION		QTY	UNIT	UNIT PRICE	TOTAL AMOUNT
Supervision					
President	Mike Abraham	10	HR	$148.75	$1,487.50
Project Manager	Eric Rotner	528	HR	$85.00	$44,880.00
Project Administrator	Melissa Holper	352	HR	$85.00	$29,920.00
Paving Superintendent	Chuck Price	704	HR	$55.00	$38,720.00
Project Engineer	Kevin Smith	352	HR	$45.00	$15,840.00
Equipment Superintendent	Ralph Light	176	HR	$55.00	$9,680.00
Contract Admin	Molly Tieskoetter	70	HR	$32.50	$2,275.00
Certified Payroll & AP	Lesia Cordova	70	HR	$38.75	$2,712.50
Cost Accountant	Chris Wittrock	70	HR	$36.25	$2,537.50
Pickup, 3/4 Ton		2122	HR	$15.00	$31,830.00
Subtotal					**$179,882.50**
Field Offices & Temporary Facilities					
Computer / Office Equipment		4	MN	$200.00	$800.00
Portable Toilets		4	MN	$425.00	$1,700.00
Dumpster		4	MN	$200.00	$800.00
Cell Phones		4	MN	$650.00	$2,600.00
Airport Radios		1	LS	$2,400.00	$2,400.00
Misc Office Supplies		4	MN	$150.00	$600.00
Subtotal					**$8,900.00**
Safety Incidentals					
Airport Safety Training		56	HR	$35.00	$1,960.00
Weekly Safety Meeting		120	HR	$35.00	$4,200.00
Labor Bulletin Board		1	EA	$200.00	$200.00
Safety Supplies		11564	MH	$0.27	$3,122.28
Safety Program		11564	MH	$0.25	$2,891.00
Drug Testing/Random		12	EA	$30.00	$360.00
Subtotal					**$12,733.28**
Payment & Performance Bonds					
Payment & Performance Bonds		1	LS	$30,132.00	$30,132.00
Total					**$30,132.00**
Insurance					
General Liability		1	LS	$35,300.00	$35,300.00
Builders Risk (included in General - no add'l charge)		1	LS	$0.00	$0.00
Total					**$35,300.00**
General Conditions					
Total					**$266,947.78**

Contractor Allowance
Flagstaff Airport Westplex Taxilanes Reconstruction GMP1
AIP 3-04-0015-36, ADOT E-3S3E, COF 01-12003, Acct 270-3776-783

ITEM#	BID ITEM DESCRIPTION	QTY	UNIT	UNIT PRICE	TOTAL AMOUNT
	Contractor Allowance				
1	Field Modifications	1	LS	$7,500.00	$7,500.00
2	Quantity Over/Under Runs	1	LS	$10,000.00	$10,000.00
3	Unforeseen Utility Relocation / Repair	1	LS	$10,000.00	$10,000.00
10	Change in Disposal Site to Woody Mountain Pit	1	LS	$45,000.00	$45,000.00
11	Damage to Milling Machine by Hidden Tie Downs	1	LS	$15,000.00	$15,000.00
	Subtotal				**$87,500.00**

Banicki Construction

Section 3B – SUBCONTRACTOR/SUPPLIER SUMMARY

Subcontractor/Supplier Cost Summary
Flagstaff Airport Westplex Taxilanes Reconstruction GMP1
AIP 3-04-0015-36, ADOT E-3S3E, COF 01-12003, Acct 270-3776-783

ITEM#	SPEC#	BID ITEM DESCRIPTION	QTY	UNIT	UNIT PRICE	TOTAL AMOUNT
		Low Level Barrier Rental - J Banicki Construction				
4	M-003	Low Level Barrier Rental	12600	ED	$3.45	$43,470.00
		Total				**$43,470.00**
		DBE Amount				**$0.00**
		Water Buy - City of Flagstaff				
7	NA	Water Buy	5000	MG	$5.50	$27,500.00
		Total				**$27,500.00**
		DBE Amount				**$0.00**
		Quality Control Testing - Quality Testing				
1	P-100	Sieve Analysis / Gradation	8	EA	$40.00	$320.00
2	P-100	Plasticity Index	8	EA	$45.00	$360.00
1	P-100	Procter	8	EA	$80.00	$640.00
1	P-100	Fractured Faces	4	EA	$40.00	$160.00
1	P-100	Sand Equivalent	4	EA	$55.00	$220.00
1	P-100	Aggregate Unit Weight	6	EA	$35.00	$210.00
1	P-100	Flat and Elongated Particles	4	EA	$55.00	$220.00
1	P-100	LA Abrasion	4	EA	$160.00	$640.00
1	P-100	Sodium Sulfate Soundness	2	EA	$220.00	$440.00
1	P-100	Ignition Furnace Calibration	4	LS	$275.00	$1,100.00
1	P-100	AC Content by Ignition Method/Mech Analysis	16	EA	$125.00	$2,000.00
1	P-100	AC Bulk Density (Marshall)	24	EA	$110.00	$2,640.00
1	P-100	Theoretical Mix Spec Gravity	24	EA	$120.00	$2,880.00
1	P-100	AC Core Bulk SPG/Thickness	48	EA	$25.00	$1,200.00
1	P-100	Concrete Cylinder's (Set of 4)	16	EA	$8.00	$128.00
1	P-100	QC Reports	1	LS	$0.00	$0.00
1	P-100	Materials Supervisor / PM	55	HR	$56.00	$3,080.00
1	P-100	Field Technician	550	HR	$36.00	$19,800.00
1	P-100	Office Tech / Coordinator	128	HR	$24.00	$3,072.00
1	P-100	Per Diem / Travel / Mobilization	69	DA	$130.00	$8,970.00
		Total				**$48,080.00**
		DBE Amount				**$0.00**
		Survey - Shepard & Westnitzer Inc				
6	SP-13	Verify Control	1	LS	$340.00	$340.00
6	SP-13	Removal Limits for Each Phase	1	LS	$1,020.00	$1,020.00
6	SP-13	Topo Existing Striping	1	LS	$1,275.00	$1,275.00
6	SP-13	Rough Grade	1	LS	$4,080.00	$4,080.00
6	SP-13	Subgrade Bluetops	1	LS	$4,080.00	$4,080.00
6	SP-13	P208 Bluetops	1	LS	$4,080.00	$4,080.00
6	SP-13	Striping Layout	1	LS	$4,080.00	$4,080.00
6	SP-13	Tie Down Layout (In Asphalt)	1	LS	$1,020.00	$1,020.00
6	SP-13	As-Builts	1	LS	$4,080.00	$4,080.00
6	SP-13	Reproduction Costs (Allowance)	1	LS	$100.00	$100.00
6		Two-Man Survey Crew	PER	HR	$170.00	NA
6		Three-Man Survey Crew	PER	HR	$255.00	NA
6		Office/CAD Technician	PER	HR	$105.00	NA
6		Field Surveyor/Supervisor	PER	HR	$105.00	NA
6		Project Manager	PER	HR	$120.00	NA
		Total				**$24,155.00**
		DBE Amount				**$0.00**
		Sawcut - Penhall Company				
1	P-101	Mobilization	3	EA	$450.00	$1,350.00
10	P-104	Saw Cut Asphalt Concrete, 2" Depth	3320	LF	$0.50	$1,660.00
		Total				**$3,010.00**
		DBE Amount				**$0.00**

Banicki Construction

Subcontractor/Supplier Cost Summary
Flagstaff Airport Westplex Taxilanes Reconstruction GMP1
AIP 3-04-0015-36, ADOT E-3S3E, COF 01-12003, Acct 270-3776-783

ITEM#	SPEC#	BID ITEM DESCRIPTION	QTY	UNIT	UNIT PRICE	TOTAL AMOUNT
		Milling - Swaine Asphalt				
1	P-101	Mobilization	3	EA	$1,800.00	$5,400.00
11	P-104	Mill AC, 4" depth	43490	SY	$0.65	$28,268.50
11	P-104	Mill AC, Transition, 2" depth	730	SY	$1.00	$730.00
13	P-152	Mill Existing Soil, 16" depth	34165	SY	$1.50	$51,247.50
		Total				**$85,646.00**
		DBE Amount				**$0.00**
		Asphalt & ABC - Cemex				
3	P-156	Construction Entrance Drainage Rock, FOB Plant	50	TN	$7.50	$375.00
14	P-152	3-6" Rock (Clinkers)	9724	TN	$7.00	$68,068.00
17	P-208	ABC, FOB Plant	12910	TN	$12.00	$154,920.00
18	P-208	ABC, FOB Plant (Allowance, 1" Ramp)	522	TN	$12.00	$6,264.00
20	P-208	ABC, FOB Plant (Allowance, Var Depth)	10728	TN	$12.00	$128,736.00
21	P-403	Asphalt, PG58-28, FOB Plant	11000	TN	$80.00	$880,000.00
12	P-104	Sand	30	TN	$21.00	$630.00
12	P-104	Fuel Surcharge	2	LD	$26.00	$52.00
12	P-104	Slurry, 1 Sack	15	CY	$75.00	$1,125.00
		Total				**$1,240,170.00**
		DBE Amount				**$0.00**
		Trucking - M&P Contracting				
1	P-101	Mobilization	3	EA	$13,680.00	$41,040.00
2	P-156	Super 16, Haul off SWPPP (Non-Davis Bacon)	5	EA	$95.00	$475.00
11	P-104	Super 16, Haul off Asphalt Chunks (Non-Davis Bacon)	144	HR	$95.00	$13,680.00
11	P-104	Super 16, Haul Millings to Stockpile	144	HR	$98.00	$14,112.00
12	P-104	Super 16, Haul off Concrete (Non-Davis Bacon)	12	HR	$95.00	$1,140.00
13	P-152	Super 16, Haul Soil to Forest Service Pit	1980	HR	$98.00	$194,040.00
14	P-152	Super 16, Haul Unsuitable to Forest Service Pit	680	HR	$98.00	$66,640.00
14	P-152	Super 16, Haul Clinker/3-6" Rock from Plant	9724	TN	$8.50	$82,654.00
16	P-154	Super 16/Belly, Millings from Stockpile	293	HR	$98.00	$28,714.00
17	P-208	Super 16/Belly, ABC Haul from Plant	12910	TN	$8.50	$109,735.00
18	P-208	Super 16/Belly, ABC Haul from Plant (Allowance, 1" Ramp)	522	TN	$8.50	$4,437.00
20	P-208	Super 16/Belly, ABC Haul from Plant (Allowance, Var Depth)	10728	TN	$8.50	$91,188.00
21	P-403	Super 16, AC Haul from Plant	11000	TN	$9.75	$107,250.00
		Total				**$755,105.00**
		DBE Amount				**$0.00**
		Commercial Dump Site - Flagstaff Landscape				
2	P-156	Dump Fees Misc Material	5	LD	$25.00	$125.00
11	P-104	Dump Fees Asphalt	1200	TN	$6.00	$7,200.00
12	P-104	Dump Fees Concrete, w/Rebar	113	TN	$10.00	$1,130.00
		Total				**$8,455.00**
		DBE Amount				**$0.00**
		Concrete - RGG United Contractors				
1	P-101	Mobilization / Demobilization	3	EA	$2,800.00	$8,400.00
22	P-501	PCCP, 6"	4330	SY	$65.00	$281,450.00
23	P-610	Concrete Tie Downs in Asphalt	54	EA	$545.00	$29,430.00
24	P-610	Concrete Tie Downs in PCCP	114	EA	$200.00	$22,800.00
25	P-610	Reconstruct Storm Drain Inlet Apron	2	EA	$3,950.00	$7,900.00
28	SP-001	Concrete Pavement Pipe Cap	160	LF	$115.00	$18,400.00
		Total				**$368,380.00**
		DBE Amount				**$368,380.00**

Subcontractor/Supplier Cost Summary
Flagstaff Airport Westplex Taxilanes Reconstruction GMP1
AIP 3-04-0015-36, ADOT E-3S3E, COF 01-12003, Acct 270-3776-783

ITEM#	SPEC#	BID ITEM DESCRIPTION	QTY	UNIT	UNIT PRICE	TOTAL AMOUNT
		Airfield Markings - Traffic Safety Inc				
1	P101	Mobilization / Demobilization	6	EA	$800.00	$4,800.00
26	P-620	Taxiway Marking	13900	SF	$0.96	$13,344.00
27	P-620	Pavement Marking Obliteration	250	SF	$28.00	$7,000.00
		Total				**$25,144.00**
		DBE Amount				**$0.00**
		Seeding - Desert Seeders				
1	P-101	Mobilization	1	EA	$750.00	$750.00
29	T-901	Hydroseeding	4	AC	$3,527.50	$14,110.00
		Total				**$14,860.00**
		DBE Amount				**$0.00**
		Total				**$2,643,975.00**
		DBE Amount				**$368,380.00**

Banicki Construction

Solicitation Summary
Flagstaff Airport Westplex Taxilanes Reconstruction GMP1
AIP 3-04-0015-36, ADOT E-3S3E, COF 01-12003, Acct 270-3776-783

Subcontractor / Supplier	Contact	Phone	Email	DBE	Rcvd Bid	Preq Rec
Low Level Barriers						
J Banicki Construction	John Schmidt	480-921-8016	jschmidt@banicki.com		Yes	NA
Roadsafe Traffic Systems	Don Connor	602-243-1218	alatz@roadsaefttraffic.com		Yes	NA
Trafficade	Abel Duenez	602-431-0911	abel@trafficade.com		Yes	NA
Quality Control						
CK Group	Mike Bonta	602-482-5884	mbanta@theckgroup.com	Yes	Yes	4/22/13
Hoque & Associates	Enamul Hoque	480-921-1368	ehoque@hoqueandassociates.com	Yes	Yes	4/18/13
Quality Testing	Bill O'Neill	480-705-4322	boneill@qt-az.com		Yes	4/19/13
Ricker Atkinson McBee Morman	Dave Thomas	480-921-8100	dthomas@rammeng.com		Yes	4/22/13
Speedie	*Contracted for QA - can not utilize for QC				Yes	NA
Western Technologies	Conor Lynch	602-763-7831	c.lynch@wt-us.com		No Response	4/19/13
Construction Survey						
Arizona Survey and Mapping	Frank Lange	602-246-9919	frank@asam1.com		No - See emai	No Bid
CK Group	Mike Bonta	602-482-5884	mbanta@theckgroup.com	Yes	Yes	4/22/13
Morrison-Maerle	Keith Belden	602-908-4840	kbelden@m-m.net		Yes	4/19/13
Plateau Engineering	Dave Hill	928-556-0311	davidh@plateng.com		Yes	4/23/13
Stantec Consulting	Ed Balliet	602-438-2200	ed.balliet@stantec.com		Yes	4/19/13
Shepard-Wesnitzer Inc	Aaron Borling	928-773-0354	aborling@swiaz.com		Yes	4/25/13
Trace Consulting	Chintan Jhaveri	602-680-8264	cjhaveri@traceconsulting.us	Yes	Yes	4/19/13
Sawcut Asphalt Concrete						
A-Core	Brad McDonald	480-964-8662	bradm@a-core.com		Yes	NA
AZ Saw & Remove	Zach Thomas	480-988-5411	zthomas@azsaw.com		No - See emai	NA
Metro Saw & Seal	Phil Patton	602-770-5604	metroquality1@aol.com		No - See emai	NA
Penhall	AJ Hannah	602-531-5860	ajhannah@penhall.com		Yes	NA
Milling						
Bryco	Derek Kennedy	480-987-9133	brycomilling@yahoo.com		Yes	NA
Swaine Asphalt	Tom Swaine	602-397-2486	tom@swaineasphalt.com		Yes	NA
Western States Profiliing	Jamie Williams	623-434-5050	jamie@wspinc.net	Yes	Yes	NA
PCCP (Incl Sawcut & Edge Seal), Concrete Tie Downs & Manhole Adjustments						
4 M Concrete	Dennis Manuell	928-774-5358			No Response	No Response
Concrete Placement Inc.	Jason Diaz	623-931-1100	libertyp@concreteplace.com		Yes	4/19/13
H.W. Johnson	Paul Chapman, Jeremy Hoagland	602-447-8055	Paul@hwjohnson.com, jeremy@hwjohnson.com		No - See emai	No Bid
K R Concrete Inc	Kenneth Rhode	520-779-2318			No Response	No Response
RGG United Contractors	John Kliethermes	623-237-2956	jkliethermes@rggunited.com	Yes	Yes	4/19/13
Shafor Concrete	Mark Shafor	928-774-8568			No Response	No Response
Temcon	Rick Swanson	480-893-1789	r.swanson@temconconcrete.com		No Bid	No Bid
Asphalt & ABC						
Cemex	Doug Stevens	928-821-0960	drstevens@cemexusa.com		Yes	NA
Mesa Materials	Gary Slone	602-763-4484	gslone@mesamaterials.com		No Bid	No Bid
Southwest Asphalt	Greg Groneberg	602-540-8487	ggroneberg@fisherind.com		No Bid	No Bid
Trucking						
Flagstaff Landscape Products	Robert Miller	928-526-0801	flaglandscape@gmail.com		Yes	NA
Hansen Trucking	Kenneth Wyzard	480-963-2545	kenwyzard@aol.com	Yes	No Bid	NA
Heritage Trucking	Greenwood Horn	480-222-8100	ghorn@htiaz.com		No Bid	N/A
M & P Contracting	Penny Vance	602-278-7877	penny@mptrucking.com	Yes	Yes	NA
Oothoudt Brothers	Shauna Oothoudt	928-567-2656	ssodo@aol.com	Yes	No Bid	NA
Otto Trucking	Chris Fischer	480 641-3500	chrisf@ottotrucking.com		Yes	NA
Airfield Marking						
Falcon Contracting	Skip Shcultz	602-944-3614	nikki@falcon-contracting.com		Yes	4/22/13
Pavement Markings	Deke Dekay	480-398-0872	deke@pmiaz.com		Yes	4/22/13
Roadsafe Traffic Systems	Albert Latz	602-243-1218	alatz@roadsaefttraffic.com		Yes	4/23/13
Traffic Safety Inc	Russ	928-925-0162	russelhardy1@gmail.com		Yes	4/22/13
Hydroseed						
Desert Seeders	Dan James	520-705-1277	desertseeders@hotmail.com		Yes	NA
Kler Landworks	Eric Kler	928-713-9752	office@k-lerlandworks.com		No Bid	NA
Recon	Rob Evans	602-437-4393	estimator@recon-phx.com		Yes	NA
Revegetation Services	Michael Hayes	480-988-3011	mikeh@reveg.net		Yes	NA

Quotes Analysis
Flagstaff Airport Westplex Taxilanes Reconstruction GMP1
AIP 3-04-0015-36, ADOT E-3S3E, COF 01-12003, Acct 270-3776-783

J.Banicki Construction
13087 Westplex Taxilanes Reconstruction
*** Melissa Holper

Analyze Quotes

Folder: AIR Airport Low Level Barrier

Vendor Code:				**JB01**		RO10		TR10
Vendor Name:				**J Banicki Construc**		RoadSafe Traffic S		Trafficade Service
Vendor Phone:				**480-921-8016**		602-243-1218		602-272-3776
Bid	**Description**	**Quanti**	**Uni**	**UP**	**Ext.**	**UP**	**Ext.**	**UP**	**Ext.**
90	Airport Low-Level Ba	12,600.00	ED	**3.450**	43,470.00	3.500	44,100.00	5.950	74,970.00
Totals:				**43,470.00**		44,100.00		74,970.00	

Note:
A "P" beside a price indicates a plug price.
Bold indicates that the vendor is selected.

Analyze Quotes

Folder: QUA Quality Control

Vendor Code:					**QU10**		RI20		HO50	
Vendor Name:					**Quality Testing**		Ricker Atkinson M		Hoque & Associate	
Vendor Phone:					**480-496-2000**		480-921-8100		480-921-1368	
Bid	**Description**	**Quanti**	**Uni**		**UP**	**Ext.**	**UP**	**Ext.**	**UP**	**Ext.**
162	Sieve Analysis / Grad	8.00	EA		**40.000**	**320.00**	60.000	480.00	65.000	520.00
162	Plasticity Index	8.00	EA		**45.000**	**360.00**	60.000	480.00	65.000	520.00
162	Proctor	8.00	EA		**80.000**	**640.00**	110.000	880.00	110.000	880.00
162	Fractured Faces	4.00	EA		**40.000**	**160.00**	80.000	320.00	60.000	240.00
162	Sand Equivalent	4.00	EA		**55.000**	**220.00**	80.000	320.00	75.000	300.00
162	Aggregate Unit Weig	6.00	EA		**35.000**	**210.00**	50.000	300.00	60.000	360.00
162	Flat & Elongated Par	4.00	EA		**55.000**	**220.00**	90.000	360.00	65.000	260.00
162	LA Abrasion	4.00	EA		**160.000**	**640.00**	150.000	600.00	140.000	560.00
162	Sodium Sulfate Soun	2.00	EA		**220.000**	**440.00**	400.000	800.00	110.000	220.00
162	Ignition Furnace Cali	4.00	EA		**275.000**	**1,100.00**	450.000	1,800.00	310.000	1,240.00
162	AC Content Ign Meth	16.00	EA		**125.000**	**2,000.00**	135.000	2,160.00	120.000	1,920.00
162	AC Bulk Density	24.00	EA		**110.000**	**2,640.00**	125.000	3,000.00	115.000	2,760.00
162	Theoretical Mix Spec	24.00	EA		**120.000**	**2,880.00**	125.000	3,000.00	120.000	2,880.00
162	AC Core Bulk SPG / T	48.00	EA		**25.000**	**1,200.00**	40.000	1,920.00	75.000	3,600.00
162	Concrete Cylinders (	16.00	EA		**8.000**	**128.00**	60.000	960.00	60.000	960.00
162	QC Reports	1.00	LS				0.000	0.00	400.000	400.00
162	Materials Supervisor	55.00	HR		**56.000**	**3,080.00**			60.000	3,300.00
162	Field Technician	550.00	HR		**36.000**	**19,800.00**	44.000	24,200.00	40.000	22,000.00
162	Office Tech / Coordi	128.00	HR		**24.000**	**3,072.00**			32.000	4,096.00
162	Per Diem / Travel /	69.00	DA		**130.000**	**8,970.00**	133.910	9,239.79	115.000	7,935.00
Totals:						**48,080.00**		50,819.79		54,951.00

Note:
A "P" beside a price indicates a plug price.
Bold indicates that the vendor is selected.

QU10 - Quality Testing
No charge for QC Reports

RI20 - Ricker Atkinson McBee & Assoc
No charge for Project Manager, Office Coordinator or QC Reports

Analyze Quotes

Folder: SUR Survey

Vendor Code:					**SH35**		TR02		CK10		MO70		ST10		PL10		
Vendor Name:					**Shepard-Wesnitze**		Trace Consulting		CK Group		Morrison Maierle		Stantec Consulting		Plateau Engineerin		
Vendor Phone:					**928-773-0354**		602-680-8264		602-482-5884		602-273-2900		602-438-2200		928-556-0311		
Bid	**Description**	**Quanti**	**Uni**	**UP**	**Ext.**	**UP**	**Ext.**	**UP**	**Ext.**	**UP**	**Ext.**	**UP**	**Ext.**	**UP**	**Ext.**	**UP**	**Ext.**
165	Verify Control	1.00	LS	**340.000**	**340.00**	954.000	954.00	1,890.000	1,890.00	1,150.000	1,150.00	3,240.000	3,240.00	2,800.000	2,800.00		
165	Removal Limits for e	1.00	LS	**1,020.000**	**1,020.00**	1,060.000	1,060.00	1,800.000	1,800.00	900.000	900.00	3,440.000	3,440.00	2,190.000	2,190.00		
165	Topo Existing Stripin	1.00	LS	**1,275.000**	**1,275.00**	2,650.000	2,650.00	1,890.000	1,890.00	1,200.000	1,200.00	4,040.000	4,040.00	2,190.000	2,190.00		
165	Rough Grade	1.00	LS	**4,080.000**	**4,080.00**	4,240.000	4,240.00	3,870.000	3,870.00	8,700.000	8,700.00	6,680.000	6,680.00	8,010.000	8,010.00		
165	Subbase Bluetops	1.00	LS	**4,080.000**	**4,080.00**	3,180.000	3,180.00	3,510.000	3,510.00	9,800.000	9,800.00	6,410.000	6,410.00	10,815.000	10,815.00		
165	P208 Bluetops	1.00	LS	**4,080.000**	**4,080.00**	4,982.000	4,982.00	3,510.000	3,510.00	9,800.000	9,800.00	9,450.000	9,450.00	10,815.000	10,815.00		
165	Striping Layout	1.00	LS	**4,080.000**	**4,080.00**	2,862.000	2,862.00	3,510.000	3,510.00	3,150.000	3,150.00	6,610.000	6,610.00	3,690.000	3,690.00		
165	Tie Down Layout (in	1.00	LS	**1,020.000**	**1,020.00**	954.000	954.00	1,010.000	1,010.00	1,150.000	1,150.00	1,955.000	1,955.00	1,230.000	1,230.00		
165	As-Builts	1.00	LS	**4,080.000**	**4,080.00**	3,818.000	3,818.00	5,640.000	5,640.00	2,500.000	2,500.00	6,195.000	6,195.00	9,300.000	9,300.00		
165	Reproduction Costs (	1.00	LS	**100.000**	**100.00**	1,500.000	1,500.00	2,790.000	2,790.00	500.000	500.00	350.000	350.00	200.000	200.00		
Totals:					**24,155.00**		26,200.00		29,420.00		38,850.00		48,370.00		51,240.00		

Note:
A "P" beside a price indicates a plug price.
Bold indicates that the vendor is selected.

Analyze Quotes

Folder: SAW Sawcut Asphalt

Vendor Code:					**PE50**		AC50	
Vendor Name:					**Penhall Company**		A-Core of Arizona	
Vendor Phone:					**480-967-5029**		480-964-8662	
Bid	**Description**	**Quanti**	**Uni**	**UP**	**Ext.**		**UP**	**Ext.**
60	Mobilization	3.00	EA	**450.000**	**1,350.00**		1,200.000	3,600.00
170	Sawcut AC, 2" depth	3,320.00	LF	**0.500**	**1,660.00**		1.250	4,150.00
Totals:					**3,010.00**			7,750.00
Difference From Plug:					**-313.00**			4,427.00

Note:
A "P" beside a price indicates a plug price.
Bold indicates that the vendor is selected.

Analyze Quotes

Folder: MIL Milling

Vendor Code:				**SW10**		BR90		WE70		
Vendor Name:				**Swaine Asphalt Co**		Bryco Asphalt Milli		Western State Pro		
Vendor Phone:				**602-371-3410**		480-987-9133		623-434-5050		
Bid	**Description**	**Quanti**	**Uni**	**UP**	**Ext.**	**UP**	**Ext.**	**UP**	**Ext.**	
60	Mobilization	3.00	EA	**1,800.000**	**5,400.00**	2,500.000	7,500.00	2,500.000	7,500.00	
180	Mill AC, 4" depth	43,490.00	SY	**0.650**	**28,268.50**	0.940	40,880.60	0.790	34,357.10	
180	Mill AC, Transition, 2	730.00	SY	**1.000**	**730.00**	1.280	934.40	12.000	8,760.00	
200	Mill, Existing Soil, 16	34,165.00	SY	**1.500**	**51,247.50**	1.880	64,230.20	3.200	109,328.00	
Totals:					**85,646.00**		113,545.20		159,945.10	

Note:
A "P" beside a price indicates a plug price.
Bold indicates that the vendor is selected.

Analyze Quotes

Folder: MAT Asphalt, ABC & Misc

Vendor Code:				**CE50**	ME70		SO70	
Vendor Name:				**Cemex USA**	Mesa Materials		Southwest Asphalt	
Vendor Phone:				**602-220-5000**	480-830-1521		480-730-1033	
Description	**Quanti**	**Uni**	**UP**	**Ext.**	**UP**	**Ext.**	**UP**	**Ext.**
ABC P208 (McCormick	24,160.00	TN	**12.000**	289,920.00				
Sand (Flagstaff Yard)	30.00	TN	**21.000**	**630.00**				
Track Out Cinder (Glo	50.00	TN	**7.500**	**375.00**				
Asphalt, P403 (Flagsta	11,000.00	TN	**80.000**	880,000.00				
3" - 6" Rock / Clinkers	9,724.00	TN	**7.000**	68,068.00				
Slurry, 1 Sack	15.00	CY	**75.000**	1,125.00				
Fuel Surcharge	2.00	LD	**26.000**	**52.00**				
Totals:				**1,240,170.00**				

Note:
A "P" beside a price indicates a plug price.
Bold indicates that the vendor is selected.

ME70 - Mesa Materials
Letter included stating no bid due to inability to delivery material due to distance to job from plant

SO70 - Southwest Asphalt
Letter included stating no bid due to inability to delivery material due to distance to job from plant

Analyze Quotes

Folder: TRU Trucking

Vendor Code:					**M&50**		OT70
Vendor Name:					**M&P Contracting**		Otto Trucking
Vendor Phone:					**602-278-7877**		480-641-3500
Bid	**Description**	**Quanti**	**Uni**	**UP**	**Ext.**	**UP**	**Ext.**
	Mobilization	3.00	EA	13,680.000	41,040.00	18,000.000	54,000.00
	Trucking, HR 16 Whe	161.00	HR	**95.000**	15,295.00	100.000	16,100.00
	Trucking, HR 16 Whe	3,097.00	HR	**98.000**	303,506.00	107.000	331,379.00
	Trucking, TN Rate 1 (	33,884.00	TN	**8.500**	288,014.00	8.900	301,567.60
	Trucking, TN Rate 2 (	11,000.00	TN	**9.750**	107,250.00	5.300	58,300.00
Totals:					**755,105.00**		761,346.60

Note:
A "P" beside a price indicates a plug price.
Bold indicates that the vendor is selected.

M&50 - M&P Contracting
Mobilization calcluation per phase:
(Haul Off) Super 16s - 18 trucks
(ABC) Super 16s/Bellys - 10 trucks
(AC) Super 16s - 8 trucks
Total per phase - 36 trucks x 4 hours x $95 hour = $13,680

OT70 - Otto Trucking
Mobilization calcluation per phase:
(Haul Off) Super 16s - 18 trucks
(ABC) Super 16s/Bellys - 10 trucks
(AC) Super 16s - 8 trucks
Total per phase - 36 trucks x $500 each = $18,000

Analyze Quotes

Folder: DUM Dump Fees

Vendor Code: **FL20**
Vendor Name: **Flagstaff Landscap**
Vendor Phone: **928-526-0801**

Description	Quanti	Uni	UP	Ext.
Dump Fees Asphalt	1,200.00	TN	**6.000**	**7,200.00**
Dump Fees Concrete,	113.00	TN	**10.000**	**1,130.00**
Dump Fees Misc Mat	5.00	LD	**25.000**	**125.00**

Totals: **8,455.00**

Note:
A "P" beside a price indicates a plug price.
Bold indicates that the vendor is selected.

Analyze Quotes

Folder: CON Concrete

Vendor Code:					**RG30**		CO50	
Vendor Name:					**RGG United Contr**		Concrete Placeme	
Vendor Phone:					**623-388-7088**		623-931-1100	
Bid	**Description**	**Quanti**	**Uni**	**UP**	**Ext.**		**UP**	**Ext.**
60	Mobilization	3.00	EA	2,800.000	**8,400.00**		2,666.667	8,000.00
290	PCCP, 6" depth	4,330.00	SY	**65.000**	281,450.00		65.000	281,450.00
300	Airplane Tie Down in	54.00	EA	**545.000**	29,430.00		475.000	25,650.00
310	Airplane Tie Down in	114.00	EA	**200.000**	22,800.00		475.000	54,150.00
320	Reconstruct Storm D	2.00	EA	3,950.000	**7,900.00**		400.000	800.00
350	Concrete Pavement	160.00	LF	**115.000**	18,400.00		125.000	20,000.00
Totals:					**368,380.00**			390,050.00

Note:
A "P" beside a price indicates a plug price.
Bold indicates that the vendor is selected.

Analyze Quotes

Folder: STR Striping

Vendor Code:				**TR14**		RO10		FA40		PA87			
Vendor Name:				**Traffic Safety, Inc.**		RoadSafe Traffic S		Falcon Contracting		Pavement Marking			
Vendor Phone:				**928-775-0813**		602-243-1218		602-220-0055		480-598-0872			
Bid	**Description**	**Quanti**	**Uni**	**UP**	**Ext.**	**UP**	**Ext.**	**UP**	**Ext.**	**UP**	**Ext.**		
60	Mobilization	6.00	EA	**800.000**	**4,800.00**	700.000	4,200.00	1,200.000	7,200.00	2,000.000	12,000.00		
330	Taxiway Marking	13,900.00	SF	**0.960**	**13,344.00**	1.550	21,545.00	1.510	20,989.00	1.700	23,630.00		
340	Pavement Marking	250.00	SF	**28.000**	**7,000.00**	10.000	2,500.00	3.500	875.00	10.000	2,500.00		
Totals:				**25,144.00**		28,245.00		29,064.00		38,130.00			

Note:
A "P" beside a price indicates a plug price.
Bold indicates that the vendor is selected.

Analyze Quotes

Folder: HYD Hydroseeding

Vendor Code:					**DE65**		RE25		RE80	
Vendor Name:					**Desert Seeders**		Recon		Revegetation Servi	
Vendor Phone:					**520-705-1277**		602-437-4393		480-988-3011	
Bid	**Description**	**Quanti**	**Uni**		**UP**	**Ext.**	**UP**	**Ext.**	**UP**	**Ext.**
60	Mobilization	1.00	EA		**750.000**	**750.00**	800.000	800.00	0.000	0.00
360	Hydroseeding	4.00	AC		**3,527.500**	**14,110.00**	2,490.000	9,960.00	2,982.500	11,930.00
T:	Tillage & topsoil							5,000.00		5,000.00
Totals:						**14,860.00**		15,760.00		16,930.00

Note:
A "P" beside a price indicates a plug price.
Bold indicates that the vendor is selected.

RE25 - Recon
Incomplete bid - excluded topsoiling, grading and removal of rock

RE80 - Revegetation Services, dba
Incomplete bid - excluded fertilizer, lime or soil/sample tests

Section 4 – LIST OF PLANS & SPECIFICATIONS

4. List of Plans & Specifications used for GMP1 Proposal
Flagstaff Airport Westplex Taxilanes Reconstruction GMP1
AIP 3-04-0015-36, ADOT E-3S3E, COF 01-12003, Acct 270-3776-783

- Plans dated May 2011
  - Civil Sheets C1.1 – C5.7 (27 sheets)
    - C1.1 Cover Sheet
    - C1.2 General Notes & Sheet Index
    - C1.3 Abbreviations & Legend
    - C1.4 Summary of Quantities
    - C1.5 Project Layout
    - C1.6 Overall Construction Phasing Plan
    - C1.7 Construction Phase I Plan
    - C1.8 Construction Phase II Plan
    - C1.9 Construction Phase III Plan
    - C1.6 Stormwater Pollution Prevention Plan
    - C2.1 Typical Sections
    - C2.2 Typical Sections
    - C3.1-3.5 Demolition Plan
    - C4.1-4.5 Paving Plan
    - C4.6 Hangar Pad Joint Layout Plan
    - C4.7 Hangar Pad Joint Layout Plan & Details
    - C5.1-5.5 Grading Plan
    - C6.1-6.5 Pavement Marking
    - C6.6 Pavement Marking Details

- Specifications stamped received (see attached sheets)
  - Recitals
  - Articles 1 – 12
  - Signature Page
  - Exhibit A – Project Description
  - Exhibit B – Approved GMP Proposal
  - Exhibit C – Federal Assurances & Certifications
  - Exhibit D – FAA Grant Conditions
  - Exhibit E –Civil Technical Specifications
    - P100 Contractor Quality Control
    - P101 Mobilization/Demobilization
    - P104 Removal of Pavement and Other Items
    - P152 Excavation & Embankment
    - P154 Subbase Course
    - P156 Temporary Air and Water Pollution, Soil Erosion and Siltation Control
    - P205 Placement of Asphalt Millings for Pavement Shoulders
    - P208 Crushed Aggregate Base Course
    - P210 Herbicide Application
    - P403 Plant Mix Bituminous Pavements (Surface Course)
    - P603 Bituminous Tack Coat
    - P610 Structural Portland Cement Concrete
    - P620 Taxiway Painting
    - M002 Engineer's Field Office
    - M003 Airport Safety & Security
    - U200 Location of Underground Utilities

Section 5 – LIST OF CLARIFICATIONS & ASSUMPTIONS

5. Clarifications & Assumptions
Flagstaff Airport Westplex Taxilanes Reconstruction GMP1
AIP 3-04-0015-36, ADOT E-3S3E, COF 01-12003, Acct 270-3776-783

1. Airport operations personnel will be needed to assist with the opening of hangar doors during paving operations next to the doors.
2. All work will be performed during day shifts between 5:00am and 5:00pm.
3. Peabody Coal requires access to and from their hangar twice daily at 6:00am and 3:00pm. Air cargo haulers require access to and from the ramp area. We will work to accommodate their needs and provide clear travel on the necessary taxiways.
4. A sufficient amount of construction water will be available from the City reclamation plant to our operations. We will draw water from a hydrant on Lone Mountain Road.
5. There will be no striping obliteration or grinding on newly placed asphalt.
6. Only the second coat of striping paint will be beaded.
7. The Quality Control and Utility Potholing line items are allowances to be billed on a time and material basis.
8. Allowance line items 14 Unsuitable Excavation, 18 ABC 1" depth Cargo Ramp, 20 ABC Variable depth and Contractor Contingencies will be used only upon direction from the Owner and will be billed on a unit price basis.
9. The Bituminous Asphalt line item includes the asphalt test strip.
10. Items 14, 17, 18 & 20 (Unsuitable & ABC/P208) include substantial material buy & haul of approximately $37 per cy which was competitively bid.
11. Item 11 Remove Existing Asphalt included 5310 sy of removal under the canopies & next to hangars that can't be milled & will be removed in chunks that will be hauled to a dump site
12. M&P is currently shown as selected for the trucking scope of work. Due to availability of trucks and scheduling issues we retain the right to utilize Otto Trucking in lieu of M&P Contracting. The price difference between the two firms is less than one percent. M&P Contracting is a DBE subcontractor but we have not utilized any of their subcontract amount towards the DBE goal in the GMP submittal.
13. ABC/P208 was selected from the suppliers McCormick plant due to lower haul costs than from the Grey Mountain plant.
14. The selected Contractor Quality Control firm is Quality Testing. Mark Johnson will be the technician onsite (see attached resume for airport experience).
15. Based on the geotechnical report no rock excavation is anticipated.

MARK J. JOHNSON

FIELD TESTING TECHNICIAN / INSPECTOR
ACI, ATTI CERTIFIED

SUMMARY:

Mark Johnson is an inspector and field testing technician with nearly 15 years of experience on both public and private construction projects. Mark regularly demonstrates proficiency in all areas of inspection and testing and would be a valuable asset to any construction administration team. Although he frequently has materials testing responsibilities, he is also routinely responsible for inspecting various items of work including earthwork, backfill, AC paving, concrete placement, hot plant inspection, and erosion control. Mark posses recent experience with active airfield projects in the Phoenix Metro area.

CREDENTIALS:

ATTI Field Technician Certification (through 12/10/13)
ACI Level 1 Certification (through 5/16/14)
ADOT Quantlist Training
UPRR Safety Training
Radiation Safety Training

EXPERIENCE:

2008 – Present **Quality Testing, LLC** **Gilbert, AZ**
Inspector & Field Testing Technician

A few of Mr. Johnson's recent assignments included:

- Mark served as the primary field testing technician on the Deer Valley Airport Airfield Safety Enhancements GMP1 & GMP2 projects. Mark was responsible for field sampling and testing of mass grading, pipe & utility backfill, concrete placements, AC placements and Lime Treated SG.
- Mark also served as the Lead Materials Technician on the City of Phoenix 2011 summer overlay program. This assignment was initiated through QT's On-Call Materials Testing contract specifically for ARRA projects. Mark was highly praised by the City for his performance on this assignment.
- In 2010 and 2011, Mark provided materials testing and inspection support on the ADOT Red Mountain L202 D/B project in Phoenix, AZ and on the H683201C, Payson-Winslow Highway (SR 87)/ Pine-Rim project in the ADOT Prescott District.
- In 2010, Mark worked on the ADOT I-17 Black Canyon Hill full service inspection project where he performed a variety of duties including materials testing, assisting the Materials Coordinator with various field tasks, AC paving inspection, and erosion control monitoring and payment.
- In 2009, Mark completed a several month long Temp Tech ADOT assignment in the Yuma District where he primarily performed sampling and testing on several AC paving projects. During much of this assignment he also served as the Hot Plant Inspector.

- In 2008 and 2009, he served as an inspector and materials testing technician for 6 months on an ADOT consultant administered full service project on SR 86 in Sells, AZ. In this capacity he was also the right hand man to the designated project Materials Coordinator, collecting and organizing materials certifications and assuring that the project sample checklist was being complied with and updated.
- All during his tenure with QT, when not on a full time assignment, Mark worked out of QT's home office in Gilbert and serviced the field needs on numerous public works and private development projects in the Phoenix Metropolitan area. For this type of local intermittent work, Mark was often providing contractor quality control testing services.

2000 – 2008 **Various Other Materials Testing Firms** **Phoenix, AZ**
Field Testing Technician
Mark spent 8 years working for various other materials testing firms performing field testing on various private commercial and City of Phoenix development services projects. Mark is familiar with field testing for soils, concrete and asphalt. Some of the projects Mark has worked on include the 91st Ave Road Improvements (City of Tolleson), Arizona Game and Fish Facility in Maricopa County, the Buckeye Logistics Center Phase 2 and 3, and the Arvix-9/Turney Avenue Condos Offsite Work (City of Phoenix). Mark was regularly responsible for the field testing and documentation of specification compliance.

1998 – 2000 **Aramco** **Phoenix, AZ**
Carpenter
Mark was employed as a journeyman carpenter working on framing of residential homes.

1995 – 1998 **Intra-American Drilling**
Oiler
Mark's responsibilities included oiling drill rigs, indentifying soils, and equipment maintenance.

HAUL ROUTE TO FOREST SERVICE PIT

Google earth

miles 2
km 3

HAUL ROUTE TO WOODY MOUNTAIN PIT

Section 6 – PROJECT MASTER SCHEDULE

6. Project Master Schedule
Flagstaff Airport Westplex Taxilanes Reconstruction GMP1
AIP 3-04-0015-36, ADOT E-3S3E, COF 01-12003, Acct 270-3776-783

Act ID	Description	Orig Dur	Rem Dur	Early Start	Early Finish	Total Float	%	Resource
PHASE 1								
REMOVALS								
1000	REMOVE TIEDOWNS	4d	4d	05JUN13	10JUN13	0	0	
1010	REMOVE ASPHALT	2d	2d	11JUN13	12JUN13	0	0	
1020	EXCAVATION	4d	4d	13JUN13	18JUN13	0	0	
GRADING								
1030	PLACE SUBBASE	3d	3d	19JUN13	21JUN13	0	0	
1040	PLACE ABC	2d	2d	24JUN13	25JUN13	0	0	
1050	FINEGRADING	3d	3d	26JUN13	28JUN13	0	0	
CONCRETE								
1060	PLACE PCCP	4d	4d	27JUN13	02JUL13	5d	0	
1080	INSTALL TIEDOWNS	2d	2d	08JUL13	09JUL13	0	0	
PAVING								
1065	PAVE TEST STRIP	1d	1d	01JUL13	01JUL13	0	0	
1068	TESTING RESULTS	1d	1d	02JUL13	02JUL13	0	0	
1070	PAVE	2d	2d	03JUL13	05JUL13	0	0	
1090	STRIPE	1d	1d	10JUL13	10JUL13	0	0	
PHASE CLOSEOUT								
1095	CLEANUP AND REMOVE BARRICADES	1d	1d	10JUL13	10JUL13	0	0	
PHASE 2								
REMOVALS								
1100	REMOVE TIEDOWNS	3d	3d	11JUL13	15JUL13	0	0	
1110	REMOVE ASPHALT	3d	3d	15JUL13	17JUL13	0	0	
1120	EXCAVATE	5d	5d	16JUL13	22JUL13	0	0	
GRADING								
1130	PLACE SUBBASE	5d	5d	23JUL13	29JUL13	0	0	
1140	PLACE ABC	4d	4d	30JUL13	02AUG13	0	0	
1150	FINEGRADING	4d	4d	05AUG13	08AUG13	0	0	
CONCRETE								
1160	PLACE PCCP	5d	5d	06AUG13	12AUG13	0	0	
PAVING								
1170	PAVE	3d	3d	13AUG13	15AUG13	0	0	
1180	STRIPE	1d	1d	16AUG13	16AUG13	0	0	
PHASE CLOSEOUT								
1185	CLEAN UP AND REMOVE BARRICADES	1d	1d	16AUG13	16AUG13	0	0	
PHASE 3								
REMOVALS								
1190	REMOVE TIEDOWNS	3d	3d	19AUG13	21AUG13	0	0	
1200	REMOVE ASPHALT	4d	4d	21AUG13	26AUG13	0	0	
1210	EXCAVATE	5d	5d	22AUG13	28AUG13	0	0	
GRADING								
1220	PLACE SUBBASE	5d	5d	29AUG13	04SEP13	0	0	
1230	PLACE ABC	4d	4d	05SEP13	10SEP13	0	0	
1240	FINEGRADING	3d	3d	11SEP13	13SEP13	0	0	
CONCRETE								
1250	PLACE PCCP	5d	5d	12SEP13	18SEP13	0	0	
PAVING								
1260	PAVE	3d	3d	23SEP13	25SEP13	0	0	
1270	STRIPE	2d	2d	26SEP13	27SEP13	0	0	
PHASE CLOSEOUT								
1280	CLEAN UP AND REMOVE BARRICADES	1d	1d	30SEP13	30SEP13	0	0	

Start date	05JUN13
Finish date	30SEP13
Data date	05JUN13
Run date	25APR13
Page number	1A

© Primavera Systems, Inc.

J. Banicki Construction Inc.
Westplex Taxilanes Reconstruction

- Early bar
- Progress bar
- Summary bar
- Start milestone point
- Finish milestone point

Section 7 – DBE REQUIREMENTS

7. DBE Requirements & Forms
Flagstaff Airport Westplex Taxilanes Reconstruction GMP1
AIP 3-04-0015-36, ADOT E-3S3E, COF 01-12003, Acct 270-3776-783

The DBE goal for this project is 3.82%.

The DBE amount subcontracted for this project is $368,380 or 8.26%

EXHIBIT C

FEDERAL ASSURANCES AND CERTIFICATIONS

- Buy American Preferences - Title 49 U.S.C., Chapter 501
- Certification of Non-Segregated Facilities - Title 41 CFR Part 60-1.8
- Bidder's Statement On Previous Contracts Subject To EEO Clause
- Assurance of Disadvantaged Business Enterprise Participation
- Suspension And Debarment Requirement For All Contracts Over $25,000 -49 CFR Part 29
- Trade Restriction Certificate
- Contractor's Affidavit Regarding Settlement Of Claims
- Authorized Signature Form - Corporation
- Payment Bond
- Performance Bond

BUY AMERICAN CERTIFICATE
STEEL AND MANUFACTURED PRODUCTS FOR CONSTRUCTION CONTRACTS

PULLIAM AIRPORT
FLAGSTAFF, ARIZONA

WESTPLEX TAXILANES RECONSTRUCTION

Project File Number: 01-12003
FAA AIP Project Numbers: 3-04-0015-36
ADOT Grant Numbers: E-3S3E

The Contractor agrees that only domestic steel and manufactured products will be used by the Contractor, subcontractors, materialmen and suppliers in the performance of this contract, and defined below:

a. The following terms apply to this clause:

(1) **Steel and Manufactured Products**. As used in this clause, steel and manufactured products include (1) those produced in the United States or (2) a manufactured product produced in the United States, if the cost of its components mined, produced or manufactured in the United States exceeds 60 percent of the cost of all its components and final assembly has taken placed in the United States.

(2) **Components**. As used in this clause, components means those articles, materials, and supplies incorporated directly into steel and manufactured products.

(3) **Cost of Components**. This means the costs for production of the components, exclusive of final assembly labor costs.

_____

Signature (Name of Bidder)

_____

(Date) (Name and Title of Signing Officer)

Business Address _____

_____

_____

CERTIFICATION OF NONSEGREGATED FACILITIES (CONTRACTORS/SUBCONTRACTORS)

PULLIAM AIRPORT
FLAGSTAFF, ARIZONA

WESTPLEX TAXILANES RECONSTRUCTION

Project File Number: 01-12003
FAA AIP Project Numbers: 3-04-0015-36
ADOT Grant Numbers: E-3S3E

(A Certification of Non-segregated Facilities must be submitted prior to the award of a contract or subcontract exceeding $10,000 which is not exempt from the provisions of the Equal Opportunity Clause.)

The federally assisted construction contractor certifies that he does not maintain or provide for his employees any segregated facilities at any of his establishments, and that he does not permit his employees to perform their services at any location, under his control, where segregated facilities are maintained. The federally assisted construction contractor certifies further that he will not maintain or provide for his employees any segregated facilities at any of his establishments, and that he will not permit his employees to perform their services at any location, under his control, where segregated facilities are maintained. The federally assisted construction contractor agrees that a breach of this certification is a violation of the Equal Opportunity Clause in this contract. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, sex or national origin, because of habit, local custom or any other reason. The federally assisted construction contractor agrees that (except where he has obtained identical certifications from proposed subcontractors for specific time periods) he will obtain identical certifications from proposed subcontractors prior to the award of subcontracts exceeding $10,000 which are not exempt from the provisions of the Equal Opportunity Clause, and that he will retain such certifications in his files.

Certification: The above information is true and complete to the best of my knowledge and belief.

_____

Signature (Name of Bidder)

_____

(Date) (Name and Title of Signing Officer)

Business Address _____

_____

_____

NOTE: The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001.

BIDDER'S STATEMENT ON PREVIOUS CONTRACTS SUBJECT TO EEO CLAUSE

PULLIAM AIRPORT
FLAGSTAFF, ARIZONA

WESTPLEX TAXILANES RECONSTRUCTION

Project File Number: 01-12003
FAA AIP Project Numbers: 3-04-0015-36
ADOT Grant Numbers: E-3S3E

The Bidder shall complete the following statement by checking the appropriate boxes.

The Bidder has ☐ has not ☐ participated in a previous contract subject to the equal opportunity clause prescribed by Executive Order 11246, as amended, of September 24, 1965.

The Bidder has ☐ has not ☐ submitted all compliance reports in connection with any such contract due under the applicable filing requirements; and that presentations indicating submission of required compliance reports signed by proposed subcontractors will be obtained prior to award of subcontracts.

If Bidder has participated in a previous contract subject to the equal opportunity clause and has not submitted compliance reports due under application filing requirements, the bidder shall submit a compliance report on Standard Form 100, "Employee Information Report EEO-I" prior to amount of contract.

_____

Signature (Name of Bidder)

_____

(Date) (Name and Title of Signing Officer)

Business Address _____

_____

_____

NOTE: Failure to complete the blanks may be grounds for rejection of the bid.

ASSURANCE OF DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION

PULLIAM AIRPORT
FLAGSTAFF, ARIZONA

WESTPLEX TAXILANES RECONSTRUCTION

Project File Number: 01-12003
FAA AIP Project Numbers: 3-04-0015-36
ADOT Grant Numbers: E-3S3E

To meet the mandated requirements of the United States Department of Transportation, 49 CFR Part 26, the assurance below shall be signed by the bidder and submitted with the bid.

BIDDER'S ASSURANCE OF COMPLIANCE WITH TITLE 49 CFR PART 26 RELATING TO DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION

The bidder hereby gives assurance pursuant to the requirements of Title 49 CFR Part 26 that bidder has made a reasonable effort to meet the goals for Disadvantaged Business Enterprise participation specified for the contract for which this proposal is submitted and that bidder, if the contract is awarded to bidder, will have a DBE participation of _____ percent of the amount of this bid. Bidder further gives assurance that bidder has submitted the documentation required by said Regulations and the contract specifications, including the Listing of Disadvantaged Business Enterprises with which the bidder will subcontract if the contract is awarded and if bidder is unable to meet the contract goals for DBE participation, and the steps bidder has taken to obtain DBE participation.

The DBE Participation goal for this project is 3.82% Race Neutral, 3.82% Overall Goal.

ADOT will request a waiver from the United States Department of Transportation (USDOT) to implement race-conscious goals of limited application for African American, Hispanic American, and Asian American for construction projects. A waiver will also be requested to implement race-conscious goals on A&E projects for African American, Hispanic American, Native American, Asian American and Nonminority Women owned firms.

_____

Signature (Name of Bidder)

_____

(Date) (Name and Title of Signing Officer)

Business Address _____

_____

_____

NOTE: Bidder shall insert the percentage for DBE participation even if the percentage is less than the contract goal. A bid that fails to meet these requirements may be considered grounds for rejecting the bid.

SUSPENSION AND DEBARMENT REQUIREMENT FOR ALL CONTRACTS OVER $25,000 49 CFR PART 29

PULLIAM AIRPORT
FLAGSTAFF, ARIZONA

WESTPLEX TAXILANES RECONSTRUCTION

Project File Number: 01-12003
FAA AIP Project Numbers: 3-04-0015-36
ADOT Grant Numbers: E-3S3E

The bidder/offeror certifies, by submission of this proposal or acceptance of this contract, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any federal department or agency. It further agrees by submitting this proposal that it will include this clause without modification in all lower tier transactions, solicitations, proposals, contracts, and subcontracts. Where the bidder/offeror or any lower tier participant is unable to certify to this statement, it shall attach an explanation to this solicitation/proposal.

_____

Signature (Name of Bidder)

_____

(Date) (Name and Title of Signing Officer)

Business Address _____

_____

_____

TRADE RESTRICTION CERTIFICATE TO BE INCLUDED IN ALL SOLICITATIONS, CONTRACTS, AND SUBCONTRACTS

PULLIAM AIRPORT
FLAGSTAFF, ARIZONA

WESTPLEX TAXILANES RECONSTRUCTION

Project File Number: 01-12003
FAA AIP Project Numbers: 3-04-0015-36
ADOT Grant Numbers: E-3S3E

The bidder/offeror, subcontractors, and all lower tier participants, by submission of an offer and/or execution of contract, certifies that it:

a. is not owned or controlled by one or more citizens or nationals of a foreign country included in the list of countries that discriminated against U.S. firms published by the Office of the United States Trade Representative (USTR);

b. has not knowingly entered into any contract or subcontract for this project with a person that is a citizen or a national of a foreign country on said list, or is owned or controlled directly or indirectly by one or more citizens or nationals of a foreign country on said list;

c. has not procured any product nor subcontracted for the supply of any product for use on the project that is produced in a foreign country on said list.

Unless the restrictions of this clause are waived by the Secretary of Transportation in accordance with 49 CFR 30.17, no contract shall be awarded to a contractor or subcontractor who is unable to certify to the above. If the bidder/offeror knowingly procures or subcontracts for the supply of any product or service of a foreign country on the said list for use on the project, the Federal Aviation Administration may direct, through the sponsor, cancellation of the contract at no cost to the Government.

Further, the bidder/offeror agrees that, if awarded a contract resulting from this solicitation, it will incorporate this provision for certification without modification in each contract and in all lower tier subcontracts. The bidder/offeror may rely on the certification of a prospective subcontractor unless it has knowledge that the certification is erroneous.

The bidder/offeror shall provide immediate written notice to the sponsor if the bidder/offeror learns that its certification or that of a subcontractor was erroneous when submitted or has become erroneous by reason of changed circumstances. The subcontractor agrees to provide immediate written notice to the contractor, if at any time it learns that its certification was erroneous by reason of changed circumstances.

This certification is a material representation of fact upon which reliance was placed when making the award. If it is later determined that the bidder/offeror or subcontractor knowingly rendered an erroneous certification, the Federal Aviation Administration may direct, through the sponsor, cancellation of the contract or subcontract for default at no cost to the Government.

Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by this provision. The knowledge and information of a bidder/offeror is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

This certification concerns a matter within the jurisdiction of an agency of the United States of America and the making of a false, fictitious or fraudulent certification may render the make subject to prosecution under Title 18, United States Code, Section 1001.

_____

Signature (Name of Bidder)

_____

(Date) (Name and Title of Signing Officer)

Business Address _____

_____

_____

CONTRACTOR'S AFFIDAVIT REGARDING SETTLEMENT OF CLAIMS

PULLIAM AIRPORT
FLAGSTAFF, ARIZONA

WESTPLEX TAXILANES RECONSTRUCTION

Project File Number: 01-12003
FAA AIP Project Numbers: 3-04-0015-36
ADOT Grant Numbers: E-3S3E

Project Name: WESTPLEX TAXILANES RECONSTRUCTION

City of Flagstaff Project Number: 01-12003 Date_____

to the City of FLAGSTAFF, Arizona

This is to certify that all lawful claims for materials, rental of equipment and labor used in connection with the construction of the above project, whether by subcontractors or claimant in person, have been duly discharged.

The undersigned, for the consideration of $_____, as set out in the final pay estimate, as full and complete payment under the terms of the contract, hereby waives and relinquishes any and all further claims or right of lien under, in connection with, or as a result of the above described project. The undersigned further agrees to indemnify and save harmless the City of Flagstaff against any and all liens, claims of liens, suits, actions, damages, charges and expenses whatsoever, which said City may suffer arising out of the failure of the undersigned to pay for all labor performance and materials furnished for the performance of said installations.

Signed and dated at _____, this _____ day of _____, 20____.

_____
(Contractor)

_____
(By)

STATE OF ARIZONA)
ss
COUNTY OF)

The foregoing instrument was subscribed and sworn to before me this day of _____, 20____.

Notary Public

My Commission Expires _____

CITY OF FLAGSTAFF - GRANTS/CONTRACTS OFFICE
AUTHORIZED SIGNATURE FORM - CORPORATION

PULLIAM AIRPORT
FLAGSTAFF, ARIZONA

WESTPLEX TAXILANES RECONSTRUCTION

Project File Number: 01-12003
FAA AIP Project Numbers: 3-04-0015-36
ADOT Grant Numbers: E-3S3E

Project Name: WESTPLEX TAXILANES RECONSTRUCTION

City of Flagstaff File No.: 01-10004

Whereas, _____, a(n) (Name of State) Corporation, is required to execute certain documents which are necessary for the prompt and efficient execution of the corporate business;

NOW, THEREFORE, BE IT RESOLVED, by the Board of Directors of_____ _____(Corporate Name), that (Name(s) of Parties Authorized) _____ _____,is/are authorized to execute (Print Name(s) Here; Signature(s) Required Below) on behalf of said corporation the following:

1. Contract/Agreement
2. Payment and Performance Bonds
3. Payrolls
4. Claims
5. Change Orders
6. All other papers necessary for the corporation's affairs and the execution of the Contract/Agreements

The powers and duties herein granted shall be and are hereby granted for the duration of the assurance for this project or until express notice of revocation has been duly given in writing, whichever is the lesser period.

Dated and passed by the Board of Directors this____day of_____ , 20___.

(Signature of Person(s) Authorized to Sign) (Title(s))

Article I.

Article II.

CERTIFICATE

I, _____ of_____, a(n) _____ (Name of State) corporation, do hereby certify the above is a true and correct copy of a resolution adopted by the Board of Directors of said corporation, at a meeting of said board held on _____ , 20_____ and the same is in full force and effect at this time.

Dated_____, 20___.

_____
(Signature of Officer of Corporation)

(Corporate Seal)

STATE of _____)
) ss
COUNTY of _____)

The foregoing instrument was acknowledged before me this _____ day of _____, 20_____ of _____,

a(n) _____ _____ _____
(Print Name of Officer of Corporation) (Name of Corporation) (State)

_____
Notary Public

Article III. CITY OF FLAGSTAFF, ARIZONA

PAYMENT BOND

PROJECT NAME: WESTPLEX TAXILANES RECONSTRUCTION
PROJECT NUMBER: 01-12003

STATUTORY PAYMENT BOND PURSUANT TO TITLE 34
CHAPTER 2, ARTICLE 2, OF THE ARIZONA REVISED STATUTES
(Penalty of this Bond must be 100% of the Contract Amount)

KNOW ALL MEN BY THESE PRESENTS:

That, _____ (Hereinafter called the Principal), as Principal, and, _____ _____, a corporation organized and existing under the laws of the State of _____, with its principal office in the City of _____ ("Surety"), as Surety, are held and firmly bound unto the City of Flagstaff, Arizona ("Obligee"), in the amount of _____ _____Dollars ($_____) for the payment whereof, the said Principal and Surety bind themselves, and their heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into a certain written Contract with the Obligee, dated this _____ day of_____, 20___, to the City of Flagstaff which Contract is hereby referred to and made a part hereof as fully and to the same extent as if copied at length herein.

Now, therefore, the condition of this obligation is such, that if the principal promptly pays all monies due to all persons supplying labor or materials to the principal or the principal's subcontractors in the prosecution of the work provided for in the contract, this obligation is void. Otherwise it remains in full force and effect.

Provided, however, that this bond is executed pursuant to the provisions of Title 34, Chapter 2, Article 2, Arizona Revised Statutes, and all liabilities on this bond shall be determined in accordance with the provisions, conditions and limitations of said Title and Chapter, to the same extent as if it were copied at length in this Contract.

The prevailing party in a suit on this bond shall recover as a part of the judgment reasonable attorney fees that may be fixed by a judge of the court.

Witness our hands this _____ day of _____ 20___.

_____	_____
Principal (Seal)	Surety (Seal)
By: _____	By: _____
_____	_____
Agency of Record	Agency Address

CITY OF FLAGSTAFF, ARIZONA
PERFORMANCE BOND

PROJECT NAME: WESTPLEX TAXILANES RECONSTRUCTION
PROJECT NUMBER: 01-12003

STATUTORY PERFORMANCE BOND PURSUANT TO TITLE 34
CHAPTER 2, ARTICLE 2, OF THE ARIZONA REVISED STATUTES
(Penalty of this Bond must be 100% of the Contract Amount)

KNOW ALL MEN BY THESE PRESENTS:

That, _____ (hereinafter called the Principal), as Principal, and, _____, a corporation organized and existing under the laws of the State of _____ _____, with its principal office in the City of _____ ("Surety"), as Surety, are held and firmly bound unto the City of Flagstaff, Arizona ("Obligee"), in the amount of _____Dollars ($_____ _____) for the payment whereof, the said Principal and Surety bind themselves, and their heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into a certain written Contract with the Obligee, dated this ___day of _____ 200__ in the City of Flagstaff which Contract is hereby referred to and made a part hereof as fully and to the same extent as if copied at length herein.

Now, therefore, the condition of this obligation is such, that if the principal faithfully performs and fulfills all of the undertakings, covenants, terms, conditions and agreements of contract during the original term of the contract and any extension of the contract, with or without notice to the surety, and during the life of any guaranty required under the contract, and also performs and fulfills all of the undertakings, covenants, terms, conditions and agreements of all duly authorized modifications of the contract that may hereafter be made, notice of which modifications to the surety being hereby waived, the above obligation is void. Otherwise it remains in full force and effect.

Provided, however, that this bond is executed pursuant to the provisions of Title 34, Chapter 2, Article 2, Arizona Revised Statutes, and all liabilities on this bond shall be determined in accordance with the provisions of said Title and Chapter, to the extent as if it were copied at length in this Contract.

The prevailing party in a suit on this bond shall recover as part of the judgment reasonable attorney fees that may be fixed by a judge of the court.

Witness our hands this _____ day of _____20__.

_____	_____
Principal (Seal)	Surety (Seal)
By: _____	By: _____
_____	_____
Agency of Record	Agency Address

EXHIBIT D

FAA GENERAL PROVISIONS AND GRANT CONDITIONS

- FAA General Provisions - Advisory Circular 150/53070-10F
- Civil Rights Act of 1964, Title VI - Contractor Contractual Requirements - Title 49 CFR Part 21
- Airport and Airway Improvement Act of 1982, Section 520 - Title 49 U.S.C. 47123
- Lobbying and Influencing Federal Employees - Title 49 CFR Part 20
- Access to Records and Reports - Title 49 CFR Part 18.36
- Disadvantaged Business Enterprise - Title 49 CFR Part 26
- Energy Conservation - Title 49 CFR Part 18.36
- Breach of Contract Terms- Title 49 CFR Part 18.36
- Rights to Inventions - Title 49 CFR Part 18.36
- Trade Restriction Clause - Title 49 CFR Part 30
- Veteran's Preference - Title 49 U.S.C 47112

- Davis Bacon Labor Provisions - Title 29 CFR Part 5
    - Federal Wage Rates – General Decision AZ*

- Equal Opportunity Clause - Title 41 CFR Part 60-1.4
- Certification of Non-Segregated Facilities - Title 41 CFR Part 60-1.8
- Notice of Requirement for Affirmative Action - Title 41 CFR Part 60-4.2
- Equal Employment Opportunity Specification- Title 41 CFR Part 60-4.3
- Termination of Contract - Title 49 CFR Part 18.36

- Certification Regarding Debarment and Suspension (Non-Procurement) (MS Word) - Title 2 CFR Part 180 & Title 2 CFR Part 1200

- Contract Workhours and Safety Standards Act Requirements - Title 29 CFR Part 5
- Clean Air and Water Pollution Control - Title 49 CFR Part 18.36(i)(12)

FAA GENERAL PROVISIONS

1. This Contract is under and subject to Executive Order 11246, as amended of September 24, 1965, the Federal Labor provisions and the Equal Employment Opportunity (EEO) provisions as contained in the contract, specifications and documents.

2. All mechanics and laborers on the project shall be paid no less than the minimum wage rate established by the U.S. Secretary of Labor. A copy of the Department of Labor Wage Rate Determination applicable to this contract is included in the specifications.

3. The Contractor must complete, sign and furnish with his GMP the statements entitled "Contractor Statement on Previous Contracts Subject to EEO Clause" and "Certification of Non-segregated Facilities" and "Buy American Certificate".

4. ***Required Notices for all Contracts.***

a. The Contractor must supply all the information required by the proposal forms and specifications.

b. The appropriate sponsor, in accordance with Title VI of the Civil Rights Act of 1964, hereby notifies the Contractor that they must affirmatively insure that in any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full opportunity to submit a GMP and will not be discriminated against on the grounds of race, color, or national origin in consideration for award.

5. ***Requirement Notices for Contracts Over $10,000.00.*** (See Appendix 5, Paragraph 1 for Affirmative Action Plan Requirements, copy available at the City of Flagstaff Equal Opportunity Employment). The regulations and orders of the Secretary of Labor, Office of Federal Contract Compliance Programs (OFCCP) require that the sponsor and/or his Contractor(s) include in negotiations for contracts over $10,000.00 the following notices:

a. The Contractor will be required to comply with the affirmative action plan for equal employment opportunity prescribed by the OFCCP, United States Department of Labor, Regulations of the Secretary of Labor (41 CFR 60), or by other designated trades used in the performance of the contract and other non-federally involved contracts in the area geographically defined in the plan.

b. The proposed contract is under and subject to Executive Order 11246, as amended, September 24, 1965, and to the EEO clause; and

c. The Contractor will be required to submit a Certification of Non-segregated Facilities and to notify prospective subcontractors of the requirement for such a certification where the subcontract exceeds $10,000. Samples of the certification and the notice to subcontractors are available from the City of Flagstaff Equal Opportunity Employment (EOD).

d. The Contractor must indicate whether he has previously had a contract subject to the EEO clause, whether he has filed all report forms required in such contract, and if not, a compliance report (Standard Form SF 100) must be submitted.

e. EEO and labor provisions, when applicable, are included in the contract documents and are available for inspection at the City of Flagstaff Engineering Department.

f. The Contractor and subcontractors may satisfy requirements of the EEO contract clause by stating in all solicitations or advertisements for employees that:

"All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin."

Or by using a single advertisement in which appears in clearly distinguished type, the phrase:

"an equal opportunity employer."

6. ***Required Notice for Contracts with 50 or More Employees and a Contract of $50,000.00 or More***. (See appendix 4, Paragraph I for Affirmative Action Plan Requirements).

The City of Flagstaff hereby gives notice that a Contractor having 50 or more employees and first tier subcontractors having 50 or more employees and who may be awarded a subcontract of $50,000.00 or more will, within 120 days from Contract commencement, be required to develop a written Affirmative Action Compliance Program for each of its establishments (state and local governments are exempt). This notice also includes the following:

a. Within 30 days after execution of this contract, the Contractor must file a Compliance Report (SF 100) if the Contractor has not submitted a complete Compliance Report within 12 months preceding the date of award.

b. State and local governments are exempt from the requirements of filing an annual Compliance Report (SF 100).

c. The Contractor shall require the subcontractor on any first tier subcontracts to file a SF 100 within 30 days after award of the subcontract if the above conditions apply. A SF 100 will be furnished upon request. The SF 100 is normally furnished Contractor's annually, based on a mailing list currently maintained by the Joint Reporting Committee. In the event a Contractor has not received the form, he may obtain it by writing to the following address:

Joint Reporting Committee
1800 G. Street, N.W.
Washington, D.C. 20506

7. ***Bonding Clauses for Construction Contracts Subcontracts in Excess of $100,000.00.***

a. The Contractor agrees to furnish a performance bond for 100 percent of the GMP. This bond is one that is executed in connection with a Contract to secure fulfillment of all the Contractor's obligations under such Contract.

b. The Contractor agrees to furnish a payment bond for 100 percent of the Contract price. This bond is one that is executed in connection with a Contract to assure payment as required by law of all persons supplying labor and material in the execution of the work provided for in the Contract. Note: For contracts for $100,000.00 and less, local requirements should be met.

8. ***Notice to Prospective Contractors and Subcontractors Requirement for Certification of Non-segregated Facilities***:

a. A certification of Non-segregated Facilities must be submitted prior to the award of a federally assisted construction Contract exceeding $10,000.00 which is not exempt from the provisions of the EEO clause.

b. Contractor's receiving federally assisted construction contract awards exceeding $10,000.00 which are not exempt from the provisions of the EEO clause will be required to provide for the forwarding of the notice to prospective subcontractors for supplies and construction contracts where the subcontracts exceed $10,000.00 and are not exempt from the provisions of the EEO clause. NOTE: The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001.

9. ***Clean Air and Water Pollution Control Requirements for All Construction Contracts and Subcontracts Exceeding $100,000.00.***

Contractors and subcontractors agree:

a. That any facility to be used in the performance of the contract or to benefit from the contract is not listed on the Environmental Protection Agency (EPA) List of Violating Facilities.

b. To comply with all the requirements of Section 114 of the Clean Air Act, and Section 308 of the Federal Water Pollution Control Act, and all regulations issued thereunder.

c. That as a condition for award of a contract they will notify the awarding official of the receipt of any communication from the EPA indicating that a facility to be utilized for performance of or benefit from the contract is under consideration to be listed on the EPA List of Violating Facilities.

d. To include or cause to be included in any contract or subcontract which exceeds $100,000.00 the aforementioned criteria and requirements.

10. ***Buy American Requirement.***

Unless otherwise approved by the Federal Aviation Administration, it will not acquire or permit any Contractor or subcontractor to acquire any steel or manufactured products produced outside the United States to be used for any project for airport development or noise compatibility for which funds are provided under this grant. The sponsor will include in every contract a provision implementing this special condition.

SECTION 100

CONTRACTOR QUALITY CONTROL PROGRAM

100-01 GENERAL. When the specification requires a Contractor Quality Control Program, the Contractor shall establish, provide, and maintain an effective Quality Control Program that details the methods and procedures that will be taken to assure that all materials and completed construction required by this contract conform to contract plans, technical specifications and other requirements, whether manufactured by the Contractor, or procured from subcontractors or vendors. Although guidelines are established and certain minimum requirements are specified herein and elsewhere in the contract technical specifications, the Contractor shall assume full responsibility for accomplishing the stated purpose.

The intent of this section is to enable the Contractor to establish a necessary level of control that will:

a. Adequately provide for the production of acceptable quality materials.

b. Provide sufficient information to assure both the Contractor and the Engineer that the specification requirements can be met.

c. Allow the Contractor as much latitude as possible to develop his or her own standard of control.

The Contractor shall be prepared to discuss and present, at the preconstruction conference, his/her understanding of the quality control requirements. The Contractor shall not begin any construction or production of materials to be incorporated into the completed work until the Quality Control Program has been reviewed by the Engineer. No partial payment will be made for materials subject to specific quality control requirements until the Quality Control Program has been reviewed.

The quality control requirements contained in this section and elsewhere in the contract technical specifications are in addition to and separate from the acceptance testing requirements. Acceptance testing requirements are the responsibility of the Engineer.

100-02 DESCRIPTION OF PROGRAM.

a. General Description. The Contractor shall establish a Quality Control Program to perform inspection and testing of all items of work required by the technical specifications, including those performed by subcontractors. This Quality Control Program shall ensure conformance to applicable specifications and plans with respect to materials, workmanship, construction, finish, and functional performance. The Quality Control Program shall be effective for control of all construction work performed under this Contract and shall specifically include surveillance and tests required by the technical specifications, in addition to other requirements of this section and any other activities deemed necessary by the Contractor to establish an effective level of quality control.

b. Quality Control Program. The Contractor shall describe the Quality Control Program in a written document that shall be reviewed by the Engineer prior to the start of any production, construction, or off-site fabrication. The written Quality Control Program shall be submitted to the Engineer for review at least 5 calendar days before the preconstruction conference.

The Quality Control Program shall be organized to address, as a minimum, the following items:

a. Quality control organization;

b. Project progress schedule;

c. Submittals schedule;

d. Inspection requirements;

e. Quality control testing plan;

f. Documentation of quality control activities; and

g. Requirements for corrective action when quality control and/or acceptance criteria are not met.

The Contractor is encouraged to add any additional elements to the Quality Control Program that he/she deems necessary to adequately control all production and/or construction processes required by this contract.

100-03 QUALITY CONTROL ORGANIZATION. The Contractor Quality Control Program shall be implemented by the establishment of a separate quality control organization. An organizational chart shall be developed to show all quality control personnel and how these personnel integrate with other management/production and construction functions and personnel.

The organizational chart shall identify all quality control staff by name and function, and shall indicate the total staff required to implement all elements of the Quality Control Program, including inspection and testing for each item of work. If necessary, different technicians can be utilized for specific inspection and testing functions for different items of work. If an outside organization or independent testing laboratory is used for implementation of all or part of the Quality Control Program, the personnel assigned shall be subject to the qualification requirements of paragraph 100-03a and 100-03b. The organizational chart shall indicate which personnel are Contractor employees and which are provided by an outside organization.

The quality control organization shall consist of the following minimum personnel:

a. Program Administrator. The Program Administrator shall be a full-time employee of the Contractor, or a consultant engaged by the Contractor. The Program Administrator shall have a minimum of 5 years of experience in airport and/or highway construction and shall have had prior quality control experience on a project of comparable size and scope as the contract.

Additional qualifications for the Program Administrator shall include at least 1 of the following requirements:

(1) Professional engineer with 1 year of airport paving experience acceptable to the Engineer.

(2) Engineer-in-training with 2 years of airport paving experience acceptable to the Engineer.

(3) An individual with 3 years of highway and/or airport paving experience acceptable to the Engineer, with a Bachelor of Science Degree in Civil Engineering, Civil Engineering Technology or Construction.

(4) Construction materials technician certified at Level III by the National Institute for Certification in Engineering Technologies (NICET).

(5) Highway materials technician certified at Level III by NICET.

(6) Highway construction technician certified at Level III by NICET.

(7) A NICET certified engineering technician in Civil Engineering Technology with 5 years of highway and/or airport paving experience acceptable to the Engineer.

The Program Administrator shall have full authority to institute any and all actions necessary for the successful implementation of the Quality Control Program to ensure compliance with the contract plans and technical specifications. The Program Administrator shall report directly to a responsible officer of the construction firm. The Program Administrator may supervise the Quality Control Program on more than one project provided that person can be at the job site within 2 hours after being notified of a problem.

b. Quality Control Technicians. A sufficient number of quality control technicians necessary to adequately implement the Quality Control Program shall be provided. These personnel shall be either engineers, engineering technicians, or experienced craftsman with qualifications in the appropriate field equivalent to NICET Level II or higher construction materials technician or highway construction technician and shall have a minimum of 2 years of experience in their area of expertise.

The quality control technicians shall report directly to the Program Administrator and shall perform the following functions:

(1) Inspection of all materials, construction, plant, and equipment for conformance to the technical specifications, and as required by Section 100-06.

(2) Performance of all quality control tests as required by the technical specifications and Section 100-07.

Certification at an equivalent level, by a state or nationally recognized organization will be acceptable in lieu of NICET certification.

c. Staffing Levels. The Contractor shall provide sufficient qualified quality control personnel to monitor each work activity at all times. Where material is being produced in a plant for incorporation into the work, separate plant and field technicians shall be provided at each plant and field placement location. The scheduling and coordinating of all inspection and testing must match the type and pace of work activity. The Quality Control Program shall state where different technicians will be required for different work elements.

100-04 PROJECT PROGRESS SCHEDULE. The Contractor shall submit a coordinated construction schedule for all work activities. The schedule shall be prepared as a network diagram in Critical Path Method (CPM), PERT, or other format, or as otherwise specified in the contract. As a minimum, it shall provide information on the sequence of work activities, milestone dates, and activity duration.

The Contractor shall maintain the work schedule and provide an update and analysis of the progress schedule on a twice monthly basis, or as otherwise specified in the contract. Submission of the work schedule shall not relieve the Contractor of overall responsibility for scheduling, sequencing, and coordinating all work to comply with the requirements of the contract.

100-05 SUBMITTALS SCHEDULE. The Contractor shall submit a detailed listing of all submittals (e.g., mix designs, material certifications) and shop drawings required by the technical specifications. The listing can be developed in a spreadsheet format and shall include:

a. Specification item number;
b. Item description;
c. Description of submittal;
d. Specification paragraph requiring submittal; and
e. Scheduled date of submittal.

100-06 INSPECTION REQUIREMENTS. Quality control inspection functions shall be organized to provide inspections for all definable features of work, as detailed below. All inspections shall be documented by the Contractor as specified by Section 100-07.

Inspections shall be performed daily to ensure continuing compliance with contract requirements until completion of the particular feature of work. These shall include the following minimum requirements:

a. During plant operation for material production, quality control test results and periodic inspections shall be utilized to ensure the quality of aggregates and other mix components, and to adjust and control mix proportioning to meet the approved mix design and other requirements of the technical specifications. All equipment utilized in proportioning and mixing shall be inspected to ensure its proper operating condition. The Quality Control Program shall detail how these and other quality control functions will be accomplished and utilized.

b. During field operations, quality control test results and periodic inspections shall be utilized to ensure the quality of all materials and workmanship. All equipment utilized in placing, finishing, and compacting shall be inspected to ensure its proper operating condition and to ensure that all such operations are in conformance to the technical specifications and are within

the plan dimensions, lines, grades, and tolerances specified. The Program shall document how these and other quality control functions will be accomplished and utilized.

100-07 QUALITY CONTROL TESTING PLAN. As a part of the overall Quality Control Program, the Contractor shall implement a quality control testing plan, as required by the technical specifications. The testing plan shall include the minimum tests and test frequencies required by each technical specification Item, as well as any additional quality control tests that the Contractor deems necessary to adequately control production and/or construction processes.

The testing plan can be developed in a spreadsheet fashion and shall, as a minimum, include the following:

a. Specification item number (e.g., P-401);
b. Item description (e.g., Plant Mix Bituminous Pavements);
c. Test type (e.g., gradation, grade, asphalt content);
d. Test standard (e.g., ASTM or AASHTO test number, as applicable);
e. Test frequency (e.g., as required by technical specifications or minimum frequency when requirements are not stated);
f. Responsibility (e.g., plant technician); and
g. Control requirements (e.g., target, permissible deviations).

The testing plan shall contain a statistically-based procedure of random sampling for acquiring test samples in accordance with ASTM D 3665. The Engineer shall be provided the opportunity to witness quality control sampling and testing.

All quality control test results shall be documented by the Contractor as required by Section 100-08.

100-08 DOCUMENTATION. The Contractor shall maintain current quality control records of all inspections and tests performed. These records shall include factual evidence that the required inspections or tests have been performed, including type and number of inspections or tests involved; results of inspections or tests; nature of defects, deviations, causes for rejection, etc.; proposed remedial action; and corrective actions taken.

These records must cover both conforming and defective or deficient features, and must include a statement that all supplies and materials incorporated in the work are in full compliance with the terms of the contract. Legible copies of these records shall be furnished to the Engineer daily. The records shall cover all work placed subsequent to the previously furnished records and shall be verified and signed by the Contractor's Program Administrator.

Specific Contractor quality control records required for the contract shall include, but are not necessarily limited to, the following records:

a. Daily Inspection Reports. Each Contractor quality control technician shall maintain a daily log of all inspections performed for both Contractor and subcontractor operations on a form acceptable to the Engineer. These technician's daily reports shall provide factual evidence that continuous quality control inspections have been performed and shall, as a minimum, include the following:

(1) Technical specification item number and description;

(2) Compliance with approved submittals;
(3) Proper storage of materials and equipment;
(4) Proper operation of all equipment;
(5) Adherence to plans and technical specifications;
(6) Review of quality control tests; and
(7) Safety inspection.

The daily inspection reports shall identify inspections conducted, results of inspections, location and nature of defects found, causes for rejection, and remedial or corrective actions taken or proposed.

The daily inspection reports shall be signed by the responsible quality control technician and the Program Administrator. The Engineer shall be provided at least one copy of each daily inspection report on the work day following the day of record.

b. Daily Test Reports. The Contractor shall be responsible for establishing a system that will record all quality control test results. Daily test reports shall document the following information:

(1) Technical specification item number and description;
(2) Test designation;
(3) Location;
(4) Date of test;
(5) Control requirements;
(6) Test results;
(7) Causes for rejection;
(8) Recommended remedial actions; and
(9) Retests.

Test results from each day's work period shall be submitted to the Engineer prior to the start of the next day's work period. When required by the technical specifications, the Contractor shall maintain statistical quality control charts. The daily test reports shall be signed by the responsible quality control technician and the Program Administrator.

100-09 CORRECTIVE ACTION REQUIREMENTS. The Quality Control Program shall indicate the appropriate action to be taken when a process is deemed, or believed, to be out of control (out of tolerance) and detail what action will be taken to bring the process into control. The requirements for corrective action shall include both general requirements for operation of the Quality Control Program as a whole, and for individual items of work contained in the technical specifications.

The Quality Control Program shall detail how the results of quality control inspections and tests will be used for determining the need for corrective action and shall contain clear sets of rules to gauge when a process is out of control and the type of correction to be taken to regain process control.

When applicable or required by the technical specifications, the Contractor shall establish and utilize statistical quality control charts for individual quality control tests. The requirements for corrective action shall be linked to the control charts.

100-10 SURVEILLANCE BY THE ENGINEER. All items of material and equipment shall be subject to surveillance by the Engineer at the point of production, manufacture or shipment to determine if the Contractor, producer, manufacturer or shipper maintains an adequate quality control system in conformance with the requirements detailed herein and the applicable technical specifications and plans. In addition, all items of materials, equipment and work in place shall be subject to surveillance by the Engineer at the site for the same purpose.

Surveillance by the Engineer does not relieve the Contractor of performing quality control inspections of either on-site or off-site Contractor's or subcontractor's work.

100-11 NONCOMPLIANCE.

a. The Engineer will notify the Contractor of any noncompliance with any of the foregoing requirements. The Contractor shall, after receipt of such notice, immediately take corrective action. Any notice, when delivered by the Engineer or his/her authorized representative to the Contractor or his/her authorized representative at the site of the work, shall be considered sufficient notice.

b. In cases where quality control activities do not comply with either the Contractor Quality Control Program or the contract provisions, or where the Contractor fails to properly operate and maintain an effective Quality Control Program, as determined by the Engineer, the Engineer may:

(1) Order the Contractor to replace ineffective or unqualified quality control personnel or subcontractors.

(2) Order the Contractor to stop operations until appropriate corrective actions are taken.

END OF SECTION 100

SECTION 110

METHOD OF ESTIMATING PERCENTAGE OF MATERIAL WITHIN SPECIFICATION LIMITS (PWL)

110-01 GENERAL. When the specifications provide for acceptance of material based on the method of estimating percentage of material within specification limits (PWL), the PWL will be determined in accordance with this section. All test results for a lot will be analyzed statistically to determine the total estimated percent of the lot that is within specification limits. The PWL is computed using the sample average (X) and sample standard deviation (S_n) of the specified number (n) of sublots for the lot and the specification tolerance limits, L for lower and U for upper, for the particular acceptance parameter. From these values, the respective Quality index(s), Q_L for Lower Quality Index and/or Q_U for Upper Quality Index, is computed and the PWL for the lot for the specified n is determined from Table 1. All specification limits specified in the technical sections shall be absolute values. Test results used in the calculations shall be to the significant figure given in the test procedure.

There is some degree of uncertainty (risk) in the measurement for acceptance because only a small fraction of production material (the population) is sampled and tested. This uncertainty exists because all portions of the production material have the same probability to be randomly sampled. The Contractor's risk is the probability that material produced at the acceptable quality level is rejected or subjected to a pay adjustment. The Owner's risk is the probability that material produced at the rejectable quality level is accepted.

IT IS THE INTENT OF THIS SECTION TO INFORM THE CONTRACTOR THAT, IN ORDER TO CONSISTENTLY OFFSET THE CONTRACTOR'S RISK FOR MATERIAL EVALUATED, PRODUCTION QUALITY (USING POPULATION AVERAGE AND POPULATION STANDARD DEVIATION) MUST BE MAINTAINED AT THE ACCEPTABLE QUALITY SPECIFIED OR HIGHER. IN ALL CASES, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PRODUCE AT QUALITY LEVELS THAT WILL MEET THE SPECIFIED ACCEPTANCE CRITERIA WHEN SAMPLED AND TESTED AT THE FREQUENCIES SPECIFIED.

110-02 METHOD FOR COMPUTING PWL. The computational sequence for computing PWL is as follows:

a. Divide the lot into n sublots in accordance with the acceptance requirements of the specification.

b. Locate the random sampling position within the sublot in accordance with the requirements of the specification.

c. Make a measurement at each location, or take a test portion and make the measurement on the test portion in
accordance with the testing requirements of the specification.

d. Find the sample average (X) for all sublot values within the lot by using the following formula:

$$X = (x_1 + x_2 + x_3 + \ldots x_n) / n$$

Where: X = Sample average of all sublot values within a lot
x_1, x_2 = Individual sublot values
n = Number of sublots

e. Find the sample standard deviation (S_n) by use of the following formula:

$$S_n = [(d_1^2 + d_2^2 + d_3^2 + \ldots d_n^2)/(n-1)]^{1/2}$$

Where: S_n = Sample standard deviation of the number of sublot values in the set
$d_1, d_2,$ = Deviations of the individual sublot values $x_1, x_2, \ldots$ from the average value X
that is: $d_1 = (x_1 - X), d_2 = (x_2 - X) \ldots d_n = (x_n - X)$
n = Number of sublots

f. For single sided specification limits (i.e., L only), compute the Lower Quality Index Q_L by use of the following formula:

$$Q_L = (X - L) / S_n$$

Where:L = specification lower tolerance limit

Estimate the percentage of material within limits (PWL) by entering Table 1 with Q_L, using the column appropriate to the total number (n) of measurements. If the value of Q_L falls between values shown on the table, use the next higher value of PWL.

g. For double-sided specification limits (i.e. L and U), compute the Quality Indexes Q_L and Q_U by use of the following formulas:

$$Q_L = (X - L) / Sn \quad \text{and} \quad Q_U = (U - X) / Sn$$

Where:L and U = specification lower and upper tolerance limits

Estimate the percentage of material between the lower (L) and upper (U) tolerance limits (PWL) by entering Table 1 separately with Q_L and Q_U, using the column appropriate to the total number (n) of measurements, and determining the percent of material above P_L and percent of material below P_U for each tolerance limit. If the values of Q_L fall between values shown on the table, use the next higher value of P_L or P_U. Determine the PWL by use of the following formula:

$$PWL = (P_U + P_L) - 100$$

Where: P_L = percent within lower specification limit
P_U = percent within upper specification limit

EXAMPLE OF PWL CALCULATION

Project: Example Project
Test Item: Item P-401, Lot A.

A. PWL Determination for Mat Density.

1. Density of four random cores taken from Lot A.

A-1 96.60
A-2 97.55
A-3 99.30
A-4 98.35
n = 4

2. Calculate average density for the lot.

X = (x1 + x2 + x3 + . . .xn) / n
X = (96.60 + 97.55 + 99.30 + 98.35) / 4
X = 97.95 percent density

3. Calculate the standard deviation for the lot.

$Sn = [((96.60 - 97.95)^2 + (97.55 - 97.95)^2 + (99.30 - 97.95)^2 + (98.35 - 97.95)^2)) / (4 - 1)]^{1/2}$

$Sn = [(1.82 + 0.16 + 1.82 + 0.16) / 3]^{1/2}$
Sn = 1.15

4. Calculate the Lower Quality Index Q_L for the lot. (L=96.3)

$Q_L = (X - L) / Sn$
$Q_L = (97.95 - 96.30) / 1.15$
$Q_L = 1.4348$

5. Determine PWL by entering Table 1 with Q_L= 1.44 and n= 4.

PWL = 98

B. PWL Determination for Air Voids.

1. Air Voids of four random samples taken from Lot A.

A-1 5.00
A-2 3.74
A-3 2.30
A-4 3.25

2. Calculate the average air voids for the lot.

$X = (x1 + x + x3 \ldots n) / n$

$X = (5.00 + 3.74 + 2.30 + 3.25) / 4$

$X = 3.57$ percent

3. Calculate the standard deviation Sn for the lot.

$Sn = [((3.57 - 5.00)^2 + (3.57 - 3.74)^2 + (3.57 - 2.30)^2 + (3.57 - 3.25)^2) / (4 - 1)]^{1/2}$

$Sn = [(2.04 + 0.03 + 1.62 + 0.10) / 3]^{1/2}$

$Sn = 1.12$

4. Calculate the Lower Quality Index Q_L for the lot. (L= 2.0)

$Q_L = (X - L) / Sn$

$Q_L = (3.57 - 2.00) / 1.12$

$Q_L = 1.3992$

5. Determine P_L by entering Table 1 with $Q_L = 1.41$ and n = 4.

PL = 97

6. Calculate the Upper Quality Index Q_U for the lot. (U= 5.0)

$Q_U = (U - X) / Sn$

$Q_U = (5.00 - 3.57) / 1.12$

$Q_U = 1.2702$

7. Determine P_U by entering Table 1 with $Q_U = 1.29$ and n = 4.

$P_U = 93$

8. Calculate Air Voids PWL

$PWL = (P_L + P_U) - 100$

$PWL = (97 + 93) - 100 = 90$

EXAMPLE OF OUTLIER CALCULATION (Reference ASTM E 178)

Project: Example Project
Test Item: Item P-401, Lot A.

A. Outlier Determination for Mat Density.

1. Density of four random cores taken from Lot A. arranged in descending order.

A-3 99.30
A-4 98.35
A-2 97.55
A-1 96.60

2. Use n=4 and upper 5 percent significance level of to find the critical value for test criterion = 1.463.

3. Use average density, standard deviation, and test criterion value to evaluate density measurements.

a. For measurements greater than the average:
If: (measurement - average)/(standard deviation) is less than test criterion,

Then: the measurement is not considered an outlier
for A-3 Check if (99.30 - 97.95) / 1.15 greater than 1.463
1.174 is less than 1.463, the value is not an outlier

b. For measurements less than the average:
If (average - measurement)/(standard deviation) is less than test criterion, the measurement is not considered an outlier

for A-1 Check if (97.95 - 96.60) / 1.15 greater than 1.463
1.0 is less than 1.463, the value is not an outlier

NOTE: In this example, a measurement would be considered an outlier if the density was:
greater than (97.95+1.463x1.15) = 99.63 percent or,
less than (97.95-1.463x1.15) = 96.27 percent

TABLE 1. TABLE FOR ESTIMATING PERCENT OF LOT WITHIN LIMITS (PWL)

Percent Within Limits (P_L and P_U)	Positive Values of Q (Q_L and Q_U)							
	n=3	n=4	n=5	n=6	n=7	n=8	n=9	n=10
99	1.1541	1.4700	1.6714	1.8008	1.8888	1.9520	1.9994	2.0362
98	1.1524	1.4400	1.6016	1.6982	1.7612	1.8053	1.8379	1.8630
97	1.1496	1.4100	1.5427	1.6181	1.6661	1.6993	1.7235	1.7420
96	1.1456	1.3800	1.4897	1.5497	1.5871	1.6127	1.6313	1.6454
95	1.1405	1.3500	1.4407	1.4887	1.5181	1.5381	1.5525	1.5635
94	1.1342	1.3200	1.3946	1.4329	1.4561	1.4717	1.4829	1.4914
93	1.1269	1.2900	1.3508	1.3810	1.3991	1.4112	1.4199	1.4265
92	1.1184	1.2600	1.3088	1.3323	1.3461	1.3554	1.3620	1.3670
91	1.1089	1.2300	1.2683	1.2860	1.2964	1.3032	1.3081	1.3118
90	1.0982	1.2000	1.2290	1.2419	1.2492	1.2541	1.2576	1.2602
89	1.0864	1.1700	1.1909	1.1995	1.2043	1.2075	1.2098	1.2115
88	1.0736	1.1400	1.1537	1.1587	1.1613	1.1630	1.1643	1.1653
87	1.0597	1.1100	1.1173	1.1192	1.1199	1.1204	1.1208	1.1212
86	1.0448	1.0800	1.0817	1.0808	1.0800	1.0794	1.0791	1.0789
85	1.0288	1.0500	1.0467	1.0435	1.0413	1.0399	1.0389	1.0382
84	1.0119	1.0200	1.0124	1.0071	1.0037	1.0015	1.0000	0.9990
83	0.9939	0.9900	0.9785	0.9715	0.9671	0.9643	0.9624	0.9610
82	0.9749	0.9600	0.9452	0.9367	0.9315	0.9281	0.9258	0.9241
81	0.9550	0.9300	0.9123	0.9025	0.8966	0.8928	0.8901	0.8882
80	0.9342	0.9000	0.8799	0.8690	0.8625	0.8583	0.8554	0.8533
79	0.9124	0.8700	0.8478	0.8360	0.8291	0.8245	0.8214	0.8192
78	0.8897	0.8400	0.8160	0.8036	0.7962	0.7915	0.7882	0.7858
77	0.8662	0.8100	0.7846	0.7716	0.7640	0.7590	0.7556	0.7531
76	0.8417	0.7800	0.7535	0.7401	0.7322	0.7271	0.7236	0.7211
75	0.8165	0.7500	0.7226	0.7089	0.7009	0.6958	0.6922	0.6896
74	0.7904	0.7200	0.6921	0.6781	0.6701	0.6649	0.6613	0.6587
73	0.7636	0.6900	0.6617	0.6477	0.6396	0.6344	0.6308	0.6282
72	0.7360	0.6600	0.6316	0.6176	0.6095	0.6044	0.6008	0.5982
71	0.7077	0.6300	0.6016	0.5878	0.5798	0.5747	0.5712	0.5686
70	0.6787	0.6000	0.5719	0.5582	0.5504	0.5454	0.5419	0.5394
69	0.6490	0.5700	0.5423	0.5290	0.5213	0.5164	0.5130	0.5105
68	0.6187	0.5400	0.5129	0.4999	0.4924	0.4877	0.4844	0.4820
67	0.5878	0.5100	0.4836	0.4710	0.4638	0.4592	0.4560	0.4537
66	0.5563	0.4800	0.4545	0.4424	0.4355	0.4310	0.4280	0.4257
65	0.5242	0.4500	0.4255	0.4139	0.4073	0.4030	0.4001	0.3980
64	0.4916	0.4200	0.3967	0.3856	0.3793	0.3753	0.3725	0.3705
63	0.4586	0.3900	0.3679	0.3575	0.3515	0.3477	0.3451	0.3432
62	0.4251	0.3600	0.3392	0.3295	0.3239	0.3203	0.3179	0.3161
61	0.3911	0.3300	0.3107	0.3016	0.2964	0.2931	0.2908	0.2892
60	0.3568	0.3000	0.2822	0.2738	0.2691	0.2660	0.2639	0.2624
59	0.3222	0.2700	0.2537	0.2461	0.2418	0.2391	0.2372	0.2358

TABLE 1. TABLE FOR ESTIMATING PERCENT OF LOT WITHIN LIMITS (PWL)

Percent Within Limits (P_L and P_U)	Negative Values of Q (Q_L and Q_U)							
	n=3	n=4	n=5	n=6	n=7	n=8	n=9	n=10
58	0.2872	0.2400	0.2254	0.2186	0.2147	0.2122	0.2105	0.2093
57	0.2519	0.2100	0.1971	0.1911	0.1877	0.1855	0.1840	0.1829
56	0.2164	0.1800	0.1688	0.1636	0.1607	0.1588	0.1575	0.1566
55	0.1806	0.1500	0.1406	0.1363	0.1338	0.1322	0.1312	0.1304
54	0.1447	0.1200	0.1125	0.1090	0.1070	0.1057	0.1049	0.1042
53	0.1087	0.0900	0.0843	0.0817	0.0802	0.0793	0.0786	0.0781
52	0.0725	0.0600	0.0562	0.0544	0.0534	0.0528	0.0524	0.0521
51	0.0363	0.0300	0.0281	0.0272	0.0267	0.0264	0.0262	0.0260
50	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
49	-0.0363	-0.0300	-0.0281	-0.0272	-0.0267	-0.0264	-0.0262	-0.0260
48	-0.0725	-0.0600	-0.0562	-0.0544	-0.0534	-0.0528	-0.0524	-0.0521
47	-0.1087	-0.0900	-0.0843	-0.0817	-0.0802	-0.0793	-0.0786	-0.0781
46	-0.1447	-0.1200	-0.1125	-0.1090	-0.1070	-0.1057	-0.1049	-0.1042
45	-0.1806	-0.1500	-0.1406	-0.1363	-0.1338	-0.1322	-0.1312	-0.1304
44	-0.2164	-0.1800	-0.1688	-0.1636	-0.1607	-0.1588	-0.1575	-0.1566
43	-0.2519	-0.2100	-0.1971	-0.1911	-0.1877	-0.1855	-0.1840	-0.1829
42	-0.2872	-0.2400	-0.2254	-0.2186	-0.2147	-0.2122	-0.2105	-0.2093
41	-0.3222	-0.2700	-0.2537	-0.2461	-0.2418	-0.2391	-0.2372	-0.2358
40	-0.3568	-0.3000	-0.2822	-0.2738	-0.2691	-0.2660	-0.2639	-0.2624
39	-0.3911	-0.3300	-0.3107	-0.3016	-0.2964	-0.2931	-0.2908	-0.2892
38	-0.4251	-0.3600	-0.3392	-0.3295	-0.3239	-0.3203	-0.3179	-0.3161
37	-0.4586	-0.3900	-0.3679	-0.3575	-0.3515	-0.3477	-0.3451	-0.3432
36	-0.4916	-0.4200	-0.3967	-0.3856	-0.3793	-0.3753	-0.3725	-0.3705
35	-0.5242	-0.4500	-0.4255	-0.4139	-0.4073	-0.4030	-0.4001	-0.3980
34	-0.5563	-0.4800	-0.4545	-0.4424	-0.4355	-0.4310	-0.4280	-0.4257
33	-0.5878	-0.5100	-0.4836	-0.4710	-0.4638	-0.4592	-0.4560	-0.4537
32	-0.6187	-0.5400	-0.5129	-0.4999	-0.4924	-0.4877	-0.4844	-0.4820
31	-0.6490	-0.5700	-0.5423	-0.5290	-0.5213	-0.5164	-0.5130	-0.5105
30	-0.6787	-0.6000	-0.5719	-0.5582	-0.5504	-0.5454	-0.5419	-0.5394
29	-0.7077	-0.6300	-0.6016	-0.5878	-0.5798	-0.5747	-0.5712	-0.5686
28	-0.7360	-0.6600	-0.6316	-0.6176	-0.6095	-0.6044	-0.6008	-0.5982
27	-0.7636	-0.6900	-0.6617	-0.6477	-0.6396	-0.6344	-0.6308	-0.6282
26	-0.7904	-0.7200	-0.6921	-0.6781	-0.6701	-0.6649	-0.6613	-0.6587
25	-0.8165	-0.7500	-0.7226	-0.7089	-0.7009	-0.6958	-0.6922	-0.6896
24	-0.8417	-0.7800	-0.7535	-0.7401	-0.7322	-0.7271	-0.7236	-0.7211
23	-0.8662	-0.8100	-0.7846	-0.7716	-0.7640	-0.7590	-0.7556	-0.7531
22	-0.8897	-0.8400	-0.8160	-0.8036	-0.7962	-0.7915	-0.7882	-0.7858
21	-0.9124	-0.8700	-0.8478	-0.8360	-0.8291	-0.8245	-0.8214	-0.8192
20	-0.9342	-0.9000	-0.8799	-0.8690	-0.8625	-0.8583	-0.8554	-0.8533

TABLE 1. TABLE FOR ESTIMATING PERCENT OF LOT WITHIN LIMITS (PWL)

Percent Within Limits (P_L and P_U)	Negative Values of Q (Q_L and Q_U)							
	n=3	n=4	n=5	n=6	n=7	n=8	n=9	n=10
19	-0.9550	-0.9300	-0.9123	-0.9025	-0.8966	-0.8928	-0.8901	-0.8882
18	-0.9749	-0.9600	-0.9452	-0.9367	-0.9315	-0.9281	-0.9258	-0.9241
17	-0.9939	-0.9900	-0.9785	-0.9715	-0.9671	-0.9643	-0.9624	-0.9610
16	-1.0119	-1.0200	-1.0124	-1.0071	-1.0037	-1.0015	-1.0000	-0.9990
15	-1.0288	-1.0500	-1.0467	-1.0435	-1.0413	-1.0399	-1.0389	-1.0382
14	-1.0448	-1.0800	-1.0817	-1.0808	-1.0800	-1.0794	-1.0791	-1.0789
13	-1.0597	-1.1100	-1.1173	-1.1192	-1.1199	-1.1204	-1.1208	-1.1212
12	-1.0736	-1.1400	-1.1537	-1.1587	-1.1613	-1.1630	-1.1643	-1.1653
11	-1.0864	-1.1700	-1.1909	-1.1995	-1.2043	-1.2075	-1.2098	-1.2115
10	-1.0982	-1.2000	-1.2290	-1.2419	-1.2492	-1.2541	-1.2576	-1.2602
9	-1.1089	-1.2300	-1.2683	-1.2860	-1.2964	-1.3032	-1.3081	-1.3118
8	-1.1184	-1.2600	-1.3088	-1.3323	-1.3461	-1.3554	-1.3620	-1.3670
7	-1.1269	-1.2900	-1.3508	-1.3810	-1.3991	-1.4112	-1.4199	-1.4265
6	-1.1342	-1.3200	-1.3946	-1.4329	-1.4561	-1.4717	-1.4829	-1.4914
5	-1.1405	-1.3500	-1.4407	-1.4887	-1.5181	-1.5381	-1.5525	-1.5635
4	-1.1456	-1.3800	-1.4897	-1.5497	-1.5871	-1.6127	-1.6313	-1.6454
3	-1.1496	-1.4100	-1.5427	-1.6181	-1.6661	-1.6993	-1.7235	-1.7420
2	-1.1524	-1.4400	-1.6016	-1.6982	-1.7612	-1.8053	-1.8379	-1.8630
1	-1.1541	-1.4700	-1.6714	-1.8008	-1.8888	-1.9520	-1.9994	-2.0362

END OF SECTION 110

SECTION 120

NUCLEAR GAGES

120-01 TESTING. When the specifications provide for nuclear gage acceptance testing of material for Items P-152, P-154, P-208, and P-209, the testing shall be performed in accordance with this section. At each sampling location, the field density shall be determined in accordance with ASTM D 2922 using the Direct Transmission Method. The nuclear gage shall be calibrated in accordance with Annex A1. Calibration and operation of the gage shall be in accordance with the requirements of the manufacturer. The operator of the nuclear gage must show evidence of training and experience in the use of the instrument. The gage shall be standardized daily in accordance with ASTM D 2922, paragraph 8.

Use of ASTM D 2922 results in a wet unit weight, and when using this method, ASTM D 3017 shall be used to determine the moisture content of the material. The moisture gage shall be standardized daily in accordance with ASTM D 3017, paragraph 7.

The material shall be accepted on a lot basis. Each Lot shall be divided into eight (8) sublots when ASTM D 2922 is used.

120-02. When PWL concepts are incorporated, compaction shall continue until a PWL of 90 percent or more is achieved using the lower specification tolerance limits (L) below.

The percentage of material within specification limits (PWL) shall be determined in accordance with the procedures specified in Section 110 of the General Provisions.

The lower specification tolerance limit (L) for density shall be:

Specification Item Number	Specification Tolerance (L) for Density, (percent of laboratory maximum)
Item P-152	90.5 for cohesive material, 95.5 for non-cohesive
Item P-154	95.5
Item P-208	97.0
Item P-209	97.0

If the PWL is less than 90 percent, the lot shall be reworked and recompacted by the Contractor at the Contractor's expense. After reworking and recompaction, the lot shall be resampled and retested. Retest results for the lot shall be reevaluated for acceptance. This procedure shall continue until the PWL is 90 percent or greater.

120-03 VERIFICATION TESTING. (For Items P-152 and P-154 only.) The Engineer will verify the maximum laboratory density of material placed in the field for each lot. A minimum of one test will be made for each lot of material at the site. The verification process will consist of; (1) compacting the material and determining the dry density and moisture-density in accordance with [ASTM D 698 for aircraft gross weights less than 60,0000 pounds] [ASTM D 1557 for aircraft gross weights 60,000 pounds or more], and (2) comparing the result with the laboratory moisture-density curves for the material being placed. This verification process is commonly referred to as a "one-point Proctor". If the material does not conform to the existing moisture-density curves, the Engineer will establish the laboratory maximum density and optimum moisture content for the material in accordance with [ASTM D 698 for aircraft gross weights less than 60,0000 pounds] [ASTM D 1557 for aircraft gross weights 60,000 pounds or more].

Additional verification tests will be made, if necessary, to properly classify all materials placed in the lot.

The percent compaction of each sampling location will be determined by dividing the field density of each sublot by the laboratory maximum density for the lot.

END OF SECTION 120

END FAA GENERAL PROVISIONS

CIVIL RIGHTS ACT OF 1964, TITLE VI – CONTRACTOR CONTRACTUAL REQUIREMENTS

During the performance of this contract, the contractor, for itself, its assignees and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

1.1 Compliance with Regulations. The contractor shall comply with the Regulations relative to nondiscrimination in federally assisted programs of the Department of Transportation (hereinafter, "DOT") Title 49, Code of Federal Regulations, Part 21, as they may be amended from time to time (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this contract.

1.2 Nondiscrimination. The contractor, with regard to the work performed by it during the contract, shall not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor shall not participate either directly or indirectly in the discrimination prohibited by section 21.5 of the Regulations, including employment practices when the contract covers a program set forth in Appendix B of the Regulations.

1.3 Solicitations for Subcontracts, Including Procurements of Materials and Equipment. In all solicitations either by competitive bidding or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials or leases of equipment, each potential subcontractor or supplier shall be notified by the contractor of the contractor's obligations under this contract and the Regulations relative to nondiscrimination on the grounds of race, color, or national origin.

1.4 Information and Reports. The contractor shall provide all information and reports required by the Regulations or directives issued pursuant thereto and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Sponsor or the Federal Aviation Administration (FAA) to be pertinent to ascertain compliance with such Regulations, orders, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish this information, the contractor shall so certify to the sponsor or the FAA, as appropriate, and shall set forth what efforts it has made to obtain the information.

1.5 Sanctions for Noncompliance. In the event of the contractor's noncompliance with the nondiscrimination provisions of this contract, the sponsor shall impose such contract sanctions as it or the FAA may determine to be appropriate, including, but not limited to:

a. Withholding of payments to the contractor under the contract until the contractor complies, and/or

b. Cancellation, termination, or suspension of the contract, in whole or in part.

1.6 Incorporation of Provisions. The contractor shall include the provisions of paragraphs 1 through 5 in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Regulations or directives issued pursuant thereto. The contractor shall take such action with respect to any subcontract or procurement as the sponsor or the FAA may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, however, that in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction,

the contractor may request the Sponsor to enter into such litigation to protect the interests of the sponsor and, in addition, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

Reference
49 CFR Part 21
AC 150/5100-15

AIRPORT AND AIRWAY IMPROVEMENT ACT OF 1982, SECTION 520 - GENERAL CIVIL RIGHTS PROVISIONS

The contractor assures that it will comply with pertinent statutes, Executive orders and such rules as are promulgated to assure that no person shall, on the grounds of race, creed, color, national origin, sex, age, or handicap be excluded from participating in any activity conducted with or benefiting from Federal assistance. This provision obligates the tenant/concessionaire/lessee or its transferee for the period during which Federal assistance is extended to the airport a program, except where Federal assistance is to provide, or is in the form of personal property or real property or interest therein or structures or improvements thereon. In these cases the provision obligates the party or any transferee for the longer of the following periods: (a) the period during which the property is used by the airport sponsor or any transferee for a purpose for which Federal assistance is extended, or for another purpose involving the provision of similar services or benefits or (b) the period during which the airport sponsor or any transferee retains ownership or possession of the property. In the case of contractors, this provision binds the contractors from the bid solicitation period through the completion of the contract. This provision is in addition to that required of Title VI of the Civil Rights Act of 1964.

Reference
Airport and Airway Improvement Act of 1982, Section 520
Title 49 47123
AC 150/5100-15, Para. 10.c.

LOBBYING AND INFLUENCING FEDERAL EMPLOYEES

(1) No Federal appropriated funds shall be paid, by or on behalf of the contractor, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the making of any Federal grant and the amendment or modification of any Federal grant.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any Federal grant, the contractor shall complete and submit Standard Form-LLL, “Disclosure of Lobby Activities,” in accordance with its instructions.

Reference
49 CFR Part 20
Appendix A

ACCESS TO RECORDS AND REPORTS
The Contractor shall maintain an acceptable cost accounting system. The Contractor agrees to provide the Sponsor, the Federal Aviation Administration and the Comptroller General of the

United States or any of their duly authorized representative's access to any books, documents, papers, and records of the contractor which are directly pertinent to the specific contract for the purpose of making audit, examination, excerpts and transcriptions. The Contractor agrees to maintain all books, records and reports required under this contract for a period of not less than three years after final payment is made and all pending matters are closed.

Reference
49 CFR Part 18.36(i)
FAA Order 5100.38

DISADVANTAGED BUSINESS ENTERPRISES
Contract Assurance (§26.13) - The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy, as the recipient deems appropriate.

Prompt Payment (§26.29) - The prime contractor agrees to pay each subcontractor under this prime contract for satisfactory performance of its contract no later than 14 days from the receipt of each payment the prime contractor receives from the City of Flagstaff**.** The prime contractor agrees further to return retainage payments to each subcontractor within [specify the same number as above] days after the subcontractor's work is satisfactorily completed. Any delay or postponement of payment from the above referenced time frame may occur only for good cause following written approval of the City of Flagstaff**.** This clause applies to both DBE and non-DBE subcontractors.

Reference
49 CFR Part 26

ENERGY CONSERVATION REQUIREMENTS
The contractor agrees to comply with mandatory standards and policies relating to energy efficiency that are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (Public Law 94-163)

Reference
49 CFR Part 18.36
Public Law 94-163

BREACH OF CONTRACT TERMS
Any violation or breach of terms of this contract on the part of the contractor or their subcontractors may result in the suspension or termination of this contract or such other action that may be necessary to enforce the rights of the parties of this agreement. The duties and obligations imposed by the Contract Documents and the rights and remedies available thereunder shall be in addition to and not a limitation of any duties, obligations, rights and remedies otherwise imposed or available by law.

Reference
49 CFR Part 18.36

RIGHTS TO INVENTIONS

All rights to inventions and materials generated under this contract are subject to regulations issued by the FAA and the Sponsor of the Federal grant under which this contract is executed.

Reference
49 CFR Part 18.36(i)(8)
FAA Order 5100.38

TRADE RESTRICTION CLAUSE

The contractor or subcontractor, by submission of an offer and/or execution of a contract, certifies that it:

a. is not owned or controlled by one or more citizens of a foreign country included in the list of countries that discriminate against U.S. firms published by the Office of the United States Trade Representative (USTR);

b. has not knowingly entered into any contract or subcontract for this project with a person that is a citizen or national of a foreign country on said list, or is owned or controlled directly or indirectly by one or more citizens or nationals of a foreign country on said list;

c. has not procured any product nor subcontracted for the supply of any product for use on the project that is produced in a foreign country on said list.

Unless the restrictions of this clause are waived by the Secretary of Transportation in accordance with 49 CFR 30.17, no contract shall be awarded to a contractor or subcontractor who is unable to certify to the above. If the contractor knowingly procures or subcontracts for the supply of any product or service of a foreign country on said list for use on the project, the Federal Aviation Administration may direct through the Sponsor cancellation of the contract at no cost to the Government.

Further, the contractor agrees that, if awarded a contract resulting from this solicitation, it will incorporate this provision for certification without modification in each contract and in all lower tier subcontracts. The contractor may rely on the certification of a prospective subcontractor unless it has knowledge that the certification is erroneous.

The contractor shall provide immediate written notice to the sponsor if the contractor learns that its certification or that of a subcontractor was erroneous when submitted or has become erroneous by reason of changed circumstances. The subcontractor agrees to provide written notice to the contractor if at any time it learns that its certification was erroneous by reason of changed circumstances.

This certification is a material representation of fact upon which reliance was placed when making the award. If it is later determined that the contractor or subcontractor knowingly rendered an erroneous certification, the Federal Aviation Administration may direct through the Sponsor cancellation of the contract or subcontract for default at no cost to the Government.

Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by this provision. The knowledge and information of a contractor is not required to exceed that which is normally

possessed by a prudent person in the ordinary course of business dealings.

This certification concerns a matter within the jurisdiction of an agency of the United States of America and the making of a false, fictitious, or fraudulent certification may render the maker subject to prosecution under Title 18, United States Code, Section 1001.

Reference
49 CFR Part 30.13
FAA Order 5100.38

VETERAN'S PREFERENCE

In the employment of labor (except in executive, administrative, and supervisory positions), preference shall be given to Veterans of the Vietnam era and disabled veterans as defined in Section 515(c)(1) and (2) of the Airport and Airway Improvement Act of 1982. However, this preference shall apply only where the individuals are available and qualified to perform the work to which the employment relates.

Reference
Title 49 U.S.C. 47112(c)
Advisory Circular 150/5100-6d

DAVIS BACON REQUIREMENTS

1. Minimum Wages

(i) All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by the Secretary of Labor under the Copeland Act (29 CFR Part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalent thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (1)(iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR Part 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: *Provided*, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under (1)(ii) of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can easily be seen by the workers.

(ii)(A) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(2) The classification is utilized in the area by the construction industry; and

(3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(B) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, D.C. 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(C) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(D) The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs (1)(ii) (B) or (C) of this paragraph, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, *Provided*, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

2 Withholding.

The Federal Aviation Administration or the Sponsor shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to David-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any

subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of work, all or part of the wages required by the contract, the Federal Aviation Administration may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3. Payrolls and basic records.

(i) Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual costs incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(ii)(A) The contractor shall submit weekly, for each week in which any contract work is performed, a copy of all payrolls to the applicant, sponsor, or owner, as the case may be, for transmission to the Federal Aviation Administration. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under paragraph 5.5(a)(3)(i) above. This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal Stock Number 029-005-00014-1), U.S. Government Printing Office, Washington, D.C. 20402. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors.

(B) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) That the payroll for the payroll period contains the information required to be maintained under paragraph (3)(i) above and that such information is correct and complete;

(2) That each laborer and mechanic (including each helper, apprentice and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations 29 CFR Part 3;

(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(C) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph (3)(ii)(B) of this section.

(D) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 231 of Title 31 of the United States Code.

(iii) The contractor or subcontractor shall make the records required under paragraph (3)(i) of this section available for inspection, copying or transcription by authorized representatives of the Sponsor, the Federal Aviation Administration or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the Federal agency may, after written notice to the contractor, sponsor, applicant or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and Trainees.

(i) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State Apprenticeship Agency recognized by the Bureau, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually

performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Bureau of Apprenticeship and Training, or a State Apprenticeship Agency recognized by the Bureau, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) Equal Employment Opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.

5. Compliance With Copeland Act Requirements.

The contractor shall comply with the requirements of 29 CFR Part 3, which are incorporated by reference in this contract.

6. Subcontracts.

The contractor or subcontractor shall insert in any subcontracts the clauses contained in 29 CFR Part 5.5(a)(1) through (10) and such other clauses as the Federal Aviation Administration may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR Part 5.5.

7. Contract Termination: Debarment.

A breach of the contract clauses in paragraph 1 through 10 of this section may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance With Davis-Bacon and Related Act Requirements.

All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR Parts 1, 3, and 5 are herein incorporated by reference in this contract.

9. Disputes Concerning Labor Standards.

Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR Parts 5, 6 and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of Eligibility.

(i) By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

Reference
29 CFR Part 5.5
Advisory Circular 150/5100-6d

FEDERAL WAGE RATES

GENERAL DECISION NO. AZ130008 03/22/2013 AZ8

MODIFICATION NO. 3 DATED 03/22/2013

General Decision Number: AZ130008 03/22/2013 AZ8

Superseded General Decision Number: AZ20120013

State: Arizona

Construction Type: Highway

Counties: Coconino, Maricopa, Mohave, Pima, Pinal, Yavapai and Yuma Counties in Arizona.

HIGHWAY CONSTRUCTION PROJECTS

Modification Number	Publication Date
0	01/04/2013
1	01/11/2013
2	02/22/2013
3	03/22/2013

CARP0408-005 10/01/2012

	Rates	Fringes
CARPENTER (Including Cement Form Work)	$ 23.58	9.49

ENGI0428-001 01/01/2012

	Rates	Fringes
OPERATOR: Power Equipment		
Group 1	$ 19.89	9.05
Group 2	$ 23.16	9.05
Group 3	$ 24.24	9.05
Group 4	$ 25.27	9.05

POWER EQUIPMENT OPERATORS CLASSIFICATIONS:

GROUP 1: A-frame boom truck, air compressor, Beltcrete, boring bridge and texture, brakeman, concrete mixer (skip type), conductor, conveyor, cross timing and pipe float, curing machine, dinky (under 20 tons), elevator hoist (Husky and similar), firemen, forklift, generator (all), handler, highline cableway signalman, hydrographic mulcher, joint inserter, jumbo finishing machine, Kolman belt loader, machine conveyor, multiple power concrete saw, pavement breaker, power grizzly, pressure grout machine, pump, self-propelled chip spreading machine, slurry seal machine (Moto paver driver), small self-propelled compactor (with blade-backfill, ditch operation), straw blower, tractor (wheel type), tripper, tugger (single drum), welding machine, winch truck

GROUP 2:
ALL COUNTIES INCLUDING MARICOPA: Aggregate Plant, Asphalt plant Mixer, Bee Gee, Boring Machine, Concrete Pump, Concrete Mechanical Tamping-Spreading Finishing Machine,

Concrete Batch Plant, Concrete Mixer (paving & mobile), Elevating Grader (except as otherwise classified), Field Equipment Serviceman, Locomotive Engineer (including Dinky 20 tons & over), Moto-Paver, Oiler-Driver, Operating Engineer Rigger, Power Jumbo Form Setter, Road Oil Mixing Machine, Self-Propelled Compactor (with blade-grade operation), Slip Form (power driven lifting device for concrete forms), Soil Cement Road Mixing Machine, Pipe-Wrapping & Cleaning Machine (stationary or traveling), Surface Heater & Planer, Trenching Machine, Tugger (2 or more drums).

MARICOPA COUNTY ONLY: Backhoe < 1 cu yd, Motor Grader (rough), Scraper (pneumatic tired), Roller (all types asphalt), Screed, Skip Loader (all types 3<6 cu yd), Tractor (dozer, pusher-all).

GROUP 3:
ALL COUNTIES INCLUDING MARICOPA: Auto Grade Machine, Barge, Boring Machine (including Mole, Badger & similar type directional/horizontal), Crane (crawler & pneumatic 15>100 tons), Crawler type Tractor with boom attachment & slope bar, Derrick, Gradall, Heavy Duty Mechanic-Welder, Helicopter Hoist or Pilot, Highline Cableway, Mechanical Hoist, Mucking Machine, Overhead Crane, Pile Driver Engineer (portable, stationary or skid), Power Driven Ditch Lining or Ditch Trimming Machine, Remote Control Earth Moving Machine, Slip Form Paving Machine (including Gunnert, Zimmerman & similar types), Tower Crane or similar type.

MARICOPA COUNTY ONLY: Backhoe<10 cu yd, Clamshell < 10 cu yd, Concrete Pump (truck mounted with boom only), Dragline <10 cu yd, Grade Checker, Motor Grader (finish-any type power blade), Shovel < 10 cu yd.

GROUP 4: Backhoe 10 cu yd and over, Clamshell 10 cu yd and over, Crane (pneumatic or crawler 100 tons & over), Dragline 10 cu yd and over, Shovel 10 cu yd and over.

All Operators, Oilers, and Motor Crane Drivers on equipment with Booms, except concrete pumping truck booms, including Jibs, shall receive $0.01 per hour per foot over 80 ft in addition to regular rate of pay

Premium pay for performing hazardous waste removal $0.50 per hour over base rate.

IRON0075-004 01/01/2013

COCONINO, MARICOPA, MOHAVE, YAVAPAI & YUMA COUNTIES

	Rates	Fringes
Ironworker, Rebar	$ 26.52	20.65

Zone 1: 0 to 50 miles from City Hall in Phoenix or Tucson
Zone 2: 050 to 100 miles - Add $4.00

Zone 3: 100 to 150 miles - Add $5.00
Zone 4: 150 miles & over - Add $6.50

LABO0383-002 06/01/2010

	Rates	Fringes
Laborers:		
Group 1	$ 17.61	4.35
Group 2	$ 18.63	4.35
Group 3	$ 19.42	4.35
Group 4	$ 20.51	4.35
Group 5	$ 21.49	4.35

LABORERS CLASSIFICATIONS:

GROUP 1: All Counties: Chipper, Rip Rap Stoneman. Pinal County Only: General/Cleanup Laborer. Maricopa County Only: Flagger.

GROUP 2: Asphalt Laborer (Shoveling-excluding Asphalt Raker or Ironer), Bander, Cement Mason Tender, Concrete Mucker, Cutting Torch Operator, Fine Grader, Guinea Chaser, Power Type Concrete Buggy

GROUP 3: Chain Saw, Concrete Small Tools, Concrete Vibrating Machine, Cribber & Shorer (except tunnel), Hydraulic Jacks and similar tools, Operator and Tender of Pneumatic and Electric Tools (not herein separately classified), Pipe Caulker and Back-Up Man-Pipeline, Pipe Wrapper, Pneumatic Gopher, Pre-Cast Manhole Erector, Rigger and Signal Man-Pipeline

GROUP 4: Air and Water Washout Nozzleman; Bio-Filter, Pressman, Installer, Operator; Scaffold Laborer; Chuck Tender; Concrete Cutting Torch; Gunite; Hand-Guided Trencher; Jackhammer and/or Pavement Breaker; Scaler (using boson's chair or safety belt); Tamper (mechanical all types).

GROUP 5: AC Dumpman, Asbestos Abatement, Asphalt Raker II, Drill Doctor/Air Tool Repairman, Hazardous Waste Removal, Lead Abatement, Lead Pipeman, Process Piping Installer, Scaler (Driller), Pest Technician/Weed Control, Scissor Lift, Hydro Mobile Scaffold Builder.

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* PAIN0086-001 04/01/2012

	Rates	Fringes
PAINTER		
PAINTER (Yavapai County only), SAND BLASTER/WATER BLASTER (all Counties)	$ 19.35	4.75

ZONE PAY: More than 100 miles from Old Phoenix Courthouse $3.50 additional per hour.

SUAZ2009-001 04/20/2009

	Rates	Fringes
CEMENT MASON	$ 19.28	3.99
ELECTRICIAN	$ 22.84	6.48
IRONWORKER (Rebar)		
Pima County	$ 23.17	14.83
Pinal County	$ 20.27	8.35
LABORER		
Asphalt Raker	$ 15.49	3.49
Compaction Tool Operator	$ 14.59	2.91
Concrete Worker	$ 13.55	3.20
Concrete/Asphalt Saw	$ 13.95	2.58
Driller-Core, diamond, wagon, air track	$ 16.94	3.12
Dumpman Spotter	$ 14.99	3.16
Fence Builder	$ 13.28	2.99
Flagger Coconino, Mohave, Pima, Pinal, Yavapai & Yuma	$ 12.35	1.59
Formsetter	$ 16.09	3.97
General/Cleanup Laborer Coconino, Maricopa, Mohave, Pima, Yavapai & Yuma	$ 14.54	3.49
Grade Setter (Pipeline)	$ 17.83	5.45
Guard Rail Installer	$ 13.28	2.99
Landscape Laborer	$ 11.39	
Landscape Sprinkler Installer	$ 15.27	
Pipelayer	$ 14.81	2.96
Powderman, Hydrasonic	$ 16.39	2.58
OPERATOR: Power Equipment		
Asphalt Laydown Machine	$ 21.19	6.05
Backhoe < 1 cu yd Coconino, Mohave, Pima, Pinal, Yavapai & Yuma	$ 17.37	3.85
Backhoe < 10 cu yd Coconino, Mohave, Pima, Pinal, Yavapai & Yuma	$ 18.72	3.59
Clamshell < 10 cu yd Coconino, Mohave, Pima, Pinal, Yavapai & Yuma	$ 18.72	3.59
Concrete Pump (Truck Mounted with boom only) Coconino, Mohave, Pima, Pinal, Yavapai & Yuma	$ 19.92	7.10
Crane (under 15 tons)	$ 21.35	7.36
Dragline (up to 10 cu yd) Coconino, Mohave, Pima, Pinal, Yavapai & Yuma	$ 18.72	3.59
Drilling Machine (including Water Wells)	$ 20.58	5.65

Grade Checker
Coconino, Mohave, Pima,
Pinal, Yavapai & Yuma.....$ 16.04 3.68
Hydrographic Seeder.....$ 15.88 7.67
Mass Excavator.....$ 20.97 4.28
Milling Machine/Rotomill....$ 21.42 7.45
Motor Grader (Finish-any
type power blade)
Coconino, Mohave, Pima,
Pinal, Yavapai & Yuma.....$ 21.92 4.66
Motor Grader (Rough)
Coconino, Mohave, Pima,
Pinal, Yavapai & Yuma.....$ 20.07 4.13
Oiler.....$ 18.15 8.24
Power Sweeper.....$ 16.76 4.44
Roller (all types Asphalt)
Coconino, Mohave, Pima,
Pinal, Yavapai & Yuma.....$ 18.27 3.99
Roller (excluding asphalt)..$ 15.65 3.32
Scraper (pneumatic tired)
Coconino, Mohave, Pima,
Pinal, Yavapai & Yuma.....$ 17.69 3.45
Screed
Coconino, Mohave, Pima,
Pinal, Yavapai & Yuma.....$ 17.54 3.72
Shovel < 10 cu yd
Coconino, Mohave, Pima,
Pinal, Yavapai & Yuma.....$ 18.72 3.59
Skip Loader (all types <3
cu yd).....$ 18.28 5.30
Skip Loader (all types 3 <
6 cu yd)
Coconino, Mohave, Pima,
Pinal, Yavapai & Yuma.....$ 18.64 4.86
Skip Loader (all types 6 <
10 cu yd).....$ 20.15 4.52
Tractor (dozer, pusher -
all)
Coconino, Mohave, Pima,
Pinal, Yavapai & Yuma.....$ 17.26 2.65

PAINTER
Coconino, Maricopa,
Mohave, Pima, Pinal & Yuma..$ 15.57 3.92

TRUCK DRIVER
2 or 3 Axle Dump or
Flatrack.....$ 16.27 3.30
5 Axle Dump or Flatrack.....$ 13.97 2.89
6 Axle Dump or Flatrack (<
16 cu yd).....$ 17.79 6.42
Belly Dump.....$ 14.67
Oil Tanker Bootman.....$ 22.03
Self-Propelled Street
Sweeper.....$ 13.11 5.48
Water Truck 2500 < 3900
gallons.....$ 18.14 4.55
Water Truck 3900 gallons

and over.....$ 15.92 3.33
Water Truck under 2500
gallons.....$ 15.94 4.16

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is union or non-union.

Union Identifiers

An identifier enclosed in dotted lines beginning with characters other than "SU" denotes that the union classification and rate have found to be prevailing for that classification. Example: PLUM0198-005 07/01/2011. The first four letters , PLUM, indicate the international union and the four-digit number, 0198, that follows indicates the local union number or district council number where applicable , i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2011, following these characters is the effective date of the most current negotiated rate/collective bargaining agreement which would be July 1, 2011 in the above example.

Union prevailing wage rates will be updated to reflect any changes in the collective bargaining agreements governing the rates.

0000/9999: weighted union wage rates will be published annually each January.

Non-Union Identifiers

Classifications listed under an "SU" identifier were derived from survey data by computing average rates and are not union rates; however, the data used in computing these rates may

include both union and non-union data. Example: SULA2004-007 5/13/2010. SU indicates the rates are not union majority rates, LA indicates the State of Louisiana; 2004 is the year of the survey; and 007 is an internal number used in producing the wage determination. A 1993 or later date, 5/13/2010, indicates the classifications and rates under that identifier were issued as a General Wage Determination on that date.

Survey wage rates will remain in effect and will not change until a new survey is conducted.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

* an existing published wage determination
* a survey underlying a wage determination
* a Wage and Hour Division letter setting forth a position on a wage determination matter
* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

EQUAL EMPLOYMENT OPPORTUNITY - 41 CFR PART 60-1.4(b)

During the performance of this contract, the contractor agrees as follows:
1. The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

2. The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive considerations for employment without regard to race, color, religion, sex, or national origin.

3. The contractor will send to each labor union or representative of workers with which s/he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

4. The contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, as amended, and of the rules, regulations, and relevant orders of the Secretary of Labor.

5. The contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

6. In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedure authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

7. The contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provision, including sanctions for noncompliance: *Provided, however,* that in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency the contractor may request the United States to enter into such litigation to protect the interests of the United States.

Reference
Executive Order 11246
41 CFR Part 60 -1.4
AC 150/5100-15, Para. 22.a.

CERTIFICATION OF NONSEGREGATED FACILITIES - 41 CFR PART 60-1.8

(a) Notice to Prospective Federally Assisted Construction Contractors

1. A Certification of Non-segregated Facilities shall be submitted prior to the award of a federally-assisted construction contract exceeding $10,000 which is not exempt from the provisions of the Equal Opportunity Clause.

2. Contractors receiving federally-assisted construction contract awards exceeding $10,000 which are not exempt from the provisions of the Equal Opportunity Clause will be required to provide for the forwarding of the following notice to prospective subcontractors for supplies and construction contracts where the subcontracts exceed $10,000 and are not exempt from the provisions of the Equal Opportunity Clause. NOTE: The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001.

Notice to Prospective Subcontractors of Requirements for Certification of Non-Segregated Facilities

1. A Certification of Non-segregated Facilities shall be submitted prior to the award of a subcontract exceeding $10,000, which is not exempt from the provisions of the Equal Opportunity Clause.

2. Contractors receiving subcontract awards exceeding $10,000 which are not exempt from the provisions of the Equal Opportunity Clause will be required to provide for the forwarding of this notice to prospective subcontractors for supplies and construction contracts where the subcontracts exceed $10,000 and are not exempt from the provisions of the Equal Opportunity Clause. NOTE: The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001.

(i) CERTIFICATION OF NONSEGREGATED FACILITIES

The federally-assisted construction contractor certifies that she or he does not maintain or provide, for his employees, any segregated facilities at any of his establishments and that she or he does not permit his employees to perform their services at any location, under his control, where segregated facilities are maintained. The federally-assisted construction contractor certifies that she or he will not maintain or provide, for his employees, segregated facilities at any of his establishments and that she or he will not permit his employees to perform their services at any location under his control where segregated facilities are maintained. The federally-assisted construction contractor agrees that a breach of this certification is a violation of the Equal Opportunity Clause in this contract.

As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms, and washrooms, restaurants and other eating areas, timeclocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directives or are, in fact, segregated on the basis of race, color, religion, or national origin because of habit, local custom, or any other reason. The federally-assisted construction

contractor agrees that (except where she or he has obtained identical certifications from proposed subcontractors for specific time periods) she or he will obtain identical certifications from proposed subcontractors prior to the award of subcontracts exceeding $10,000 which are not exempt from the provisions of the Equal Opportunity Clause and that she or he will retain such certifications in his files.

Reference
Executive Order 11246
41 CFR Part 60 -1.8
AC 150/5100-15, Para. 22.b.

NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION - 41 CFR PART 60-2

1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.

2. The goals and timetables for minority and female participation, expressed in percentage terms for the contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

Timetables
Goals for minority participation for each trade (Vol. 45 Federal Register pg. 65984 10/3/80)
Goals for female participation in each trade (6.9%)

These goals are applicable to all the contractor's construction work (whether or not it is Federal or federally-assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its Federally involved and non-federally involved construction.

The contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training shall be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from contractor to contractor or from project to project, for the sole purpose of meeting the contractor's goals, shall be a violation of the contract, the Executive Order, and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The contractor shall provide written notification to the Director, OFCCP, within 10 working days of award of any construction subcontract in excess of $10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address, and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of subcontract; and the geographical area in which the subcontract is to be performed.

4. As used in this notice and in the contract resulting from this solicitation, the "covered area" is [insert description of the geographical areas where the contract is to be performed giving the state, county, and city, if any].

Reference
Executive Order 11246
41 CFR Parts 60 - 4
AC 150/5100-15, Para. 22.c.

STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY CONSTRUCTION CONTRACT SPECIFICATIONS - 41 CFR Part 60.4.3

1. As used in these specifications:

a. "Covered area" means the geographical area described in the solicitation from which this contract resulted;

b. "Director" means Director, Office of Federal Contract Compliance Programs (OFCCP), U.S. Department of Labor, or any person to whom the Director delegates authority;

c. "Employer identification number" means the Federal social security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941;

d. "Minority" includes:

(1) Black (all) persons having origins in any of the Black African racial groups not of Hispanic origin);

(2) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin regardless of race);

(3) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and

(4) American Indian or Alaskan native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).

2. Whenever the contractor, or any subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of $10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.

3. If the contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables)

shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors shall be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each contractor or subcontractor participating in an approved plan is individually required to comply with its obligations under the EEO clause and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other contractors or subcontractors toward a goal in an approved Plan does not excuse any covered contractor's or subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.

4. The contractor shall implement the specific affirmative action standards provided in paragraphs 18.7a through 18.7p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. Covered construction contractors performing construction work in a geographical area where they do not have a Federal or federally assisted construction contract shall apply the minority and female goals established for the geographical area where the work is being performed. Goals are published periodically in the Federal Register in notice form, and such notices may be obtained from any Office of Federal Contract Compliance Programs office or from Federal procurement contracting officers. The contractor is expected to make substantially uniform progress in meeting its goals in each craft during the period specified.

5. Neither the provisions of any collective bargaining agreement nor the failure by a union with whom the contractor has a collective bargaining agreement to refer either minorities or women shall excuse the contractor's obligations under these specifications, Executive Order 11246 or the regulations promulgated pursuant thereto.

6. In order for the non-working training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees shall be employed by the contractor during the training period and the contractor shall have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees shall be trained pursuant to training programs approved by the U.S. Department of Labor.

7. The contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The contractor shall document these efforts fully and shall implement affirmative action steps at least as extensive as the following:

a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the contractor's employees are assigned to work. The contractor, where possible, will assign two or more women to each construction project. The contractor shall specifically ensure that all foremen, superintendents, and other onsite supervisory personnel are aware of and carry out the contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.

b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.

c. Maintain a current file of the names, addresses, and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source, or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the contractor by the union or, if referred, not employed by the contractor, this shall be documented in the file with the reason therefore along with whatever additional actions the contractor may have taken.

d. Provide immediate written notification to the Director when the union or unions with which the contractor has a collective bargaining agreement has not referred to the contractor a minority person or female sent by the contractor, or when the contractor has other information that the union referral process has impeded the contractor's efforts to meet its obligations.

e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the contractor's employment needs, especially those programs funded or approved by the Department of Labor. The contractor shall provide notice of these programs to the sources compiled under 7b above.

f. Disseminate the contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.

g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination, or other employment decisions including specific review of these items with onsite supervisory personnel such a superintendents, general foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.

h. Disseminate the contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the contractor's EEO policy with other contractors and subcontractors with whom the contractor does or anticipates doing business.

i. Direct its recruitment efforts, both oral and written, to minority, female, and community organizations, to schools with minority and female students; and to minority and female recruitment and training organizations serving the contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the contractor shall send written notification to organizations,

such as the above, describing the openings, screening procedures, and tests to be used in the selection process.

j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable provide after school, summer, and vacation employment to minority and female youth both on the site and in other areas of a contractor's workforce.

k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.

l. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel, for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.

m. Ensure that seniority practices, job classifications, work assignments, and other personnel practices do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the contractor's obligations under these specifications are being carried out.

n. Ensure that all facilities and company activities are non-segregated except that separate or single user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.

o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.

p. Conduct a review, at least annually, of all supervisor's adherence to and performance under the contractor's EEO policies and affirmative action obligations.

8. Contractors are encouraged to participate in voluntary associations, which assist in fulfilling one or more of their affirmative action obligations (18.7a through 18.7p). The efforts of a contractor association, joint contractor union, contractor community, or other similar groups of which the contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 18.7a through 18.7p of these specifications provided that the contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the contractor's minority and female workforce participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the contractor. The obligation to comply, however, is the contractor's and failure of such a group to fulfill an obligation shall not be a defense for the contractor's noncompliance.

9. A single goal for minorities and a separate single goal for women have been established. The contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, if the particular group is employed in a substantially disparate manner (for example, even though the contractor has achieved its goals for women generally,) the contractor may be in violation of the Executive Order if a specific minority group of women is underutilized.

10. The contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.

11. The contractor shall not enter into any subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.

12. The contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination, and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.

13. The contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 18.7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.

14. The contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government, and to keep records. Records shall at least include for each employee, the name, address, telephone number, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.

15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

Reference
Executive Order 11246
41 CFR Parts 60 – 4.3
AC 150/5100-15, Para. 22.c.

TERMINATION OF CONTRACT

a. The Sponsor may, by written notice, terminate this contract in whole or in part at any time, either for the Sponsor's convenience or because of failure to fulfill the contract obligations. Upon receipt of such notice services shall be immediately discontinued (unless the notice directs otherwise) and all materials as may have been accumulated in performing this contract, whether completed or in progress, delivered to the Sponsor.

b. If the termination is for the convenience of the Sponsor, an equitable adjustment in the contract price shall be made, but no amount shall be allowed for anticipated profit on

unperformed services.

c. If the termination is due to failure to fulfill the contractor's obligations, the Sponsor may take over the work and prosecute the same to completion by contract or otherwise. In such case, the contractor shall be liable to the Sponsor for any additional cost occasioned to the Sponsor thereby.

d. If, after notice of termination for failure to fulfill contract obligations, it is determined that the contractor had not so failed, the termination shall be deemed to have been effected for the convenience of the Sponsor. In such event, adjustment in the contract price shall be made as provided in paragraph 2 of this clause.

e. The rights and remedies of the sponsor provided in this clause are in addition to any other rights and remedies provided by law or under this contract.

Reference
49 CFR Part 18.36(i)(2)
FAA Order 5100.38

CERTIFICATION REGARDING DEBARMENT AND SUSPENSION (NON-PROCUREMENT) – TITLE 2 CFR PART 180 & TITLE 2 CFR PART 1200

The contract agreement that ultimately results from this solicitation is a "covered transaction" as defined by Title 2 CFR Part 180. Bidder must certify at the time they submit their proposal that neither it nor its principals are presently debarred or suspended by any Federal department or agency from participation in this transaction. The bidder with the successful bid further agrees to comply with Title 2 CFR Part 1200 and Title 2 CFR Part 180, Subpart C by administering each lower tier subcontract that exceeds $25,000 as a "covered transaction".

CERTIFICATION REGARDING DEBARMENT AND SUSPENSION (NON-PROCUREMENT) – TITLE 2 CFR PART 1200 AND TITLE 2 CFR PART 180, SUBPART C

The successful bidder by administering each lower tier subcontract that exceeds $25,000 as a "covered transaction" must verify each lower tier participant of a "covered transaction" under the project is not presently debarred or otherwise disqualified from participation in this federally assisted project. The successful bidder shall accomplish this by:

i. Checking the System for Award Management at website: http://www.sam.gov
ii. Collecting a certification statement similar to paragraph (a)
iii. Inserting a clause or condition in the covered transaction with the lower tier contract

If the FAA later determines that an individual failed to tell a higher tier that they were excluded or disqualified at the time they entered the covered transaction with that person, the FAA may pursue any available remedy, including suspension and debarment.

Reference
Title 2 CFR Part 180 (Subpart C)
Title 2 CFR Part 1200
DOT Order 4200.5 DOT Suspension & Debarment Procedures & Ineligibility

CONTRACT WORKHOURS AND SAFETY STANDARDS ACT REQUIREMENTS 29 CFR PART 5

1. Overtime Requirements.

   No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic, including watchmen and guards, in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

2. Violation; Liability for Unpaid Wages; Liquidated Damages.

   In the event of any violation of the clause set forth in paragraph (1) above, the contractor and any subcontractor responsible therefore shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph 1 above, in the sum of $10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph 1 above.

2. Withholding for Unpaid Wages and Liquidated Damages.

   The Federal Aviation Administration or the Sponsor shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any monies payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph 2 above.

3. Subcontractors.

   The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraphs 1 through 4 and also a clause requiring the subcontractor to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs 1 through 4 of this section.

Reference

29 CFR Part 5.5
Advisory Circular 150/5100-6d

CLEAN AIR AND WATER POLLUTION CONTROL

Contractors and subcontractors agree:

a. That any facility to be used in the performance of the contract or subcontract or to benefit from the contract is not listed on the Environmental Protection Agency (EPA) List of Violating Facilities;

b. To comply with all the requirements of Section 114 of the Clean Air Act, as amended, 42 U.S.C. 1857 et seq. and Section 308 of the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq. relating to inspection, monitoring, entry, reports, and information, as well as all other requirements specified in Section 114 and Section 308 of the Acts, respectively, and all other regulations and guidelines issued thereunder;

c. That, as a condition for the award of this contract, the contractor or subcontractor will notify the awarding official of the receipt of any communication from the EPA indicating that a facility to be used for the performance of or benefit from the contract is under consideration to be listed on the EPA List of Violating Facilities;

d. To include or cause to be included in any construction contract or subcontract which exceeds $ 100,000 the aforementioned criteria and requirements.

Reference

49 CFR Part 18.36(i)(12)
Section 306 of the Clean Air Act
Section 508 of the Clean Water Act

EXHIBIT E

CIVIL TECHNICAL SPECIFICATIONS

Flagstaff Pulliam Airport
Westplex Taxilane Reconstruction

CIVIL TECHNICAL SPECIFICATIONS

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ITEM P-100 CONTRACTOR QUALITY CONTROL

DESCRIPTION

100-1.1 GENERAL. This item shall consist of all work necessary to ensure quality control of the Contractor's work during construction in accordance the Civil Specifications.

The Contractor shall be responsible to conduct all quality control testing and inspections as indicated in the these specifications, and for each pay item, as well as any other test or inspection not specifically listed, but necessary to adequately control the work to the satisfaction of the City of Flagstaff. Although guidelines are established and certain minimum requirements are specified herein and elsewhere in the contract technical specifications, the Contractor shall assume full responsibility for accomplishing the stated purpose.

The Contractor shall submit his plan for Quality Control Testing and Inspection as required per this specification for review and approval to the Engineer at least five (5) working days prior to the pre-construction conference.

The quality control requirements contained in this section and elsewhere in the contract technical specifications are in addition to and separate from the acceptance testing requirements. Acceptance testing requirements are the responsibility of the Engineer.

100-1.2 DESCRIPTION OF PROGRAM.

a. **General Description.** The Contractor shall establish a Quality Control Program to perform inspection and testing of all items of work required by the technical specifications, including those performed by subcontractors. This Quality Control Program shall ensure conformance to applicable specifications and plans with respect to materials, workmanship, construction, finish, and functional performance. The Quality Control Program shall be effective for control of all construction work performed under this Contract and shall specifically include surveillance and tests required by the technical specifications, in addition to other requirements of this section and any other activities deemed necessary by the Contractor to establish an effective level of quality control.

b. **Quality Control Program.** The Contractor shall describe the Quality Control Program in a written document that shall be reviewed by the Engineer prior to the start of any production, construction, or off-site fabrication. The written Quality Control Program shall be submitted to the Engineer for review at least 5 calendar days before the pre-construction conference.

The Quality Control Program shall be organized to address, as a minimum, the following items:

a. Quality control organization;
b. Project progress schedule;
c. Submittals schedule;
d. Inspection requirements;
e. Quality control testing;
f. Documentation of quality control activities, and;
g. Requirements for corrective action when quality control and/or acceptance criteria are not met.

The Contractor is encouraged to add any additional elements to the Quality Control Program that he/she deems necessary to adequately control all production and/or construction processes required by this contract.

100-1.3 QUALITY CONTROL ORGANIZATION. The Contractor Quality Control Program shall be implemented through the Contractor's quality control organization.

100-1.4 PROJECT PROGRESS SCHEDULE. The Contractor shall submit a coordinated construction schedule for all work activities. The schedule shall be prepared as a network diagram in Critical Path Method (CPM), PERT, or other format, or as otherwise specified in the contract. As a minimum, it shall provide information on the sequence of work activities, milestone dates, and activity duration.

The Contractor shall maintain the work schedule and provide an update and analysis of the progress schedule on a twice monthly basis, or as otherwise specified in the contract. Submission of the work schedule shall not relieve the Contractor of overall responsibility for scheduling, sequencing, and coordinating all work to comply with the requirements of the contract.

100-1.5 SUBMITTALS SCHEDULE. The Contractor shall submit a detailed listing of all submittals (e.g., mix designs, material certifications) and shop drawings required by the technical specifications. The listing can be developed in a spreadsheet format and shall include:

a. Specification item number;
b. Item description;
c. Description of submittal;
d. Specification paragraph requiring submittal; and
e. Scheduled date of submittal.

100-1.6 INSPECTION REQUIREMENTS. Quality control inspection functions shall be organized to provide inspections for all definable features of work, as detailed below. All inspections shall be documented by the Contractor as specified by Section 100-07.

Inspections shall be performed daily to ensure continuing compliance with contract requirements until completion of the particular feature of work. These shall include the following minimum requirements:

a. For material production, quality control test results and periodic inspections shall be utilized to ensure the quality of aggregates and other mix components, and to adjust and control mix proportioning to meet the approved mix design and other requirements of the technical specifications. All equipment utilized in proportioning and mixing shall be inspected to ensure its proper operating condition. The Quality Control Program shall detail how these and other quality control functions will be accomplished and utilized.

b. During field operations, quality control test results and periodic inspections shall be utilized to ensure the quality of all materials and workmanship. All equipment utilized in placing, finishing, and compacting shall be inspected to ensure its proper operating condition and to ensure that all such operations are in conformance to the technical specifications and are within the plan dimensions, lines, grades, and tolerances specified.

The Program shall document how these and other quality control functions will be accomplished and utilized.

100-1.7 DOCUMENTATION. The Contractor shall maintain current quality control records of all inspections and tests performed. These records shall include factual evidence that the required inspections or tests have been performed, including type and number of inspections or tests involved; results of inspections or tests; nature of defects, deviations, causes for rejection, etc.; proposed remedial action; and corrective actions taken.

These records must cover both conforming and defective or deficient features, and must include a statement that all supplies and materials incorporated in the work are in full compliance with the terms of the contract. Legible copies of these records shall be furnished to the Engineer daily. The records shall cover all work placed subsequent to the previously furnished records and shall be verified and signed by the Contractor's Program Administrator.

100-1.8 SURVEILLANCE BY THE ENGINEER. All items of material and equipment shall be subject to surveillance by the Engineer at the point of production, manufacture or shipment to determine if the Contractor, producer, manufacturer or shipper maintains an adequate quality control system in conformance with the requirements detailed herein and the applicable technical specifications and plans. In addition, all items of materials, equipment and work in place shall be subject to surveillance by the Engineer at the site for the same purpose.

Surveillance by the Engineer does not relieve the Contractor of performing quality control inspections of either on-site or off-site Contractor's or subcontractor's work.

100-1.9 NONCOMPLIANCE.

a. The Engineer will notify the Contractor of any noncompliance with any of the foregoing requirements. The Contractor shall, after receipt of such notice, immediately take corrective action. Any notice, when delivered by the Engineer or his/her authorized representative to the Contractor or his/her authorized representative at the site of the work, shall be considered sufficient notice.

b. In cases where quality control activities do not comply with either the Contractor Quality Control Program or the contract provisions, or where the Contractor fails to properly operate and maintain an effective Quality Control Program, as determined by the Engineer, the Engineer may:

(1) Order the Contractor to replace ineffective or unqualified quality control personnel or subcontractors.

(2) Order the Contractor to stop operations until appropriate corrective actions are taken.

METHOD OF MEASUREMENT

100-2.1 GENERAL. Contractor Quality Control shall be measured for payment by the lump sum as a single complete unit of work.

BASIS OF PAYMENT

100-3.1 Payment for the performance of the Contractor Quality Control work as specified above will be made at the contract lump sum price for the item Mobilization/Demobilization. The costs for work under this item include furnishing all technicians, inspectors, testing equipment and field vehicles.

Payment will be made under;

Item P-100 Contractor Quality Control – per Lump Sum

END OF ITEM P-100

ITEM P-101 MOBILIZATION/DEMOBILIZATION

DESCRIPTION

101-1.1 GENERAL. Mobilization/Demobilization shall consist of preparatory work and operations, including but not limited to, furnishing, installing, locating of staging area(s), temporary utilities, the movement of personnel, equipment, materials, supplies and incidentals to the project site, and for transportation of quality control personnel, laboratory field testing equipment and tools, testing supplies, barricades, haul roads and other facilities necessary to complete the work on the project including. This item is for other work and operations that the Contractor must perform or costs he must incur before beginning work on the project, and for necessary work and costs in completing the construction and demobilizing from the site.

Demobilization costs will include, but not be limit to: removal of temporary utilities to the staging area(s) removal of temporary field offices, materials, barricades, equipment and the clean up and restoration of the construction staging area(s).

101-2.1 STAGING AREAS LOCATIONS. The proposed staging area location is shown on the plans. These areas may be used for the Contractor's operations, and at the Contractor's option. The staging shall be kept in a neat and orderly condition at all times. Stockpiled materials in the staging area(s) shall be kept below all Federal Aviation Requirements.

Equipment shall only be parked in retracted and lowered condition. The Engineer reserves the right to direct the Contractor to correct any deficiencies in the maintenance of the staging yard and the Contractor shall promptly comply with the directives of the Engineer.

101-2.2 SPECIAL REQUIREMENTS OF STAGING AREA(S). Due to the close proximity of the airport and the traveling public, the following special requirements shall be adhered to:

a. **Temporary Security Fencing and Gates.** At the Contractor's option, the staging area(s) may be secured with chain link fence and gates.

b. **Obstruction Lighting**. Equipment of significant height shall be required to have red obstruction lights provided and maintained by the Contractor. The red obstruction lights shall be 100-watt fixtures, with 360-degreee beam spread, in compliance with the Federal Aviation Administration (FAA) specification AC 150/5345-43, L-810.

c. **Dust Control.** The Contractor shall use all measures to control dust from equipment, and storage piles. Uncontrolled dust from the staging areas shall be grounds for suspension of operation until remedial measures are undertaken. The Contractor shall address dust control of the staging area in the dust control plan prior to commencing operations. Sweeping equipment must be equipped and maintained by the Contractor such that excessive dust is not emitted while operating.

d. **Protection and Restoration of Staging Area.** The Contractor shall be responsible for all damage or injury to property of any character. The Contractor shall protect all existing utilities, fencing, and other facilities at the Airport.

e. **Mobile Telephones.** The Contractor's and each subcontractor's on-site superintendent, and foremen shall have mobile telephones. The mobile telephone numbers shall be provided to the Airport Manager and the Engineer.

101-2.3 BARRICADES. For each phase of the project, the contractor shall delineate the area of work as shown on the plans with low profile barricades. The barricades shall be placed so that they do not violate the Taxiway Safety Area as defined by the FAA advisory Circular AC150/5300-13. Barricades shall be of the type as shown on the plans.

METHOD OF MEASUREMENT

101-3.1 Mobilization/Demobilization shall be measured for payment by the lump sum as a single complete unit of work.

BASIS OF PAYMENT

101-4.1 Payment for the performance of the Mobilization/Demobilization work as specified above will be made at the contract lump sum price for the item Mobilization/Demobilization. Mobilization/Demobilization shall not exceed eight (8) percent of the total amount bid for each Schedule awarded.

This item shall include the movement of all personnel, all equipment, the establishment of all haul roads, temporary utilities for the staging area and temporary utilities, restoration and protection of the site(s), safety, providing and for maintaining temporary security fence and gates. Partial payments under this item will be made in accordance with the provisions of Table 1.

TABLE 1 – Payment Schedule for Mobilization/Demobilization

Mobilization/ Demobilization Payment Number	Percent Payment	Partial Payment Requirements
1	25% of Lump Sum Amount	After the pre-construction conference provided that submissions required are provided to the satisfaction of the Engineer and the Engineer Field Office are functional with equipment and supplies and the Critical Path Method schedule has been submitted. The first payment for mobilization/ demobilization shall be contingent upon the Engineer receiving the Quality Control Program at least five (5) working days before the pre-construction conference.
2	25% of Lump Sum Amount	When the Engineer has determined that a significant amount of equipment has been mobilized to the project site which will be used to perform the Contract work. The second payment for mobilization/ demobilization shall be contingent upon the Contractor submitting the revised Quality Control Program to the Engineer for review and approval.
3	25% of Lump Sum Amount	On the first progress payment application following completion of five (5) percent of the bid amount.
4	25% of Lump Sum Amount	On the first progress payment application following completion of ten (10) percent of the bid amount.

Payment will be made under:

Item P-101.1	Mobilization/Demobilization (Not to Exceed 5% each schedule awarded) – per lump sum

END OF ITEM P-101

ITEM P-104 REMOVAL OF BITUMINOUS PAVEMENTS

DESCRIPTION

104-1.1 This item shall consist of saw cutting and the removal of asphaltic concrete partial depth or full depth, and the temporary storage of the millings for placement as subbase.

MATERIALS

104-2.1 All other materials used in conjunction with this work shall be furnished by the Contractor and will be considered incidental to these P-104 items.

CONSTRUCTION METHODS

104-3.1 GENERAL. The removal of existing structures and utilities required to permit orderly progress of work shall be accomplished by the Contractor, unless otherwise shown on the plans.

All materials and debris which are to be discarded shall be disposed of by the Contractor to an off-site location (landfill) and in accordance with Local, State, and Federal Rules, Regulations, and Laws.

Upon removal, the remaining site and/or materials shall be compacted in accordance with Item P-152 and restored to as near as the original condition as can be determined or as shown on the plans.

104-3.2 PAVEMENT MILLING. All asphaltic concrete pavement and/or bituminous pavement shall be removed by milling in accordance with these specifications and in conformity with the lines, grades, and typical sections as shown on the plans or as designated by the Engineer. All milled pavement shall not exceed a maximum gradation of two and one half (2½) inches particle diameter.

The equipment for removing the pavement shall be a commercially designated and manufactured machine capable of performing the work in a manner satisfactory to the Engineer. The machine(s) shall be power-operated and self-propelled, and shall be sufficient power, traction and stability to remove a thickness of bituminous surface to a specified depth, and provide a uniform profile and cross slope.

The machine shall have an automatic system for controlling grade elevation and cross slope. The machine shall be equipped with a means to effectively control dust generated by the milling operation.

The surface resulting from the milling operation shall be in accordance with the plan grades, and shall be characterized by uniform, continuous longitudinal striations or other uniform patterns and shall not be gouged or torn.

104-3.3 PAVEMENT SAW CUTTING. Existing asphalt and PCCP pavement to be removed shall be saw cut by a device capable of making a neat, straight, smooth and vertical cut without damaging adjacent pavement that is not to be removed. The Engineer's decision as to the acceptability of the cutting device and manner of operation will be final. Pavement saw cutting shall be required at match lines to existing pavement that is to remain, per section 104-3.5 below.

104-3.4 PAVEMENT REMOVAL. Pavement to be removed shall be saw cut from adjoining pavement and removed by milling and stored for placement, as subbase.

The Contractor shall use care when removing existing pavement adjacent to pavement that is proposed to remain, such that lower-paving courses will not "slough" or be disturbed. If lower paving courses, such as aggregate base courses, select base courses or native materials are being disturbed at the pavement match line, the Contractor will be required to repair the existing pavement(s) to the satisfaction of the Engineer and at no additional cost to the City of Flagstaff.

104-3.5 PAVEMENT MATCHING. Existing asphalt pavements that are to be matched shall be trimmed to a neat true line, with straight vertical edges free from irregularities using a saw specifically designed for this purpose.

a. Matching Asphalt Pavement. The existing asphalt pavement trimmed shall be cut and be painted with a coating of asphalt cement or emulsified asphalt immediately prior to constructing the new bituminous base or surface course. No extra payment will be provided for these items and all costs incurred in performing this work shall be incidental to those items for which direct payment is made.

104-3.6 ADJOINING PAVEMENTS DESIGNATED TO REMAIN. The matching edge of all existing pavements designated to remain shall be saw cut in a straight and true line. The saw cut edge shall be protected from damage until the finished surface has been completed. Edges which are damaged in the opinion of the Engineer, shall be re-sawn the entire length of the matching joint prior to placing the finished surface. Objects, surfaces and items including the underground utilities designated to remain shall be carefully avoided and left undisturbed. Any damage to these items shall be the responsibility of the Contractor, and shall be corrected to the satisfaction of the Engineer and at no additional cost to the City of Flagstaff.

CONTRACTOR QUALITY CONTROL

104-4.1 QUALITY CONTROL PROGRAM. The Contractor shall develop a Quality Control Program in accordance with Item P-100 of the Civil Technical Specifications. The program shall address all elements that effect the quality of the pavement to be milled, including, but not limited to:

a. Maximum gradation of the milled material;
b. Fugitive dust control from the milling operation, and;
c. Inspection and testing of placement and compaction of materials stated in Item P-104;
d. Inspection, documentation and corrective action for saw cut irregularities.

104-4.2 CORRECTIVE ACTION. The Quality Control Plan shall indicate that appropriate action shall be taken when the milling process is believed to be out of tolerance. The Plan shall contain a set of rules to gauge when a process is out of control and detail what action will be taken to bring the process into control. As a minimum, correction action shall be taken when the following conditions are determined:

a. Gradation of Milled Asphalt. When the maximum size gradation exceeds 2½-inches, the Contractor shall make the appropriate adjustments to effectively control the gradation.
b. Fugitive Dust. The Contractor shall supply and operate all necessary equipment and personnel to meet the requirements for dust control. The Contractor shall document dust control procedures in the daily Quality Control reports.

c. **Saw Cut Irregularities.** The Contractor shall supply and operate all necessary equipment and personnel to meet the requirements for saw cutting such that the asphalt is trimmed to a neat true line, with straight vertical edges free from irregularities using a saw specifically designed for this purpose. The Contractor shall document saw cut procedures in the daily Quality Control Reports.

METHOD OF MEASUREMENT

104-5.1 Measurement for Bituminous Pavement Removal (by milling full depth) shall be the number of square yards completed in conformance with these specifications. Measurement for various depths or thicknesses shall not be made for the miscellaneous bituminous pavement removed by milling. Measurement shall be calculated to the nearest square yard.

104-5.2 Measurement for Saw Cut Asphalt Concrete (Full Depth) shall be made by the number of linear feet, completed in conformance with these specifications. Measurement shall be made to the nearest foot.

104-5.3 Measurement for Tie-Down Removal shall be the number of tie-downs removed.

ITEM P-152 EXCAVATION AND EMBANKMENT

DESCRIPTION

152-1.1 This item covers excavation, disposal, placement, and compaction of all materials within the limits of the work required to construct taxiways, taxi lanes and aprons, as well as other areas for drainage, or other purposes in accordance with these specifications and in conformity to the dimensions and typical section shown on the plans.

152-1.2 CLASSIFICATION. All material excavated shall be classified as defined below:

a. Unclassified Excavation. Unclassified excavation shall consist of the excavation, incorporation of excavated material into embankments, compaction of soils in excavated areas, and disposal of all excess material, regardless of its nature, which is not otherwise classified and paid for under the following items.

b. Unsuitable Excavation. Unsuitable excavation shall consist of the excavation backfill with replacement material and disposal of all material unsuitable for embankment construction.
Any material containing vegetable or organic matter, such as muck, peat, organic silt, or sod shall be considered unsuitable for use in embankment construction. Fat clays shall be considered unsuitable for embankment construction or pavement subgrades. Material, when approved by the Engineer as suitable to support vegetation, may be used on the embankment slope. Unsuitable material above subgrade elevation will be considered and paid for as unclassified excavation, but may not be used for embankment construction elsewhere..

152-1.4 Definitions. For this specification, cohesive soils shall be classified as all fine-grained soils that posess a bonding or attraction between particles which creates shear strength within the soil (ie. that have cohesion). All other soils shall be classified as non-cohesive soils.

CONSTRUCTION METHODS

152-2.1 General. Before beginning excavation, grading, and embankment operations in any area, the area shall be completely cleared and grubbed, if necessary.

The suitability of material to be placed in embankments shall be subject to approval by the Engineer. All unsuitable material shall be disposed of off airport property unless otherwise approved by the Engineer

When the Contractor's excavating operations encounter artifacts of historical or archaeological significance, the operations shall be temporarily discontinued. At the direction of the Engineer, the Contractor shall excavate the site in such a manner as to preserve the artifacts encountered and allow for their removal. Such excavation will be paid for as extra work.

Those areas outside of the pavement areas in which the top layer of soil material has become compacted, by hauling or other activities of the Contractor shall be scarified and disked to a depth of 4 inches (100 mm), in order to loosen and pulverize the soil.

If it is necessary to interrupt existing surface drainage, sewers or under-drainage, conduits, utilities, or similar underground structures the Contractor shall be responsible for and shall take all necessary precautions to preserve them or provide temporary services. When such facilities are encountered, the Contractor shall notify the Engineer, who shall arrange for their removal if necessary. The Contractor shall, at his/her own expense, satisfactorily repair or pay the cost of all damage to such facilities or structures which may result from any of the Contractor's operations during the period of the contract.

152-2.2 EXCAVATION. No excavation shall be started until the work has been staked out by the Contractor and approved by the Engineer. All suitable excavated material shall be used in the formation of embankment, subgrade, or for other purposes shown on the plans. All unsuitable material, or excess suitable material, shall be disposed of off airport property.

When the volume of the excavation exceeds that required to construct the embankments to the grades indicated, the excess shall be disposed off-site. When the volume of excavation is not sufficient for constructing the fill to the grades indicated, the deficiency shall be obtained from on-site borrow areas.

The grade shall be maintained so that the surface is well drained at all times. When necessary, temporary drains and drainage ditches shall be installed to intercept or divert surface water which may affect the work. No additional compensation or contract time shall be awarded for the removal, manipulation, drying, or rehandling of material saturated due to a failure by the Contractor to protect the area affected.

a. Selective Grading. When selective grading is indicated on the plans, the more suitable material as designated by the Engineer shall be used in constructing the embankment or in capping the pavement subgrade. If, at the time of excavation, it is not possible to place this material in its final location, it shall be stockpiled in approved areas. Rehandling of material shall be considered incidental to construction.

b. Undercutting. Rock, shale, hardpan, loose rock, boulders, or other similar material unsatisfactory for runway and taxiway safety areas, roads, shoulders, or any areas intended for turfing shall be excavated to a minimum depth of 4 inches (300 mm), or to the depth specified on the plans or by the Engineer, below the subgrade. Unsuitable materials shall be disposed of off airport property. This excavated material shall be paid for at the contract unit price per cubic yard for unclassified excavation. The excavated area shall be refilled with suitable material, obtained from the grading operations. The necessary refilling will constitute a part of the embankment. Any pockets created in the rock surface shall be drained.

c. Overbreak. Overbreak, including slides, is that portion of any material displaced or loosened beyond the finished work as planned or authorized by the Engineer. The Engineer shall determine if the displacement of such material was unavoidable and his/her decision shall be final. All overbreak shall be graded or removed by the Contractor and disposed of as directed; however, payment will not be made for the removal and disposal of overbreak which the Engineer determines as avoidable. Unavoidable overbreak will be classified as ``Unclassified Excavation."

d. Removal of Utilities. The removal of existing drainage structures, drainage pipe, and utilities required to permit–the orderly progress of work will be accomplished by the Contractor—unless otherwise shown on the plans. All existing foundations shall be excavated for at least 2 feet (60 cm) below the top of subgrade or as indicated on the

plans. All materials must be removed from airport property. All foundations thus excavated and utility trenches shall be backfilled with suitable material and compacted as specified herein.

e. Unsuitable Material Removal. When unsuitable material is encountered at pavement subgrade in cut areas, where deflection or “pumping” is observed after the preparation of subgrade has been completed, in accordance with Section 152-2.7, or in areas directed by the Engineer, this material shall be removed to a depth of twelve (12”) inches and replaced with 3” to 6” (2 lifts of material may be needed) uniformly graded angular stone. Removal and replacement of this material shall be paid for under the item “Unsuitable Excavation”. This stone shall be compacted with a minimum of three (3) passes of a five (5) ton steel wheel roller. After the three passes are complete, the Engineer shall examine the backfill to determine acceptance. Additional rolling may be required at the sole discretion of the Engineer. Sound rock obtained from excavation may be used as replacement material if processed to meet grading requirements.

Unsuitable Material to be removed shall be determined in the field by the Engineer. Removal shall be only with the written instruction of the Engineer. The quantity of the unsuitable material removal and replacement in the proposal is an estimate based in part on the geotechnical investigation. This quantity, and unit price, shall not be deemed a major contract item. The Contractor agrees to accept payment for quantity alterations as if the altered work had been part of the original contract.

Unsuitable material may be deemed suitable for use in other construction areas within the project.

f. Compaction Requirements. Compaction shall be performed in accordance with Section 152-2.6.

In cuts, all loose or protruding rocks on the back slopes shall be bared loose or otherwise removed to line of finished grade of slope. All cut-and-fill slopes shall be uniformly dressed to the slope, cross section, and alignment shown on the plans or as directed by the Engineer.

Blasting will be permitted only when proper precautions are taken for the safety of all persons, the work, and the property. All damage done to the work or property shall be repaired at the Contractor's expense. All operations of the Contractor in connection with the transportation, storage, and use of explosives shall conform to all state and local regulations and explosive manufacturers' instructions, with applicable approved permits reviewed by the Engineer. Any approval given, however, will not relieve the Contractor of his/her responsibility in blasting operations.

Where blasting is approved, the Contractor shall employ a vibration consultant, approved by the Engineer, to advise on explosive charge weights per delay and to analyze records from seismograph recordings. The seismograph shall be capable of producing a permanent record of the three components of the motion in terms of particle velocity, and in addition shall be capable of internal dynamic calibration.

In each distinct blasting area, where pertinent factors affecting blast vibrations and their effects in the area remain the same, the Contractor shall submit a blasting plan of the initial blasts to the Engineer for approval. This plan must consist of hole size, depth, spacing, burden, type of explosives, type of delay sequence, maximum amount of

explosive on any one delay period, depth of rock, and depth of overburden if any. The maximum explosive charge weights per delay included in the plan shall not be increased without the approval of the Engineer.

The Contractor shall keep a record of each blast fired--its date, time and location; the amount of explosives used, maximum explosive charge weight per delay period, and, where necessary, seismograph records identified by instrument number and location.

These records shall be made available to the Engineer on a monthly basis or in tabulated form at other times as required.

Blasting shall be performed in accordance with section 70-09 of the General Provisions.

Prior to blasting, the Engineer shall notify the control tower personnel to close the runway and all taxiways. These pavements shall remain closed until all pavements are inspected for fly rock and damage.

152-2.3 BORROW EXCAVATION. Borrow area(s) if required within the airport property are indicated on the plans. Borrow excavation shall be made only at these designated locations and within the horizontal and vertical limits as staked or as directed.

When borrow sources are outside the boundaries of the airport property, it shall be the Contractor's responsibility to locate and obtain the supply, subject to the approval of the Engineer. The Contractor shall notify the Engineer, at least 15 days prior to beginning the excavation, so necessary measurements and tests can be made. All unsuitable material shall be disposed of by the Contractor. All borrow pits shall be opened up to expose the vertical face of various strata of acceptable material to enable obtaining a uniform product. Borrow pits shall be excavated to regular lines to permit accurate measurements, and they shall be drained and left in a neat, presentable condition with all slopes dressed uniformly, and revegetated in accordance with T-901.

152-2.4 DRAINAGE EXCAVATION. Drainage excavation shall consist of excavating for drainage ditches such as intercepting, inlet or outlet, for temporary levee construction; or for any other type as designed or as shown on the plans. The work shall be performed in the proper sequence with the other construction. All satisfactory material shall be placed in fills; unsuitable material shall be disposed of offsite or as directed. Intercepting ditches shall be constructed prior to starting adjacent excavation operations. All necessary work shall be performed to secure a finish true to line, elevation, and cross section.

The Contractor shall maintain ditches constructed on the project to the required cross section and shall keep them free of debris or obstructions until the project is accepted. Excavation and backfill required for drainage excavation and backfill for pipes and drainage structures shall be incidental to that respective item.

152-2.5 PREPARATION OF EMBANKMENT AREA. Where an embankment is to be constructed, all sod and vegetable matter shall be removed from the surface upon which the embankment is to be placed, and the cleared surface shall be completely broken up by plowing or scarifying to a minimum depth of 8 inches (200 mm), moisture conditioned to within 2 percent of optimum and recompacted to a minimum of 100 percent of the maximum density as determined by ASTM D698.

Where embankments are to be placed on natural slopes steeper than 5 to 1, horizontal benches

shall be constructed to reduce the potential for slippage between existing slopes and fills. Benches should be level and wide enough to accommodate compaction and earth moving equipment. Prior to the start of construction, the Contractor shall submit a bench detail for approval by the Engineer. No bench excavation shall be measured for payment. It shall be considered incidental to embankment construction.

No direct payment shall be made for the work performed under this section. The necessary clearing and grubbing will be paid for under the respective items of work.

152-2.6 FORMATION OF EMBANKMENTS. Embankments shall be formed in successive horizontal layers of not more than 8 inches (200 mm) in loose depth for the full width of the cross section, unless otherwise approved by the Engineer.

The grading operations shall be conducted, and the various soil strata shall be placed, to produce a soil structure as shown on the typical cross section or as directed. Materials such as brush, hedge, roots, stumps, grass and other organic matter, shall not be incorporated or buried in the embankment.

Operations on earthwork shall be suspended at any time when satisfactory results cannot be obtained because of rain, freezing, or other unsatisfactory conditions of the field. The Contractor shall drag, blade, or slope the embankment to provide proper surface drainage.

The material in the layer shall be 0 to -2% of optimum moisture content before rolling to obtain the prescribed compaction. In order to achieve a uniform moisture content throughout the layer, wetting or drying of the material and manipulation shall be required when necessary. Should the material be too wet to permit proper compaction or rolling, all work on all of the affected portions of the embankment shall be delayed until the material has dried to the required moisture content. Sprinkling of dry material to obtain the proper moisture content shall be done with approved equipment that will sufficiently distribute the water. Sufficient equipment to furnish the required water shall be available at all times. Samples of all embankment materials for testing, both before and after placement and compaction, will be taken for each 1000 cubic yards of material placed per layer. Based on these tests, the Contractor shall make the necessary corrections and adjustments in methods, materials or moisture content in order to achieve the correct embankment density.

Rolling operations shall be continued until the embankment is compacted to not less than 95 percent of maximum density from finished grade to 10 feet below finished grade and to not less than 100 percent of maximum density below a depth of 10 feet as determined by ASTM D 698 except where non-cohesive soils are used in the top six inches of an embankment under pavement. In these areas, non-cohesive soils shall be compacted to 100% of the maximum density. Maximum densities and optimum moisture shall be determined by ASTM D 698.

The in-place field density acceptance testing shall be performed by the Engineer using a nuclear gage in accordance with ASTM D 2922. ASTM D 3017 shall be used to determine the moisture content of the material. Stones or rock fragments larger than 4 inches (100 mm) in their greatest dimension will not be permitted in top 6 inches (150 mm) of the subgrade. The finished grading operations, conforming to the typical cross section, shall be completed and maintained at least 1,000 feet (300 m) ahead of the paving operations or as directed by the Engineer.

Rock used for embankment construction placed below a depth of 4 feet, as measured from

finished grade, should have a maximum dimension of 24 inches. Rock used within the top 4 feet of the embankment should have a maximum dimension of 12 inches. No rock larger than 4 inches should be allowed in the top 6 inches of the embankment fill. Nesting of large rock should not be allowed in any portion of the fill embankment.

Fill slopes constructed using on-site materials shall be no steeper than 3:1 (horizontal: vertical).

Formation of embankments under paved areas shall not include red cinders removed from excavations. Cinders shall not be within three (3) feet of any slope face or within two (2) feet of an embankment surface.

On all areas outside of the pavement areas, no compaction will be required on the top 4 inches (100 mm).

The in-place field density acceptance testing shall be accomplished by the Engineer using a nuclear gage in accordance with ASTM D 2922. ASTM D 3017 shall be used to determine the moisture content of the material.

When the material is too coarse, (more than 20 percent is retained on the ¾ sieve and does not have a well-defined moisture-density curve) to satisfactorily use these methods, the material shall be compacted to non-movement of the material under compaction equipment to the satisfaction of the Engineer. Compaction will be verified through the use of test excavations. A test excavation shall be defined as follows:

Test Excavation – A two (2) to three (3) feet deep hole dug by the Contractor for the purpose of allowing the Engineer's representative an opportunity to visually observe compacted materials for, but not limited to, segregation, nesting, uniform compaction, consolidation and maximum particle size. The test excavation shall be dug with a bulldozer or similar flat-bladed equipment so the sides of the excavation are not disturbed. The Engineer shall have complete discretion as to the frequency of the test excavations, however; at least one test per lift of embankment is required.

Compaction areas shall be kept separate, and no layer shall be covered by another until the proper density is obtained.

During construction of the embankment, the Contractor shall route his/her equipment at all times, both when loaded and when empty, over the layers as they are placed and shall distribute the travel evenly over the entire width of the embankment. The equipment shall be operated in such a manner that hardpan, cemented gravel, clay, or other chunky soil material will be broken up into small particles and become incorporated with the other material in the layer.

In the construction of embankments, layer placement shall begin in the deepest portion of the fill; as placement progresses, layers shall be constructed approximately parallel to the finished pavement grade line.

When rock and other embankment material are excavated at approximately the same time, the rock shall be incorporated into the outer portion of the embankment and the other material shall be incorporated under the future paved areas. Stones or fragmentary rock larger than 4 inches (100 mm) in their greatest dimensions will not be allowed in the top 6 inches (150 mm) of the subgrade. Rockfill shall be brought up in layers as specified or as directed and every effort shall be exerted to fill the voids with the finer material forming a dense, compact mass. Rock or

boulders shall not be disposed of outside the excavation or embankment areas, except at places and in the manner designated by the Engineer.

Frozen material shall not be placed in the embankment nor shall embankment be placed upon frozen material.

There will be no separate measurement of payment for compacted embankment, and all costs incidental to placing in layers, compacting, disking, watering, mixing, sloping, and other necessary operations for construction of embankments will be included in the contract price for excavation, borrow, or other items.

152-2.7 FINISHING AND PROTECTION OF SUBGRADE. After the subgrade has been substantially completed the full width shall be conditioned by removing any soft or other unstable material which will not compact properly. The resulting areas and all other low areas, holes or depressions shall be brought to grade with suitable select material. Scarifying, blading, rolling and other methods shall be performed to provide a thoroughly compacted subgrade shaped to the lines and grades shown on the plans.

Grading of the subgrade shall be performed so that it will drain readily. The Contractor shall take all precautions necessary to protect the subgrade from damage. He/she shall limit hauling over the finished subgrade to that which is essential for construction purposes.

All ruts or rough places that develop in a completed subgrade shall be smoothed and recompacted.

No subbase, or surface course shall be placed on the subgrade until the subgrade has been approved by the Engineer.

152-2.8 HAUL. All hauling will be considered a necessary and incidental part of the work. Its cost shall be considered by the Contractor and included in the contract unit price for the pay of items of work involved. No payment will be made separately or directly for hauling on any part of the work.

152-2.9 TOLERANCES. In those areas upon which a subbase or base course is to be placed, the top of the subgrade shall be of such smoothness that, when tested with a 16-foot (4.8 m) straightedge applied parallel and at right angles to the centerline, it shall not show any deviation in excess of 1/2-inch (12 mm), and shall not be more than 0.05-foot (.015 m) from true grade as established by grade hubs or pins. Any deviation in excess of these amounts shall be corrected by loosening, adding, or removing materials; reshaping; and recompacting by sprinkling and rolling. These tolerances shall be modified in rock cut areas. In these areas, the subgrade rock surface shall be no higher than the design grades and be reasonably smooth and sloped as depicted on the plans. Irregularities in the rock subgrade surface shall be filled with P-209 material as part of the Pavement Base Course. This additional material shall be placed at no additional cost to the Owner.

All unpaved surfaces shall be of such smoothness that it will not vary more than 0.10 foot (0.03 m) from true grade as established by grade hubs. Any deviation in excess of this amount shall be corrected by loosening, adding or removing materials, and reshaping.

152-2.10 TOPSOIL. When topsoil is specified or required as shown on the plans or under Item T-905, it shall be salvaged from stripping or other grading operations. The topsoil shall meet the requirements of Item T-905. If, at the time of excavation or stripping, the topsoil cannot be

placed in its proper and final section of finished construction, the material shall be stockpiled at a location determined by the Engineer. If, in the judgment of the Engineer, it is practical to place the salvaged topsoil at the time of excavation or stripping, the material shall be placed in its final position without stockpiling or further rehandling.

Upon completion of grading operations, stockpiled topsoil shall be handled and placed as directed, or as required in Item T-905.

No direct payment will be made for topsoil as such under Item P-152. The quantity removed and placed directly or stockpiled shall be paid for at the contract unit price per cubic yard for ``Unclassified Excavation."

When stockpiling of topsoil and later rehandling of such material is directed by the Engineer, the material so rehandled shall be paid for at the contract unit price per cubic yard for ``Topsoiling," as provided in Item T-905.

152-2.11 TESTING REQUIREMENTS. The Contractor shall be responsible for all quality control testing associated with earthwork operations. The Owner shall provide quality assurance testing only to verify contract performance.

The Contractor shall submit a half of a split sample of the owner of all earth material encountered within the project site for compaction testing prior to start of compaction operations. Laboratory density shall be determined as stated above. Contractor shall submit copies of all laboratory tests performed to determine density.

152-2.12 WASTE AREA. Upon completion of all embankments required for the project, all remaining earthwork from the grading operations, suitable for embankment construction, shall be placed in the waste area identified on the plans. All grades and slopes shown are approximate only and shall be modified based on the actual quantity of waste excavation available. Prior to construction of the waste area, the Contractor shall assess the amount of embankment to be constructed and provide the Engineer with a revised contour plan and profile. Once approved, this plan shall be closely followed and updated by the Contractor on a weekly basis until grading operations are complete. All waste area embankments shall be constructed in strict accordance with the requirements of this item. All final slopes, and the final condition of the waste area, must be approved by the Engineer.

METHOD OF MEASUREMENT

152-3.1 The quantity of Unclassified Excavation to be paid for shall be the number of cubic yards measured in its original position.

Measurement shall not include the quantity of materials excavated without authorization beyond normal slope lines, or the quantity of material used for purposes other than those directed.

152-3.2 The quantity of Unsuitable Excavation shall be the number of cubic yards measured in its original position authorized to be removed and replaced with acceptable material. The cost of replacement material shall be included in this unit cost.

For payment specified by the cubic yard, measurement for all excavation shall be computed by the average end area method. The end area is that bound by the original ground line established by field cross sections and the final theoretical pay line established by excavation

cross sections shown on the plans, subject to verification by the Engineer. After completion of all excavation operations and prior to the placing of base or subbase material, the final excavation shall be verified by the Engineer by means of field cross sections taken randomly at intervals not exceeding 500 linear feet (150 meters).

Final field cross sections shall be employed if the following changes have been made:

a. Plan width of embankments or excavations are changed by more than plus or minus 1.0 foot (0.3 meter); or

b. Plan elevations of embankments or excavations are changed by more than plus or minus 0.5 foot (0.15 meter).

152-3.3 The quantity of Subgrade Preparation shall be measured by the number of square yards measured and accepted by the Engineer.

BASIS OF PAYMENT

152-4.1 For "Unclassified Excavation" payment shall be made at the contract unit price per cubic yard. This price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the item.

152-4.2 For "Unsuitable Excavation" payment shall be made at the contract unit price per cubic yard. This price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the item. The cost of replacement material shall be included in this unit cost. Only the actual quantity of unsuitable excavation of material removed and replaced will be measured and paid.

152-4.3 Payment for Subgrade Preparation shall be made at the contract unit price per square yard. This price shall be full compensation for furnishing all materials, water, labor, equipment, tools, and incidentals necessary to complete the item.

Payment will be made under:

Item P-152.1 Unclassified Excavation--per cubic yard

Item P-152.2 Unsuitable Excavation (Allowance) – per cubic yard

Item P-152.3 Subgrade Preparation – per cubic yard

CONTRACTOR QUALITY CONTROL

152-5.1 QUALITY CONTROL PROGRAM. The Contractor shall develop a Quality Control Program in accordance with Item P-100 of the Civil Technical Specifications. The program shall address all elements that affect the quality of the pavement to be milled, including, but not limited to:

a. Maximum gradation of the milled material;
b. Fugitive dust control from the milling operation, and;
c. Inspection and testing of placement and compaction of materials stated in Item P-152;

d. Inspection, documentation and corrective action for saw cut irregularities.

TESTING REQUIREMENTS

ASTM D 698	Tests for Moisture-Density Relations of Soils and Soil-Aggregate Mixtures, Using 5.5-pound (2.5 kg) Rammer and 12-inch (300 mm) Drop
ASTM D 2922	*Density of Soil and Soil-Aggregate in Place by Nuclear Methods.*
ASTM D 3017	Moisture Content of Soil and Soil-Aggregate in Place by Nuclear Methods.

END OF ITEM P-152

ITEM P-154 SUBBASE COURSE

DESCRIPTION

154-1.1 This item shall consist of a subbase course composed of granular materials constructed on a prepared subgrade or underlying course in accordance with these specifications, and in conformity with the dimensions and typical cross section shown on the plans.

MATERIALS

154-2.1 MATERIALS. The subbase material shall consist of hard durable particles or fragments of granular aggregates. This material will be mixed or blended with fine sand, clay, stone dust, or other similar binding or filler materials produced from approved sources. This mixture must be uniform and shall comply with the requirements of these specifications as to gradation, soil constants, and shall be capable of being compacted into a dense and stable subbase. The material shall be free from vegetable matter, lumps or excessive amounts of clay, and other objectionable or foreign substances. Pit-run material may be used, provided the material meets the requirements specified.

TABLE 1. GRADATION REQUIREMENTS

Sieve designation (square openings) as per ASTM C 136 and ASTM D 422	Percentage by weight passing sieves
3 inch (75.0 mm)	100
No. 10 (2.0 mm)	20-100
No. 40 (0.450 mm)	5-60
No. 200 (0.075 mm)	0-8

The portion of the material passing the No. 40 (0.450 mm) sieve shall have a liquid limit of not more than 25 and a plasticity index of not more than 6 when tested in accordance with ASTM D 4318.

The maximum amount of material finer than 0.02 mm in diameter shall be less than 3%. The gradation shall be tested once per day during construction.

CONSTRUCTION METHODS

154-3.1 GENERAL. The subbase course shall be placed where designated on the plans or as directed by the Engineer. The material shall be shaped and thoroughly compacted within the tolerances specified.

Granular subbases which, due to grain sizes or shapes, are not sufficiently stable to support without movement the construction equipment, shall be mechanically stabilized to the depth necessary to provide such stability as directed by the Engineer. The mechanical stabilization shall principally include the addition of a fine-grained medium to bind the particles of the subbase material sufficiently to furnish a bearing strength, so that the course will not deform under the traffic of the construction equipment. The addition of the binding medium to the subbase material shall not increase the soil constants of that material above the limits specified.

154-3.2 OPERATION IN PITS. All work involved in clearing and stripping pits and handling unsuitable material encountered shall be performed by the Contractor at his/her own expense. The subbase material shall be obtained from pits or sources that have been approved. The material in the pits shall be excavated and handled in such manner that a uniform and satisfactory product can be secured.

154-3.3 PREPARING UNDERLYING COURSE. Before any subbase material is placed, the underlying course shall be prepared and conditioned as specified. The course shall be checked and accepted by the Engineer before placing and spreading operations are started.

To protect the subgrade and to ensure proper drainage, the spreading of the subbase shall begin along the centerline of the pavement on a crowned section or on the high side of pavements with a one-way slope.

154-3.4 MATERIALS ACCEPTANCE IN EXISTING CONDITION. When the entire subbase material is secured in a uniform and satisfactory condition and contains approximately the required moisture, such approved material may be moved directly to the spreading equipment for placing. The material may be obtained from gravel pits, stockpiles, or may be produced from a crushing and screening plant with the proper blending. The materials from these sources shall meet the requirements for gradation, quality, and consistency. It is the intent of this section of the specifications to secure materials that will not require further mixing. The moisture content of the material shall be approximately that required to obtain maximum density. Any minor deficiency or excess of moisture may be corrected by surface sprinkling or by aeration. In such instances, some mixing or manipulation may be required, immediately preceding the rolling, to obtain the required moisture content. The final operation shall be blading or dragging, if necessary, to obtain a smooth uniform surface true to line and grade.

154-3.5 PLANT MIXING. When materials from several sources are to be blended and mixed, the subbase material shall be processed in a central or travel mixing plant. The subbase material, together with any blended material, shall be thoroughly mixed with the required amount of water. After the mixing is complete, the material shall be transported to and spread on the underlying course without undue loss of the moisture content.

154-3.5.1 MIXED IN PLACE. When materials from different sources are to be proportioned and mixed or blended in place, the relative proportions of the components of the mixture shall be as designated by the Engineer.

The subbase material shall be deposited and spread evenly to a uniform thickness and width. Then the binder, filler or other material shall be deposited and spread evenly over the first layer. There shall be as many layers of materials added as the Engineer may direct to obtain the required subbase mixture.

When the required amount of materials have been placed, they shall be thoroughly mixed and blended by means of graders, discs, harrows, rotary tillers, supplemented by other suitable equipment if necessary. The mixing shall continue until the mixture is uniform throughout. Areas of segregated material shall be corrected by the addition of binder or filler material and by thorough remixing. Water in the amount and as directed by the Engineer shall be uniformly applied prior to and during the mixing operations, if necessary, to maintain the material at its required moisture content. When the mixing and blending has been completed, the material shall be spread in a uniform layer which, when compacted, will meet the requirements of thickness and typical cross section.

154-3.6 GENERAL METHODS FOR PLACING. The subbase course shall be constructed in layers. Any layer shall be not less than 3 inches (75 mm) nor more than 8 inches (200 mm) of compacted thickness. The subbase material shall be deposited and spread evenly to a uniform thickness and width. The material, as spread, shall be of uniform gradation with no pockets of fine or coarse materials. The subbase, unless otherwise permitted by the Engineer, shall not be spread more than 2,000 square yards (1700 square meters) in advance of the rolling. Any necessary sprinkling shall be kept within this limit. No material shall be placed in snow or on a soft, muddy, or frozen course.

When more than one layer is required, the construction procedure described herein shall apply similarly to each layer.

During the placing and spreading, sufficient caution shall be exercised to prevent the incorporation of subgrade, shoulder, or foreign material in the subbase course mixture.

154-3.7 FINISHING AND COMPACTING. After spreading or mixing, the subbase material shall be thoroughly compacted by rolling and sprinkling, when necessary. Sufficient rollers shall be furnished to adequately handle the rate of placing and spreading of the subbase course.

The field density of the compacted material shall be at least 100 percent of the maximum density of laboratory specimens prepared from samples of the subbase material delivered to the jobsite. The laboratory specimens shall be compacted and tested in accordance with ASTM D-698. The moisture content of the material at the start of compaction shall not be below nor more than 2 percentage points above the optimum moisture content.

When nuclear density gages are to be used for density determination, testing shall be in accordance with Section 120.

The course shall not be rolled when the underlying course is soft or yielding or when the rolling causes undulation in the subbase. When the rolling develops irregularities that exceed 1/2 inch (12 mm) when tested with a 16-foot (4.8 m) straightedge, the irregular surface shall be loosened and then refilled with the same kind of material as that used in constructing the course and again rolled as required above.

Along places inaccessible to rollers, the subbase material shall be tamped thoroughly with mechanical or hand tampers.

Sprinkling during rolling, if necessary, shall be in the amount and by equipment approved by the Engineer. Water shall not be added in such a manner or quantity that free water will reach the underlying layer and cause it to become soft.

154-3.8 SURFACE TEST. N/A.

154-3.9 THICKNESS. N/A.

154-3.10 PROTECTION. Work on subbase course shall not be conducted during freezing temperature nor when the subgrade is wet. When the subbase material contains frozen material or when the underlying course is frozen, the construction shall be stopped.

154-3.11 MAINTENANCE. Following the final shaping of the material, the subbase shall be maintained throughout its entire length by the use of standard motor graders and rollers until, in the judgment of the Engineer, the subbase meets all requirements and is acceptable for the

construction of the next course.

METHOD OF MEASUREMENT

154-4.1 The yardage of subbase course to be paid for shall be the number of cubic yards (cubic meters) of subbase course material placed, compacted, and accepted in the completed course. The quantity of subbase course material shall be measured in final position based upon depth tests or cores taken as directed by the Engineer, or at the rate of 1 depth test for each 500 square yards (420 square meters) of subbase course, or by means of average end areas on the complete work computed from elevations to the nearest 0.01 foot (3 mm). On individual depth measurements, thicknesses more than 1/2 inch (12 mm) in excess of that shown on the plans shall be considered as the specified thickness plus 1/2 inch (12 mm) in computing the yardage for payment. Subbase materials shall not be included in any other excavation quantities.

BASIS OF PAYMENT

154-5.1 Payment shall be made at the contract unit price per cubic yard (cubic meter) for subbase course. This price shall be full compensation for furnishing all materials; for all preparation, hauling, and placing of these materials; and for all labor, equipment, tools, and incidentals necessary to complete the item.

Payment will be made under:

Item P-154.1 Subbase Course—per cubic yard

TESTING REQUIREMENTS

ASTM C 136 Sieve Analysis of Fine and Coarse Aggregates

ASTM D 422 Particle Size Analysis of Soils

ASTM D 698 Moisture-Density Relations of Soils and Soil-Aggregate Mixtures Using 5.5 lb (2.49 kg) Rammer and 12-in (305 mm) Drop

ASTM D 1556 Density of Soil in Place by the Sand-Cone Method

ASTM D 1557 Test for Laboratory Compaction Characteristics of Soil Using Modified Effort

ASTM D 2922 Density of Soil in Place by the Nuclear Density Method

ASTM D 4318 Liquid Limit, Plastic Limit, and Plasticity Index of Soils

END OF ITEM P-154

ITEM P-156 STORM WATER POLLUTION PREVENTION PLAN

DESCRIPTION

156-1.1. GENERAL: This project is subject to the terms and conditions of Arizona Pollutant Discharge Elimination System (AZPDES) for storm water discharges from construction activities. Under the provisions of the AZPDES General Permit, both the City of Flagstaff and the Contractor shall be designated as operators, and both must ensure compliance with the terms and conditions of the AZPDES General Permit.

Work under this item shall consist of preparing all required documents and certifications, performing inspections, and furnishing all materials, labor, and equipment necessary to comply with all requirements of AZPDES General Permit for storm water discharges from construction activities. The work shall also include providing, installing, maintaining, removing and disposing of erosion and sediment control measures such as gravel filter berms, dikes, catch basin inlet protection, end-of pipe filtering devices, silt fences, dams, sediment traps and basins, netting, straw bale and log barriers, slope drains, and other erosion control devices or methods.

PERMIT REQUIREMENTS

156-2.1 Note that the terms and conditions of AZPDES General Permit, except to the extent that more explicit or more stringent requirements are written directly into the contract documents, have the same force and effect (and are made a part of the contract documents by reference) as if copied directly into the contract documents, or as if published copies are bound herewith.

Both the City of Flagstaff and the Contractor are designated as operators of the construction site, and both must complete a Notice of Intent (NOI) to comply with the terms and conditions of AZPDES for Storm Water Discharges from Construction Activities. The NOI must be signed in accordance with the signatory requirements of the AZPDES General Permit, and must contain all required eligibility certifications.

It shall be the responsibility of both the City of Flagstaff and the Contractor to prepare a joint Storm Water Pollution Prevention Plan (SWPPP) and ensure its compliance with the minimum conditions of the AZPDES General Permit, including measures to protect impaired or unique waters, measures to protect threatened and/or endangered species, and measures to protect properties eligible for protection under the National Historic Preservation Act. The SWPPP must reflect the Contractor's entire scope of activities at the job site as anticipated for the duration of the construction activities. The Contractor must indicate in the SWPPP those changes in job site requirements and/or the order of work performance that will require modifications to the SWPPP, and include those modifications in the SWPPP.

Once completed, it shall be the responsibility of the City of Flagstaff to review and approve the joint SWPPP prior to the start of work. The preconstruction conference shall not be held and the Contractor shall not be allowed to start work until the City of Flagstaff has approved the SWPPP as being adequate and in accordance with the requirements of the AZPDES General Permit. The City of Flagstaff shall approve or not approve the SWPPP within seven (7) calendar days after receipt of the SWPPP from the Contractor for purposes of review. Failure of the Contractor and the City of Flagstaff to reach agreement on the adequacy of the SWPPP prior to the preconstruction conference may delay the start of work. The Contractor shall not be entitled to additional compensation for costs that result from such delay in the construction start date.

The SWPPP is not to be submitted to the ADEQ unless directed to do so by the City's Project Manager or in response to a direct request from the ADEQ Director (or authorized representative). If the SWPPP must be submitted to the ADEQ for review and approval, authorization to discharge under the AZPDES General Permit may be withheld by ADEQ for up to thirty-two (32) business days after receipt of the SWPPP.

It shall be the responsibility of the Contractor to implement the SWPPP, and ensure day-to-day compliance with the terms and conditions of the SWPPP and the AZPDES General Permit. The Contractor shall, with the approval of the City's Project Manager, update and revise the SWPPP as necessary throughout the duration of the project to ensure compliance with the AZPDES General Permit requirements.

The Contractor shall retain a copy of the SWPPP and the AZPDES General Permit at a central location on the job site for the use of all operators whenever they are on the construction site. A copy of the signed SWPPP must be retained on the construction site during normal working hours.

All subcontractors and construction site operators having control over only a portion of the construction site shall comply with the requirements of the AZPDES General Permit and the common SWPPP under the supervision of the Contractor. The Contractor shall ensure that all partial site operators having day-to-day operational control of activities necessary to ensure compliance with the SWPPP or other permit requirements submit NOI to ADEQ as required by the AZPDES General Permit. Subcontractors and partial site operators shall ensure that their activities do not render any other party's pollution prevention plan measures ineffective.

The Contractor shall obtain and incorporate into the SWPPP copies of all NOI required by the AZPDES General Permit. The Contractor shall ensure that all required documents are complete and accurate, and all required NOI are received by ADEQ at least two (2) business days before a Contractor, subcontractor, or partial site operator is allowed to perform any work at the construction site.

The Contractor must submit an amended NOI if ADEQ provides notification that the previously submitted NOI is incomplete. The amended NOI must be submitted to the ADEQ, the City's Project Manager, and if so directed by the City's Project Manager, to the Development Services Department.

STORM WATER POLLUTION PREVENTION PLAN (SWPPP) REQUIREMENTS

156-3.1 The SWPPP must be prepared prior to submitting the NOI to ADEQ for coverage under AZPDES General Permit, and the Contractor must implement the SWPPP as written from the initial commencement of construction activity until final stabilization is complete. The SWPPP must be prepared in accordance with good engineering practice, and must:

(a) Identify potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges from the construction site;

(b) Identify, describe and ensure implementation of best management practices (BMP) that will be used to reduce the amount of pollutants in storm water discharges from the construction site;

(c) Assure compliance with the terms and conditions of AZPDES General Permit for Storm Water Discharges from construction activities; and

(d) Identify the party responsible for on-site implementation of the SWPPP.

Specific requirements for the contents of the SWPPP include identification of all operators of the project site, and the areas over which each operator has control. The SWPPP must also provide a description of the nature of the construction activity that includes:

(a) A description of the project and its intended use after the Notice of Termination (NOT) is filed (e.g. a municipal airport, etc.);

(b) A description of the intended sequence of activities that disturb the soil at the site (e.g. clearing, grubbing, excavation, grading, paving, utilities, infrastructure installation, etc.);

(c) The total area of the site, and an estimate of the total area of the site expected to be disturbed by excavation, grading, or other activities, including off-site borrow and fill areas;

(d) An estimate of the runoff coefficient of the site for both the pre-construction and post-construction conditions, and data describing the soil and any existent data on the quality of any discharge from the site;

(e) A general location map (e.g. U.S.G.S quadrangle map, a portion of a city or county map, or other map) with enough detail to identify the location of the construction site and the receiving waters within one mile of the site.

The SWPPP must contain a legible site map completed to scale that shows the entire site, and identifies:

(a) The directions of storm water flow (e.g. use arrows to show which way or ways storm water will flow on, through, and off the site), and the approximate slopes anticipated after major grading activities;

(b) Areas of soil disturbance and areas of no soil disturbance;

(c) Locations of structural and non-structural controls identified in the SWPPP;

(d) Locations where stabilization practices are expected to occur;

(e) Locations of off-site material, waste, borrow areas, or equipment storage areas;

(f) Locations of all surface water bodies (including wetlands);

(g) Locations where storm water discharges to surface water (including dry washes) and to the City's storm sewer system;

(h) Locations and registration numbers of on-site drywells (if any);

(i) Areas where final stabilization has been accomplished and no further construction-phase permit requirements apply.

The SWPPP must identify the nearest receiving water or waters, including ephemeral and intermittent streams, dry sloughs, and arroyos. If applicable, the SWPPP must also identify the

extent and describe any wetlands near the site that could be disturbed or that could potentially receive discharges from the disturbed areas of the project.

The SWPPP must identify the location and describe any storm water or non-storm water discharges at the site associated with activity other than construction and other pollutant sources, such as fueling operations, on-site material storage areas, waste piles, etc. This includes discharges from dedicated asphalt plants and dedicated concrete plants that are covered by the AZPDES General Permit.

The SWPPP must identify and address off-site storage areas or borrow areas that are used solely for this construction project.

The SWPPP must describe all pollution control measures that will be implemented as part of the construction project to control pollutants in storm water discharges. For each major activity identified in the project description, the SWPPP must clearly describe appropriate control measures; the general sequence during the construction process when the measures will be implemented; and identify the construction site operator responsible for the implementation of the described control measures.

Off-site material storage areas (including overburden and stockpiles of dirt, borrow areas, etc.) used solely by the Contractor for the permitted construction project are considered a part of the project and must be addressed in the SWPPP.

For purposes of controlling erosion and sediment, the SWPPP must address the following:

(a) Erosion and sediment controls must be designed to retain sediment on the construction site to the extent practicable.

(b) All control measures must be properly selected, installed, and maintained per the manufacturer's specifications and good engineering practices. If periodic inspections or information is discovered that indicates a control has been used inappropriately, or installed incorrectly, the Contractor must replace or modify the control for site situations as soon as practicable and before the next anticipated storm event.

(c) When sediment escapes the construction site, off-site accumulations of sediment must be routinely removed at a frequency sufficient to ensure no adverse effects on water quality.

The SWPPP must describe good housekeeping procedures to prevent litter, construction debris, and construction chemicals exposed to storm water from becoming a pollutant source for storm water discharges.

The SWPPP must include a description of and identify interim and permanent stabilization practices for the construction site, including a schedule of when the practices will be implemented. The SWPPP shall document those areas where existing vegetation will be preserved.

The Contractor must initiate stabilization measures within 14 calendar days in those areas where construction activities have temporarily or permanently ceased, except:

(a) Where stabilization by the 14th day is precluded by snow cover or frozen ground conditions, stabilization measures must be initiated as soon as practicable.

(b) Where construction activity on a portion of the site has temporarily ceased, but earth disturbing activities will resume in that area within the 14 days. In this event, temporary stabilization measures do not have to be initiated on that portion of the site.

(c) When the site is using vegetative stabilization measures and it is during seasonally arid conditions, vegetative stabilization measures must be initiated as soon as practicable.

The Contractor must maintain the following records as part of the SWPPP:

(a) Dates when major grading activities occur;

(b) Dates when construction activities temporarily or permanently cease on a portion of the site;

(c) Dates when stabilization measures are initiated and completed, and the reasons for any delay.

The SWPPP must describe structural practices to divert flows from exposed soils, store flows or otherwise limit runoff and the discharge of pollutants from exposed areas of the site to the degree attainable. Placement of structural practices in floodplains should be avoided to the degree attainable. A combination of sediment and erosion control measures is required to achieve maximum pollutant removal. Sediment basins and velocity dissipation devices must be utilized and placed in accordance with the AZPDES General Permit.

The SWPPP must include a description of post-construction storm water management measures that will be installed during the construction process to control pollutants in storm water discharges after construction operations have been completed. Structural measures shall be placed on upland soils to the degree attainable, and must be designed and installed consistent with applicable City of Flagstaff storm water management requirements.

The SWPPP must identify all allowable sources of non-storm water discharges of AZPDES General Permit for Storm Water Discharges from Construction Activities except for flows from fire fighting activities. Non-storm water discharges are to be eliminated or reduced to the extent feasible. The Contractor must implement appropriate best management practices (BMP) to minimize pollutants in any non-storm water discharges, and must describe those BMP in the SWPPP. Except if used in emergency firefighting, super-chlorinated wastewaters must be held on-site until the chorine dissipates, or otherwise de-chlorinated prior to discharge.

The SWPPP must describe:

(a) Measures to prevent the discharge of solid materials, including building materials, to waters of the United States, except as authorized by a permit issued under section 404 of the Clean Water Act;

(b) Measures to minimize off-site vehicle tracking of sediments, to the extent practicable, and the generation of on-site dust;

(c) Construction and waste materials expected to be stored on-site with updates as appropriate. The SWPPP must also include a description of the controls to reduce

pollutants from these materials including storage practices to minimize exposure of the materials to storm water, and spill prevention and response practices;

(d) Any pollutant sources from areas other than construction (including storm water discharges from dedicated asphalt plants, dedicated concrete plants, and/or any other non-construction pollutant sources), with details of controls and measures that will be implemented at those sites to minimize pollutant discharges; and

(e) Measures to sufficiently stabilize soil at culvert locations to prevent the formation of rills and gullies during construction.

The SWPPP must include a copy of AZPDES General Permit for Storm Water Discharges from Construction Activities. Copies of the NOI submitted to ADEQ and/or copies of the certificates received from ADEQ specifying the authorization numbers must also be incorporated into the SWPPP as they become available. If any other agreements with state, federal, or local officials exist that would affect the provisions or implementation of the SWPPP, copies of these agreements must also be included in the SWPPP. (Please note, these types of agreements would include grading and drainage approvals and/or permits, and storm water management approvals and/or permits issued by the City of Flagstaff, Development Services Department.)

The SWPPP must be consistent with applicable federal, state, and local requirements for soil and erosion control or storm water management. The SWPPP may incorporate by reference the appropriate elements of soil and erosion or storm water management plans required by other agencies. A copy of these requirements incorporated by reference must be provided as an attachment to the SWPPP, and must be updated as necessary to remain consistent with any revisions made to the requirements by the responsible agency or agencies. Examples of appropriate requirements include the Flagstaff Grading and Drainage Ordinance (Chapter 32A of the Flagstaff City Code) and the Flagstaff Storm Water Management Ordinance (Chapter 32C of the Flagstaff City Code).

A schedule for routine inspections of the construction site must be included in the SWPPP. This schedule must comply with Part IV.H.1 and Part IV.H.2 of the AZPDES General Permit.

The Contractor must sign the SWPPP in accordance with Part VII.K of the AZPDES General Permit. A copy of the signed SWPPP must be retained on the construction site or at another location easily accessible during normal working hours.

SWPPP IMPLEMENTATION AND CONSTRUCTION REQUIREMENTS

156-4.1 The Contractor shall not begin any construction activity until all applicable SWPPP controls, devices, and practices have been put into place.

In accordance with the terms and conditions of the AZPDES General Permit, the Contractor shall post the following documents at the construction site near the main entrance:

(a) The AZPDES authorization number for the project or a copy of the NOI if an authorization number has not yet been assigned,

(b) The name and telephone number of a local office or site contact person,

(c) A brief description of the construction project, and

(d) The location of the SWPPP if the site is inactive or does not have an on-site location to store the plan, and the name of the contact person for accessing the SWPPP.

The Contractor shall provide adequate and timely maintenance of vegetation, erosion and sediment control measures, and other protective measures and/or best management practices (BMPs) identified in the site plan or SWPPP to ensure that they remain in effective operating condition. Maintenance needs identified through inspections or other means shall be accomplished as soon as practicable and before the next anticipated storm event. If existing protective measures need to be modified or additional measures added, implementation of these changes must be completed before the next anticipated storm event, if practicable. If not practicable, implementation must be completed as soon as it is practicable. Sediment and debris must be removed from sediment traps, sediment ponds, trash racks, and similar structures when the design capacity of the structure has been reduced by fifty (50) percent.

The Contractor shall employ qualified personnel as defined by Part IV.H.3 of the AZPDES General Permit to inspect construction site areas in accordance with the requirements of Part IV.H.4 of the AZPDES General Permit. All inspection results shall be documented in reports that, at a minimum, include:

(a) The inspection date;

(b) The name, title, and qualifications of the person or persons performing the inspection. The qualifications must be either on or attached to the report. Alternatively, if the SWPPP documents the qualifications of the person or persons performing the inspection, then that portion of the SWPPP may be referenced;

(c) The weather information for the period since the last inspection (or since the start of construction if this is the first inspection), including the best estimate of the beginning of each storm event, the duration of each event, the time that has elapsed since the last storm event, and the approximate amount of rainfall for each event in inches;

(d) The location or locations of discharges of sediment or other pollutants from the site;

(e) The location or locations and identification of BMPs that need to be maintained, failed to operate as designed, or proved inadequate;

(f) The location or locations where additional BMPs that do not exist at the time of the inspection need to be implemented;

(g) Any corrective actions required, including any changes to the SWPPP that are needed, and the dates for implementation;

(h) Identification of all sources of non-storm water and their associated pollution prevention control measures; and

(i) Identification of material storage areas, and any evidence of or potential for pollutant discharge from such areas.

The Contractor must retain the inspection reports and any records of follow-up actions taken for a period of at least three (3) years from the date permit coverage expires or is terminated. Inspection reports must identify any instance of non-compliance with the terms and conditions of the AZPDES General Permit. Where no instance of non-compliance is identified, the report

must contain a certification that the construction project or site is being operated in compliance with the SWPPP and AZPDES General Permit No. AZG2003-001. The report shall be signed in accordance with Part VII.K of the permit. Copies of all inspection reports shall be provided to the City's Project Manager at least once each month throughout the duration of the project.

Based on the results of the inspection, the Contractor must modify the SWPPP to include additional or modified BMPs designed to correct problems identified. These revisions must be completed within seven (7) calendar days following the inspection. If existing BMPs need to be modified, or if additional BMPs are needed, implementation must be completed before the next anticipated storm event. If implementation before the next anticipated storm event is not practicable, implementation must occur as soon as it is practicable.

The Contractor, with the approval of the City's Project Manager, must amend the SWPPP within fifteen (15) business days whenever:

(1) There is a change in design, construction, operation, or maintenance at the construction site that has a significant effect on the discharge of pollutants to the waters of the United States, and such effect has not been previously addressed in the SWPPP; or
(2) Inspections, monitoring (if required), or investigations by the Contractor, the City of Flagstaff, state officials, or federal officials determine the discharges are causing or contributing to water quality exceedances, or the SWPPP is ineffective in eliminating or significantly minimizing pollutants in storm water discharges from the construction site.

The SWPPP and all reports required under this contract shall be available to the public in accordance with the requirements of section 308(b) of the Clean Water Act. The Contractor shall make plans and reports available upon request to the ADEQ Director (or authorized representative); State, Tribal, or local agency with approval authority for sediment and erosion control plans, grading plans, or storm water management plans; local government officials; or to the operator of a municipal separate storm sewer receiving discharges from the site in accordance with the terms and conditions of the AZPDES General Permit.

The ADEQ Director (or authorized representative) may notify the Contractor and/or the City of Flagstaff at any time that the SWPPP is inadequate, or does not meet one or more of the requirements of Part IV of AZDES General Permit. Within fifteen (15) business days of receipt of such notification from ADEQ (or as otherwise provided by ADEQ), the Contractor must make the required changes to the SWPPP and submit to the ADEQ a written certification that the requested changes were made and implemented. The ADEQ may request submittal or re-submittal of the SWPPP to verify that all deficiencies have been adequately addressed.

No condition of the AZPDES General Permit or the SWPPP shall release the Contractor from any responsibilities or requirements under any other environmental statutes or regulations, including requirements for the prevention or minimization of the discharge of hazardous substances or oil. If there is a release containing a hazardous substance or oil in an amount equal to or greater than the reportable quantities established under federal regulations that has the potential to impact storm water discharges from this site, the Contractor must report the release to the regulatory agencies in accordance with regulatory requirements. In addition, the Contractor must modify the SWPPP within fourteen (14) calendar days after gaining knowledge of the release to provide a description of the release, the circumstances leading to the release, and the date of the release. The SWPPP must identify measures to minimize and/or prevent the occurrence of such releases,

and appropriate measures for responding to such releases. The general permit does not authorize the discharge of any substance resulting from on-site spills, or the discharge of oil or chemicals.

The SWPPP including a copy of the general permit shall be kept on the project site from the date of commencement of construction activities to the date of submittal of the Notice of Termination (NOT). A copy of the SWPPP and the permit shall be retained by the Contractor for a period of at least three (3) years following the date of final stabilization of the construction site. The Contractor shall also retain for the same three-year period all reports required by the AZPDES General Permit and all records of data used to complete the NOI.

It shall be the responsibility of the Contractor to ensure that copies of all documents and records retained by the Contractor in accordance with requirements of the AZPDES permit are also provided to the City's Project Manager.

Within thirty (30) days of the date of final stabilization of the construction site, the Contractor shall submit a completed and properly signed Notice of Termination (NOT) form to the City's Project Manager. The City of Flagstaff will also complete a NOT form, and will submit both the Contractor's and the City's NOT to the ADEQ at the address specified on the NOT form; thereby terminating the Contractor's and the City's AZPDES permit coverage for the project. Copies of the NOT will also be sent to those agencies that received a copy of the NOI.

DUST CONTROL

156-5.1 GENERAL. The Contractor shall furnish all labor, equipment and means required to carry out effective measures wherever and as often as necessary to prevent his operations from producing dust in amounts damaging to property, cultivated vegetation and domestic animals, or which would cause a nuisance to persons living or occupying buildings in the vicinity. Airborne dust shall not exceed 20 percent visible emissions. The Contractor shall be responsible for any damage resulting from any dust originating from activities on or around the excavation sites. Dust abatement measures shall be continued until the Contractor has met the requirements of this item and is relieved of further responsibility by the Engineer. This dust abatement program shall include provisions to prevent excessive airborne dust in levels determined to be detrimental to aircraft operations by the City of Flagstaff and its representatives. Contractor's operations may be halted by the City if aircraft operations are determined to be unsafe. The Contractor shall take the following measures, at a minimum, to control and prevent a dust problem:

1. To control dust on roadways, stockpiles and around the site, the areas shall be treated, as required, with dust suppressants approved by the City of Flagstaff.
2. Temporary access roads shall be planned so travel on unpaved roads is minimized. Track out pads must be installed at locations where travel crosses from unpaved areas on to pavements. – A stabilized construction track out entrance is designed to remove mud and dirt from the tires of vehicles as they leave the construction site. The gravel pad should be at least 30 feet wide by 50 feet long and a minimum of six inches deep. One to three inch diameter, washed gravel or crushed rock should be used. It is very important that the gravel pad be properly graded.
3. A vacuum sweeper shall be required on all paved access roads for dust control as necessary.

A Dust Control Plan shall be submitted at the pre-construction conference. The plan should include a description of the equipment required, manpower and methods for dust control. Any chemical additives used must be approved by the City of Flagstaff. The Contractor shall also

address in the Dust Control Plan, a method to keep public thoroughfares free of mud, dust and debris at all times.

156-5.2 SITE PREPARATION. The Contractor shall use water trucks and/or water wagons at all times to minimize dust to supplement other control measures. The Contractor shall cover trucks when hauling materials, and shall stabilize the surface of stockpiles when not relocating immediately.

156-5.3 CONSTRUCTION. The Contractor shall provide a copy of the Air Quality Management Plan/Dust Control Plan to all adjacent site Contractors and subcontractors. The Contractor must also post a copy of the Air Quality Management Plan/Dust Control Plan in a weather resistant location at the construction site where it may be seen by the workers. It must show track out erosion prevention control locations. The Contractor shall cover trucks when transferring materials and shall use dust suppressants on traveled paths, construction parking and staging areas that are fine grained materials and not paved. The Contractor shall also minimize unnecessary vehicular and machinery activities to reduce dust and shall minimize soil track-out on paved roads and streets by cleaning trucks and equipment before leaving non-paved roads.

156-5.4 POST CONSTRUCTION. The Contractor shall stabilize non-paved areas and shall removed unused materials and stockpiles at the end of construction.

BASIS OF PAYMENT

156-6.1 An allowance for the Contractor's participation in the preparation of the Storm Water Pollution Prevention Plan (SWPPP), the implementation of the SWPPP, and the modification of the SWPPP as necessary for compliance with AZPDES General Permit No. AZG2003-001 for the duration of this construction project is included in these contract documents. Payment shall be made monthly with equal payment during the entire construction period with any retention required by the terms and conditions of the construction contract to be paid after filing of the Notice of Termination (NOT).

No separate measurement or direct payment will be made for preparing the Notice of Intent (NOI), the Notice of Termination (NOT), Inspection and Maintenance Reports, or other documentation required to perform the work, the cost being considered as included in the allowance.

Payment will be made under:

P-156.1	Storm Water Pollution Prevention – per lump sum

CONTRACTOR QUALITY CONTROL

156-7.1 The Contractor shall be responsible for developing and implementing a Contractor quality Control program including inspection and testing to assure compliance with the requirements of the section in accordance with Item P-100 of the Civil Technical Specifications.

END OF ITEM P-156

ITEM P-208 AGGREGATE BASE COURSE

208-1.1 This item shall consist of a base course composed of crushed coarse aggregate bonded with either soil or fine aggregate or both. It shall be constructed on a prepared underlying course in accordance with these specifications and shall conform to the dimensions and typical cross section shown on the plans.

MATERIALS

208-2.1 UNCRUSHED COARSE AGGREGATE. The base course material shall consist of hard, durable particles or fragments of stone or gravel mixed or blended with sand, stone dust, or other similar binding or filler materials produced from approved sources. All oversized stones, rocks and boulders occurring in the pit or quarry material shall be wasted; those of acceptable quality may be crushed and become a part of the base material, provided the blend meets the specified gradations. The aggregate shall be free from vegetation, lumps, or excessive amounts of clay and other objectionable substances. The coarse aggregate shall have a percent of wear not more than 45 at 500 revolutions as determined by ASTM C 131.

208-2.2 CRUSHED COARSE AGGREGATE. The aggregates shall consist of both fine and coarse fragments of crushed stone, crushed slag, or crushed gravel mixed or blended with sand, screenings, or other similar approved materials. The crushed stone shall consist of hard, durable particles or fragments of stone and shall be free from excess flat, elongated, soft or disintegrated pieces, dirt, or other objectionable matter.

The crushed slag shall be air-cooled, blast furnace slag and shall consist of angular fragments reasonably uniform in density and quality and shall be reasonably free from thin, elongated, or soft pieces, dirt, and other objectionable matter. It shall weigh not less than 70 pounds per cubic foot (1.12 Mg/cubic meter) as determined by ASTM C 29.

The crushed gravel shall consist of hard, durable stones, rock, and boulders crushed to specified size and shall be free from excess flat, elongated, soft or disintegrated pieces, dirt, or other objectionable matter. The method used in production of crushed gravel shall be such that the fractured particles occurring in the finished product shall be as nearly constant and uniform as practicable and shall result in a minimum of 60% of the material retained on the No. 4 sieve having at least 2 fractured faces and 75% having at least 1 fractured face.

If necessary to meet this requirement or to eliminate an excess of fine, uncrushed particles, the gravel shall be screened before crushing. All stones, rocks, and boulders of inferior quality in the pit shall be wasted.

The crushed coarse aggregate shall have a percent of wear not more than 50 at 500 revolutions as determined by ASTM C 131.

All material passing the No. 4 mesh (4.75 mm) sieve produced in the crushing operation of either stone, slag, or gravel shall be incorporated in the base material to the extent permitted by the gradation requirements.

208-2.3 GRADATION. The gradation of the uncrushed or crushed material shall meet the requirements of one of the gradations given in Table 1 when tested in accordance with ASTM C 117, ASTM C 136, and ASTM D 422.

TABLE 1. REQUIREMENTS FOR GRADATION OF AGGREGATE

Sieve Designation	Percentage by weight passing sieves 1 1/2" maximum
2 inch (50.0 mm)	--
1-1/2 inch (37.0 mm)	100
1 inch (25.0 mm)	70-100
3/4 inch (13.0 mm)	55-85
No. 4 (4.75 mm)	30-60
No. 40 (0.45 mm)	10-30
No. 200 (0.075 mm)	0-8

The gradations in the table represent the limits that shall determine suitability of aggregate for use from the sources of supply. The final gradations decided on within the limits designated in the table shall be well graded from coarse to fine and shall not vary from the low limit on one sieve to the high limit on the adjacent sieves, or vice versa.

The amount of the fraction of material passing the No. 200 mesh (0.075 mm) sieve shall not exceed one-half the fraction passing the No. 40 mesh (0.45 mm) sieve. The aggregate blend shall not contain more than 3% material finer than 0.02 mm unless all materials are produced from crushed stone.

The portion of the filler and binder, including any blended material, passing the No. 40 mesh (0.45 mm) sieve have a liquid limit not more than 25 and a plasticity index not more than 6 when tested in accordance with ASTM D 4318.

The selection of any of the gradations shown in the table shall be such that the maximum size aggregate used in any course shall be not more than two-thirds the thickness of the layer of the course being constructed.

208-2.4 FILLER FOR BLENDING. If filler, in addition to that naturally present in the base course material, is necessary for satisfactory bonding of the material, for changing the soil constants of the material passing the No. 40 mesh (0.45 mm) sieve, or for correcting the gradation to the limitations of the specified gradation, it shall be uniformly blended with the base course material at the crushing plant or at the mixing plant. The material for such purpose shall be obtained from sources approved by the Engineer and shall be of a gradation necessary to accomplish the specified gradation in the finally processed material.

The additional filler may be composed of sand, but the amount of sand shall not exceed 20% by weight of the total combined base aggregate. All the sand shall pass a No. 4 mesh (4.75 mm) sieve and not more than 5% by weight shall pass a No. 200 mesh (0.075 mm) sieve.

CONSTRUCTION METHODS

208-3.1 OPERATIONS IN PITS AND QUARRIES. All work involved in clearing and stripping pits and quarries, including handling of unsuitable material, shall be performed by the Contractor. All material shall be handled in a manner that shall secure a uniform and satisfactory base product. The base course material shall be obtained from sources that have been approved.

208-3.2 PREPARING UNDERLYING COURSE. The underlying course shall be checked and accepted by the Engineer before placing and spreading operations are started. Any ruts or soft, yielding places due to improper drainage conditions, hauling, or any other cause, shall be corrected and rolled to the required density before the base course is placed thereon.

To protect the underlying course and to ensure proper drainage, the spreading of the base shall begin along the centerline of the pavement on a crowned section or on the high side of the pavement with a one-way slope.

208-3.3 METHODS OF PRODUCTION

a. Plant Mix. When provided in the proposal, or when selected by the Contractor and approved by the Engineer, the base material shall be uniformly blended or mixed in an approved plant. The mixing plant shall include bins for storage and batching of the aggregate, pump and tanks for water, and batch mixers of either the pugmill or drum type. All mineral aggregates shall be batched into the mixer by weight. The agitation shall be such that a thorough dispersion of moisture is obtained. The size of the batch and the time of mixing shall be fixed by the Engineer and shall produce the results and requirements specified. The base course material produced by combining two or more materials from different sources shall be mixed in a mixing plant described herein. The mixture material shall be at a satisfactory moisture content to obtain maximum density.

b. Travel Plant. When the use of a traveling plant is allowed, the plant shall blend and mix the materials to meet these specifications. It shall accomplish a thorough mixing in one trip. The agitation shall be such that the dispersion of the moisture is complete. The machine shall move at a uniform rate of speed and this speed shall be regulated to fix the mixing time. If a windrow-type of travel plant is employed for mixing, the aggregate shall be placed in windrows parallel to the pavement centerline.

The windrow volume shall be sufficient to cover exact areas as planned. The windrow contents shall produce a mixture of the required gradation and bonding qualities. If a travel plant is used which is of the type that mixes previously spread aggregates in-place, the material shall have been spread in such thickness and proportions as may be handled by the machine to develop a base course of the thickness of each layer and of the gradation required. With either type of equipment, the mixed material shall be at a satisfactory moisture content to obtain the maximum density.

c. Materials of Proper Gradation. When the entire base course material from coarse to fine is secured in a uniform and well-graded condition and contains approximately the proper moisture, such approved material may be handled directly to the spreading equipment. The material may be obtained from gravel pits, stockpiles, or produced from a crushing and screening plant with the proper blending. The materials from these sources shall meet the requirements for gradation, quality, and consistency. The intent of this section of these specifications is to secure materials that will not require further mixing. The base material shall be at a satisfactory moisture content to obtain maximum density. Any minor deficiency or excess of moisture may be corrected by surface sprinkling or by aeration. In such instances some mixing or manipulation may be required immediately preceding the rolling to obtain the required moisture content. The final operation shall be blading, if necessary, to obtain a smooth uniform surface true to line and grade.

208-3.4 PLACING.

a. The aggregate base material that is correctly proportioned, or has been processed in a plant, shall be placed on the prepared underlying course and compacted in layers of the thickness shown on the plans. The depositing and spreading of the material shall commence where designated and shall progress continuously without breaks. The material shall be deposited and spread in lanes in a uniform layer and without segregation of size to such loose depth that, when compacted, the layer shall have the required thickness. The base aggregate shall be spread by spreader boxes or other approved devices having positive thickness controls that shall spread the aggregate in the required amount to avoid or minimize the need for hand manipulation. Dumping from vehicles in piles that require rehandling shall not be permitted. Hauling over the uncompacted base course shall not be permitted.

b. The aggregate base material that has been processed in a traveling plant, or mixed and blended in-place, shall be spread in a uniform layer of required depth and width and to the typical cross section. The spreading shall be by a self-powered blade grader, mechanical spreader, or other approved method. In spreading, care shall be taken to prevent cutting into the underlying layer. The material shall be bladed until a smooth, uniform surface is obtained, true to line and grade.

c. The base course shall be constructed in a layer not less than 3 inches (75 mm) nor more than 6 inches (150 mm) of compacted thickness. The aggregate as spread shall be of uniform grading with no pockets of fine or coarse materials. The aggregate, unless otherwise permitted by the Engineer, shall not be spread more than 2,000 square yards (1700 square meters) in advance of the rolling. Any necessary sprinkling shall be kept within these limits. No material shall be placed in snow or on a soft, muddy, or frozen course.

When more than one layer is required, the construction procedure described herein shall apply similarly to each layer.

During the mixing and spreading process, sufficient caution shall be exercised to prevent the incorporation of subgrade, subbase, or shoulder material in the base course mixture.

208-3.5 COMPACTION. Immediately upon completion of the spreading operations, the aggregate shall be thoroughly compacted. The number, type, and weight of rollers shall be sufficient to compact the material to the required density.

The moisture content of the material during placing operations shall not be below, nor more than 2 percentage points above, the optimum moisture content as determined by ASTM 2922 or 3017.

208-3.6 ACCEPTANCE SAMPLING AND TESTING FOR DENSITY. Aggregate base course shall be accepted for density on a lot basis. A lot will consist of one day's production where it is not expected to exceed 2400 square yards (2000 square meters). A lot will consist of one-half day's production where a day's production is expected to consist of between 2400 and 4800 square yards (2000 and 4000 square meters).

Each lot shall be divided into two equal sublots. One test shall be made for each sublot. Sampling locations will be determined by the Engineer on a random basis in accordance with statistical procedures contained in ASTM D 3665.

Each lot will be accepted for density when the field density is at least 100 percent of the maximum density of laboratory specimens prepared from samples of the material delivered to the jobsite. The specimens shall be compacted and tested in accordance with ASTM D698. The in-place field density shall be determined in accordance with ASTM D 1556 or ASTM D 2167. If the specified density is not attained, the entire lot shall be reworked and/or recompacted and two additional random tests made. This procedure shall be followed until the specified density is reached.

208-3.7 SURFACE TEST. After the course has been completely compacted, the surface shall be tested for smoothness and accuracy of grade and crown. Any portion lacking the required smoothness or failing in accuracy of grade or crown shall be scarified, reshaped, recompacted, and otherwise manipulated as the Engineer may direct until the required smoothness and accuracy are obtained. The finished surface shall not vary more than 3/8 inch (9 mm) from a 16-foot (4.8 m) straightedge when applied to the surface parallel with, and at right angles to, the centerline.

208-3.8 THICKNESS. The thickness of the base course shall be determined by depth tests or cores taken at intervals in such manner that each test shall represent no more than 300 square yards (250 square meters). When the base deficiency is more than 1/2 inch (12 mm), the Contractor shall correct such areas by scarifying, adding satisfactory base mixture, rolling, sprinkling, reshaping, and finishing in accordance with these specifications. The Contractor shall replace, at his/her expense, the base material where borings have been taken for test purposes.

208-3.9 PROTECTION. Work on the base course shall not be accomplished during freezing temperatures nor when the subgrade is wet. When the aggregates contain frozen materials or when the underlying course is frozen, the construction shall be stopped.

Hauling equipment may be routed over completed portions of the base course, provided no damage results and provided that such equipment is routed over the full width of the base course to avoid rutting or uneven compaction. However, the Engineer in charge shall have full and specific authority to stop all hauling over completed or partially completed base course when, in his/her opinion, such hauling is causing damage. Any damage resulting to the base course from routing equipment over the base course shall be repaired by the Contractor at his/her own expense.

208-3.10 MAINTENANCE. Following the completion of the base course, the Contractor shall perform all maintenance work necessary to keep the base course in a condition satisfactory for priming. After priming, the surface shall be kept clean and free from foreign material. The base course shall be properly drained at all times. If cleaning is necessary, or if the prime coat becomes disturbed, any work or restitution necessary shall be performed at the expense of the Contractor.

Before preparations begin for the application of a surface treatment or for a surface course, the base course shall be allowed to partially dry until the average moisture content of the full depth of base is less than 80% of the optimum moisture of the base mixture. The drying shall not continue to the extent that the surface of the base becomes dusty with consequent loss of binder. If during the curing period the surface of the base dries too fast, it shall be kept moist by sprinkling until such time as the prime coat is applied as directed.

The Contractor shall remove all survey and grade hubs from the base courses prior to placing any bituminous surface course.

METHOD OF MEASUREMENT

208-4.1 The quantity of crushed aggregate base course to be paid for shall be the number of cubic yards (cubic meters) of base course material placed, bonded, and accepted in the completed base course. The quantity of base course material shall be measured in final position based upon depth test, or cores taken as directed by the Engineer, or at the rate of 1 depth test for each 300 square yards of base course, or by means of average end areas on the complete work computed from elevations to the nearest 0.01 foot . On individual depth measurements, thicknesses more than 1/2 inch in excess of that shown on the plans shall be considered as specified thickness plus 1/2 inch in computing the yardage for payment. Base materials shall not be included in any other excavation quantities.

BASIS OF PAYMENT

208-5.1 Payment shall be made at the contract unit price per cubic yard for aggregate base course for each of the various thicknesses shown on completed. This price shall be full compensation for furnishing all materials and for all operations, hauling, and placing of these materials, and for all labor, equipment, tools, and incidentals necessary to complete the item.

Payment will be made under:

Item P-208.1 Crushed Aggregate Base Course (6-Inches)—per cubic yard

Item P-208.2 Crushed Aggregate Base Course - Cargo Ramp 1" Adjust to Grade (Allowance)—per cubic yard

Item P-208.3 Crushed Aggregate Base Course - Variable Adjustment Between Base and Subbase (Allowance) —per cubic yard

TESTING REQUIREMENTS

ASTM C 29 Unit Weight of Aggregate

ASTM C 117 Materials Finer than 75µm (No. 200) Sieve in Mineral Aggregates by Washing

ASTM C 131 Resistance to Abrasion of Small Size Coarse Aggregate by Use of the Los Angeles Machine

ASTM C 136 Sieve Analysis of Fine and Coarse Aggregates

ASTM D 422 Particle Size Analysis of Soils

ASTM D 698 Moisture-Density Relations of Soils and Soil-Aggregate Mixtures Using 5.5 lb (2.49 kg) Rammer and 12-in (305 mm) Drop

ASTM D 1556 Density of Soil in Place by the Sand-Cone Method

ASTM D 1557 Test for Laboratory Compaction Characteristics of Soil Using Modified Effort

ASTM D 2167 Density of Soil in Place by the Rubber-Ball on Method

ASTM D 3665 Random Sampling of Paving Materials

ASTM D 4318 Liquid Limit, Plastic Limit, and Plasticity Index of Soils

END OF ITEM P-208

ITEM P-403 PLANT MIX BITUMINOUS PAVEMENTS (SURFACE COURSE)

DESCRIPTION

403-1.1 This item shall consist of a surface course composed of mineral aggregate and bituminous material mixed in a central mixing plant and placed on a prepared course in accordance with these specifications and shall conform to the lines, grades, thicknesses, and typical cross sections shown on the plans. Each course shall be constructed to the depth, typical section, and elevation required by the plans and shall be rolled, finished, and approved before the placement of the next course.

MATERIALS

403-2.1 AGGREGATE. Aggregates shall consist of crushed stone, crushed gravel, or crushed slag with or without natural sand or other inert finely divided mineral aggregate. The portion of combined materials retained on the No. 4 (4.75 mm) sieve is coarse aggregate. The portion of combined materials passing the No. 4 (4.75 mm) sieve and retained on the No. 200 (0.075 mm) sieve is fine aggregate, and the portion passing the No. 200 (0.075 mm) sieve is mineral filler.

a. Coarse Aggregate. Coarse aggregate shall consist of sound, tough, durable particles, free from adherent films of matter that would prevent thorough coating and bonding with the bituminous material and be free from organic matter and other deleterious substances. The percentage of wear shall not be greater than 40 percent when tested in accordance with ASTM C 131. The sodium sulfate soundness loss shall not exceed 10 percent, or the magnesium sulfate soundness loss shall not exceed 13 percent, after five cycles, when tested in accordance with ASTM C 88.

Aggregate shall contain at least 70 percent by weight of individual pieces having two or more fractured faces and 85 percent by weight having at least one fractured face. The area of each face shall be equal to at least 75 percent of the smallest midsectional area of the piece. When two fractured faces are contiguous, the angle between the planes of fractures shall be at least 30 degrees to count as two fractured faces. Fractured faces shall be obtained by crushing.

The aggregate shall not contain more than a total of 8 percent, by weight, of flat particles, elongated particles, and flat and elongated particles, when tested in accordance with ASTM D 4791 with a value of 5:1.

Slag shall be air-cooled, blast furnace slag, and shall have a compacted weight of not less than 70 pounds per cubic foot (1.12 mg/cubic meter) when tested in accordance with ASTM C 29.

b. Fine Aggregate. Fine aggregate shall consist of clean, sound, durable, angular shaped particles produced by crushing stone, slag, or gravel that meets the requirements for wear and soundness specified for coarse aggregate. The aggregate particles shall be free from coatings of clay, silt, or other objectionable matter and shall contain no clay balls. The fine aggregate, including any blended material for the fine aggregate, shall have a plasticity index of not more than 6 and a liquid limit of not more than 25 when tested in accordance with ASTM D 4318.

Natural (nonmanufactured) sand may be used to obtain the gradation of the aggregate blend or to improve the workability of the mix. The amount of sand to be added will be adjusted to produce mixtures conforming to requirements of this specification. If used, the natural sand shall meet the requirements of ASTM D 1073 and shall have a plasticity index of not more than 6 and a liquid limit of not more than 25 when tested in accordance with ASTM D 4318.

The aggregate shall have sand equivalent values of 45 or greater when tested in accordance with ASTM D 2419.

c. Sampling. ASTM D 75 shall be used in sampling coarse and fine aggregate, and ASTM C 183 shall be used in sampling mineral filler.

403-2.2 MINERAL FILLER. If filler, in addition to that naturally present in the aggregate, is necessary, it shall meet the requirements of ASTM D 242.

403-2.3 BITUMINOUS MATERIAL. Bituminous material shall conform to the following requirements: PG58-28.

The Contractor shall furnish vendor's certified test reports for each lot of bituminous material shipped to the project. The vendor's certified test report for the bituminous material can be used for acceptance or tested independently by the Engineer.

403-2.4 PRELIMINARY MATERIAL ACCEPTANCE. Prior to delivery of materials to the job site, the Contractor shall submit certified test reports to the Engineer for the following materials:

a. Coarse Aggregate.

(1) Percent of wear.
(2) Soundness.
(3) Unit weight of slag.
(4) Percent fractured faces

b. Fine Aggregate.

(1) Liquid limit.
(2) Plasticity index.
(3) Sand equivalent.

c. Mineral Filler.

d. Bituminous Material. Test results for bituminous material shall include temperature/viscosity charts for mixing and compaction temperatures.

The certification(s) shall show the appropriate ASTM test(s) for each material, the test results, and a statement that the material meets the specification requirement.

The Engineer may request samples for testing, prior to and during production, to verify the quality of the materials and to ensure conformance with the applicable specifications.

403-2.5 ANTI-STRIPPING AGENT. Any anti-stripping agent or additive if required shall be heat stable, shall not change the asphalt cement viscosity beyond specifications, shall contain no harmful ingredients, shall be added in recommended proportion by approved method, and shall be a material approved by the Department of Transportation of the State in which the project is located.

COMPOSITION

403-3.1 COMPOSITION OF MIXTURE. The bituminous plant mix shall be composed of a mixture of well-graded aggregate, filler and anti-strip agent if required, and bituminous material. The several aggregate fractions shall be sized, handled in separate size groups, and combined in such proportions that the resulting mixture meets the grading requirements of the job mix formula (JMF).

403-3.2 JOB MIX FORMULA. No bituminous mixture for payment shall be produced until a job mix formula has been approved in writing by the Engineer. The bituminous mixture shall be designed using procedures contained in Chapter 5, MARSHALL METHOD OF MIX DESIGN, of the Asphalt Institute's Manual Series No. 2 (MS-2), Mix Design Methods for Asphalt Concrete, sixth edition, and shall meet the requirements of Tables 1, 2 and 3.

Tensile Strength Ratio (TSR) of the composite mixture, as determined by ASTM D 4867, shall not be less than 75. Anti-stripping agent shall be added to the asphalt, as necessary, to produce a TSR of not less than 75. If an antistrip agent is required, it will be provided by the Contractor at no additional cost to the Owner.

The job mix formula shall be submitted in writing by the Contractor to the Engineer at least 10 days prior to the start of paving operations and shall include as a minimum:

a. Percent passing each sieve size for total combined gradation, individual gradation of all aggregate stockpiles and percent by weight of each stockpile used in the job mix formula.

b. Percent of asphalt cement.

c. Asphalt performance, viscosity or penetration grade, and type of modifier if used.

d. Number of blows of hammer compaction per side of molded specimen.

e. Mixing temperature.

f. Compaction temperature.

g. Temperature of mix when discharged from the mixer.

h. Temperature-viscosity relationship of the asphalt cement.

i. Plot of the combined gradation on the Federal Highway Administration (FHWA) 45 power gradation curve.

j. Graphical plots of stability, flow, air voids, voids in the mineral aggregate, and unit weight versus asphalt content.

k. Percent natural sand.

l. Percent fractured faces.

m. Percent by weight of flat particles, elongated particles, and flat and elongated particles (and criteria).

n. Tensile Strength Ratio (TSR).

o. Antistrip agent (if required).

The Contractor shall submit to the Engineer the results of verification testing of three (3) asphalt samples prepared at the optimum asphalt content. The average of the results of this testing shall indicate conformance with the job mix formula requirements specified in Tables 1, 2 and 3.

When the project requires asphalt mixtures of differing aggregate gradations, a separate job mix formula and the results of job mix formula verification testing must be submitted for each mix.

The job mix formula for each mixture shall be in effect until a modification is approved in writing by the Engineer. Should a change in sources of materials be made, a new job mix formula must be submitted within 10 days and approved by the Engineer in writing before the new material is used. After the initial production job mix formula(s) has/have been approved by the Engineer and a new or modified job mix formula is required for whatever reason, the subsequent cost of the Engineer's approval of the new or modified job mix formula will be borne by the Contractor. There will be no time extension given or considerations for extra costs associated with the stoppage of production paving or restart of production paving due to the time needed for the Engineer to approve the initial, new or modified job mix formula.

TABLE 1. MARSHALL DESIGN CRITERIA

TEST PROPERTY	REQUIREMENTS
Number of blows	50
Stability, pounds minimum	1000
Flow, 0.01 in.	8-20
Air voids (percent)	2-5
Percent voids in mineral aggregate, minimum	See Table 2

TABLE 2. MINIMUM PERCENT VOIDS IN MINERAL AGGREGATE

Maximum Particle Size		Minimum Voids in Mineral Aggregate, percent
in.	Percent	
½	16	
¾	15	
1	14	
1-½	13	

The mineral aggregate shall be of such size that the percentage composition by weight, as determined by laboratory sieves, will conform to the gradation or gradations specified in Table 3 when tested in accordance with ASTM C 136 and C 117.

The gradations in Table 3 represent the limits that shall determine the suitability of aggregate for use from the sources of supply. The aggregate, as selected (and used in the JMF), shall have a gradation within the limits designated in Table 3 and shall not vary from the low limit on one sieve to the high limit on the adjacent sieve, or vice versa, but shall be well graded from coarse to fine.

Deviations from the final approved mix design for bitumen content and gradation of aggregates shall be within the action limits for individual measurements as specified in paragraph 403-6.5a. The limits still will apply if they fall outside the master grading band in Table 3.

The maximum size aggregate used shall not be more than one-half of the thickness of the course being constructed except where otherwise shown on the plans or ordered by the Engineer.

TABLE 3. AGGREGATE - BITUMINOUS PAVEMENTS

Sieve Size	Percentage by Weight Passing Sieve
1-½ in.	--
1 in.	--
¾ in.	100
½ in.	79-99
⅜ in.	68-78
No. 4	48-68
No. 8	33-53
No. 16	20-40
No. 30	14-30
No. 50	9-21
No. 100	6-16
No. 200	3-5
Asphalt percent	
Stone or gravel	5.0-7.5
Slag	6.5-9.5

The aggregate gradations shown are based on aggregates of uniform specific gravity. The percentages passing the various sieves shall be corrected when aggregates of varying specific gravities are used, as indicated in the Asphalt Institute Manual Series No. 2 (MS-2), Chapter 3.

403-3.4 TEST SECTION. Prior to full production, the Contractor shall prepare and place a quantity of bituminous mixture according to the job mix formula. The amount of mixture shall be sufficient to construct a test section 300 long and 20 wide**,** placed in two lanes, with a longitudinal cold joint, and shall be of the same depth specified for the construction of the course which it represents. A cold joint is an exposed construction joint at least 4 hours old or whose mat has cooled to less than 160°F. The underlying grade or pavement structure upon which the test section is to be constructed shall be the same as the remainder of the course represented by the test section. The equipment used in construction of the test section shall be the same type and weight to be used on the remainder of the course represented by the test section.

THE TEST SECTION SHALL BE EVALUATED FOR ACCEPTANCE AS A SINGLE LOT IN ACCORDANCE WITH THE ACCEPTANCE CRITERIA IN PARAGRAPH 403-5.1 AND 403-6.3. THE TEST SECTION SHALL BE DIVIDED INTO EQUAL SUBLOTS. AS A MINIMUM THE TEST SECTION SHALL CONSIST OF 3 SUBLOTS.

The test section shall be considered acceptable if the average mat density of the test section cores is greater than or equal to 98 percent and the average joint density of the test section cores is greater than or equal to 95 percent. If the initial test section should prove to be unacceptable, the necessary adjustments to the job mix formula, plant operation, placing procedures, and/or rolling procedures shall be made. A second test section shall then be placed. If the second test section also does not meet specification requirements, both sections shall be removed at the Contractor's expense. Additional test sections, as required, shall be constructed and evaluated for conformance to the specifications. Any additional sections that are not acceptable shall be removed at the Contractor's expense. Full production shall not begin until an acceptable section has been constructed and accepted in writing by the Engineer. Once an acceptable test section has been placed, payment for the initial test section and the section that meets specification requirements shall be made in accordance with paragraph 403-8.1.

Job mix control testing shall be performed by the Contractor at the start of plant production and in conjunction with the calibration of the plant for the job mix formula. If the aggregates produced by the plant do not satisfy the gradation requirements or produce a mix that meets the JMF, it will be necessary to reevaluate and redesign the mix using plant-produced aggregates. Specimens shall be prepared and the optimum bitumen content determined in the same manner as for the original design tests.

403-3.5 TESTING LABORATORY. The Contractor’s laboratory used to develop the job mix formula shall meet the requirements of ASTM D 3666 including the requirement to be accredited by a national authority such as the National Voluntary Laboratory Accreditation Program (NVLAP), the American Association for Laboratory Accreditation (AALA), or AASHTO Accreditation Program (AAP). A certification signed by the manager of the laboratory stating that it meets these requirements shall be submitted to the Engineer prior to the start of construction. The certification shall contain as a minimum:

a. Qualifications of personnel; laboratory manager, supervising technician, and testing technicians.

b. A listing of equipment to be used in developing the job mix.

c. A copy of the laboratory's quality control system.

d. Evidence of participation in the AASHTO Materials Reference Laboratory (AMRL) program.

e. ASTM D 3666 certification of accreditation by a nationally recognized accreditation program.

CONSTRUCTION METHODS

403-4.1 WEATHER LIMITATIONS. The bituminous mixture shall not be placed upon a wet surface or when the surface temperature of the underlying course is less than specified in Table

4. The temperature requirements may be waived by the Engineer, if requested; however, all other requirements including compaction shall be met.

TABLE 4. BASE TEMPERATURE LIMITATIONS

Mat Thickness	Base Temperature (Minimum)	
	Deg. F	Deg. C
3 in. (7.5 cm) or greater	40	4
Greater than 1 in. (2.5 cm) but less than 3 in. (7.5 cm)	45	7
1 in. (2.5 cm) or less	50	10

403-4.2 BITUMINOUS MIXING PLANT. Plants used for the preparation of bituminous mixtures shall conform to the requirements of ASTM D 995 with the following changes:

a. Requirements for All Plants.

(1) Truck Scales. The bituminous mixture shall be weighed on approved scales furnished by the Contractor, or on certified public scales at the Contractor's expense. Scales shall be inspected and sealed as often as the Engineer deems necessary to assure their accuracy. Scales shall conform to the requirements of the General Provisions, Section 90-01.

In lieu of scales, and as approved by the Engineer, asphalt mixture weights may be determined by the use of an electronic weighing system equipped with an automatic printer that weighs the total paving mixture. Contractor must furnish calibration certification of the weighing system prior to mix production and as often thereafter as requested by the Engineer.

(2) Testing Facilities. The Contractor shall provide laboratory facilities at the plant for the use of the Engineer's acceptance testing and the Contractor's quality control testing. The Engineer will always have priority in the use of the laboratory. The lab shall have sufficient space and equipment so that both testing representatives (Engineer's and Contractor's) can operate efficiently. The lab shall also meet the requirements of ASTM D 3666.

The plant testing laboratory shall have a floor space area of not less than 150 square feet, with a ceiling height of not less than 7-½ feet. The laboratory shall be weather tight, sufficiently heated in cold weather, air-conditioned in hot weather to maintain temperatures for testing purposes of 70 degrees F +/- 5 degrees F. The plant testing laboratory shall be located on the plant site to provide an unobstructed view, from one of its windows, of the trucks being loaded with the plant mix materials.

Laboratory facilities shall be kept clean, and all equipment shall be maintained in proper working condition. The Engineer shall be permitted unrestricted access to inspect the Contractor's laboratory facility and witness quality control activities. The Engineer will advise the Contractor in writing of any noted deficiencies concerning the laboratory facility, equipment, supplies, or testing personnel and procedures. When the deficiencies are serious enough to be adversely affecting the test results,

the incorporation of the materials into the work shall be suspended immediately and will not be permitted to resume until the deficiencies are satisfactorily corrected.

As a minimum, the plant testing laboratory shall have:

(a) Adequate artificial lighting
(b) Electrical outlets sufficient in number and capacity for operating the required testing equipment and drying samples.
(c) Fire extinguishers (2), Underwriter's Laboratories approved
(d) Work benches for testing, minimum 2-½ feet by 10 feet.
(e) Desk with 2 chairs
(f) Sanitary facilities convenient to testing laboratory
(g) Exhaust fan to outside air, minimum 12 inch blade diameter
(h) A direct telephone line and telephone including a FAX machine operating 24 hours per day, seven days per week
(i) File cabinet with lock for Engineer
(j) Sink with running water, attached drain board and drain capable of handling separate material
(k) Metal stand for holding washing sieves
(l) Two element hot plate or other comparable heating device, with dial type thermostatic controls for drying aggregates
(m) Mechanical shaker and appropriate sieves (listed in JMF, Table 3) meeting the requirements of ASTM E-11 for determining the gradation of coarse and fine aggregates in accordance with ASTM C 136
(n) Marshall testing equipment meeting ASTM D 6926, ASTM D 6927, or ASTM D 5581 as necessary, automatic compaction equipment capable of compacting three specimens at once and other apparatus as specified in ASTM C 127, D 2172, D 2726, and D 2041
(o) Oven, thermostatically controlled, inside minimum 1 cubic foot
(p) Two volumetric specific gravity flasks, 500 CC
(q) Other necessary hand tools required for sampling and testing
(r) Library containing contract specifications, latest ASTM volumes 4.01, 4.02,4.03 and 4.09, AASHTO standard specification parts I and II, and Asphalt Institute Publication MS-2.
(s) Equipment for Theoretical Specific Gravity testing including a 4,000 cc pycnometer, vacuum pump capable of maintaining 30 ml mercury pressure and a balance, 16-20 kilograms with accuracy of 0.5 grams
(t) Extraction equipment, centrifuge and reflux types and ROTOflex equipment
(u) A masonry saw with diamond blade for trimming pavement cores and samples
(v) Telephone

Approval of the plant and testing laboratory by the Engineer requires all facilities and equipment to be in good working order during production, sampling and testing. Failure to provide the specified facilities shall be sufficient cause for disapproving bituminous plant operations.

The Owner shall have access to the lab and at the plant whenever Contractor is producing asphalt for the project.

(3) Inspection of Plant. The Engineer, or Engineer's authorized representative, shall have access, at all times, to all areas of the plant for checking adequacy of

equipment; inspecting operation of the plant: verifying weights, proportions, and material properties; and checking the temperatures maintained in the preparation of the mixtures.

(4) Storage Bins and Surge Bins. Use of surge bins or storage bins for temporary storage of hot bituminous mixtures will be permitted as follows:

(a) The bituminous mixture may be stored in surge bins for a period of time not to exceed 3 hours.
(b) The bituminous mixture may be stored in insulated storage bins for a period of time not to exceed 24 hours**.**

The bins shall be such that mix drawn from them meets the same requirements as mix loaded directly into trucks.

If the Engineer determines that there is an excessive amount of heat loss, segregation or oxidation of the mixture due to temporary storage, no temporary storage will be allowed.

403-4.3 HAULING EQUIPMENT. Trucks used for hauling bituminous mixtures shall have tight, clean, and smooth metal beds. To prevent the mixture from adhering to them, the truck beds shall be lightly coated with a minimum amount of an approved asphalt release agent. Petroleum products shall not be used for coating truck beds. Each truck shall have a suitable cover to protect the mixture from adverse weather. When necessary, to ensure that the mixture will be delivered to the site at the specified temperature, truck beds shall be insulated or heated and covers shall be securely fastened.

403-4.4 BITUMINOUS PAVERS. Bituminous pavers shall be self-propelled with an activated heated screed, capable of spreading and finishing courses of bituminous plant mix material that will meet the specified thickness, smoothness, and grade. The paver shall have sufficient power to propel itself and the hauling equipment without adversely affecting the finished surface.

The paver shall have a receiving hopper of sufficient capacity to permit a uniform spreading operation. The hopper shall be equipped with a distribution system to place the mixture uniformly in front of the screed without segregation. The screed shall effectively produce a finished surface of the required evenness and texture without tearing, shoving, or gouging the mixture.

The paver shall be equipped with a control system capable of automatically maintaining the specified screed elevation. The control system shall be automatically actuated from either a reference line and/or through a system of mechanical sensors or sensor-directed mechanisms or devices that will maintain the paver screed at a predetermined transverse slope and at the proper elevation to obtain the required surface. The transverse slope controller shall be capable of maintaining the screed at the desired slope within plus or minus 0.1 percent.

The controls shall be capable of working in conjunction with any of the following attachments:

a. Ski-type device of not less than 30 feet (9.14 m) in length.
b. Taut stringline (wire) set to grade.
c. Short ski or shoe.
d. Laser control.

If, during construction, it is found that the spreading and finishing equipment in use leaves tracks or indented areas, or produces other blemishes in the pavement and/or base course that are not satisfactorily corrected by the scheduled operations, the use of such equipment shall be discontinued and satisfactory equipment shall be provided by the Contractor.

403-4.5 ROLLERS. Rollers of the vibratory, steel wheel, and pneumatic-tired type shall be used. They shall be in good condition, capable of operating at slow speeds to avoid displacement of the bituminous mixture. The number, type, and weight of rollers shall be sufficient to compact the mixture to the required density while it is still in a workable condition.

All rollers shall be specifically designed and suitable for compacting hot mix bituminous concrete and shall be properly used. Rollers that impair the stability of any layer of a pavement structure or underlying soils shall not be used. Depressions in pavement surfaces caused by rollers shall be repaired by the Contractor at its own expense.

The use of equipment that causes crushing of the aggregate will not be permitted.

a. Nuclear Densometer. The Contractor shall have on site a nuclear densometer during all paving operations in order to assist in the determination of the optimum rolling pattern, type of roller and frequencies, as well as to monitor the effect of the rolling operations during production paving. The Contractor shall also supply a qualified technician during all paving operations to calibrate the nuclear densometer and obtain accurate density readings for all new bituminous concrete. These densities shall be supplied to the Engineer upon request at any time during construction. No separate payment will be made for supplying the density gauge and technician.

403-4.6 PREPARATION OF BITUMINOUS MATERIAL. The bituminous material shall be heated in a manner that will avoid local overheating and provide a continuous supply of the bituminous material to the mixer at a uniform temperature. The temperature of the bituminous material delivered to the mixer shall be sufficient to provide a suitable viscosity for adequate coating of the aggregate particles, but shall not exceed 325 degrees F (160 degrees C), unless otherwise required by the manufacturer.

403-4.7 PREPARATION OF MINERAL AGGREGATE. The aggregate for the mixture shall be heated and dried prior to introduction into the mixer. The maximum temperature and rate of heating shall be such that no damage occurs to the aggregates. The temperature of the aggregate and mineral filler shall not exceed 350 degrees F (175 degrees C) when the asphalt is added. Particular care shall be taken that aggregates high in calcium or magnesium content are not damaged by overheating. The temperature shall not be lower than is required to obtain complete coating and uniform distribution on the aggregate particles and to provide a mixture of satisfactory workability.

403-4.8 PREPARATION OF BITUMINOUS MIXTURE. The aggregates and the bituminous material shall be weighed or metered and introduced into the mixer in the amount specified by the job mix formula.

The combined materials shall be mixed until the aggregate obtains a uniform coating of bitumen and is thoroughly distributed throughout the mixture. Wet mixing time shall be the shortest time that will produce a satisfactory mixture, but not less than 25 seconds for batch plants. The wet mixing time for all plants shall be established by the Contractor, based on the procedure for determining the percentage of coated particles described in ASTM D 2489, for each individual

plant and for each type of aggregate used. The wet mixing time will be set to achieve 95 percent of coated particles. For continuous mix plants, the minimum mixing time shall be determined by dividing the weight of its contents at operating level by the weight of the mixture delivered per second by the mixer. The moisture content of all bituminous mixtures upon discharge shall not exceed 0.5 percent.

403-4.9 PREPARATION OF THE UNDERLYING SURFACE. Immediately before placing the bituminous mixture, the underlying course shall be cleaned of all dust and debris. A prime coat or tack coat shall be applied in accordance with Item P-602 or P-603, if shown on the plans.

403-4.10 LAYDOWN PLAN, TRANSPORTING, PLACING, AND FINISHING. Prior to the placement of the bituminous mixture, the Contractor shall prepare a laydown plan for approval by the Engineer. This is to minimize the number of cold joints in the pavement. The laydown plan shall include the sequence of paving laydown by stations, width of lanes, temporary ramp location(s), and laydown temperature. The laydown plan shall also include estimated time of completion for each portion of the work (i.e. milling, paving, rolling, cooling, etc.). Modifications to the laydown plan shall be approved by the Engineer.

The bituminous mixture shall be transported from the mixing plant to the site in vehicles conforming to the requirements of paragraph 403-4.3. Deliveries shall be scheduled so that placing and compacting of mixture is uniform with minimum stopping and starting of the paver. Hauling over freshly placed material shall not be permitted until the material has been compacted, as specified, and allowed to cool to atmospheric temperature.

The Contractor may elect to use a material transfer vehicle to deliver mix to the paver.

Paving during nighttime construction shall require the following:

a. All paving machines, rollers, distribution trucks and other vehicles required by the Contractor for his operations shall be equipped with artificial illumination sufficient to safely complete the work.

b. Minimum illumination level shall be twenty (20) horizontal foot candles and maintained in the following areas:

(1) An area of 30 feet wide by 30 feet long immediately behind the paving machines during the operations of the machines.

(2) An area 15 feet wide by 30 feet long immediately in front and back of all rolling equipment, during operation of the equipment.

(3) An area 15 feet wide by 15 feet long at any point where an area is being tack coated prior to the placement of pavement.

c. As partial fulfillment of the above requirements, the Contractor shall furnish and use, complete artificial lighting units with a minimum capacity of 3,000 watt electric beam lights, affixed to all equipment in such a way to direct illumination on the area under construction.

d. In addition, the Contractor shall furnish portable floodlight units for night work.

The initial placement and compaction of the mixture shall occur at a temperature suitable for obtaining density, surface smoothness, and other specified requirements but not less than 250ºF (121ºC).

Edges of existing bituminous pavement abutting the new work shall be saw cut and carefully removed as shown on the drawings and painted with bituminous tack coat before new material is placed against it.

Upon arrival, the mixture shall be placed to the full width by a bituminous paver. It shall be struck off in a uniform layer of such depth that, when the work is completed, it shall have the required thickness and conform to the grade and contour indicated. The speed of the paver shall be regulated to eliminate pulling and tearing of the bituminous mat. Unless otherwise permitted, placement of the mixture shall begin along the centerline of a crowned section or on the high side of areas with a one-way slope. The mixture shall be placed in consecutive adjacent strips having a minimum width of 12' except where edge lanes require less width to complete the area. Additional screed sections shall not be attached to widen paver to meet the minimum lane width requirements specified above unless additional auger sections are added to match. The longitudinal joint in one course shall offset the longitudinal joint in the course immediately below by at least 1 foot (30 cm); however, the joint in the surface top course shall be at the centerline of crowned pavements. Transverse joints in one course shall be offset by at least 10 feet (3 m) from transverse joints in the previous course.

Transverse joints in adjacent lanes shall be offset a minimum of 10 feet (3 m).

On areas where irregularities or unavoidable obstacles make the use of mechanical spreading and finishing equipment impractical, the mixture may be spread and luted by hand tools. Areas of segregation in the course, as determined by the Engineer, shall be removed and replaced at the Contractor's expense. The area shall be removed by saw cutting and milling a minimum of 2 inches deep. The area to be removed and replaced shall be a minimum width of the paver and a minimum of 10 feet long.

403-4.11 COMPACTION OF MIXTURE. After placing, the mixture shall be thoroughly and uniformly compacted by power rollers. The surface shall be compacted as soon as possible when the mixture has attained sufficient stability so that the rolling does not cause undue displacement, cracking or shoving. The sequence of rolling operations and the type of rollers used shall be at the discretion of the Contractor. The speed of the roller shall, at all times, be sufficiently slow to avoid displacement of the hot mixture and be effective in compaction. Any displacement occurring as a result of reversing the direction of the roller, or from any other cause, shall be corrected at once.

Sufficient rollers shall be furnished to handle the output of the plant. Rolling shall continue until the surface is of uniform texture, true to grade and cross section, and the required field density is obtained.

To prevent adhesion of the mixture to the roller, the wheels shall be equipped with a scraper and kept properly moistened using a water soluble asphalt release agent approved by the engineer.

In areas not accessible to the roller, the mixture shall be thoroughly compacted with approved power driven tampers. Tampers shall weigh not less than 275 pounds, have a tamping plate width not less than 15 inches, be rated at not less than 4,200 vibrations per minute, and be suitably equipped with a standard tamping plate wetting device.

Any mixture that becomes loose and broken, mixed with dirt, contains check-cracking, or in any way defective shall be removed and replaced with fresh hot mixture and immediately compacted to conform to the surrounding area. This work shall be done at the Contractor's expense. Skin patching shall not be allowed.

403-4.12 JOINTS. The formation of all joints shall be made in such a manner as to ensure a continuous bond between the courses and obtain the required density. All joints shall have the same texture as other sections of the course and meet the requirements for smoothness and grade.

The roller shall not pass over the unprotected end of the freshly laid mixture except when necessary to form a transverse joint. When necessary to form a transverse joint, it shall be made by means of placing a bulkhead or by tapering the course. The tapered edge shall be cut back to its full depth and width on a straight line to expose a vertical face prior to placing the adjacent lane. In both methods, all contact surfaces shall be given a tack coat of bituminous material before placing any fresh mixture against the joint.

Longitudinal joints which are irregular, damaged, uncompacted, or otherwise defective **[**or which have been left exposed for more than 4 hours, or whose surface temperature has cooled to less than 160^0 F**]** shall be cut back [specify cutback] to expose a clean, sound surface for the full depth of the course. All contact surfaces shall be cleaned and dry and given a tack coat of bituminous material prior to placing any fresh mixture against the joint. The cost of this work and tack coat shall be considered incidental to the cost of the bituminous course.

MATERIAL ACCEPTANCE

403-5.1 ACCEPTANCE SAMPLING AND TESTING. Unless otherwise specified, all acceptance sampling and testing necessary to determine conformance with the requirements specified in this section will be performed by the Engineer at no cost to the Contractor. Testing organizations performing these tests shall meet the requirements of ASTM D 3666. All equipment in Contractor furnished laboratories shall be calibrated by the testing organization prior to the start of operations.

a. Field Placed Material. Material placed in the field shall be tested for mat and joint density on a lot basis. A lot will consist of:

Figure 1

- one day or shift's production not to exceed 2,000 tons (1 814 000 kg), or

Figure 2

- a half day or shift's production where a day's production is expected to consist of between 2,000 and 4,000 tons (1 814 000 and 3 628 000 kg), or
- similar subdivisions for tonnages over 4,000 tons (3 628 000 kg).

Where more than one plant is simultaneously producing material for the job, the lot sizes shall apply separately for each plant.

(1) Mat Density. The lot shall be divided into four equal sublots. One core of finished, compacted materials shall be taken by the Contractor from each sublot. Core locations will be determined by the Engineer on a random basis in accordance

with procedures contained in ASTM D 3665. Cores shall not be taken closer than one foot from a transverse or longitudinal joint.

(2) Joint Density. The lot shall be divided into four equal sublots. One core of finished, compacted materials shall be taken by the Contractor from each sublot. Core locations will be determined by the Engineer on a random basis in accordance with procedures contained in ASTM D 3665. Edge of cores will be taken within 6 inches of the joint of the same lot material but not directly on the joint.

(3) Sampling. Samples shall be neatly cut with a core drill. The cutting edge of the core drill bit shall be of hardened steel or other suitable material with diamond chips embedded in the metal cutting edge. The minimum diameter of the sample shall be five inches. Samples that are clearly defective, as a result of sampling, shall be discarded and another sample taken. The Contractor shall furnish all tools, labor, and materials for cutting samples, cleaning, and filling the cored pavement. Cored pavement shall be cleaned and core holes shall be filled in a manner acceptable to the Engineer and within one day after sampling.

(4) Testing. The bulk specific gravity of each cored sample will be measured by the Engineer in accordance with ASTM D 2726 or ASTM D 1188, whichever is applicable. The percent compaction (density) of each sample will be determined by dividing the bulk specific gravity of each sublot sample by the average bulk specific gravity of all laboratory prepared specimens for the lot, as determined as follows:

(a) Sufficient material for preparation of test specimens for all testing will be sampled by the Engineer on a random basis, in accordance with the procedures contained in ASTM D 3665. One set of laboratory compacted specimens will be prepared for each sublot in accordance with ASTM D 6926, at the number of blows required by paragraph 403-3.2, Table 1. Each set of laboratory compacted specimens will consist of three test portions prepared from the same sample increment. The sample of bituminous mixture may be put in a covered metal tin and placed in an oven for not less than 30 minutes or more than 60 minutes to stabilize to compaction temperature. The compaction temperature of the specimens shall be as specified in the job mix formula.

(b) The bulk specific gravity of each test specimen shall be measured by the Engineer in accordance with ASTM D 2726 using the procedure for laboratory-prepared thoroughly dry specimens, or ASTM D 1188, whichever is applicable, for use in computing pavement density.

(c) The bulk specific gravity used to determine the joint density at joints formed between different lots shall be the lowest of the bulk specific gravity values from the two different lots.

(5) Acceptance. Acceptance of field placed material for mat and joint density will be determined by the Engineer in accordance with the requirements of paragraph 403-5.2b.

d. Partial Lots — Field Placed Material. When operational conditions cause a lot to be terminated before the specified number of tests have been made for the lot, or when the Contractor and Engineer agree in writing to allow overages or other minor tonnage

placements to be considered as partial lots, the following procedure will be used to adjust the lot size and the number of tests for the lot.

The last batch produced where production is halted will be sampled, and its properties shall be considered as representative of the particular sublot from which it was taken. In addition, an agreed to minor placement will be sampled, and its properties shall be considered as representative of the particular sublot from which it was taken. Where three sublots are produced, they shall constitute a lot. Where one or two sublots are produced, they shall be incorporated into the next lot, and the total number of sublots shall be used in the acceptance plan calculation, i.e., n = 5 or n = 6, for example. Partial lots at the end of asphalt production on the project shall be included with the previous lot.

403-5.2 ACCEPTANCE CRITERIA.

a. General. Acceptance will be based on the following characteristics of the bituminous mixture and completed pavement and test results:

(1) Mat density
(2) Joint density
(3) Thickness
(4) Smoothness
(5) Grade

Mat density will be evaluated for acceptance in accordance with paragraph 403-5.2b(1). Joint density will be evaluated for acceptance in accordance with paragraph 403-5.2b(2).

Thickness will be evaluated by the Engineer for compliance in accordance with paragraph 403-5.2b(3). Acceptance for smoothness will be based on the criteria contained in paragraph 403-5.2b(4). Acceptance for grade will be based on the criteria contained in paragraph 403-5.2b(5).

The Engineer may at any time, notwithstanding previous plant acceptance, reject and require the Contractor to dispose of any batch of bituminous mixture which is rendered unfit for use due to contamination, segregation, incomplete coating of aggregate, or improper mix temperature. Such rejection may be based on only visual inspection or temperature measurements. In the event of such rejection, the Contractor may take a representative sample of the rejected material in the presence of the Engineer, and if it can be demonstrated in the laboratory, in the presence of the Engineer, that such material was erroneously rejected, payment will be made for the material at the contract unit price.

b. Acceptance Criteria.

(1) Mat Density. Acceptance of each lot of plant produced material for mat density shall be based on the average of all of the densities taken from the sublots. If the average mat density of the lot so established equals or exceeds 96 percent, the lot shall be acceptable. If the average mat density of the lot is below 96 percent, the lot shall be removed and replaced at the Contractor's expense.

(2) Joint Density. Acceptance of each lot of plant produced material for joint density shall be based on the average of all of the joint densities taken from the sublots. If the average joint density of the lot so established equals or exceeds 94 percent, the lot shall be acceptable. If the average joint density of the lot is less than

94 percent, the Contractor shall stop production and evaluate the method of compacting joints. Production may resume once the reason for poor compaction has been determined and appropriate measures have been taken to ensure proper compaction.

(3) Thickness. Thickness of each course shall be evaluated by the Engineer for compliance to the requirements shown on the plans. Measurements of thickness shall be made by the Engineer using the cores extracted for each sublot for density measurement. The maximum allowable deficiency at any point shall not be more than ¼ inch less than the thickness indicated for the lift. Average thickness of lift, or combined lifts, shall not be less than the indicated thickness. Where thickness deficiency exceeds the specified tolerances, the lot or sublot shall be corrected by the Contractor at his expense by removing the deficient area and replacing with new pavement. The Contractor, at his expense, may take additional cores as approved by the Engineer to circumscribe the deficient area.

(4) Smoothness. The final surface shall be free from roller marks. The finished surfaces of each course of the pavement, except the finished surface of the final surface course, shall not vary more than ⅜ inch when evaluated with a 16 foot straightedge. The finished surface of the final surface course shall not vary more than ¼ inch when evaluated with a 16 foot straightedge. The lot size shall be 2,000 square yards (square meters). Smoothness measurements shall be made at 50 foot intervals and as determined by the Engineer. In the longitudinal direction, a smoothness reading shall be made at the center of each paving lane. In the transverse direction, smoothness readings shall be made continuously across the full width of the pavement. However, transverse smoothness readings shall not be made across designed grade changes. At warped transition areas, straightedge position shall be adjusted to measure surface smoothness and not design grade transitions. When more than 15 percent of all measurements within a lot exceed the specified tolerance, the Contractor shall remove the deficient area to the depth of the course of pavement and replace with new material. Skin patching shall not be permitted. Isolated high points may be ground off providing the course thickness complies with the thickness specified on the plans. High point grinding will be limited to 15 square yards. Areas in excess of 15 square yards will require removal and replacement of the course in accordance with the limitations noted above.

(5) Grade. The finished surface of the pavement shall not vary from the gradeline elevations and cross sections shown on the plans by more than ½ inch (12.70 mm). The finished grade of each lot will be determined by running levels at intervals of 50 feet (15.2 m) or less longitudinally and all breaks in grade transversely (not to exceed 50 feet) to determine the elevation of the completed pavement. The Contractor shall pay the cost of surveying of the level runs that shall be performed by a licensed surveyor. The documentation, stamped and signed by a licensed surveyor, shall be provided by the Contractor to the Engineer. The lot size shall be 2,000 square yards (square meters). When more than 15 percent of all the measurements within a lot are outside the specified tolerance, or if any one shot within the lot deviates ¾ inch or more from planned grade, the Contractor shall remove the deficient area to the depth of the final course of pavement and replace with new material. Skin patching shall not be permitted. Isolated high points may be ground off providing the course thickness complies with the thickness specified on the plans. High point grinding will be limited to 15 square yards. The surface of the ground pavement shall have a texture consisting of grooves between 0.090 and

0.130 inches wide. The peaks and ridges shall be approximately 1/32 inch higher than the bottom of the grooves. The pavement shall be left in a clean condition. The removal of all of the slurry resulting form the grinding operation shall be continuous. The grinding operation should be controlled so the residue from the operation does not flow across other lanes of pavement. Areas in excess of 15 square yards will require removal and replacement of the pavement in accordance with the limitations noted above.

c. Density Outliers. If the tests within a lot include a very large or a very small value that appears to be outside the normal limits of variation, check for an outlier in accordance with ASTM E 178, at a significance level of 5 percent, to determine if this value should be discarded.

403-5.3 RESAMPLING PAVEMENT FOR MAT DENSITY.

a. General. Resampling of a lot of pavement will only be allowed for mat density and then, only if the Contractor requests same in writing, within 48 hours after receiving the written test results from the Engineer. A retest will consist of all the sampling and testing procedures contained in paragraphs 403-5.1b(1). Only one resampling per lot will be permitted.

(1) A redefined mat density shall be calculated for the resampled lot. The number of tests used to calculate the redefined mat density shall include the initial tests made for that lot plus the retests.

(2) The cost for resampling and retesting shall be borne by the Contractor.

b. Payment for Resampled Lots. The redefined mat density for a resampled lot shall be used to evaluate the acceptance of that lot in accordance with Paragraph 403-5.2.

CONTRACTOR QUALITY CONTROL

403-6.1 GENERAL. The Contractor shall perform quality control sampling, testing, and inspection during all phases of the work and shall perform them at a rate sufficient to ensure that the work conforms to the contract requirements, and at minimum test frequencies required by paragraph 403-6.3, including but not limited to:

a. Mix Design
b. Aggregate Grading
c. Quality of Materials
d. Stockpile Management
e. Proportioning
f. Mixing and Transportation
g. Placing and Finishing
h. Joints
i. Compaction
j. Surface smoothness

403-6.2 TESTING LABORATORY. The Contractor shall provide a fully equipped asphalt laboratory meeting the requirements of paragraph 403-3.5 and 403-4.2a(2) located at the plant or job site. The Contractor shall provide the Engineer with certification stating that all of the

testing equipment to be used is properly calibrated and will meet the specifications applicable for the specified test procedures.

403-6.3 QUALITY CONTROL TESTING. The Contractor shall perform all quality control tests necessary to control the production and construction processes applicable to these specifications and as set forth in the approved Quality Control Program. The testing program shall include, but not necessarily be limited to, tests for the control of asphalt content, aggregate gradation, temperatures, aggregate moisture, field compaction, and surface smoothness.

a. Asphalt Content. A minimum of two tests shall be performed per lot in accordance with ASTM D 2172 for determination of asphalt content. The weight of ash portion of the test, as described in ASTM D 2172, shall be determined as part of the first test performed at the beginning of plant production; and as part of every tenth test performed thereafter, for the duration of plant production. The last weight of ash value obtained shall be used in the calculation of the asphalt content for the mixture. The asphalt content for the lot will be determined by averaging the test results.

The use of the nuclear method for determining asphalt content in accordance with ASTM D 4125 is permitted, provided that it is calibrated for the specific mix being used.

b. Gradation. Aggregate gradations shall be determined a minimum of twice per lot from mechanical analysis of extracted aggregate in accordance with ASTM D 5444 and ASTM C 136 (Dry Sieve). When asphalt content is determined by the nuclear method, aggregate gradation shall be determined from hot bin samples on batch plants, or from the cold feed on drum mix or continuous mix plants, and tested in accordance with ASTM C 136 (dry sieve) using actual batch weights to determine the combined aggregate gradation of the mixture.

c. Moisture Content of Aggregate. The moisture content of aggregate used for production shall be determined a minimum of once per lot in accordance with ASTM C 566.

d. Moisture Content of Mixture. The moisture content of the mixture shall be determined once per lot in accordance with ASTM D 1461 or AASHTO T110**.**

e. Temperatures. Temperatures shall be checked, at least four times per lot, at necessary locations to determine the temperatures of the dryer, the bitumen in the storage tank, the mixture at the plant, and the mixture at the job site.

f. In-Place Density Monitoring. The Contractor shall conduct any necessary testing to ensure that the specified density is being achieved. A nuclear gauge may be used to monitor the pavement density in accordance with ASTM D 2950.

g. Additional Testing. Any additional testing that the Contractor deems necessary to control the process may be performed at the Contractor's option.

h. Monitoring. The Engineer reserves the right to monitor any or all of the above testing.

403-6.4 SAMPLING. When directed by the Engineer, the Contractor shall sample and test any material that appears inconsistent with similar material being sampled, unless such material is voluntarily removed and replaced or deficiencies corrected by the Contractor. All sampling shall be in accordance with standard procedures specified.

403-6.5 CONTROL CHARTS. The Contractor shall maintain linear control charts both for individual measurements and range (i.e., difference between highest and lowest measurements) for aggregate gradation and asphalt content.

Control charts shall be posted in a location satisfactory to the Engineer and shall be kept current. As a minimum, the control charts shall identify the project number, the contract item number, the test number, each test parameter, the Action and Suspension Limits applicable to each test parameter, and the Contractor's test results. The Contractor shall use the control charts as part of a process control system for identifying potential problems and assignable causes before they occur. If the Contractor's projected data during production indicates a problem and the Contractor is not taking satisfactory corrective action, the Engineer may suspend production or acceptance of the material.

a. Individual Measurements. Control charts for individual measurements shall be established to maintain process control within tolerance for aggregate gradation and asphalt content. The control charts shall use the job mix formula target values as indicators of central tendency for the following test parameters with associated Action and Suspension Limits:

CONTROL CHART LIMITS FOR INDIVIDUAL MEASUREMENTS		
Sieve	Action Limit	Suspension Limit
¾ inch (19.0 mm)	0%	0%
½ inch (12.5 mm)	+/-6%	+/-9%
⅜ inch (9.5 mm)	+/-6%	+/-9%
No. 4 (4.75 mm)	+/-6%	+/-9%
No. 16 (1.18 mm)	+/-5%	+/-7.5%
No. 50 (0.30 mm)	+/-3%	+/-4.5%
No. 200 (0.075 mm)	+/-2%	+/-3%
Asphalt Content	+/-0.45%	+/-0.70%

b. Range. Control charts for range shall be established to control process variability for the test parameters and Suspension Limits listed below. The range shall be computed for each lot as the difference between the two test results for each control parameter. The Suspension Limits specified below are based on a sample size of n = 2. Should the Contractor elect to perform more than two tests per lot, the Suspension Limits shall be adjusted by multiplying the Suspension Limit by 1.18 for n = 3 and by 1.27 for n = 4.

CONTROL CHART LIMITS BASED ON RANGE (Based on n = 2)	
Sieve	Suspension Limit
½ inch (12.5 mm)	11 percent
⅜ inch (9.5 mm)	11 percent
No. 4 (4.75 mm)	11 percent
No. 16 (1.18 mm)	9 percent
No. 50 (0.30 mm)	6 percent
No. 200 (0.075 mm)	3.5 percent
Asphalt Content	0.8 percent

c. Corrective Action. The Contractor Quality Control Program shall indicate that appropriate action shall be taken when the process is believed to be out of tolerance. The Plan shall contain sets of rules to gauge when a process is out of control and detail what action will be taken to bring the process into control. As a minimum, a process shall be deemed out of control and production stopped and corrective action taken, if:

(1) One point falls outside the Suspension Limit line for individual measurements or range; or

(2) Two points in a row fall outside the Action Limit line for individual measurements.

403-6.6 QUALITY CONTROL REPORTS. The Contractor shall maintain records and shall submit reports of quality control activities daily.

METHOD OF MEASUREMENT

403-7.1 MEASUREMENT. Plant mix bituminous concrete pavement shall be measured by the number of tons (kg) of bituminous mixture used in the accepted work. Recorded batch weights or truck scale weights will be used to determine the basis for the tonnage.

BASIS OF PAYMENT

403-8.1 PAYMENT. Payment for an accepted lot of bituminous concrete pavement shall be made at the contract unit price per ton (kg) for bituminous mixture**.** The price shall be compensation for furnishing all materials, for all preparation, mixing, and placing of these materials, and for all labor, equipment, tools, and incidentals necessary to complete the item.

Payment will be made under:

Item P-403.1 Bituminous Surface Course — per ton

TESTING REQUIREMENTS

ASTM C 29	Bulk Density (“Unit Weight”) and Voids in Aggregate
ASTM C 88	Soundness of Aggregates by Use of Sodium Sulfate or Magnesium Sulfate
ASTM C 117	Materials Finer than 75µm (No.200) Sieve in Mineral Aggregates by Washing
ASTM C 127	Specific Gravity and Absorption of Coarse Aggregate
ASTM C 131	Resistance to Degradation of Small Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine
ASTM C 136	Sieve Analysis of Fine and Coarse Aggregates
ASTM C 183	Sampling and the Amount of Testing of Hydraulic Cement

ASTM C 566	Total Evaporable Moisture Content of Aggregate by Drying
ASTM D 75	Sampling Aggregates
ASTM D 979	Sampling Bituminous Paving Mixtures
ASTM D 995	Mixing Plants for Hot-Mixed Hot-Laid Bituminous Paving Mixtures
ASTM D 1073	Fine Aggregate for Bituminous Paving Mixtures
ASTM D 1074	Compressive Strength of Bituminous Mixtures
ASTM D 1188	Bulk Specific Gravity and Density of Compacted Bituminous Mixtures Using Paraffin-Coated Specimens
ASTM D 1461	Moisture or Volatile Distillates in Bituminous Paving Mixtures
ASTM D 2041	Theoretical Maximum Specific Gravity and Density of Bituminous Paving Mixtures
ASTM D 2172	Quantitative Extraction of Bitumen from Bituminous Paving Mixtures
ASTM D 2419	Sand Equivalent Value of Soils and Fine Aggregate
ASTM D 2489	Estimating Degree of Particle Coating of Bituminous-Aggregate Mixtures
ASTM D 2726	Bulk Specific Gravity and Density of Non-Absorptive Compacted Bituminous Mixtures
ASTM D 2950	Density of Bituminous Concrete in Place by Nuclear Methods
ASTM D 3203	Percent Air Voids in Compacted Dense and Open Bituminous Paving Mixtures
ASTM D 3665	Random Sampling of Construction Materials
ASTM D 3666	Minimum Requirements for Agencies Testing and Inspecting Road and Paving Materials
ASTM D 4125	Asphalt Content of Bituminous Mixtures by the Nuclear Method
ASTM D 4318	Liquid Limit, Plastic Limit, and Plasticity Index of Soils
ASTM D 4791	Flat Particles, Elongated Particles, or Flat and Elongated Particles in Coarse Aggregate
ASTM D 4867	Effect of Moisture on Asphalt Concrete Paving Mixtures
ASTM D 5444	Mechanical Size Analysis of Extracted Aggregate

ASTM D 5581 Resistance to Plastic Flow of Bituminous Mixtures Using Marshall Apparatus (6" Diameter Specimen)

ASTM D 6926 Preparation of Bituminous Specimens Using MARSHALL Apparatus

ASTM D 6927 MARSHALL Stability and Flow of Bituminous Mixtures

ASTM E 11 Wire-Cloth Sieves for Testing Purposes

ASTM E 178 Dealing with Outlying Observations

AASHTO T 30 Mechanical Analysis of Extracted Aggregate

[AASHTO T 110 Moisture or Volatile Distillates in Bituminous Paving Mixtures**]**

The Asphalt Institute'sMix Design Methods for Asphalt Concrete Manual No. 2 (MS-2)

MATERIAL REQUIREMENTS

ASTM D 242 Mineral Filler for Bituminous Paving Mixtures
ASTM D 946 Penetration Graded Asphalt Cement for Use in Pavement Construction
ASTM D 3381 Viscosity-Graded Asphalt Cement for Use in Pavement Construction
ASTM D 4552 Classifying Hot-Mix Recycling Agents
AASHTO MP1 Performance Graded Binder Designation

END OF ITEM P-403

ITEM P-603 BITUMINOUS TACK COAT

DESCRIPTION

603-1.1 This item shall consist of preparing and treating a bituminous or concrete surface with bituminous material in accordance with these specifications and in reasonably close conformity to the lines shown on the plans.

MATERIALS

603-2.1 BITUMINOUS MATERIALS. The bituminous material shall be either cutback asphalt, emulsified asphalt, or tar and shall conform to the requirements of Table 1. The type, grade, controlling specification, and application temperature of bituminous material to be used shall be specified by the Engineer.

TABLE 1 – Bituminous Material.

Type and Grade	Specification	Application Temperature Degrees Fahrenheit
Emulsified Asphalt SS-1, SS-1h	ASTM D 977	75-130

CONSTRUCTION METHODS

603-3.1 WEATHER LIMITATIONS. The tack coat shall be applied only when the existing surface is dry and the atmospheric temperature is above 60 degrees Fahrenheit. The temperature requirements may be waived, but only when so directed by the Engineer.

603-3.2 EQUIPMENT. The Contractor shall provide equipment for heating and applying the bituminous material.

The distributor shall be designed, equipped, maintained, and operated so that bituminous material at even heat may be applied uniformly on variable widths of surface at the specified rate. The allowable variation from the specified rate shall not exceed 10 percent. Distributor equipment shall include a tachometer, pressure gages, volume-measuring devices or a calibrated tank, and a thermometer for measuring temperatures of tank contents. The distributor shall be self-powered and shall be equipped with a power unit for the pump and full circulation spray bars adjustable laterally and vertically. The Contractor shall submit spray bar certifications, certifying the application rate.

If the distributor is not equipped with an operable quick shut off valve, the tack operations shall be started and stopped on building paper. The Contractor shall remove blotting sand prior to asphalt concrete lay down operations at no additional expense to the owner.

A power broom and/or blower shall be provided for any required cleaning of the surface to be treated.

603-3.3 APPLICATION OF BITUMINOUS MATERIAL. Immediately before applying the tack coat, the full width of surface to be treated shall be swept with a power broom and/or airblast to remove all loose dirt and other objectionable material.

Emulsified asphalt shall be diluted by the addition of water when directed by the Engineer and shall be applied a sufficient time in advance of the paver to ensure that all water has evaporated before any of the overlying mixture is placed on the tacked surface.

The bituminous material including vehicle or solvent shall be uniformly applied with a bituminous distributor at the rate of 0.05 to 0.15 gallons per square yard depending on the condition of the existing surface. The type of bituminous material and application rate shall be approved by the Engineer prior to application.

Following the application, the surface shall be allowed to cure without being disturbed for such period of time as may be necessary to permit drying out and setting of the tack coat. This period shall be determined by the Engineer. The surface shall then be maintained by the Contractor until the next course has been placed. Suitable precautions shall be taken by the Contractor to protect the surface against damage during this interval.

603-3.4 BITUMINOUS MATERIAL CONTRACTOR RESPONSIBILITY. Samples of the bituminous material that the Contractor proposes to use, together with a statement as to its source and character, must be submitted and approved before use of such material begins. The Contractor shall require the manufacturer or producer of the bituminous material to furnish material subject to this and all other pertinent requirements of the contract. Only satisfactory materials so demonstrated by service tests, shall be acceptable.

The Contractor shall furnish the vendor's certified test reports for each carload, or equivalent, of bituminous material shipped to the project. The tests reports shall contain all the data required by the applicable specification. If the Contractor applies the material prior to receipt of the tests reports, payment for the material shall be withheld until they are received. If the material does not pass the specifications it shall be replaced at the Contractor’s expense. The report shall be delivered to the Engineer before permission is granted for use of the material. The furnishing of the vendor's certified test report for the bituminous material shall not be interpreted as a basis for final acceptance. All such test reports shall be subject to verification by testing samples of material received for use on the project.

603-3.5 FREIGHT AND WEIGH BILLS. Before the final estimate is allowed, the Contractor shall file with the Engineer receipted bills when railroad shipments are made, and certified weigh bills when materials are received in any other manner, of the bituminous materials actually used in the construction covered by the contract. The Contractor shall not remove bituminous material from the tank car or storage tank until the initial outage and temperature measurements have been taken by the Engineer, nor shall the car or tank be released until the final outage has been taken by the Engineer. Copies of freight bills and weigh bills shall be furnished to the Engineer during the progress of the work.

METHOD OF MEASUREMENT

603-4.1 The bituminous material for tack coat shall not be measured or paid for separately.

MATERIAL REQUIREMENTS

ASTM D 633	Volume Correction Table for Road Tar
ASTM D 977	Emulsified Asphalt
ASTM D 1250	Petroleum Measurement Tables
ASTM D 2028	Cutback Asphalt (Rapid-Curing Type)
ASTM D 2397	Cationic Emulsified Asphalt
Asphalt Institute Manual MS-6 Table IV-3	Asphalt Pocketbook of Useful Information (Temperature-Volume Corrections for Emulsified Asphalts)

END ITEM P-603

ITEM P-610 STRUCTURAL PORTLAND CEMENT CONCRETE

DESCRIPTION

610-1.1 This item shall consist of plain and reinforced structural Portland cement concrete, prepared and constructed in accordance with these specifications, at the locations and of the form and dimensions shown on the plans.

MATERIALS

610-2.1 GENERAL. Only approved materials, conforming to the requirements of these specifications, shall be used in the work. They may be subjected to inspection and tests at any time during the progress of their preparation or use. The source of supply of each of the materials shall be approved by the Engineer before delivery or use is started. Representative preliminary samples of the materials shall be submitted by the Contractor, when required, for examination and test. Materials shall be scored and handled to insure the preservation of their quality and fitness for use and shall be located to facilitate prompt inspection. All equipment for handling and transporting materials and concrete must be clean before any material or concrete is placed therein.

In no case shall the use of pit-run or naturally mixed aggregates be permitted. Naturally mixed aggregate shall be screened and washed, and all fine and coarse aggregates shall be stored separately and kept clean. The mixing of different kinds of aggregates from different sources in one storage pile or alternating batches of different aggregates will not be permitted.

Aggregates shall be tested for deleterious reactivity with alkalies in the cement that may cause excessive expansion of the concrete. Acceptance of aggregates shall be based upon satisfactory evidence furnished by the Contractor that the aggregates, combined with other mixture constituents, do not produce excessive expansion in the concrete. This evidence shall include service records of concrete of comparable properties under similar conditions or exposure and certified records of tests by a testing laboratory that meets the requirements of ASTM C 1077. Tests shall be made in accordance with ASTM C 1260. Test specimens shall be produced using all components (e.g. coarse aggregate, fine aggregate, cement and fly ash…) to be included in the produced concrete. If the mean expansion of the test specimens, tested in accordance with ASTM C 1260, does not exceed 0.10 % at 16 days from casting the aggregates shall be accepted. If the mean expansion at 16 days is greater than 0.10% but less than 0.15%, the aggregate may be accepted based upon satisfactory service records and acceptance of the aggregate by a State Highway Department specifically addressing Alkali-Silica Reactivity. If the expansion is greater than 0.15%, the aggregate shall not be accepted for use.

610-2.2 COARSE AGGREGATE. The coarse aggregate for concrete shall meet the requirements of ASTM C 33. Crushed stone aggregate shall have a durability factor, as determined by ASTM C 666, greater than or equal to 95. The Engineer may consider and reserve final approval of other State classification procedures addressing aggregate durability.

Coarse aggregate shall be well graded from coarse to fine and shall meet one of the gradations shown in Table 1, using ASTM C 136.

TABLE 1 – Gradation for Coarse Aggregate.

Sieve Designation (square openings)	***Percentage by Weight Passing Sieves***					
	1½"	1"	3/4"	1/2"	3/8"	No.4
No. 4 to ¾-inch		100	90-100		20-55	0-10
No. 4 to 1-inch	100	90-100		25-60		0-10

610-2.3 FINE AGGREGATE. The fine aggregate for concrete shall meet the requirements of ASTM C 33. The fine aggregate shall be well graded from fine to coarse and shall meet the requirements of Table 2 when tested in accordance with ASTM C 136:

TABLE 2 – Gradation for Fine Aggregate.

Sieve Designation (square openings)	***Percentage by Weight Passing Sieves***
3/8 inch	100
No. 4	95-100
No. 16	45-80
No. 30	25-55
No. 50	10-30
No. 100	2-10

Blending will be permitted, if necessary, in order to meet the gradation requirements for fine aggregate. Fine aggregate deficient in the percentage of material passing the No. 50 mesh sieve may be accepted, provided that such deficiency does not exceed 5% and is remedied by the addition of pozzolanic or cementitious materials other than portland cement, as specified in 610-2.6 on admixtures, in sufficient quantity to produce the required workability as approved by the Engineer.

610-2.4 CEMENT. Cement shall conform to the requirements of ASTM C 150, Type 1.

The Contractor shall furnish vendors' certified test reports for each carload, or equivalent, of cement shipped to the project. The report shall be delivered to the Engineer before permission to use the cement is granted. All such test reports shall be subject to verification by testing sample materials received for use on the project.

610-2.5 WATER. The water used in concrete shall be free from sewage, oil, acid, strong alkalies, vegetable matter, and clay and loam. If the water is of questionable quality, it shall be tested in accordance with AASHTO T 26.

610-2.6 ADMIXTURES. The use of any material added to the concrete mix shall be approved by the Engineer. Before approval of any material, the Contractor shall be required to submit the results of complete physical and chemical analyses made by an acceptable testing laboratory. Subsequent tests shall be made of samples taken by the Engineer from the supply of the material being furnished or proposed for use on the work to determine whether the admixture is uniform in quality with that approved.

Pozzolanic admixtures shall be fly ash or raw or calcined natural pozzolons meeting the requirements of ASTM C 618.

Air-entraining admixtures shall meet the requirements of ASTM C 260. Air-entraining admixtures shall be added at the mixer in the amount necessary to produce the specified air content.

Water-reducing, set-controlling admixtures shall meet the requirements of ASTM C 494, Type A, water-reducing or Type D, water-reducing and retarding. Water-reducing admixtures shall be added at the mixer separately from air-entraining admixtures in accordance with the manufacturer's printed instructions.

610-2.7 PREMOLDED JOINT MATERIAL. Premolded joint material for expansion joints shall meet the requirements of ASTM D 1751**.**

610-2.8 JOINT FILLER. The filler for joints shall meet the requirements of Item P-605, unless otherwise specified in the proposal.

610-2.9 STEEL REINFORCEMENT. Reinforcing shall consist of ASTM A 184 or A 704 conforming to the requirements of bar mats**.**

610-2.10 COVER MATERIALS FOR CURING. Curing materials shall conform to the following specification: Liquid Membrane-Forming Compounds for Curing Concrete, ASTM C 309, Type 2.

CONSTRUCTION METHODS

610-3.1 GENERAL. The Contractor shall furnish all labor, materials, and services necessary for, and incidental to, the completion of all work as shown on the drawings and specified herein. All machinery and equipment owned or controlled by the Contractor, which he proposes to use on the work, shall be of sufficient size to meet the requirements of the work, and shall be such as to produce satisfactory work; all work shall be subject to the inspection and approval of the Engineer.

610-3.2 CONCRETE COMPOSITION. The concrete shall develop a compressive strength of 4,000 psi in 28 days as determined by test cylinders made in accordance with ASTM C 31 and tested in accordance with ASTM C 39. The concrete shall contain not less than 470 pounds of cement per cubic yard. The concrete shall contain 5 to 7 percent of entrained air, plus, as determined by ASTM C 231 and shall have a slump of not more than 4-inches as determined by ASTM C 143.

610-3.3 ACCEPTANCE SAMPLING AND TESTING. Concrete for each structure will be accepted on the basis of the compressive strength specified in paragraph 3.2. The concrete shall be sampled in accordance with ASTM C 172. Compressive strength specimens shall be made in accordance with ASTM C 31 and tested in accordance with ASTM C 39.

Concrete cylindrical test specimens shall be made in accordance with ASTM C 31 and tested in accordance with ASTM C 39. The Contractor shall cure and store the test specimens under such conditions as directed. The Engineer will make the actual tests on the specimens at no expense to the Contractor.

610-3.4 PROPORTIONING AND MEASURING DEVICES. When package cement is used, the quantity for each batch shall be equal to one or more whole sacks of cement. The aggregates shall be measured separately by weight. If aggregates are delivered to the mixer in batch trucks, the exact amount for each mixer charge shall be contained in each batch compartment. Weighing boxes or hoppers shall be approved by the Engineer and shall provide means of regulating the flow of aggregates into the batch box so that the required and exact weight of aggregates can be readily obtained.

610-3.5 CONSISTENCY. The consistency of the concrete shall be checked by the slump test specified in ASTM C 143.

610-3.6 MIXING. Concrete may be mixed at the construction site, at a central point, or wholly or in part in truck mixers. The concrete shall be mixed and delivered in accordance with the requirements of ASTM C 94.

610-3.7 MIXING CONDITIONS. The concrete shall be mixed only in quantities required for immediate use. Concrete shall not be mixed while the air temperature is below 40 degrees Fahrenheit without permission of the Engineer. If permission is granted for mixing under such conditions, aggregates or water, or both, shall be heated and the concrete shall be placed at a temperature not less than 50 degrees Fahrenheit nor more than 100 degrees Fahrenheit. The Contractor shall be held responsible for any defective work, resulting from freezing or injury in any manner during placing and curing, and shall replace such work at his/her expense.

Re-tempering of concrete by adding water or any other material shall not be permitted.

The delivery of concrete to the job shall be in such a manner that batches of concrete will be deposited at uninterrupted intervals.

610-3.8 FORMS. Concrete shall not be placed until all the forms and reinforcements have been inspected and approved by the Engineer. Forms shall be of suitable material and shall be of the type, size, shape, quality, and strength to build the structure as designed on the plans. The forms shall be true to line and grade and shall be mortar-tight and sufficiently rigid to prevent displacement and sagging between supports. The Contractor shall bear responsibility for their adequacy. The surfaces of forms shall be smooth and free from irregularities, dents, sags, and holes.

The internal ties shall be arranged so that, when the forms are removed, no metal will show in the concrete surface or discolor the surface when exposed to weathering. All forms shall be wetted with water or with a non-staining mineral oil, which shall be applied shortly before the concrete is placed. Forms shall be constructed so that they can be removed without injuring the concrete or concrete surface. The forms shall not be removed before the expiration of at least 30-hours from vertical faces, walls, slender columns, and similar structures; forms supported by falsework under slabs, beams, girders, arches, and similar construction shall not be removed until tests indicate that at least 60% of the design strength of the concrete has developed.

610-3.9 PLACING REINFORCEMENT. All reinforcement shall be accurately placed, as shown on the plans, and shall be firmly held in position during concreting. Bars shall be fastened together at intersections. The reinforcement shall be supported by approved metal chairs. Shop drawings, lists, and bending details shall be supplied by the Contractor when required.

610-3.10 EMBEDDED ITEMS. Before placing concrete, any items that are to be embedded shall be firmly and securely fastened in place as indicated. All such items shall be clean and free from coating, rust, scale, oil, or any foreign matter. The embedding of wood shall be avoided. The concrete shall be spaded and consolidated around and against embedded items.

610-3.11 PLACING CONCRETE. All concrete shall be placed during daylight, unless otherwise approved. The concrete shall not be placed until the depth and character of foundation, the adequacy of forms and falsework, and the placing of the steel reinforcing have been approved. Concrete shall be placed as soon as practical after mixing and in no case later than 1-hour after water has been added to the mix. The method and manner of placing shall be such to avoid segregation and displacement of the reinforcement. Troughs, pipes, and chutes shall be used as an aid in placing concrete when necessary. Dropping the concrete a distance of more than 5-feet, or depositing a large quantity at one point, will not be permitted. Concrete shall be placed upon clean, damp surfaces, free from running water, or upon properly consolidated soil.

The concrete shall be compacted with suitable mechanical vibrators operating within the concrete. When necessary, vibrating shall be supplemented by hand spading with suitable tools to assure proper and adequate compaction. Vibrators shall be manipulated so as to work the concrete thoroughly around the reinforcement and embedded fixtures and into corners and angles of the forms. The vibration at any joint shall be of sufficient duration to accomplish compaction but shall not be prolonged to the point where segregation occurs. Concrete deposited under water shall be carefully placed in a compact mass in its final position by means of a tremie, a closed bottom dump bucket, or other approved method and shall not be disturbed after being deposited.

610-3.12 CONSTRUCTION JOINTS. When the placing of concrete is suspended, necessary provisions shall be made for joining future work before the placed concrete takes its initial set. For the proper bonding of old and new concrete, such provisions shall be made for grooves, steps, keys, dovetails, reinforcing bars or other devices as may be prescribed. The work shall be arranged so that a section begun on any day shall be finished during daylight of the same day. Before depositing new concrete on or against concrete that has hardened, the surface of the hardened concrete shall be cleaned by a heavy steel broom, roughened slightly, wetted, and covered with a neat coating of cement paste or grout.

610-3.13 EXPANSION JOINTS. Expansion joints shall be constructed at such points and of such dimensions as may be indicated on the drawings. The premolded filler shall be cut to the same shape as that of the surfaces being joined. The filler shall be fixed firmly against the surface of the concrete already in place in such manner that it will not be displaced when concrete is deposited against it.

610-3.14 DEFECTIVE WORK. Any defective work discovered after the forms have been removed shall be immediately removed and replaced. If any dimensions are deficient, or if the surface of the concrete is bulged, uneven, or shows honeycomb, which in the opinion of the Engineer cannot be repaired satisfactorily, the entire section shall be removed and replaced at the expense of the Contractor.

610-3.15 SURFACE FINISH. All exposed concrete surfaces shall be true, smooth, and free from open or rough spaces, depressions, or projections. The concrete in horizontal plane surfaces shall be brought flush with the finished top surface at the proper elevation and shall be struck-off with a straightedge and floated. Mortar finishing shall not be permitted, nor shall dry cement or sand-cement mortar be spread over the concrete during the finishing of horizontal plane surfaces.

When directed, the surface finish of exposed concrete shall be a rubbed finish. If forms can be removed while the concrete is still green, the surface shall be pointed and wetted and then rubbed with a wooden float until all irregularities are removed. If the concrete has hardened before being rubbed, a carborundum stone shall be used to finish the surface. When approved, the finishing can be done with a rubbing machine.

610-3.16 CURING AND PROTECTION. All concrete shall be properly cured and protected by the Contractor. The work shall be protected from the elements, flowing water, and from defacement of any nature during the building operations. The concrete shall be cured as soon as it has sufficiently hardened by covering with an approved material. Water-absorptive coverings shall be thoroughly saturated when placed and kept saturated for a period of at least 3-days. All curing mats or blankets shall be sufficiently weighted or tied down to keep the concrete surface covered and to prevent the surface from being exposed to currents of air. Where wooden forms are used, they shall be kept wet at all times until removed to prevent the opening of joints and drying out of the concrete. Traffic shall not be allowed on concrete surfaces for 7-days after the concrete has been placed.

610-3.17 DRAINS OR DUCTS. Drainage pipes, conduits, and ducts that are to be encased in concrete shall be installed by the Contractor before the concrete is placed. The pipe shall be held rigidly so that it will not be displaced or moved during the placing of the concrete.

610-3.18 COLD WEATHER PROTECTION. When concrete is placed at temperatures below 40 degrees Fahrenheit, the Contractor shall provide satisfactory methods and means to protect the mix from injury by freezing. The aggregates, or water, or both, shall be heated in order to place the concrete at temperatures between 50 degrees Farhenheit and 100 degrees Fahrenheit.

Calcium chloride may be incorporated in the mixing water when directed by the Engineer. Not more than 2 pounds of Type 1 nor more than 1.6 pounds of Type 2 shall be added per bag of cement. After the concrete has been placed, the Contractor shall provide sufficient protection such as cover, canvas, framework, heating apparatus, etc., to enclose and protect the structure and maintain the temperature of the mix at not less than 50 degrees Fahrenheit until at least 60 percent of the designed strength has been attained.

610-3.19 FILLING JOINTS. All joints that require filling shall be thoroughly cleaned, and any excess mortar or concrete shall be cut out with proper tools. Joint filling shall not be started until after final curing and shall be done only when the concrete is completely dry. The cleaning and filling shall be carefully done with proper equipment and in a manner to obtain a neat looking joint free from excess filler.

METHOD OF MEASUREMENT

610-4.1 Portland Cement Concrete Pavement shall be measured by the number of square yards of either plain or reinforced pavement as specified in-place, completed and accepted. Plain and reinforced pavement will be measured as one item. Measurement shall not include any materials placed beyond the dimensions shown on the plans.

610-4.2 The quantity of Tie-Downs shall per each for item installed in concrete or asphalt pavement.

610-4.3 Reconstruct Strom Inlet Drain Apron shall be measured per each to remove and

replace the concrete apron.

610-4.4 Placement of Concrete Pavement Pipe Cap over existing drainage pipes shall be measured per linear foot.

BASIS OF PAYMENT

610-5.1 Payment shall be made at the contract unit price per square yard for structural Portland Cement concrete. These prices shall be full compensation for furnishing all materials and for all preparation, delivery and installation of these materials, and for all labor, equipment, tools, and incidentals necessary to complete the item.

610-4.2 Payment shall be made at the contract unit price per each for Tie-Down installed in concrete and asphalt pavement. These prices shall be full compensation for furnishing all materials and for all preparation, delivery and installation of these materials, and for all labor, equipment, tools, and incidentals necessary to complete the item.

610-4.3 Payment shall be made at the contract unit price per each to Reconstruct Strom Inlet Drain Apron. These prices shall be full compensation for removing and replacing the inlet apron and furnishing all materials and for all preparation, delivery and installation of these materials, and for all labor, equipment, tools, and incidentals necessary to complete the item.

610-4.4 Payment shall be made at the contract unit price per linear foot to construct a Concrete Pavement Pipe Cap over existing drainage pipes. These prices shall be full compensation placing concrete cap over the exposed drainage pipe and furnishing all materials and for all preparation, delivery and installation of these materials, and for all labor, equipment, tools, and incidentals necessary to complete the item.

Payment will be made under:

Item P-610.1 Portland Cement Concrete Pavement (6 inches), per square yard

Item P-610.2 Tie-Down (in AC Pavement), per each

Item P-610.3 Tie-Down (in PCC Pavement), per each

Item P-610.4 Reconstruct Storm Drain Inlet Apron, per each

Item P-610.5 Concrete Pavement Pipe Cap, per linear foot

CONTRACTOR QUALITY CONTROL

610-6.1 THE CONTRACTOR SHALL BE RESPONSIBLE FOR DEVELOPING AND IMPLEMENTING A CONTRACTOR QUALITY CONTROL PROGRAM INCLUDING INSPECTION AND TESTING TO ASSURE COMPLIANCE WITH THE REQUIREMENTS OF THE SECTION IN ACCORDANCE WITH ITEM P-100 OF THE CIVIL TECHNICAL SPECIFICATIONS.

TESTING REQUIREMENTS

ASTM C 31 Making and Curing Test Specimens in the Field

ASTM C 39 Compressive Strength of Cylindrical Concrete Specimens

ASTM C 136 Sieve Analysis of Fine and Coarse Aggregates

ASTM C 138 Density (Unit Weight), Yield, and Air Content (Gravimetric) of Concrete

ASTM C 143 Slump of Hydraulic Cement Concrete

ASTM C 231 Air Content of Freshly Mixed Concrete by the Pressure Method

ASTM C 666 Resistance of Concrete to Rapid Freezing and Thawing

ASTM C 1077 Laboratories Testing Concrete and Concrete Aggregates for Use in Construction and Criteria for Laboratory Evaluation

ASTM C 1260 Potential Alkali Reactivity of Aggregates (Mortar-Bar Method)

MATERIAL REQUIREMENTS

ASTM A 184 Specification for Fabricated Deformed Steel Bar or Rod Mats for Concrete Reinforcement

ASTM A 185 Steel Welded Wire Fabric, Plain, for Concrete Reinforcement

ASTM A 497 Steel Welded Wire Fabric, Deformed, for Concrete Reinforcement

ASTM A 615 Deformed and Plain Billet-Steel Bars for Concrete Reinforcement

ASTM A 704 Welded Steel Plain Bars or Rod Mats for Concrete Reinforcement

ASTM C 33 Concrete Aggregates

ASTM C 94 Ready-Mixed Concrete

ASTM C 150 Portland Cement

ASTM C 171 Sheet Materials for Curing Concrete

ASTM C 172 Sampling Freshly Mixed Concrete

ASTM C 260 Air-Entraining Admixtures for Concrete

ASTM C 309 Liquid Membrane-Forming Compounds for Curing Concrete

ASTM C 494 Chemical Admixtures for Concrete

ASTM C 595 Blended Hydraulic Cements

ASTM C 618 Coal Fly Ash and Raw or Calcined Natural Pozzolan for Use as a Mineral Admixture in Concrete

ASTM D 1751 Specification for Preformed Expansion Joint Fillers for Concrete Paving and Structural Construction (Non-extruding and Resilient Bituminous Types)

ASTM D 1752 Specification for Preformed Sponge Rubber and Cork Expansion Joint Fillers for Concrete Paving and Structural Construction

AASHTO T 26 Quality of Water to be used in Concrete

END OF ITEM P-610

ITEM P-620 TAXIWAY PAINTING

DESCRIPTION

620-1.1 This item shall consist of the painting of numbers, markings, and stripes on the surface of runways and taxiways in accordance with these specifications and at the locations shown on the plans, or as directed by the Engineer. **All permanent markings shall be painted twice at the rates shown**.

MATERIALS

620-2.1 MATERIALS ACCEPTANCE. The Contractor shall furnish manufacturer's certified test reports for materials shipped to the project. The certified test reports shall include a statement that the materials meet the specification requirements. The reports can be used for material acceptance or the Engineer may perform verification testing. The reports shall not be interpreted as a basis for payment. The Contractor shall notify the Engineer upon arrival of a shipment of materials to the site.

620-2.2 PAINT. Paint shall be waterborne in accordance with the requirements of Federal Specification TT-P-1952D Type I or Type II – fast drying. Paint shall be furnished in white – 37925, yellow – 33538 or 33655, black – 37038 and red - 31136 in accordance with Federal Standard No 595.

620-2.2 PREFORMED THERMOPLASTIC AIRPORT PAVEMENT MARKINGS. - N/A

620-2.3 REFLECTIVE MEDIA. Glass beads shall meet the requirements of TT-B-1325, type III. Glass beads shall be treated with all compatible coupling agents recommended by the manufacturers of the paint and reflective media to ensure adhesion and embedment.

CONSTRUCTION METHODS

620-3.1 WEATHER LIMITATIONS. The permanent painting shall be performed only when the surface is dry and when the surface temperature is at least 45 degrees Fahrenheit and rising and the pavement surface temperature is at least 5 degrees Fahrenheit above the dew point. Painting operations shall be discontinued when the surface temperature exceeds the paint manufactures recommendations degrees.

620-3.2 EQUIPMENT. Equipment shall include the apparatus necessary to properly clean the existing surface, a mechanical marking machine, a bead dispensing machine, and such auxiliary hand-painting equipment as may be necessary to satisfactorily complete the job.

The mechanical marker shall be an atomizing spray-type marking machine suitable for application of traffic paint. It shall produce an even and uniform film thickness at the required coverage and shall apply markings of uniform cross sections and clear-cut edges without running or spattering and without over spray.

620-3.3 PREPARATION OF SURFACE. Immediately before application of the paint, the surface shall be dry and free from dirt, grease, oil, laitance, or other foreign material that would reduce the bond between the paint and the pavement. The area to be painted shall be cleaned by sweeping and blowing or by other methods as required to remove all dirt, laitance, and loose

materials without damage to the pavement surface. Use of any chemicals or impact abrasives during surface preparation shall not be used.

620-3.4 LAYOUT OF MARKINGS. The proposed markings shall be laid out in advance of the paint application by the Contractor. The locations of markings to receive glass beads are shown below:

1. All runway and taxiway holding position markings.
2. Taxiway centerline marking.
3. Surface painted signs.
4. Runway side stripes,
5. Taxiway edge markings,
6. Non-movement Area boundary markings,

620-3.5 APPLICATION. Paint shall be applied at the locations and to the dimensions and spacing shown on the plans. Paint shall not be applied until the layout and condition of the surface has been approved by the Engineer.

The edges of the markings shall not vary from a straight line more than ½-inch in 50-feet and marking dimensions and spacing shall be within the following tolerances:

TABLE 1 – Paint Application Tolerances.

Dimension and Spacing	Tolerance
36-inches or less	± ½-inch
Greater than 36-inches to 6-feet	± 1-inch
Greater than 6-feet to 60-feet	± 2-inches
Greater than 60-feet	± 3-inches

The paint shall be mixed in accordance with the manufacturer's instructions and applied to the pavement with a marking machine at the rate(s) shown in Table 2. The addition of thinner will not be permitted. A period of 24-hours shall elapse between placement of a bituminous surface course or seal coat and application of the temporary paint. A period of 30-days shall elapse between the placement of the bituminous surface course and the application of the permanent paint.

TABLE 2 – Application Rates for Paint and Glass Beads.*

Paint, Square Feet per Gallon	Glass Beads, Type III, Pounds per Gallon of Paint
115 (Maximum)	10 (Minimum)

*** Table Notes:**

1. Temporary paint shall be applied at one-half the application rate of permanent paint.

2. Prior to applying the temporary paint, the Contractor shall first apply slurry seal to protect the existing pavement so that the removal method will not damage the underlying pavement and leave an objectionable shadow.

3. When painting on the runway grooved surfaces with permanent waterborne based paints, the paint shall be mixed in accordance with the manufacturer's instructions and applied to the pavement with a marking machine from two directions at 75 percent of the rate as shown in this Table 2, the rate shall be 0.75 for paint, 0.75 × the rate for beads from each direction.

Glass beads shall be distributed upon the marked areas at the locations shown on the plans to receive glass beads immediately after application of the paint. A dispenser shall be furnished which is properly designed for attachment to the marking machine and suitable for dispensing glass beads. Glass beads shall be applied at the rate(s) shown in Table 2. Glass beads shall not be applied to black paint. Glass beads shall adhere to the cured paint or all marking operations shall cease until corrections are made.

All emptied containers shall be returned to the paint storage area for checking by the Engineer. The containers shall not be removed from the airport or destroyed until authorized by the Engineer.

620-3.6 PROTECTION AND CLEANUP. After application of the paint, all markings shall be protected from damage until the paint is dry. All surfaces shall be protected from excess moisture and/or rain and from disfiguration by spatter, splashes, spillage, or drippings of paint. The Contractor shall remove from the site all debris, waste, loose or un-adhered reflective media, and by-products generated by the surface preparation and application operations to the satisfaction of the Engineer. The Contractor shall dispose of these wastes in strict compliance with all applicable state, local, and Federal environmental statutes and regulations.

620-3.8 PAVEMENT MARKING REMOVAL. Pavement markings shall be removed by a method that will not damage the underlying pavement and leave an objectionable shadow. Prior to beginning full scale removal, the Contractor shall demonstrate to the City of Flagstaff the method and effectiveness of the removal process on a section of paint no less than 50 square feet. To be considered acceptable, the process employed must remove the paint without damage to the underlying pavement and leaving an objectionable shadow, as determined by the Engineer. Once the method of removal has been accepted, the Contractor shall remove the paint on the designated areas. Any residue from the removal operation shall be removed from the area by employing a vacuum truck. Marking may be blacked out with airport approval only.

METHOD OF MEASUREMENT

620-4.1 The quantity of Taxiway Marking to be measured by the number of square feet performed in accordance with the specifications and accepted by the Engineer. Reflective media will not be measured for payment.

620-4.2 Pavement Marking Obliteration will be measured by the number of square feet accepted by the Engineer.

BASIS OF PAYMENT

620-5.1 Payment shall be made at the respective contract price per square foot for taxiway painting. This price shall be full compensation for furnishing all materials and for all labor, equipment, tools, and incidentals necessary to complete the item.

All permanent markings shall be painted twice at the rates shown.

620-5.1 Payment shall be made at contract price per square foot for Pavement Marking Obliteration. This price shall be full compensation for furnishing all materials and for all labor, equipment, tools, and incidentals necessary to complete the item.

Payment will be made under:

Item P-620.1 Taxiway Marking – per square foot

Item P-620.2 Pavement Marking Obliteration – per square foot

CONTRACTOR QUALITY CONTROL

620-6.1 QUALITY CONTROL PROGRAM. The Contractor shall be responsible for developing and implementing a contractor quality control program including inspection and testing to assure compliance with the requirements of this section in accordance with the civil technical specification Item P-100, Contractor quality control.

620-6.2 MINIMUM TESTING AND INSPECTION REQUIREMENTS. At a minimum, the contractor shall establish the following conditions:

a. Verify and document the weather limitations prior to scheduling the paint marking in accordance with section 620-3.1.
b. Verify and document that the preparation of the surface is dry and free from dirt, grease and other foreign material that would reduce the bond between the paint and the pavement in accordance with section 620-3.3.
c. Verify and document that the paint markings are laid out in advance of the paint application.
d. Verify and document that a sufficient quantity of a slurry seal was applied prior to the application of the temporary paint markings.
e. Verify and document that the paint is applied at the locations and to the dimensions and spacing shown on the plans and to the tolerances shown in table 1 of section 620-3.5.
f. Measure and document that the paint and glass beads are applied at the minimum application rates as shown in table 2 of section 620-3.5.

TESTING REQUIREMENTS

ASTM C 136	Sieve Analysis of Fine and Coarse Aggregates
ASTM C 146	Chemical Analysis of Glass Sand
ASTM C 371	Wire-Cloth Sieve Analysis of Non-plastic Ceramic Powders
ASTM D 92	Test Method for Flash and Fire Points by Cleveland Open Cup
ASTM D 711	No-Pick-Up Time of Traffic Paint
ASTM D 968	Standard Test Methods for Abrasion Resistance of Organic Coatings by Falling Abrasive
ASTM D 1213-54(1975)	Test Method for Crushing Resistance of Glass Spheres
ASTM D 1652	Test Method for Epoxy Content of Epoxy Resins

ASTM D 2074	Test Method for Total Primary, Secondary, and Tertiary Amine Values of Fatty Amines by Alternative Indicator Method
ASTM D 2240	Test Method for Rubber Products-Durometer Hardness
ASTM G 15453	Operating Light and Water-Exposure Apparatus (Fluorescent Light Apparatus UV-Condensation Type) for Exposure of Nonmetallic Materials.
Federal Test Method Standard No. 141D/GEN	Paint, Varnish, Lacquer and Related Materials; Methods of Inspection, Sampling and Testing

MATERIAL REQUIREMENTS

ASTM D 476	Specifications for Dry Pigmentary Titanium Dioxide Pigments Products
Code of Federal	40 CFR Part 60, Appendix A – Definition of Traverse Point Regulations Number and Location
Code of Federal Regulations	29 CFR Part 1910.1200 – Hazard Communications
FED Specification TT-B-1325C	Beads (Glass Spheres) Retroreflective
AASHTO M 247	Glass Beads Used in Traffic Paints
FED Specification TT-P-1952D	Paint, Traffic and Airfield Marking, Waterborne
Commercial Item Description (CID) A-A-2886A	Paint, Traffic, Solvent Based
FED STD 595	Colors used in Government Procurement

END OF ITEM P-620

ITEM T-901 SEEDING

DESCRIPTION

901-1.1 This item shall consist of soil preparation, harrowing, disking, liming, fertilizing and seeding the areas shown on the plans or as directed by the Engineer in accordance with these specifications.

MATERIALS

901-2.1 SEED. The species and application rates shall be according to the City of Flagstaff Standard Specifications.

Seed shall be furnished separately or in mixtures in standard containers with the seed name, lot number, net weight, percentages of purity and of germination and hard seed, and percentage of maximum weed seed content clearly marked for each kind of seed. The Contractor shall furnish the Engineer duplicate signed copies of a statement by the vendor certifying that each lot of seed has been tested by a recognized laboratory for seed testing within 6-months of date of delivery. This statement shall include: name and address of laboratory, date of test, lot number for each kind of seed, and the results of tests as to name, percentages of purity and of germination, and percentage of weed content for each kind of seed furnished, and, in case of a mixture, the proportions of each kind of seed.

The area to be seeded shall be prepared by disking and harrowing to loosening the soil. Seed shall be plated approximately ¼-inch deep, with a maximum depth of ½-inch. The distance between furrows shall not exceed eight (8) inches. Seeding shall be applied at the following rates:

Common Name	***Botanical Name***	***Pounds Per Acre***
Little Bluestem	Schizachrium Scoparium	2
Blue Grama	Bouteloua Gracilis	4
Spike Muhly	Muhlenbergia Wrightii	2
Hairy Grama	Bouteloua Hirsuta	3
Blue Flax	Linum Lewisii	2
Rocky Mountain Penstemon	Penstemon Strictus	3
Firecracker Penstemon	Penstemon Eatonii	4
Prarie Coneflower	Ratibida Columnaris	2

The application of seeding with hydraulic methods, using a minimum of 1,500 pounds of wood cellulose fiber per acre, will be required for planting and mulching seed as described above. Preparation of the seed bed as described above shall be required.

901-2.2 LIME. Lime shall be ground limestone containing not less than 85% of total carbonates, and shall be ground to such fineness that 90% will pass through a No. 20 mesh sieve and 50% will pass through a No. 100 mesh sieve. Coarser material will be acceptable, providing the rates of application are increased to provide not less than the minimum quantities and depth specified in the special provisions on the basis of the two sieve requirements above. Dolomitic lime or a high magnesium lime shall contain at least 10% of magnesium oxide. Lime

shall be applied at the rate as recommended by the soil test analysis that is conducted by the Contractor. All liming materials shall conform to the requirements of ASTM C 602.

901-2.3 FERTILIZER. Fertilizer shall be standard commercial fertilizers supplied separately or in mixtures containing the percentages of total nitrogen, available phosphoric acid, and water-soluble potash. They shall be applied at the rate and to the depth specified herein, and shall meet the requirements of Federal Specification A-A-1909 and applicable state laws. They shall be furnished in standard containers with name, weight, and guaranteed analysis of contents clearly marked thereon. No cyanamide compounds or hydrated lime shall be permitted in mixed fertilizers.

The fertilizers may be supplied in one of the following forms:

a. A finely-ground fertilizer soluble in water, suitable for application by power sprayers.

Fertilizers shall be slow release commercial fertilizer and shall be spread at the rate as recommended by the soil test analysis that is conducted by the Contractor.

901-2.4 SOIL FOR REPAIRS. The soil for fill and top soiling of areas to be repaired shall be at least of equal quality to that which exists in areas adjacent to the area to be repaired. The soil shall be relatively free from large stones, roots, stumps, pine needles, or other materials that will interfere with subsequent sowing of seed, compacting and shall be approved by the Engineer before being placed.

901-2.5 HYDRO MULCHING. Hydro mulching - 100% virgin wood cellulose fiber mulch shall be;

- Free of growth or germination inhibiting ingredients.
- Specially manufactured for use in hydraulic seeding and mulching equipment.
- Minimum organic matter content of 95%.
- Minimum moisture content of 12%.
- Water absorption potential of 800 -900% for wood cellulose fiber mulch.
- Quantity and rate shall be per the manufacturer's recommendation for use as a metering agent to apply seed uniformly over designated area.

901-2.6 Contractor shall apply hydro-mulch with hydro-seeding in all locations as designated on the plans or by the engineer.

CONSTRUCTION METHODS

901-3.1 ADVANCE PREPARATION AND CLEANUP. After grading of areas has been completed and before applying fertilizer and ground limestone, areas to be seeded shall be raked or otherwise cleared of stones larger than 2-inches in any diameter, sticks, stumps, and other debris that might interfere with sowing of seed, growth of grasses, or subsequent maintenance of grass-covered areas. If any damage by erosion or other causes has occurred after the completion of grading and before beginning the application of fertilizer and ground limestone, the Contractor shall repair such damage. This may include filling gullies, smoothing irregularities, and repairing other incidental damage.

An area to be seeded shall be considered a satisfactory seedbed without additional treatment if it has recently been thoroughly loosened and worked to a depth of not less than 5-inches as a result of grading operations and, if immediately prior to seeding, the top 3-inches of soil is loose,

friable, reasonably free from large clods, rocks, large roots, or other undesirable matter, and if shaped to the required grade.

However, when the area to be seeded is sparsely sodded, weedy, barren and un-worked, or packed and hard, any grass and weeds shall first be cut or otherwise satisfactorily disposed of, and the soil then scarified or otherwise loosened to a depth not less than 5-inches. Clods shall be broken and the top 3-inches of soil shall be worked into a satisfactory seedbed by disking, or by use of cultipackers, rollers, drags, harrows, or other appropriate means.

901-3.2 WET APPLICATION METHOD.

a. General. The Contractor may elect to apply seed and fertilizer (and lime, if required) by spraying them on the previously prepared seedbed in the form of an aqueous mixture and by using the methods and equipment described herein. The rates of application shall be as specified above.

b. Spraying Equipment. The spraying equipment shall have a container or water tank equipped with a liquid level gauge calibrated to read in increments not larger than 50 gallons over the entire range of the tank capacity, mounted so as to be visible to the nozzle operator. The container or tank shall also be equipped with a mechanical power-driven agitator capable of keeping all the solids in the mixture in complete suspension at all times until used.

The unit shall also be equipped with a pressure pump capable of delivering 100 gallons per minute at a pressure of 100 pounds per square inch. The pump shall be mounted in a line that will re-circulate the mixture through the tank whenever it is not being sprayed from the nozzle. All pump passages and pipe lines shall be capable of providing clearance for 5/8 inch solids. The power unit for the pump and agitator shall have controls mounted so as to be accessible to the nozzle operator. There shall be an indicating pressure gauge connected and mounted immediately at the back of the nozzle.

The nozzle pipe shall be mounted on an elevated supporting stand in such a manner that it can be rotated through 360 degrees horizontally and inclined vertically from at least 20 degrees below to at least 60 degrees above the horizontal. There shall be a quick-acting, three-way control valve connecting the re-circulating line to the nozzle pipe and mounted so that the nozzle operator can control and regulate the amount of flow of mixture delivered to the nozzle. At least three different types of nozzles shall be supplied so that mixtures may be properly sprayed over distance varying from 20 to 100-feet. One shall be a close-range ribbon nozzle, one a medium-range ribbon nozzle, and one a long-range jet nozzle. For case of removal and cleaning, all nozzles shall be connected to the nozzle pipe by means of quick-release couplings.

In order to reach areas inaccessible to the regular equipment, an extension hose at least 50-feet in length shall be provided to which the nozzles may be connected.

c. Mixtures. Lime, if required, shall be applied separately, in the quantity specified, prior to the fertilizing and seeding operations. Not more than 220 pounds of lime shall be added to and mixed with each 100 gallons of water. Seed and fertilizer shall be mixed together in the relative proportions specified, but not more than a total of 220 pounds of these combined solids shall be added to and mixed with each 100 gallons of water.

All water used shall be obtained from fresh water sources and shall be free from injurious

chemicals and other toxic substances harmful to plant life. Brackish water shall not be used at any time. The Contractor shall identify to the Engineer all sources of water at least 2-weeks prior to use. The Engineer may take samples of the water at the source or from the tank at any time and have a laboratory test the samples for chemical and saline content. The Contractor shall not use any water from any source that is disapproved by the Engineer following such tests.

All mixtures shall be constantly agitated from the time they are mixed until they are finally applied to the seedbed. All such mixtures shall be used within 2-hours from the time they were mixed or they shall be wasted and disposed of at locations acceptable to the Engineer.

d. Spraying. Lime, if required, shall be sprayed only upon previously prepared seedbeds. After the applied lime mixture has dried, the lime shall be worked into the top 3-inches after which the seedbed shall again be properly graded and dressed to a smooth finish.

Mixtures of seed and fertilizer shall only be sprayed upon previously prepared seedbeds on which the lime, if required, shall already have been worked in. The mixtures shall be applied by means of a high-pressure spray that shall always be directed upward into the air so that the mixtures will fall to the ground like rain in a uniform spray. Nozzles or sprays shall never be directed toward the ground in such a manner as might produce erosion or runoff.

Particular care shall be exercised to insure that the application is made uniformly and at the prescribed rate and to guard against misses and overlapped areas. Proper predetermined quantities of the mixture in accordance with specifications shall be used to cover specified sections of known area. Checks on the rate and uniformity of application may be made by observing the degree of wetting of the ground or by distributing test sheets of paper or pans over the area at intervals and observing the quantity of material deposited thereon.

On surfaces that are to be mulched as indicated by the plans or designated by the Engineer, seed and fertilizer applied by the spray method need not be raked into the soil or rolled. However, on surfaces on which mulch is not to be used, the raking and rolling operations will be required after the soil has dried.

901-3.3 MAINTENANCE OF SEEDED AREAS. The Contractor shall protect seeded areas against traffic or other use by warning signs or barricades, as approved by the Engineer. Surfaces gullied or otherwise damaged following seeding shall be repaired by re-grading and reseeding as directed. The Contractor shall mow, water as directed, and otherwise maintain seeded areas in a satisfactory condition until final inspection and acceptance of the work.

When either the dry or wet application method outlined above is used for work done out of season, it will be required that the Contractor establish a good stand of native seeding of uniform color and density to the satisfaction of the Engineer. A stand of native seeding shall be considered adequate when bare spots are one square foot or less, randomly dispersed, and do not exceed three percent (3%) of the area seeded. If at the time when the contract has been otherwise completed it is not possible to make an adequate determination of the color, density, and uniformity of such stand of grass, payment for the unaccepted portions of the areas seeded out of season will be withheld until such time as these requirements have been met.

METHOD OF MEASUREMENT

901-4.1 The quantity of hydro-seeding to be paid for shall be the number of measured on the ground surface, completed and accepted.

BASIS OF PAYMENT

901-5.1 Payment shall be made at the contract unit price per acre, which price and payment shall be full compensation for preparation, harrowing, disking, furnishing and placing all material and for all labor, equipment, tools, and incidentals necessary to complete the work prescribed in this item.

Payment will be made under:

Item 901.1 Hydro-Seeding – per acre

CONTRACTOR QUALITY CONTROL

901-6.1 QUALITY CONTROL PROGRAM. The Contractor shall be responsible for developing and implementing a Contractor quality control program including inspection and testing to assure compliance with the requirements of this section in accordance with Item P-100 of the Civil Technical Specifications.

901-6.2 MINIMUM TESTING AND INSPECTION REQUIRED. The following shall be the minimum testing and inspections required for this item:

a. Inspection and documentation that the seed name, lot number, net weight, percentage of purity and of germination and hard seed, and percentage of maximum weed seed content are clearly marked for each kind of seed.

b. Inspection and documentation that the various seeds are applied at the minimum number of pounds per acre.

c. Inspection and documentation that the seed was plated at ¼-inch to ½-inch maximum depth.

d. When applying seed by hydraulic methods, inspect and document that a minimum of 1,500 pounds of weed cellulose fiber was applied per acre.

e. Conduct soil tests to verify rate of lime application and document in the daily quality control and inspection reports.

f. Provide inspections to verify the rate of soluble fertilizer and document in the daily quality control and inspection reports.

g. Provide inspection and documentation that the preparation of the seed bed is satisfactory to insure that all material 2-inches in any diameter, such as sticks, stumps, and other debris that might interfere with sowing of seed, growth of grasses, or subsequent maintenance of grass-covered areas.

h. Provide documentation and inspection for the maintenance of seeded areas.

MATERIAL REQUIREMENTS

ASTM C 602	Agricultural Liming Materials
ASTM D 977	Emulsified Asphalt
Federal Specification A-A-1909	Fertilizer
Federal Specification A-A-2671	Seeds, Agriculture

END OF ITEM T-901

ITEM M-002 ENGINEER'S FIELD OFFICE

DESCRIPTION

002-1.1 GENERAL. This item shall consist of furnishing, maintaining and providing a weekly cleaning of a new Engineer's field office for the use of the Engineer, in a weatherproof building hereafter described, at locations approved by the Engineer. Unless otherwise approved, the building shall be independent of any buildings used by the Contractor and all keys to the buildings shall be turned over to the Engineer.

ENGINEER'S FIELD OFFICE

002-2.1 FIELD OFFICE. The Contractor shall furnish one (1) building for the use of the Engineer as a field office. The buildings shall be furnished and maintained by the Contractor as specified herein and shall become property of the Contractor when the contract work is completed.

The office shall be durable, waterproof, dust tight and securable. The field office shall have ceiling heights of not less than eight (8) feet and a floor space less than 720 square feet with an approximate length of 50-feet. The field office shall have at least two (2) office rooms. The office shall be provided with sufficient heat, natural and artificial light and air conditioning to maintain thermostatically controlled temperatures between sixty (60) and eighty (80) degrees Fahrenheit. Doors and windows shall be equipped with locks approved by the Engineer, and windows shall contain wrought iron security coverings and blinds. Suitable sanitary facilities separate from those for the Contractor's personnel meeting Federal, state and local health department requirements shall be provided and maintained and cleaned daily. Bathrooms shall be stocked with lavatory and sanitary supplies at all times during the period of the Contract.

Field offices that are provided by the Contractor must be new and the layout approved by the City of Flagstaff, and they shall be securely blocked and tied down per the manufacturer's recommendations.

In addition, the following equipment and furniture meeting the approval of the Engineer shall be furnished for the Engineers Field Office:

TABLE 1 – Engineer's Field Office Equipment and Furniture.

Quantity	Description of Item or Items
1	Desks (2.5-feet by 5-feet) with armed swivel desk chairs
1	Three shelf bookcases (each shelf to accommodate at least 12" high binders
1	Four-drawer legal file cabinets
1	Trash cans (1.2 cubic feet minimum capacity)
1	Plain paper fax machine and paper supplies
1	Copy machine, with 20 bin sorter or approved equal with document feeder with reduction and enlargement, auto document feeder and copy sorting capability and paper supplies for 2,000 combined copies of 8½-inch by 11-inch, 8½-inch by 14-inch and 11-inch by 17-inch per month. Provide service contract/warranty (including toner and replacement cartridges) and maintenance contract for the duration of the Engineer's field office. Supply paper as needed

The field office building, equipment, materials and furnishings, shall remain fully operational and maintained on the job site for the duration of the project, until final completion date and released by the Engineer.

The Contractor shall provide space for conferences with one (1) room being large enough to accommodate twelve (12) people for meetings and conferences at another location other that the engineer's field office.

The Contractor shall provide continuous maintenance and refuse removal. Weekly cleaning and janitorial services shall be provided, except that sanitary facilities shall be cleaned daily. In addition to office supplies stated herein, the Contractor shall provide soap, paper towels, cleansers, and sanitary supplies to maintain a functional field office for the duration of the contract.

002-2.2 TEMPORARY UTILITIES. The Contractor shall make all arrangements, obtain any necessary permits, install utilities and pay for all installation fees and all monthly billings for the following utilities for the Field Office.

a. Arizona Public Service
b. Temporary generator if APS service are not provided
c. City of Flagstaff Water and Wastewater Services

The Contractor shall coordinate and arrange with the appropriate utility owner to install temporary service or connect to existing service. Where the company provides only part of the service, the Contractor shall provide the remainder with matching, compatible materials and equipment; comply with the company's requirements. All work and costs associated with installing and maintaining utilities shall be the responsibility of the Contractor. In the event that the electrical power is not available or initially available for the field office, the Contractor shall provide generators until such permanent electrical power is available.

METHOD OF MEASUREMENT

002-3.1 This item shall be measured as one lump sum for providing a Field Office in accordance with this specification.

BASIS OF PAYMENT

002-4.1 Payment for providing the Engineer's Field Office fully equipped as specified herein shall be made at the contract lump sum price.

Payment will be made as follows:

a. First Pay Estimate. Sixty percent (60%) of the amount provided in the GMP proposal will be paid with the first estimate after the Engineer's Field Office is completely furnished and operational to the Engineer's satisfaction.
b. Remainder. The remaining forty percent (40%) will be paid in approximately equal monthly payments based on the duration the Engineer's Field Office will be used by the Engineer.

Payment will be made under:

Item M-002 Engineer's Field Office – per Lump Sum

END OF ITEM M-002

ITEM M-003 AIRPORT SAFETY AND SECURITY

DESCRIPTION

003-1.1 GENERAL. The Contractor shall be required to carry out his operations in a manner that will cause a minimum of interference with air traffic, and shall be required to cooperate with the FAA, the City of Flagstaff, the airlines, and other Contractor's that may be working in the area. All work shall be completed in accordance with the phasing plans, the FAA Advisory Circular 150/5370-2E and the Special Provisions of these Contract Documents.

The Contractor shall complete the Airport Construction Safety Plan as contained within the specifications with information applicable to the Contractors specific personal and means and methods of completing this project.

The Contractor shall be required to hold weekly airfield coordination meetings with the City of Flagstaff Operations. Additionally, the Contractor shall meet with Operations prior to the start of each shift to discuss the day's anticipated work activities.

All vehicles shall have flashing yellow lights in accordance with the Special Provision Specifications.

The Contractor shall be required to supply, place, maintain, move and store the items listed herein, as appropriate, to facilitate construction and protect air traffic and to keep on site an adequate extra supply of these items.

MATERIALS

003-2.1 RED WARNING LIGHTS. Red warning lights shall be flashing red lights meeting the requirements of the "Manual on Uniform Traffic Control Devices for Streets and Highways" for Type A and Type B flashers.

003-2.2 WARNING MARKERS. Warning markers shall be the type and size detailed on the plans. Markers shall be equipped with a red warning light per paragraph 003-2.1.

003-2.3 LOW LEVEL BARRIERS. Low level barriers shall be the Airport Runway Safety Barricade Model AR-2 Multi-Barrier as manufactured by Off The Wall Products, LLC, or approved equal. The AR-2 low level barrier sections shall be eight (8) feet long and ten (10) inches high. Sections shall be interlocking and shall be ballasted to prevent damage from jet blast. Each barricade section shall be equipped with a Model: SL-H867R Solar Powered Safety lights as manufactured by Leotek Electronics USA Corp., or approved equal. The barriers shall be furnished, maintained and relocated during each phase by the Contractor.

003-2.4 VACUUM SWEEPER. Vacuum Sweeper shall be Tymco, Model HSP-600 or Elgin Model crosswind or approved equal.

003-2.5 SECURITY CHECK POINTS AND CONTROLLED CROSSINGS. Provide as shown on the plans and as detailed within this specification, the items necessary to control crossings at active taxiways. These items may include traffic control devices or handheld traffic signals.

RESPONSIBILITIES

003-3.1 CONTROL REQUIREMENTS. The Contractor's responsibilities for work areas are as follows:

1) The Contractor shall be held responsible for controlling his employees, subcontractor's, and their employees with regard to traffic movement.

2) The Contractor shall rebuild, repair, restore, and make good at his own expense all injuries or damages to any portion of the work occasioned by his use of these facilities before completion and acceptance of his work.

3) The Contractor shall submit to the Engineer in writing a detailed work plan for each construction phase. This plan shall be submitted 14 calendar days prior to the start of each construction phase. No work within the construction phase may commence until the phase work plan has been reviewed by the City of Flagstaff and returned to the Contractor and marked as "no exceptions taken" or "make corrections noted."

4) The Contractor shall submit to the Engineer in writing a plan, by construction phase, for controlling construction equipment and vehicular movements in the Air Operations Area (AOA). This plan shall be submitted at the preconstruction conference. No work may commence until this plan has been reviewed and marked as "no exceptions taken" or "make corrections noted." The Plan must include material haul roads.

5) The Contractor shall provide a responsible Traffic Manager whose duty shall be to direct all traffic on or near active runways, taxiways, haul roads, and highways.

003-3.2 VEHICLE AND PEDESTRIAN CONTROL. Vehicle and access routes for airport construction shall be controlled as necessary to prevent inadvertent or unauthorized entry of persons, vehicles or animals onto air operation areas. No vehicle shall enter the air operations area except at predetermined locations. The amount of construction traffic will require the Contractor to use a security guard at access gates and a flag person to control traffic crossing taxiways and other aircraft movement areas. Contractor personnel who operate vehicles in the AOA shall comply with the airport operator's rules and regulations for vehicle marking, lighting, and operation. Failure to comply may result in fines as listed in Table 1.

003-3.3 CONTROL AND WARNING DEVICES. During construction operations near active taxiways or runways the Contractor shall furnish and maintain medium and low level barricades equipped with red warning lights along the edges of the runway and taxiway safety areas to warn construction equipment to stay clear of the active airfield pavement. The Contractor shall furnish and maintain warning markers with red warning lights along the edges of the runway safety area as designated and detailed on the plans. The Contractor shall maintain warning lights and red warning flags around all equipment, stockpiles, or other areas as directed by the Engineer.

The Contractor shall provide the phone numbers of two (2) of its responsible personnel, including the project superintendent, and one (1) other responsible person whom may be contacted in an emergency. Personnel shall be on call 24-hours per day for maintaining construction hazard lighting and barricades.

003-3.4 VEHICLE MARKING AND IDENTIFICATION. All permitted vehicles operating in the AOA shall display in full view above the vehicle a 3-feet x 3-feet or larger, orange and white checkerboard flag, each checkerboard color being 1-foot square. Any vehicle operating on the AOA shall be equipped with a flashing amber (yellow) dome-type light, mounted on top of the vehicle and of such intensity to conform to local codes for maintenance and emergency vehicles. All vehicles operating within the airfield boundary shall be identified with a sign on each side of the vehicle bearing the contractor's name with an 8-inch minimum letter height.

Vehicles making only occasional visits to the job site are exempt from the identification requirements contained above provided that a properly identified vehicle escorts them into, through, and out of the airport secured area. These and other vehicles needing intermittent identification may be marked with tape or with magnetically attached markers that are commercially available.

003-3.5 VEHICLE TRAFFIC AND OPERATIONS. When any vehicle other than those approved for use in the AOA is required to travel to or from the work area or over any portion of the work area, it shall be escorted by a vehicle properly identified to operate in the area and be provided with a flag on a staff attached to the vehicle. All construction vehicles/equipment shall have automatic signaling devices to sound an alarm when moving in reverse. All equipment shall be operated within the approved speed limit(s).

003-3.6 VEHICLE PARKING. All vehicles shall be parked and serviced in the designated staging and employee parking areas shown on the plans. The Contractor is responsible for transporting his/her employees from these areas to the jobsite.

003-3.7 RADIO COMMUNICATIONS. The control of vehicular activity on the AOA is of the highest importance. This requires coordination with airport users and ATCT. The Contractor's designated and trained personnel shall have direct contact with ATCT ground control. All communications with ATCT shall be coordinated through the City of Flagstaff Operations personnel. However, the Contractor shall properly train his/her personnel, particularly flag persons, on the proper procedures for monitoring radio frequencies.

All vehicles and/or construction equipment operating inside the active AOA, but outside of the designated haul roads, shall be escorted by the City of Flagstaff Operations personnel, who will maintain radio contact with the ATCT. Crossing the active runway shall not be permitted. Vehicular traffic crossing active taxiways shall be controlled by two-way radio with the ATCT by escort or flagmen as detailed on the plans. The clearance shall be confirmed by the driver's personal observation that no aircraft is approaching his/her position. Aircraft have the right-of-way. Construction equipment shall always yield to aircraft.

003-3.8 AIRPORT SECURITY REQUIREMENTS. The Contractor will be required to coordinate his work so as to satisfy clearance requirements for arrival and departure of scheduled aircraft, and in compliance with FAA Advisory Circular 150/5370-2E, concerning operational safety on airports during construction activity.

The airport is operated in strict compliance with Federal Aviation Regulation – Part 107, which prohibits unauthorized persons or vehicles in the Air Operations Area. Equipment and personnel will be restricted to the work area defined on the plans. Any violations by Contractor's personnel will subject the Contractor to penalties imposed by the FAA and the Aviation Department Airport Security Office.

Airport restricted areas are fenced and must remain fenced at all times. Any required temporary security fences and/or gates shall be constructed by the Contractor. Temporary fencing shall be constructed and paid for in accordance with this Item M-003. The gates will remain closed and locked, or if it is being continuously used for ingress and egress, a gate operator will be provided at the Contractor's expense. The Contractor shall furnish the gate operator with a roster of his personnel and ensure that each individual has adequate identification. Interlocking locks supplied by the Contractor will not be allowed. The Airport Operations will control the security check point gates. Gates will be staffed as described in the subsequent paragraph during shift working hours and secured when there is no activity at that location. The Contractor will be responsible for a 24-hour advance notification to Operations regarding the scheduling of the use of the various securities check point gates.

The Contractor shall be responsible to provide at his own cost an escort service for all vehicles that do not operate on a daily basis within the AOA. Escorted vehicles shall not be left unattended. Any escorted vehicle allowed on the AOA by the Contractor shall be escorted back and forth to the point of entry. One badged escort vehicle shall be required for each unbadged vehicle. There will be no exceptions to this requirement.

003-3.9 VIOLATION OF RESPONSIBILITIES. Any violation of 003-3.1 - 003-3.8 shall be considered a violation of the Contract itself and shall be sufficient cause for halting the work without extending the time limit of the job.

003-3.10 FINES. Due to both the safety and security precautions necessary at Flagstaff Pulliam Airport, failure of the Contractor to adhere to the prescribed requirements/regulations has consequences that may jeopardize the health, welfare and lives of the customers and employees at Flagstaff Pulliam Airport, as well as the Contractor's own employees. Therefore, if the Contractor is found to be in non-compliance with the security, airfield badging/licensing and airfield safety requirements by either Airside Operation's personnel or the Engineer or his representatives, the Airside Operations may issue Notice of Violations (NOV). The Contractor may appeal the NOV, however appeals must be made in writing, and within four (4) calendar days of the offending incident, to the City of Flagstaff's Senior Project Manager. The appeal would need to state, in sufficient detail, why the NOV/circumstances is unwarranted. A final and binding decision on the appeal will be made by the City of Flagstaff's Project Management Team within ten (10) working days of receipt of the appeal, the Contractor will then be notified of this decision in writing. No further appeals to the specific NOV will be considered or accepted. Subsequent fines and/or requirements, if any, will be applied in accordance with Table 1, Schedule of Fines listed below and the applicable amount will be withheld from the Contractor's next monthly payment application following the date of the violation. The Contractor will be held financially responsible for all NOV's issued to their subcontractor's or material suppliers associated with this contract.

TABLE 1 – Schedule of Fines for Notice of Violation.

Description of Fines	First Offense	Second Offense	Third Offense
Shift Supervisor* not having proper and current Airport Security Badge or not properly displaying Airport Security Badge.	$1,000.00	$5,000.00	$15,000.00
Lost or unreturned Airport Security Badge.	$300.00	$450.00	$600.00
Un-authorized access to AOA by construction personnel or access through construction gate by un-authorized personnel.	$1,000.00	$5,000.00	$15,000.00
Failure to Escort / be Escorted.	$1,000.00	$5,000.00	$15,000.00
No logo on vehicle or logo is not Correct in name and dimension.	$1,000.00	$5,000.00	$15,000.00
Active runway incursion.	$15,000.00	$20,000.00	$25,000.00
Active taxiway, taxilane or apron incursion.	$10,000.00	$15,000.00	$20,000.00
Active runway or taxiway object free area incursion	$5,000.00	$10,000.00	$15,000.00
Safety violation, such as insufficient barricades, or no flags or amber beacons on vehicle or equipment. Or no red obstruction lighting on cement silo, batch plants, cranes or other equipment with significant height.	$5,000.00	$10,000.00	$15,000.00
Failure to provide lighted barricades.	$5,000.00	$10,000.00	$15,000.00
All other NOV not listed above.	$1,000.00	$5,000.00	$15,000.00

*Contractor must provide a minimum of one properly badged on-site shift supervisor at all times to escort crews.

The City of Flagstaff has the option to issue warnings on the first offense if the incident justifies it. Individuals involved in a non-compliance violation may be required to surrender their security badge and airfield driver's license pending investigations of the matter and the outcome of the possible appeal.

Incursions are defined as any entrance onto an active runway, taxiway, taxilane or apron that may or may not subject any aircraft or crash fire rescue vehicle to yield, stop or change direction to avoid the sudden entrance.

The fourth and each subsequent offence for any of the NOV listed above, the fine shall remain at the same amount shown for the third offence. Advancing from the first offence to the second offence, or from the second offence to the third offence, etc., shall be considered whether the individual is employed with the prime Contractor or any subcontractor or material supplier.

COORDINATION OF CONSTRUCTION ACTIVITIES

003-4.1 WORK SCHEDULING AND ACCOMPLISHMENT. The Contractor shall contact the Engineer each day before he begins work to coordinate the status and nature of work to be done that day. The Contractor shall also report to the Engineer at the end of each day to schedule the work he plans to do on the following day.

SAFETY REQUIREMENTS

003-5.1 GENERAL. Before entering upon or crossing any runway or taxiway, the Contractor shall receive proper clearance. Emergencies and operating conditions may necessitate sudden changes, both in Airport operations and in the operations of the Contractor. Aircraft operations shall always have priority over any and all of the Contractor's operations. Should runways or taxiways be required for the use of aircraft and should Airport operations, the control tower, or the Engineer deem the Contractor to be too close to active runways or taxiways the Contractor shall suspend his operations, remove his personnel, equipment, and materials to a safe distance outside of the object free area and stand by until the runways and taxiways are no longer required for use by aircraft. There will be no compensation for delays or inefficiencies due to these changes.

Throughout the duration of the job, any practice or situations that the City of Flagstaff determines to be unsafe or a hindrance to regular Airport operations shall be immediately rectified.

(1) The following publications contain definitions/descriptions of critical airport operating areas. The areas defined below pertain to airfield safety requirements and are referenced throughout the contract documents.

(A) Advisory Circular 150/5370-2E, Current Edition, *Operational Safety on Airports During Construction*, sets forth guidelines to assist airport operators in complying with FAR Part 139, *Certification and Operation/Land Airports Serving Certain Air Carriers* and with the requirements of federally funded construction projects.

(B) FAR Part 77, *Objects Affecting Navigable Airspace*, current edition; establishes standards for determining obstructions to navigable airspace. Civil airport imaginary surfaces are defined in the publication. It also sets forth requirements for notice of certain proposed construction or alteration. Notice of construction provides a basis for recommendations for identifying the construction or alteration in accordance with AC 70/7460-1, *Obstruction Marking and Lighting*, current edition.

(C) AC 150/5300-13, *Airport Design*, current edition; establishes design, operational and maintenance standards for airports.

(2) The Contractor shall acquaint his supervisors and employees with the airport and operations that are inherent to Flagstaff Pulliam Airport and shall conduct his/her construction activities to conform to all routine and emergency air traffic requirements and guidelines for safety specified herein. The Contractor shall be responsible for providing all safety devices as required for the protection of his personnel.

(3) Protection of all persons shall be provided throughout the progress of the work. The work shall proceed in such a manner as to provide safe conditions for all workers and

personnel. The sequence of operations shall be such that maximum protection is afforded to ensure that personnel and workers in the work area are not subject to any dangerous conditions. The Contractor must provide safety measures to guard against injury.

(4) During the performance of this contract, the airport facility shall remain in use to the maximum extent possible. Use of areas near the Contractor's work will be controlled to minimize disturbance to the Airport's operation. The Contractor shall not allow employees, subcontractor's, suppliers, or any other unauthorized person to enter or remain in any airport area which would be hazardous to persons.

(5) All work to be performed which is too close to an active runway, taxiway or apron under operational conditions shall be performed when the runway, taxiway or apron is not in use. Such work shall not be accomplished without prior permission from the Engineer. Requested closings shall be directed to the Engineer in writing at least 72-hours in advance. The Engineer will then notify the City of the upcoming closure.

(6) The Contractor shall be aware of the following types of safety problems and/or hazards. These problems or hazards shall not be permitted. Should any of these problems or hazards arise during construction, the Contractor shall immediately rectify/correct the problem or hazard to the satisfaction of the Engineer and Operations Personnel:

(a) Trenches, holes, or excavations on or adjacent to any open runway or in safety areas.

(b) Unmarked/unlighted holes or excavation in any apron, open taxiway, open taxilane, or related safety area.

(c) Mounds or piles of earth, construction materials, temporary structures, or other objects in the vicinity of any open runway, taxiway, taxilane, or in a related safety, approach, or departure area.

(d) Vehicles or equipment (whether operating or idle) on any open runway, taxiway, taxilane, or in any related safety, approach, or departure area.

(e) Vehicles, equipment, excavations, stockpiles, or other materials which could degrade or otherwise interfere with electronic signals from radios or electronic navigational aids (NAVAIDS).

(f) Runway surfacing projects resulting in excessive lips greater than 1-inch for runways and exceeding 3 inches for edges between the old shoulder and new surfaces at runway edges and ends.

(g) Unmarked utility, NAVAID, weather service, runway lighting, or other power or signal cables that could be damaged during construction.

(h) Objects (whether or not marked or flagged) or activities anywhere on or in the vicinity of the airport which could be distracting, confusing, or alarming to pilots during aircraft operations.

(i) Un-flagged or unlighted low visibility items (such as tall cranes, drills, and the like) anywhere in the vicinity of active runways, or in any approach or departure area.

(j) Misleading or malfunctioning obstruction lights or unlighted/unmarked obstructions in an approach to any open runway.

(k) Inadequate approach/departure surfaces needed to assure adequate landing/takeoff clearance over obstructions or work or storage areas.

(l) Inadequate, confusing or misleading (to user pilots) marking/lighting of runways, taxiways, or taxilanes, including displaced or relocated thresholds.

(m) Water, dirt, debris, or other transient accumulation which temporarily obscures pavement marking, pavement edges, or derogates visibility of runway/taxiway marking or lighting.

(n) Inadequate or improper methods of marking, barricading, and lighting of temporarily closed portions of airport operations area.

(o) Trash or other materials with foreign object damage (FOD) potential, whether on runways, taxiways, or aprons, or in related safety areas.

(p) Inadequate barricading or other marking which is placed to separate construction or maintenance areas form open aircraft operating areas.

(q) Failure to control vehicle and human access to open aircraft operating areas.

(r) Construction/maintenance activities or materials which could hamper the response of aircraft rescue and firefighting (ARFF) equipment from reaching all aircraft or any part of the runway/taxiway system, runway approach and departure areas, and aircraft parking locations.

(s) Bird attractants on airport, such as edibles (food scraps, etc.), miscellaneous trash, or ponded water.

(7) The Contractor shall conduct activities so as not to violate any safety standards contained herein. The Contractor shall inspect all construction and storage areas as often as necessary and promptly take all steps needed to prevent/remedy any unsafe or potentially unsafe conditions/activities discovered.

(8) Before actual commencement of construction activity, the Contractor shall notify in writing, at least 72-hours in advance, Airport Operations and the Engineer of his intentions to begin construction, stating the proposed time, date, and area of which commencement is to occur in order for the appropriate Notice-to-Airmen (NOTAM) to be issued.

Upon completion of work and return of all related areas to standard conditions, the Contractor shall again notify Airport Operations and the Engineer in writing, and describe the area that is complete and available for normal airport operations.

(9) *Debris.* Debris, waste and loose material or any other FOD (including dust and dirt) capable of causing damage to aircraft landing gear, propellers or being ingested in jet engines shall not be allowed on active aircraft movement areas or adjacent infield areas. Materials observed to be within these areas shall be removed immediately and/or continuously by the Contractor. The Contractor shall be required to have a sweeping machine and operator on site, ready at all times during construction activity. Where travel on or across runways, ramp areas,

taxiways, or aircraft aprons are required, the Contractor shall provide adequate personnel and equipment to keep such surfaces clear of debris. Closed pavements shall be swept clean prior to reopening to aircraft traffic.

(10) *Flagmen*. In accordance with the specifications, the Contractor shall furnish, at his own expense, flagmen as necessary to control his traffic unless otherwise directed by the Engineer.

(11) *Trenches, Excavations and Stockpiled Material*. Open trenches or excavations exceeding 3-inches in depth and 3-inches in width or stockpiled material will not be permitted within the limits of restricted areas of operational runways or taxiways. Covering for open trenches or excavations shall be of sufficient strength to support the weight of the heaviest aircraft operating on the runway or taxiway.

(12) Construction in Proximity to Active Runways and Taxiways.

Taxiway Sides. If appropriate construction/maintenance NOTAM has been issued, construction is permissible as close as the dimensions shown on the phasing plans provided that all Airport Operations and FAA criteria are met. This dimension(s) shall be clearly marked in the infield areas with warning flags at 10-feet intervals.

(13) *Equipment Height Restrictions*. Maximum permissible equipment height varies by location and by construction phase. Maximum equipment height requirements shall be in accordance with Part 77. Atop all equipment booms shall be mounted the white and orange checkered flag described in Paragraph 003-3.4. The top 10-feet of these booms shall be painted fluorescent orange and they shall be equipped with a red obstruction light. Any crane erections shall be coordinated with Operations and the Engineer during every shift.

(14) Miscellaneous.

(a) Open flame, welding or torch cutting operations is prohibited unless adequate fire and safety precautions have been taken and the procedure has been approved by the Engineer.

(b) All materials and equipment when not in use shall be placed in approved areas where they will not constitute a hazard to aircraft operations and not penetrate clearance height restrictions as shown on the Construction Restriction Plan(s). All equipment shall be parked in the appropriate area(s) when not in use.

(c) The Contractor shall provide the Safety/Security Manager with a current list of all employees working on the airport. The list shall be maintained current by the Contractor and subcontractors.

(d) Except for emergencies, all contact with airport personnel shall be made through the Engineer. For emergencies involving safety (injuries, fires, security breaches, etc.), the Contractor shall make direct contact with Airport Operations followed by notification to the Engineer as soon as possible.

003-5.2 HAZARD MARKING. Hazard-marking barricades, traffic cones, flashers, etc. should be used: to identify and define the limits of construction making them visible to aircraft, personnel, or vehicles; to identify hazards such as open manholes, small areas under repair, stockpiled material, waste areas, etc.; to prevent aircraft from taxiing onto a closed runway for takeoff; and to identify FAA, airport, and cables, power lines, instrument landing system (ILS)

critical areas, and other sensitive areas to prevent damage, interference, and facility shutdown. Hazardous areas, in which no part of an aircraft may enter, should be indicated by the use of barricades marked with diagonal, alternating orange and white stripes. The barricades should be supplemented with alternating orange and white flags, and installed so that they are always in the extended position and properly oriented. During reduced visibility or night hours, the barricades should be supplemented with flashing red lights. The intensity of the lights and spacing for barricades, flags, and lights should be adequate to delineate the hazardous area without ambiguity. The Contractor shall have a designated person on call 24 hours a day for emergency maintenance of airport hazard lighting and barricades.

003-5.3 CONSTRUCTION AREA MARKING AND LIGHTING. Low profile lights, retro-reflective taxiway edge markers, low level barriers, and warning flags shall be provided and erected by the Contractor as shown on the plans or as directed by the Engineer. All construction areas, including closed runways and taxiways, should be clearly and visibly separated from active air operation areas. Hazard areas, facilities, cables, and power lines should also be clearly identified by the Contractor. The Contractor is responsible for maintaining the condition and visibility of all markers identifying above-mentioned areas and that marking and lighting aids remain in place. Alternating orange and white flaglines, traffic cones, omnidirectional red flashers, and/or signs should be used as necessary to clearly separate all construction/maintenance areas from other parts of the AOA. All barricades, temporary markers, flaglines supports, and other objects placed and left in safety areas on any open runway, taxiway, or taxilane should be: as low as possible to the ground; of low mass; easily collapsible upon contact with an aircraft or any of its components; weighted down or sturdily attached to the surface to prevent displacement from propwash, jet blast, wing vortex, or other surface wind currents; and if affixed to the surface, frangible at ground level.

003-5.4 CONSTRUCTION NEAR NAVIGATIONAL AIDS. Construction materials and equipment shall not be placed or parked where they may interfere with the line-of-sight of the ATCT and navigational aids in operation. The City of Flagstaff shall determine if any materials or equipment will cause any type of interference.

003-5.5 CONSTRUCTION SITE ACCESS AND HAUL ROADS. The Contractor should submit specific proposed ingress and egress routes associated with specific construction activities to the Engineer for evaluation and review prior to commencing construction activities. Aircraft Rescue and Firefighting (ARFF) vehicles shall not be impeded at any time when traveling on access roads, haul roads, taxiways, and runways

003-5.6 TRENCHES AND EXCAVATIONS. Open trenches and excavations at the construction site outside of the RSA should be prominently marked with red or orange flags, as approved by the Engineer, and lighted with red light units during hours of restricted visibility or darkness.

Excavations and open trenches may be permitted up to the edge of structural taxiways provided the drop-off is adequately signed, marked, and lighted and the appropriate NOTAM is issued.

003-5.7 CONSTRUCTION MATERIALS STOCKPILING AND EQUIPMENT STORAGE. There shall not be any equipment storage in the active runway and active taxiway safety areas or in the infield areas. Refer to the Special Provisions Specification for limitations on stockpiled material. Stockpiled materials and equipment should be prominently marked with red flags and lighted during hours of restricted visibility or darkness if in the air operations area. Stockpiled material or equipment should not be stored near aircraft turning areas or operational movement areas, aprons, or excavations and trenches. Stockpiled materials or equipment should not be stored near NAVAIDs, visual or approach aids, nor should they obstruct the ATCT's line of sight

to any runway or taxiway. The Contractor should ensure that stockpiled construction materials and equipment do not cause degraded or hazardous conditions to airport operations safety. This includes determining and verifying that stockpiled materials and equipment are stored or parked at an approved location, that they are properly stowed to prevent foreign object debris (FOD), attraction by wildlife, or obstruction of air operations either by their proximity to NAVAIDs or to aircraft movement areas.

003-5.8 OTHER LIMITATIONS ON CONSTRUCTION. Open flame welding or torch cutting operations are prohibited unless adequate fire and safety precautions are provided and have been approved for use by the Engineer. Under no circumstances should flare pots be used near aircraft turning areas.

003-5.10 FOREIGN OBJECT DEBRIS (FOD) MANAGEMENT. Waste and loose materials capable of causing damage to aircraft landing gears or propellers or capable of being ingested in jet engines should not be left or placed on or near active aircraft movement areas. Materials tracked onto these areas should be continuously removed during the construction project. It is also recommended that waste or loose materials which would attract wildlife be carefully controlled and removed on a continuous basis. A minimum of one (1) operational vacuum sweepers and an operator, and one (1) 4M water truck with an operator, shall be on-site and operating continuously while the Contractor and/or any Subcontractor is working on airfield pavements.

003-5.11 RUNWAYS AND TAXIWAYS. Nothing shall be placed upon runways, taxiways, taxilanes, or aprons without authorization from the City of Flagstaff.

CONTRACTOR QUALITY CONTROL

003-6.1 The Contractor shall be responsible for developing and implementing a Contractor Quality Control Program including inspections necessary to assure compliance with the requirements of this section in accordance with Item P-100 of the Civil Technical Specifications.

METHOD OF MEASUREMENT

003-7.1 All items specified in this section will be measured as an lump sum based on the actual costs of the work.

BASIS OF PAYMENT

003-8.1 Airport safety and security shall be paid for from the lump sum based on approved actual costs. This price shall constitute full compensation for furnishing material and equipment, including but not limited to flagmen, temporary taxiway closure markings, warning markers, low level barriers, other traffic control devices and necessary equipment, safety area support material, and other material and equipment list herein, and the maintenance thereof and all other labor, materials, equipment, tools and incidentals necessary to accomplish this item.

Payment will be made under:

Item M-003 Airport Safety and Security – per lump sum

END ITEM M-003

ITEM U-200 LOCATION OF UNDERGROUND UTILITIES

DESCRIPTION

200-1.1 SCOPE. This Item shall govern the field location of all underground existing utilities in areas to be improved, to avoid conflicts with proposed surface or underground improvements. Work under this section shall include any additional designation and potholing as required to provide additional information as necessary on existing City of Flagstaff underground utilities. This shall include, but not be limited to, the location of sewer, water, gas, electrical and communication ducts, airfield lighting and control cables and FAA NAVAID cables. It is the intent of this specification to provide for the location of existing utilities and, by hand digging, particularly of direct burial cables for NAVAIDS.

a. General Requirements. See Special Provision Specification Section 12, *Protection of Existing Facilities* and Section 25, *Underground Facilities*.

b. The Contractor is hereby advised that the location of all utilities, as shown on the Plans, may not be complete or exact. The Contractor shall satisfy himself as to the exact location of the utilities by contacting all utility companies before proceeding with the work and by having a private utility locating firm locate and identify all utilities at the work site prior to any construction. The Contractor shall be responsible for any and all costs as a result of damage caused by construction activities to public or private property or utilities.

CONSTRUCTION METHODS

200-1.2 GENERAL. Utilities, utility appurtenances and cables encountered by the Contractor during the construction of this project shall be protected by the Contractor as needed to permit construction and to conform to the finished grades on the project. Use of mechanical equipment of any kind to verify utility locations are expressly prohibited. The Contractor shall immediately repair any damaged utilities at his own expense.

Coordinate all contacts with companies maintaining utilities at the Airport through the Engineer prior to any excavation/digging. Provide the Engineer with written documentation of how utility locations were verified.

Continuously maintain utilities for facilities and/or systems which are or may be affected by work associated with the project. Prepare and maintain a contingency plan, approved by the Engineer, to restore to service all utilities and/or control/signal cables which may be placed out of service or damaged during performance of the work. The Contractor shall provide the Engineer and the Flagstaff Pulliam Airport with written reports on all cable cuts.

Take all measures necessary to accurately locate all the routing of underground cable and utilities within project areas to be excavated, trenched or drilled. Contractor shall locate underground cables and utilities by designation, and where necessary, potholing and/or hand digging. Once located, place highly visible and durable markers along all such cable and utility route at intervals of not greater

than 25-feet. The Contractor shall maintain these markers in their original location throughout the project. The Contractor shall also be responsible for providing and maintaining a field survey and plan of the maker locations and shall replace any disturbed markers at his own expense. Do not use power equipment with teeth when excavating where cables are marked. Obtain Engineer approval of proposed marking devices. Use semi-permanent markers which are low profile, frangible and non-metallic within runway/taxiway safety areas and navigational and restricted zones.

Utilities located by potholing and/or had digging shall be surveyed by the Contractor. Coordinates and elevations shall be submitted to the Engineer and marked on the Contractor maintained record drawings.

CONTRACTOR QUALITY CONTROL

200-4.1 The Contractor shall be responsible for developing and implementing a Contractor Quality Control Program including inspection and testing to assure compliance with the requirements of this section in accordance with Item P-100 of the Civil Technical Specifications.

METHOD OF MEASUREMENT

200-5.1 Measurement for "Location of Underground Utilities" shall be by the actual cost of the work. Cost for work for subcontractors *(i.e.*, Utility Designation/Potholing Contractor) will be based upon invoiced cost from the subcontractor. Cost shall be calculated in accordance with the MAG standard specifications. Underground Utility Location costs will be subject to daily monitoring and approval by the Engineer.

BASIS OF PAYMENT

200-6.1 Payment for location of underground utilities, measured as prescribed above, shall be paid from the "Location of Underground Utilities – Lump Sum" based on approved actual costs. Such payment shall be full compensation for furnishing all labor, equipment, tools and materials and for all designation, preparation, excavation, backfilling and placing of materials; and for all incidentals necessary. Payment for the cost of each utility location will not be made until satisfactory survey data has been submitted to the Engineer.

Payment will be made under:

Item U-200 Location of Underground Utilities – per Lump Sum

END ITEM U-200

EXHIBIT F
MANDATORY STATUTORY PROVISIONS

Statutorily Required Contract Provisions
for Arizona Governmental Entities

1. Business Operations in Sudan/Iran

In accordance with A.R.S. §§ 35-391.06(A) and 35-393.06(B), CM@Risk certifies that the CM@Risk and its affiliates and subsidiaries do not have scrutinized business operations in Sudan or Iran. If the City determines that the CM@Risk certification is false, the City may impose all legal and equitable remedies available to it, including but not limited to termination of this Agreement.

2. Verification regarding immigration laws

CM@Risk warrants to the City that the CM@Risk and each of its subcontractors ("Subcontractors") will comply with, and are contractually obligated to comply with, all Federal Immigration laws and regulations that relate to its employees and A.R.S. §23-214(A) ("CM@Risk Immigration Warranty").

2.1 A breach of the CM@Risk Immigration Warranty shall constitute a material breach of this Agreement and shall subject the CM@Risk to penalties up to and including termination of this Agreement at the sole discretion of the City.

2.2 The City retains the legal right to inspect the papers of any CM@Risk or Subcontractor employee who works on this Agreement to ensure that the CM@Risk or Subcontractor is complying with the CM@Risk Immigration Warranty. CM@Risk agrees to assist the City in regard to any such inspections.

2.3 The City may, at its sole discretion, conduct random verification of the employment records of the CM@Risk and any of subcontractors to ensure compliance with CM@Risk 's Immigration Warranty. CM@Risk agrees to assist the City in regard to any random verifications performed.

2.4 The provisions of this Section 2 must be included in any contract the CM@Risk enters into with any and all of its subcontractors who provide services under this Agreement or any subcontract. "Services" are defined as furnishing labor, time or effort in the State of Arizona by a contractor or subcontractor. Services include construction or maintenance of any structure, building or transportation facility or improvement to real property.

3. Cancellation for Conflict of Interest

The parties understand and agree that this Agreement may be cancelled for conflict of interest in accordance with Arizona Revised Statutes § 38-511.

CITY OF FLAGSTAFF

STAFF SUMMARY REPORT

To:	The Honorable Mayor and Council
From:	Trevor Henry, Project Manager
Date:	05/29/2013
Meeting Date:	06/04/2013

TITLE:

Consideration and Approval of Construction Contract: La Plaza Vieja 2010 Bond Project.

RECOMMENDED ACTION:

1) Award the construction contract to LP's Excavating, Inc. of Williams, Arizona in the total award amount of $1,741,893.15, which includes $80,000.00 in contract allowance. The contract period is 150 calendar days; and
2) Authorize Change Order Authority to the City Manager in the amount of $166,000.00 (10% of the bid contract amount, less contract allowance) for unanticipated additional costs; and
3) Authorize the City Manager to execute the necessary documents.

Policy Decision or Reason for Action:

Awarding the contract will authorize the construction of the La Plaza Vieja 2010 Bond Project in accordance with the approved public improvements as authorized by the Special Debt Authorization election of November 2010. Proceeding with the contract work will improve the La Plaza Vieja neighborhood, the project will comply with the 2010 Bond program including water, sewer and pavement resurfacing and reconstruction.

Financial Impact:

The La Plaza Vieja 2010 Bond Improvement project is funded by the total budget appropriation of $2,118,044 (includes FY 12 and FY 13 prior year expenditures) and FY 14 budget amount of $1,957,236 for the voter approved Street/Utility Bond Program (acct. 403-2437-691).

Connection to Council Goal:

Repair, Replace, and Maintain Infrastructure (Streets & Utilities)

Has There Been Previous Council Decision on This:

Yes, Council approval of the Special Debt Authorization Election held in November 2010 and authorizing general obligation bonds to fund Street and Utilities Improvements in a principle amount up to $16,500,000.

Options and Alternatives:

1) Approve the award as recommended.
2) Reject the approval of the award and direct staff to re-advertise the project. This option would delay the construction start date and cause the work to be deferred until 2014.

Background/History:

The scope of the project includes new 8" sanitary sewer mains and services, new 8" water mains and services and new fire hydrants. New curb, gutter and sidewalk will be constructed for the areas where water and sewer services are installed to the property line. Asphalt pavement replacement includes resurfacing or reconstruction of the streets within the neighborhood. The project will also address vehicular traffic through the neighborhood by constructing mini traffic circles at the intersections of, Tombstone Ave and Florence St., Tucson Ave. and Florence St., Tombstone Ave. and Kingman St.

Construction impacts include traffic detours and temporary displacement of parking for the residents.

Key Considerations:

The bid solicitations were published two times, April 21 and 28, 2013.Six bids were received on May 8, 2013 at the office of the City Purchasing Agent. A summary of the bids received are:

Engineer's Estimate	$1,803,908.00
LP's Excavating	$1,741,893.15
Alliance Streets Works	$1,777,000.00
Fann Contracting	$2,125,276.00
Standard Construction Co.	$2,341,772.25
Hunter Contracting Co	.$2,623,091.69
Eagle Mountain Const.	$3,391,228.00

Expanded Financial Considerations:

Project expenditures will be funded by the current total budget appropriation of $2,118,044 for 2010 Bond Projects (acct. 403-2437-691).

Community Benefits and Considerations:

The project will replace deteriorated utility and street infrastructure in accordance with the voter approved bond authorization of November 2010. Pedestrian and ADA accessibility will be improved by the replacement of non-compliant street features.

Community Involvement:

All property owners in the La Plaza Vieja neighborhood were sent letters which gave a brief overview of the project and encouraged questions and comments from the residents. Staff attended the La Plaza Vieja Neighborhood Association meetings and gave updates on the project status. Construction up-dates will be provided to residents, property owners and to the neighborhood association throughout the project duration.

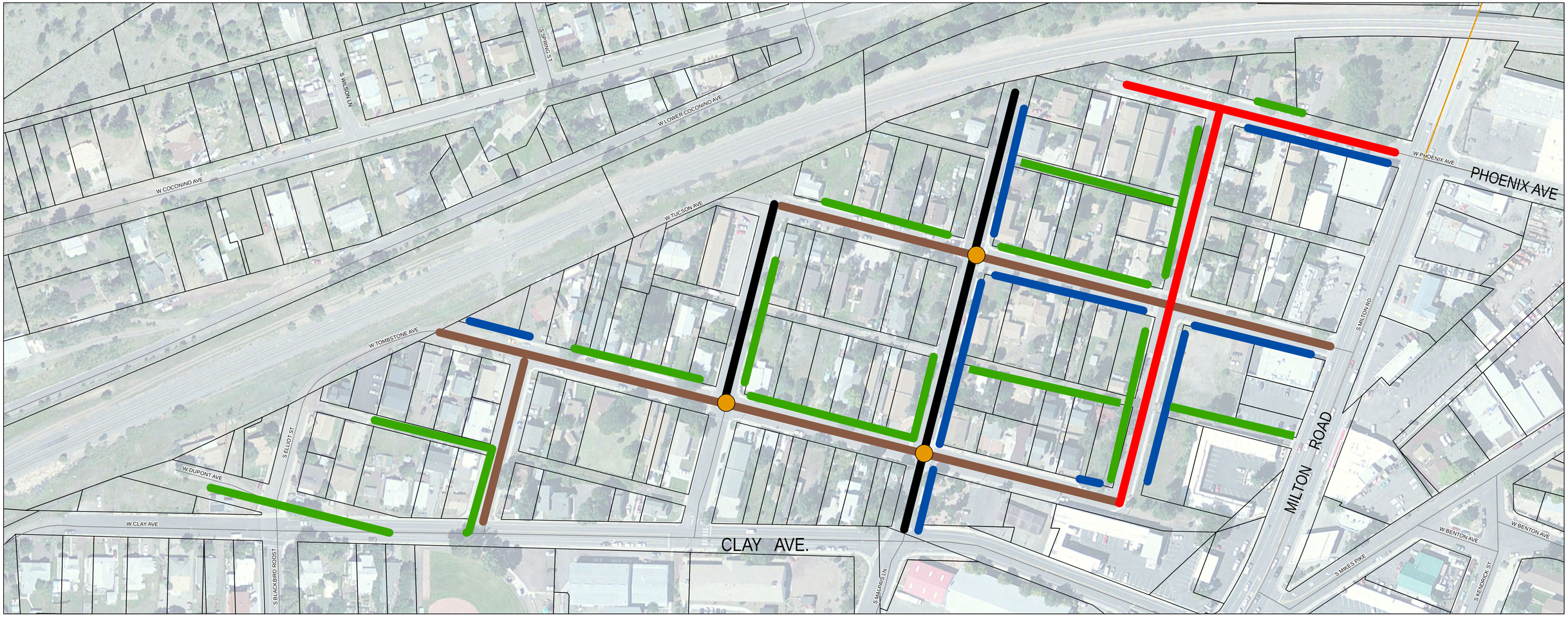
Expanded Options and Alternatives:

- Approve the award as recommended.
- Reject approval of the award. This option would delay the construction start and cause the work to be deferred until 2014. Provide additional direction to staff.

Attachments: Vicinity Map
Construction Contract
Bond Update Sheet
Mini Traffic Circle Exhibit

LA PLAZA VIEJA -- 2010 BOND IMPROVEMENTS

FLORENCE ST, TUCSON ST, TOMBSTONE AVE, PARK ST, PHOENIX AVE, GLOBE AVE, KINGMAN ST AND DUPONT AVE



N

Title: LA PLAZA VIEJA Improvements

1.) - Pavement Reconstruction

2.) - Mill and Pavement Overlay

3.) - Chip Seal Application

4.) - Water / Sewer replacements

5.) - Mini Traffic Circles

May 2012

CONSTRUCTION CONTRACT

City of Flagstaff, Arizona
And
LP's Excavating, Inc.

This Construction Contract ("Contract") is made and entered into this _____ day of _____ 2013, by and between the City of Flagstaff, an Arizona municipal corporation with offices at 211 West Aspen Avenue, Flagstaff, Arizona ("Owner") and LP's Excavating, Inc., an Arizona corporation ("Contractor") with offices at 606 E. Frank Way, Williams, Arizona. Contractor and the Owner may be referred to each individually as a "Party" and collectively as the "Parties."

RECITALS

A. Owner desires to obtain construction services; and

B. Contractor has available and offers to provide personnel and materials necessary to accomplish the work and complete the Project as described in the Scope of Work within the required time in accordance with the calendar days included in this Contract.

NOW, THEREFORE, the Owner and Contractor agree as follows:

1. Scope of Work. The Contractor shall furnish any and all labor, materials, equipment, transportation, utilities, services and facilities required to perform all work for the construction of **La Plaza Vieja 2010 Bond Project** (the "Project"). Contractor shall construct the Project for the Owner in a good, workmanlike and substantial manner and to the satisfaction of the Owner through its engineers and under the direction and supervision of the City Engineer, or his properly authorized agents including but not limited to project managers and project engineers. Contractor's work shall be strictly pursuant to and in conformity with the Contract.

1.1 A Pre-Construction Conference will be held with the successful Contractor after the Notice of Award is issued. The date and time of the Conference will be agreed upon between the Contractor and the Engineer. The meeting will be held at City Hall, 211 West Aspen Avenue, Flagstaff, AZ 86001. The purpose of the meeting is to outline specific construction items and procedures that the City of Flagstaff (the "Owner") feels require special attention on the part of the Contractor. The Contractor may also present any variations in procedures to improve the workability of the Project, reduce the cost, or reduce inconvenience to the public. The Contractor shall submit a written proposal at this conference outlining intended plans for pavement replacement, maintaining continuous access to residences and businesses along the construction site, and traffic control.

2. Contract; Ownership of Work. Contractor shall furnish and deliver all of the materials and perform all of the work in accordance with this Contract; Construction Plans; Special Provisions; the City of Flagstaff Engineering Design and Construction Standards and Specifications; the latest version of the Maricopa Association of Governments ("MAG")

Specifications for Public Works Construction and City revisions to the MAG Specifications for Public Works Construction ("Exhibit A"); and any Arizona Department of Transportation (A.D.O.T.) Standards that may be referenced on the Plans or in the specifications, incorporated in this Contract by reference, plans and associated documents. All provisions of the Invitation for Construction Bids, Performance Bond, Payment Bond, Certificates of Insurance, Addenda, Change Orders and Field Orders, if any, are hereby incorporated into this Contract. All materials, work, specifications and plans shall be the property of the Owner.

The following exhibits are incorporated by reference and are expressly made a part of this Contract:

2.1.1 Revisions of MAG Standard Specifications for Public Works Construction ("Flagstaff Addendum to MAG")	Exhibit A
2.1.2 Special Provisions	Exhibit B

3. Payments. In consideration of the faithful performance of the work described in this Contract, the Owner shall pay an amount not to exceed **$1,741,893.15** to the Contractor for work and materials provided in accordance with the bid schedule, which amount includes all federal, state, and local taxes, as applicable. This amount shall be payable through monthly progress payments, subject to the following conditions:

3.1 Contractor shall promptly submit to the Owner all proper invoices necessary for the determination of the prices of labor and materials;

3.2 Progress payments shall be made in the amount of ninety percent (90%) of the value of labor and materials incorporated in the work, based on the sum of the Contract prices of labor and material, and of materials stored at the worksite, on the basis of substantiating paid invoices, as estimated by the Owner, less the aggregate of all previous payments, until the work performed under this Contract is fifty percent (50%) complete. When and after such work is fifty (50%) complete, the ten percent (10%) of value previously retained may be reduced to five percent (5%) of value completed if Contractor is making satisfactory progress as determined by the Owner, and providing that there is no specific cause or claim requiring a greater amount to be retained. If at any time the Owner determines that satisfactory progress is not being made, the ten percent (10%) retention shall be reinstated for all subsequent progress payments made under this Contract;

3.3 The City Engineer shall have the right to finally determine the amount due to Contractor;

3.4 Monthly progress payments shall be made by the Owner, on or before fourteen (14) calendar days after the receipt by the Owner of an approved estimate of the work completed;

3.5 Contractor agrees that title to materials incorporated in the work, and stored at the site, shall vest with the Owner upon receipt of the corresponding progress payment;

3.6 The remainder of the Contract price, after deducting all such monthly payments and any retention, shall be paid within sixty (60) days after final acceptance of completed work by the Owner. The release of retention or alternate surety shall be made following the Owner's receipt and acceptance of: Contractor's Affidavit Regarding Settlement of Claims, Affidavit of Payment, Consent of Surety for Final Payment, and Unconditional Full and Final lien waivers from all subcontractors and suppliers who have filed an Arizona Preliminary 20 Day Lien Notice in accordance with A.R.S. §§ 33-992.01 and 33-992.02.

4. Time of Completion. Contractor agrees to complete all work as described in this Contract within **150 calendar days** from the date of the Owner's Notice to Proceed free of all liens, claims and demands of any kind for materials, equipment, supplies, services, labor, taxes and damages to property or persons, in the manner and under the conditions specified within the time or times specified in this Contract.

5. Performance of Work. All work covered by this Contract shall be done in accordance with the latest and best accepted practices of the trades involved. The Contractor shall use only skilled craftsmen experienced in their respective trades to prepare the materials and to perform the work.

6. Acceptance of Work; Non Waiver. No failure of the Owner during the progress of the work to discover or reject materials or work not in accordance with this Contract shall be deemed an acceptance of, or a waiver of, defects in work or materials. No payment shall be construed to be an acceptance of work or materials which are not strictly in accordance with the Contract.

7. Delay of Work. Any delay in the performance of this Contract due to strikes, lockouts, fires, or other unavoidable casualties beyond the control of the Contractor and not caused by any wrongful act or negligence of the Contractor shall entitle the Contractor to an extension of time equal to the delay so caused. The Contractor shall notify the Owner in writing specifying such cause within twenty-four (24) hours after its occurrence. In the event such delay is caused by strikes, lockouts, or inability to obtain workmen for any other cause, the Owner shall have the right but shall not be obligated to complete the work on the same basis as is provided for in Section 13 below (Contract Violations).

8. Failure to Complete Project in Timely Manner. If Contractor fails or refuses to execute this Contract within the time specified in Section 4 above, or such additional time as may be allowed, the proceeds of Contractor's performance guaranty shall become subject to deposit into the Treasury of the municipality as monies available to compensate the Owner for damages as provided by A.R.S. § 34-201 for the delay in the performance of work under this Contract, and the necessity of accepting a higher or less desirable bid from such failure or refusal to perform this Contract as required. If Contractor has submitted a certified check or cashier's check as a performance guaranty, the check shall be returned after the completion of this Contract.

9. Labor Demonstration. It is understood that the work covered by this Contract is for the Owner's business purposes and that any unfavorable publicity or demonstrations in connection with the work will have a negative effect upon the Owner. If Contractor's actions in performance of the

Contract result in any public demonstration on behalf of the laborers or organized labor in the vicinity of the Owner's premises, whether such demonstration is in the form of picketing, posting of placards or signs, violence, threats of violence or in any other form, which in the Owner's judgment, might convey to the public the impression that the Owner or the Contractor or any subcontractor is unfair to laborers or to organized labor, the Owner shall have the right to terminate this Contract immediately, unless the Contractor shall have caused such demonstration to be discontinued within two (2) days after request of the Owner to do so. In the event any such demonstration is attended by violence, the Owner may fix lesser time within which a discontinuance shall be accomplished. In the event of Contract termination, the Contractor agrees to remove from the Premises within twenty-four (24) hours of termination, all machinery, tools, and equipment belonging to it or to its subcontractors. All obligations or liabilities of the Owner to the Contractor shall be discharged by such termination, except the obligation to pay to the Contractor a portion of the Contract price representing the value based upon the Contract prices of labor and materials incorporated in the work as established by the Owner, less the aggregate of all previous payments, but subject to all of the conditions pertaining to payments generally.

10. Material Storage. During the progress of the work, the Contractor shall arrange for office facilities and for the orderly storage of materials and equipment. Contractor shall erect any temporary structures required for the work at his or her own expense. The Contractor shall at all times keep the premises reasonably free from debris and in a condition which will not increase fire hazards. Upon completion of the work, the Contractor shall remove all temporary buildings and facilities and all equipment, surplus materials and supplies belonging to the Contractor. Contractor shall leave the Premises in good order, clean, and ready to use by the Owner. The establishment of any temporary construction yard, material storage area or staging area to be located within City of Flagstaff limits and outside the public right-of-way or Project limits generally requires a Temporary Use Permit. (See Exhibit A, Section 107.2.1.)

11. Assignment. Contractor shall not assign this Contract, in whole or in part, without the prior written consent of the Owner.

12. Notices. All notices or demands required to be given, pursuant to the terms of this Contract, shall be given to the other Party in writing, delivered in person, sent by facsimile transmission, deposited in the United States mail, postage prepaid, registered or certified mail, return receipt requested or deposited with any commercial air courier or express service at the addresses set forth below, or to such other address as the Parties may substitute by written notice, given in the manner prescribed in this paragraph.

If to Owner:

Patrick Brown, C.P.M.
Senior Procurement Specialist
211 West Aspen Avenue
Flagstaff, AZ 86001

If to Contractor:

Chad Pittenger
L.P's Excavating, Inc.
606 E. Frank Way
Williams, Arizona 86046

13. Contract Violations. In the event of any of the provisions of this Contract are violated by the Contractor or by any of Contractor's subcontractors, the Owner may serve written notice upon the Contractor and the Surety of its intention to terminate such Contract (the "Notice to Terminate"). The Contract shall terminate within five (5) days of the date Contractor receives the Notice to Terminate, unless the violation ceases and Contractor makes arrangements for correction satisfactory to the Owner. In the event of any such termination, the Owner shall immediately serve notice of the termination upon the Surety by registered mail, return receipt requested. The Surety shall have the right to take over and perform the Contract. If the Surety does not commence performance within ten (10) days from the date of receipt of the Owner's notice of termination, the Owner may complete the work at the expense of the Contractor, and the Contractor and his or her Surety shall be liable to the Owner for any excess cost incurred by the Owner to complete the work. If the Owner completes the work, the Owner may take possession of and utilize such materials, appliances and plants as may be on the worksite site and necessary for completion of the work.

14. Contractor's Liability and Indemnification. To the fullest extent permitted by law, the Contractor shall defend, indemnify and hold harmless the Owner, its agents, representatives, officers, directors, officials and employees from and against all claims, damages, losses and expenses (including but not limited to attorney fees, court costs, and the cost of appellate proceedings), relating to arising out of, or alleged to have resulted from the acts, errors, mistakes, omissions, work or services of the Contractor, its employees, agents, or any tier of subcontractors in the performance of this Contract. Contractor's duty to defend, hold harmless and indemnify the Owner, its agents, representatives, officers, directors, officials and employees shall arise in connection with the claim, damage, loss or expense that is attributable to bodily injury, sickness, disease, death, or injury to, impairment, or destruction of property including loss of use resulting there from, caused by any acts, errors, mistakes, omissions, work or services in the performance of this Contract including any employee of the Contractor or any tier of subcontractor or any other person for whose acts, errors, mistakes, omissions, work or services the Contractor may be legally liable. The amount and type of insurance coverage requirements set forth in the Contract (Section 103.6 of Exhibit A) will in no way be construed as limiting the scope of the indemnity in this paragraph.

15. Non Appropriation. In the event that no funds or insufficient funds are appropriated and budgeted in any fiscal period of the Owner to meet the Owner's obligations under this Contract, the Owner will notify Contractor in writing of such occurrence, and this Contract will terminate on the earlier of the last day of the fiscal period for which sufficient appropriation was made or whenever the funds appropriated for payment under this Contract are exhausted. No payments shall be made or due to the other party under this Contract beyond these amounts appropriated and budgeted by the Owner to fund the Owner's obligations under this Contract.

16. Amendment of Contract. This Agreement may not be modified or altered except in writing and signed by duly authorized representatives of the parties.

17. Subcontracts. Contractor shall not enter into any subcontract, or issue any purchase order for the completed work, or any substantial part of the work, unless in each instance, prior written approval shall have been given by the Owner. Contractor shall be fully responsible to the Owner

for acts and omissions of Contractor's subcontractors and all persons either directly or indirectly employed by them.

18. Cancellation for Conflict of Interest. This Contract is subject to the cancellation provisions of A.R.S. § 38-511.

19. Compliance with All Laws. Contractor shall comply with all applicable laws, statutes, ordinances, regulations and governmental requirements in the performance of this Contract.

20. Employment of Aliens. Contractor shall comply with A.R.S. § 34-301, which provides that a person who is not a citizen or ward of the United States shall not be employed upon or in connection with any state, county or municipal public works project.

21. Compliance with Federal Immigration Laws and Regulations. Contractor warrants that it complies with all Federal Immigration laws and regulations that relate to its employees and complies with A.R.S. 23-214.A. Contractor acknowledges that pursuant to A.R.S. 41-4401 a breach of this warranty is a material breach of this contract subject to penalties up to and including termination of this contract, and that the City retains the legal right to inspect the papers of any employee who works on the contract to ensure compliance with this warranty.

22. Business Operations in Sudan/Iran. In accordance with A.R.S. § 35-397, the Contractor certifies that the Contractor and its affiliates and subsidiaries do not have scrutinized business operations in Sudan or Iran. If the City determines that the Provider's certification is false, the City may impose all legal and equitable remedies available to it, including but not limited to termination of this Agreement.

23. Contractor's Warranty. Pursuant to MAG specifications 108.8, The Contractor shall guarantee the work against defective workmanship or materials for a period of one year from the date of its final acceptance under the contract, ordinary wear and tear and unusual abuse or neglect excepted.

24. Jurisdiction and Venue. This Agreement shall be administered and interpreted under the laws of the State of Arizona. The Contractor hereby submits itself to the original jurisdiction of those courts located within Coconino County, Arizona.

25. Attorney's Fees. If suit or action is initiated in connection with any controversy arising out of this Agreement, the prevailing party shall be entitled to recover in addition to costs such sum as the court may adjudge reasonable as attorney fees, or in event of appeal as allowed by the appellate court.

26. Time is of the Essence. Contractor acknowledges that the completion of the Contract by the dates specified final completion is critical to the Owner, time being of the essence of this Contract.

27. Headings. The article and section headings contained herein are for convenience in reference and are not intended to define or limit the scope of any provision of this Contract.

28. Severability. If any part of this Contract is determined by a court to be in conflict with any statute or constitution or to be unlawful for any reason, the parties intend that the remaining provisions of this Contract shall remain in full force and effect unless the stricken provision leaves the remaining Contract unenforceable.

IN WITNESS WHEREOF, the Owner and Contractor, by their duly authorized representatives, have executed this Contract as of the date written above.

(Please sign in blue ink. Submit original signatures – photocopies not accepted)

Owner, City of Flagstaff

_____
Kevin Burke, City Manager

Attest:

_____
City Clerk

Approved as to form:

_____
City Attorney

LP's Excavating, Inc.

_____
Signature

_____
Printed Name

CITY OF FLAGSTAFF, ARIZONA
PAYMENT BOND

PROJECT NAME: La Plaza Vieja 2010 Bond Project
PROJECT NUMBER: 243700 BID NUMBER: 2013-40

STATUTORY PAYMENT BOND PURSUANT TO TITLE 34
CHAPTER 2, ARTICLE 2, OF THE ARIZONA REVISED STATUTES
(Penalty of this Bond must be 100% of the Contract Amount)

KNOW ALL MEN BY THESE PRESENTS:

That, _____ (Hereinafter called the Principal), as Principal, and, _____ _____, a corporation organized and existing under the laws of the State of _____, with its principal office in the City of _____ ("Surety"), as Surety, are held and firmly bound unto the City of Flagstaff, Arizona ("Obligee"), in the amount of _____ _____Dollars ($_____) for the payment whereof, the said Principal and Surety bind themselves, and their heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into a certain written Contract with the Obligee, dated this _____ day of_____, 20___, to the City of Flagstaff which Contract is hereby referred to and made a part hereof as fully and to the same extent as if copied at length herein.

Now, therefore, the condition of this obligation is such, that if the principal promptly pays all monies due to all persons supplying labor or materials to the principal or the principal's subcontractors in the prosecution of the work provided for in the contract, this obligation is void. Otherwise it remains in full force and effect.

Provided, however, that this bond is executed pursuant to the provisions of Title 34, Chapter 2, Article 2, Arizona Revised Statutes, and all liabilities on this bond shall be determined in accordance with the provisions, conditions and limitations of said Title and Chapter, to the same extent as if it were copied at length in this Contract.

The prevailing party in a suit on this bond shall recover as a part of the judgment reasonable attorney fees that may be fixed by a judge of the court.

Witness our hands this _____ day of _____ 20___.

_____	_____
Principal (Seal)	Surety (Seal)
By: _____	By: _____
_____	_____
Agency of Record	Agency Address

CITY OF FLAGSTAFF, ARIZONA
PERFORMANCE BOND

PROJECT NAME: La Plaza Vieja 2010 Bond Project
PROJECT NUMBER:243700 BID NUMBER: 2013-40

STATUTORY PERFORMANCE BOND PURSUANT TO TITLE 34
CHAPTER 2, ARTICLE 2, OF THE ARIZONA REVISED STATUTES
(Penalty of this Bond must be 100% of the Contract Amount)

KNOW ALL MEN BY THESE PRESENTS:

That, _____ (hereinafter called the Principal), as Principal, and, _____ _____, a corporation organized and existing under the laws of the State of _____ _____, with its principal office in the City of _____ ("Surety"), as Surety, are held and firmly bound unto the City of Flagstaff, Arizona ("Obligee"), in the amount of _____Dollars ($_____ _____) for the payment whereof, the said Principal and Surety bind themselves, and their heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into a certain written Contract with the Obligee, dated this ____day of _____ 20__ in the City of Flagstaff which Contract is hereby referred to and made a part hereof as fully and to the same extent as if copied at length herein.

Now, therefore, the condition of this obligation is such, that if the principal faithfully performs and fulfills all of the undertakings, covenants, terms, conditions and agreements of contract during the original term of the contract and any extension of the contract, with or without notice to the surety, and during the life of any guaranty required under the contract, and also performs and fulfills all of the undertakings, covenants, terms, conditions and agreements of all duly authorized modifications of the contract that may hereafter be made, notice of which modifications to the surety being hereby waived, the above obligation is void. Otherwise it remains in full force and effect.

Provided, however, that this bond is executed pursuant to the provisions of Title 34, Chapter 2, Article 2, Arizona Revised Statutes, and all liabilities on this bond shall be determined in

accordance with the provisions of said Title and Chapter, to the extent as if it were copied at length in this Contract.

The prevailing party in a suit on this bond shall recover as part of the judgment reasonable attorney fees that may be fixed by a judge of the court.

Witness our hands this _____ day of _____20__.

_____	_____
Principal (Seal)	Surety (Seal)
By: _____	By: _____
_____	_____
Agency of Record	Agency Address

2010 Street/Utility Bond Program UPDATE

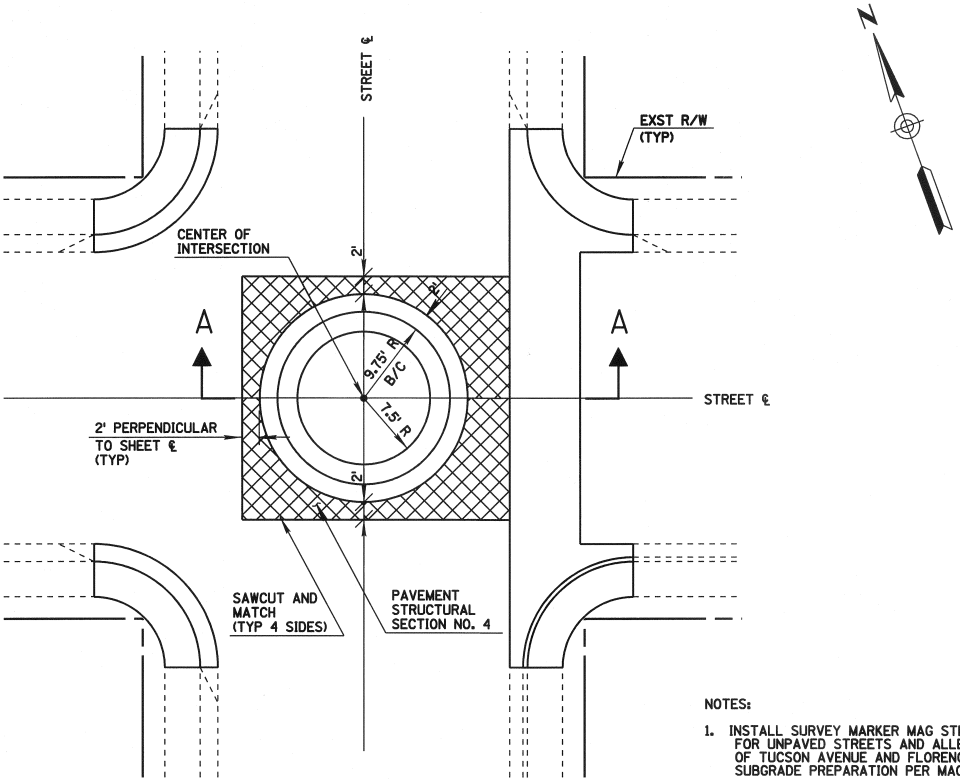
13-May-13

	Project	Status	Total Cost
1	**Izabel Street**	Complete	$525,324
2	**Sunnyside Phase V-B**	Complete	$536,717
3	**Franklin / Mohawk**	Complete	$1,507,075
4	**Beulah Blvd. Overlay**	Complete	$1,039,558
5	**Fourth Street Overlay**	Complete	$1,371,292
6	**Dodge Avenue**	Warranty	$1,101,396
7	**Cherry Avenue**	Warranty	$1,217,942
8	**Coconino / Elden / Humphreys**	Construct 2012-2013	$2,077,738
9	**S. Beaver / S. Leroux**	Construct 2013	$2,696,391
10	**La Plaza Vieja**	Construct 2013	$2,118,044
11	**Cedar Avenue Overlay**	Construct 2013	$689,169
12	**Rose Avenue**	Construct 2014	$1,606,525
	***Bond Premium Issuance Costs**		$56,517
		TOTAL:	**$16,543,688**

Total Amount of Bond Premium	$55,099
Total Amount of Bond Available	$16,555,099
Amount Difference	$11,411

* $143,832 of bond issuance costs included in the total project amount for 4th Street Overlay

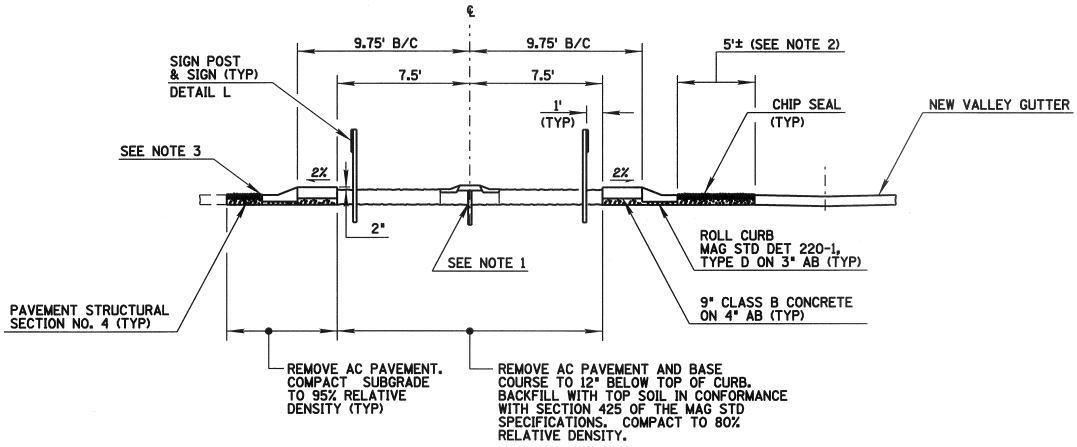
LA PLAZA VIEJA 2010 BOND PROJECT
MINI TRAFFIC CIRCLES



PLAN

NOTES:

1. INSTALL SURVEY MARKER MAG STD. DET. 120-1, TYPE A FOR UNPAVED STREETS AND ALLEYS AT INTERSECTION OF TUCSON AVENUE AND FLORENCE STREET ONLY. SUBGRADE PREPARATION PER MAG SECTION 301.
2. REMOVE EXISTING PAVEMENT TO EDGE OF NEW VALLEY GUTTER ON BOTH SIDES OF STREET AT TUCSON AND TOMBSTONE AVENUES.
3. LIP OF NEW CURB AND GUTTER TO MATCH EXISTING PAVEMENT. CONTRACTOR TO PROVIDE PLAN SHOWING PROPOSED FINISH GRADE ELEVATIONS TO THE ENGINEER BEFORE REMOVING PAVEMENT.



SECTION A-A
1"=5'

DETAIL K
TRAFFIC CIRCLE CONSTRUCTION

Two working days before you dig
CALL FOR THE BLUE STAKES
1-800-782-5348
BLUE STAKE CENTER

CITY OF FLAGSTAFF ARIZONA ESTABLISHED 1882

CITY OF FLAGSTAFF

STAFF SUMMARY REPORT

To:	The Honorable Mayor and Council
From:	Erin Young, Water Resources Manager
Date:	05/29/2013
Meeting Date:	06/04/2013

TITLE:

Consideration and Approval of Consulting Contract: Red Gap Ranch Water Resources Environmental Assessment.

RECOMMENDED ACTION:

Approve a Contract with Southwest Ground-water Consultants, Inc. to provide professional consulting services for a not-to-exceed amount of $276,210.

Policy Decision or Reason for Action:

The scope of work prepared by Southwest Ground-water Consultants will address the impact that pumping groundwater from beneath Red Gap Ranch could have to base flow that feeds the Little Colorado River, East Clear Creek and Chevelon Creek, and the impact the conveyance of groundwater (i.e. pipelines, roads, treatment facility) could have on biological and cultural resources on the Red Gap Ranch property, as required by the NEPA process.

Financial Impact:

This project is funded by a grant from the U.S. Department of the Interior, Bureau of Reclamation (Reclamation) in the amount of $300,000. The contract length will be seven (7) months from the date of the Notice to Proceed.

Connection to Council Goal:

Effective governance.

Has There Been Previous Council Decision on This:

Yes. On August 23, 2011, Council approved an Agreement between Reclamation and other stakeholders to participate in and provide funds and in-kind services for the Coconino Plateau Water Advisory Council North Central Arizona Water Supply Feasibility Study. On September 18, 2012 Council accepted the Reclamation FFY 2012 North Central Arizona Water Supply Grant for the Red Gap Ranch Feasibility Study in the amount of $300,000.

Options and Alternatives:

1) Approve the contract with Southwest Ground-Water Consultants to provide professional groundwater and environmental consulting services
2) Do not approve the contract with Southwest Ground-water Consultants and re-advertise for a statement of professional qualifications to provide groundwater and environmental services

Background/History:

The Coconino Plateau Water Advisory Council has been actively involved in finding regional solutions to meeting future water demands. The Coconino Plateau Water Advisory Council completed the North Central Arizona Water Supply Appraisal Study in 2006. That study identified that the City of Flagstaff may experience a shortfall of water supplies at 8,027 AF/year by 2050. Scenario planning conducted by the City, as discussed in the Water Resources Master Plan (WRMP), estimates that under a normal climate scenario, and assuming a historical growth rate of 1.4%, the shortfall could be upwards of 12,100 AF/year at full development in 2080. The Appraisal Study identified numerous solutions to this long-term water supply shortfall. Reclamation is currently investigating the feasibility of the various projects that were identified in the Appraisal Study, one of which is the Red Gap Ranch project.

On August 23, 2011 City Council approved an Agreement between Reclamation, Coconino County, City of Flagstaff, City of Page and the Arizona Department of Water Resources to provide funds and in-kind services for the North Central Arizona Water Supply Feasibility Study. The City's cost-share obligation in that agreement is $1.18 million.

To date, approximately $1.66 million has been verified as the City's cost-share by Reclamation, which exceeds the requirement within our August 23, 2011 Agreement. In order to receive this $300,000 grant accepted by Council on September 18, 2012, the City was required to only demonstrate a cost-share match of $731,000 (59% non-Federal). The dollar amount in excess of this (i.e., $1.66 million - $731,000 = $929,000) will be applied toward future Reclamation and Rural Water Supply Program grants as they become available.

On December 23, 2012, staff advertised a solicitation for a Request for Statement of Qualifications (RSOQ) for four weeks. Staff received nine responses from interested firms. An evaluation committee of 5 members, which included two representatives from outside the City of Flagstaff, to evaluate the submittals. The evaluation committee rendered three top candidates which were then interviewed by phone and Southwest Ground-water Consultants, Inc. was determined to be the top candidate.

Key Considerations:

The proposed pipeline from Red Gap Ranch to Flagstaff crosses Federal land and is also partially funded with Federal funds, therefore triggering permitting under the Council of Environmental Quality's National Environmental Policy Act (NEPA) and the need for an Environmental Impact Statement (EIS). Work covered under the contract with Southwest Ground-water Consultants will fit into an EIS as overseen by the Bureau of Reclamation (Reclamation).

The work covered by the contract with Southwest Ground-water Consultants, Inc. (Attachment-SCG Scope & Fee), will also satisfy Provision No. 3 written in the 2011 Stipulation between the City and the Navajo Nation (Superior Court of the State of Arizona, Civil No. 6417), part of which states: "The Parties agree to work cooperatively and in good faith to evaluate environmental impacts, if any, from both the City's pumping of Underground Water at Red Gap Ranch and the Navajo Nation's pumping of Underground Water along the south-western portion of the Navajo Nation." The development of this scope of work involved collaboration between the City of Flagstaff, the Navajo Nation, the U.S. Fish and Wildlife Service, and Reclamation.

Additionally, Council approved in July 2012, a Joint Funding Agreement with the U.S. Geological Survey (USGS) for the monitoring of the C-Aquifer over an area that includes Flagstaff to Red Gap Ranch and base flow to the Little Colorado River, Clear Creek and Chevelon Creek. The Navajo Nation has been a financial contributor to this data collection effort since 2005 and Staff recognized this collaborative opportunity to support monitoring of the C-Aquifer within a groundwater basin that both parties share. Data from this effort is necessary baseline information for the water resources assessment task of this Scope of Work.

Community Involvement:

Collaborate. Moving forward with this work will involve collaboration with the Navajo Nation, U.S. Fish and Wildlife Service, Reclamation and others to ensure stakeholder concerns are represented and addressed.

Attachments: Service Agreement
Scope and Fee

PROFESSIONAL SERVICE AGREEMENT
FOR
RED GAP RANCH WATER RESOURCES ASSESSMENT SERVICES

CITY OF FLAGSTAFF
and

SOUTHWEST GROUND-WATER CONSULTANTS, INC

This Agreement for the Red Gap Ranch Water Resources Assessment Services ("Agreement") is made by and between the City of Flagstaff ("City"), an Arizona municipal corporation with offices at 211 W. Aspen Avenue, Flagstaff, Coconino County, Arizona, and Southwest Ground-water Consultants, Inc, an Arizona corporation, with offices at 3033 N. 44th Street, Suite 120, Phoenix, Arizona ("Provider"), effective as of the date written below.

RECITALS

A. The City desires to enter into this Agreement in order to obtain services of a consultant for the Red Gap Ranch Water Resources Assessment Services, as outlined in the Scope of Work/Specifications section of the RSOQ document; and

B. Provider has available and offers to provide the personnel necessary to provide said services within the required time in accordance with the Scope of Services included in this Agreement;

For the reasons recited above, and in consideration of the mutual covenants contained in this Agreement, the City and Provider agree as follows:

1. SERVICES TO BE PERFORMED BY PROVIDER

Provider agrees to perform the following services:

1.1 Provider agrees to provide the services as set forth in detail in Exhibit "A" attached and incorporated in this Agreement.

1.2 Provider warrants that all materials, services or construction delivered under the Agreement shall conform to the specifications of the Agreement. The City's receipt or inspection of the materials, services, or construction specified shall not alter or affect the obligations of Provider or the rights of the City under the foregoing warranty.

1.3 All services, information, computer program elements, reports and other deliverables which may be created under the Agreement are the sole property of the City and shall not be used or released by Provider or any other person except with prior written permission of the City.

2. COMPENSATION OF PROVIDER

Provider agrees to provide all of the services set forth in Exhibit "A" for prices not to exceed the amounts set forth in the fee/price schedule, attached as Exhibit "A".

3. RIGHTS AND OBLIGATIONS OF PROVIDER

3.1 **Independent Contractor**. The parties agree that Provider performs specialized services and that Provider enters into this Agreement with the City as an independent contractor. Nothing in this Agreement shall be construed to constitute Provider or any of Provider's agents or employees as an agent, employee or representative of the City. As an independent contractor, Provider is solely responsible for all labor and expenses in connection with this Agreement and for any and all damages arising out of Provider's performance under this Agreement.

3.2 Provider's Control of Work. All services to be provided by Provider shall be performed as determined by the City in accordance with the Scope of Services set forth in Exhibit "A." Provider shall furnish the qualified personnel, materials, equipment and other items necessary to carry out the terms of this Agreement. Provider shall be responsible for, and in full control of, the work of all such personnel.

3.3 Reports to the City. Although Provider is responsible for control and supervision of work performed under this Agreement, the services provided shall be acceptable to the City and shall be subject to a general right of inspection and supervision to ensure satisfactory completion. This right of inspection and supervision shall include, but not be limited to, all reports to be provided by Provider to the City and the right of the City, as set forth in the Scope of Services, and the right of the City to audit Provider's records.

3.4 Compliance with All Laws. Provider shall comply with all applicable laws, ordinances, rules, regulations and executive orders of the federal, state and local government, which may affect the performance of this Agreement. Any provision required by law, ordinances, rules, regulations, or executive orders to be inserted in this Agreement shall be deemed inserted, whether or not such provisions appear in this Agreement.

4. NOTICE PROVISIONS

Notice. Any notice concerning this Agreement shall be in writing and sent by certified or registered mail as follows:

To the City's Authorized Representative:	To Provider:
Patrick Brown, C.P.M. Senior Procurement Specialist City of Flagstaff 211 W. Aspen Flagstaff, Arizona 86001	William M. Greenslade, P.E., R.G. Principal/Senior Hydrogeologist Southwest Ground-water Consultants, Inc. 3033 N. 44th Street, Suite 120 Phoenix, Arizona, 85018

5. INDEMNIFICATION

To the fullest extent permitted by law, Provider shall indemnify, defend, save and hold harmless the City of Flagstaff and its officers, officials, agents, and employees ("Indemnitee") from and against any and all claims, actions, liabilities, damages, losses, or expenses (including court costs, attorneys' fees, and costs of claim processing, investigation and litigation) ("Claims") including claims for bodily injury or personal injury (including death), or loss or damage to tangible or intangible property caused, or alleged to be caused, in whole or in part, by the negligent or willful acts or omissions of Provider or any of its owners, officers, directors, agents, employees or subcontractors. This indemnity includes any claim or amount arising out of or recovered under the Workers' Compensation Law or arising out of the failure of such Provider to conform to any federal, state or local law, statute, ordinance, rule, regulation or court decree. It is the specific intention of the parties that the Indemnitee shall, in all instances, except for Claims arising solely from the negligent or willful acts or omissions of the Indemnitee, be indemnified by Provider from and against any and all claims. It is agreed that Provider shall be responsible for primary loss investigation, defense and judgment costs where this indemnification is applicable. Provider shall waive all rights of subrogation against the City, its officers, officials, agents and employees for losses arising from the work performed by Provider for the City.

6. INSURANCE

Provider and subcontractors shall procure and maintain insurance against claims for injury to persons or damage to property, which may arise from or in connection with this Agreement by the Provider, Provider's agents, representatives, employees or contractors until all of their obligations under this Agreement have been discharged, including any warranty periods. The insurance requirements are minimum requirements for this Agreement and in no way limit the indemnity covenants contained in this

Agreement. The City does not represent or warrant that the minimum limits set forth in this Agreement are sufficient to protect the Provider from liabilities that might arise out of this Agreement, and Provider is free to purchase such additional insurance as Provider may determine is necessary.

6.1. <u>Minimum Scope and Limits of Insurance</u>. Provider shall provide coverage at least as broad and with limits not less than those stated below.

6.1.1. Commercial General Liability - Occurrence Form
(Form CG 0001, ed. 10/93 or any replacement thereof)

General Aggregate	$2,000,000
Products/Completed Operations Aggregate	$1,000,000
Personal and Advertising Injury	$1,000,000
Each Occurrence	$1,000,000
Fire Damage (any one fire)	$500,000
Medical Expense (any one person)	Optional

6.1.2. Automobile Liability - Any Automobile or Owned, Hired and Non-owned Vehicles
(Form CA 0001, ed. 12/93 or any replacement thereof)

Combined Single Limit Per Accident for Bodily Injury and Property Damage	$1,000,000

6.1.3. Workers' Compensation and Employer's Liability

Workers' Compensation	Statutory
Employer's Liability: Each Accident	$500,000
Disease - Each Employee	$500,000
Disease - Policy Limit	$500,000

6.1.4. Professional Liability $1,000,000

6.2 <u>Self-insured Retention/Deductibles.</u> Any self-insured retentions and deductibles must be declared to and approved by the City. If not approved, the City may require that the insurer reduce or eliminate such self-insured retentions with respect to the City, its officers, agents, employees, and volunteers.

6.3. <u>Other Insurance Requirements.</u> The policies shall contain, or be endorsed to contain, the following provisions:

6.3.1 Commercial General Liability and Automobile Liability Coverages. The City of Flagstaff, its officers, officials, agents and employees shall be named as additional insureds with respect to liability arising out of the use and/or occupancy of the Premises subject to this Agreement and activities performed by or on behalf of the Provider, including products and completed operations of the Provider; and automobiles owned, leased, hired or borrowed by the Provider.

6.3.2 The Provider's insurance shall contain broad form contractual liability coverage.

6.3.3 The City of Flagstaff, its officers, officials, agents and employees volunteers shall be named as additional insureds to the full limits of liability purchased by the Provider even if those limits of liability are in excess of those required by this Agreement.

6.3.4. The Provider's insurance coverage shall be primary insurance with respect to the City, its officers, officials, agents, employees and volunteers. Any insurance or self-insurance maintained by the City, its officers, officials, agents and employees, shall be in excess of the coverage of the Provider's insurance and shall not contribute to it.

6.3.5 The Provider's insurance shall apply separately to each insured against whom a claim is made or suit is brought, except with respect to the limits of the insurer's liability.

6.3.6 Coverage provided by the Provider shall not be limited to the liability assumed under the indemnification provisions of this Agreement.

6.3.7 The policies shall contain a waiver of subrogation against the City, its officers, officials, agents and employees for losses arising from work performed by Provider for the City.

6.6 **Notice of Cancellation**. Each insurance policy required by the insurance provisions of this Agreement shall provide the required coverage and shall not be suspended, voided, cancelled, reduced in coverage or in limits except after thirty (30) days' prior written notice has been given to the City. When cancellation is for non-payment of premium, then at least ten (10) days' prior notice shall be given to the City. Notices required by this section shall be sent directly to Patrick Brown, Senior Procurement Specialist, City of Flagstaff, 211 W. Aspen Avenue, Flagstaff, Arizona 86001.

6.7 **Acceptability of Insurers**. Provider shall place insurance hereunder with insurers duly licensed or approved unlicensed companies in the State of Arizona and with a "Best's" rating of not less than A-: VII. The City does not represent or warrant that the above required minimum insurer rating is sufficient to provide the Provider from potential insurer insolvency.

6.8 **Verification of Coverage**. The Provider shall furnish the City with certificates of insurance (ACORD form) as required by this Agreement. The certificates for each insurance policy shall be signed by a person authorized by that insurer to bind coverage on its behalf. Any policy endorsements that restrict or limit coverage shall be clearly noted on the certificate of insurance.

6.8.1 The City must receive and approve all certificates of insurance before the Provider commences work. Each insurance policy required by this Agreement shall be in effect at, or before, commencement of work under this Agreement and shall remain in effect until all Provider's and its subcontractors' obligations under this Agreement have been met. The Provider's failure to maintain the insurance policies as required by this Agreement or to provide timely evidence of renewal will be considered a material breach of this Agreement.

6.8.2 All certificates of insurance shall be sent directly to Patrick Brown, Senior Procurement Specialis, 211 West Aspen Avenue, Flagstaff, Arizona 86001. The City project/contract number and project description shall be noted on the certificates of insurance. The City reserves the right to require, and receive within ten (10) days, complete, certified copies of all insurance policies and endorsements required by this Agreement at any time. The City shall not be obligated, however, to review any insurance policies or to advise Provider of any deficiencies in such policies and endorsements. The City's receipt of Provider's policies or endorsements shall not relieve Provider from, or be deemed a waiver of, the City's right to insist on strict fulfillment of Provider's obligations under this Agreement.

6.9 **Subcontractors**. Provider's certificate(s) shall include all subcontractors as additional insureds under its policies, or Provider shall furnish to the City Separate certificates and endorsements for each subcontractor. All coverages for subcontractors shall be subject to the minimum requirements identified above.

6.10 **Approval**. Any modification or variation from the insurance requirements in this Agreement must have the prior approval of the City's Attorney's Office, whose decision shall be final. Such action will not require a formal Agreement amendment but may be made by administrative action.

7. DEFAULT AND TERMINATION

7.1 **Events of Default Defined**. The following shall be Events of Default under this Agreement:

7.1.1 Any material misrepresentation made by Provider to the City;

7.1.2 Any failure by Provider to perform its obligations under this Agreement including, but not limited to, the following:

7.1.2.1 Failure to commence work at the time(s) specified in this Agreement due to a reason or circumstance within Provider's reasonable control;

7.1.2.2 Failure to perform the work with sufficient personnel and equipment or with sufficient equipment to ensure completion of the work within the specified time due to a reason or circumstance within Provider's reasonable control;

7.1.2.3 Failure to perform the work in a manner reasonably satisfactory to the City;

7.1.2.4 Failure to promptly correct or re-perform within a reasonable time work that was rejected by the City as unsatisfactory or erroneous;

7.1.2.5 Discontinuance of the work for reasons not beyond Provider's reasonable control;

7.1.2.6 Unsatisfactory performance as judged by the Contract Administrator;

7.1.2.7 Failure to provide the City, upon request, with adequate assurance of future performance;

7.1.2.8 Failure to comply with a material term of this Agreement, including, but not limited to, the provision of insurance; and

7.1.2.9 Any other acts specifically stated in this Agreement as constituting a default or a breach of this Agreement.

7.2 <u>Remedies</u>.

7.2.1 Upon the occurrence of any Event of Default, the City may declare Provider in default under this Agreement. The City shall provide written notification of the Event of Default. If such Event of Default is not cured within seven (7) days of receipt of the notification, the City may invoke any or all of the following remedies:

7.2.1.1 The right to cancel this Agreement as to any or all of the services yet to be performed;

7.2.1.2 The right of specific performance, an injunction or any other appropriate equitable remedy;

7.2.1.3 The right to monetary damages;

7.2.1.4 The right to withhold all or any part of Provider's compensation under this Agreement;

7.2.1.5 The right to deem Provider non-responsive in future contracts to be awarded by the City; and

7.2.1.6 The right to seek recoupment of public funds spent for impermissible purposes.

7.2.2 The City may elect not to declare an Event of Default or default under this Agreement or to terminate this Agreement upon the occurrence of an Event of Default. The parties acknowledge that

this provision is solely for the benefit of the City, and that if the City allows Provider to continue to provide the Services despite the occurrence of one or more Events of Default, Provider shall in no way be relieved of any of its responsibilities or obligations under this Agreement, nor shall the City be deemed to waive or relinquish any of its rights under this Agreement.

7.2.3 In the Event of Default by the Provider, the City shall not be liable to Provider for any amount, and Provider may be liable to the City for any and all damages sustained by reason of the default which gave rise to the termination.

7.3 **Right to Offset**. Any costs, including but not limited to attorney's fees, costs of remediation, and costs of delay, incurred by the City due to default of Proposer, or due to the City's exercise any of the remedies available to it under this Agreement, may be offset by use of any payment due for services completed before the default or the exercise of any remedies. If the offset amount is insufficient to cover excess costs, Provider shall be liable for and shall remit promptly to the City the balance upon written demand from the City.

7.4 **Termination for Convenience**. The City reserves the right to terminate, with or without cause, this Agreement upon thirty (30) days written notice. The City shall be responsible only for those standard items or services which have been delivered and accepted. If any items being purchased are truly unique and therefore not saleable or useable for any other application, the City shall reimburse Proposer for actual labor, material, and burden costs, plus a profit not to exceed 8%. Title to all materials, work in progress, and completed but undelivered goods, shall pass to the City after costs are claimed and allowed. Proposer shall submit detailed cost claims in an acceptable manner and shall permit the City to examine such books and records as may be necessary in order to verify the reasonableness of any claims.

8. GENERAL PROVISIONS

8.1 **Headings**. The article and section headings contained herein are for convenience in reference and are not intended to define or limit the scope of any provision of this Agreement.

8.2 **Jurisdiction and Venue**. This Agreement shall be administered and interpreted under the laws of the State of Arizona. Provider hereby submits itself to the original jurisdiction of those courts located within Coconino County, Arizona.

8.3 **Attorney's Fees**. Subject to Section 8.11, if suit or action is initiated in connection with any controversy arising out of this Agreement, the prevailing party shall be entitled to recover, in addition to costs, such sum as the court, including an appellate court, may adjudge reasonable as attorney fees.

8.4 **Severability**. If any term or provision of this Agreement shall be found by a court of competent jurisdiction to be illegal or unenforceable, then notwithstanding such illegality or unenforceability, the remainder of this Agreement shall remain in full force and effect and such term or provision shall be deemed to be deleted.

8.5 **Successors and Assigns**. No right or interest in the Agreement shall be assigned by Provider without prior written permission of the City, and no delegation of any duty of Provider shall be made without prior written permission of the City. The City shall not unreasonably withhold approval and shall notify Provider of the City's position within fifteen (15) days of receipt of written notice by Provider. This Agreement shall extend to and be binding upon the Provider, its successors and assigns, including any individual, company, partnership, or other entity with or into which the Provider shall merge, consolidate, or be liquidated, or any person, corporation, partnership, or other entity to which the Provider shall sell its assets.

8.6 **Subcontracts**. No subcontract shall be entered into by Provider with any other party to furnish any service specified in this Agreement without the advance written approval of the City. All subcontracts shall comply with Federal, State and local laws and regulations that are applicable to the services

covered by the subcontract and shall include all the terms and conditions set forth in the Agreement which shall apply with equal force to the subcontract, as if the subcontractor were the Provider. Provider is responsible for contract performance whether or not subcontractors are used. The City shall not unreasonably withhold approval and shall notify Provider of the City's position within fifteen (15) days of receipt of written notice by Provider. Provider shall be responsible for executing the agreement with subcontractor and obtaining Certificates of Insurance verifying the insurance requirements.

8.7 **Conflict of Interest**. Provider covenants that Provider presently has no interest and shall not acquire any interest, direct or indirect, that would conflict in any manner or degree with the performance of services required to be performed under this Agreement. Provider further covenants that in the performance of this Agreement, Provider shall not engage any employee or apprentice having any such interest. The parties agree that this Agreement may be cancelled for conflict of interest in accordance with Arizona Revised Statutes § 38-511.

8.8 **Authority to Contract**. Each party represents and warrants that it has full power and authority to enter into this Agreement and perform its obligations hereunder, and that it has taken all actions necessary to authorize entering into this Agreement.

8.9 **Integration.** This Agreement represents the entire understanding of City and Provider as to those matters contained in this Agreement, and no prior oral or written understanding shall be of any force or effect with respect to those matters, except for documents comprising the RSOQ Package that have been incorporated into this Agreement. This Agreement may not be modified or altered except in writing signed by duly authorized representatives of the parties.

8.10 **Non Appropriation**. If the City Council does not appropriate funds to continue this Agreement and pay for charges under this Agreement, the City may terminate this Agreement at the end of the current fiscal period, or at the time that funds are no longer available to meet the City's payment obligations. The City agrees to give written notice of termination to the Provider at least thirty (30) days prior to any termination for a lack of funds and will pay to the Provider all approved charges incurred prior to Provider's receipt of such notice, subject to the availability of funds appropriated and budgeted by the City to fund payments under this Agreement.

8.11 **Mediation**. If a dispute arises out of or relates to this Agreement, and if the dispute cannot be settled through negotiation, the parties agree first to try in good faith to resolve the dispute by mediation before resorting to litigation or some other dispute resolution procedure. Mediation shall take place in Flagstaff, Arizona, shall be self-administered, and shall be conducted under the CPR Mediation Procedures established by the CPR Institute for Dispute Resolution, 366 Madison Avenue, New York, NY 10017, (212) 949-6490, www.cpradr.org with the exception of the mediator selection provisions, unless other procedures are agreed upon by the parties. Unless the parties agree otherwise, the mediator(s) shall be selected from panels of mediators trained under the Alternative Dispute Resolution Program of the Coconino County Superior Court. Each party agrees to bear its own costs in mediation. The parties shall not be obligated to mediate if an indispensable party is unwilling to join the mediation. This mediation provision shall not constitute a waiver of the parties' right to initiate legal action if a dispute is not resolved through good faith negotiation or mediation, or if a party seeks provisional relief under the Arizona Rules of Civil Procedure.

8.12 **Non-Discrimination**. Provider shall not discriminate against any employee, or applicant for employment in violation of Federal Executive Order 11246, State Executive Order 75-5 as modified by State Executive Order 99-4 or A.R.S. 41-1461 et. seq. The Provider shall be required to comply with all applicable provisions of the Americans with Disabilities Act (Public Law 101-336, 42 U.S.C. 12101-12213) and applicable federal regulations under the Act.

8.13 **Compliance with Federal Immigration Laws and Regulations**. Provider hereby warrants to the City that the Provider and each of its subcontractors ("Subcontractors") will comply with, and are contractually obligated to comply with, all Federal Immigration laws and regulations that relate to its employees and A.R.S. §23-214(A) (hereinafter "Provider Immigration Warranty").

8.13.1 A breach of the Provider Immigration Warranty shall constitute a material breach of this Agreement and shall subject the Provider to penalties up to and including termination of this Agreement at the sole discretion of the City.

8.13.2 The City retains the legal right to inspect the papers of any Provider or Subcontractor employee who works on this Agreement to ensure that the Provider or Subcontractor is complying with the Provider Immigration Warranty. Provider agrees to assist the City in regard to any such inspections.

8.13.3 The City may, at its sole discretion, conduct random verification of the employment records of the Provider and any of Subcontractors to ensure compliance with Provider's Immigration Warranty. Provider agrees to assist the City in regard to any random verifications performed.

8.13.4 The provisions of this Article must be included in any contract the Provider enters into with any and all of its Subcontractors who provide services under this Agreement or any subcontract. "Services" are defined as furnishing labor, time or effort in the State of Arizona by a contractor or subcontractor. Services include construction or maintenance of any structure, building or transportation facility or improvement to real property.

8.14 **Anti-Trust Violations**. The City maintains that, in actual practice, overcharges resulting from antitrust violations are borne by the Provider. Therefore, to the extent permitted by law, Provider hereby assigns to the City any and all claims for such overcharges as to the goods or services used to fulfill this Agreement.

8.15 **Advertising**. Proposer shall not advertise or publish information concerning the Agreement, without the prior written consent of the City.

8.16 **Inspection**. All material, services or construction are subject to final inspection and acceptance by the City. The City may, at reasonable times and at its expense, inspect the plant or place of business of Provider or its subcontractor(s) which is related to the performance of this Agreement. This right of inspection and supervision shall include, but not be limited to the right of the City to audit Provider's records.

8.17 **Force Majeure**. Except for payment of sums due, neither party shall be liable to the other nor deemed in default under this Agreement if and to the extent that such party's performance of this Agreement is prevented by reason of force majeure.

8.17.1 The term "force majeure" means an occurrence that is unforeseeable and beyond the control of the party affected, which occurs without its fault or negligence, and which it is unable to prevent by exercising reasonable diligence. Without limiting the foregoing, force majeure includes acts of God, acts of the public enemy, war, riots, strikes, mobilization, labor disputes, civil disorders, fire, flood, lockouts, injunctions-intervention-acts, or unreasonable failures or refusal to act by government authority, and other similar occurrences. The force majeure shall be deemed to commence when the party declaring force majeure notifies the other party, in writing, of the existence of the force majeure and shall be deemed to continue as long as the results or effects of the force majeure prevent the party from resuming performance in accordance with this agreement.

8.17.2 Force majeure shall not include the following occurrences:

8.17.2.1 Late delivery of equipment or materials caused by congestion at a manufacturer's plant or elsewhere, or by an oversold condition of the market.

8.17.2.2 Late performance by a Subcontractor unless the delay arises directly out of a force majeure occurrence in accordance with this force majeure term and condition. Any delay or failure in performance by either party hereto shall not constitute default hereunder or give rise to any claim for damages or loss of anticipated profits if, and to the extent that, such delay or failure is caused by force majeure.

8.17.3 If either party is delayed at any time in the progress of the work by force majeure, the delayed party shall notify the other party in writing as soon as is practical, of the commencement of such delay and shall specify the causes of such delay in such notice. Such notice shall be hand delivered or mailed certified-return receipt and shall make a specific reference to this section, thereby invoking its provisions. The delayed party shall cause such delay to cease as soon as practicable and shall notify the other party in writing when it has done so. The time of completion shall be extended by Agreement modification for a period of time equal to the time that the results or effects of such delay prevent the delayed party from performing in accordance with this Agreement.

8.18 **Business Operations in Sudan/Iran**. In accordance with A.R.S. § 35-397, the Provider certifies that the Provider and its affiliates and subsidiaries do not have scrutinized business operations in Sudan or Iran. If the City determines that the Provider's certification is false, the City may impose all legal and equitable remedies available to it, including but not limited to termination of this Agreement.

9. SPECIAL TERMS AND CONDITIONS

9.1 Rights and Obligations of Consultant

9.1.1 Work Schedule: By mutual agreement of the City of Flagstaff and Consultant, the Consultant shall prepare a work schedule. The work schedule shall include:

9.1.1.1. Events which will satisfy SECTION 1. Services to be performed by the Consultant.

9.1.1.2 Date each event shall start and its duration.

9.1.1.3 Critical relationship of events.

9.1.1.4 Name(s) of the person(s) responsible for the project. The work schedule shall provide for the completion of SECTION I services not later than **365** calendar days from the written Notice-to-Proceed.

9.1.1.5 The schedule shall be updated periodically as necessary.

9.1.1.6 The Consultant agrees to maintain adequate resources to provide the described services within the time provided in the agreed upon schedule. Failure to adhere to the schedule may result in termination of this contract.

9.2 **Maintenance of Documents.** Consultant shall deliver to the City copies of reports, specifications and drawings prepared under the terms of this agreement. If drawings are prepared, the City will be provided with a set of full-size reproducibles. Originals of design and study notes, calculations, correspondence and similar material will be filed by the Consultant and made available to the City on Request. Copies will be furnished to the City by the Consultant at cost.

9.3 **Alteration in Character of Work.** Whenever an alteration in the character of work results in a substantial change in the planned consulting services, thereby materially increasing or decreasing the cost of the performance, the work will be performed in accordance with the contract and as directed; provided however, that before such work is started, a contract change order shall be approved and executed by the City and the Consultant. Additions to, modifications, or deletions from the project provided herein may be made and the compensation to be paid to the Consultant may be adjusted accordingly by written mutual

agreement of the City and Consultant. It is distinctly understood and agreed that no claim for extra work done or materials furnished by the Consultant will be allowed by the City except as provided herein, nor shall the Consultant do any work, or furnish any materials not covered by this Agreement unless such work is first ordered in writing.

9.3.1 Any such work or materials furnished by the Consultant without such written order first being given shall be at his/her own risk, cost, and expense, and Consultant hereby agrees that without such written order he/she will make no claim for compensation for such work or materials furnished.

9.4 **Completeness and Accuracy of Consultant's Work.** The Consultant shall be responsible for the completeness and accuracy of his/her work prepared or compiled under his/her obligation for this project and shall correct, at his/her expense, all errors or omissions therein which may be disclosed during the review of the plans.

9.5 **General Responsibilities and Obligations of Consultant.** The Consultant is employed to render a professional service only, and any payments made to him are compensation solely for such services as he/she may render and recommendations he/she may make in carrying out the work. The Consultant shall follow the practice of the profession to make findings, opinion, factual presentations, and to offer professional advice and recommendations..

10. DURATION

This Agreement shall become effective on and from the day and year executed by the parties, indicated below, and shall continue in force until _____, unless sooner terminated as provided above. In addition, by mutual written amendment, the Agreement may be renewed month to month for up to (1) year.

(Please sign in blue ink. Submit original signatures – photocopies not accepted)

City of Flagstaff	**Southwest Ground-water Consultants, Inc.**
_____	_____
Kevin Burke, City Manager	**Name, Title**
Attest:	
_____	
City Clerk	
Approved as to form:	
_____	
City Attorney	Date of Execution:_____

EXHIBIT A

SCOPE OF WORK AND FEE SCHEDULE

See Attached

RED GAP RANCH
WATER RESOURCES ENVIRONMENTAL ASSESSMENT
PROJECT NO. 524900
SCOPE AND COST
May 20, 2013

INTRODUCTION

Southwest Ground-water Consultants, Inc. (SGC) is pleased to present this scope and cost to complete the Red Gap Ranch (RGR) Water Resources Environmental Assessment, as defined in the Request for Statement of Qualifications (RFQ) Scope of Services (SOS) dated December 2012. In addition to the groundwater modeling task described in the SOS, the City of Flagstaff (City) has requested that SGC include a scope and cost for portions of the biological and cultural assessment tasks (Tasks 4 and 5) outlined in the Bureau of Reclamation Assistance Agreement (BOR Grant) R12AP32025. The scope and costs for these tasks have been prepared by SGC's subcontractor WestLand Resources, Inc.

SCOPE OF WORK

GROUNDWATER MODELING (BOR TASK 3)

The scope of work for groundwater modeling is based on the SOS and on the Task 3 description in the BOR Grant. SGC has divided the scope of work into seven (7) tasks, as described below.

Task 3-1 – Conceptual Model Development

This task will comprise the collection and analysis of hydrogeologic and streamflow data for the study area. Work will include:

- Meeting with City staff to gather data developed by the City on the study area, including but not limited to development plans, wells drilled by the City and previous RGR studies.
- Meet with the USGS to collect streamflow and other data from previous and onging programs in the study area. Discuss interpretation of hydrogeologic conditions and the conceptual model underlying the Northern Arizona Regional Groundwater Flow Model (NARGFM).
- Compile and interpret well logs, geologic, geophysical and pumping data. Construct maps, cross-sections and tables.
- Review previous studies and groundwater flow models including the HDR, USGS Papadopulos and AMEC report.

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Phoenix, Arizona
Prescott, Arizona

- Develop a conceptual model of the hydrogeologic system in the study area, with emphasis on:
    - Hydrogeologic conditions on the RGR
    - Groundwater – surface water interconnections
    - Area of Impact (AOI) of groundwater withdrawals at RGR
- Meet with the City to present and discuss the conceptual model. Identify desired model outputs and formats

Task 3-2 – Evaluate Flagstaff Model

This task will involve reviewing the existing Flagstaff Model and its relationship to the conceptual model developed in Task 1. Specific activities will include:

- Review of the model files, spreadsheets and documentation, including:
    - Aquifer parameters
    - Aquifer geometry
    - Simulation of streamflow
    - Water levels
    - Pumping files
    - Discretization
    - Representation of geologic structure
    - Water budgets
    - Calibration targets and statistics, with emphasis on the study area
- Document review and day-long meeting with City staff to present results

Task 3-3 – Recommend Refinements to the Flagstaff Model

The function of this task to conduct preliminary testing of proposed refinements and present any recommended refinements and changes to the CPTAC. The proposed refinements/changes would be presented to the City for review and concurrence prior to a formal presentation to the CPTAC. The CPTAC presentation would include:

- Overview of the work completed to date
- Description of the conceptual model, with emphasis on changes from the Flagstaff (and NARGFM) model
- Proposed model refinements (e.g. spatial and temporal discretization)
- Recommended spatial refinement method (i.e. nested model versus refined grid)
- Proposed method to simulate streamflow
- Results of preliminary testing
- Proposed model calibration parameters

- Proposed calibration targets, including:
    - 2012 water level data
    - USGS stream baseflow estimates
- Description of planned model outputs
- Schedule for completion of the model

Task 3-4 – Construct and Calibrate Model

Following agreement with the City and CPTAC on the model construction, SGC will make any agreed upon refinements and changes to the Flagstaff Model, perform model calibration and document the results. Work will include:

- Incorporate model refinements/changes
- Initiate model calibration and identify problems
- Address problems and recalibrate – an iterative process
- Calibrate model and present results to City staff (meeting)
- Present PEST parameter sensitivity data
- Conduct traditional sensitivity analysis and present results to city Staff (meeting)

Task 3-5 – Develop Scenarios

The RFQ SOS allowed up to five (5) scenarios to be modeled, three (3) of which were identified, including:

1. Baseline – Current pumping by all Indian and non-Indian to be held constant for 100 years. No RGR pumping.
2. Proposed RGR Groundwater Pumping – Assess the extent and amount of drawdown due to planned RGR pumping, with emphasis on groundwater-surface water interconnections.
3. Cumulative Impacts of RGR and Navajo Pumping – Assess the extent and amount of drawdown due to planned RGR *and Navajo* pumping, with emphasis on groundwater-surface water interconnections.

Work in this task will include:

- Compiling the pumping values for all users in the study area
- Confirming the values to be used in Scenarios 1, 2 and 3
- Identify the other scenarios to modeled, if any
- Meet with City staff to finalize scenarios
- Present the Scenarios to the CPTAC

Task 3-6 – Run the Modeled Scenarios

The scenarios agreed upon in Task 5 will be modeled using the calibrated groundwater flow model. Results will be presented in maps, graphs and tables and will include:

- Predicted groundwater level and flow direction changes
- Predicted streamflow changes
- Capture zone analyses
- Water budgets
- Predictive uncertainty analyses

Results will be presented to City staff in two (2) meetings: 1) on completion of initial model runs and 2) after fine tuning of the initial results and subsequent model runs. Following concurrence with the City, the results will be presented to the CPTAC and the City Water Commission.

Based on comments from the CPTAC and City Water Commission an outline of the draft report will be presented to the City for approval.

Task 3-7 – Report

This task will document the results of the Groundwater Model Task and will include a draft and final report with relevant appendices. The report and model files will be provided as follows:

- 5-paper copies of DRAFT report
- 5-paper copies of FINAL report
    - Electronic files of FINAL report
    - Electronic model and supporting documentation files

A meeting will be held with City staff to review the draft report. Prior to preparation of the final report, a presentation on the model results will be made to the Water Commission and subsequently the City Council. In coordination with City staff, the final report outline will be finalized and a final report prepared. Following report completion, a walk-through of the model specifics will be provided to City Staff to facilitate the transfer and use of the model and associated software.

BIOLOGICAL RESOURCE INVESTIGATIONS (BOR TASK 4)

WestLand Resources, Inc. (WestLand) has prepared the following scope of services for the initiation of biological resource investigations for the 7,500-acre RGR owned by the City, and the analysis of potential impacts to biological resources from the development of pumping infrastructure and associated features at the RGR. WestLand understands the proposed infrastructure currently includes groundwater wells, an onsite water treatment facility, secondary pipelines from the wells to the treatment facility, onsite power distribution, and maintenance roads.

The current scope includes description of the existing environment of the RGR and a screening analysis of the potential for sensitive species identified in the BOR Grant (collectively, Species of Concern) to occur within the analyzed area. Data collected from the exiting environment description and species screening will inform an analysis which will address the impacts of the infrastructure development on the biological resources of the RGR.

Task 4-1 – Existing Environment Description

WestLand will produce a description of the biological resources and existing environment of the 7,500-acre RGR. Completion of the description will require limited field reconnaissance of the analyzed area to verify field conditions and note any existing disturbance or alteration to the overall character of the area. The existing environment description will include the following:

- Broad characterization of vegetation community (using Brown, Lowe, and Pace)
- Identification of habitats listed as "unique" in the BOR Grant, particularly wetlands, seeps, and springs
- Description of the typical wildlife which may occur within the RGR, and identification of potential large mammal movement corridors, avian flyways, and/or important wildlife areas

Task 4-2 – Screening Analysis

WestLand will draft a screening analysis to identify the "potential to occur" for Species of Concern within the RGR. These Species of Concern are defined from the BOR Grant and include Federally listed threatened, endangered, and candidate species; U.S. Forest Service sensitive species; State-listed Wildlife of Special Concern; and species considered as endangered or sensitive by the Navajo Nation.

The scope presupposes that the Navajo Nation Department of Fish and Wildlife (NNDFW) maintains and can provide known ranges and occurrences of endangered or sensitive species on lands located in proximity to, but not on, the Navajo Nation itself. The list of species considered as "sensitive" is extensive and covers the Nation's lands in four states, not all of which will be applicable to the area analyzed under these tasks. For this scope it is assumed that any sensitive species list provided by the Navajo Nation will contain no more than 30 species unique to the list to be included in the screening analysis. Species identified as sensitive by the Bureau of Land Management (BLM) will be excluded from the screening analysis, as lands managed by the BLM do not occur within any of the areas to be analyzed, nor between RGR and Flagstaff, along the path of any potential pipeline.

- Data compiled for the habitat description to inform the potential for any Species of Concern to occur within the analyzed area

- Screening analysis to be based on the best available biological data on each of the species' habitat requirements, known ranges, and records of occurrence
- Screening analysis findings will describe the potential for a species to occur within the analyzed area
- Analysis will include documentation of the data utilized to support that finding
- No species-specific survey is proposed under the current scope of work

Task 4-3 – Environmental Consequences Analysis

WestLand will utilize the results of the existing environment description and the screening analysis to describe the potential effects to biological resources, including Species of Concern, to be affected by the development of the pumping infrastructure and associated features at RGR. The effects analysis will include a summary of those physical changes to the biological resources of the RGR as a result of the infrastructure development, and will provide suggestions for potential mitigation opportunities which may be required to offset these impacts.

- Qualitative assessment of expected physical changes to the RGR as a result of infrastructure development
- Assessment and discussion of potential effects to vegetation, wildlife (including Species of Concern), and unique habitats as predicted by these physical impacts
- Provide recommendations for further analysis which may be warranted to quantify potential effects, particularly to Species of Concern and unique habitats
- Provide recommendations for mitigation which may be required to offset potential impacts of the infrastructure development

Task 4-4 – Report

The habitat description, screening analysis, and environmental consequences analysis will be provided as a single technical memorandum to the City and the BOR, suitable for reference in future National Environmental Policy Act (NEPA) documentation in support of an Environmental Impact Statement (EIS). Under this scope, WestLand will respond to one round of agency comments on the memorandum. Consultation with Federal, Tribal, or State wildlife regulatory agencies is not anticipated under this scope.

CULTURAL RESOURCE INVESTIGATIONS (BOR TASK 5)

WestLand has prepared the following scope of services for the initiation of cultural resource investigations for the RGR. As direct impact related to infrastructure development is not anticipated within a 2-mile radius of the Navajo Nation, the scope of this task is limited to the 5,500 acres of the RGR outside of this radius. Work under this scope includes a Class I Records Search of previously recorded cultural resources and surveys within 1 mile of the 5,500 acres and

targeted Class III pedestrian survey of the areas of direct impact anticipated under the proposed infrastructure development.

Task 5-1 – Class I Records Search

- Class I including the land area of the 5,500 acres and 1-mile buffer around the land area collectively
- Records search of the AZSITE on-line data base maintained by the Arizona State Museum (ASM)
- Records search of the Museum of Northern Arizona (MNA) site files
- Search of records stored at Northern Arizona University (NAU)
- Records search of the Navajo Nation Historic Preservation Department (NNHPD) files
- Records search of historic Government Land Office (GLO) maps
- Records search of historic topographic maps

Task 5-2 – Targeted Class III Survey

WestLand will conduct targeted Class III (100% coverage) pedestrian cultural resource survey to locate and evaluate all cultural resources within the areas of direct impact anticipated under the proposed infrastructure development. WestLand understands the City is currently working to develop Geographic Information System (GIS) linework for the areas of proposed infrastructure development, which include groundwater wells, an onsite water treatment facility, secondary pipelines from the wells to the treatment facility, onsite power distribution, and maintenance roads. The proposed scope of Class III survey assumes approximately 60 miles of 120-foot-wide corridor survey for proposed linear features and approximately 20 acres of block coverage for associated structures within the overall 5,500 acres. Class III survey coverage of the entire 5,500-acre area is not proposed under this scope. Class III survey work includes:

- Submit a Notice of Intent to survey to ASM
- Conduct a 100% pedestrian cultural resources inventory survey of areas of impact to ASM and BOR standards
- All discovered archaeological sites, historic age features, and historic age structures will be recorded in the field and evaluated for their eligibility of inclusion on the National Register of Historic Places (NRHP).
- All previously recorded sites will be re-recorded to assess any changes in the site integrity since the initial recording and to re-evaluate the site in terms of the NRHP eligibility criteria.

Task 5-3 – Cultural Resource Report

WestLand will prepare a cultural resource report documenting the results of the Class I Records Search and the Class III Survey performed for the RGR. The report will be written to National

Historic Preservation Act Section 106 and BOR standards, suitable for reference in future NEPA documentation in support of an EIS. A draft of the report will be provided to the City and the BOR. Under this this scope, WestLand will respond to one round of agency comments on the draft document. The final report will be registered with ASM, and registration will include payment of the ASM project registration fee.

SCHEDULE

The proposed project schedule is given on the next page. Meeting dates are approximate and will depend on project progress and participant availability. Total estimated time to complete the project is seven (7) months.

COST

Estimated project costs are summarized below. SGC has made every effort to identify work tasks and assign the appropriate level of effort. However, groundwater modeling and NEPA compliance tasks are subject to uncertainty due to the fact that the results of early tasks can modify the work needed in subsequent tasks. To account for this uncertainty SGC recommends the budget include a contingency of ten (10) percent.

TASK	HOURS	COST
GROUNDWATER MODELING		
3-1 Conceptual Model Development	120	$14,150
3-2 Evaluate Flagstaff Model	200	$22,025
3-3 Recommend Refinements	133	$26,040
3-4 Calibrate Model	280	$30,550
3-5 Develop Scenarios	150	$17,950
3-6 Run Modeled Scenarios	380	$42,450
3-7 Model Report	230	$38,935
Subtotal	**1,493**	**$192,100**
BIOLOGICAL RESOURCES		
4-1 Existing Environment	108	$12,728
4-2 Screening Analysis	96	$9,400
4-3 Environmental Consequences	88	$8,605
4-4 Report	22	$2,267
Subtotal	**314**	**$33,000**
CULTURAL RESOURCES		
5-1 Class I Records Search	45	$4,353
5-2 Targeted Class III Survey	190	$15,635
5-3 Report	40	$6,012
Subtotal	**275**	**$26,000**
Contingency (10%)		**$25,110**
TOTAL	**2,082**	**$276,210**

SCHEDULE

TASK	WEEKS AFTER AUTHORIZATION																													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
GROUNDWATER MODELING																														
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* * *

Southwest Ground-water Consultants, Inc. and WestLand Resources, Inc. appreciate the opportunity to submit this proposal and look forward to being of service to the City of Flagstaff. If you have any questions do not hesitate to contact us at 602-955-5547.

Sincerely,
Southwest Ground-water Consultants, Inc.

William M. Greenslade, P.E., R.G.
Principal/Senior Hydrogeologist

CITY OF FLAGSTAFF

STAFF SUMMARY REPORT

To:	The Honorable Mayor and Council
From:	James Duval, Sr. Project Manager
Date:	05/29/2013
Meeting Date:	06/04/2013

TITLE:

Consideration of Construction Manager at Risk Contract: Street Maintenance Program 2013: Cedar Avenue 2010 Bond Improvements.

RECOMMENDED ACTION:

1) Award Guaranteed Maximum Price Contract #4 (GMP #4) to the Construction Manager at Risk (CMAR) Contract with C and E Paving and Grading, LLC in an amount of $941,672.30. The contract period is 60 calendar days; and
2) Authorize the City Manager to execute the necessary documents.

Policy Decision or Reason for Action:

- Provide for annual pavement maintenance of City streets and implement utility improvements as authorized by the Special Debt Authorization Election of November 2010.
- Staff makes this request in order to proceed with the work this construction season so as to limit interim repair costs should we have to go through another winter, and to complete the work by start of the FUSD school year in mid-August.

Financial Impact:

The Cedar Avenue 2010 Bond Improvement Project is funded by the total budget appropriation of $689,169 (includes FY12 and FY13 prior year expenditures and recommended FY14 budget amount of $676,375) for the voter approved Street/Utility Bond Program (acct. 403-2442-691) and from the Aging Water and Wastewater Infrastructure program (201-5110-770 and 201-5810-773) in the amount of $400,000 and from the Transportation Tax Fund (401-3310-600) in the amount of $100,000.

Connection to Council Goal:

Repair Replace maintain infrastructure (streets & utilities)

Has There Been Previous Council Decision on This:

Yes, Council approval of the Special Debt Authorization Election held in November 2010 and authorizing General Obligation bonds to fund Street and Utilities Improvements in a principal amount up to $16,500,000.

Options and Alternatives:

1) Approve the award as recommended
2) Reject approval of the award and direct staff to pursue traditional design-bid-build project delivery. This would delay progress on the project into the calendar year 2014 construction season.

Background/History:

On May 7, 2013, Council approved award of the Construction Manager at Risk Street Maintenance Contract for the 2013 street maintenance program to C and E Paving and Grading, LLC. The contractor has successfully completed contract work through GMP #1 and #2; GMP #1 for the Fourth Street overlay, GMP#2 for the 2012 Street Maintenance Program. GMP#3, as approved on May 7 th, 2013, is for the 2013 Street Maintenance program in the current construction season.

This award is for GMP #4 to complete street maintenance and minor utility improvements on Cedar Avenue between Fourth Street and West Street. The construction will include asphalt mill and overlay, infill and repair of sidewalk/curb/gutter, ADA related curb return modifications, replacement of water and sewer services, a minor waterline connection and two new sections of sanitary sewer mains. The GMP will include costs for construction, construction fee, costs for General Conditions (including bonds and insurance), sales taxes, and contingency funds.

Key Considerations:

The goal of the Street/Utility Bond Improvements is to use the voter approved funds to improve and repair City infrastructure. This contract utilizes a completed selection process which conserves City resources and expedites the construction schedule during the prime summer construction season.

Expanded Financial Considerations:

Project expenditures will be funded by the current total budget appropriation of $689,169 for 2010 Bond Projects (acct 403-2442-691) and will be supplemented with $400,000 from the Aging Water and Wastewater Infrastructure program and $100,000 from the Transportation Tax. The total project budget is $1,189,169 and staff is requesting the Mayor and Council to approve $941,672.30 for construction of this project.

The financial goal is to exhaust all 2010 Street/Utility Bond funds before using Utility and Transportation Tax funds to supplement the project. Transportation Tax funding is available in the West/Arrowhead PH II budget appropriation in FY14 resulting from the hard bid contract amount coming in lower than the engineer's estimate.

Community Benefits and Considerations:

The Street Maintenance Program provides surface treatments to preserve and maintain the pavement condition of City streets. The ADA (Americans with Disabilities Act) improvements provide improved access for disabled citizens and visitors along existing streets and provide compliance with Federal requirements.

Community Involvement:

In June 2010, the Council approved ballot language for the Special Debt Authorization Election held in November 2010. Voter approval authorized the City to sell and issue general obligation bonds to fund Street and Utilities Improvements in a principal amount up to $16,500,000.

Expanded Options and Alternatives:

1) Approve the award as recommended
2) Reject approval of the award and direct staff to pursue traditional design-bid-build project delivery. This would delay progress on the project into the calendar year 2014 construction season.

Attachments: Vicinity Map
2010 Bond Update
Sample CMAR Contract
Cedar GMP

N

1 inch = 249 feet

Map and Data is a Product of the City of Flagstaff
GIS Section
211 West Aspen Ave
Flagstaff, AZ 86001
(928) 213-2850

2010 Street/Utility Bond Program UPDATE

29-May-13

	Project	Status	Total Cost
1	**Izabel Street**	Complete	$525,324
2	**Sunnyside Phase V-B**	Complete	$536,717
3	**Franklin / Mohawk**	Complete	$1,507,075
4	**Beulah Blvd. Overlay**	Complete	$1,039,558
5	**Fourth Street Overlay**	Complete	$1,371,292
6	**Dodge Avenue**	Warranty	$1,101,396
7	**Cherry Avenue**	Warranty	$1,217,942
8	**Coconino / Elden / Humphreys**	Construct 2012-2013	$2,077,738
9	**S. Beaver / S. Leroux**	Construct 2013	$2,696,391
10	**La Plaza Vieja**	Construct 2013	$2,118,044
11	**Cedar Avenue Overlay****	Construct 2013	$1,189,169
12	**Rose Avenue**	Construct 2014	$1,606,525
	***Bond Premium Issuance Costs**		$56,517
		TOTAL:	**$17,043,688**

Total Amount of Bond Premium	$55,099
Total Amount of Bond Available	$16,555,099
Amount Difference	-$488,589

* $143,832 of bond issuance costs included in the total project amount for 4th Street Overlay

**Total Cost is supplemented by $400,000 from Utility Funds and $100,000 from the Transportation Tax Funds

City of Flagstaff, Arizona

Project Name

CONSTRUCTION MANAGER AT RISK

CONSTRUCTION SERVICES

PROJECT NO.

Agreement No.

MAYOR

CITY COUNCIL

CITY MANAGEMENT

City Manager

Utilities Director

Community Development Director

Public Works Director

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EXHIBIT A – PROJECT DESCRIPTION

EXHIBIT B – APPROVED GMP PROPOSAL

EXHIBIT C – TECHNICAL SPECIFICATIONS

CITY OF FLAGSTAFF, ARIZONA

Project Name

CONSTRUCTION MANAGER AT RISK

CONSTRUCTION SERVICES AGREEMENT

PROJECT No. ; Agreement No.

This Construction Services Agreement ("Agreement"), is made and entered into by and between the City of Flagstaff, an Arizona municipal corporation ("City"), and _____ ("Construction Manager at Risk" or CM@Risk") on this ___ day of _____, 200__.

RECITALS

A. The City is authorized and empowered by provisions of the City Charter to execute agreements for construction services.

B. The City intends to construct _____ as more fully described in Exhibit "A" attached ("Project").

C. To undertake the construction administration of the Project the City has entered into a separate agreement with _____ ("Design Professional.")

D. CM@Risk has represented to the City that it has the ability to provide construction services for the Project, and based on this representation, the City hereby engages CM@Risk to provide these services and construct the Project.

E. Agreement # _____ has been executed previously between the City and CM@Risk to perform design phase services for the Project. Those services may continue during the duration of this Agreement.

***NOW THEREFORE*,** for and in consideration of the mutual covenants and considerations hereinafter contained, it is agreed by and between the City and CM@Risk as follows:

Article 1 - Definitions

"Agreement" - This written document signed by the City and CM@Risk covering the construction phase of the Project, and including other documents itemized and referenced in, or attached to, and made part of this Agreement.

"Change Directive" - A written order prepared and signed by the City, directing a change in the Work prior to agreement on an adjustment in the Contract Price and the Contract Time.

"Change Order" - A type of Contract amendment issued after execution of the Contract Documents or future GMP Amendments signed by the City and CM@Risk, agreeing to changes to a GMP, for substantial unanticipated alterations in the character of Work. The Change Order shall state the following: the addition, deletion or revision in the scope of Work; the amount of the adjustment to the Contract Price; and the extent of the adjustment to the Contract Times or other modifications to Agreement terms.

"The City ("Owner" or "OWNER") - The City of Flagstaff, a municipal corporation, with whom CM@Risk has entered into this Agreement and for whom the services are to be provided pursuant to said Contact. Regulatory activities handled by the City of Flagstaff Community Development, Fire and Planning Departments or any other City Department are not subject to the responsibilities of the City under this Agreement.

"City's Representative" - The person designated in Subsection 8.3.1.2.

"City's Senior Representative" - The person designated in Subsection 8.3.1.1.

"CM@Risk" - The firm selected by the City to provide construction services as detailed in this Agreement.

"CM@Risk's Contingency" - A fund to cover cost growth during the Project used at the discretion of CM@Risk usually for costs that result from project circumstances. The amount of CM@Risk's Contingency shall be negotiated as a separate line item in each GMP package. Use and management of CM@Risk's Contingency is described in Subsection 5.3.1.

"CM@Risk's Representative" - The person designated in Subsection 8.3.2.2.

"CM@Risk's Senior Representative" - The person designated in Subsection 8.3.2.1.

"Construction Documents" - Certain plans, specifications and drawings prepared by the Design Professional after correcting for permit review requirements or dated plans and specifications specifically identified as the "Construction Documents" herein or in an Exhibit or Addendum which is attached hereto.

"Construction Fee" - CM@Risk's administrative costs, home office overhead, and profit as applicable to this Project whether at CM@Risk's principal or branch offices.

"Contract Documents" - The following items and documents in descending order of precedence executed by the City and CM@Risk: (i) all written modifications, amendments and Change Orders; (ii) this Agreement, including all exhibits and attachments; (iii) Construction Documents; (iv) GMP Plans and Specifications.

"Contract Price" - The amount or amounts set forth in Article 5.

"Contract Time" - The days, as set forth in Article 4, the period of time, including authorized adjustments, allotted in the Contract Documents for Substantial Completion of the Work.

"Cost of the Work" - The direct costs necessarily incurred by CM@Risk in the proper performance of the Work. The Cost of the Work shall include direct labor costs, subcontract costs, costs of materials and equipment incorporated in the completed construction, costs of other materials and equipment, temporary facilities, permit and license fees, materials testing, and related items. The Cost of the Work shall not include CM@Risk's Construction Fee, General Conditions Costs, and taxes.

"Critical Path Method" - A scheduling technique used to predict project duration by analyzing which sequence of activities has the least amount of scheduling flexibility thus identifying the path (sequence) of activities which represent the longest total time required to complete the Project. Delay in completion of the identified activities shall cause a delay in achieving Substantial Completion.

"Day(s)" - Calendar days unless otherwise specifically noted in the Contract Documents.

"Design Phase Contract" - The agreement between the City and CM@Risk for Services provided by CM@Risk during the design phase which may include the following: design recommendations, Project scheduling, constructability reviews, alternate systems evaluation, cost estimate, Minority Business Enterprise/Woman's Business Enterprise/Small Business Enterprise **("MBE/WBE/SBE")** utilization, subcontractor bid phase services, GMP preparation and other services set forth in this Agreement or reasonably inferable therefrom.

"Design Professional" - A qualified, licensed design professional who furnishes, design**,** construction documents, and/or construction administration services required for the Project.

"Differing Site Conditions" - Concealed or latent physical conditions or subsurface conditions at the Site that, (i) materially differ from the conditions indicated in the Contract Documents or (ii) are of an unusual nature, differing materially from the conditions ordinarily encountered and generally recognized as inherent in the Work.

"Final Completion" - 100% completion of all construction Work noted in or reasonably inferred from the Contract Documents, including but not limited to all Punch Lists work, all record and close-out documents specified in Owner's Project specifications and Owner training/start up activities.

"Float" - The number of Days by which an activity can be delayed without lengthening the Critical Path and extending the Substantial Completion date.

"General Conditions Costs" - Includes, but is not limited to the following types of costs for CM@Risk during the construction phase: (i) payroll costs for Project manager or CM@Risk for work conducted at the Site, (ii) payroll costs for the superintendent and full-time general foremen, (iii) payroll costs for other management personnel resident and working at the Site, (iv) workers not included as direct labor costs engaged in support (e.g. loading/unloading, clean-up, etc.), (v) costs of offices and temporary facilities setup solely for this Project including office materials, office supplies, office equipment and minor expenses, (vi) cost of utilities, fuel, sanitary facilities and telephone services at the Site, (vii) costs of liability and other applicable insurance premiums not included in labor burdens for direct labor costs, (viii) costs of bond premiums, (ix) costs of consultants not in the direct employ of CM@Risk or Subcontractors.

"Guaranteed Maximum Price" or "GMP" - The sum of the maximum Cost of the Work; the Construction Fee; General Conditions Costs, taxes, and CM@Risk's Contingency.

"GMP Plans and Specifications" - The plans and specifications upon which the Guaranteed Maximum Price proposal is based.

"Legal Requirements" - All applicable federal, state and local laws, codes, ordinances, rules, regulations, orders and decrees of any government or quasi-government entity having jurisdiction over the Project or Site, the practices involved in the Project or Site, or any Work.

"Notice to Proceed" or "NTP" - The directive issued by the City, authorizing CM@Risk to start Work.

"Owner's Contingency" - A fund to cover cost growth during the project used at the discretion of the Owner usually for costs that result from Owner directed changes or unforeseen Site conditions. The amount of the Owner's contingency shall be set solely by the Owner and shall be in addition to the Project costs included in CM@Risk's GMP packages. Use and management of the Owner's contingency is described in Section 5.3.2.

"Performance Period" - The period of time allotted in the Contract Documents to complete the Work comprised within a GMP. The Performance Period shall be stated with each GMP and shown on the Project Master Schedule.

"Payment Request" - The City form used by CM@Risk to request progress payments for Work in accordance with Article 7.

"Product Data" - Illustrations, standard schedules, performance charts, instructions, brochures, diagrams and other information furnished by CM@Risk to illustrate materials or equipment for some portion of the Work.

"Project" - The work to be completed in the execution of this Agreement as amended and as described in the Recitals above and in Exhibit "A" attached.

"Project Record Documents" - The documents created pursuant to Section 2.10.

"Samples" - Physical examples, which illustrate materials, equipment or workmanship and establish standards by which the Work shall be evaluated.

"Schedule of Values" - A statement furnished by CM@Risk to the City's Representative for approval, reflecting the portions of the GMP allotted for the various parts of the work and used as the basis for evaluating CM@Risk's applications for progress payments.

"Shop Drawings" - Drawings, diagrams, schedules and other data specially prepared for the Work by CM@Risk or a Subcontractor, manufacturer, supplier or distributor to illustrate some portion of the Work.

"Site" - Land or premises on which the Project is located.

"Specifications" - The part(s) of the Contract Documents for the construction phase consisting of written technical descriptions of materials, equipment, construction systems, standards and workmanship as applied to the Work and certain administrative details applicable thereto.

"Subcontractor" - An individual or firm having a direct Agreement with CM@Risk or any other individual or firm having an Agreement with the aforesaid Contractors at any tier, who undertakes to perform a part of the construction phase Work for which CM@Risk is responsible.

"Submittals" - Documents and/or things that may be produced or presented by one party for consideration review or such other actions as may be required by this Agreement by another party, entity or person. Examples of Submittals include, but are not limited to, preliminary or evolving drafts, product data samples, etc.

"Substantial Completion" - The established date when the Work or designated portion thereof is sufficiently complete, in accordance with the Contract Documents so that the Owner may occupy the Work, or designated portion thereof, for the use for which it is intended. This may include, but is not limited to: (i) Approval by the City or State Fire Marshall and/or other state or local authorities having jurisdiction over the Work or a portion thereof (Certificate of Occupancy); (ii) all systems in place, functional, and displayed to, and accepted by, the City or it's representative; (iii) City operation and maintenance training complete; (iv) HVAC test and balance completed with reports provided to the Design Professional for review; (v) Operational and Maintenance manuals and final Project Record Documents delivered to the City or Design Professional for review.

"Supplier" - A manufacturer, fabricator, supplier, distributor, material man or vendor having a direct agreement with CM@Risk or any Subcontractor to furnish materials or equipment to be incorporated in the construction phase Work by CM@Risk or any Subcontractor.

"Work" - The entire completed construction or the various separately identifiable parts thereof, required to be furnished during the construction phase. Work includes and is the result of performing or furnishing labor and furnishing and incorporating materials, resources and equipment into the construction, and performing or furnishing services and documents as required by the Contract Documents for the construction phase.

Article 2 - CM@Risk's Services and Responsibilities

2.0 CM@Risk shall furnish any and all labor, materials, equipment, transportation, utilities, services and facilities required to perform all Work for the construction of the Project, and to completely and totally construct the same and install the material therein for the City. All Work shall be performed in a good and workmanlike and substantial manner and within the care and skill of a qualified CM@Risk in Flagstaff, Arizona. The Work shall be to the satisfaction of the City and strictly pursuant to and in conformity with the Project's Contract Documents. It is not required that the services be performed in the sequence in which they are described.

2.1 General Services

2.1.1. CM@Risk's Representative shall be reasonably available to the City and shall have the necessary expertise and experience required to supervise the Work. CM@Risk's Representative shall communicate regularly with the City but not less than once a week and shall be vested with the authority to act on behalf of CM@Risk. CM@Risk's Representative may be replaced only with the written consent of the City.

2.2 Government Approvals and Permits

2.2.1 Unless otherwise provided, CM@Risk shall obtain all applicable and/or necessary permits, approvals and licenses required for the prosecution of the Work from any government or quasi-government entity having jurisdiction over the Project. CM@Risk is specifically reminded of the need to obtain the applicable and/or necessary environmental permits or file the applicable and/or necessary environmental notices.

2.2.2 Copies of these permits and notices must be provided to the City's Representative prior to starting the permitted activity. In the case of Fire Department permits, a copy of the application for permit shall also be provided to the City's Representative. This provision does not constitute an assumption by the City of an obligation of any kind for violation of said permit or notice requirements.

2.2.3 City shall be responsible for City of Flagstaff review and permit(s) fees for building and demolition permits. City shall also pay review fees for grading and drainage, water, sewer, and landscaping. City shall also pay for utility design fees for permanent services.

2.2.4 CM@Risk shall be responsible for all other permits and review fees not specifically listed in Subsection 2.3.3 above.

2.2.5 CM@Risk is responsible for the cost of water meter(s), water and sewer taps, fire lines and taps, and all water bills on the project meters until Substantial Completion of the Project. Arrangements for construction water are CM@Risk's responsibility.

2.3 Pre-construction Conference

2.3.1 Prior to the commencement of any Work, the City's Representative or designee shall schedule and conduct a Pre-construction conference.

2.3.2 The purpose of this conference is to establish a working relationship between CM@Risk, utility firms, and various City agencies. The agenda shall include critical elements of the work schedule, submittal schedule, cost breakdown of major lump sum items, Payment Requests and processing, coordination with the involved utility firms, the level of Project Record Documents required and emergency telephone numbers for all representatives involved in the course of construction.

2.3.3 The Notice to Proceed date shall be concurred with by the parties or set by the City at the Preconstruction Conference. After the meeting and upon receipt of a signed Agreement and delivery of the required bonds and insurance in a City approved format, a Notice to Proceed letter shall be issued confirming the construction start date, Performance Period and if applicable, the Substantial Completion date. If a Substantial Completion date is established the conditions of the Substantial Completion shall be listed and/or as set forth in Article 1 herein. Failure by CM@Risk to provide the properly executed bond and insurance forms in a timely manner may delay the construction start date; however, it shall not alter the proposed Substantial Completion date nor be a basis for any time extension request or other claims.

2.3.4 CM@Risk shall provide a Schedule of Values based on the categories used in the buy out of the Work but not greater than the approved GMP and identifying CM@Risk's Contingency. The Schedule of Values shall subdivide the Work into all items comprising the Work. The Schedule of Values shall contain sufficient detail to identify each individual element of the Work and shall relate to the approved GMP Schedule. The Schedule of Values shall be subject to approval by the City's representative.

2.3.5 Minimum attendance by CM@Risk shall be CM@Risk's Representative, who is authorized to execute and sign documents on behalf of the firm, the job superintendent, and CM@Risk's safety officer.

2.4 Control of the Work

2.4.1 Unless otherwise provided in the Contract Documents to be the responsibility of the City or a separate Contractor, CM@Risk shall provide through itself or Subcontractors the necessary supervision, labor, inspection, testing, start-up, material, equipment, machinery, temporary utilities and other temporary facilities to permit CM@Risk to complete the Work consistent with the Contract Documents.

2.4.2 CM@Risk shall perform all construction activities efficiently and with the requisite expertise, skill and competence to satisfy the requirements of the Contract Documents. CM@Risk shall at all times exercise complete and exclusive control over the means, methods, sequences and techniques of construction.

2.4.3 CM@Risk's Representative or CM@Risk's Superintendent shall be present at the Site at all times that construction activities are taking place.

2.4.3.1 All elements of the Work shall be under the direct supervision of a foreman or his designated representative on the Site who shall have the authority to take actions required to properly carry out that particular element of the work.

2.4.3.2 In the event of noncompliance with this Section, the City may require CM@Risk to stop or suspend the Work in whole or in part.

2.4.4 Where the Contract Documents require that a particular product be installed and/or applied by an applicator approved by the manufacturer, it is CM@Risk's responsibility to ensure the Subcontractor employed for such work, is approved by the manufacturer.

2.4.5 Before ordering materials or doing work, CM@Risk and each Subcontractor shall verify measurements at the Site and shall be responsible for the correctness of such measurements.

No extra charge or compensation shall be allowed because of differences between actual dimensions and the dimensions indicated on the drawings; differences, which may be found, shall be submitted to the City for resolution before proceeding with the work.

2.4.6 CM@Risk shall take field measurements and verify field conditions and shall carefully compare such field measurements and conditions and other information known to CM@Risk with the Contract Documents before commencing activities. Errors, inconsistencies or omissions discovered shall be reported to the City at once.

2.4.7 CM@Risk shall establish and maintain all building and construction grades, lines, levels, and bench marks, and shall be responsible for accuracy and protection of same. This Work shall be performed or supervised by a civil engineer or surveyor licensed as such in the State of Arizona.

2.4.8 Any person employed by CM@Risk or any Subcontractor who, in the opinion of the City, does not perform his work in a proper, skillful and safe manner or is intemperate or disorderly shall, at the written request of the City, be removed from the Work by CM@Risk or Subcontractor employing such person, and shall not be employed again in any portion of Work without the written approval of the City. CM@Risk or Subcontractor shall keep the City harmless from damages or claims, which may occur in the enforcement of this Section.

2.4.9 CM@Risk assumes responsibility to the City for the proper performance of the work of Subcontractors and any acts and omissions in connection with such performance. Nothing in the Contract Documents is intended or deemed to create any legal or contractual relationship between the City and any Subcontractor or Sub-Subcontractor, including but not limited to any third-party beneficiary rights.

2.4.10 CM@Risk shall coordinate the activities of all Subcontractors. If the City performs other work on the Project or at the Site with separate contractors under the City's control, CM@Risk agrees to reasonably cooperate and coordinate its activities with those of such separate contractors so that the Project can be completed in an orderly and coordinated manner without unreasonable disruption.

2.5 Control of the Work Site

2.5.1 Throughout all phases of construction, including suspension of Work, CM@Risk shall keep the Site reasonably free from debris, trash and construction wastes to permit CM@Risk to perform its construction services efficiently, safely and without interfering with the use of adjacent land areas. Upon Substantial Completion of the Work, or a portion of the Work, CM@Risk shall remove all debris, trash, construction wastes, materials, equipment, machinery and tools arising from the Work or applicable portions thereof to permit the City to occupy the Project or a portion of the Project for its intended use.

2.5.2 CM@Risk shall take whatever steps, procedures or means to prevent any dust nuisance due to construction operations. The dust control measures shall be maintained at all times to the satisfaction of the City and in accordance with the requirements of the Arizona Department of Environmental Quality rules and regulations.

2.5.3 CM@Risk shall maintain ADA, ADAAG and ANSI accessibility requirements during construction activities in an occupied building or facility. ADA, ADAAG and ANSI accessibility requirements shall include, but not be limited to, parking, building access, entrances, exits, restrooms, areas of refuge, and emergency exit paths of travel. CM@Risk shall be responsible for the coordination of all work to minimize disruption to building occupants and facilities.

2.5.4 Only materials and equipment, which are to be used directly in the Work, shall be brought to

and stored on the Site by CM@Risk. When equipment is no longer required for the Work, it shall be removed promptly from the Site. Protection of construction materials and equipment stored at the Site from weather, theft, damage and all other adversity is solely the responsibility of CM@Risk.

2.6 Shop Drawings, Product Data and Samples

2.6.1 Shop Drawings, Product Data, Samples and similar Submittals are not Contract Documents. The purpose of their submittal is to demonstrate, for those portions of the Work for which Submittals are required, the way CM@Risk proposes to conform to the information given and the design concept expressed in the Contract Documents.

2.6.2 CM@Risk shall review, approve, verify, and submit to the City five copies of each Shop Drawing, Product Data, Sample, and similar Submittals required by the Contract Documents in accordance with the approved GMP schedule as shown in Exhibit “B” as to cause no delay in the Work or in the activities of the City or of separate contractors. Submittals made by CM@Risk, which are not required by the Contract Documents, may be returned without action.

2.6.3 CM@Risk shall perform no portion of the Work requiring submittal and review of Shop Drawings, Product Data, Samples, or similar Submittals until the respective submittal has been approved by the City or City’s designee. Such Work shall be in accordance with approved Submittals.

2.6.4 By approving, verifying and submitting Shop Drawings, Product Data, Samples and similar Submittals, CM@Risk represents that CM@Risk has determined and verified materials, field measurements and field construction criteria related thereto, or shall do so, and has checked and coordinated the information contained within such Submittals with the requirements of the Work and of the Contract Documents.

2.6.5 CM@Risk shall not be relieved of responsibility for deviations from requirements of the Contract Documents by the City 's approval of Shop Drawings, Product Data, Samples or similar Submittals unless CM@Risk has specifically informed the City in writing of such deviation at the time of submittal and the City has given written approval to the specific deviation. CM@Risk shall not be relieved of responsibility for errors or omissions in Shop Drawings, Product Data, Samples, or similar Submittals by the City’s approval thereof.

2.6.6 CM@Risk shall direct specific attention, in writing or on resubmitted Shop Drawings, Product Data, Samples, or similar Submittals, to revisions other than those requested by the City on previous Submittals.

2.6.7 Informational Submittals upon which the City is not expected to take responsive action may be so identified in the Contract Documents.

2.6.8 When professional certification of performance criteria of materials, systems or equipment is required by the Contract Documents, the City shall be entitled to rely upon the accuracy and completeness of such calculations and certifications.

2.7 Quality Control, Testing and Inspection

2.7.1 All materials used in the Work shall be new and unused, unless otherwise noted, and shall meet all quality requirements of the Contract Documents.

2.7.2 All construction materials to be used on the Work or incorporated into the Work, equipment, plant, tools, appliances or methods to be used in the Work may be subject to the inspection and approval or rejection by the City. Any material rejected by the City shall be removed immediately and replaced in an acceptable manner.

2.7.3 The procedures and methods used to sample and test material shall be determined by the City. Unless otherwise specified, samples and tests shall be made in accordance with the most recently adopted edition of the City of Flagstaff Engineering Division Design and Construction Standards and Specifications.

2.7.4 The City shall select a City or Independent Testing Laboratory and shall pay for initial City Acceptance Testing.

2.7.4.1 When the first and/or subsequent tests indicate noncompliance with the Contract Documents, the cost associated with that noncompliance and the cost of all tests, except the first test, shall be paid for by CM@Risk. CM@Risk's Contingency cannot be utilized for the cost of re-testing.

2.7.4.2 When the first and/or subsequent tests indicate noncompliance with the Contract Documents, all retesting shall be performed by the same testing agency.

2.7.5 CM@Risk shall cooperate with the selected testing laboratory and all others responsible for testing and inspecting the work and shall provide them access to the Work at all times.

2.7.6 At the option of the City, materials may be approved at the source of supply before delivery is started.

2.7.7 Code compliance testing and inspections required by codes or ordinances, or by a plan approval authority, and which are made by a legally constituted authority, shall be the responsibility of and shall be paid by CM@Risk, unless otherwise provided in the Contract Documents.

2.7.8 CM@Risk's convenience and quality control testing and inspections shall be the sole responsibility of CM@Risk and paid by CM@Risk.

2.8 Trade Names and Substitutions

2.8.1 Unless indicated that no substitutions are permitted, CM@Risk may request a substitution or alternative to Contract Document references to equipment, materials or patented processes by manufacturer, trade name, make or catalog number, subject to the following:

2.8.2 The substitution shall be submitted by CM@Risk in writing to the City.

2.8.3 CM@Risk shall certify that the substitution shall perform the functions and achieve the results called for by the general design, be similar and of equal substance, and be suited to the same use as that specified.

2.8.4 The submittal shall state any required changes in the Contract Documents to adapt the design to the proposed substitution.

2.8.5 The submittal shall contain an itemized estimate of all costs and credits that will result directly and indirectly from the acceptance of such substitution, including cost of design, license fees, royalties, and testing. Also, the submittal shall include any adjustment in the Contract Time created by the substitution.

2.8.6 CM@Risk if requested by the City shall submit Samples or any additional information that may be necessary to evaluate the acceptability of the substitution.

2.8.7 The City shall make the final decision and shall notify CM@Risk in writing as to whether the substitution has been accepted or rejected.

2.8.8 If the City does not respond in a timely manner, CM@Risk shall continue to perform the Work in accordance with the Contract Documents and the substitution shall be considered rejected.

2.9 Project Record Documents

2.9.1 During the construction period, CM@Risk shall maintain at the Site a set of blueline or blackline prints of the Construction Document drawings and shop drawings for Project Record Document purposes.

2.9.1.1 CM@Risk shall mark these drawings to indicate the actual installation where the installation varies appreciably from the original Construction Documents. CM@Risk shall give particular attention to information on concealed elements, which would be difficult to identify or measure and record later. Items required to be marked include but are not limited to:

- Dimensional changes to the drawings.
- Revisions to details shown on Drawings
- Depths of foundations below first floor
- Locations and depths of underground utilities
- Revisions to routing of piping and conduits.
- Revisions to electrical circuitry.
- Actual equipment locations.
- Duct size and routing.
- Locations of concealed internal utilities.
- Changes made by Change Order, Change Order Directive, Field Order, Record of Field Change, ASI's and RFI's.
- Addenda and other details not on original Agreement Drawings.

2.9.1.2 CM@Risk shall mark completely and accurately Project Record Drawing prints of Construction Documents or Shop Drawings, whichever is the most capable of indicating the actual physical condition. Where Shop Drawings are marked, show cross-reference on the Construction Documents location.

2.9.1.3 CM@Risk shall mark Project Record Drawings sets with red erasable colored pencil.

2.9.1.4 CM@Risk shall note RFI Numbers, ASI Numbers and Change Order numbers, etc., as required to identify the source of the change to the Construction Documents.

2.9.1.5 CM@Risk shall, as a condition of Substantial Completion, submit Project Record Drawing prints and Shop Drawings to the City or its representative for review and comment.

2.10.2 Upon receipt of the reviewed Project Record Drawings from the City, CM@Risk shall correct any deficiencies and/or omissions to the drawings and prepare the following for submission to the City within 14 Days:

2.10.2.1 CM@Risk shall provide a complete set of electronic Project Record Drawings prepared in AutoCAD format compatible with City of Flagstaff CADD technology. The Design Professional shall provide files of the original Construction Documents to CM@Risk for the use of preparing these final Project Record Drawings or CM@Risk may contract with the Design Professional to revise and update the electronic drawing files. Each drawing shall be clearly marked with "As-Built Document."

2.10.2.2 CM@Risk shall provide a complete set of reproducible mylars from the final AutoCAD drawings.

2.10.2.3 CM@Risk shall provide the original copy of the Project Record Drawings (redline mark-ups).

2.10 Project Safety

2.11.1 CM@Risk recognizes the importance of performing the Work in a safe manner so as to prevent damage, injury or loss to (i) all individuals at the Site, whether working or visiting, (ii) the Work, including materials and equipment incorporated into the Work or stored on-Site or off-Site, and (iii) all other property at the Site or adjacent thereto.

2.11.2 CM@Risk assumes responsibility for implementing and monitoring all safety precautions and programs related to the performance of the Work.

2.11.3 CM@Risk shall, prior to commencing construction, designate a Safety Representative with the necessary qualifications and experience to supervise the implementation and monitoring of all safety precautions and programs related to the Work. Unless otherwise required by the Contract Documents, CM@Risk's Safety Representative shall be an individual stationed at the Site who may have other responsibilities on the Project in addition to safety.

2.11.4 The Safety Representative shall make routine daily inspections of the Site and shall hold weekly safety meetings with CM@Risk's personnel, Subcontractors and others as applicable.

2.11.5 CM@Risk and Subcontractors shall comply with all Legal Requirements relating to safety, as well as any City-specific safety requirements set forth in the Contract Documents, provided that such City-specific requirements do not violate any applicable Legal Requirement.

2.11.6 CM@Risk shall immediately report in writing any safety-related injury, loss, damage or accident arising from the Work to City's Representative and, to the extent mandated by Legal Requirements, to all government or quasi-government authorities having jurisdiction over safety-related matters involving the Project or the Work.

2.11.7 CM@Risk's responsibility for safety under this Section is not intended in any way to relieve Subcontractors and Sub-Subcontractors of their own contractual and legal obligations and responsibility for (i) complying with all Legal Requirements, including those related to health and safety matters, and (ii) taking all necessary measures to implement and monitor all safety precautions and programs to guard against injury, losses, damages or accidents resulting from their performance of the Work.

2.11 Warranty

2.12.1 CM@Risk warrants to City that the construction, including all materials and equipment furnished as part of the construction, shall be new unless otherwise specified in the Contract Documents, of good quality, in conformance with the Contract Documents and free of defects in materials and workmanship.

2.12.2 CM@Risk's warranty obligation shall be for one (1) year, except for such greater period as may be required by the technical specifications.

2.12.3 Nothing in this warranty is intended to limit any manufacturer's warranty which provides The City with greater warranty rights than set forth in this Section or the Contract Documents. CM@Risk shall provide City with all manufacturers' warranties upon Substantial Completion.

2.12.4 Nothing in this warranty is intended to limit any other remedy at law that may be available to the City.

2.13 Correction of Defective Work

2.13.1 CM@Risk agrees to correct any Work that is found to not be in conformance with the Contract Documents, including that part of the Work subject to Section 2.12 above, within a period of one (1) year from the date of Substantial Completion of the Work or any portion of the Work, or within such longer period to the extent required by the Contract Documents, or as may be available to the City by law. A progress payment, or partial or entire use or occupancy of the Project by the City, shall not constitute acceptance of Work not in accordance with the Contract Documents.

2.13.2 During the performance of the Work, CM@Risk shall take meaningful steps to commence correction of such nonconforming Work as notified by the City or as discovered by CM@Risk. This includes the correction, removal or replacement of the nonconforming Work and any damage caused to other parts of the Work affected by the nonconforming Work. If CM@Risk fails to commence the necessary steps during the performance of the Work, City, in addition to any other remedies provided under the Contract Documents, may provide CM@Risk with written notice that City shall commence correction of such nonconforming Work with its own forces.

2.13.3 CM@Risk shall, take meaningful steps to commence correction of nonconforming Work subject to Section 2.12 and/or Section 2.13.1 above, within seven (7) days of receipt of written notice from City. This includes the correction, removal or replacement of the nonconforming Work and any damage caused to other parts of the Work affected by the nonconforming Work. If CM@Risk fails to commence the necessary steps within such seven-day period, City, in addition to any other remedies provided under the Contract Documents, may provide CM@Risk with written notice that City shall commence correction of such nonconforming Work with its own forces.

2.13.4 If City does perform such corrective Work, CM@Risk shall be responsible for all reasonable costs incurred by City in performing such correction.

2.13.5 For nonconforming Work that creates an emergency requiring an immediate response, CM@Risk shall respond and initiate corrections within twenty-four hours.

2.13.6 The one year period referenced in Subsection 2.13.1 above applies only to CM@Risk's obligation to correct nonconforming Work relative to the warranty set forth in that section and is not intended to constitute a period of limitations for any other rights or remedies the City may have regarding CM@Risk's other obligations under the Contract Documents or as may be allowed by law.

Article 3 - The City's Services and Responsibilities

3.1 Duty to Cooperate.

3.1.1 City shall, throughout the performance of the Work, cooperate with CM@Risk and perform its responsibilities, obligations and services in a timely manner to facilitate CM@Risk's timely and efficient performance of the Work and so as not to delay or interfere with CM@Risk's performance of its obligations under the Contract Documents.

3.1.2 City shall furnish at CM@Risk's request, at no cost to CM@Risk, a CADD file of the Construction Documents in AutoCAD format compatible with The City of Flagstaff CADD technology.

3.2 The City's Representative

3.2.1 City's Representative shall be responsible for providing City (as defined in Article I) supplied information and approvals in a timely manner to permit CM@Risk to fulfill its obligations under the Contract Documents.

3.2.2 City's Representative shall also provide CM@Risk with prompt notice if it observes any failure on the part of CM@Risk to fulfill its contractual obligations, including any default or defect in the project or non-conformance with the drawings and specifications.

3.2.3 The City may utilize field inspectors to assist the City's Representative during construction in observing performance of CM@Risk. The inspector is for the purpose of assisting the City's Representative and should not be confused with an inspector with a City regulatory agency or with an inspector from a City laboratory pursuant to Section 2.8.4.

3.2.3.1 The field inspector shall be authorized to inspect all Work and materials furnished. Such inspection may extend to all or part of the Work and to the preparation, fabrication or manufacture of the materials to be used.

3.2.3.2 The field inspector shall not be authorized to issue instructions contrary to the Construction Documents or to act as foreman for CM@Risk.

3.2.3.3 The field inspector shall have the authority to reject work or materials until any questions at issue can be decided by the City's Representative.

3.2.3.4 The furnishing of such services for the City shall not make the City responsible for or give the City control over construction means, methods, techniques, sequences or procedures or for safety precautions or programs or responsibility for CM@Risk's failure to perform the work in accordance with Contract Documents.

3.3 Design Professional Services

3.3.1 The City may contract separately with one or more Design Professionals to provide construction administration of the Project. The Design Professional's Agreement as well as other firms hired by the City shall be available for review by CM@Risk. CM@Risk shall not have any right however, to limit or restrict any contract provisions and/or modifications that are mutually acceptable to the City and Design Professional.

3.3.2 The City may contract with the Design Professional to provide some or all of the following services during the performance of the Work.

3.3.2.1 Provide oversight of the Work. The City and CM@Risk shall endeavor to communicate through the Design Professional. Communications by and with the Design Professional's consultants shall be through the Design Professional.

3.3.2.2 Conduct Site visits at intervals appropriate to the stage of construction to become generally familiar with the progress and quality of the completed Work and to determine in general if the Work is being performed in accordance with the Contract Documents. The Design Professional shall keep the City informed of progress of the Work and any noted defects and deficiencies of the Work, and shall endeavor to guard the City against defects and deficiencies in the Work. The Design Professional may have authority to reject construction, which does not conform to the Construction Documents and to require additional inspection or testing of the construction in accordance with Section 2.8.

3.3.2.3 Review and recommend approval of Payment Requests.

3.3.2.4 Review and approve or take other appropriate action upon CM@Risk's Submittals such as Shop Drawings, Product Data and Samples in accordance with Section 2.7.

3.3.2.5 Interpret and decide matters concerning performance under and requirements of the Contract Documents on written request of either the City or CM@Risk. The Design Professional's response to such requests shall be made with reasonable promptness and within any time limits agreed upon.

3.3.2.6 Prepare Change Orders, and may authorize minor changes in the Work as provided in Section 6.6.1.

3.3.2.7 Conduct inspections to determine Substantial Completion and Final Acceptance.

3.3.2.8 Receive and forward to the City for the City's review and records written warranties and related documents required by the Contract Documents and assembled by CM@Risk.

3.4 **City's Separate Contractors**. City is responsible for all work performed on the Project or at the Site by separate contractors under City's control. City shall contractually require its separate contractors to cooperate with, and coordinate their activities so as not to interfere with CM@Risk in order to enable CM@Risk to timely complete the Work consistent with the Contract Documents.

3.5 **Permit Review and Inspections**

3.5.1 If requested by CM@Risk, the City's Representative shall provide assistance and guidance in obtaining necessary reviews, permits and inspections, however, the responsibility for obtaining the necessary reviews, permits and inspections remains with CM@Risk.

3.5.2 Regulating agencies of the City, such as Community Development, Fire, Planning, Building Inspection, Environmental Services, and Engineering Departments, enforce Legal Requirements. These enforcement activities are not subject to the responsibilities of the City under this Agreement.

Article 4 - Contract Time

4.0 **Contract Time.**

4.0.1 Contract Time shall start with the Notice to Proceed ("NTP") with construction services and shall end with Substantial Completion.

4.0.2 Where there is more than one GMP, each GMP shall establish a separate NTP date and a Performance Period. The Performance Periods for individual GMPs may be sequential or concurrent as established in the individual Notices to Proceed. The Performance Period for the GMP under this Agreement shall be ___ days starting with the NTP.

4.0.3 CM@Risk agrees that it shall commence timely performance of the Work and shall achieve substantial completion within the Performance Periods and Contract Time.

4.0.4 All of the times set forth in this Article 4 shall be subject to adjustment in accordance with Article 6.

4.0.5 Time is of the essence, for times and time matters set forth in Article 4 and the rest of this Agreement.

4.1 Substantial Completion

4.1.1 Substantial Completion shall be for the entire Project unless a partial Substantial Completion is identified in the approved GMP schedule and stated in the Notice to Proceed letter or as may be mutually agreed by the parties in writing. Substantial Completion shall be in accordance with its definition in Article 1 and with the criteria set forth in the Notice to Proceed.

4.1.2 Prior to notifying the City in accordance to Section 4.1.3 below, CM@Risk shall inspect the Work and prepare and submit to the City a comprehensive list of items to be completed or corrected. CM@Risk shall proceed promptly to complete and correct items on the list. Failure to include an item on such list does not alter the responsibility of CM@Risk to complete all Work in accordance with the Contract Documents.

4.1.3 CM@Risk shall notify City when it believes the Work, or to the extent permitted in the Contract Documents, a portion of the Work, is substantially complete.

4.1.4 Within five (5) days of City's receipt of CM@Risk's notice, the City and CM@Risk shall jointly inspect such Work to verify that it is substantially complete in accordance with the requirements of the Contract Documents.

4.1.5 If such Work is substantially complete, City shall prepare and issue a Certificate of Substantial Completion that shall set forth (i) the date of Substantial Completion of the Work or portion thereof, (ii) the remaining items of Work that have to be completed within thirty (30) calendar days before Final Acceptance, (iii) provisions (to the extent not already provided in the Contract Documents) establishing City's and CM@Risk's responsibility for the Project's security, maintenance, utilities and insurance pending Final Acceptance and (iv) an acknowledgment that warranties commence to run on the date of Substantial Completion, except as may otherwise be noted in the Certificate of Substantial Completion.

4.1.6 City, at its option, may use a portion of the Work which has been determined to be substantially complete, provided, however, that (i) a Certificate of Substantial Completion has been issued for the portion of Work addressing the items set forth in Section 4.1.5 above, (ii) CM@Risk and City have obtained the consent of their sureties and insurers, and to the extent applicable, the appropriate government authorities having jurisdiction over the Project, and (iii) City and CM@Risk agree that City's use or occupancy shall not interfere with CM@Risk's completion of the remaining Work.

4.2 **Final Completion**. Upon receipt of written notice that the Work or identified portions of the Work is ready for final inspection and acceptance, City and CM@Risk shall jointly inspect to verify that the remaining items of Work have been completed as set forth in Section 4.1.5. The City shall issue a Final Completion Letter and payment pursuant to Section 7.5.

4.3 Liquidated Damages

4.3.1 CM@Risk understands that if Substantial Completion is not attained within the Contract Time as adjusted, the City shall suffer damages, which are difficult to determine and accurately specify. CM@Risk agrees that if Substantial Completion is not attained within the Contract Time as adjusted, CM@Risk shall pay the City $__(to be determined on an agreement by agreement basis) per day as liquidated damages for each Day that Substantial Completion extends beyond the date determined by the Contract Time as adjusted and further agrees that such amount is reasonable under the circumstances.

4.3.2 CM@Risk understands that if Final Completion is not attained within the Contract Time as adjusted, the City shall suffer damages, which are difficult to determine and accurately specify. CM@Risk agrees that if Final Completion is not attained within the Contract Time as adjusted,

CM@Risk shall pay the City $___(to be determined on an agreement by agreement basis) per day as liquidated damages for each Day that Final Completion extends beyond the date determined by the Contract Time as adjusted and further agrees that such amount is reasonable under the circumstances.

4.4 Project Master Schedule

4.4.1 The Project Master Schedule approved as part of a GMP shall be updated and maintained throughout the Work by CM@Risk.

4.4.2 The Project Master Schedule shall be revised by CM@Risk as required by conditions and progress of the Work, but such revisions shall not relieve CM@Risk of its obligations to complete the Work within the Contract Time, as such dates may be adjusted in accordance with the Contract Documents.

4.4.3 Updated Project Master Schedules shall be submitted monthly by CM@Risk to the City as part of the Payment Request.

4.4.3.1 CM@Risk shall provide City with a monthly status report with each Project Master Schedule detailing the progress of the Work, including: (i) if the Work is proceeding according to schedule, (ii) any discrepancies, conflicts, or ambiguities found to exist in the Contract Documents that require resolution, and (iii) other items that require resolution so as not to jeopardize ability to complete the Work as presented in the GMP and within the Contract Time.

4.4.3.2 With each schedule submittal CM@Risk shall include a transmittal letter including the following:

- Description of problem tasks (referenced to field instructions, requests for information (RFI's), as appropriate.
- Current and anticipated delays including:
  - Cause of the delay
  - Corrective action and schedule adjustments to correct the delay
  - Known or potential impact of the delay on other activities, milestones, and/or the date of Substantial Completion.
- Changes in construction sequence
- Pending items and status thereof including but not limited to:
  - Time Extension requests
  - Other items
- Substantial Completion date status:
  - If ahead of schedule, the number of calendar days ahead.
  - If behind schedule, the number of calendar days behind.
- Other project or scheduling concerns

4.4.4 City's review of and response to the Project Master Schedule is only for general conformance with the scheduling requirements of the Contract Documents. The review shall not relieve CM@Risk from compliance with the requirements of the Contract Documents or be construed as relieving CM@Risk of its complete and exclusive control over the means, methods, sequences and techniques for executing the Work.

4.4.5 The Project Master Schedule shall include a Critical Path Method (CPM) diagram schedule that shall show the sequence of activities, the interdependence of each activity and indicate the Critical Path.

4.4.5.1 The CPM diagram schedule shall be in Days and indicate duration, earliest and latest start and finish dates for all activities, and total Float times for all activities except critical activities. The CPM diagram shall be presented in a time scaled graphical format for the Project as a whole.

4.4.5.2 The CPM diagram schedule shall indicate all relationships between activities.

4.4.5.3 The activities making up the schedule shall be in sufficient detail to assure that adequate planning has been done for proper execution of the Work and such that it provides an appropriate basis for monitoring and evaluating the progress of the Work.

4.4.5.4 The CPM diagram schedule shall be based upon activities, which would coincide with the Schedule of Values.

4.4.5.5 The CPM diagram schedule shall show all Submittals associated with each work activity and the review time for each submittal.

4.4.5.6 The schedule shall show milestones, including milestones for Owner-furnished information, and shall include activities for Owner-furnished equipment and furniture when those activities are interrelated with CM@Risk activities.

4.4.5.7 The schedule shall include a critical path activity that reflects anticipated weather delay during the performance of the Agreement. The duration shall reflect the average climatic range and usual industrial conditions prevailing in the locality of the Site. Weather data shall be based on the information set forth on the City of Flagstaff's Table of "Monthly Anticipated Adverse Weather Calendar Days" and the explanatory paragraphs attached thereto.

4.4.6 The Project Master Schedule shall consider the City's and the tenants' occupancy requirements showing portions of the Project having occupancy priority, and Contract Time.

4.4.7 Float time shall be as prescribed below:

4.4.7.1 The total Float within the overall schedule, is not for the exclusive use of either the City or CM@Risk, but is jointly owned by both and is a resource available to and shared by both parties as needed to meet Agreement milestones and the Project completion date.

4.4.7.2 CM@Risk shall not sequester shared Float through such strategies as extending activity duration estimates to consume available Float, using preferential logic, or using extensive crew/resource sequencing, etc. Since Float time within the schedule is jointly owned, no time extensions shall be granted nor delay damages paid until a delay occurs which extends the Work beyond the Substantial Completion date and then only if any such extensions or damages are shown to be justified under the Contract Documents.

4.4.7.3 Since Float time within the schedule is jointly owned, it is acknowledged that City-caused delays on the Project may be offset by City-caused time savings (i.e., critical path Submittals returned in less time than allowed by the Agreement, approval of substitution requests and credit changes which result in savings of time to CM@Risk, etc.). In such an event, CM@Risk shall not be entitled to receive a time extension or delay damages until all City-caused time savings are exceeded, and the Substantial Completion date is also exceeded.

Article 5- Contract Price

5.0 CM@Risk agrees at his own cost and expense, to completely construct and install all Work and materials as called for by this Agreement, free and clear of all claims, liens and charges whatsoever, in the manner and under the conditions specified in the Contract Documents, within the time or times stated in the approved Guaranteed Maximum Price (GMP).

5.1 Contract Price

5.1.1 The Contract Price shall be as approved in the Guaranteed Maximum Price Proposal attached as Exhibit "B" and an amount of $_____ with an additional $_____ allowed for Owner's Contingency.

5.1.2 The Cost of the Work is actual costs and is a not-to-exceed reimbursable amount.

5.1.3 The General Conditions Costs and the Construction Fee are firm fixed lump sums delineated in the GMP.

5.1.4 Taxes are deemed to include all sales, use consumer and other taxes, which are legally enacted when negotiations of the GMP were concluded, whether or not yet effective, or merely scheduled to go into effect. Taxes are actual costs and are a not-to-exceed reimbursable amount.

5.2 Guaranteed Maximum Price

5.2.1 The Guaranteed Maximum Price is composed of the maximum Cost of the Work; the Construction Fee; General Conditions Costs; taxes; and, CM@Risk's contingency all of which are not-to-exceed cost reimbursable or lump sum amounts defined in Articles 5.1 and 5.3. CM@Risk is at risk to cover any additional Project costs. If the Cost of Work amount, set forth in the GMP, is in excess of the actual Cost of Work and/or CM@Risk's Contingency, said amount by which the Cost of Work set forth in the GMP is in excess of the actual Cost of Work and/or CM@Risk's Contingency, shall revert to the City.

5.2.2 The GMP is subject to adjustments made in accordance with Article 6 and by GMP amendments to this Agreement.

5.2.3 GMP amendments are cumulative except for CM@Risk's Contingency. The amount of CM@Risk's Contingency for each GMP shall be negotiated separately.

5.2.4 If the GMP requires an adjustment due to changes in the scope of the Work the cost of such changes is determined subject to Article 6. The markups that may be allowed on such changes shall be no greater than the markups delineated in the approved GMP.

5.3 Contingencies

5.3.1 CM@Risk's Contingency is an amount CM@Risk may use at its sole discretion for, an increase in the Cost of Work , and may use for increases in General Conditions Costs with written approval of the City. CM@Risk's Contingency is assumed to be a direct Project cost and all applicable markups shall be applied at the time of GMP submission.

5.3.1.1 When CM@Risk utilizes CM@Risk's Contingency funds, CM@Risk shall make the appropriate changes to the Schedule of Values with the next regular progress payment request. CM@Risk shall deduct the amount of CM@Risk's Contingency funds used from CM@Risk's Contingency line item and add the same amount to the line item on the Schedule of Values where the funds were used. If CM@Risk's contingency funds are used for a new line item that was not given with the original Schedule of Values, these shall be so indicated.

5.3.2 Owner's Contingency are funds to be used at the sole discretion of the Owner to cover any increases in Project costs that result from Owner directed changes or unforeseen Site conditions. Owner's Contingency shall be added to the GMP amount provided by CM@Risk, the sum of which shall be the full Contract Price for construction. At the time that Owner's Contingency is used the appropriate markups shall be applied.

5.4 **Open Book.** CM@Risk shall submit to the City upon request all payrolls, reports, estimates, records and any other data concerning the Work performed or to be performed or concerning materials supplied or to be supplied, as well as Subcontractor or Consultant payment applications or invoices and such Subcontractor's or Consultant progress payment checks. The requirements of this Section shall be included in all Agreements between CM@Risk and its Subcontractors and Consultants. The City may exercise its rights under this Section as often as reasonably necessary in the City's sole judgment to assure the City has a complete and accurate understanding of all Project costs.

Article 6 - Changes to the Contract Price and Time

6.0 Delays to the Work

6.0.1 If CM@Risk is delayed in the performance of the Work that shall cause a change in the date of Substantial Completion due to acts, omissions, conditions, events, or circumstances beyond its control and due to no fault of its own, or, those for whom CM@Risk is responsible, the Contract Times for performance shall be reasonably extended by Change Order.

6.0.2 CM@Risk shall request an increase in the Contract Time by written notice including an estimate of probable effect of delay on progress of the Work within three (3) days of the occurrence of the delay. In the case of a continuing delay only one request is necessary.

6.0.3 By way of example, events that shall entitle CM@Risk to an extension of the Contract Time include acts or omissions of City or anyone under City's control (including separate Contractors), changes in the Work, Differing Site Conditions, Hazardous Conditions, delays by regulating agencies, wars, floods, labor disputes, unusual delay in transportation, epidemics abroad, earthquakes, adverse weather conditions not reasonably anticipated, and other acts of God.

6.0.4 If adverse weather conditions are the basis for a request for additional Contract Time, such requests shall be documented by data substantiating that weather conditions were abnormal for the period of time and could not have been reasonably anticipated, and that weather conditions had an adverse effect on the scheduled Substantial Completion. All terms, conditions and definitions necessary for the application of this paragraph shall be as set forth on the City of Flagstaff's Table of "Monthly Anticipated Adverse Weather Calendar Days" and the explanatory paragraphs attached thereto.

6.0.5 It is understood, however, that permitting CM@Risk to proceed to complete any Work, or any part of the Work, after the date to which the time of completion may have been extended, shall in no way act as a waiver on the part of the City of any of its legal rights herein.

6.0.6 In addition to CM@Risk's right to a time extension for those events set forth in this Section, CM@Risk shall also be entitled to an appropriate adjustment of the Contract Price provided, however, that the Contract Price shall not be adjusted for those events set forth in this Section that are beyond the control of both CM@Risk and City, including the events of war, floods, labor disputes, earthquakes, epidemics, adverse weather conditions not reasonably anticipated, and other acts of God and shall not be adjusted absent a showing of actual damage.

6.1 Differing Site Conditions

6.1.1 If CM@Risk encounters a Differing Site Condition, CM@Risk shall be entitled to an adjustment in the Contract Price and/or Contract Times to the extent CM@Risk's cost and/or time of performance are actually adversely impacted by the Differing Site Condition.

6.1.2 Upon encountering a Differing Site Condition, CM@Risk shall provide prompt written notice to City of such condition, which notice shall not be later than seven (7) days after such condition has been encountered. CM@Risk shall, to the extent reasonably possible, provide such notice before the Differing Site Condition has been substantially disturbed or altered.

6.2 Errors, Discrepancies and Omissions

6.2.1 If CM@Risk observes errors, discrepancies or omissions in the Contract Documents, he shall promptly notify the Design Professional and request clarification.

6.2.2 If CM@Risk proceeds with the Work affected by such errors, discrepancies or omissions, without receiving such clarifications, CM@Risk does so at its own risk. Adjustments involving such circumstances made by CM@Risk prior to clarification by the Design Professional shall be at CM@Risk's risk.

6.3 The City Requested Change in Work

6.3.1 The City reserves the right to make, at any time during the progress of the Work, such alterations as may be found necessary or in the City's best interest.

6.3.2 Such alterations and changes shall not invalidate this Agreement nor release the surety and CM@Risk agrees to perform the Work as altered, the same as if it has been a part of the original Contract Documents.

6.3.3 The City shall request a proposal for a change in Work from CM@Risk, and an adjustment in the Contract Price and/or Contract Times shall be made based on a mutual agreed upon cost and time.

6.4 **Legal Requirements**. The Contract Price and/or Contract Times shall be adjusted to compensate CM@Risk for the effects of any changes in the Legal Requirements enacted after the date of their Agreement or the date of the GMP, affecting the performance of the Work

6.5 Change Directives and Change Orders

6.5.1 City and CM@Risk shall negotiate in good faith and as expeditiously as possible the appropriate adjustments for a Change Directive if any adjustments are appropriate. Upon reaching an agreement, the parties shall prepare and execute an appropriate Change Order reflecting the terms of the adjustment.

6.5.2 All changes in Work authorized by Change Directives and/or Change Orders shall be performed under the conditions of the Contract Documents.

6.6 Minor Changes in the Work

6.6.1 The City has authority to order minor changes in Work that do not materially and adversely affect the Work, including the design, quality, performance and workmanship required by the Contract Documents. Such changes shall be affected by written order and shall be binding on the City and CM@Risk. CM@Risk shall carry out such written orders promptly.

6.6.2 CM@Risk may make minor changes in Work, provided, however that CM@Risk shall promptly inform City, in writing, of any such changes and record such changes, if appropriate, on the Project Record Documents maintained by CM@Risk.

6.6.3 Minor changes in Work shall not involve an adjustment in the Contract Price and/or Contract Times.

6.7 Contract Price Adjustments

6.7.1 The increase or decrease in Contract Price resulting from a change in the Work shall be determined by one or more of the following methods:

6.7.1.1 Unit prices set forth in this Agreement or as subsequently agreed to between the parties;

6.7.1.2 A mutually accepted, lump sum, properly itemized and supported by sufficient substantiating data to permit evaluation by City; and

6.7.1.3 Costs, fees and any other markups.

6.7.2 The markups that shall be allowed on such changes shall be no greater than the markups delineated in the approved GMP as shown on Exhibit “B”.

6.7.3 If an increase or decrease cannot be agreed to as set forth in Sections 6.7.1.1 through 6.7.1.3 above and City issues a Change Directive, the cost of the change of the Work shall be determined by the reasonable expense and savings in the performance of the Work resulting from the change, including a reasonable overhead and profit, as may be set forth in their Agreement. CM@Risk shall maintain a documented, itemized accounting evidencing the expenses and savings associated with such changes.

6.7.4 If unit prices are set forth in the Contract Documents or are subsequently agreed to by the parties, but application of such unit prices shall cause substantial inequity to City or CM@Risk because of differences in the character or quantity of such unit items as originally contemplated, such unit prices shall be equitably adjusted.

6.7.5 If City and CM@Risk disagree upon whether CM@Risk is entitled to be paid for any services required by City, or if there are any other disagreements over the scope of Work or proposed changes to the Work, City and CM@Risk shall resolve the disagreement pursuant to Article 8 hereof.

6.7.5.1 As part of the negotiation process, CM@Risk shall furnish City with a good faith estimate of the costs to perform the disputed services in accordance with City's interpretations.

6.7.5.2 If the parties are unable to agree and City expects CM@Risk to perform the services in accordance with City's interpretations, CM@Risk shall proceed to perform the disputed services, conditioned upon City issuing a written order to CM@Risk (i) directing CM@Risk to proceed and (ii) specifying City's interpretation of the services that are to be performed.

6.7.6 **Emergencies**. In any emergency affecting the safety of persons and/or property, CM@Risk shall act, at its discretion, to prevent threatened damage, injury or loss. Any change in the Contract Price and/or Contract Time resulting from emergency work under this Section shall be determined as provided in this Article.

Article 7- Procedure for Payment

7.0 For and in consideration of the faithful performance of the work herein embraced as set forth in the Contract Documents, which are a part hereof and in accordance with the directions of the City and to the City's satisfaction, the City agrees to pay CM@Risk the actual Cost of the Work and any applicable General Conditions Costs including, insurance and bonding, taxes and CM@Risk's Construction Fee, but no more than the GMP as adjusted by any change orders. Payment for the specific work under this Agreement shall be made in accordance with payment provisions detailed below.

7.1 GMP Payment Request

7.1.1 At the pre-construction conference prescribed in Section 2.4, CM@Risk shall submit for City's review and approval a Schedule of Values. The Schedule of Values shall serve as the basis for monthly progress payments made to CM@Risk throughout the Work.

7.1.2 At least five (5) working days prior to the date established for a Payment Request, CM@Risk shall submit an updated Project Master Schedule and meet with the City's Representative to review the progress of the Work as it shall be reflected on the Payment Request.

7.1.3 The Payment Request shall constitute CM@Risk's representation that the Work has been performed consistent with the Contract Documents, has progressed to the point indicated in the Payment Request, and that title to all Work shall pass to City free and clear of all claims, liens, encumbrances, and security interests upon the incorporation of the Work into the Project.

7.1.4 The Payment Request may request payment for stored equipment and materials if construction progress is in reasonable conformance with the approved schedule.

7.1.4.1 For equipment and materials suitably stored at the Site, the equipment and materials shall be protected by suitable insurance and City shall receive the equipment and materials free and clear of all liens and encumbrances.

7.1.4.2 For materials and equipment stored off the Site, the City must approve the storage. The material and equipment must be stored within Coconino County or other Sites as may be approved and be accessible for City's inspection. CM@Risk must establish City title to such materials and equipment or otherwise protect the City's interest and shall include applicable insurance, bonding, storage and transportation to the Site.

7.1.4.3 All bonds and insurance required for stored materials shall name the City as the loss payee to the extent of its interest in the stored materials.

7.1.5 CM@Risk shall submit to City on a monthly basis either on the first of the month for payment on the 15th or on the 19th of the month for payment on the 30th or 31st. If the payment date is on a Saturday, payment shall be on Friday. If the payment date is on a Sunday, payment shall be on Monday.

7.2 Payment of GMP

7.2.1 City shall make payment in accordance with A.R.S. §34-607. Payment shall be made no later than fourteen (14) days after the Payment Request is certified and approved, but in each case less the total of payments previously made, and less amounts properly retained under Section 7.3 below.

7.2.2 City shall pay CM@Risk all amounts properly due. If City determines that CM@Risk is not entitled to all or part of a Payment Request, it shall notify CM@Risk in writing within (7) days after the date Payment Request is received by the City. The notice shall indicate the specific amounts City intends to withhold, the reasons and contractual basis for the withholding, and the specific measures CM@Risk shall take to rectify City's concerns. CM@Risk and City shall attempt to resolve City's concerns. If the parties cannot resolve such concerns, CM@Risk may pursue its rights under the Contract Documents, including those under Article 8 hereof.

7.3 Retention on GMP

7.3.1 City shall retain ten percent (10%) of each Payment Request amount provided. When fifty percent (50%) of the Work has been completed by CM@Risk, upon request of CM@Risk, City may reduce the amount retained to five percent (5%) from CM@Risk's subsequent Payment Requests if CM@Risk's performance of Work has been satisfactory.

7.3.2 In lieu of retention, CM@Risk may provide as a substitute, an assignment of time certificates of deposit (CDs) from a bank licensed by the State of Arizona, securities of or guaranteed by the United States of America, securities of counties, municipalities and school districts within the State of Arizona or shares of savings and loan institutions authorized to transact business in Arizona.

7.3.2.1 CDs assigned to the City must be maintained at the City's single servicing bank, currently Wells Fargo, in the form of time deposit receipt accounts.

7.3.2.2 Securities depoSited in lieu of retention must be depoSited into a separate account with a bank within the State of Arizona.

7.3.2.3 CDs and Securities shall be assigned exclusively for the benefit of the City of Flagstaff pursuant to the City's form of Escrow Agreement. Escrow Agreement forms may be obtained from the Contracts Department by calling (928) 779-7685, extension 7318.

7.4 **Substantial Completion**. Upon Substantial Completion of the entire Work or, if applicable, any portion of the Work, City shall release to CM@Risk all retained amounts relating, as applicable, to the entire Work or completed portion of the Work, less an amount up to two and one-half (2.5) times the reasonable value of all remaining or incomplete items of Work as noted in the Certificate of Substantial Completion.

7.5 Final Payment

7.5.1 After receipt of a final Payment Request, City shall make final payment within sixty (60) days after receipt by the City, provided that CM@Risk has completed all of the Work in conformance with the Contract Documents and a Final Completion Letter has been issued by the City.

7.5.2 At the time of submission of its final Payment Request, CM@Risk shall provide the following information:

7.5.2.1 An affidavit affirming that there are no claims, obligations or liens outstanding or unsatisfied for labor, services, material, equipment, taxes or other items performed, furnished or incurred for or in connection with the Work which shall in any way affect City's interests;

7.5.2.2 A general release executed by CM@Risk waiving, upon receipt of final payment by CM@Risk, all claims, except those claims previously made in writing to City and remaining unsettled at the time of final payment; and

7.5.2.3 Consent of CM@Risk's surety, if any, to final payment.

7.6 Payments To Subcontractors or Suppliers

7.6.1 CM@Risk shall pay its Subcontractors or suppliers within seven (7) calendar days of receipt of each progress payment from the City. CM@Risk shall pay for the amount of Work performed or materials supplied by each Subcontractor or supplier as accepted and approved by the City with each progress payment. In addition, any reduction of retention by the City to CM@Risk shall result in a corresponding reduction to Subcontractors or suppliers who have performed satisfactory work. CM@Risk shall pay Subcontractors or suppliers the reduced retention within fourteen (14) calendar days of the payment of the reduction of the retention to CM@Risk. No agreement between CM@Risk and its Subcontractors and suppliers may materially alter the rights of any Subcontractor or supplier to receive prompt payment and retention reduction as provided herein.

7.6.2 If CM@Risk fails to make payments in accordance with these provisions, the City may take any one or more of the following actions and CM@Risk agrees that the City may take such actions:

7.6.2.1 To hold CM@Risk in default under this Agreement;

7.6.2.2 Withhold future payments including retention until proper payment has been made to Subcontractors or suppliers in accordance with these provisions;

7.6.2.3 Reject all future offers to perform work for the City from CM@Risk for a period not to exceed one (1) year from Substantial Completion date of this Project; or

7.6.2.4 Terminate this Agreement.

7.6.3 If CM@Risk's payment to a Subcontractor or supplier is in dispute, it shall act in compliance with A.R.S. § 32-1129.02(D) and related statutes as amended, and shall further hold the City harmless from any ensuing damages, claims or costs.

7.6.4 Should the City fail or delay in exercising or enforcing any right, power, privilege, or remedy under this Section, such failure or delay shall not be deemed a waiver, release, or modification of the requirements of this Section or of any of the terms or provisions thereof.

7.6.5 CM@Risk shall include these prompt payment provisions in every subcontract, including procurement of materials and leases of equipment for this Agreement.

7.7 Record Keeping and Finance Controls

7.7.1 Records of CM@Risk's direct personnel payroll, reimbursable expenses pertaining to this Project and records of accounts between the City and CM@Risk shall be kept on a generally recognized accounting basis and shall be available for three (3) years after Final Completion of the Project.

7.7.2 The City, its authorized representative, and/or the appropriate federal agency, reserve the right to audit CM@Risk's records to verify the accuracy and appropriateness of all pricing data, including data used to negotiate Contract Documents and any Change Orders.

7.7.3 The City reserves the right to decrease Contract Price and/or payments made on this Agreement if, upon audit of CM@Risk's records, the audit discloses CM@Risk has provided false, misleading, or inaccurate cost and pricing data.

7.7.4 CM@Risk shall include a similar provision in all of its agreements with Subconsultants and Subcontractors providing services under the Contract Documents to ensure the City, its authorized representative, and/or the appropriate federal agency, has access to the Subconsultants' and Subcontractors' records to verify the accuracy of cost and pricing data.

7.7.5 The City reserves the right to decrease Contract Price and/or payments made on this Agreement if the above provision is not included in Subconsultant's and Subcontractor's Agreements, and one or more Subconsultants and/or Subcontractors do not allow the City to audit their records to verify the accuracy and appropriateness of pricing data.

Article 8- Claims and Disputes

8.0 Requests for Agreement Adjustments and Relief.

8.0.1 If either CM@Risk or City believes that it is entitled to relief against the other for any event arising out of or related to Work, such party shall provide written notice to the other party of the basis for its claim for relief.

8.0.2 Such notice shall, if possible, be made prior to incurring any cost or expense and in accordance with any specific notice requirements contained in applicable sections of the Agreement.

8.0.3 In the absence of any specific notice requirement, written notice shall be given within a reasonable time, not to exceed fourteen (14) days, after the occurrence giving rise to the claim for relief or after the claiming party reasonably should have recognized the event or condition giving rise to the request, whichever is later.

8.0.4 Such notice shall include sufficient information to advise the other party of the circumstances giving rise to the claim for relief, the specific contractual adjustment or relief requested and the basis of such request.

8.1 Dispute Avoidance and Resolution

8.1.1 The parties are fully committed to working with each other throughout the Project and agree to communicate regularly with each other at all times so as to avoid or minimize disputes or disagreements. If disputes or disagreements do arise, CM@Risk and City each commit to resolving such disputes or disagreements in an amicable, professional and expeditious manner so as to avoid unnecessary losses, delays and disruptions to the Work.

8.1.2 CM@Risk and City shall first attempt to resolve disputes or disagreements at the field level through discussions between CM@Risk's Representative and City's Representative.

8.1.3 If a dispute or disagreement cannot be resolved through CM@Risk's Representative and City's Representative, CM@Risk's Senior Representative and City's Senior Representative, upon the request of either party, shall meet as soon as conveniently possible, but in no case later than thirty (30) days after such a request is made, to attempt to resolve such dispute or disagreement. Prior to any meetings between the Senior Representatives, the parties shall exchange relevant information that shall assist the parties in resolving their dispute or disagreement.

8.1.4 If a dispute arises out of or relates to this Agreement and if the dispute cannot be settled through negotiation, the parties agree first to try in good faith to resolve the dispute by mediation before resorting to litigation or some other dispute resolution procedure. Mediation shall take place in Flagstaff, Arizona, be self-administered and be conducted under the CPR Mediation Procedures established by the CPR Institute for Dispute Resolution, 366 Madison Avenue, New York, New York 10017, (212) 949-6490, www.cpradr.org, with the exception of the mediator selection provisions, unless other procedures are agreed upon by the parties.

1. Mediator Selection. Unless the parties agree otherwise, the mediator(s) shall be selected from the roster of attorney mediators trained under the Alternative Dispute Resolution Program of the Coconino County Superior Court. If the parties are unable to agree upon a mediator within 10 business days, each party shall independently inform the Director of the Alternative Dispute Resolution Program of the Coconino County Superior Court (the "Director") of three attorney mediators from that roster that are acceptable to the party, and further, inform the Director of any preference as to matters such as the candidate's mediation style, subject matter expertise, or other factors pertinent to the case. The Director shall then select an attorney mediator from the parties' lists or such other attorney mediator from the above noted roster, as the Director may deem, in the Director's sole discretion, appropriate under the circumstances.

2. Fees and Costs. Each party agrees to bear its own fees and costs in mediation.

3. Subsequent or Contemporaneous Agreements. The parties shall include this provision in all subsequent or contemporaneous agreements relative to this matter, absent specific written agreement of the parties otherwise.

4. Participation in Mediation. The parties agree to encourage participation in mediation by all relevant parties. The parties shall not be obligated to mediate if an indispensable party is unwilling to join the mediation.

5. Waiver. This Section shall not constitute a waiver of the parties' right to arbitrate or initiate legal action if a dispute is not resolved through good faith negotiation or mediation, or if provisional relief is required under the Arizona Rules of Civil Procedure.

8.1.5 Except as otherwise agreed by the parties, any litigation brought by either party against the other to enforce the provisions of this Agreement shall be filed in the Coconino County Superior Court and Arizona law shall apply and control. In the event any action at law or in equity is instituted between the parties in connection with this Agreement, the prevailing party in the action shall be entitled to its costs including reasonable attorneys' fees and court costs from the non-prevailing party.

8.2 **Duty to Continue Performance**. Unless provided to the contrary in the Contract Documents, CM@Risk shall continue to perform the Work and City shall continue to satisfy its payment obligations to CM@Risk, pending the final resolution of any dispute or disagreement between CM@Risk and City.

8.3 Representatives of the Parties

8.3.1 The City's Representatives

8.3.1.1 City designates the individual listed below or his designee as its Senior Representative ("City's Senior Representative"), which individual has the authority and responsibility for avoiding and resolving disputes under Section 8.1.3:

Name
211 West Aspen Avenue
Flagstaff, AZ 86001
(928) _____ (928) _____

8.3.1.2 City designates the individual listed below as its City's Representative, which individual has the authority and responsibility set forth in Section 8.1.2:

Name
211 West Aspen Avenue
Flagstaff, AZ 86001
(928) (928) _____

8.3.2 CM@Risk's Representatives

8.3.2.1 CM@Risk designates the individual listed below as its Senior Representative ("CM@Risk's Senior Representative"), which individual has the authority and responsibility for avoiding and resolving disputes under Section 8.1.3:

_____, Title
Address
City, State, Zip
Telephone

8.3.2.2 CM@Risk designates the individual listed below as its CM@Risk's Representative, which individual has the authority and responsibility set forth in Section 8.1.2:

_____, Title
Address
City, State, Zip
Telephone

Article 9 – Suspension and Termination

9.0 City's Right to Stop Work

9.0.1 City may, at its discretion and without cause, order CM@Risk in writing to stop and suspend the Work. Such suspension shall not exceed one hundred and eighty (180) consecutive days.

9.0.2 CM@Risk may seek an adjustment of the Contract Price and/or Contract Time if its cost or time to perform the Work has been adversely impacted by any suspension or stoppage of Work by City.

9.1 Termination for Convenience

9.1.1 Upon receipt of written notice to CM@Risk, City may, at its discretion and without cause, elect to terminate this Agreement. In such event, City shall pay CM@Risk only the direct value of its completed Work and materials supplied as of the date of termination. CM@Risk shall be entitled to profit and overhead on completed Work only, but shall not be entitled to anticipated profit or anticipated overhead.

9.1.2 If the City suspends the Work for one hundred eighty-one (181) consecutive days or more, such suspension shall be deemed a termination for convenience.

9.1.3 Upon such termination, CM@Risk shall proceed with the following obligations.

9.1.3.1 Stop Work as specified in the notice.

9.1.3.2 Place no further subcontracts or orders.

9.1.3.3 Terminate all subcontracts to the extent they relate to the work terminated. CM@Risk shall ensure that all subcontracts contain this same termination for convenience provision set forth in Section 9.1 et seq.

9.1.3.4 At the City's sole discretion and if requested in writing by the City, assign to the City all right, title and interest of CM@Risk under the subcontracts subject to termination.

9.1.3.5 Take any action that may be necessary for the protection and preservation of the property related to this Agreement that is in the possession of CM@Risk and in which the City has or may acquire an interest.

9.1.4 CM@Risk shall submit complete termination inventory schedules no later than one hundred twenty (120) days from the date of the notice of termination.

9.1.5 The City shall pay CM@Risk the following:

9.1.5.1 The direct value of its completed Work and materials supplied as of the date of termination.

9.1.5.2 The reasonable and direct, actual costs and expenses attributable to such termination. Reasonable costs and expenses shall not include, among other things, anticipated profit, anticipated overhead, or costs arising from CM@Risk's failure to perform as required under this Agreement.

9.1.5.3 CM@Risk shall be entitled to profit and overhead on completed Work only, but shall not be entitled to anticipated profit or anticipated overhead. If it is determined that CM@Risk would have sustained a loss on the entire Work had they been completed, CM@Risk shall not be allowed profit and the City shall reduce the settlement to reflect the indicated rate of loss.

9.1.6 CM@Risk shall maintain all records and documents for three (3) years after final settlement. These records shall be maintained and subject to auditing as prescribed in Section 7.7.

9.2 The City's Right to Perform and Terminate for Cause

9.2.1 If the City provides CM@Risk with a written order to provide adequate maintenance of traffic, adequate cleanup, adequate dust control or to correct deficiencies or damage resulting from abnormal weather conditions, and CM@Risk fails to comply in a time frame specified, the City may have work accomplished by other sources at CM@Risk's sole expense.

9.2.2 If CM@Risk persistently fails to (i) provide a sufficient number of skilled workers, (ii) supply the materials required by the Contract Documents, (iii) comply with applicable Legal Requirements, (iv) timely pay, without cause, Subconsultants and/or Subcontractors, (v) prosecute the Work with promptness and diligence to ensure that the Work is completed by the Contract Time, as such times may be adjusted, or (vi) perform material obligations under the Contract Documents, then City, in addition to any other rights and remedies provided in the Contract Documents or by law, shall have the rights set forth in Subsections 9.2.3 and 9.2.4 below.

9.2.3 Upon the occurrence of an event set forth in Subsection 9.2.2 above, City may provide written notice to CM@Risk that it intends to terminate this Agreement unless the problem cited is cured, or commenced to be cured, within seven (7) days of CM@Risk's receipt of such notice.

9.2.3.1 If CM@Risk fails to cure, or reasonably commence to cure, such problem, then City may give a second written notice to CM@Risk of its intent to terminate within an additional seven (7) day period.

9.2.3.2 If CM@Risk, within such second seven (7) day period, fails to cure, or reasonably commence to cure, such problem, then City may declare this Agreement terminated for default by providing written notice to CM@Risk of such declaration.

9.2.4 Upon declaring this Agreement terminated pursuant to Subsection 9.2.3.2 above, City may enter upon the premises and take possession, for the purpose of completing the Work, of all materials, equipment, scaffolds, tools, appliances and other items thereon, which have been purchased or provided for the performance of the Work, all of which CM@Risk hereby transfers, assigns and conveys to City for such purpose, and to employ any person or persons to complete the Work and provide all of the required labor, services, materials, equipment and other items.

9.2.5 In the event of such termination, CM@Risk shall not be entitled to receive any further payments under the Contract Documents until the Work shall be finally completed in accordance with the Contract Documents. At such time, CM@Risk shall only be entitled to be paid for Work performed and accepted by the City prior to its default.

9.2.6 If City's cost and expense of completing the Work exceeds the unpaid balance of the Contract Price, then CM@Risk shall be obligated to pay the difference to City. Such costs and expenses shall include not only the cost of completing the Work, but also losses, damages, costs and expense, including attorneys' fees and expenses, incurred by City in connection with the reprocurement and defense of claims arising from CM@Risk's default.

9.2.7 If City improperly terminates the Agreement for cause, the termination for cause shall be converted to a termination for convenience in accordance with the provisions of Section 9.1.

Article 10 - Insurance and Bonds

10.0 Insurance Requirements

10.0.1 CM@Risk and Subcontractors shall procure and maintain until all of their obligations have been discharged, including any warranty periods under this Agreement are satisfied, insurance against claims for injury to persons or damage to property which may arise from or in connection with the performance of the Work hereunder by CM@Risk, its agents, representatives, employees or Subcontractors.

10.0.2 The insurance requirements herein are minimum requirements for this Agreement and in no way limit the indemnity covenants contained in this Agreement.

10.0.3 The City in no way warrants that the minimum limits contained herein are sufficient to protect CM@Risk from liabilities that might arise out of the performance of the work under this Agreement by CM@Risk, its agents, representatives, employees, or subcontractors. CM@Risk is free to purchase such additional insurance as may be determined necessary.

10.1 **Minimum Scope And Limits Of Insurance**. CM@Risk shall provide coverage with limits of liability not less than those stated below:

10.1.1 Commercial General Liability – Occurrence Form
Policy shall include bodily injury, property damage, broad form contractual liability and XCU coverage.

• General Aggregate/for this Project	$2,000,000/$1,000,000
• Products – Completed Operations Aggregate	$1,000,000
• Personal and Advertising Injury	$1,000,000
• Each Occurrence	$1,000,000

The policy shall be endorsed to include the following additional insured language: **"The City of Flagstaff shall be named as an additional insured with respect to liability arising out of the activities performed by, or on behalf of CM@Risk".**

10.1.2 Automobile Liability **-** Bodily injury and property damage for any owned, hired, and non-owned vehicles used in the performance of this Agreement.

Combined Single Limit (CSL)	$1,000,000

The policy shall be endorsed to include the following additional insured language: **"The City of Flagstaff shall be named as an additional insured with respect to liability arising out of the activities performed by, or on behalf of CM@Risk, including automobiles owned, leased, hired or borrowed by CM@Risk".**

10.1.3 Worker's Compensation and Employers' Liability

Workers' Compensation	Statutory
Employers' Liability	
Each Accident	$100,000
Disease - Each Employee	$100,000
Disease – Policy Limit	$500,000

10.1.4 **Builders' Risk Insurance or Installation Floater** $_____

In an amount equal to the initial Contract Amount plus additional coverage equal to Contract Amount for all subsequent change orders.

10.1.4.1 The City of Flagstaff, CM@Risk, Subcontractors, Design Professional and Design Professional's consultant and any others with an insurable interest in the Work shall be **Named Insured's** on the policy**.**

10.1.4.2 Coverage shall be written on an all risk, replacement cost basis and **shall include coverage for soft costs, flood and earth movement**.

10.1.4.3 Coverage shall be maintained until whichever of the following shall first occur: (i) final payment has been made; or, (ii) until no person or entity, other than the City of Flagstaff, has an insurable interest in the property required to be covered.

10.1.4.4 Coverage shall be endorsed such that the insurance shall not be canceled or lapse because of any partial use or occupancy by the City.

10.1.4.5 CM@Risk shall provide coverage from the time any covered property becomes the responsibility of CM@Risk, and continue without interruption during construction, renovation, or installation, including any time during which the covered property is being transported to the construction installation Site, or awaiting installation, whether on or off Site.

10.1.4.6 Coverage shall contain a **waiver of subrogation** against the City of Flagstaff.

10.1.4.7 CM@Risk is responsible for the payment of all policy deductibles.

10.2 **Additional Insurance Requirements.** The policies shall include, or be endorsed to include, the following provisions:

10.2.1 The City, its officers, officials, agents, employees and volunteers shall be additional insured to the full limits of liability purchased by CM@Risk even if those limits of liability are in excess of those required by this Agreement.

10.2.2 CM@Risk's insurance coverage shall be primary insurance and non-contributory with respect

to all other available sources.

10.2.3 Coverage provided by CM@Risk shall not be limited to the liability assumed under the indemnification provisions of this Agreement.

10.2.4 The policies shall contain a waiver of subrogation against the City, its officers, officials, agents, and employees for losses arising from work performed by the CM@Risk for the City.

10.3 **Notice Of Cancellation.** Each insurance policy required by the insurance provisions of this Agreement shall provide the required coverage and shall not be suspended, voided, canceled, reduced in coverage or endorsed to lower limits except after thirty (30) days prior written notice has been given to the City. Such notice shall be sent directly to the City Contracts Division and shall be sent by certified mail, return receipt requested.

10.4 **Acceptability Of Insurers.** Insurance is to be placed with insurers who are duly licensed companies in the State of Arizona with an "A.M. Best" rating of A-,7, or as approved by the City and licensed in the State of Arizona with policies and forms satisfactory to the City. The City in no way warrants that the above-required minimum insurer rating is sufficient to protect CM@Risk from potential insurer insolvency.

10.5 **Verification Of Coverage**

10.5.1 CM@Risk shall furnish the City with Certificates of Insurance (ACORD form or equivalent approved by the City) as required by this Agreement. The Certificates for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf.

10.5.2 All Certificates of Insurance and endorsements are to be received and approved by the City before work commences. Each insurance policy required by this Agreement shall be in effect at or prior to commencement of Work under this Agreement and remain in effect for the duration of the Project. Failure to maintain the insurance policies as required by this Agreement or to provide evidence of renewal is a material breach of contract.

10.5.3 All Certificates of Insurance required by this Agreement shall be sent directly to City's Contracts Division. The City project/contract number and project description shall be noted on the Certificate of Insurance. The City reserves the right to require complete, certified copies of all insurance policies required by this Agreement at any time.

10.5.4 **If the Certificate of Insurance reflecting policy coverage and cancellation notice does not conform to the City's requirements, the CM@Risk must:**

- **Submit a current Certificate of Insurance (dated within fifteen (15) days of the payment request submittal) with each payment request form. The payment request shall be rejected if the Certificate of Insurance is not submitted with the payment request.**

10.6 **Subcontractors.** CM@Risks' Certificate(s) of Insurance shall include all Subcontractors as additional insured's under its policies. All coverage's for Subcontractors shall be subject to the minimum requirements identified above.

10.7 **Approval.** Any modification or variation from the insurance requirements in this Agreement shall be made by the City's Legal Department, whose decision shall be final. Such action shall not require a formal contract amendment, but may be made by administrative action.

10.8 **Bonds and Other Performance Security.**

10.8.1 Prior to execution of this Agreement, CM@Risk shall provide a performance bond and a labor

and materials bond, each in an amount equal to the full amount of the GMP.

10.8.2 Each such bond shall be executed by a surety company, or companies, holding a Certificate of Authority to transact surety business in the State of Arizona, issued by the Director of the Arizona Department of Insurance. A copy of the Certificate of Authority shall accompany the bonds. The Certificate shall have been issued or updated within two (2) years prior to the execution of this Agreement.

10.8.3 The bonds shall be made payable and acceptable to the City of Flagstaff.

10.8.4 The bonds shall be written or countersigned by an authorized representative of the surety who is either a resident of the State of Arizona or whose principal office is maintained in Arizona, as by law required, and the bonds shall have attached thereto a certified copy of Power of Attorney of the signing official.

10.8.4.1 If one Power of Attorney is submitted, it shall be for twice the total GMP amount.

10.8.4.2 If two Powers of Attorney are submitted, each shall be for the total GMP amount. Personal or individual bonds are not acceptable.

10.8.5 Upon the request of any person or entity appearing to be a potential beneficiary of bonds covering payment of obligations arising under the Contract Documents, CM@Risk shall promptly furnish a copy of the bonds or shall permit a copy to be made.

10.8.6 All bonds submitted for this project shall be provided by a company which has been rated AM Best rating of "A-,7, or better for the prior four quarters" by the A.M. Best Company.

Article 11 - Indemnification

11.1 CM@Risk's Liability and Indemnification.

11.1.1 To the fullest extent permitted by law, CM@Risk shall defend, indemnify and hold harmless the City, its agents, representatives, officers, directors, officials and employees from and against all claims, damages, losses and expenses (including but not limited to attorney fees, court costs, and the cost of appellate proceedings), relating to, arising out of, or alleged to have resulted from the acts, errors, mistakes, omissions, work or services of CM@Risk, its employees, agents, or any tier of subcontractors in the performance of this Agreement. CM@Risk's duty to defend, hold harmless and indemnify the City, its agents, representatives, officers, directors, officials and employees shall arise in connection with the claim, damage, loss or expense that is attributable to bodily injury, sickness, disease, death, or injury to, impairment, or destruction of property including loss of use resulting therefrom, caused by any acts, errors, mistakes, omissions, work or services in the performance of this Agreement including any employee of CM@Risk or any tier of subcontractor or any other person for whose acts, errors, mistakes, omissions, work or services CM@Risk may be legally liable.

The amount and type of insurance coverage requirements set forth herein shall in no way be construed as limiting the scope of the indemnity in this paragraph.

Article 12 – General Provisions

12.1 Contract Documents

12.1.1 Contract Documents are as defined in Article 1. This Agreement, Plans, Standard Specifications and Details, Special Provisions, Addenda (if any) dated _____ and used as the basis for the Guaranteed Maximum Price Proposal and Guaranteed Maximum Price Proposal, as accepted by the Mayor and Council per Council Minutes __th day of

_____, 2007, Performance Bond, Payment Bond, Certificates of Insurance, Construction Documents and Change Orders (if any) are by this reference made a part of this Agreement to the same extent as if set forth herein in full.

12.1.2 The Contract Documents are intended to permit the parties to complete the Work and all obligations required by the Contract Documents within the Contract Times for the Contract Price. The Contract Documents are intended to be complementary and interpreted in harmony so as to avoid conflict, with words and phrases interpreted in a manner consistent with construction and design industry standards.

12.1.3 In the event of any inconsistency, conflict, or ambiguity between or among the Contract Documents, the Contract Documents shall take precedence in the order in which they are listed in the definition of Contract Documents in Article 1.

12.1.3.1 On the drawings, given dimensions shall take precedence over scaled measurements, and large-scale drawings over small-scale drawings.

12.1.3.2 Specifications take precedence over Plans.

12.1.3.3 In the event of any inconsistency, conflict, or ambiguity between the Contract Documents and the Design Phase Agreement, the Contract Documents take precedence over the Design Phase Agreement

12.1.4 The headings used in this Agreement, or any other Contract Documents, are for ease of reference only and shall not in any way be construed to limit or alter the meaning of any provision.

12.1.5 The Contract Documents form the entire agreement between City and CM@Risk and by incorporation herein are as fully binding on the parties as if repeated herein. No oral representations or other agreements have been made by the parties except as specifically stated in the Contract Documents.

12.2 **Amendments.** The Contract Documents may not be changed, altered, or amended in any way except in writing signed by a duly authorized representative of each party.

12.3 **Time is of the Essence.** City and CM@Risk mutually agree that time is of the essence with respect to the dates and times set forth in the Contract Documents.

12.4 **Mutual Obligations.** City and CM@Risk commit at all times to cooperate fully with each other, and proceed on the basis of trust and good faith, to permit each party to realize the benefits afforded under the Contract Documents.

12.5 **Cooperation and Further Documentation.** CM@Risk agrees to provide the City such other duly executed documents as shall be reasonably requested by the City to implement the intent of the Contract Documents.

12.6 **Assignment.** Neither CM@Risk nor City shall, without the written consent of the other assign, transfer or sublet any portion of this Agreement or part of the Work or the obligations required by the Contract Documents.

12.7 **Successorship.** CM@Risk and City intend that the provisions of the Contract Documents are binding upon the parties, their employees, agents, heirs, successors and assigns.

12.8 **Third Party Beneficiary.** Nothing under the Contract Documents shall be construed to give any rights or benefits in the Contract Documents to anyone other than the City and CM@Risk, and all duties and responsibilities undertaken pursuant to the Contract Documents shall be for the sole and exclusive benefit of City and CM@Risk and not for the benefit of any other party.

12.9 **Governing Law.** This Agreement and all Contract Documents shall be deemed to be made under, and shall be construed, in accordance with and governed by the laws of the State of Arizona without regard to the conflicts or choice of law provisions thereof. Any action to enforce any provision of this Agreement or to obtain any remedy with respect hereto shall be brought in the Superior Court, Coconino County, Arizona, and for this purpose, each party hereby expressly and irrevocably consents to the jurisdiction and venue of such Court.

12.10 **Severability.** If any provision of the Contract Documents or the application thereof to any person or circumstance shall be invalid, illegal or unenforceable to any extent, the remainder of the Contract Documents and the application thereof shall not be affected and shall be enforceable to the fullest extent permitted by law.

12.11 **Compliance with Federal Laws.** CM@Risk understands and acknowledges the applicability of the Americans with Disabilities Act, the Immigration Reform and Control Act of 1986 and the Drug Free Workplace Act of 1989. CM@Risk agrees to comply with these laws in performing the Contract Documents and to permit the City to verify such compliance.

12.12 **Legal Requirements.** CM@Risk shall perform all Work in accordance with all Legal Requirements and shall provide all notices applicable to the Work as required by the Legal Requirements.

12.13 It is not CM@Risk's responsibility to ascertain that the Construction Documents are in accordance with applicable laws, statutes, ordinances, building codes, rules and regulations. However, if CM@Risk recognizes that portions of the Construction Documents are at variance therewith, CM@Risk shall promptly notify the Design Professional and City in writing, describing the apparent variance or deficiency.

12.14 **Independent Contractor.** CM@Risk is and shall be an independent contractor. Any provisions in the Contract Documents that may appear to give the City the right to direct CM@Risk as to the details of accomplishing the Work or to exercise a measure of control over the Work means that CM@Risk shall follow the wishes of the City as to the results of the Work only. These results shall comply with all applicable laws and ordinances.

12.15 **The City's Right Of Cancellation.** All parties hereto acknowledge that this Agreement is subject to cancellation by the City pursuant to the provisions of Section 38-511, Arizona Revised Statutes.

12.16 **Survival.** All warranties, representations and indemnifications by CM@Risk shall survive the completion or termination of this Agreement.

12.17 **Covenant Against Contingent Fees**. CM@Risk warrants that no person has been employed or retained to solicit or secure this Agreement upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, and that no member of the City Council, or any employee of City has any interest, financially, or otherwise, in the firm. For breach or violation of this warrant, the City shall have the right to annul this Agreement without liability, or at its discretion to deduct from the Contract Price or consideration, the full amount of such commission, percentage, brokerage, or contingent fee.

12.18 **No Waiver.** The failure of either party to enforce any of the provisions of the Contract Documents or to require performance of the other party of any of the provisions hereof shall not be construed to be a waiver of such provisions, nor shall it affect the validity of the Contract Documents or any part thereof, or the right of either party to thereafter enforce each and every provision.

12.19 Notice.

12.19.1 Unless otherwise provided, any notice, request, instruction or other document to be given under this Agreement by any party to any other party shall be in writing and shall be delivered in person or by courier or facsimile transmission or mailed by certified mail, postage prepaid, return receipt requested and shall be deemed given upon (a) confirmation of receipt of a facsimile transmission, (b) confirmed delivery by hand or standard overnight mail or (c) upon the expiration of three (3) business days after the day mailed by certified mail, as follows:

to CM@Risk:

_____, Title
Address
City, State, Zip
Telephone

to City:

City of Flagstaff
211 West Aspen Avenue
Flagstaff, Arizona 86001
Attn: Rick Barrett, Division/Department Head
Phone: (928) _____
Fax: (928) _____

With a copy to:

City of Flagstaff
211 West Aspen Avenue
Flagstaff, Arizona 86001
Attn: Christine Cameron, Project Manager
Phone: (928) 226-4863
Fax: (928) _____

Design Professional:

_____, Title
Address
City, State, Zip
Telephone

or to such other place and with such other copies as either Party may designate as to itself by written notice to the other Party. Rejection, any refusal to accept or the inability to deliver because of changed address of which no notice was given shall be deemed to be receipt of the notice as of the date of such rejection, refusal or inability to deliver.

12.19.2 Notices Related to Payment, Securities-in-lieu, Bonds. Any notice, request, instruction or other document to be given under this Agreement by any party to any other party related to payment, securities-in-lieu, bonds or other instrument securing the performance of this Agreement, including but not limited to, bid bonds, performance bonds, payment bonds or letters of credit, shall be in writing and shall be delivered in person or by courier or facsimile transmission or mailed by certified mail, postage prepaid, return receipt requested and shall be deemed given upon (a) confirmation of receipt of a facsimile transmission, (b) confirmed

delivery by hand or standard overnight mail or (c) upon the expiration of three (3) business days after the day mailed by certified mail, as follows:

to Contractor:

_____, Title
Address
City, State, Zip
Telephone

to City:

City of Flagstaff
211 West Aspen Avenue
Flagstaff, Arizona 86001
Attn: Rick Compau, Purchasing Director
Phone: (928) 779-7661
Fax: (928) 779-7656

With copies to:

City of Flagstaff
211 West Aspen Avenue
Flagstaff, Arizona 86001
Attn:
Phone: (928) Ext.
Fax: (928)

City of Flagstaff
211 West Aspen Avenue
Flagstaff, Arizona 86001
Attn:
Phone: (928)
Fax: (928) _____

or to such other place and with such other copies as either Party may designate as to itself by written notice to the other Party. Rejection, any refusal to accept or the inability to deliver because of changed address of which no notice was given shall be deemed to be receipt of the notice as of the date of such rejection, refusal or inability to deliver.

12.20 Equal Opportunity/Affirmative Action

12.20.1 CM@Risk shall comply with the provisions of this Agreement, including the requirements of Section 1-15-0010 of the City of Flagstaff Employee Handbook of Regulations pertaining to discrimination and accepting applications or hiring employees. CM@Risk shall not discriminate against any worker, employee or applicant, or any member of the public, because of race, color, religion, gender, national origin, age or disability nor otherwise commit an unfair employment practice. CM@Risk shall take affirmative action to ensure that applicants are employed, and employees are dealt with during employment, without regard to their race, color, religion, gender or national origin, age or disability. Such action shall include but not be limited to the following: employment, promotion, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship as well as all other labor organizations furnishing skilled, unskilled and union labor, or who may perform any such labor or services in connection with this Agreement. CM@Risk further agrees that this Subsection shall be incorporated in all subcontracts and job-consultant contracts under this Agreement entered into by CM@Risk.

12.20.2 The City extends to each individual, firm, vendor, supplier, contractor, and Subcontractor an equal economic opportunity to compete for City business and strongly encourages voluntary utilization of disadvantaged and/or minority-owned or woman-owned business to reflect both the industry and community ethnic composition.

The following two paragraphs apply to CM@Risk named herein and shall appear in all Agreements between CM@Risk and any and all Subcontractors who are employed on this Project. CM@Risk further agrees that the two paragraphs shall be incorporated in all subcontracts with all labor organizations furnishing skilled, unskilled and union labor, or who may perform any such labor or services in connection with this Agreement.

Any Party (Subcontractor), in performing under this Agreement, shall not discriminate against any worker, employee or applicant, or any member of the public, because of race, color, religion, gender, national origin, age or disability nor otherwise commit an unfair employment practice.

The Party (Subcontractor) shall take affirmative action to ensure that applicants are employed, and employees are dealt with during employment without regard to their race, color, religion, gender or national origin, age or disability. Such action shall include, but not be limited to the following: employment, promotion, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rate of pay or other forms of compensation; and selection for training; including apprenticeship.

CM@Risk further agrees that the above two paragraphs shall be incorporated in all subcontracts with all labor organizations furnishing skilled, unskilled and union labor, or who may perform any such labor or services in connection with this Agreement.

12.21 Confidentiality Of Plans & Specifications

12.21.1 Any plans or specifications regarding this Project shall be for official use only. CM@Risk shall not share them with others except as required to fulfill the obligations of this Agreement with the City.

12.21.2 All Record Documents, Shop Drawings and other plans or drawings prepared or submitted by CM@Risk shall include the following language: "These plans are for official use only and may not be shared with others except as required to fulfill the obligations of _____ Agreement with the City of Flagstaff."

12.22 CM@Risk and Subcontractor Employee Security Inquiries. The parties acknowledge that security measures required in this Section are necessary in order to preserve and protect the public health, safety and welfare. In addition to the specific measures set forth below, CM@Risk shall take such other measures, as it deems reasonable and necessary to further preserve and protect the public health, safety and welfare.

12.22.1 Security Inquiries. CM@Risk acknowledges that all of the employees that it provides pursuant to this Agreement shall be subject to background and security checks and screening ("Security Inquiries"). CM@Risk shall perform all such security inquiries and shall make the results available to City for all employees considered for performing work (including supervision and oversight) under this Agreement. City may make further security inquiries. Whether or not further security inquires are made by City, City may, at its sole, absolute and unfettered discretion, accept or reject any or all of the employees proposed by CM@Risk for performing work under this Agreement. Employees rejected by City for performing services under this Agreement may still be engaged by CM@Risk for other work not involving the City. An employee rejected for work under this Agreement shall not be proposed to perform work under other City Agreements or engagements without City 's prior approval.

12.22.2 Criteria for Evaluating Security Inquiries. Once formally adopted by City, criteria for excluding an individual from performing work under this Agreement shall be communicated by City to CM@Risk and used by CM@Risk as a factor in making its decision. Prior to such adoption, CM@Risk shall use its best judgment in making its decision using, among other criteria, applicable law, administrative regulations of federal, state and local agencies concerned with work performed under this Agreement, specific local concerns that deal with the specific work and work location(s) of the Project, and standards used by City in evaluating its own personnel.

12.22.3 Additional City Rights Regarding Security Inquiries. In addition to the foregoing, City reserves the right to: (1) have an employee/prospective employee of CM@Risk be required to provide fingerprints and execute such other documentation as may be necessary to obtain criminal justice information pursuant to A.R.S. § 41-1750(G)(4); (2) act on newly acquired information whether or not such information should have been previously discovered; (3) unilaterally change its standards and criteria relative to the acceptability of CM@Risk 's employees and/or prospective employees; and, (4) object, at any time and for any reason, to an employee of CM@Risk performing work (including supervision and oversight) under this Agreement.

12.22.4 Background and Security-Contracts and Subcontracts. CM@Risk shall include the security inquiry terms of this Section for employee background and security checks and screening in all contracts and subcontracts for work performed under this Agreement, including supervision and oversight.

12.22.5 Materiality of Security Inquiry Provisions. The security inquiry provisions of this Agreement, as set forth above, are material to City 's entry into this Agreement and any breach thereof by CM@Risk may, at City's sole and unfettered discretion, be considered to be a breach of contract of sufficient magnitude to terminate this Agreement. Such termination shall subject CM@Risk to liability for its breach of this Agreement.

12.23 Hazardous Materials

12.23.1 Unless included in the Work, if CM@Risk encounters material on the Site which it reasonably believes to contain asbestos, polychlorinated biphenyl (PCB), or other hazardous substances or materials regulated by applicable law, it shall immediately stop work and report the condition to the City.

12.23.2 If the material is found to contain asbestos, PCB or other hazardous substances or materials regulated by applicable law, CM@Risk shall not resume work in the affected area until the material has been abated or rendered harmless. CM@Risk and the City may agree, in writing, to continue work in non-affected areas on the Site.

12.23.3 An extension of Contract Time may be granted in accordance with Article 6.

12.23.4 CM@Risk shall comply with all applicable laws/ordinances and regulations and take all appropriate health and safety precautions upon discovery.

12.24 Computer Systems. CM@Risk shall warrant fault-free performance in the processing of date and date-related data including, but not limited to calculating, comparing, and sequencing by all equipment and software products, individually and in combination, from the commencement of the Work. Fault-free performance shall include the manipulation of data when dates are in the 20th or 21st centuries and shall be transparent to the user. Failure to comply with "Year 2000" requirements shall be considered a breach of this Agreement.

12.25 Traffic Control. CM@Risk shall comply with all provisions of the latest version of the Manual on Uniform Traffic Control Devices and any other traffic control provisions as may be provided in the technical specifications.

THE CITY OF FLAGSTAFF, ARIZONA

Project Name

Project No. _____, Agreement No. _____

IN WITNESS WHEREOF, two (2) identical counterparts of this Agreement each of which shall for all purposes be deemed an original thereof, have been duly executed by the parties herein above named, on the date and year first above written.

CM@Risk agrees that this Agreement, as awarded, is for the stated Work and understands that payment for the total Work shall be made on the basis of the indicated amount(s), per the terms and conditions of this Agreement.

Guaranteed Maximum Price

(Written Amount)

$_____

THE CITY OF FLAGSTAFF, ARIZONA

By:_____
City Manager

Name, Legal Entity

By:_____

Title:_____

(Corporate Seal)

ATTEST:

_____
City Clerk

_____
ATTEST: (Signature and Title)

APPROVED AS TO FORM:

_____
City Attorney

EXHIBIT A - PROJECT DESCRIPTION

EXHIBIT B – APPROVED GMP PROPOSAL

PROJECT #: **DATE:**
PROJECT NAME:

EXHIBIT C – TECHNICAL SPECIFICATIONS

GMP SUMMARY 2013

CEDAR AVENUE 2010 PROJECT, WEST STREET TO FOURTH STREET

GMP SUMMARY

PROJECT NAME:	City of Flagstaff - Cedar Avenue, West Street to 4th Street
PROJECT NUMBER:	2010 Bond Project
LAST UPDATED:	5/14/2013
OWNER(S):	City of Flagstaff
BILLNG ADDRESS:	211 West Aspen Avenue
JOB SITE ADDRESS:	Cedar Avenue 2010 Bond Project West Street to 4th Street
OWNER PHONE:	(928) 779-7685 James Duval

C and E
PAVING & GRADING L.L.C.

GMP SUMMARY					AMOUNT
A	COST OF THE WORK (LABOR, MATERIALS, EQUIPMENT)				$712,822.00
B	CM@RISK'S CONTINGENCY				$20,000.00
	INDIRECT COSTS				$732,822.00
C	CONSTRUCTION FEE			4.9052313	$45,210.22
D	GENERAL CONDITIONS			9.8%	$90,323.88
	D1	PAYMENT AND PERFORMANCE BOND	$6,451.70	0.007%	
	D2	INSURANCE	$1,612.93	0.175%	
E	SALES TAX		(9.446%)	5.784724	$53,316.20
			F: Total GMP		$921,672.30
			G: Owners Contingency		$20,000.00
			H: Contract Amount		$941,672.30

Schedule of Values

CEDAR AVE.					
NO.	DESCRIPTION	QUANTITY	UNIT	Unit Cost	Cost
	STREETS				
1	ADJUST MANHOLE FRAME & COVER (CITY DTL. 9-03-060)	25	EA	532.30	13307.50
3	ADJUST WATER VALVE BOX (CITY DTL. 9-03-060)	17	EA	487.00	8279.00
8	CONTRACT ALLOWANCE - **Rock Excavation Allowance**	1	EA	10000.00	10000.00
10	CRACK SEALING	5.8	T	4000.00	23200.00
11	HOT MIX ASPHALT - (LARGE THERMAL CRACK FILLER)	10	T	336.75	3367.50
12	LOWER MANHOLE FRAME & COVER, SEWER CLEANOUT, BLOWOFFS AND SURVEY HANDHOLDS	11	EA	355.00	3905.00
13	MODIFIED ASPHALTIC CONCRETE	1220.0	T	116.50	142130.00
15	PAVEMENT MILLING	14462.9	SY	2.50	36157.25
17	REMOVE AND REPLACE CONCRETE DRIVEWAY (INCLUDING. 6"ABC)	1091.9	SF	19.00	20746.10
19	REMOVE AND REPLACE CURB AND GUTTER (VERTICAL- INCLUDING. 3"ABC)	695.2	LF	34.50	23984.40
22	REMOVE AND REPLACE PAVEMENT (4" AC [C-3/4"]) PATCH	154.5	SY	70.00	10815.00
23	REMOVE AND REPLACE SEWER MANHOLE **(Assuming in quantities below)**	2	EA	0	.00
24	REMOVE AND REPLACE SIDEWALK (INCLUDING. 3"ABC)	2818.7	SF	10.50	29596.35
26	REMOVE RAMP & INSTALL DETACHABLE WARNING (ADA Ramp MAG 235-3) INCLUDING 3" ABC	8	EA	1800.00	14400.00
30	STREET REBUILDING & PATCHING CONTINGENCY	1090	SY	49.00	53410.00
31	STRIPING AND MARKING	1	LS	5475.40	5475.40
33	TACK COAT (SS-1H)	3.0	T	1940.00	5820.00
34	TRAFFIC CONTROL	1	LS	40500.00	40500.00
37	LOWER WATER VALVE BOX	1	EA	340.50	340.50
38	ADJUST SEWER CLEANOUT, BLOWOFFS AND SURVEY HANDHOLDS (CITY DTL. 9-03-062)	8	EA	470.00	3760.00
39	MANHOLE RECONSTRUCT **(Assuming in quantities below)**	6	EA	0	.00
41	REMOVE RAMP & RETROFIT DETACHABLE WARNING (ADA Ramp MAG 232) INCLUDING 3" ABC	6	EA	1450.00	8700.00
42	NEW WATER METERS AND SERVICE LINES	28	EA	2012.00	56336.00
43	ASPHALT PATCH IN BUSINESS PARKING LOT	13	SY	70.00	910.00
	MONTE VISTA TO ROSE SEWER REPLACEMENT				
44	REMOVE 6" SEWER AND REPLACE W/8" IN SAME ALIGN	107	LF	129.00	13803.00
45	NEW 8' SEWER IN NEW TRENCH	68	LF	124.00	8432.00
46	PLUG AND ABANDON EXISTING 6" SEWER	70	LF	22.00	1540.00
47	REMOVE AND REPLACE MANHOLE IN SAME LOCATION	1	EA	7040.00	7040.00
48	REMOVE EXISTING MANHOLE	1	EA	3700.00	3700.00
49	CONSTRUCT NEW MANHOLE IN NEW LOCATION	3	EA	6650.00	19950.00
50	TRENCH PATCHING (OUTSIDE OF OVERLAY)	65	LF	49.00	3185.00
51	SEWER/WATER ENCASEMENT/EXTRA PROTECTION **(Need Detail)**	40	LF	53.00	2120.00
	CEDAR AT MOUNT ELDEN SEWER REPLACEMENT				
52	REMOVE 6" SEWER AND REPLACE W/8" IN SAME ALIGN	332	LF	146.00	48472.00
53	REMOVE AND REPLACE MANHOLE IN SAME LOCATION	2	EA	7040.00	14080.00
54	CONSTRUCT NEW MANHOLE IN NEW LOCATION	1	EA	6300.00	6300.00
55	TRENCH PATCHING (OUTSIDE OF OVERLAY)	10	LF	49.00	490.00
56	SEWER/WATER ENCASEMENT/EXTRA PROTECTION **(Need Detail)**	40	LF	53.00	2120.00
	WATER MAIN EXTENSIONS				
57	REMOVE 2" WATER LINE AND REPLACE WITH 8" PVC WATER LINE.	30	LF	117.00	3510.00
58	CONNECT TO EXISTING 6" AC. **(C and E Provides Tapping Sleeve / C.O.F. Provides Taps)**	2	EA	2480.00	4960.00
59	8" GATE VALVE ASSEMBLY **(This will actually be a 6 " valve due to Tap)**	2	EA	2965.00	5930.00
60	8"X2" CONNECT TO EXISTING 2"	2	EA	800.00	1600.00
61	TRENCH PATCHING	30	LF	49.00	1470.00
	REPLACE SEWER SERVICE CONNECTIONS				
62	4" SEWER SERVICE CONNECTION	5	EA	1700.00	8500.00
63	6" SEWER SERVICE CONNECTION	22	EA	1840.00	40480.00
				TOTAL :	**$ 712822.00**

CITY OF FLAGSTAFF

STAFF SUMMARY REPORT

To: The Honorable Mayor and Council

From: Stacey Brechler-Knaggs, Grants Manager

Co-Submitter: Deputy Chief Jerry Bills and Lieutenant Frank Higgins

Date: 05/29/2013

Meeting Date: 06/04/2013

TITLE:

Consideration and Approval of Grant Agreements: Arizona Deparartment of Homeland Security Subgrantee Agreements for the FFY 2010 and FFY 2011 Homeland Security Grant Program.

RECOMMENDED ACTION:

Approve the FFY 2011 and FFY 2010 Reallocation Subgrantee Agreement(s) with the AZ Department of Homeland Security (AZDOHS) for grant funds for the Fire Department **Special Operations Team Personal Protective Gear** in the amount of **$5,824**, and for the Police Department **Portable Radios** in the amount of **$10,978.81**, and Gas Masks and Replacement Filters in the amount of **$5,464.54**.

Policy Decision or Reason for Action:

- Approve the Subgrantee Agreement(s) to AZDOHS for the Fire Department Special Operations Team Personal Protective Gear, and for the Police Department for Portable Radios and Gas Masks and Replacement Filters.
- The Fire Department, Speiaoal Operations Teamm Personal Protective Gear will strengthen the department's ability to safely and effectively response to Chemical, Biological, Radiological, Nuclear and Explosive weapons (CBRNE) indients, in detection, response and decontamination.
- The Police Department, Potable Radios's will strengthen the department's communication capabilities and the Gas Masks and Replacement Filters will assit our first responders to effectively respond to acts of terrorism involving CBRNE materials or agents.

Financial Impact:

There is no significant financial impact to the Fire or Police Department in terms of expenditures, the equipment is 100% grant funded.

Connection to Council Goal:

11. Effective governance

Has There Been Previous Council Decision on This:

No

Options and Alternatives:

1) Approve the Grant Agreement(s)
2) Disapprove the Grant Agreements(s)

Background/History:

The Flagstaff Fire Department (FFD) Special Operations Team consist of 24 members. Currently, only 10 of 24 of FFDs Special Operations Team (HazMat and Technical Rescue RRT) are outfitted with the NFPA compliant coveralls. In order to provide PPE to the entire team, additional coveralls are needed to outfit the entire team for PPE and uniformity. The FFDs RRT provides regional HazMat and Technical Rescue to Northern Arizona and is a resource available to the state and the nation as needed.

The Flagstaff Police Department is in need for additional portable radios for special events, such as Dew Downtown. If and when the EOC is activated additional radios would be need to help cover the additional personnel assigned to the EOC. If in the event our dispatch center had to evacuate, each dispatcher would need a portable. And, if we have an officer and his portable were to get damaged or simply stop working we need a backup.The new digital radio system recently implemented allows officers to communicate with all agencies within the area. The addition of these radios will bolster and strengthen our interoperable communications capabilities.

In addition, the Police Department is in need of additional gas masks and replacement filters allowing officers to respond to incidents on involving CBRNE agenda and riot control situations. The replacement filters are needed for expired cartridges installed on existing gas masks.

Key Considerations:

The FFD Special Operations Team Personal Protective Gear supports efforts to reach a higher level of capability to respond to chemical and toxic agent incidents by protecting first responders per NFPA 472. The equipment will better protect responders who will be responding to possible CBRNE events and on drug lab and other more routine HazMat events.

The FPD Portable Radios will enhance interoperable communication capabilities which will result in improved officer safety, mission effectiveness and overall public safety. The Gas Masks and Filters will enhance and strengthen our ability to provide immediate actions to save lives, protect property, and meet basic human needs in CBRNE incidents.

Community Benefits and Considerations:

The Fire and Police Department equipment will ensure the safety of public safety personnel, enhance communications, save lives and protect property.

Community Involvement:

Inform

Attachments: 2010 Reallocation Subgrantee Agrmt #777108-04-FFD Special Ops Protective Gear
2011 Reallocation Subgrantee Agrmt #888106-02-FPD Portable Radios
2010 Reallocation Subgrantee Agrmt #777109-02-FPD Gas Mask & Filters

SUBGRANTEE AGREEMENT-REALLOCATION

10-AZDOHS-HSGP- 777108-04

Between

The Arizona Department of Homeland Security
And

City of Flagstaff

WHEREAS, A.R.S. § 41-4254 charges the Arizona Department of Homeland Security (AZDOHS) with the responsibility of administering funds.

THEREFORE, it is agreed that the AZDOHS shall provide funding to the

City of Flagstaff

for services under the terms of this Grant Agreement.

I. PURPOSE OF AGREEMENT

The purpose of this Agreement is to specify the responsibilities and procedures for the subrecipient's role in administering homeland security grant funds.

II. TERM OF AGREEMENT, TERMINATION AND AMENDMENTS

This Agreement shall become effective on **May 17, 2013** and shall terminate on **July 31, 2013**. The obligations of the subrecipient as described herein will survive termination of this agreement.

III. DESCRIPTION OF SERVICES

The subrecipient shall provide the services for the State of Arizona, Arizona Department of Homeland Security as approved in the grant application titled

"Special Operations Team Personal Protective Gear"

and funded at **$5,824** (as may have been modified by the award letter).

IV. MANNER OF FINANCING

The AZDOHS shall:

a) Provide up to **$ 5,824** to the subrecipient for services provided under Paragraph III.

b) Payment made by the AZDOHS to the subrecipient shall be on a reimbursement basis only and is conditioned upon receipt of proof of payment and applicable, accurate and complete reimbursement documents, as deemed necessary by the AZDOHS, to be submitted by the subrecipient. A listing of acceptable documentation can be found at www.azdohs.gov. Payments will be contingent upon receipt of all reporting requirements of the subrecipient under this Agreement.

V. FISCAL RESPONSBILITY

It is understood and agreed that the total amount of the funds used under this Agreement shall be used only for the project as described in the application. Any modification to quantity or scope of work must be preapproved in writing by the AZDOHS. Therefore, should the project not be completed, the subrecipient shall reimburse said funds directly to the AZDOHS immediately. If the project is completed at a lower cost than the original budget called for, the amount reimbursed to the subrecipient shall be for only the amount of dollars actually spent by the subrecipient in accordance with the approved application. For any funds received under this Agreement for which expenditure is disallowed by an audit exemption or otherwise by the AZDOHS, the State, or Federal government, the subrecipient shall reimburse said funds directly to the AZDOHS immediately.

VI. FINANCIAL AUDIT/PROGRAMATIC MONITORING

The subrecipient agrees to terms specified in A.R.S. § 35-214 and § 35-215.

a) In addition, in compliance with the Federal Single Audit Act (31 U.S.C. par. 7501-7507), as amended by the Single Audit Act Amendments of 1996 (P.L. 104 to 156), the subrecipient must have an annual audit conducted in accordance with OMB Circular #A-133 ("Audits of States, Local Governments, and Non-profit Organizations") if the subrecipient expends more than $500,000 from Federal awards. If the subrecipient has expended more than $500,000 in Federal dollars, a copy of the subrecipient's audit report for the previous fiscal year and subsequent years within the period of performance is due annually to AZDOHS by March 31st.

b) Subrecipients will be monitored periodically by the AZDOHS staff, both programmatically and financially, to ensure that the project goals, objectives, performance requirements, timelines, milestone completion, budgets, and other related program criteria are being met. Monitoring will be accomplished through a combination of office-based reviews and onsite monitoring visits. Monitoring can involve aspects of the work involved under this contract including but not limited to the review and analysis of the financial, programmatic, performance and administrative issues relative to each program and will identify areas where technical assistance and other support may be needed.

VII. APPLICABLE FEDERAL REGULATIONS

The subrecipient must comply with the grant guidance Office of Management and Budget (OMB) Circulars Code of Federal Regulations (CFR) and other Federal guidance including but not limited to:

a) 44 CFR Chapter 1, Federal Emergency Management Agency, Department of Homeland Security at http://www.access.gpo.gov/nara/cfr/waisidx_07/44cfrv1_07.html.

b) 2 CFR 225 Cost Principles for State, Local & Indian Tribal Governments (A-87 OMB Circular), at http://www.access.gpo.gov/nara/cfr/waisidx_07/2cfr225_07.html. Cost Principles: 2 CFR Part 225, State and Local Governments; 2 CFR Part 220, Educational Institutions; 2 CFR Part 230, Non-Profit Organizations; Federal Acquisition Regulation Sub-part 31.2, Contracts with Commercial Organizations. OMB Circular A-133, Audits of States, Local Governments, and Non-Profit Organizations, at http://www.whitehouse.gov/omb/circulars/a133/a133.html.

c) 44 CFR Part 13, Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments (formerly OMB Circular A-102), at http://149.168.212.15/mitigation/Library/44_CFR-Part_13.pdf. U.S. Department of Homeland Security Authorized Equipment List (AEL), at https://www.rkb.mipt.org/ael.cfm 2 CFR Part 215, Institutions of Higher Education, Hospitals and Other Non-Profit Organizations.

d) 28 CFR applicable to grants and cooperative agreements, including Part II, Applicability of Office of Management and Budget Circulators; Part 18, Administrative Review Procedure; Part 20, Criminal Justice Information Systems; Part 22, Confidentiality of Identifiable Research and Statistical Information; Part 23, Criminal Intelligence System Operating Policies; Part 42, Non-discrimination Equal Employment Opportunities Policies and Procedures; Part 61, Procedures for Implementing the National Environmental Policy Act; Part 63, Floodplain Management and Wetland Protection Procedures; and Part 66, Uniform Administrative Requirements for Grants and Co-operative Agreements to State and Local Government.

Included within the above mentioned guidance documents are provisions for the following:

NIMSCAST
The subrecipient agrees to complete the National Incident Management System Compliance Assistance Support Tool (NIMSCAST) and remain in compliance.

Environmental Planning and Historic Preservation
The subrecipient shall comply with all applicable Federal, State, and Local environmental and historic preservation (EHP) requirements and shall provide any information requested by FEMA to ensure compliance with applicable laws including: National Environmental Policy Act, National Historic Preservation Act, Endangered Species Act, and Executive Orders on Floodplains (11988), Wetlands (11990) and Environmental Justice (12898).Subrecipient shall not undertake any project having the potential to impact EHP resources without the prior approval of AZDOHS/FEMA, including but not limited to communications towers, physical security enhancements, new construction, and modifications to buildings that are 50 years old or greater. Subrecipient must comply with all conditions placed on the project as the result of the EHP review. Any change to the approved project scope of work will require re-evaluation for compliance with these EHP requirements. If ground disturbing activities occur during project implementation, the subrecipient must ensure monitoring of ground disturbance and if any potential archeological resources are discovered, the subrecipient will immediately cease construction in that area and notify FEMA and the appropriate State Historic Preservation Office. Procurement and construction activities shall not be initiated prior to the full environmental and historic preservation review.

Consultants/Trainers/Training Providers
Billings for consultants/trainers/training providers must include at a minimum: a description of services; dates of services; number of hours for services performed; rate charged for services; and, the total cost of services performed. Consultant/trainer/training provider costs must be within the prevailing rates; must be obtained under consistent treatment with the procurement policies of the subrecipient and 44 CFR Chapter 1, Part 13; and shall not exceed the maximum of $450 per day per consultant/trainer/training provider unless prior written approval is granted by the AZDOHS. In addition to the per day $450 maximum amount, the consultant/trainer/training provider may be reimbursed

reasonable travel, lodging, and per diem not to exceed the state rate. Itemized receipts are required for lodging and travel reimbursements. The subrecipient will not be reimbursed costs other than travel, lodging, and per diem on travel days for consultants/trainers/training providers.

Contractors/Subcontractors
The subrecipient may enter into written subcontract(s) for performance of certain of its functions under the contract in accordance with terms established in the OMB Circulars, Code of Federal Regulations, DHS Guidance and DHS Program Guide. The subrecipient agrees and understands that no subcontract that the subrecipient enters into with respect to performance under this Agreement shall in any way relieve the subrecipient of any responsibilities for performance of its duties. The subrecipient shall give the AZDOHS immediate notice in writing by certified mail of any action or suit filed and prompt notice of any claim made against the subrecipient by any subcontractor or vendor which in the opinion of the subrecipient may result in litigation related in any way to the Agreement with the AZDOHS.

Personnel and Travel Costs
All grant funds expended for personnel, travel, lodging, and per diem must be consistent with the subrecipient's policies and procedures and must be applied uniformly to both federally financed and other activities of the agency. At no time will the subrecipient's reimbursement(s) exceed the State rate established by the Arizona Department of Administration, General Accounting Office Travel Policies: http://www.gao.state.gov.

Procurement
The subrecipient shall comply with all internal agency procurement rules/policies and must also comply with Federal procurement rules/policies as outlined in section VII and all procurement must comply with Arizona State procurement code and rules. The Federal intent is that all Homeland Security Funds are awarded competitively. The subrecipient shall not enter into a Sole or Single Source procurement agreement, unless prior written approval is granted by the AZDOHS.

Training and Exercise
The subrecipient agrees that any grant funds used for training and exercise must be in compliance with grant guidance. All training must be approved through the ADEM/AZDOHS training request process prior to execution of training contract(s). All exercises must utilize the FEMA Homeland Security Exercise and Evaluation Program (HSEEP) Toolkit for exercise design, development and scheduling. Subrecipient agrees to:

a) Submit the HSEEP Toolkit Exercise Summary to AZDOHS with all Exercise Reimbursement Requests.
b) Post all exercises, documentation and After Action Reports/Improvement Plans via the HSEEP Toolkit.
c) Within 60 days of completion of an exercise, the exercise host subrecipent is required to upload the AAR/IP into the HSEEP Toolkit and email the AAR/IP to the local County Emergency Manager, the FEMA Region IX Exercise POC, HSEEP@dhs.gov, the AZDOHS Strategic Planner, and the Arizona Department of Emergency Management (ADEM) Exercise Officer.

Nonsupplanting Agreement
The subrecipient shall not use funds to supplant State or Local funds or other resources that would otherwise have been made available for this program/project. Further, if a position created by a grant is filled from within, the vacancy created by this action must be filled within thirty (30) days. If the vacancy is not filled within thirty (30) days, the subrecipient must stop charging the grant for the new position. Upon filling the vacancy, the subrecipient may resume charging for the grant position.

E-Verify
Compliance requirements for A.R.S. § 41-4401—immigration laws and E-Verify requirement.

a) The subrecipient warrants compliance with all Federal immigration laws and regulations relating to employees and warrants its compliance with Section A.R.S. § 23-214, Subsection A. (That subsection reads: "After December 31, 2007, every employer, after hiring an employee, shall verify the employment eligibility of the employee through the E-Verify program).

b) A breach of a warranty regarding compliance with immigration laws and regulations shall be deemed a material breach of the contract and the subrecipient may be subject to penalties up to and including termination of the Agreement.

c) The AZDOHS retains the legal right to inspect the papers of any employee who works on the Agreement to ensure that the subrecipient is complying with the warranty under paragraph (a) above.

Property Control
Effective control and accountability must be maintained for all property. The subrecipient must adequately safeguard all such property and must assure that it is used solely for authorized purposes as described in the guidance and application. The subrecipient shall exercise caution in the use, maintenance, protection and preservation of such property.

a) Equipment shall be used by the subrecipient in the program or project for which it was acquired as long as needed, whether or not the program or project continues to be supported by federal grant funds. Theft, destruction, or loss of property shall be reported to the AZDOHS immediately.

b) Nonexpendable Property is property which has a continuing use, is not consumed in use, is of a durable nature with an expected service life of one or more years, has an acquisition cost of $300 (Three Hundred Dollars) or more, and does not become a fixture or lose its identity as a component of other equipment or plant.

c) A Capital Asset is any personal or real property, or fixture that has an acquisition cost of $5,000 (Five Thousand Dollars) or more per unit and/or a useful life of more than one year. When use of the Capital Asset for project activities is discontinued, the subrecipient shall request/receive authorization from AZDOHS prior to disposition.

d) A Property Control Form shall be maintained for the entire scope of the program or project for which property was acquired through the end of its useful life and/or disposition. Nonexpendable Property and Capital Assets must be included on the Property Control Form. When disposition of Nonexpendable Property and Capital Assets occurs the subrecipient shall submit an updated Property Control Form to AZDOHS.

e) Upon submission of the final quarterly programmatic report the subrecipient must file with the AZDOHS a copy of the Property Control Form. The subrecipient agrees to be subject to equipment monitoring and auditing by state or federal authorized representatives to verify information.

f) A physical inventory of the Nonexpendable Property and Capital Assets must be taken and the results reconciled with the Property Control Form at least once every two years.

(1) A control system must be developed to ensure adequate safeguards to prevent loss, damage, or theft of the property. Any loss, damage, or theft shall be investigated.

(2) Adequate maintenance procedures must be developed to keep the property in good condition.

Allowable Costs

The allowability of costs incurred under this agreement shall be determined in accordance with the general principles of allowability and standards for selected cost items as set forth in the applicable OMB Circulars, Code of Federal Regulations, authorized equipment lists and guidance documents referenced above.

a) The subrecipient agrees that grant funds are not to be expended for any indirect costs that may be incurred by the subrecipient for administering these funds.
b) The subrecipeint agrees that grant funds are not to be expended for any Management and Administrative (M&A) costs that may be incurred by the subrecipient for administering these funds unless explicitly applied for and approved in writing by the AZDOHS and shall be in compliance with Grant Guidance.

VIII. DEBARMENT CERTIFICATION

The subrecipient agrees to comply with the Federal Debarment and Suspension regulations as outlined in the "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – Lower Tier Covered Transactions."

IX. FUNDS MANAGEMENT

The subrecipient must maintain funds received under this Agreement in separate ledger accounts and cannot mix these funds with other sources. The subrecipient must manage funds according to applicable Federal regulations for administrative requirements, costs principles, and audits.

The subrecipient must maintain adequate business systems to comply with Federal requirements. The business systems that must be maintained are:

- Financial Management
- Procurement
- Personnel
- Property
- Travel

A system is adequate if it is 1) written; 2) consistently followed – it applies in all similar circumstances; and 3) consistently applied – it applies to all sources of funds.

X. REPORTING REQUIREMENTS

Regular reports by the subrecipient shall include:

a) Programmatic Reports
The subrecipient shall provide quarterly programmatic reports to the AZDOHS within fifteen (15) working days of the last day of the quarter in which services are provided. The subrecipient shall use the form provided by the AZDOHS to submit quarterly programmatic reports. The report shall contain such information as deemed necessary by the AZDOHS. The subrecipient shall use the Quarterly Programmatic Report Format template, which is posted at www.azdohs.gov. If the scope of the project has been fully completed and implemented, and there will be no further updates, then the quarterly programmatic report for the quarter in which the project was completed will be sufficient as the final report. The report should be marked as final and should be inclusive of all necessary and pertinent information regarding the project as deemed necessary by the AZDOHS. Quarterly programmatic reports shall be submitted to the AZDOHS until the entire scope of the project is completed

b) Quarterly Programmatic Reports are due:
January 15 (period October 1– December 31)
April 15 (period January 1 – March 31)
July 15 (period April 1 – June 30)
October 15 (period July 1 – September 30)

c) Financial Reimbursements
The subrecipient shall provide as frequently as monthly but not less than quarterly requests for reimbursement. Reimbursements shall be submitted with the Reimbursement Form provided by the AZDOHS staff. The subrecipient shall submit a final reimbursement for expenses received and invoiced prior to the end of the termination of this Agreement no more than **forty-five (45) calendar days** after the end of the Agreement. Requests for reimbursement received later than the forty-five (45) days after the Agreement termination will not be paid. The final reimbursement request as submitted shall be marked FINAL.

The AZDOHS requires that all requests for reimbursement are submitted via U.S. mail (United States Postal Service), FedEx, UPS, etc...or in person. Reimbursements submitted via fax or by any electronic means will not be accepted.

The AZDOHS reserves the right to request and/or require any supporting documentation it feels necessary in order to process reimbursements.

All reports shall be submitted to the contact person as described in Paragraph XXXIX, NOTICES, of this Agreement.

XI. ASSIGNMENT AND DELEGATION

The subrecipient may not assign any rights hereunder without the express, prior written consent of both parties.

XII. AMENDMENTS

Any change in this Agreement including but not limited to the Description of Services and budget described herein, whether by modification or supplementation, must be accomplished by a formal Agreement amendment signed and approved by and between the duly authorized representative of the subrecipient and the AZDOHS.

Any such amendment shall specify: 1) an effective date; 2) any increases or decreases in the amount of the subrecipient's compensation if applicable; 3) be titled as an "Amendment," and 4) be signed by the parties identified in the preceding sentence. The subrecipient expressly and explicitly understands and agrees that no other method of communication, including any other document, correspondence, act, or oral communication by or from any person, shall be used or construed as an amendment or modification or supplementation to this Agreement.

XIII. OFFSHORE PERFORMANCE OF WORK PROHIBITED

Due to security and identity protection concerns, all services under this Agreement shall be performed within the borders of the United States. All storage and processing of information shall be performed within the borders of the United States. This provision applies to work performed by subcontractors at all tiers.

XIV. AGREEMENT RENEWAL

This Agreement shall not bind nor purport to bind the AZDOHS for any contractual commitment in excess of the original Agreement period.

XV. RIGHT TO ASSURANCE

If the AZDOHS in good faith has reason to believe that the subrecipient does not intend to, or is unable to perform or continue performing under this Agreement, the AZDOHS may demand in writing that the subrecipient give a written assurance of intent to perform. If the subrecipient fails to provide written assurance within the number of days specified in the demand, the AZDOHS at its option may terminate this Agreement.

XVI. CANCELLATION FOR CONFLICT OF INTEREST

The AZDOHS may, by written notice to the subrecipient, immediately cancel this Agreement without penalty or further obligation pursuant to A.R.S. § 38-511 if any person significantly involved in initiating, negotiating, securing, drafting or creating the Agreement on behalf of the State or its subdivisions (unit of Local Government) is an employee or agent of any other party in any capacity or a consultant to any other party to the Agreement with respect to the subject matter of the Agreement. Such cancellation shall be effective when the parties to the Agreement receive written notice from the AZDOHS, unless the notice specifies a later time.

XVII. THIRD PARTY ANTITRUST VIOLATIONS

The subrecipient assigns the State of Arizona any claim for overcharges resulting from antitrust violations to the extent that such violations concern materials or services supplied by third parties to subrecipient toward fulfillment of this Agreement.

XVIII. AVAILABILITY OF FUNDS

Every payment obligation of the AZDOHS under this Agreement is conditioned upon the availability of funds appropriated or allocated for the payment of such obligations. If the funds are not allocated and available for the continuance of this Agreement, the AZDOHS may terminate this Agreement at the end of the period for which funds are available. No liability shall accrue to the AZDOHS in the event this provision is exercised, and the AZDOHS shall not be obligated or liable for any future payments or for any damages as a result of termination under this paragraph, including purchases and/or contracts entered into by the subrecipient in the execution of this Agreement.

XIX. FORCE MAJEURE

If either party hereto is delayed or prevented from the performance of any act required in this Agreement by reason of acts of God, strikes, lockouts, labor disputes, civil disorder, or other causes without fault and beyond the control of the party obligated, performance of such act will be excused for the period of the delay.

XX. PARTIAL INVALIDITY

Any term or provision of this Agreement that is hereafter declared contrary to any current or future law, order, regulation, or rule, or which is otherwise invalid, shall be deemed stricken from this Agreement without impairing the validity of the remainder of this Agreement.

XXI. ARBITRATION

In the event of any dispute arising under this Agreement, written notice of the dispute must be provided to the other party within thirty (30) days of the events giving the rise to the dispute. The subrecipient agrees to terms specified in A.R.S. § 12-1518.

XXII. GOVERNING LAW AND CONTRACT INTERPRETATION

a) This Agreement shall be governed and interpreted in accordance with the laws of the State of Arizona.

b) This Agreement is intended by the parties as a final and complete expression of their agreement. No course of prior dealings between the parties and no usage of the trade shall supplement or explain any terms in this document.

c) Either party's failure to insist on strict performance of any term or condition of the Agreement shall not be deemed a waiver of that term or condition even if the party accepting or acquiescing in the nonconforming performance knows of the nature of the performance and fails to object.

XXIII. ENTIRE AGREEMENT

This Agreement and its Exhibits constitute the entire Agreement between the parties hereto pertaining to the subject matter hereof and may not be changed or added to except by a writing signed by all parties hereto in conformity with Paragraph X, REPORTING REQUIREMENTS; provided; however, that the AZDOHS shall have the right to immediately amend this Agreement so that it complies with any new legislation, laws, ordinances, or rules affecting this Agreement. The subrecipient agrees to comply with any such amendment within ten (10) business days of receipt of a fully executed amendment. All prior and contemporaneous agreements, representations, and understandings of the parties, oral, written, pertaining to the subject matter hereof, are hereby superseded or merged herein.

XXIV. RESTRICTIONS ON LOBBYING

The subrecipient shall not use funds made available to it under this Agreement to pay for, influence, or seek to influence any officer or employee of a State or Federal government.

XXV. LICENSING

The subrecipient, unless otherwise exempted by law, shall obtain and maintain all licenses, permits, and authority necessary to perform those acts it is obligated to perform under this Agreement.

XXVI. NON-DISCRIMINATION

The subrecipient shall comply with all State and Federal equal opportunity and non-discrimination requirements and conditions of employment, including the Americans with Disabilities Act, in accordance with A.R.S. title 41, Chapter 9, Article 4 and Executive Order2009-09.

XXVII. SECTARIAN REQUESTS

Funds disbursed pursuant to this Agreement may not be expended for any sectarian purpose or activity, including sectarian worship or instruction in violation of the United States or Arizona Constitutions.

XXVIII. SEVERABILITY

The provisions of this Agreement are severable. Any term or condition deemed illegal or invalid shall not affect any other term or condition of the Agreement.

XXIX. ADVERTISING AND PROMOTION OF AGREEMENT

The subrecipient shall not advertise or publish information for commercial benefit concerning this Agreement without the written approval of the AZDOHS.

XXX. OWNERSHIP OF INFORMATION, PRINTED AND PUBLISHED MATERIAL

The AZDOHS reserves the right to review and approve any publications funded or partially funded through this Agreement. All publications funded or partially funded through this Agreement shall recognize the AZDOHS and the U.S. Department of Homeland Security. The U.S. Department of Homeland Security and the AZDOHS shall have full and complete rights to reproduce, duplicate, disclose, perform, and otherwise use all materials prepared under this Agreement.

The subrecipient agrees that any report, printed matter, or publication (written, visual, or sound, but excluding press releases, newsletters, and issue analyses) issued by the subrecipient describing programs or projects funded in whole or in part with Federal funds shall contain the following statement:

> "This document was prepared under a grant from U.S. Department of Homeland Security. Points of view or opinions expressed in this document are those of the authors and do not necessarily represent the official position or policies of the U.S. Department of Homeland Security."

The subrecipient also agrees that one copy of any such publication, report, printed matter, or publication shall be submitted to the AZDOHS to be placed on file and distributed as appropriate to other potential sub-recipients or interested parties. The AZDOHS may waive the requirement for submission of any specific publication upon submission of a request providing justification from the subrecipient.

The AZDOHS and the subrecipient recognize that research resulting from this Agreement has the potential to become public information. However, prior to the termination of this Agreement, the subrecipient agrees that no research-based data resulting from this Agreement shall be published or otherwise distributed in any form without express written permission from the AZDOHS and possibly the U.S. Department of Homeland Security. It is also agreed that any report or printed matter completed as a part of this agreement is a work for hire and shall not be copyrighted by the subrecipient.

XXXI. CLOSED-CAPTIONING OF PUBLIC SERVICE ANNOUNCEMENTS

Any television public service announcement that is produced or funded in whole or in part by the subrecipient shall include closed captioning of the verbal content of such announcement.

XXXII. INDEMNIFICATION

To the extent permitted by law, each party (as indemnitor) agrees to indemnify, defend and hold harmless the other party (as indemnitee) from and against any and all claims, losses, liability, costs, or expenses (including reasonable attorney's fees) (hereinafter collectively referred to as claims) arising out of bodily injury of any person (including death) or property damage, but only to the extent that such claims which result in vicarious/derivative liability to the indemnitee, are caused by the act, omission, negligence, misconduct, or other fault of the indemnitor, its officers, officials, agents, employees, or volunteers.

XXXIII. TERMINATION

a) All parties reserve the right to terminate the Agreement in whole or in part due to the failure of the subrecipient or the grantor to comply with any term or condition of the Agreement, to acquire and maintain all required insurance policies, bonds, licenses and permits or to make satisfactory progress in performing the Agreement. The staff of either party shall provide a written thirty (30) day advance notice of the termination and the reasons for it.

b) If the subrecipient chooses to terminate the contract before the grant deliverables have been met then the AZDOHS reserves the right to collect all reimbursements distributed to the subrecipient.

c) The AZDOHS may, upon termination of this Agreement, procure, on terms and in the manner that it deems appropriate, materials or services to replace those under this Agreement. The subrecipient shall be liable to the AZDOHS for any excess costs incurred by the AZDOHS in procuring materials or services in substitution for those due from the subrecipient.

XXXIV. CONTINUATION OF PERFORMANCE THROUGH TERMINATION

The subrecipient shall continue to perform, in accordance with the requirements of the Agreement, up to the date of termination, as directed in the termination notice.

XXXV. PARAGRAPH HEADINGS

The paragraph headings in this Agreement are for convenience of reference only and do not define, limit, enlarge, or otherwise affect the scope, construction, or interpretation of this Agreement or any of its provisions.

XXXVI. COUNTERPARTS

This Agreement may be executed in any number of counterparts, copies, or duplicate originals. Each such counterpart, copy, or duplicate original shall be deemed an original, and collectively they shall constitute one agreement.

XXXVII. AUTHORITY TO EXECUTE THIS AGREEMENT

Each individual executing this Agreement on behalf of the subrecipient represents and warrants that he or she is duly authorized to execute this Agreement.

XXXVIII. SPECIAL CONDITIONS

a) The subrecipient must comply with the most recent version of the Administrative Requirements, Cost Principles, and Audit requirements

b) The subrecipient acknowledges that U.S. Department of Homeland Security and the AZDOHS reserves a royalty-free, non-exclusive, and irrevocable license to reproduce, publish, or otherwise use, and authorize others to use, for Federal government purposes: (a) the copyright in any work developed under an award or sub-award; and (2) any rights of copyright to which a subrecipient purchases ownership with Federal support. The subrecipient shall consult with the AZDOHS regarding the allocation of any patent rights that arise from, or are purchased with, this funding.

c) The subrecipient agrees that, when practicable, any equipment purchased with grant funding shall be prominently marked as follows: **"Purchased with funds provided by the U.S. Department of Homeland Security."**

d) The subrecipient agrees to cooperate with any assessments, state/national evaluation efforts, or information or data collection requests, including, but not limited to, the provision of any information required for the assessment or evaluation of any activities within this agreement.

e) The subrecipient is prohibited from transferring funds between programs (State Homeland Security Program, Urban Area Security Initiative, Citizen Corps Program, Operation Stonegarden, and Metropolitan Medical Response System).

XXXIX. NOTICES

Any and all notices, requests, demands, or communications by either party to this Agreement, pursuant to or in connection with this Agreement shall be in writing be delivered in person or shall be sent to the respective parties at the following addresses:

Arizona Department of Homeland Security
1700 West Washington, Suite 210
Phoenix, AZ 85007

The subrecipient shall address all programmatic notices relative to this Agreement to the appropriate the AZDOHS staff; contact information at www.azdohs.gov.

The subrecipient shall submit reimbursement requests relative to this Agreement to the appropriate the AZDOHS staff; contact information at www.azdohs.gov

The AZDOHS shall address all notices relative to this Agreement to:

City of Flagstaff

City Manager Kevin Burke

211 W. Aspen Avenue

Flagstaff, AZ 86001

XXXX. IN WITNESS WHEREOF

The parties hereto agree to execute this Agreement.

FOR AND BEHALF OF THE	FOR AND BEHALF OF THE
City of Flagstaff	Arizona Department of Homeland Security
Authorized Signature above	Gilbert M. Orrantia
Kevin Burke, City Manager Print Name & Title above	Director
Enter Date above	Date

This form is to be signed and returned.

Grant #: **777108-04** Sub-Recipient: **City of Flagstaff, Flagstaff Fire Department**

Project Title: **Special Operations Team Personal Protective Gear**
Grant Program: **STATE HOMELAND SECURITY GRANT PROGRAM**

1. Unit of Government: **None Entered**
   Point of Contact: **Grants Manager Stacey Brechler-Knaggs**

   Sub-recipient Address:
   Street: **211 W Aspen Avenue**

   City/State/Zip: **Flagstaff, AZ 86001**

   Head of Agency: **City Manager Kevin Burke**
   Authorized individual has delegated authority to make application on behalf of the agency.
   Phone#: **928-779-7604**

   E-mail Address: **kburke@flagstaffaz.gov**

2. Organizational Type: **Local Government / Municipality**

3. Region or Entity: **North Region**

4. Initiative Title: **Implement NIMS and NRP Capabilities**

5. Total Dollar Amount Requested: **$5,824** Total Dollar Amount Awarded: **$5,824**

6. Enter the 2011-2014 State Homeland Security Strategy Objectives (EXAMPLE: 1.1.0) and Action Item(s) Numbers (EXAMPLE: 1.1.4) that relate to this project. To learn more about the strategy visit this website:
   5.1.1

7. Identify the primary National Priority that is supported by this project from the drop down box below:
   NP 2. Implement the National Incident Management System and National Response Plan (NRP)

8. Is this project new or ongoing? If the project is ongoing, identify the corresponding projects and funding amounts for each year as applicable. Also, for the current grant cycle, please identify, if any, requests for funding from other funding sources i.e. EOC, EMPG etc.
   Not on going

9. Can partial funding be accepted? If so, at what specific dollar amount(s), items, and quantities? Be sure to list the order of priority.
   Partial Funding acceptable

10. Please list the multiple jurisdictions and/or disciplines served by this project. Include POC information for each partnering agency.
    None Entered

APPROVAL PROCESS

The signatures below verify the submission/approval process. All parties signify that all aspects of this project are allowable, reasonable and justifiable in accordance with published federal grant guidelines. The signatures confirm the acceptance that the funding amounts and quantities are limited to the amounts and quantities approved and awarded on the Application Summary and Budget Narrative page(s) (Equipment, Training, Exercise, Planning, Organization, M&A, if applicable) as provided in the award letter attachments.

Project Point of Contact	Grants Manager Stacey Brechler-Knaggs		
	Print Name	Signature	Date
Strategic Planner or Assistant Director Planning & Preparedness			
	Print Name	Signature	Date

This form is to be signed and returned.

STATE OF ARIZONA

Department of Homeland Security

2013 STATE HOMELAND SECURITY GRANT PROGRAM PROJECT DETAIL WORKBOOK

City of Flagstaff, Flagstaff Fire Department 777108-04

Application Summary

Award Funded As Follows:

	Requested Amounts	*Recommended Amounts*	*Awarded Amounts*
Equipment	$5,824.00	$5,824.00	$5,824.00
Training	$0.00	$0.00	$0.00
Exercise	$0.00	$0.00	$0.00
Planning	$0.00	$0.00	$0.00
M & A	$0.00	$0.00	$0.00
Organization	$0.00	$0.00	$0.00
Award Totals	$5,824.00	$5,824.00	$5,824.00

STATE OF ARIZONA
Department of Homeland Security
2013 STATE HOMELAND SECURITY GRANT PROGRAM
PROJECT DETAIL WORKBOOK

City of Flagstaff, Flagstaff Fire Department 777108-04

Equipment - Budget Narrative

Budget Description: List each item from your budget worksheet pages in the same order in which they are listed on the proceeding page. For Equipment, each Allowable Equipment Category (PPE, Interoperable Communications, Detection, etc.) must be listed. Under the federal guidelines "Equipment" has been defined as any single item that has a value of more than 5,000 and a life expectancy greater than a year. However, for this budget narrative please be sure to include any and all items that can be found on the AEL. Please be sure to provide a brief description of each item and how each item will be utilized. Equipment cost estimates must be listed. For each item of equipment, list the Authorized Equipment List (AEL) Item Number. The most current AEL can be found on line at the Responder Knowledge Base at the following website: www.rkb.us. If "Other Authorized Equipment" was annotated, specify the equipment here. All equipment associated with this grant must be listed on this page only. If you have any questions or concerns regarding the AEL, please feel free to contact Michael Stidham at mstidham@azdohs.gov.

Brief Description and Utilization:	6 oz Nomex Coverall, reinforced knees, reflective triple trim on wrists and ankles and "Flagstaff Fire Dept Special Operations" in 2" reflective letters on back. Currently, 10 of 24 Flagstaff Fire Department Special Operations team members are outfitted in the above described item. To ensure team uniformity and PPE for all team members, item is requested as above.

AEL #	*Item Description*	*Quantity*	*Cost*	*Total Cost*	*AZDOHS Approved*	*Approved Quantity*	*Approved Cost*
01LE-02-BDUS	Battle dress uniforms (BDUs), coveralls and jumpsuits t hat are worn during tactical operations and are construc	14	$416.00	$5,824.00	Maryann Johns	14	$5,824.00

Totals For City of Flagstaff, Flagstaff Fire Department Contract Number 777108-04 *Requested* $5,824.00 *Approved* $5,824.00

State of Arizona
Department of Homeland Security

Governor Janice K. Brewer

Director Gilbert M. Orrantia

FFY 2010-REALLOCATION

Dear Stakeholder:

The projectthat your agency submitted to the Arizona Department of Homeland Security (AZDOHS) for consideration under the Homeland Security Grant Program has been awarded.

Please be advised, your project required an Environmental and Historic Preservation review. It has been reviewed and your project has been determined to have no potential impact to environmental or historic concerns. No further EHP review is required unless you modify the project and it is approved by AZDOHS. If you need further clarification please contact Michael Stidham at (602) 542-7041 or mstidham@azdohs.gov with AZDOHS for further information regarding the EHP specific requirements for your award.

As stated in the subgrantee agreement:

> The subrecipient shall comply with all applicable Federal, State, and local environmental and historic preservation (EHP) requirements and shall provide any information requested by FEMA to ensure compliance with applicable laws including: National Environmental Policy Act, National Historic Preservation Act, Endangered Species Act, and Executive Orders on Floodplains (11988), Wetlands (11990) and Environmental Justice (12898).Subrecipient shall not undertake any project having the potential to impact EHP resources <u>without the prior approval of AZDOHS/FEMA</u>, including but not limited to communications towers, physical security enhancements, new construction, and modifications to buildings that are 50 years old or greater. Subrecipient must comply with all conditions placed on the project as the result of the EHP review. Any change to the approved project scope of work will require re-evaluation for compliance with these EHP requirements. If ground disturbing activities occur during project implementation, the subrecipient must ensure monitoring of ground disturbance and if any potential archeological resources arc discovered, the subrecipient will immediately cease construction in that area and notify FEMA and the appropriate State Historic Preservation Office. <u>Construction activities shall not be initiated prior to the full environmental and historic preservation review</u>.

SUBGRANTEE AGREEMENT-REALLOCATION

11-AZDOHS-HSGP- 888106-02

Between

The Arizona Department of Homeland Security
And

City of Flagstaff

WHEREAS, A.R.S. § 41-4254 charges the Arizona Department of Homeland Security (AZDOHS) with the responsibility of administering funds.

THEREFORE, it is agreed that the AZDOHS shall provide funding to the

City of Flagstaff

for services under the terms of this Grant Agreement.

I. PURPOSE OF AGREEMENT

The purpose of this Agreement is to specify the responsibilities and procedures for the subrecipient's role in administering homeland security grant funds.

II. TERM OF AGREEMENT, TERMINATION AND AMENDMENTS

This Agreement shall become effective on **June 1, 2013** and shall terminate on **May 31, 2014**. The obligations of the subrecipient as described herein will survive termination of this agreement.

III. DESCRIPTION OF SERVICES

The subrecipient shall provide the services for the State of Arizona, Arizona Department of Homeland Security as approved in the grant application titled

"Portable Radio Program"

and funded at **$10,978.81** (as may have been modified by the award letter).

IV. MANNER OF FINANCING

The AZDOHS shall:

a) Provide up to **$ 10,978.81** to the subrecipient for services provided under Paragraph III.

b) Payment made by the AZDOHS to the subrecipient shall be on a reimbursement basis only and is conditioned upon receipt of proof of payment and applicable, accurate and complete reimbursement documents, as deemed necessary by the AZDOHS, to be submitted by the subrecipient. A listing of acceptable documentation can be found at www.azdohs.gov. Payments will be contingent upon receipt of all reporting requirements of the subrecipient under this Agreement.

V. FISCAL RESPONSBILITY

It is understood and agreed that the total amount of the funds used under this Agreement shall be used only for the project as described in the application. Any modification to quantity or scope of work must be preapproved in writing by the AZDOHS. Therefore, should the project not be completed, the subrecipient shall reimburse said funds directly to the AZDOHS immediately. If the project is completed at a lower cost than the original budget called for, the amount reimbursed to the subrecipient shall be for only the amount of dollars actually spent by the subrecipient in accordance with the approved application. For any funds received under this Agreement for which expenditure is disallowed by an audit exemption or otherwise by the AZDOHS, the State, or Federal government, the subrecipient shall reimburse said funds directly to the AZDOHS immediately.

VI. FINANCIAL AUDIT/PROGRAMATIC MONITORING

The subrecipient agrees to terms specified in A.R.S. § 35-214 and § 35-215.

a) In addition, in compliance with the Federal Single Audit Act (31 U.S.C. par. 7501-7507), as amended by the Single Audit Act Amendments of 1996 (P.L. 104 to 156), the subrecipient must have an annual audit conducted in accordance with OMB Circular #A-133 ("Audits of States, Local Governments, and Non-profit Organizations") if the subrecipient expends more than $500,000 from Federal awards. If the subrecipient has expended more than $500,000 in Federal dollars, a copy of the subrecipient's audit report for the previous fiscal year and subsequent years within the period of performance is due annually to AZDOHS by March 31st.

b) Subrecipients will be monitored periodically by the AZDOHS staff, both programmatically and financially, to ensure that the project goals, objectives, performance requirements, timelines, milestone completion, budgets, and other related program criteria are being met. Monitoring will be accomplished through a combination of office-based reviews and onsite monitoring visits. Monitoring can involve aspects of the work involved under this contract including but not limited to the review and analysis of the financial, programmatic, performance and administrative issues relative to each program and will identify areas where technical assistance and other support may be needed.

VII. APPLICABLE FEDERAL REGULATIONS

The subrecipient must comply with the grant guidance Office of Management and Budget (OMB) Circulars Code of Federal Regulations (CFR) and other Federal guidance including but not limited to:

a) 44 CFR Chapter 1, Federal Emergency Management Agency, Department of Homeland Security at http://www.access.gpo.gov/nara/cfr/waisidx_07/44cfrv1_07.html.

b) 2 CFR 225 Cost Principles for State, Local & Indian Tribal Governments (A-87 OMB Circular), at http://www.access.gpo.gov/nara/cfr/waisidx_07/2cfr225_07.html. Cost Principles: 2 CFR Part 225, State and Local Governments; 2 CFR Part 220, Educational Institutions; 2 CFR Part 230, Non-Profit Organizations; Federal Acquisition Regulation Sub-part 31.2, Contracts with Commercial Organizations. OMB Circular A-133, Audits of States, Local Governments, and Non-Profit Organizations, at http://www.whitehouse.gov/omb/circulars/a133/a133.html.

c) 44 CFR Part 13, Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments (formerly OMB Circular A-102), at http://149.168.212.15/mitigation/Library/44_CFR-Part_13.pdf. U.S. Department of Homeland Security Authorized Equipment List (AEL), at https://www.rkb.mipt.org/ael.cfm 2 CFR Part 215, Institutions of Higher Education, Hospitals and Other Non-Profit Organizations.

d) 28 CFR applicable to grants and cooperative agreements, including Part II, Applicability of Office of Management and Budget Circulators; Part 18, Administrative Review Procedure; Part 20, Criminal Justice Information Systems; Part 22, Confidentiality of Identifiable Research and Statistical Information; Part 23, Criminal Intelligence System Operating Policies; Part 42, Non-discrimination Equal Employment Opportunities Policies and Procedures; Part 61, Procedures for Implementing the National Environmental Policy Act; Part 63, Floodplain Management and Wetland Protection Procedures; and Part 66, Uniform Administrative Requirements for Grants and Co-operative Agreements to State and Local Government.

Included within the above mentioned guidance documents are provisions for the following:

NIMSCAST
The subrecipient agrees to complete the National Incident Management System Compliance Assistance Support Tool (NIMSCAST) and remain in compliance.

Environmental Planning and Historic Preservation
The subrecipient shall comply with all applicable Federal, State, and Local environmental and historic preservation (EHP) requirements and shall provide any information requested by FEMA to ensure compliance with applicable laws including: National Environmental Policy Act, National Historic Preservation Act, Endangered Species Act, and Executive Orders on Floodplains (11988), Wetlands (11990) and Environmental Justice (12898).Subrecipient shall not undertake any project having the potential to impact EHP resources without the prior approval of AZDOHS/FEMA, including but not limited to communications towers, physical security enhancements, new construction, and modifications to buildings that are 50 years old or greater. Subrecipient must comply with all conditions placed on the project as the result of the EHP review. Any change to the approved project scope of work will require re-evaluation for compliance with these EHP requirements. If ground disturbing activities occur during project implementation, the subrecipient must ensure monitoring of ground disturbance and if any potential archeological resources are discovered, the subrecipient will immediately cease construction in that area and notify FEMA and the appropriate State Historic Preservation Office. Procurement and construction activities shall not be initiated prior to the full environmental and historic preservation review.

Consultants/Trainers/Training Providers
Billings for consultants/trainers/training providers must include at a minimum: a description of services; dates of services; number of hours for services performed; rate charged for services; and, the total cost of services performed. Consultant/trainer/training provider costs must be within the prevailing rates; must be obtained under consistent treatment with the procurement policies of the subrecipient and 44 CFR Chapter 1, Part 13; and shall not exceed the maximum of $450 per day per consultant/trainer/training provider unless prior written approval is granted by the AZDOHS. In addition to the per day $450 maximum amount, the consultant/trainer/training provider may be reimbursed

reasonable travel, lodging, and per diem not to exceed the state rate. Itemized receipts are required for lodging and travel reimbursements. The subrecipient will not be reimbursed costs other than travel, lodging, and per diem on travel days for consultants/trainers/training providers.

Contractors/Subcontractors
The subrecipient may enter into written subcontract(s) for performance of certain of its functions under the contract in accordance with terms established in the OMB Circulars, Code of Federal Regulations, DHS Guidance and DHS Program Guide. The subrecipient agrees and understands that no subcontract that the subrecipient enters into with respect to performance under this Agreement shall in any way relieve the subrecipient of any responsibilities for performance of its duties. The subrecipient shall give the AZDOHS immediate notice in writing by certified mail of any action or suit filed and prompt notice of any claim made against the subrecipient by any subcontractor or vendor which in the opinion of the subrecipient may result in litigation related in any way to the Agreement with the AZDOHS.

Personnel and Travel Costs
All grant funds expended for personnel, travel, lodging, and per diem must be consistent with the subrecipient's policies and procedures and must be applied uniformly to both federally financed and other activities of the agency. At no time will the subrecipient's reimbursement(s) exceed the State rate established by the Arizona Department of Administration, General Accounting Office Travel Policies: http://www.gao.state.gov.

Procurement
The subrecipient shall comply with all internal agency procurement rules/policies and must also comply with Federal procurement rules/policies as outlined in section VII and all procurement must comply with Arizona State procurement code and rules. The Federal intent is that all Homeland Security Funds are awarded competitively. The subrecipient shall not enter into a Sole or Single Source procurement agreement, unless prior written approval is granted by the AZDOHS.

Training and Exercise
The subrecipient agrees that any grant funds used for training and exercise must be in compliance with grant guidance. All training must be approved through the ADEM/AZDOHS training request process prior to execution of training contract(s). All exercises must utilize the FEMA Homeland Security Exercise and Evaluation Program (HSEEP) Toolkit for exercise design, development and scheduling. Subrecipient agrees to:

a) Submit the HSEEP Toolkit Exercise Summary to AZDOHS with all Exercise Reimbursement Requests.
b) Post all exercises, documentation and After Action Reports/Improvement Plans via the HSEEP Toolkit.
c) Within 60 days of completion of an exercise, the exercise host subrecipent is required to upload the AAR/IP into the HSEEP Toolkit and email the AAR/IP to the local County Emergency Manager, the FEMA Region IX Exercise POC, HSEEP@dhs.gov, the AZDOHS Strategic Planner, and the Arizona Department of Emergency Management (ADEM) Exercise Officer.

Nonsupplanting Agreement
The subrecipient shall not use funds to supplant State or Local funds or other resources that would otherwise have been made available for this program/project. Further, if a position created by a grant is filled from within, the vacancy created by this action must be filled within thirty (30) days. If the vacancy is not filled within thirty (30) days, the subrecipient must stop charging the grant for the new position. Upon filling the vacancy, the subrecipient may resume charging for the grant position.

E-Verify
Compliance requirements for A.R.S. § 41-4401—immigration laws and E-Verify requirement.

a) The subrecipient warrants compliance with all Federal immigration laws and regulations relating to employees and warrants its compliance with Section A.R.S. § 23-214, Subsection A. (That subsection reads: "After December 31, 2007, every employer, after hiring an employee, shall verify the employment eligibility of the employee through the E-Verify program).

b) A breach of a warranty regarding compliance with immigration laws and regulations shall be deemed a material breach of the contract and the subrecipient may be subject to penalties up to and including termination of the Agreement.

c) The AZDOHS retains the legal right to inspect the papers of any employee who works on the Agreement to ensure that the subrecipient is complying with the warranty under paragraph (a) above.

Property Control
Effective control and accountability must be maintained for all property. The subrecipient must adequately safeguard all such property and must assure that it is used solely for authorized purposes as described in the guidance and application. The subrecipient shall exercise caution in the use, maintenance, protection and preservation of such property.

a) Equipment shall be used by the subrecipient in the program or project for which it was acquired as long as needed, whether or not the program or project continues to be supported by federal grant funds. Theft, destruction, or loss of property shall be reported to the AZDOHS immediately.

b) Nonexpendable Property is property which has a continuing use, is not consumed in use, is of a durable nature with an expected service life of one or more years, has an acquisition cost of $300 (Three Hundred Dollars) or more, and does not become a fixture or lose its identity as a component of other equipment or plant.

c) A Capital Asset is any personal or real property, or fixture that has an acquisition cost of $5,000 (Five Thousand Dollars) or more per unit and/or a useful life of more than one year. When use of the Capital Asset for project activities is discontinued, the subrecipient shall request/receive authorization from AZDOHS prior to disposition.

d) A Property Control Form shall be maintained for the entire scope of the program or project for which property was acquired through the end of its useful life and/or disposition. Nonexpendable Property and Capital Assets must be included on the Property Control Form. When disposition of Nonexpendable Property and Capital Assets occurs the subrecipient shall submit an updated Property Control Form to AZDOHS.

e) Upon submission of the final quarterly programmatic report the subrecipient must file with the AZDOHS a copy of the Property Control Form. The subrecipient agrees to be subject to equipment monitoring and auditing by state or federal authorized representatives to verify information.

f) A physical inventory of the Nonexpendable Property and Capital Assets must be taken and the results reconciled with the Property Control Form at least once every two years.

(1) A control system must be developed to ensure adequate safeguards to prevent loss, damage, or theft of the property. Any loss, damage, or theft shall be investigated.

(2) Adequate maintenance procedures must be developed to keep the property in good condition.

Allowable Costs

The allowability of costs incurred under this agreement shall be determined in accordance with the general principles of allowability and standards for selected cost items as set forth in the applicable OMB Circulars, Code of Federal Regulations, authorized equipment lists and guidance documents referenced above.

a) The subrecipient agrees that grant funds are not to be expended for any indirect costs that may be incurred by the subrecipient for administering these funds.
b) The subrecipeint agrees that grant funds are not to be expended for any Management and Administrative (M&A) costs that may be incurred by the subrecipient for administering these funds unless explicitly applied for and approved in writing by the AZDOHS and shall be in compliance with Grant Guidance.

VIII. DEBARMENT CERTIFICATION

The subrecipient agrees to comply with the Federal Debarment and Suspension regulations as outlined in the "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – Lower Tier Covered Transactions."

IX. FUNDS MANAGEMENT

The subrecipient must maintain funds received under this Agreement in separate ledger accounts and cannot mix these funds with other sources. The subrecipient must manage funds according to applicable Federal regulations for administrative requirements, costs principles, and audits.

The subrecipient must maintain adequate business systems to comply with Federal requirements. The business systems that must be maintained are:

- Financial Management
- Procurement
- Personnel
- Property
- Travel

A system is adequate if it is 1) written; 2) consistently followed – it applies in all similar circumstances; and 3) consistently applied – it applies to all sources of funds.

X. REPORTING REQUIREMENTS

Regular reports by the subrecipient shall include:

a) Programmatic Reports
The subrecipient shall provide quarterly programmatic reports to the AZDOHS within fifteen (15) working days of the last day of the quarter in which services are provided. The subrecipient shall use the form provided by the AZDOHS to submit quarterly programmatic reports. The report shall contain such information as deemed necessary by the AZDOHS. The subrecipient shall use the Quarterly Programmatic Report Format template, which is posted at www.azdohs.gov. If the scope of the project has been fully completed and implemented, and there will be no further updates, then the quarterly programmatic report for the quarter in which the project was completed will be sufficient as the final report. The report should be marked as final and should be inclusive of all necessary and pertinent information regarding the project as deemed necessary by the AZDOHS. Quarterly programmatic reports shall be submitted to the AZDOHS until the entire scope of the project is completed

b) Quarterly Programmatic Reports are due:
January 15 (period October 1– December 31)
April 15 (period January 1 – March 31)
July 15 (period April 1 – June 30)
October 15 (period July 1 – September 30)

c) Financial Reimbursements
The subrecipient shall provide as frequently as monthly but not less than quarterly requests for reimbursement. Reimbursements shall be submitted with the Reimbursement Form provided by the AZDOHS staff. The subrecipient shall submit a final reimbursement for expenses received and invoiced prior to the end of the termination of this Agreement no more than **forty-five (45) calendar days** after the end of the Agreement. Requests for reimbursement received later than the forty-five (45) days after the Agreement termination will not be paid. The final reimbursement request as submitted shall be marked FINAL.

The AZDOHS requires that all requests for reimbursement are submitted via U.S. mail (United States Postal Service), FedEx, UPS, etc...or in person. Reimbursements submitted via fax or by any electronic means will not be accepted.

The AZDOHS reserves the right to request and/or require any supporting documentation it feels necessary in order to process reimbursements.

All reports shall be submitted to the contact person as described in Paragraph XXXIX, NOTICES, of this Agreement.

XI. ASSIGNMENT AND DELEGATION

The subrecipient may not assign any rights hereunder without the express, prior written consent of both parties.

XII. AMENDMENTS

Any change in this Agreement including but not limited to the Description of Services and budget described herein, whether by modification or supplementation, must be accomplished by a formal Agreement amendment signed and approved by and between the duly authorized representative of the subrecipient and the AZDOHS.

Any such amendment shall specify: 1) an effective date; 2) any increases or decreases in the amount of the subrecipient's compensation if applicable; 3) be titled as an "Amendment," and 4) be signed by the parties identified in the preceding sentence. The subrecipient expressly and explicitly understands and agrees that no other method of communication, including any other document, correspondence, act, or oral communication by or from any person, shall be used or construed as an amendment or modification or supplementation to this Agreement.

XIII. OFFSHORE PERFORMANCE OF WORK PROHIBITED

Due to security and identity protection concerns, all services under this Agreement shall be performed within the borders of the United States. All storage and processing of information shall be performed within the borders of the United States. This provision applies to work performed by subcontractors at all tiers.

XIV. AGREEMENT RENEWAL

This Agreement shall not bind nor purport to bind the AZDOHS for any contractual commitment in excess of the original Agreement period.

XV. RIGHT TO ASSURANCE

If the AZDOHS in good faith has reason to believe that the subrecipient does not intend to, or is unable to perform or continue performing under this Agreement, the AZDOHS may demand in writing that the subrecipient give a written assurance of intent to perform. If the subrecipient fails to provide written assurance within the number of days specified in the demand, the AZDOHS at its option may terminate this Agreement.

XVI. CANCELLATION FOR CONFLICT OF INTEREST

The AZDOHS may, by written notice to the subrecipient, immediately cancel this Agreement without penalty or further obligation pursuant to A.R.S. § 38-511 if any person significantly involved in initiating, negotiating, securing, drafting or creating the Agreement on behalf of the State or its subdivisions (unit of Local Government) is an employee or agent of any other party in any capacity or a consultant to any other party to the Agreement with respect to the subject matter of the Agreement. Such cancellation shall be effective when the parties to the Agreement receive written notice from the AZDOHS, unless the notice specifies a later time.

XVII. THIRD PARTY ANTITRUST VIOLATIONS

The subrecipient assigns the State of Arizona any claim for overcharges resulting from antitrust violations to the extent that such violations concern materials or services supplied by third parties to subrecipient toward fulfillment of this Agreement.

XVIII. AVAILABILITY OF FUNDS

Every payment obligation of the AZDOHS under this Agreement is conditioned upon the availability of funds appropriated or allocated for the payment of such obligations. If the funds are not allocated and available for the continuance of this Agreement, the AZDOHS may terminate this Agreement at the end of the period for which funds are available. No liability shall accrue to the AZDOHS in the event this provision is exercised, and the AZDOHS shall not be obligated or liable for any future payments or for any damages as a result of termination under this paragraph, including purchases and/or contracts entered into by the subrecipient in the execution of this Agreement.

XIX. FORCE MAJEURE

If either party hereto is delayed or prevented from the performance of any act required in this Agreement by reason of acts of God, strikes, lockouts, labor disputes, civil disorder, or other causes without fault and beyond the control of the party obligated, performance of such act will be excused for the period of the delay.

XX. PARTIAL INVALIDITY

Any term or provision of this Agreement that is hereafter declared contrary to any current or future law, order, regulation, or rule, or which is otherwise invalid, shall be deemed stricken from this Agreement without impairing the validity of the remainder of this Agreement.

XXI. ARBITRATION

In the event of any dispute arising under this Agreement, written notice of the dispute must be provided to the other party within thirty (30) days of the events giving the rise to the dispute. The subrecipient agrees to terms specified in A.R.S. § 12-1518.

XXII. GOVERNING LAW AND CONTRACT INTERPRETATION

a) This Agreement shall be governed and interpreted in accordance with the laws of the State of Arizona.

b) This Agreement is intended by the parties as a final and complete expression of their agreement. No course of prior dealings between the parties and no usage of the trade shall supplement or explain any terms in this document.

c) Either party's failure to insist on strict performance of any term or condition of the Agreement shall not be deemed a waiver of that term or condition even if the party accepting or acquiescing in the nonconforming performance knows of the nature of the performance and fails to object.

XXIII. ENTIRE AGREEMENT

This Agreement and its Exhibits constitute the entire Agreement between the parties hereto pertaining to the subject matter hereof and may not be changed or added to except by a writing signed by all parties hereto in conformity with Paragraph X, REPORTING REQUIREMENTS; provided; however, that the AZDOHS shall have the right to immediately amend this Agreement so that it complies with any new legislation, laws, ordinances, or rules affecting this Agreement. The subrecipient agrees to comply with any such amendment within ten (10) business days of receipt of a fully executed amendment. All prior and contemporaneous agreements, representations, and understandings of the parties, oral, written, pertaining to the subject matter hereof, are hereby superseded or merged herein.

XXIV. RESTRICTIONS ON LOBBYING

The subrecipient shall not use funds made available to it under this Agreement to pay for, influence, or seek to influence any officer or employee of a State or Federal government.

XXV. LICENSING

The subrecipient, unless otherwise exempted by law, shall obtain and maintain all licenses, permits, and authority necessary to perform those acts it is obligated to perform under this Agreement.

XXVI. NON-DISCRIMINATION

The subrecipient shall comply with all State and Federal equal opportunity and non-discrimination requirements and conditions of employment, including the Americans with Disabilities Act, in accordance with A.R.S. title 41, Chapter 9, Article 4 and Executive Order2009-09.

XXVII. SECTARIAN REQUESTS

Funds disbursed pursuant to this Agreement may not be expended for any sectarian purpose or activity, including sectarian worship or instruction in violation of the United States or Arizona Constitutions.

XXVIII. SEVERABILITY

The provisions of this Agreement are severable. Any term or condition deemed illegal or invalid shall not affect any other term or condition of the Agreement.

XXIX. ADVERTISING AND PROMOTION OF AGREEMENT

The subrecipient shall not advertise or publish information for commercial benefit concerning this Agreement without the written approval of the AZDOHS.

XXX. OWNERSHIP OF INFORMATION, PRINTED AND PUBLISHED MATERIAL

The AZDOHS reserves the right to review and approve any publications funded or partially funded through this Agreement. All publications funded or partially funded through this Agreement shall recognize the AZDOHS and the U.S. Department of Homeland Security. The U.S. Department of Homeland Security and the AZDOHS shall have full and complete rights to reproduce, duplicate, disclose, perform, and otherwise use all materials prepared under this Agreement.

The subrecipient agrees that any report, printed matter, or publication (written, visual, or sound, but excluding press releases, newsletters, and issue analyses) issued by the subrecipient describing programs or projects funded in whole or in part with Federal funds shall contain the following statement:

> "This document was prepared under a grant from U.S. Department of Homeland Security. Points of view or opinions expressed in this document are those of the authors and do not necessarily represent the official position or policies of the U.S. Department of Homeland Security."

The subrecipient also agrees that one copy of any such publication, report, printed matter, or publication shall be submitted to the AZDOHS to be placed on file and distributed as appropriate to other potential sub-recipients or interested parties. The AZDOHS may waive the requirement for submission of any specific publication upon submission of a request providing justification from the subrecipient.

The AZDOHS and the subrecipient recognize that research resulting from this Agreement has the potential to become public information. However, prior to the termination of this Agreement, the subrecipient agrees that no research-based data resulting from this Agreement shall be published or otherwise distributed in any form without express written permission from the AZDOHS and possibly the U.S. Department of Homeland Security. It is also agreed that any report or printed matter completed as a part of this agreement is a work for hire and shall not be copyrighted by the subrecipient.

XXXI. CLOSED-CAPTIONING OF PUBLIC SERVICE ANNOUNCEMENTS

Any television public service announcement that is produced or funded in whole or in part by the subrecipient shall include closed captioning of the verbal content of such announcement.

XXXII. INDEMNIFICATION

To the extent permitted by law, each party (as indemnitor) agrees to indemnify, defend and hold harmless the other party (as indemnitee) from and against any and all claims, losses, liability, costs, or expenses (including reasonable attorney's fees) (hereinafter collectively referred to as claims) arising out of bodily injury of any person (including death) or property damage, but only to the extent that such claims which result in vicarious/derivative liability to the indemnitee, are caused by the act, omission, negligence, misconduct, or other fault of the indemnitor, its officers, officials, agents, employees, or volunteers.

XXXIII. TERMINATION

a) All parties reserve the right to terminate the Agreement in whole or in part due to the failure of the subrecipient or the grantor to comply with any term or condition of the Agreement, to acquire and maintain all required insurance policies, bonds, licenses and permits or to make satisfactory progress in performing the Agreement. The staff of either party shall provide a written thirty (30) day advance notice of the termination and the reasons for it.

b) If the subrecipient chooses to terminate the contract before the grant deliverables have been met then the AZDOHS reserves the right to collect all reimbursements distributed to the subrecipient.

c) The AZDOHS may, upon termination of this Agreement, procure, on terms and in the manner that it deems appropriate, materials or services to replace those under this Agreement. The subrecipient shall be liable to the AZDOHS for any excess costs incurred by the AZDOHS in procuring materials or services in substitution for those due from the subrecipient.

XXXIV. CONTINUATION OF PERFORMANCE THROUGH TERMINATION

The subrecipient shall continue to perform, in accordance with the requirements of the Agreement, up to the date of termination, as directed in the termination notice.

XXXV. PARAGRAPH HEADINGS

The paragraph headings in this Agreement are for convenience of reference only and do not define, limit, enlarge, or otherwise affect the scope, construction, or interpretation of this Agreement or any of its provisions.

XXXVI. COUNTERPARTS

This Agreement may be executed in any number of counterparts, copies, or duplicate originals. Each such counterpart, copy, or duplicate original shall be deemed an original, and collectively they shall constitute one agreement.

XXXVII. AUTHORITY TO EXECUTE THIS AGREEMENT

Each individual executing this Agreement on behalf of the subrecipient represents and warrants that he or she is duly authorized to execute this Agreement.

XXXVIII. SPECIAL CONDITIONS

a) The subrecipient must comply with the most recent version of the Administrative Requirements, Cost Principles, and Audit requirements

b) The subrecipient acknowledges that U.S. Department of Homeland Security and the AZDOHS reserves a royalty-free, non-exclusive, and irrevocable license to reproduce, publish, or otherwise use, and authorize others to use, for Federal government purposes: (a) the copyright in any work developed under an award or sub-award; and (2) any rights of copyright to which a subrecipient purchases ownership with Federal support. The subrecipient shall consult with the AZDOHS regarding the allocation of any patent rights that arise from, or are purchased with, this funding.

c) The subrecipient agrees that, when practicable, any equipment purchased with grant funding shall be prominently marked as follows: **"Purchased with funds provided by the U.S. Department of Homeland Security."**

d) The subrecipient agrees to cooperate with any assessments, state/national evaluation efforts, or information or data collection requests, including, but not limited to, the provision of any information required for the assessment or evaluation of any activities within this agreement.

e) The subrecipient is prohibited from transferring funds between programs (State Homeland Security Program, Urban Area Security Initiative, Citizen Corps Program, Operation Stonegarden, and Metropolitan Medical Response System).

XXXIX. NOTICES

Any and all notices, requests, demands, or communications by either party to this Agreement, pursuant to or in connection with this Agreement shall be in writing be delivered in person or shall be sent to the respective parties at the following addresses:

Arizona Department of Homeland Security
1700 West Washington, Suite 210
Phoenix, AZ 85007

The subrecipient shall address all programmatic notices relative to this Agreement to the appropriate the AZDOHS staff; contact information at www.azdohs.gov.

The subrecipient shall submit reimbursement requests relative to this Agreement to the appropriate the AZDOHS staff; contact information at www.azdohs.gov

The AZDOHS shall address all notices relative to this Agreement to:

City of Flagstaff

City Manager Kevin Burke

211 West Aspen Avenue

Flagstaff, AZ 86001-5827

XXXX. IN WITNESS WHEREOF

The parties hereto agree to execute this Agreement.

FOR AND BEHALF OF THE

City of Flagstaff

Authorized Signature above

Kevin Burke, City Manager
Print Name & Title above

Enter Date above

FOR AND BEHALF OF THE

Arizona Department of Homeland Security

Gilbert M. Orrantia
Director

Date

This form is to be signed and returned.

Grant #: **888106-02** Sub-Recipient: **City of Flagstaff - Flagstaff Police Department**

Project Title: **Portable Radio program**
Grant Program: **STATE HOMELAND SECURITY GRANT PROGRAM**

1. Unit of Government: **None Entered**
   Point of Contact: **Grants Manager Stacey Brechler-Knaggs**

   Sub-recipient Address:
   Street: **211 West Aspen**

   City/State/Zip: **Flagstaff, AZ 86001-5827**

   Head of Agency: **City Manager Kevin Burke**
   Authorized individual has delegated authority to make application on behalf of the agency.
   Phone#: **928-213-2051**

   E-mail Address: **kburke@flagstaffaz.gov**

2. Organizational Type: **Local Government / Municipality**

3. Region or Entity: **North Region**

4. Initiative Title: **Strengthen Interoperable Communications Capabilities**

5. Total Dollar Amount Requested: **$34,764** Total Dollar Amount Awarded: **$10,978.81**

6. Enter the 2011-2014 State Homeland Security Strategy Objectives (EXAMPLE: 1.1.0) and Action Item(s) Numbers (EXAMPLE: 1.1.4) that relate to this project. To learn more about the strategy visit this website:
   Objective 1.1.0 Bolster Arizona's Communication Capability in Interoperable Voice Communications / Radios
   Action Item 1.1.3 Upgrade operable communication systems for state, local and Tribal entities in support of interoperable communications

7. Identify the primary National Priority that is supported by this project from the dropdown box below:
   NP 5. Strengthen Interoperable Communications Capabilities

8. Is this project new or ongoing? If the project is ongoing, identify the corresponding projects and funding amounts for each year as applicable. Also, for the current grant cycle, please identify, if any, requests for funding from other funding sources i.e. EOC, EMPG etc.
   This is an ongoing project.

9. Can partial funding be accepted? If so, at what specific dollar amount(s), items, and quantities? Be sure to list the order of priority.
   Partial funding can be accepted for this project. One half of total the total project cost ($17,382) would purchase 3 dual band portable radios.

10. Please list the multiple jurisdictions and/or disciplines served by this project. Include POC information for each partnering agency.
    City of Flagstaff, Flagstaff Police Department :
    Project Representative, POC Lt. Frank Higgins, 911 E. Sawmill RD., Flagstaff, Az 86001 (928) 556-2207

APPROVAL PROCESS

The signatures below verify the submission/approval process. All parties signify that all aspects of this project are allowable, reasonable and justifiable in accordance with published federal grant guidelines. The signatures confirm the acceptance that the funding amounts and quantities are limited to the amounts and quantities approved and awarded on the Application Summary and Budget Narrative page(s) (Equipment, Training, Exercise, Planning, Organization, M&A, if applicable) as provided in the award letter attachments.

Project Point of Contact	Grants Manager Stacey Brechler-Knaggs		
	Print Name	Signature	Date
Strategic Planner or Assistant Director Planning & Preparedness			
	Print Name	Signature	Date

This form is to be signed and returned.

Award Funded as follows:

	Requested Totals	Recommended Totals	Awarded Totals
Equipment	$34,764	$10,978.81	$10,978.81
Training	$ 0	$ 0	$ 0
Exercise	$ 0	$ 0	$ 0
Planning	$ 0	$ 0	$ 0
M & A	$ 0	$ 0	$ 0
Organization	$ 0	$ 0	$ 0
Award Total	$34,764	$10,978.81	$10,978.81

STATE OF ARIZONA

Department of Homeland Security

2013 STATE HOMELAND SECURITY GRANT PROGRAM PROJECT DETAIL WORKBOOK

City of Flagstaff - Flagstaff Police Department 888106-02

Application Summary

Award Funded As Follows:

	Requested Amounts	*Recommended Amounts*	*Awarded Amounts*
Equipment	$34,764.00	$10,978.81	$10,978.81
Training	$0.00	$0.00	$0.00
Exercise	$0.00	$0.00	$0.00
Planning	$0.00	$0.00	$0.00
M & A	$0.00	$0.00	$0.00
Organization	$0.00	$0.00	$0.00
Award Totals	$34,764.00	$10,978.81	$10,978.81

STATE OF ARIZONA
Department of Homeland Security
2013 STATE HOMELAND SECURITY GRANT PROGRAM
PROJECT DETAIL WORKBOOK

City of Flagstaff - Flagstaff Police Department 888106-02

Equipment - Budget Narrative

Budget Description: List each item from your budget worksheet pages in the same order in which they are listed on the proceeding page. For Equipment, each Allowable Equipment Category (PPE, Interoperable Communications, Detection, etc.) must be listed. Under the federal guidelines "Equipment" has been defined as any single item that has a value of more than 5,000 and a life expectancy greater than a year. However, for this budget narrative please be sure to include any and all items that can be found on the AEL. Please be sure to provide a brief description of each item and how each item will be utilized. Equipment cost estimates must be listed. For each item of equipment, list the Authorized Equipment List (AEL) Item Number. The most current AEL can be found on line at the Responder Knowledge Base at the following website: www.rkb.us. If "Other Authorized Equipment" was annotated, specify the equipment here. All equipment associated with this grant must be listed on this page only. If you have any questions or concerns regarding the AEL, please feel free to contact Michael Stidham at mstidham@azdohs.gov.

Brief Description and Utilization:	This equipment is P25 and narrowband compliant and compatible hand held radio supporting encryption, VHF, UHF 800mh and digital capabilities to be used by officers during normal operations and or special operations/events.

AEL #	*Item Description*	*Quantity*	*Cost*	*Total Cost*	*AZDOHS Approved*	*Approved Quantity*	*Approved Cost*
06CP-01-PORT	Individual/portable radio transceivers with chargers	6	$5,794.00	$34,764.00	Maryann Johns	2	$10,978.81

Totals For City of Flagstaff - Flagstaff Police Department Contract Number 888106-02 *Requested* $34,764.00 *Approved* $10,978.81

State of Arizona
Department of Homeland Security

Governor Janice K. Brewer

Director Gilbert M. Orrantia

FFY 2011-REALLOCATION

Dear Stakeholder:

The projectthat your agency submitted to the Arizona Department of Homeland Security (AZDOHS) for consideration under the Homeland Security Grant Program has been awarded.

Please be advised, your project required an Environmental and Historic Preservation review. It has been reviewed and your project has been determined to have no potential impact to environmental or historic concerns. No further EHP review is required unless you modify the project and it is approved by AZDOHS. If you need further clarification please contact Michael Stidham at (602) 542-7041 or mstidham@azdohs.gov with AZDOHS for further information regarding the EHP specific requirements for your award.

As stated in the subgrantee agreement:

> The subrecipient shall comply with all applicable Federal, State, and local environmental and historic preservation (EHP) requirements and shall provide any information requested by FEMA to ensure compliance with applicable laws including: National Environmental Policy Act, National Historic Preservation Act, Endangered Species Act, and Executive Orders on Floodplains (11988), Wetlands (11990) and Environmental Justice (12898).Subrecipient shall not undertake any project having the potential to impact EHP resources <u>without the prior approval of AZDOHS/FEMA</u>, including but not limited to communications towers, physical security enhancements, new construction, and modifications to buildings that are 50 years old or greater. Subrecipient must comply with all conditions placed on the project as the result of the EHP review. Any change to the approved project scope of work will require re-evaluation for compliance with these EHP requirements. If ground disturbing activities occur during project implementation, the subrecipient must ensure monitoring of ground disturbance and if any potential archeological resources arc discovered, the subrecipient will immediately cease construction in that area and notify FEMA and the appropriate State Historic Preservation Office. <u>Construction activities shall not be initiated prior to the full environmental and historic preservation review</u>.

SUBGRANTEE AGREEMENT-REALLOCATION

10-AZDOHS-HSGP-777109-02

Between

The Arizona Department of Homeland Security
And

City of Flagstaff

WHEREAS, A.R.S. § 41-4254 charges the Arizona Department of Homeland Security (AZDOHS) with the responsibility of administering funds.

THEREFORE, it is agreed that the AZDOHS shall provide funding to the

City of Flagstaff

for services under the terms of this Grant Agreement.

I. PURPOSE OF AGREEMENT

The purpose of this Agreement is to specify the responsibilities and procedures for the subrecipient's role in administering homeland security grant funds.

II. TERM OF AGREEMENT, TERMINATION AND AMENDMENTS

This Agreement shall become effective on **May 17, 2013** and shall terminate on **July 31, 2013**. The obligations of the subrecipient as described herein will survive termination of this agreement.

III. DESCRIPTION OF SERVICES

The subrecipient shall provide the services for the State of Arizona, Arizona Department of Homeland Security as approved in the grant application titled

"Gas Masks and Replacement Filters"

and funded at **$ 5,464.54** (as may have been modified by the award letter).

IV. MANNER OF FINANCING

The AZDOHS shall:

a) Provide up to **$ 5,464.54** to the subrecipient for services provided under Paragraph III.

b) Payment made by the AZDOHS to the subrecipient shall be on a reimbursement basis only and is conditioned upon receipt of proof of payment and applicable, accurate and complete reimbursement documents, as deemed necessary by the AZDOHS, to be submitted by the subrecipient. A listing of acceptable documentation can be found at www.azdohs.gov. Payments will be contingent upon receipt of all reporting requirements of the subrecipient under this Agreement.

V. FISCAL RESPONSBILITY

It is understood and agreed that the total amount of the funds used under this Agreement shall be used only for the project as described in the application. Any modification to quantity or scope of work must be preapproved in writing by the AZDOHS. Therefore, should the project not be completed, the subrecipient shall reimburse said funds directly to the AZDOHS immediately. If the project is completed at a lower cost than the original budget called for, the amount reimbursed to the subrecipient shall be for only the amount of dollars actually spent by the subrecipient in accordance with the approved application. For any funds received under this Agreement for which expenditure is disallowed by an audit exemption or otherwise by the AZDOHS, the State, or Federal government, the subrecipient shall reimburse said funds directly to the AZDOHS immediately.

VI. FINANCIAL AUDIT/PROGRAMATIC MONITORING

The subrecipient agrees to terms specified in A.R.S. § 35-214 and § 35-215.

a) In addition, in compliance with the Federal Single Audit Act (31 U.S.C. par. 7501-7507), as amended by the Single Audit Act Amendments of 1996 (P.L. 104 to 156), the subrecipient must have an annual audit conducted in accordance with OMB Circular #A-133 ("Audits of States, Local Governments, and Non-profit Organizations") if the subrecipient expends more than $500,000 from Federal awards. If the subrecipient has expended more than $500,000 in Federal dollars, a copy of the subrecipient's audit report for the previous fiscal year and subsequent years within the period of performance is due annually to AZDOHS by March 31st.

b) Subrecipients will be monitored periodically by the AZDOHS staff, both programmatically and financially, to ensure that the project goals, objectives, performance requirements, timelines, milestone completion, budgets, and other related program criteria are being met. Monitoring will be accomplished through a combination of office-based reviews and onsite monitoring visits. Monitoring can involve aspects of the work involved under this contract including but not limited to the review and analysis of the financial, programmatic, performance and administrative issues relative to each program and will identify areas where technical assistance and other support may be needed.

VII. APPLICABLE FEDERAL REGULATIONS

The subrecipient must comply with the grant guidance Office of Management and Budget (OMB) Circulars Code of Federal Regulations (CFR) and other Federal guidance including but not limited to:

a) 44 CFR Chapter 1, Federal Emergency Management Agency, Department of Homeland Security at http://www.access.gpo.gov/nara/cfr/waisidx_07/44cfrv1_07.html.

b) 2 CFR 225 Cost Principles for State, Local & Indian Tribal Governments (A-87 OMB Circular), at http://www.access.gpo.gov/nara/cfr/waisidx_07/2cfr225_07.html. Cost Principles: 2 CFR Part 225, State and Local Governments; 2 CFR Part 220, Educational Institutions; 2 CFR Part 230, Non-Profit Organizations; Federal Acquisition Regulation Sub-part 31.2, Contracts with Commercial Organizations. OMB Circular A-133, Audits of States, Local Governments, and Non-Profit Organizations, at http://www.whitehouse.gov/omb/circulars/a133/a133.html.

c) 44 CFR Part 13, Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments (formerly OMB Circular A-102), at http://149.168.212.15/mitigation/Library/44_CFR-Part_13.pdf. U.S. Department of Homeland Security Authorized Equipment List (AEL), at https://www.rkb.mipt.org/ael.cfm 2 CFR Part 215, Institutions of Higher Education, Hospitals and Other Non-Profit Organizations.

d) 28 CFR applicable to grants and cooperative agreements, including Part II, Applicability of Office of Management and Budget Circulators; Part 18, Administrative Review Procedure; Part 20, Criminal Justice Information Systems; Part 22, Confidentiality of Identifiable Research and Statistical Information; Part 23, Criminal Intelligence System Operating Policies; Part 42, Non-discrimination Equal Employment Opportunities Policies and Procedures; Part 61, Procedures for Implementing the National Environmental Policy Act; Part 63, Floodplain Management and Wetland Protection Procedures; and Part 66, Uniform Administrative Requirements for Grants and Co-operative Agreements to State and Local Government.

Included within the above mentioned guidance documents are provisions for the following:

NIMSCAST
The subrecipient agrees to complete the National Incident Management System Compliance Assistance Support Tool (NIMSCAST) and remain in compliance.

Environmental Planning and Historic Preservation
The subrecipient shall comply with all applicable Federal, State, and Local environmental and historic preservation (EHP) requirements and shall provide any information requested by FEMA to ensure compliance with applicable laws including: National Environmental Policy Act, National Historic Preservation Act, Endangered Species Act, and Executive Orders on Floodplains (11988), Wetlands (11990) and Environmental Justice (12898).Subrecipient shall not undertake any project having the potential to impact EHP resources without the prior approval of AZDOHS/FEMA, including but not limited to communications towers, physical security enhancements, new construction, and modifications to buildings that are 50 years old or greater. Subrecipient must comply with all conditions placed on the project as the result of the EHP review. Any change to the approved project scope of work will require re-evaluation for compliance with these EHP requirements. If ground disturbing activities occur during project implementation, the subrecipient must ensure monitoring of ground disturbance and if any potential archeological resources are discovered, the subrecipient will immediately cease construction in that area and notify FEMA and the appropriate State Historic Preservation Office. Procurement and construction activities shall not be initiated prior to the full environmental and historic preservation review.

Consultants/Trainers/Training Providers
Billings for consultants/trainers/training providers must include at a minimum: a description of services; dates of services; number of hours for services performed; rate charged for services; and, the total cost of services performed. Consultant/trainer/training provider costs must be within the prevailing rates; must be obtained under consistent treatment with the procurement policies of the subrecipient and 44 CFR Chapter 1, Part 13; and shall not exceed the maximum of $450 per day per consultant/trainer/training provider unless prior written approval is granted by the AZDOHS. In addition to the per day $450 maximum amount, the consultant/trainer/training provider may be reimbursed

reasonable travel, lodging, and per diem not to exceed the state rate. Itemized receipts are required for lodging and travel reimbursements. The subrecipient will not be reimbursed costs other than travel, lodging, and per diem on travel days for consultants/trainers/training providers.

Contractors/Subcontractors
The subrecipient may enter into written subcontract(s) for performance of certain of its functions under the contract in accordance with terms established in the OMB Circulars, Code of Federal Regulations, DHS Guidance and DHS Program Guide. The subrecipient agrees and understands that no subcontract that the subrecipient enters into with respect to performance under this Agreement shall in any way relieve the subrecipient of any responsibilities for performance of its duties. The subrecipient shall give the AZDOHS immediate notice in writing by certified mail of any action or suit filed and prompt notice of any claim made against the subrecipient by any subcontractor or vendor which in the opinion of the subrecipient may result in litigation related in any way to the Agreement with the AZDOHS.

Personnel and Travel Costs
All grant funds expended for personnel, travel, lodging, and per diem must be consistent with the subrecipient's policies and procedures and must be applied uniformly to both federally financed and other activities of the agency. At no time will the subrecipient's reimbursement(s) exceed the State rate established by the Arizona Department of Administration, General Accounting Office Travel Policies: http://www.gao.state.gov.

Procurement
The subrecipient shall comply with all internal agency procurement rules/policies and must also comply with Federal procurement rules/policies as outlined in section VII and all procurement must comply with Arizona State procurement code and rules. The Federal intent is that all Homeland Security Funds are awarded competitively. The subrecipient shall not enter into a Sole or Single Source procurement agreement, unless prior written approval is granted by the AZDOHS.

Training and Exercise
The subrecipient agrees that any grant funds used for training and exercise must be in compliance with grant guidance. All training must be approved through the ADEM/AZDOHS training request process prior to execution of training contract(s). All exercises must utilize the FEMA Homeland Security Exercise and Evaluation Program (HSEEP) Toolkit for exercise design, development and scheduling. Subrecipient agrees to:

a) Submit the HSEEP Toolkit Exercise Summary to AZDOHS with all Exercise Reimbursement Requests.
b) Post all exercises, documentation and After Action Reports/Improvement Plans via the HSEEP Toolkit.
c) Within 60 days of completion of an exercise, the exercise host subrecipent is required to upload the AAR/IP into the HSEEP Toolkit and email the AAR/IP to the local County Emergency Manager, the FEMA Region IX Exercise POC, HSEEP@dhs.gov, the AZDOHS Strategic Planner, and the Arizona Department of Emergency Management (ADEM) Exercise Officer.

Nonsupplanting Agreement
The subrecipient shall not use funds to supplant State or Local funds or other resources that would otherwise have been made available for this program/project. Further, if a position created by a grant is filled from within, the vacancy created by this action must be filled within thirty (30) days. If the vacancy is not filled within thirty (30) days, the subrecipient must stop charging the grant for the new position. Upon filling the vacancy, the subrecipient may resume charging for the grant position.

E-Verify
Compliance requirements for A.R.S. § 41-4401—immigration laws and E-Verify requirement.

a) The subrecipient warrants compliance with all Federal immigration laws and regulations relating to employees and warrants its compliance with Section A.R.S. § 23-214, Subsection A. (That subsection reads: "After December 31, 2007, every employer, after hiring an employee, shall verify the employment eligibility of the employee through the E-Verify program).

b) A breach of a warranty regarding compliance with immigration laws and regulations shall be deemed a material breach of the contract and the subrecipient may be subject to penalties up to and including termination of the Agreement.

c) The AZDOHS retains the legal right to inspect the papers of any employee who works on the Agreement to ensure that the subrecipient is complying with the warranty under paragraph (a) above.

Property Control
Effective control and accountability must be maintained for all property. The subrecipient must adequately safeguard all such property and must assure that it is used solely for authorized purposes as described in the guidance and application. The subrecipient shall exercise caution in the use, maintenance, protection and preservation of such property.

a) Equipment shall be used by the subrecipient in the program or project for which it was acquired as long as needed, whether or not the program or project continues to be supported by federal grant funds. Theft, destruction, or loss of property shall be reported to the AZDOHS immediately.

b) Nonexpendable Property is property which has a continuing use, is not consumed in use, is of a durable nature with an expected service life of one or more years, has an acquisition cost of $300 (Three Hundred Dollars) or more, and does not become a fixture or lose its identity as a component of other equipment or plant.

c) A Capital Asset is any personal or real property, or fixture that has an acquisition cost of $5,000 (Five Thousand Dollars) or more per unit and/or a useful life of more than one year. When use of the Capital Asset for project activities is discontinued, the subrecipient shall request/receive authorization from AZDOHS prior to disposition.

d) A Property Control Form shall be maintained for the entire scope of the program or project for which property was acquired through the end of its useful life and/or disposition. Nonexpendable Property and Capital Assets must be included on the Property Control Form. When disposition of Nonexpendable Property and Capital Assets occurs the subrecipient shall submit an updated Property Control Form to AZDOHS.

e) Upon submission of the final quarterly programmatic report the subrecipient must file with the AZDOHS a copy of the Property Control Form. The subrecipient agrees to be subject to equipment monitoring and auditing by state or federal authorized representatives to verify information.

f) A physical inventory of the Nonexpendable Property and Capital Assets must be taken and the results reconciled with the Property Control Form at least once every two years.

(1) A control system must be developed to ensure adequate safeguards to prevent loss, damage, or theft of the property. Any loss, damage, or theft shall be investigated.

(2) Adequate maintenance procedures must be developed to keep the property in good condition.

Allowable Costs

The allowability of costs incurred under this agreement shall be determined in accordance with the general principles of allowability and standards for selected cost items as set forth in the applicable OMB Circulars, Code of Federal Regulations, authorized equipment lists and guidance documents referenced above.

a) The subrecipient agrees that grant funds are not to be expended for any indirect costs that may be incurred by the subrecipient for administering these funds.
b) The subrecipeint agrees that grant funds are not to be expended for any Management and Administrative (M&A) costs that may be incurred by the subrecipient for administering these funds unless explicitly applied for and approved in writing by the AZDOHS and shall be in compliance with Grant Guidance.

VIII. DEBARMENT CERTIFICATION

The subrecipient agrees to comply with the Federal Debarment and Suspension regulations as outlined in the "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – Lower Tier Covered Transactions."

IX. FUNDS MANAGEMENT

The subrecipient must maintain funds received under this Agreement in separate ledger accounts and cannot mix these funds with other sources. The subrecipient must manage funds according to applicable Federal regulations for administrative requirements, costs principles, and audits.

The subrecipient must maintain adequate business systems to comply with Federal requirements. The business systems that must be maintained are:

- Financial Management
- Procurement
- Personnel
- Property
- Travel

A system is adequate if it is 1) written; 2) consistently followed – it applies in all similar circumstances; and 3) consistently applied – it applies to all sources of funds.

X. REPORTING REQUIREMENTS

Regular reports by the subrecipient shall include:

a) Programmatic Reports
The subrecipient shall provide quarterly programmatic reports to the AZDOHS within fifteen (15) working days of the last day of the quarter in which services are provided. The subrecipient shall use the form provided by the AZDOHS to submit quarterly programmatic reports. The report shall contain such information as deemed necessary by the AZDOHS. The subrecipient shall use the Quarterly Programmatic Report Format template, which is posted at www.azdohs.gov. If the scope of the project has been fully completed and implemented, and there will be no further updates, then the quarterly programmatic report for the quarter in which the project was completed will be sufficient as the final report. The report should be marked as final and should be inclusive of all necessary and pertinent information regarding the project as deemed necessary by the AZDOHS. Quarterly programmatic reports shall be submitted to the AZDOHS until the entire scope of the project is completed

b) Quarterly Programmatic Reports are due:
January 15 (period October 1– December 31)
April 15 (period January 1 – March 31)
July 15 (period April 1 – June 30)
October 15 (period July 1 – September 30)

c) Financial Reimbursements
The subrecipient shall provide as frequently as monthly but not less than quarterly requests for reimbursement. Reimbursements shall be submitted with the Reimbursement Form provided by the AZDOHS staff. The subrecipient shall submit a final reimbursement for expenses received and invoiced prior to the end of the termination of this Agreement no more than **forty-five (45) calendar days** after the end of the Agreement. Requests for reimbursement received later than the forty-five (45) days after the Agreement termination will not be paid. The final reimbursement request as submitted shall be marked FINAL.

The AZDOHS requires that all requests for reimbursement are submitted via U.S. mail (United States Postal Service), FedEx, UPS, etc...or in person. Reimbursements submitted via fax or by any electronic means will not be accepted.

The AZDOHS reserves the right to request and/or require any supporting documentation it feels necessary in order to process reimbursements.

All reports shall be submitted to the contact person as described in Paragraph XXXIX, NOTICES, of this Agreement.

XI. ASSIGNMENT AND DELEGATION

The subrecipient may not assign any rights hereunder without the express, prior written consent of both parties.

XII. AMENDMENTS

Any change in this Agreement including but not limited to the Description of Services and budget described herein, whether by modification or supplementation, must be accomplished by a formal Agreement amendment signed and approved by and between the duly authorized representative of the subrecipient and the AZDOHS.

Any such amendment shall specify: 1) an effective date; 2) any increases or decreases in the amount of the subrecipient's compensation if applicable; 3) be titled as an "Amendment," and 4) be signed by the parties identified in the preceding sentence. The subrecipient expressly and explicitly understands and agrees that no other method of communication, including any other document, correspondence, act, or oral communication by or from any person, shall be used or construed as an amendment or modification or supplementation to this Agreement.

XIII. OFFSHORE PERFORMANCE OF WORK PROHIBITED

Due to security and identity protection concerns, all services under this Agreement shall be performed within the borders of the United States. All storage and processing of information shall be performed within the borders of the United States. This provision applies to work performed by subcontractors at all tiers.

XIV. AGREEMENT RENEWAL

This Agreement shall not bind nor purport to bind the AZDOHS for any contractual commitment in excess of the original Agreement period.

XV. RIGHT TO ASSURANCE

If the AZDOHS in good faith has reason to believe that the subrecipient does not intend to, or is unable to perform or continue performing under this Agreement, the AZDOHS may demand in writing that the subrecipient give a written assurance of intent to perform. If the subrecipient fails to provide written assurance within the number of days specified in the demand, the AZDOHS at its option may terminate this Agreement.

XVI. CANCELLATION FOR CONFLICT OF INTEREST

The AZDOHS may, by written notice to the subrecipient, immediately cancel this Agreement without penalty or further obligation pursuant to A.R.S. § 38-511 if any person significantly involved in initiating, negotiating, securing, drafting or creating the Agreement on behalf of the State or its subdivisions (unit of Local Government) is an employee or agent of any other party in any capacity or a consultant to any other party to the Agreement with respect to the subject matter of the Agreement. Such cancellation shall be effective when the parties to the Agreement receive written notice from the AZDOHS, unless the notice specifies a later time.

XVII. THIRD PARTY ANTITRUST VIOLATIONS

The subrecipient assigns the State of Arizona any claim for overcharges resulting from antitrust violations to the extent that such violations concern materials or services supplied by third parties to subrecipient toward fulfillment of this Agreement.

XVIII. AVAILABILITY OF FUNDS

Every payment obligation of the AZDOHS under this Agreement is conditioned upon the availability of funds appropriated or allocated for the payment of such obligations. If the funds are not allocated and available for the continuance of this Agreement, the AZDOHS may terminate this Agreement at the end of the period for which funds are available. No liability shall accrue to the AZDOHS in the event this provision is exercised, and the AZDOHS shall not be obligated or liable for any future payments or for any damages as a result of termination under this paragraph, including purchases and/or contracts entered into by the subrecipient in the execution of this Agreement.

XIX. FORCE MAJEURE

If either party hereto is delayed or prevented from the performance of any act required in this Agreement by reason of acts of God, strikes, lockouts, labor disputes, civil disorder, or other causes without fault and beyond the control of the party obligated, performance of such act will be excused for the period of the delay.

XX. PARTIAL INVALIDITY

Any term or provision of this Agreement that is hereafter declared contrary to any current or future law, order, regulation, or rule, or which is otherwise invalid, shall be deemed stricken from this Agreement without impairing the validity of the remainder of this Agreement.

XXI. ARBITRATION

In the event of any dispute arising under this Agreement, written notice of the dispute must be provided to the other party within thirty (30) days of the events giving the rise to the dispute. The subrecipient agrees to terms specified in A.R.S. § 12-1518.

XXII. GOVERNING LAW AND CONTRACT INTERPRETATION

a) This Agreement shall be governed and interpreted in accordance with the laws of the State of Arizona.

b) This Agreement is intended by the parties as a final and complete expression of their agreement. No course of prior dealings between the parties and no usage of the trade shall supplement or explain any terms in this document.

c) Either party's failure to insist on strict performance of any term or condition of the Agreement shall not be deemed a waiver of that term or condition even if the party accepting or acquiescing in the nonconforming performance knows of the nature of the performance and fails to object.

XXIII. ENTIRE AGREEMENT

This Agreement and its Exhibits constitute the entire Agreement between the parties hereto pertaining to the subject matter hereof and may not be changed or added to except by a writing signed by all parties hereto in conformity with Paragraph X, REPORTING REQUIREMENTS; provided; however, that the AZDOHS shall have the right to immediately amend this Agreement so that it complies with any new legislation, laws, ordinances, or rules affecting this Agreement. The subrecipient agrees to comply with any such amendment within ten (10) business days of receipt of a fully executed amendment. All prior and contemporaneous agreements, representations, and understandings of the parties, oral, written, pertaining to the subject matter hereof, are hereby superseded or merged herein.

XXIV. RESTRICTIONS ON LOBBYING

The subrecipient shall not use funds made available to it under this Agreement to pay for, influence, or seek to influence any officer or employee of a State or Federal government.

XXV. LICENSING

The subrecipient, unless otherwise exempted by law, shall obtain and maintain all licenses, permits, and authority necessary to perform those acts it is obligated to perform under this Agreement.

XXVI. NON-DISCRIMINATION

The subrecipient shall comply with all State and Federal equal opportunity and non-discrimination requirements and conditions of employment, including the Americans with Disabilities Act, in accordance with A.R.S. title 41, Chapter 9, Article 4 and Executive Order2009-09.

XXVII. SECTARIAN REQUESTS

Funds disbursed pursuant to this Agreement may not be expended for any sectarian purpose or activity, including sectarian worship or instruction in violation of the United States or Arizona Constitutions.

XXVIII. SEVERABILITY

The provisions of this Agreement are severable. Any term or condition deemed illegal or invalid shall not affect any other term or condition of the Agreement.

XXIX. ADVERTISING AND PROMOTION OF AGREEMENT

The subrecipient shall not advertise or publish information for commercial benefit concerning this Agreement without the written approval of the AZDOHS.

XXX. OWNERSHIP OF INFORMATION, PRINTED AND PUBLISHED MATERIAL

The AZDOHS reserves the right to review and approve any publications funded or partially funded through this Agreement. All publications funded or partially funded through this Agreement shall recognize the AZDOHS and the U.S. Department of Homeland Security. The U.S. Department of Homeland Security and the AZDOHS shall have full and complete rights to reproduce, duplicate, disclose, perform, and otherwise use all materials prepared under this Agreement.

The subrecipient agrees that any report, printed matter, or publication (written, visual, or sound, but excluding press releases, newsletters, and issue analyses) issued by the subrecipient describing programs or projects funded in whole or in part with Federal funds shall contain the following statement:

> "This document was prepared under a grant from U.S. Department of Homeland Security. Points of view or opinions expressed in this document are those of the authors and do not necessarily represent the official position or policies of the U.S. Department of Homeland Security."

The subrecipient also agrees that one copy of any such publication, report, printed matter, or publication shall be submitted to the AZDOHS to be placed on file and distributed as appropriate to other potential sub-recipients or interested parties. The AZDOHS may waive the requirement for submission of any specific publication upon submission of a request providing justification from the subrecipient.

The AZDOHS and the subrecipient recognize that research resulting from this Agreement has the potential to become public information. However, prior to the termination of this Agreement, the subrecipient agrees that no research-based data resulting from this Agreement shall be published or otherwise distributed in any form without express written permission from the AZDOHS and possibly the U.S. Department of Homeland Security. It is also agreed that any report or printed matter completed as a part of this agreement is a work for hire and shall not be copyrighted by the subrecipient.

XXXI. CLOSED-CAPTIONING OF PUBLIC SERVICE ANNOUNCEMENTS

Any television public service announcement that is produced or funded in whole or in part by the subrecipient shall include closed captioning of the verbal content of such announcement.

XXXII. INDEMNIFICATION

To the extent permitted by law, each party (as indemnitor) agrees to indemnify, defend and hold harmless the other party (as indemnitee) from and against any and all claims, losses, liability, costs, or expenses (including reasonable attorney's fees) (hereinafter collectively referred to as claims) arising out of bodily injury of any person (including death) or property damage, but only to the extent that such claims which result in vicarious/derivative liability to the indemnitee, are caused by the act, omission, negligence, misconduct, or other fault of the indemnitor, its officers, officials, agents, employees, or volunteers.

XXXIII. TERMINATION

a) All parties reserve the right to terminate the Agreement in whole or in part due to the failure of the subrecipient or the grantor to comply with any term or condition of the Agreement, to acquire and maintain all required insurance policies, bonds, licenses and permits or to make satisfactory progress in performing the Agreement. The staff of either party shall provide a written thirty (30) day advance notice of the termination and the reasons for it.

b) If the subrecipient chooses to terminate the contract before the grant deliverables have been met then the AZDOHS reserves the right to collect all reimbursements distributed to the subrecipient.

c) The AZDOHS may, upon termination of this Agreement, procure, on terms and in the manner that it deems appropriate, materials or services to replace those under this Agreement. The subrecipient shall be liable to the AZDOHS for any excess costs incurred by the AZDOHS in procuring materials or services in substitution for those due from the subrecipient.

XXXIV. CONTINUATION OF PERFORMANCE THROUGH TERMINATION

The subrecipient shall continue to perform, in accordance with the requirements of the Agreement, up to the date of termination, as directed in the termination notice.

XXXV. PARAGRAPH HEADINGS

The paragraph headings in this Agreement are for convenience of reference only and do not define, limit, enlarge, or otherwise affect the scope, construction, or interpretation of this Agreement or any of its provisions.

XXXVI. COUNTERPARTS

This Agreement may be executed in any number of counterparts, copies, or duplicate originals. Each such counterpart, copy, or duplicate original shall be deemed an original, and collectively they shall constitute one agreement.

XXXVII. AUTHORITY TO EXECUTE THIS AGREEMENT

Each individual executing this Agreement on behalf of the subrecipient represents and warrants that he or she is duly authorized to execute this Agreement.

XXXVIII. SPECIAL CONDITIONS

a) The subrecipient must comply with the most recent version of the Administrative Requirements, Cost Principles, and Audit requirements

b) The subrecipient acknowledges that U.S. Department of Homeland Security and the AZDOHS reserves a royalty-free, non-exclusive, and irrevocable license to reproduce, publish, or otherwise use, and authorize others to use, for Federal government purposes: (a) the copyright in any work developed under an award or sub-award; and (2) any rights of copyright to which a subrecipient purchases ownership with Federal support. The subrecipient shall consult with the AZDOHS regarding the allocation of any patent rights that arise from, or are purchased with, this funding.

c) The subrecipient agrees that, when practicable, any equipment purchased with grant funding shall be prominently marked as follows: **"Purchased with funds provided by the U.S. Department of Homeland Security."**

d) The subrecipient agrees to cooperate with any assessments, state/national evaluation efforts, or information or data collection requests, including, but not limited to, the provision of any information required for the assessment or evaluation of any activities within this agreement.

e) The subrecipient is prohibited from transferring funds between programs (State Homeland Security Program, Urban Area Security Initiative, Citizen Corps Program, Operation Stonegarden, and Metropolitan Medical Response System).

XXXIX. NOTICES

Any and all notices, requests, demands, or communications by either party to this Agreement, pursuant to or in connection with this Agreement shall be in writing be delivered in person or shall be sent to the respective parties at the following addresses:

Arizona Department of Homeland Security
1700 West Washington, Suite 210
Phoenix, AZ 85007

The subrecipient shall address all programmatic notices relative to this Agreement to the appropriate the AZDOHS staff; contact information at www.azdohs.gov.

The subrecipient shall submit reimbursement requests relative to this Agreement to the appropriate the AZDOHS staff; contact information at www.azdohs.gov

The AZDOHS shall address all notices relative to this Agreement to:

City of Flagstaff

City Manager Kevin Burke

211 West Aspen

Flagstaff, AZ 86001-5827

XXXX. IN WITNESS WHEREOF

The parties hereto agree to execute this Agreement.

FOR AND BEHALF OF THE

City of Flagstaff

Authorized Signature above

Kevin Burke, City Manager
Print Name & Title above

Enter Date above

FOR AND BEHALF OF THE

Arizona Department of Homeland Security

Gilbert M. Orrantia
Director

Date

This form is to be signed and returned.

Grant #: **777109-02** Sub-Recipient: **City of Flagstaff - Flagstaff Police Department**

Project Title: **Gas Masks and Replacement Filters**
Grant Program: **STATE HOMELAND SECURITY GRANT PROGRAM**

1. Unit of Government: **None Entered**
   Point of Contact: **Grants Manager Stacey Brechler-Knaggs**

   Sub-recipient Address:
   Street: **211 West Aspen**

   City/State/Zip: **Flagstaff, AZ 86001-5827**

   Head of Agency: **City Manager Kevin Burke**
   Authorized individual has delegated authority to make application on behalf of the agency.
   Phone#: **928-213-2051**

   E-mail Address: **kburke@flagstaffaz.gov**

2. Organizational Type: **Local Government / Municipality**

3. Region or Entity: **North Region**

4. Initiative Title: **Strengthen CBRNE Detection, Response & Decontamination Capabilities**

5. Total Dollar Amount Requested: **$13,216** Total Dollar Amount Awarded: **$5,464.54**

6. Enter the 2011-2014 State Homeland Security Strategy Objectives (EXAMPLE: 1.1.0) and Action Item(s) Numbers (EXAMPLE: 1.1.4) that relate to this project. To learn more about the strategy visit this website:
   Objective 5.2.0 Strengthen Arizona's essential responder capabilities to address CBRNE incidents.
   Action Item 5.2.1 Strengthen Arizona's CBRNE capabilities through acquisition of necessary equipment to respond to incidents involving CBRNE agents.

7. Identify the primary National Priority that is supported by this project from the dropdown box below:
   NP 6. Strengthen CBRNE Detection, Response and Decontamination Capabilities

8. Is this project new or ongoing? If the project is ongoing, identify the corresponding projects and funding amounts for each year as applicable. Also, for the current grant cycle, please identify, if any, requests for funding from other funding sources i.e. EOC, EMPG etc.
   This is an ongoing project.

9. Can partial funding be accepted? If so, at what specific dollar amount(s), items, and quantities? Be sure to list the order of priority.
   Partial funding can be accepted for this project. One half of total the total project cost ($6,608) would purchase 6 gas masks and 50 replacement filters.

10. Please list the multiple jurisdictions and/or disciplines served by this project. Include POC information for each partnering agency.
    City of Flagstaff, Flagstaff Police Department :
    Project Representative, POC Lt. Frank Higgins, 911 E. Sawmill RD., Flagstaff, Az 86001 (928) 556-2207

APPROVAL PROCESS

The signatures below verify the submission/approval process. All parties signify that all aspects of this project are allowable, reasonable and justifiable in accordance with published federal grant guidelines. The signatures confirm the acceptance that the funding amounts and quantities are limited to the amounts and quantities approved and awarded on the Application Summary and Budget Narrative page(s) (Equipment, Training, Exercise, Planning, Organization, M&A, if applicable) as provided in the award letter attachments.

Project Point of Contact	Grants Manager Stacey Brechler-Knaggs		
	Print Name	Signature	Date
Strategic Planner or Assistant Director Planning & Preparedness			
	Print Name	Signature	Date

This form is to be signed and returned.

Award Funded as follows:

	Requested Totals	Recommended Totals	Awarded Totals
Equipment	$13,216	$5,464.54	$5,464.54
Training	$ 0	$ 0	$ 0
Exercise	$ 0	$ 0	$ 0
Planning	$ 0	$ 0	$ 0
M & A	$ 0	$ 0	$ 0
Organization	$ 0	$ 0	$ 0
Award Total	$13,216	$5,464.54	$5,464.54

STATE OF ARIZONA

Department of Homeland Security

2013 STATE HOMELAND SECURITY GRANT PROGRAM PROJECT DETAIL WORKBOOK

City of Flagstaff - Flagstaff Police Department 777109-02

Application Summary

Award Funded As Follows:

	Requested Amounts	*Recommended Amounts*	*Awarded Amounts*
Equipment	$13,216.00	$5,464.54	$5,464.54
Training	$0.00	$0.00	$0.00
Exercise	$0.00	$0.00	$0.00
Planning	$0.00	$0.00	$0.00
M & A	$0.00	$0.00	$0.00
Organization	$0.00	$0.00	$0.00
Award Totals	$13,216.00	$5,464.54	$5,464.54

STATE OF ARIZONA
Department of Homeland Security
2013 STATE HOMELAND SECURITY GRANT PROGRAM
PROJECT DETAIL WORKBOOK

City of Flagstaff - Flagstaff Police Department 777109-02

Equipment - Budget Narrative

Budget Description: List each item from your budget worksheet pages in the same order in which they are listed on the proceeding page. For Equipment, each Allowable Equipment Category (PPE, Interoperable Communications, Detection, etc.) must be listed. Under the federal guidelines "Equipment" has been defined as any single item that has a value of more than 5,000 and a life expectancy greater than a year. However, for this budget narrative please be sure to include any and all items that can be found on the AEL. Please be sure to provide a brief description of each item and how each item will be utilized. Equipment cost estimates must be listed. For each item of equipment, list the Authorized Equipment List (AEL) Item Number. The most current AEL can be found on line at the Responder Knowledge Base at the following website: www.rkb.us. If "Other Authorized Equipment" was annotated, specify the equipment here. All equipment associated with this grant must be listed on this page only. If you have any questions or concerns regarding the AEL, please feel free to contact Michael Stidham at mstidham@azdohs.gov.

Brief Description and Utilization:	3M Full Facepiece FR-M40B Respirator Assembly, Fr-15CBRN Filter assembly, NIOSH approved for Chemical Biological Radiological Nuclear requirements. To be used by first responders to effectively respond to acts of terrorism or incidents involving CBRN materials or agents.

AEL #	*Item Description*	*Quantity*	*Cost*	*Total Cost*	*AZDOHS Approved*	*Approved Quantity*	*Approved Cost*
01AR-02-APR	FR-M40B Respirator Assembly	12	$693.00	$8,316.00	Maryann Johns	4	$2,772.54
01AR-02-APRC	FR-15 CBRN Filter Canister	100	$49.00	$4,900.00	Maryann Johns	55	$2,692.00

Totals For City of Flagstaff - Flagstaff Police Department Contract Number 777109-02 *Requested* $13,216.00 *Approved* $5,464.54

State of Arizona
Department of Homeland Security

Governor Janice K. Brewer

Director Gilbert M. Orrantia

FFY 2010-REALLOCATION

Dear Stakeholder:

The projectthat your agency submitted to the Arizona Department of Homeland Security (AZDOHS) for consideration under the Homeland Security Grant Program has been awarded.

Please be advised, your project required an Environmental and Historic Preservation review. It has been reviewed and your project has been determined to have no potential impact to environmental or historic concerns. No further EHP review is required unless you modify the project and it is approved by AZDOHS. If you need further clarification please contact Michael Stidham at (602) 542-7041 or mstidham@azdohs.gov with AZDOHS for further information regarding the EHP specific requirements for your award.

As stated in the subgrantee agreement:

> The subrecipient shall comply with all applicable Federal, State, and local environmental and historic preservation (EHP) requirements and shall provide any information requested by FEMA to ensure compliance with applicable laws including: National Environmental Policy Act, National Historic Preservation Act, Endangered Species Act, and Executive Orders on Floodplains (11988), Wetlands (11990) and Environmental Justice (12898).Subrecipient shall not undertake any project having the potential to impact EHP resources <u>without the prior approval of AZDOHS/FEMA</u>, including but not limited to communications towers, physical security enhancements, new construction, and modifications to buildings that are 50 years old or greater. Subrecipient must comply with all conditions placed on the project as the result of the EHP review. Any change to the approved project scope of work will require re-evaluation for compliance with these EHP requirements. If ground disturbing activities occur during project implementation, the subrecipient must ensure monitoring of ground disturbance and if any potential archeological resources arc discovered, the subrecipient will immediately cease construction in that area and notify FEMA and the appropriate State Historic Preservation Office. <u>Construction activities shall not be initiated prior to the full environmental and historic preservation review</u>.

CITY OF FLAGSTAFF

STAFF SUMMARY REPORT

To:	The Honorable Mayor and Council
From:	Jill Trompeter, Real Estate Manager
Date:	05/29/2013
Meeting Date:	06/04/2013

TITLE:

Consideration of Marketing, RFP and Potential Sale of City-owned Property: Fire Station No. 7 (west of Milton, south of Butler) APN's 103-06-019, 103-06-017A, 103-06-018A, 103-06-003B consisting of a total of 1.52 acres.

RECOMMENDED ACTION:

Authorize the City Manager and designated staff to market, issue a RFP and to accept proposals for purchase of Fire Station No. 7, located within the City limits.

Policy Decision or Reason for Action:

This request authorizes staff to proceed with the marketing and bid process of selling Fire Station No 7, located within the City limits. Upon a successful bid process and sales contract, staff will request Council approval to enter into the agreement for a sale. The proceeds from the sale are expected to offset any financial obligations associated with the parcel and will be used toward the development and/or construction of future projects such as the new Courthouse facility.

Financial Impact:

All costs associated with the marketing and sale of these properties will be offset through the sale of each property.

Connection to Council Goal:

A sustainable community through economic vitality, environmental protection and social inclusion.

Has There Been Previous Council Decision on This:

Yes, January of 2013. Council requested additional information regarding out reach and site development, which is discussed in this summary.

Options and Alternatives

Option A - A motion to authorize staff to proceed in the marketing and sale of this specific property.
Option B - A motion to authorize staff to sell only certain portions of this parcel, as Council desires.
Option C - A motion to authorize staff to sell all or certain parcels at a later date.
Option D- A motion to not sell this parcel until the City's property inventory is completed.

Background/History:

The parcel identified for potential sale was purchased for various reasons; including facility use and drainage. Although there is no open space designation, the neighborhood would like to continue to use this property for an entry feature into their neighborhood. This request would be best handled through a matrix within the RFP. The purpose of this proposed sale is twofold: the property will be on the tax rolls generating revenues and a portion of the proceeds will be used to offset costs incurred in the development of the courthouse. Upon a successful bid process, staff will approach Council with a request for authorization to enter into a sales agreement. The property being proposed for sale is listed below. Maps to better identify their locations are part of the attachments to this communication:

Fire Station No. 7 (west of Milton, south of Butler)
APN's 103-06-019, 103-06-017A, 103-06-018A, 103-06-003B
Consisting of a total of 1.52 acre

Key Considerations:

With the proceeds of the sale of this property, the City will be able to move forward in the planning and development of the Courthouse facility.

Expanded Financial Considerations:

After paying the costs of the property sale, the City will primarily use the proceeds to fund a Courthouse. In addition, approximately $100,000 will be used to fund the final cost differential in the fire station construction project as authorized by the 2004 bond question.

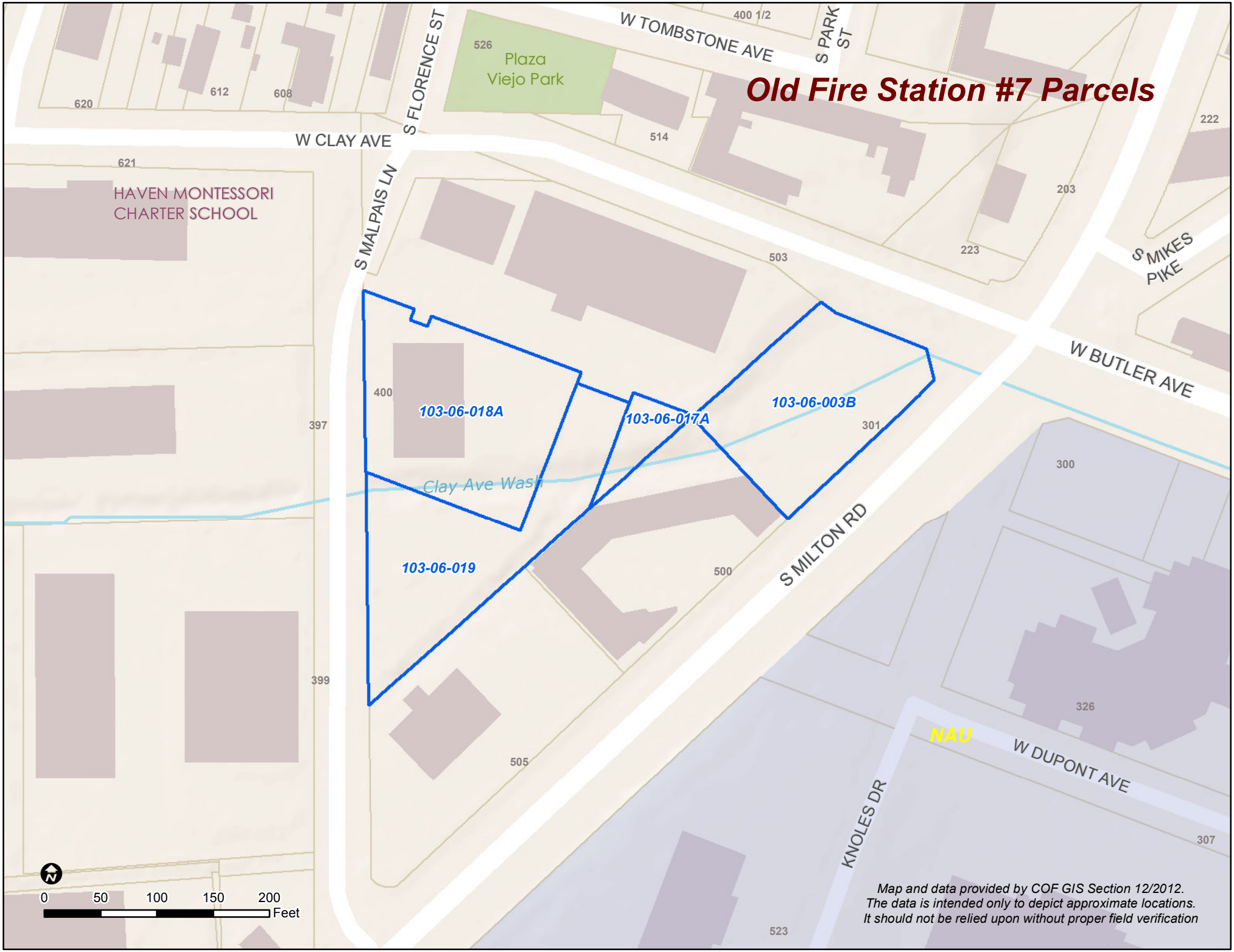
Community Benefits and Considerations:

Inform: Staff has presented the proposed sale of Fire station to the community and HOA. The response of both are positive and in favor of selling.

Community Involvement:

The neighboring home owners association has provided much input in the writing of the RFP as they have an interest in a portion of the property that is to be sold. The HOA is in support of this potienital sale.

Attachments: FireStationNo.7


Old Fire Station #7 Parcels
W TOMBSTONE AVE
S PARK ST
400 1/2
526
Plaza
Viejo Park
S FLORENCE ST
620
612
608
W CLAY AVE
514
222
621
HAVEN MONTESSORI
CHARTER SCHOOL
S MALPAIS LN
203
503
223
S MIKES
PIKE
W BUTLER AVE
400
103-06-018A
103-06-017A
103-06-003B
397
301
300
Clay Ave Wash
103-06-019
500
S MILTON RD
399
326
NAU
W DUPONT AVE
505
KNOLES DR
307
523
0
50
100
150
200
Feet
Map and data provided by COF GIS Section 12/2012.
The data is intended only to depict approximate locations.
It should not be relied upon without proper field verification

CITY OF FLAGSTAFF

STAFF SUMMARY REPORT

To:	The Honorable Mayor and Council
From:	Jill Trompeter, Real Estate Manager
Date:	05/29/2013
Meeting Date:	06/04/2013

TITLE:

Consideration of a Resolution No. 2013-06: Abandoning a portion of a public ingress and egress easement located at Pulliam Airport Airpark, a part of Track 5B near Shamrell Blvd.

RECOMMENDED ACTION:

1) Read Resolution No. 2013-06 by title only
2) City Clerk reads Resolution No. 2013-06 (if approved above)
3) Adopt Resolution No. 2013-06

Policy Decision or Reason for Action:

- The parcel which is encumbered by this easement, is currently under a ground lease with an expectation to develop by a certain date. Through the abandonment of this easement, the developer will be able to continue with the scheduled development plans.
-
- Council decision is to abandon a 16-foot wide ingress/ egress easement located on a City-owned parcel (see map attached). The abandonment of this easement is necessary for the continued development of this parcel. Alternative points of ingress and egress have been made.

- Decision Points: Abandoning a portion of the easement will remove the City from any liability or maintenance of this area and allow for continued development.

Financial Impact:

There is no immediate financial implication to the City. However, through this abandonment, development of this parcel will be made possible and additional lease revenues will be generated.

Connection to Council Goal:

5. Retain, expand, and diversify economic base

Has There Been Previous Council Decision on This:

No previous decision has been made by the current City Council on this specific item, although in October of 1998, a previous Council approved an agreement that outlined expectations of Pulliam LLC's development at this location.

Options and Alternatives:

- The Council may approve the abandonment request, allowing for the continued development of this parcel
- The Council may deny the abandonment request, and ask for a review of the site plan prior to making a determination.

Background/History:

In October 1998, Pulliam LLC entered into a lease agreement with the City for the lease of 32 acres located at the Pulliam Airpark. One term of this lease was that Pulliam LLC, is expected to meet certain development criteria, as outlined in the lease. This abandonment of the easement will allow for the completion of development, thus meeting the criteria outlined in the lease.

Key Considerations:

This abandonment of the easement will allow for the development required per the lease agreement between the City and Pulliam LLC. Alternative points of ingress and egress will be provided per City Code. Both Rick Barrett, City Engineer, and Erik Solberg, Public Works Director, have approved this easement abandonment.

A.R.S. Sec. 28-7201, et seq. provides that a city may dispose of a public roadway or portion thereof that is no longer necessary for public use.

Community Benefits and Considerations:

Approving an abandonment of the easement will allow Pulliam LLC to fulfill their contractual obligation to develop this parcel, as well as generate lease dollars for the Airpark.

Attachments: Aerial
Res. 2013-06

265.78
L= 248.67
13
17
1020

RESOLUTION NO. 2013-06

RESOLUTION OF THE COUNCIL OF THE CITY OF FLAGSTAFF, ARIZONA, ABANDONING A PUBLIC INGRESS/EGRESS EASEMENT IN THE PULLIAM AIRPORT AIRPARK

RECITALS:

WHEREAS, the Flagstaff City Code provides for a method of abandoning public easements located within the City limits; and

WHEREAS, the City received a request to abandon an ingress/egress easement located in the Pulliam Airport Airpark; and

WHEREAS, a legal description of the easement is attached to this resolution as Exhibit A ("the Easement"); and

WHEREAS, the City Staff has followed the procedures outlined in the City Code for abandonment of the Easement; and

WHEREAS, the Planning and Zoning Commission recommends abandonment of the Easement; and

WHEREAS, Arizona Revised Statutes Sections 28-7214 and 7215 permit a City Council to extinguish an easement without compensation; and

ENACTMENTS:

NOW, THEREFORE, BE IT RESOLVED THAT THE COUNCIL OF THE CITY OF FLAGSTAFF, ARIZONA does hereby find that the easement has no public use and the person taking possession of the property formerly encumbered by the easement will assume all costs and liability for the property; and, as such, the easement is hereby abandoned, extinguished and vacated.

PASSED AND ADOPTED by the City Council of the City of Flagstaff this 4th day of June, 2013. This resolution shall be effective 30 days after adoption.

_____
MAYOR

ATTEST:

_____
CITY CLERK

APPROVED AS TO FORM:

_____
CITY ATTORNEY

Northland Exploration Surveys, Inc.

EXHIBIT "A"

LEGAL DESCRIPTION

EXHIBIT "A"

LEGAL DESCRIPTION:

That 16 foot wide Access Easement being part of Tract 5B Amended and as shown on the final plat of Pulliam Airport Airpark, Amended as recorded in Case 9, Map 80 of the Records of Coconino County, situated in the South 1/2 of Section 5 and the North 1/2 of Section 8, Township 20 North, Range 7 East, Gila and Salt River Meridian, City of Flagstaff, Coconino County, Arizona, as shown on Exhibit "A-1" which is made a part hereof by this reference.

NES12-050AEA

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
14671
KENNETH A
KRENKE
Date Signed 08/16/13
ARIZONA, U.S.A.
EXPIRES 06/30/2015

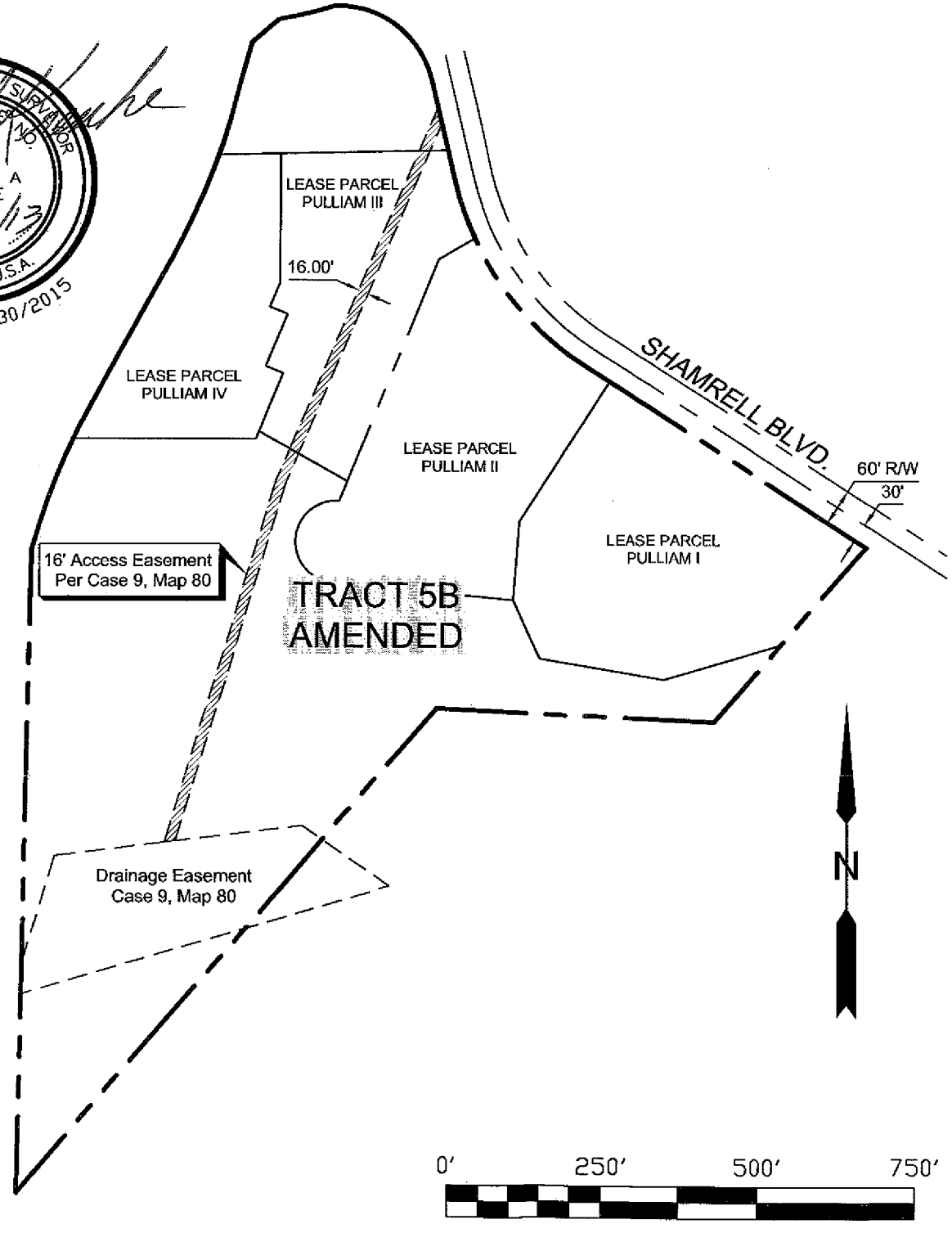
P.O. BOX 1401 / Flagstaff, Arizona 86002 / (928) 774-5058 / FAX (928) 774-3089

Northland Exploration Surveys, Inc.

EXHIBIT "A-1"

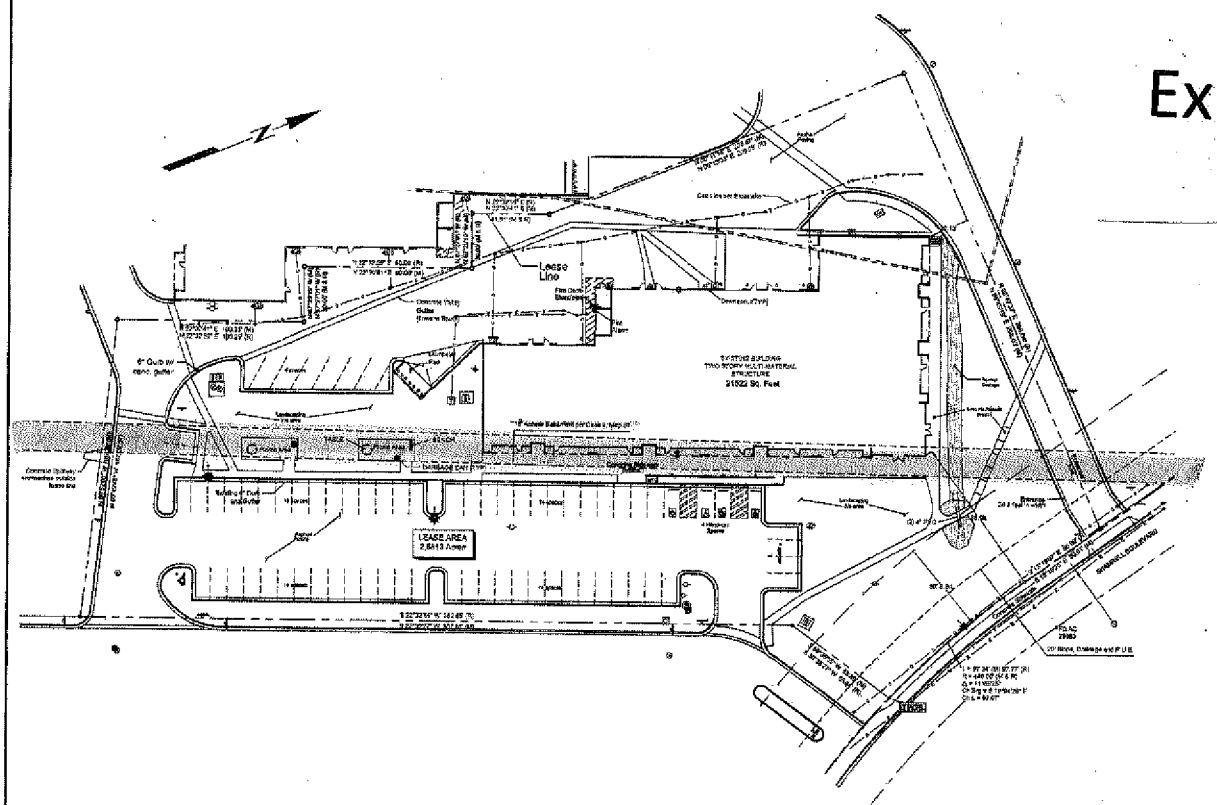
A portion of Tract 5B Amended of Pulliam Airport Airpark Unit 2, Amended as recorded in Case 9, Map 80 of the records of Coconino County, situated in the South 1/2 of Section 5 and the North 1/2 of Section 8 Township 20 North, Range 7 East, Gila and Salt River Meridian, City of Flagstaff, Coconino County, Arizona

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
14671
KENNETH A
KRENKE
Date Signed 01/16/13
ARIZONA, U.S.A.
EXPIRES 06/30/2015



P.O. BOX 1401 / Flagstaff, Arizona 86002 / (928) 774-5058 / FAX (928) 774-3089

Exhibit B



SCHEDULE B ITEMS:

[illegible]

4. Water Rights: This item does not affect the Subject Parcel in matters of survey.

5. Terms and conditions as set forth in Water Hauling Pact Book 5 of Official Records, Page 187 and thereafter amended by Instrument recorded in Docket 1273, Page 24. This item does not affect the Subject Parcel in matters of survey.

6. Easement and rights in easements, as set forth in Instrument recorded in Docket 701, Page 42 for the purposes of an underground electric line and appurtenant facilities. This item does not affect the Subject Parcel.

7. Easement and rights in easements, as set forth in Instrument recorded in Docket 702, Page 107 for the purposes of underground electric lines and appurtenant facilities. This item does not affect the Subject Parcel.

8. Easement and rights in easements, as set forth in Instrument recorded in Docket 703, Page 738 and recorded in Docket 807, Page 246 for the purposes of electric lines and appurtenant facilities. This item does affect the Subject Parcel.

9. The right of the State of Arizona to control the access rights of ingress and egress to Highway 17 as set forth in Instrument recorded September 17, 1969 in Docket 800, Page 577. This item does not affect the Subject Parcel.

10. Terms, Conditions and Prohibitions set forth in Resolution of Executive mass relocation in Docket 1258, Page 187, and in the Department of Transportation Rights of Way Section Entry Agreement recorded in Docket 1309, Page 412. This item does not affect the Subject Parcel.

11. All matters set forth in Ordinance No. 1740 regarding zoning recorded in Docket 1827, Page 554. This item does not affect the Subject Parcel in matters of survey.

12. All matters set forth in Resolution No. 1994 establishing an airport influence area for designated properties located within the vicinity of and/or at the City Airport facility recorded in Docket 2000, Page 370. This item does not affect the Subject Parcel in matters of survey.

13. Easements, Restrictions, Conditions, Covenants, Reservations as shown on the plat as recorded in Case 6, Map 44 AB. This item does affect the Subject Parcel and is plotted and shown hereon.

14. Easements, Reservations, Conditions, Covenants, Reservations as shown on the plat as recorded in Case 7, Map 96. This item does affect the Subject Parcel and is plotted and shown hereon.

15. Easements, Restrictions, Conditions, Covenants, Reservations as shown on the plat as recorded in Case 9, Map 80. This item does affect the Subject Parcel and is plotted and shown hereon.

16. Restrictions, Conditions, Covenants, Reservations, Conditions and Obligations, including but not limited to any matters creating easements, liens, encumbrances or restrictions, if any, from the sketch, any restrictions based on race, color, sex, religion, age, handicap, familial status or national origin contained in Instrument No. 3018806. This item does not affect the Subject Parcel in matters of survey.

17. Agreements according to the terms and conditions contained therein for the purchase of subdivision of property dated July 01, 1996 and recorded July 29, 1996 recorded in Instrument No. 3013603. This item does not affect the Subject Parcel in matters of survey.

18. Easements and rights incident thereto, as set forth in Instrument No. 3041117 by the purposes of a Cut Map and Resolution No. 2003 authorizing the same recorded January 29, 2008 as Instrument No. 3038274 and Acceptance and Assumption of Easements Case Order recorded October 7, 2009 in Instrument No. 3038880. This item does not affect the Subject Parcel.

19. Restrictions, Conditions, Covenants, Reservations, including but not limited to any matters creating easements, liens, encumbrances or restrictions, if any, from the sketch, any restrictions based on race, color, religion, sex, handicap, familial status or national origin contained in Instrument No. 3055677. This item does not affect the Subject Parcel in matters of survey.

20. All matters set forth in Ordinance No. 2003-18 regarding zoning recorded December 22, 2003 as Instrument No. 3072247. This item does not affect the Subject Parcel in matters of survey.

21. All matters set forth in Coconino City and County Board Resolution Approval Form recorded August 5, 2005 as Instrument No. 3088790. This item affects the Subject Parcel in more detailed the Current Boundary at Page 58.

22. Restrictions, Conditions, Covenants, Reservations, including but not limited to any matters creating easements, liens, encumbrances or restrictions, if any, from the sketch, any restrictions based on race, color, religion, sex, handicap, familial status or national origin contained in Instrument No. 3091718. This item does not affect the Subject Parcel in matters of survey.

23. Easement and rights incident thereto, as set forth in Instrument No. 3091718 for the purposes of underground electric lines, telecommunications utility and drainage facilities. This item does affect the Subject Parcel.

24. All matters disclosed by Development Agreement in Instrument No. 3100 as Instrument No. 3099198. This item does not affect the Subject Parcel in matters of survey.

25. All matters disclosed by the Groundwater Management Agreement regarding the Flagstaff Metropolitan Planning Organization between City of Flagstaff and Coconino County recorded January 27, 2010 as Instrument No. 3093713 and recorded June 4, 2010 as Instrument No. 3093803. This item does not affect the Subject Parcel in matters of survey.

26. Terms, Conditions and Provisions set forth in the lease set forth in Schedule A, Part Two. This item does not affect the Subject Parcel in matters of survey.

27. Adverse matters that may be revealed by an inspection of the land.

28. Rights of parties on possession.

29. Financing Statement between Mad Hat Solutions, Inc. and The Private Bank and Trust Company recorded November 18, 2011 in Instrument No. 3011197. This item does not affect the Subject Parcel in matters of survey.

30. Financing Statement between Mad Hat Solutions, Inc. and The Private Bank and Trust Company recorded November 18, 2011 in Instrument No. 3011198. This item does not affect the Subject Parcel in matters of survey.

31. Rights of Tenants, as tenants only, as disclosed by application for title insurance. This item does not affect the Subject Parcel in matters of survey.

LEGEND

- Found Common Monument
- Computed Point
- Set 1/2" rebar w/cap 14271
- Fire Hydrant
- Water Valve
- Water Meter/Service
- Utility Marker
- Gas Meter
- Gas Service
- Electric Box
- Electric Service
- Light Pole
- Light
- Wall Sign
- Sanitary Manhole
- Sewer Cleanout
- Irrigation Control Valve
- Telephone Riser
- Telephone Manhole
- Cable TV Riser
- Spot Elevation
- Street Sign
- Bollard
- MAILBOX
- Property Monument
- Easement (as located)
- Building Setback
- Fence type as labeled
- (R) Record Legal Description
- (R1) Record Information per Case 9, Map 80, R.O.C.
- (R2) Record Information per Case 7, Map 96 R.O.C.

BASIS OF BEARINGS:

A note on Basis of Bearing and Coordinate System

Linear Unit: International Foot
Coordinate Datum: North American Datum 1983
System: Arizona LDP (Low Distortion Projection)

Projection: Transverse Mercator
Latitude of grid origin: 31° 00' 00" N
Longitude of Central Meridian: 111° 37' 02" W
Northing at grid origin: 0.000 ft
Easting at Central Meridian: 70,000,000 ft
Central Meridian Scale Factor: 1.000333 (exact)

All distances and bearings shown hereon are grid values based on the preceding projection definition. The projection was defined such that grid distances are equivalent to "ground" distances within the project area.

The Basis of Bearings is Geodetic North based on GPS measurements. These bearings have been rotated to grid for the City of Flagstaff Low Distortion Projection. All bearings and distances shown on this map are grid per the preceding definition.

CURVE DATA:

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	1000.00' (R)	30.00'	30.00'	N 11°18'00"E	1°43'12"
C2	1480.00' (R)	37.24' (R)	37.23'	N 10°54'00"E	1°43'00"
C3	1480.00' (R1)	37.24' (R1)	37.23'	N 10°54'00"E	1°43'00"
C4	1480.00' (R2)	37.24' (R2)	37.23'	N 10°54'00"E	1°43'00"
C5	55.00' (R)	102.10' (R)	87.70'	S 34°50'11"W	106°21'00"
C6	55.00' (R)	102.10' (R)	87.70'	S 34°50'11"W	106°21'00"

(R2) Not Used

LINE TABLE:

LINE	BEARING	DISTANCE
L1	N 89°36'28"E (R)	69.84' (R)
L2	N 89°36'28"E (R)	69.84' (R)
L3	N 89°36'28"E (R)	39.50' (R)
L4	N 89°36'28"E (R)	39.50' (R)
L5	N 89°36'28"E (R)	45.50' (R)
L6	N 89°36'28"E (R)	45.50' (R)

ALTA/ACSM SURVEY
OF
Pulliam III
Being a Portion of Tract 5B of Pulliam
Airport Airpark, as recorded in Case 7,
Maps 96 and 96A and amended in Case 9, Map 80,
Records of Coconino County
Situated in Sections 5 & 8, Township 20 North, Range 7 East,
Gila and Salt River Meridian, Coconino County, Arizona

0 30' 60' 90'
SCALE: 1" = 30'

Northland Exploration Surveyors, Inc.
[illegible]

SCALE 1" = 30 ft.	ALTA/ACSM SURVEY OF A Portion of Tract 5B of Pulliam Airport Airpark, as recorded in Case 7, Maps 96 and 96A and amended in Case 9, Map 80, Records of Coconino County Situated in Sections 5 & 8, Township 20 North, Range 7 East, Gila and Salt River Meridian, Coconino County, Arizona	SHEET 2 OF 2
SURVEYOR NOT INDICATED		JOB NO.
DRAWN J Waters		
CHECKED K. A. Knapke		
DATE October 24, 2012		12-059

CITY OF FLAGSTAFF

STAFF SUMMARY REPORT

To:	The Honorable Mayor and Council
From:	Elizabeth A. Burke, City Clerk
Date:	05/29/2013
Meeting Date:	06/04/2013

TITLE:

Consideration and Adoption of Resolution No. 2013-15: A resolution of the City Council of the City of Flagstaff repealing Resolution No. 2013-02 adopted March 5, 2013, designating the "2013 City of Flagstaff Parks and Recreation Organizational Master Plan" as a Public Record and adopting the 2013 City of Flagstaff Parks and Recreation Organizational Master Plan.

RECOMMENDED ACTION:

1) Read Resolution No. 2013-15 by title only
2) City Clerk reads Resolution No. 2013-15 by title only (if approved above)
3) Adopt Resolution No. 2013-15

Policy Decision or Reason for Action:

Resolution No. 2013-02 adopting the Parks and Recreation Organizational Master Plan was adopted by the Flagstaff City Council on March 5, 2013. Since that time, Mayor Nabours has questioned Section III of this resolution and has asked that it be reconsidered for elimination of that section.

Financial Impact:

None

Connection to Council Goal:

2. Fund existing and consider expanded recreational services

Has There Been Previous Council Decision on This:

Yes. This resolution was first brought to Council in June of 2012, at which time Section III was added (minutes attached for your information). At that meeting the resolution was not adopted and staff was instructed to bring the Plan back before the Council chapter by chapter to allow for a more in-depth review. On March 6, 2013, the Council adopted the resolution, which declared the Plan a public record and adopted the 2013 City of Flagstaff Parks and Recreation Organizational Master Plan.

Options and Alternatives:

1) Adopt Resolution No. 2013-13 (repealing the prior resolution and adopting a new resolution without Section III)
2) Take no action (the existing Resolution [2013-02] would remain in effect)
3) Adopt Resolution No. 2013-13 with different or additional wording

Background/History:

A resolution adopting The Parks and Recreation Organizational Master Plan was first brought to Council in June of 2012, at which time Section III was added (minutes attached for your information). At that meeting the resolution was not adopted and staff was instructed to bring the Plan back before the Council chapter by chapter to allow for a more in-depth review. On March 6, 2013, the Council adopted the resolution, which declared the Plan a public record and adopted the 2013 City of Flagstaff Parks and Recreation Organizational Master Plan.

Upon further review of the resolution, Mayor Nabours had concerns with Section III of the resolution which reads:

> *Section III. That the Parks and Recreation Commission has prioritized parks and recreation unfunded capital improvement projects in order to guide and plan for future development and acquisition with the list as follows:*

- *Westside Parkland Acquisition*
- *Competitive Lap Pool*
- *Bushmaster Park Improvements*
- *Enclosed Tennis Structure/Bubble*
- *Continental Park Improvements, Phase I*
- *Wheeler Park Redesign, Phase I*
- *Christensen Park Development/Soccer Fields*

At the May 7, 2013, Council Meeting Mayor Nabours, with concurrence of other Councilmembers, asked that this item be placed on a future agenda for further consideration. The cleanest way to make changes to a resolution is to repeal the previous resolution and adopt a completely new one; therefore, Resolution No. 2013-15 has been prepared to read the same as the original, with elimination of Section III.

Community Involvement:

Inform

Attachments: Res. No. 2013-15
Excerpt of 6/5/12 Minutes
Res. No. 2013-02 (Prior)

RESOLUTION NO. 2013-15

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF FLAGSTAFF DESIGNATING THE "2013 CITY OF FLAGSTAFF PARKS AND RECREATION ORGANIZATIONAL MASTER PLAN" AS A PUBLIC RECORD, REPEALING RESOLUTION NO. 2013-02 ADOPTED MARCH 5, 2013, AND ADOPTING A NEW 2013 CITY OF FLAGSTAFF PARKS AND RECREATION ORGANIZATIONAL MASTER PLAN

RECITALS:

WHEREAS, the primary goal of the Parks and Recreation Organizational Master Plan is to provide for a viable blueprint and plan of action to guide the future orderly growth and development of the community's comprehensive parks and recreation system for the citizens of Flagstaff, Arizona; and

WHEREAS, the Flagstaff City Council recognizes the need for a Parks and Recreation Organizational Master Plan to provide goals, needs assessments, standards, recommendations, and strategies for implementation over a ten-year period in an effort to provide for, and continually improve, park and recreational facilities, programs, and services; and

WHEREAS, in collaboration with Flagstaff's citizens and after considerable analysis and study, staff and consultants have prepared the Parks and Recreation Organizational Master Plan document; and

WHEREAS, the Parks and Recreation Commission has been involved with the preparation of the Parks and Recreation Organizational Master Plan and recommends its adoption as a guide for existing and future citizens of the City of Flagstaff, Arizona; and

WHEREAS, having taken into consideration the desires of the citizens of Flagstaff and the in-depth study conducted by the staff and consultants, the City Council concludes that its recommendations are appropriate and reasonable; and

WHEREAS, three copies of the City of Flagstaff Parks and Recreation Organizational Master Plan have been placed on file with the City Clerk so that the official copies thereof shall be readily available to the public.

ENACTMENTS:

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF FLAGSTAFF, COCONINO COUNTY, ARIZONA, AS FOLLOWS:

Section I. THAT Resolution No. 2013-02, adopted by the Flagstaff City Council on March 5, 2013, is hereby repealed.

Section II. THAT the 2013 City of Flagstaff Parks and Recreation Organizational Master Plan, three copies of which are on file in the City Clerk's Office and attached hereto, is hereby declared to be a public record.

Section III. That the 2013 City of Flagstaff Parks and Recreation Organizational Master Plan is intended to provide ongoing guidance to the City Council and the City of Flagstaff staff for comprehensive strategic planning of parks and recreational facilities, programs, and services for its citizens.

Section IV. That the Flagstaff City Council hereby adopts the 2013 City of Flagstaff Parks and Recreation Organizational Master Plan.

PASSED AND ADOPTED by the City Council and approved by the Mayor of the City of Flagstaff this 4th day of June, 2013.

_____
MAYOR

ATTEST:

_____
CITY CLERK

APPROVED AS TO FORM:

_____
CITY ATTORNEY

B. **Consideration and Approval of Resolution No. 2012-22:** A resolution of the City Council of the City of Flagstaff adopting the 2012 City of Flagstaff Resiliency and Preparedness Study as a public record and adopting Municipal resiliency and preparedness policy statements.

RECOMMENDED ACTION: Read Resolution No. 2012-22 by title only.

Adopt Resolution No. 2012-22.

Councilmember Evans moved to read Resolution No. 2012-22 by title only, seconded by Councilmember Brewster. The motion passed on unanimous vote and title was read as follows:

RESOLUTION NO. 2012-22

A resolution of the City Council of the City of Flagstaff adopting the 2012 City of Flagstaff Resiliency and Preparedness Study as a public record and adopting Municipal resiliency and preparedness policy statements.

Councilmember White moved to adopt Resolution No. 2012-22. Upon second by Councilmember Evans, the motion passed on unanimous vote.

C. **Consideration and Approval of Resolution No. 2012-26:** A resolution of the City Council of the City of Flagstaff adopting the "2012 City of Flagstaff Parks and Recreation Organizational Master Plan" as a public record.

RECOMMENDED ACTION: Read Resolution No. 2012-26 by title only.

Adopt Resolution No. 2012-26.

Margie Brown, City Clerk, read a proposed amendment to the resolution into the record as follows:

Add a new Section 3 as follows:

"Section 3. That the Parks and Recreation Commission has prioritized parks and recreation unfunded capital improvement projects in order to guide and plan for future development and acquisition with the list as follows:

- Westside park land acquisition
- Competitive lap pool
- Bushmaster Park improvements
- Enclosed tennis structure/bubble
- Continental park improvements, Phase I
- Wheeler Park redesign, Phase I
- Christensen Park development
- Soccer fields."

Elizabeth Anderson, Community Enrichment Director, identified that the plan is being adopted minus the financial section which needs some tweaks on what BBB funding can be used for.

Given Council concerns over the lack of financial information and readiness for adopting the plan itself, it was agreed that the plan will come back to the Council for a chapter-by-chapter presentation at works sessions until the Council is comfortable with the plan. In addition, information on previously articulated Council concerns and how they are addressed will be included in future agenda packets. Finally, the Council requested a joint meeting with the Parks and Recreation Commission.

15. DISCUSSION ITEMS

None.

PUBLIC PARTICIPATION

None.

INFORMATIONAL ITEMS AND REPORTS FROM COUNCIL AND STAFF, REQUESTS FOR FUTURE AGENDA ITEMS

16. ADJOURNMENT

There being no further business to come before the Council, the meeting was adjourned at * p.m.

Celia Barotz
VICE MAYOR

ATTEST:

Margie Brown
CITY CLERK

CERTIFICATION

STATE OF ARIZONA,)
) ss.
Coconino County.)

I, MARGIE BROWN, do hereby certify that I am the City Clerk of the City of Flagstaff, County of Coconino, State of Arizona, and that the above Minutes are a true and correct summary of the Meeting of the Council of the City of Flagstaff held on June 5, 2012. I further certifty that the Meeting was duly called and held and that a quorum was present.

DATED this 20th day of June, 2012.

Margie Brown
CITY CLERK

RESOLUTION NO. 2013-02

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF FLAGSTAFF DESIGNATING THE "2013 CITY OF FLAGSTAFF PARKS AND RECREATION ORGANIZATIONAL MASTER PLAN" AS A PUBLIC RECORD AND ADOPTING THE 2013 CITY OF FLAGSTAFF PARKS AND RECREATION ORGANIZATIONAL MASTER PLAN

RECITALS:

WHEREAS, the primary goal of the Parks and Recreation Organizational Master Plan is to provide for a viable blueprint and plan of action to guide the future orderly growth and development of the community's comprehensive parks and recreation system for the citizens of Flagstaff, Arizona; and

WHEREAS, the Flagstaff City Council recognizes the need for a Parks and Recreation Organizational Master Plan to provide goals, needs assessments, standards, recommendations, and strategies for implementation over a ten-year period in an effort to provide for, and continually improve, park and recreational facilities, programs, and services; and

WHEREAS, in collaboration with Flagstaff's citizens and after considerable analysis and study, staff and consultants have prepared the Parks and Recreation Organizational Master Plan document; and

WHEREAS, the Parks and Recreation Commission has been involved with the preparation of the Parks and Recreation Organizational Master Plan and recommends its adoption as a guide for existing and future citizens of the City of Flagstaff, Arizona; and

WHEREAS, having taken into consideration the desires of the citizens of Flagstaff and the in-depth study conducted by the staff and consultants, the City Council concludes that its recommendations are appropriate and reasonable; and

WHEREAS, three copies of the City of Flagstaff Parks and Recreation Organizational Master Plan have been placed on file with the City Clerk so that the official copies thereof shall be readily available to the public.

ENACTMENTS:

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF FLAGSTAFF, COCONINO COUNTY, ARIZONA, AS FOLLOWS:

Section I. That the 2013 City of Flagstaff Parks and Recreation Organizational Master Plan, three copies of which are on file in the City Clerk's Office and attached hereto, is hereby declared to be a public record.

Section II. That the 2013 City of Flagstaff Parks and Recreation Organizational Master Plan is intended to provide ongoing guidance to the City Council and the City of Flagstaff staff for comprehensive strategic planning of parks and recreational facilities, programs, and services for its citizens.

Section III. That the Parks and Recreation Commission has prioritized parks and recreation unfunded capital improvement projects in order to guide and plan for future development and acquisition with the list as follows:

- Westside Parkland Acquisition
- Competitive Lap Pool
- Bushmaster Park Improvements
- Enclosed Tennis Structure/Bubble
- Continental Park Improvements, Phase I
- Wheeler Park Redesign, Phase I
- Christensen Park Development/Soccer Fields

Section IV. That the Flagstaff City Council hereby adopts the 2013 City of Flagstaff Parks and Recreation Organizational Master Plan.

PASSED AND ADOPTED by the City Council and approved by the Mayor of the City of Flagstaff this 5th day of March, 2013.

_____
MAYOR

ATTEST:

_____
CITY CLERK

APPROVED AS TO FORM:

_____
CITY ATTORNEY

CITY OF FLAGSTAFF

STAFF SUMMARY REPORT

To: The Honorable Mayor and Council

From: McKenzie Jones, Sustainability Specialist

Date: 05/29/2013

Meeting Date: 06/04/2013

TITLE:

Consideration and Possible Adoption of Resolution No. 2013-12: Arizona State Parks FY 2013 Growing Smarter Grant Application.

RECOMMENDED ACTION:

1) Read Resolution No. 2013-12 by title only
2) City Clerk reads Resolution No. 2013-12 by title only (if approved above)
3) Adopt Resolution No. 2013-12

Policy Decision or Reason for Action:

The Arizona State Parks Board ("Board") requires the applicant to certify by Resolution the approval of applications, signature authorization, the availability of local matching funds, and authorization to sign a Participant Agreement with the Board prior to submission of the Growing Smarter State Trust Land Acquisition Grant Application.

Financial Impact:

The costs associated with adoption of Resolution No. 2013-12 include staff time to support the submittal of the Growing Smarter Grant application. In the event of a successful grant application, it is anticipated the estimated $7 million in matching funds will come from the $5.5 million Observatory Mesa bond, $750,000 Open Space bond, and potentially $750,000 from Coconino County to purchase approximately 2,260 acres of land on Observatory Mesa.

Connection to Council Goal:

Fund existing and consider expanded recreational services / Retain, expand, and diversify economic base.

Over the years, Observatory Mesa has emerged as an important resource for recreation and tourism. Observatory Mesa hosts a segment of the Flagstaff Loop Trail and Flagstaff Urban Trail System that promote connectivity for non-motorized transportation and recreation. Arizona Game & Fish has identified Observatory Mesa as important wildlife habitat and wildlife movement corridor. According to the 2006 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation, 1.3 million wildlife viewing participants spend $838 million in Arizona annually. Sites like Observatory Mesa significantly contribute to the local tourism economy. Eco-tourism and its related service sector are important components of Flagstaff's economic base. As such, the natural environment and outdoor recreational opportunities are extremely important to the tourism trade in Flagstaff.

Has There Been Previous Council Decision on This:

On December 13, 2011 staff presented an update to Council on the status of the 2004 and 2010 bond projects. At that time staff discussed pursuing the Growing Smart Grant as a means to offset costs of the acquisition of Observatory Mesa. This is the last grant cycle for the Growing Smarter Grant program.

Options and Alternatives:

Option A – Adopt Resolution No. 2013-12 as submitted and authorize submission of the grant application;
Option B – Not adopt Resolution No. 2013-12 and do not authorize submission of the grant application.

Background/History:

As critical wildlife habitat, a popular recreation corridor, and protection for dark skies, Observatory Mesa is a natural and cultural amenity for the northern Arizona community. Efforts to formally protect Observatory Mesa started decades ago and continue today. A milestone was achieved in August 2012 when the City of Flagstaff Open Spaces Commission approved the application for a Growing Smarter Grant for the acquisition of Observatory Mesa. In April 2013, the State Land Commissioner ordered that Observatory Mesa be reclassified as suitable for conservation purposes. The application to acquire Observatory Mesa for conservation purposes through the Growing Smarter Grant process is dependent upon the adoption of a City resolution approving of the grant application. If directed by Council, staff will submit an up-to-50% matching grant through the Arizona Preserve Initiative's Growing Smarter State Trust Land Acquisition Program to purchase priority lands at Observatory Mesa.

Key Considerations:

Resolution No. 2013-12 requires that the City comply with applicable federal, state, and local laws, regulations, rules, standards, procedures, and guidelines related to the Growing Smarter Grant application. The resolution also certifies that the City will supply at least 50% of the project costs of acquiring State Trust lands at Observatory Mesa.

Expanded Financial Considerations:

The costs associated with adoption of Resolution No. 2013-12 include staff time to support the submittal of the Growing Smarter Grant application. In the event of a successful grant application, it is anticipated the estimated $7 million in matching funds will come from the $5.5 million Observatory Mesa bond and $750,000 of the Open Space bond to purchase approximately 2,260 acres of land on Observatory Mesa. The City has requested the support of Coconino County in providing the remaining $750,000.

The final project costs will depend on the State Land appraisal and the grant amount. In fall 2013, staff will return to Council for formal approval based on the appraisal and grant amount. In the event of an appraisal value that exceeds the City's bonding authority ($5.5 Observatory Mesa bond and $750,000 Open Space bond) and staff is unable to locate the full match amount, the project acreage will be reduced.

The City has appropriated $12,250,000 in the Observatory Mesa program (403-2410-691) and $750,000 in the Open Space program (403-2409-691). The remaining $1,000,000 appropriation would likely come from one of the other capital projects which have appropriation available in FY 2014. It is not expected that this would delay any project as we would look for the additional authority in FY 2015. Management will strategize this once appraisals are complete and this will be provided at the time of purchase authorization.

Community Benefits and Considerations:

Acquiring Observatory Mesa as open space will provide a natural place for members of the Flagstaff community to learn about geology, ecology, astronomy, and civic engagement while engaging in outdoor recreation.

Community Involvement:

Empower

In 2005, Flagstaff voters approved a $5.5 million bond to acquire State Trust land on Observatory Mesa for open space. Additionally, approximately 100 members of the community attended the State Trust Public Comment Hearing in February 2013 to show unanimous support for the preservation of Observatory Mesa.

Expanded Options and Alternatives:

Option A – Adopt Resolution No. 2013-12 as submitted and authorize submission of the grant application;
Option B – Not adopt Resolution No. 2013-12 and do not authorize submission of the grant application.

Attachments: Resolution 2013-12
FY13 Growing Smarter Obs Mesa Acquisition Application Certification Form
Grant Narrative

RESOLUTION NO. 2013-12

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF FLAGSTAFF APPROVING THE SUBMISSION OF A GRANT APPLICATION TO ARIZONA STATE PARKS FOR THE GROWING SMARTER STATE TRUST LAND ACQUISITION PROGRAM TO ACQUIRE LAND AT OBSERVATORY MESA

WHEREAS, the Legislature under A. R. S. §41-511 has authorized the establishment of the Growing Smarter State Trust Land Acquisition Grant Program providing funds to the State of Arizona and other eligible applicants for the purpose of conserving open spaces in or near urban areas and other areas experiencing high growth pressures; and

WHEREAS, Arizona State Parks Board ("Board") is responsible for the administration of the program within the State, setting up necessary rules and procedures governing application by local agencies under the program; and

WHEREAS, said adopted procedures established by the Board require the applicant to certify by resolution the approval of applications, signature authorization, the availability of local matching funds, and authorization to sign a Participant Agreement with the Board prior to submission of said applications to the Board.

NOW THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF FLAGSTAFF AS FOLLOWS:

Section 1. That the Mayor and Council approve the filing of an application for FY 2013 Growing Smarter State Trust Land Acquisition grant assistance.

Section 2. That the application is consistent and compatible with all adopted plans and programs of the City of Flagstaff as they relate to the application.

Section 3. That the City of Flagstaff agrees to comply with all appropriate procedures, guidelines, and requirements established by the Board as a part of the application process.

Section 4. That the City of Flagstaff will comply with all appropriate state and federal regulations, policies, guidelines, and requirements as they relate to the application; and

Section 5. That the City of Flagstaff will provide matching funds of at least 50% of the project costs.

Section 6. That the City Manager, or his designee(s), be authorized as agent of the City of Flagstaff to conduct all negotiations, execute and submit all documents including, but not limited to, applications, agreements, amendments, billing statements, and other necessary forms, for the completion of the aforementioned project.

PASSED AND ADOPTED by the City Council and approved by the Mayor of the City of Flagstaff this _____ day of _____, 2013.

_____
MAYOR

ATTEST:

_____
CITY CLERK

APPROVED AS TO FORM:

_____
CITY ATTORNEY

FY 2013 Growing Smarter State Trust Land Acquisition Application Certification Form

Participant Information

1. Applicant Name City of Flagstaff
2. Applicant Address 211 W. Aspen Ave.
3. Applicant Contact: Name: McKenzie Jones Title: Sustainability Specialist Telephone: (928) 213-2153 Email: mjones@flagstaffaz.gov Fax: (928) 213-3636

Project Information

4. Applicant Type

_____ Board of Supervisors of any county

_____ Governing Body of a school district

__x__ Governing Body of a city or town

_____ Governing Body of a special district

_____ Governing Body of a nonprofit organization

Name of special district:

_____ State Agency

_____

5. Acreage and Acquisition Type	6. Congressional	7. AZ Legislative	8. County
2,260 acres for purchase	District #1	Districts #1 and 2	Coconino

9. Brief Description of Property: Located in west Flagstaff, Observatory Mesa is a southerly facing mesa that is an integral part of the ecology centered on the San Francisco Peaks. Elevation, creviced drainages, and sloping terrain support a diversity of plants and wildlife. Its location provides wildlife grazing between the Peaks and lower elevations. Observatory Mesa overlooks Flagstaff and much of the surrounding countryside, with unobstructed views extending north to the San Francisco Peaks and south to the Mogollon Rim.

10. Estimated Project Funding Amount

Estimated Grant Request (50%)	Estimated Match (50%)	Estimated Total Project Cost (100%)
$7,000,000	$7,000,000	14,000,000*

*Pending appraisal

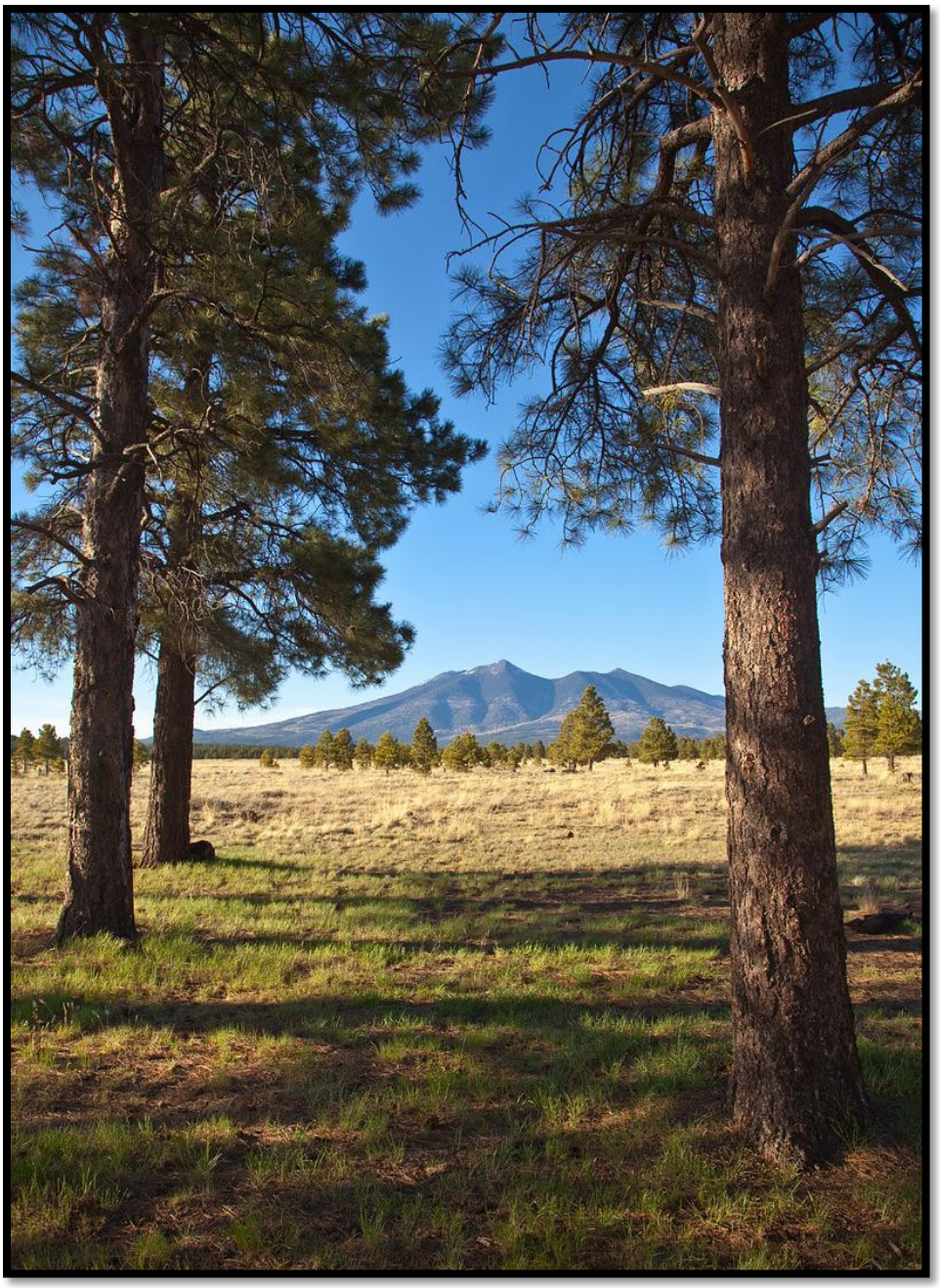
11. **Certification** (This form must be signed for the application to be considered complete.)

I hereby certify that the information in this application is true and correct to the best of my knowledge.

Authorized Signature _____ Date _____

Typed Name and Title: Kevin Burke, City Manager

Observatory Mesa Growing Smarter Grant Project Narrative

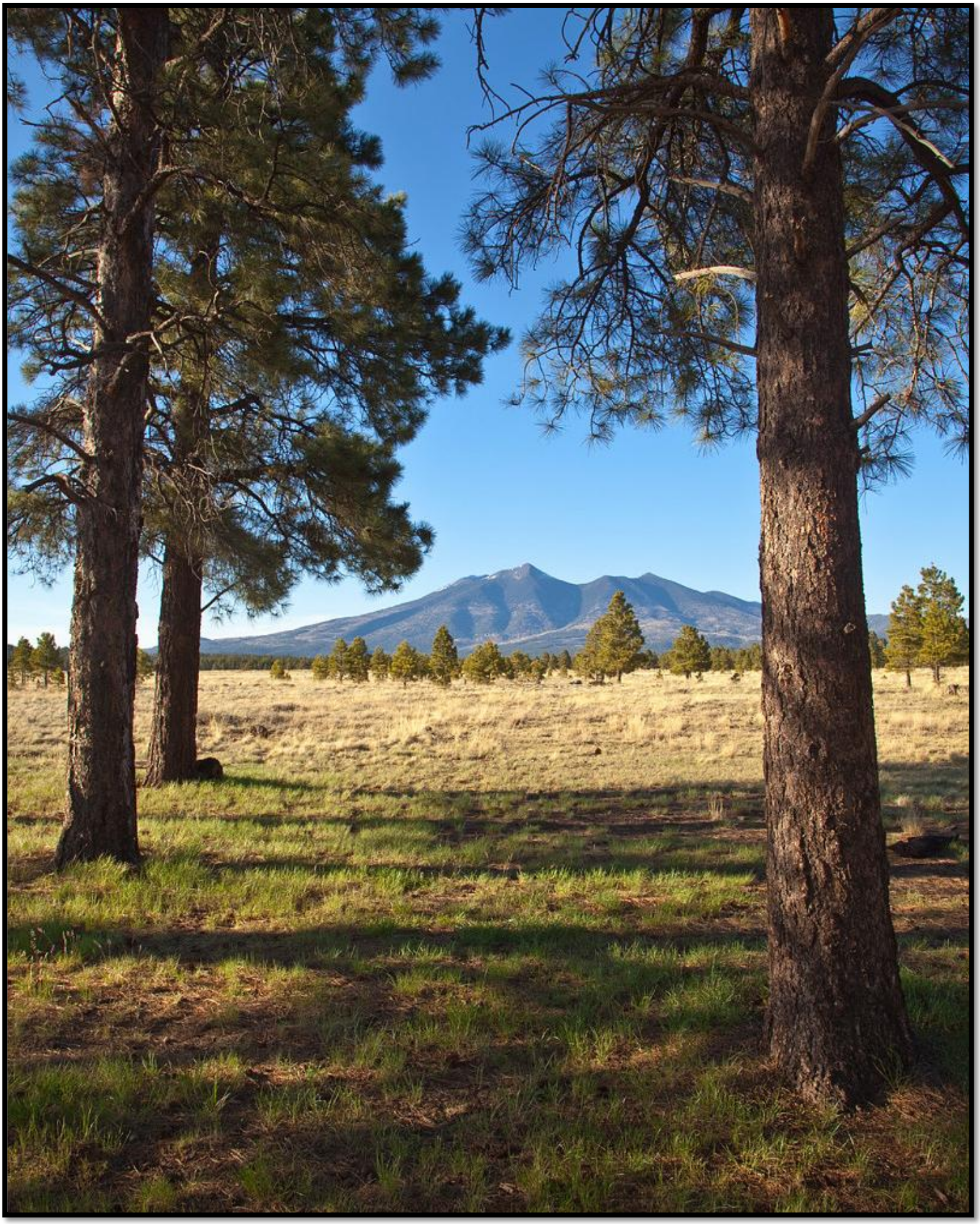


View of San Francisco Peaks from Observatory Mesa © Tom Bean

PROJECT NARRATIVE
CITY OF FLAGSTAFF GROWING SMARTER APPLICATION

Introduction

Observatory Mesa encompasses nearly 7,600 acres, of which state lands comprise approximately 2,260 acres in a checkerboard fashion, along with approximately 4,400 acres of U.S. Forest Service land. The largest single ownership of private land is the Lowell Observatory, which has approximately 760 acres on the southeast edge of the Mesa. Attached are photos of the subject property depicting its ecological values, conservation values, and community support. The photos were taken at 24 different locations in and around the property. These points are depicted on the attached map. Each photo is captioned with the number of the photo point and the compass direction of the photo. The 8” x 10” photo on the following page is Point 13.



I. Ecological Values

A. Riparian area

Does the parcel contain a riparian area or is the parcel adjacent to a *preserved* area containing a riparian area? Clearly state whether the riparian area is on or adjacent to the parcel and describe the riparian area in terms of vegetation type. If the parcel contains a riparian area, provide panoramic and close-up photos of riparian area and vegetation, and a 7.5' USGS map clearly highlighting the location of the riparian area on the parcel to be purchased. (0, 4, or 8 points)

Yes. The Observatory Mesa parcels contain several intermittent riparian areas.

Each section within this application contains an intermittent stream. There are two in Section 6 that are tributaries of the Rio de Flag. Another intermittent stream is in the northeast quarter of Section 8 that flows to the east into the Rio de Flag. Section 12 has three intermittent streams, one of which feeds into Belle Spring in an adjacent section. There is a significant drainage in the northeast portion of Section 12 that has a broad influence on adjacent Sections 7 and 8. Sections 18 and 19 have intermittent streams that originate from Tunnel Spring. The conservation designation of these lands would lend to the overall integrity of the Rio de Flag watershed, a vital resource for the Flagstaff community.

The 100-year flood plain affects the southeast corner of Section 18 in the Clay Avenue Wash area. The other sections within this petition are unaffected by the 100-year floodplain.

There are several water tanks in this application area including, Matson, Truck Tank, and Lang. Perennial water in the form of a seep that feeds Matson tank lies within Trust Sections 8 and 6 and Forest Service Section 7. There are three unnamed tanks that are considered "live tanks" because they still hold water after several dry years. Tunnel Springs, which is in Section 18, was continually full of water until approximately 1995. One thought is that this spring was fed by the perched aquifer in the Baderville area. New development and greater use of this aquifer may be what has stopped the flow. Tunnel Springs was developed by the railroad to provide water for its steam engines. Old Town Springs, located in Section 16 at the southeastern edge of the Mesa, is part of the Mesa's system of springs.

Observatory Mesa is located in the Rio de Flag watershed and the Clay Avenue Wash drainage basin (the Clay Avenue Wash being a tributary of the Rio de Flag). The Rio de Flag is a tributary of the San Francisco Wash, which is a tributary of the Little Colorado River**.**

Attachment 1.A. Photo of riparian vegetation, map of springs and tanks.

Point 1. North. Water tank on southwest corner of Section 8. June 15, 1998.
Photo credit: Nat White

I. Ecological Values
B. Wildlife
1. Threatened and Endangered Species
Does this parcel provide habitat for any Threatened or Endangered (T&E) species as documented by the Arizona Game & Fish Department? (0 or 3 points)

Yes. Arizona Game & Fish Department (AFGD) has not documented any Threatened or Endangered (T&E) species within the parcel, however, according to the Arizona Game & Fish Department online tool, the Mexican Spotted Owl (Strix occidentalis lucida) occurs within a five mile buffer of the parcel. As a result, Observatory Mesa is considered to be critical habitat.

Attachment 1.B.1. Arizona Game & Fish Department Online Tool

I. Ecological Values
B. Wildlife
2. Sensitive Species. Does this parcel provide habitat for any Sensitive Species as documented by the Arizona Game & Fish Department? (0 or 3 points)

Yes. According to the Arizona Game & Fish Department, the parcel and surrounding lands within a five mile buffer provide habitat for the following twenty-two sensitive species, as identified by State and Federal offices.

- Accipiter gentilis, Northern Goshawk (FWS, USFS, BLM, State)
- Aquila chrysaetos, Golden Eagle (FWS, BLM)
- Aquilegia desertorum, Mogollon Columbine (State)
- Astragalus rusbyi, Rusby's Milk-vetch (USFS)
- Bat Colony
- Strix occidentalis lucida, Mexican spotted owl (FWS, State - Designated Critical Habitat)
- Clematis hirsutissima, Clustered Leather Flower (USFS)
- Eumops perotis californicus, Greater Western Bonneted Bat (FWS, USFS, BLM)
- Falco peregrinus anatum, American Peregrine Falcon (FWS, USFS, BLM, State)
- Gymnogyps californianus, 10J area for California condor
- Haliaeetus leucocephalus, Bald Eagle (FWS, USFS, BLM, State)
- Hedeoma diffusa, Flagstaff False Pennyroyal (USFS, State)
- Idionycteris phyllotis, Allen's Lappet-browed Bat (FWS, USFS, BLM)
- Microtus mexicanus Navaho, Navajo Mexican Vole (FWS, USFS, State)
- Myotis evotis, Long-eared Myotis (FWS)
- Myotis occultus, Arizona Myotis (FWS, BLM)
- Myotis thysanodes, Fringed Myotis (FWS)
- Myotis volans, Long-legged Myotis (FWS)
- Opuntia x martiniana, Seashore Cactus (State)
- Pinus aristata, Rocky Mountain Bristlecone Pine (State)
- Rana pipiens, Northern Leopard Frog (USFS, BLM, State)
- Zigadenus virescens, Green Death Camas (State)

See Attachment 1.B.1. Arizona Game & Fish Department Online Tool

I. Ecological Values
B. Wildlife
3. Critical Pathway for Migratory Species. Does this parcel provide habitat for any migratory wildlife species as documented by the Arizona Game & Fish Department? (0 or 3 points)

Yes. The parcel provides habitat for migratory wildlife species as documented by the Arizona Game & Fish Department. The parcel is extremely valuable as a wildlife habitat and corridor.

According to the Arizona Game & Fish Department, Observatory Mesa is a high priority for wildlife habitat conservation in Arizona. The varied topography of Observatory Mesa supports several vegetation types including ponderosa pine forest, stands of Gambel oak, high-elevation grassland and shrub-steppe, and numerous springs and seeps are found in the area. These habitats provide essential resources for diverse wildlife including but not limited to elk, mule deer, pronghorn, grey fox, several small species of squirrels, chipmunks and other small mammals, porcupine, mountain lion, black bear, various species of bats, turkey, raptors including red-tailed hawk, sharp-shinned hawk, and several owls, migratory and resident songbirds, and reptiles and amphibians such as chorus frogs and short-horned lizards.

Wildlife movement corridors are important to protecting wildlife migration patterns that sustain feeding and breeding activities for wildlife existence. The Arizona Game & Fish Department recognizes Observatory Mesa and the area immediately to its west as an important link in a landscape-scale wildlife corridor known as the Woody Ridge Corridor, which connects habitat on the San Francisco Peaks with lower-elevation shrub and grassland habitat near the Mogollon Rim to the south. This corridor supports migratory movements of a wide range of species and was the first wildlife corridor selected by the Department's Regional office for GIS-based modeling due to its significance for wildlife. Several raptors listed as State Wildlife Species of Concern, northern goshawk, American peregrine falcon, and wintering bald eagle, have also been reported here.

Attachments 1.B.3. Photos of wildlife, Arizona Game & Fish Department letter, Northern Arizona Audubon Bird List

Point 4. North. Late fall elk migration across Section 12. No date. Photo credit: Nat White

Point 5. North. Elk on Section 12. No date. Photo credit: Nat White

Point 6. South. Mule deer feeding in grassy opening amid the ponderosa pine forest.
© Tom Bean

Point 7. East. Mountain bluebird in grassland area of Observatory Mesa. © Tom Bean

II. Conservation Values

A. Scenic and/or Geological Features

Does the parcel have scenic and/or geological features such as mountains, steep slopes, rock outcroppings, diverse or abundant vegetation, caves, faults, volcanoes, lava tubes, etc? Please describe and provide photos. (0 or 3 points)

Yes. The parcel has scenic and geological features such as mountains, steep slopes, rock outcroppings, diverse or abundant vegetation, caves, faults, volcanoes, lava tubes, etc. The parcel provides a scenic gateway into Flagstaff from I-40 and historic Route 66. In particular, the parcel has cinder cones, steep slopes, lava flows, rock outcroppings, and diverse and abundant vegetation. The parcel is part of Observatory Mesa, an elongated, flat topped, volcanic feature lying just west of Flagstaff and southwest of the San Francisco Peaks. It is generally 200 to 400 feet higher than the adjacent land with a slope to the south. A-1 Mountain is at the higher, northwest end of the Mesa. This 8,300-foot cinder cone complex was the source of a 300,000-year-old volcanic flow that formed Observatory Mesa. The Burlington and Santa Fe railroad grade follows the contour at the base of the steep, southerly edge of the Mesa. Three drainage systems, the Rio de Flag to the north and east, the Clay Avenue Wash to the south, and Volunteer Wash to the west follow the base of the Mesa. These drainages support a higher vegetative and structural diversity for wildlife than surrounding areas.

The scenic beauty of Observatory Mesa is related to its location between the San Francisco Peaks and the Mogollon Rim. Its elevation provides 360 degrees of panoramic views unaffected by the development that lies just below its edges. The side canyons, the forest and grasslands, and pockets of different vegetation fostered by the varied soils, exposure, and underground moisture, produce seasonal changes of scenic beauty that enhance the panorama. All the sections have spectacular views of the San Francisco Peaks, Mount Elden, and Dry Lake Hills.

Section 18 is a flat, thin ponderosa pine forest that defines the edge of Observatory Mesa on the south. This section has a mile and a half of steep slopes that provide excellent views of Woody Mountain, Mormon Mountain, and Anderson Mesa. Section 18 has a more open and natural forest due to restorative thinning, making it an excellent area for abundant wildflowers. Section 12 offers a large meadow with 360-degree view of Mount Elden/Dry Lake Hills, A-1 Mountain, Wing Mountain, Sitgreaves Mountain, Bill Williams Mountain, Woody Mountain, Mormon Mountain, the San Francisco Peaks, as well as views of Dry Lake. It is in direct line of sight of the Naval Observatory.

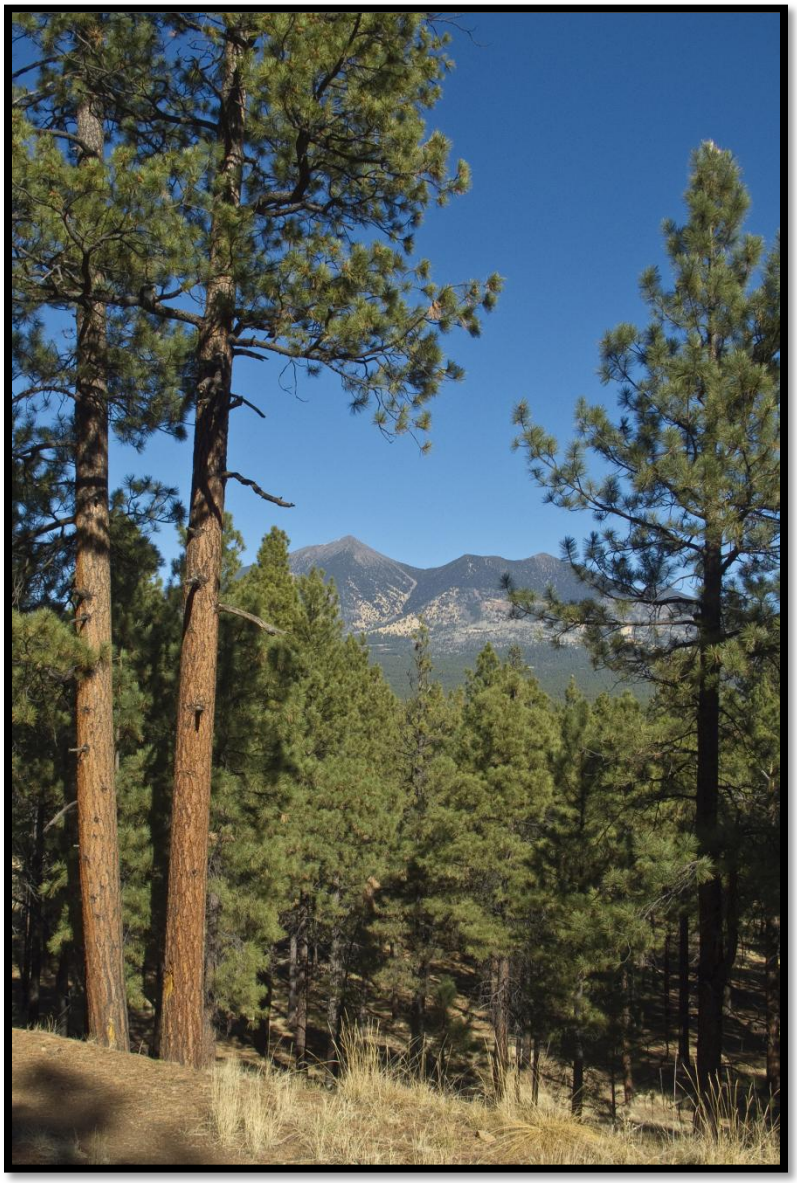
The upper portion of Section 6 offers unique views of both Mount Elden and the San Francisco Peaks. Section 8 has a steep tree-covered canyon on its east side, providing a backdrop to the city's regional park, Thorpe Park. There is a bowl-shaped canyon in Section 8 that is unique because it does not have a wide assortment of rock outcroppings, providing favorable conditions for a variety of wild flowers and grasses. The native plant species include some old growth ponderosa pine, four genera of native grass species, and a variety of other tree and shrub species. There are abundant warm-loving woody species on south or west-facing rock exposures that are indicative of increased habitat diversity. Among these are New Mexico

locust, mountain mahogany, juniper, Gambel oak, smooth sumac, Apache plume, wild rose and wax currant. An abundance of forb species, many of them long-blooming wildflowers such as Arizona gilia and golden-beard penstemon, provide nectar for several species of hummingbirds.

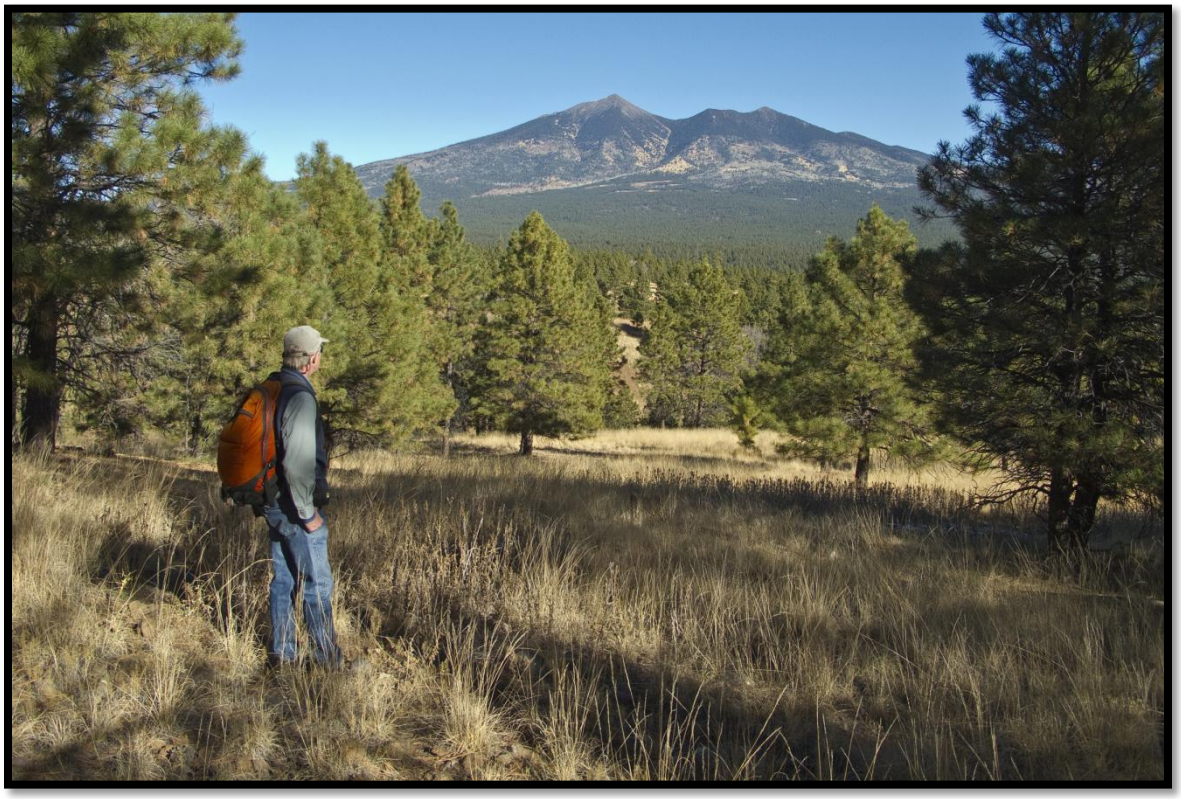
Attachments 2.A. Photos of scenic and geologic features, photos of diverse and abundant vegetation, plant species list.

Point 7. South. Grassland vegetation with distant rain clouds on Section 12. © Tom Bean

Point 8. South. View of Mormon Mountain from south rim of Section 18. © Tom Bean



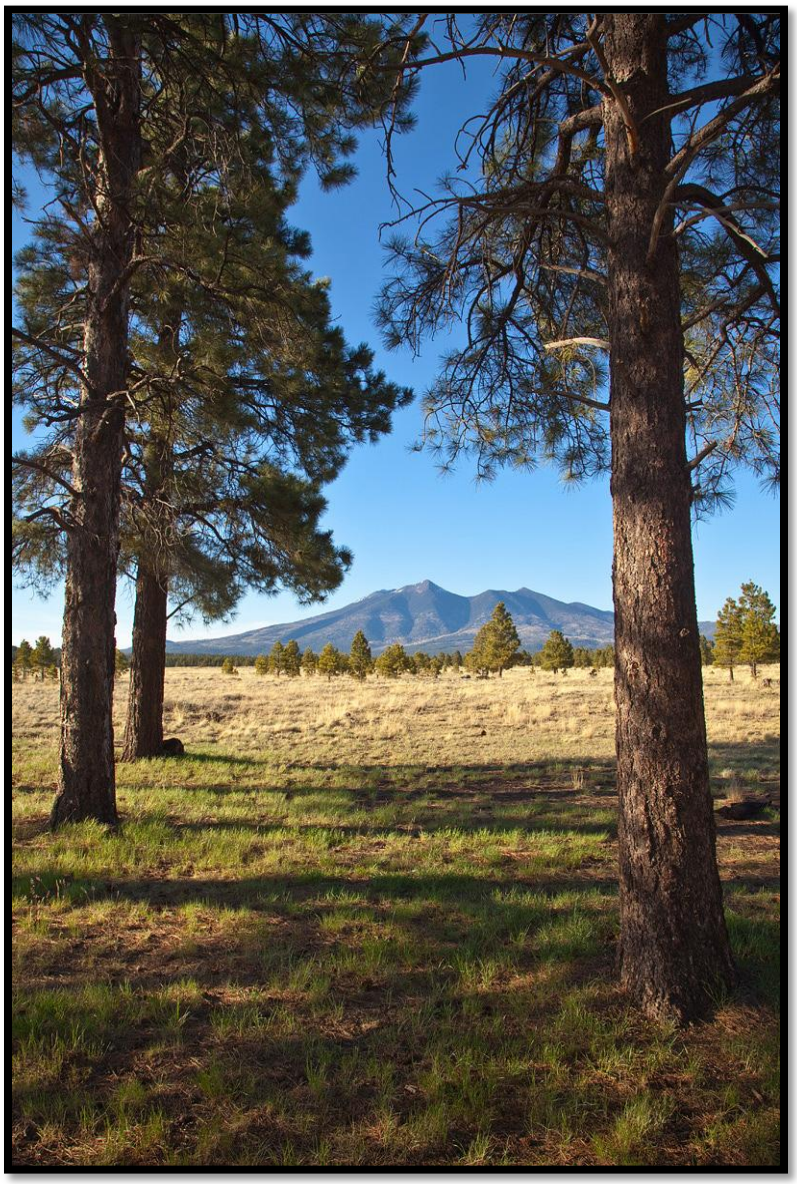
Point 9. Northeast. View along road across State Trust Lands with ponderosa pines on Observatory Mesa. © Tom Bean



Point 10. North. Hiker on Section 6. © Tom Bean

Point 11. East. View along Forest Service Road 515A in Section 6. © Tom Bean

Point 12. North. Wildflowers on Section 12. Photo credit: McKenzie Jones



Point 13. North. View of the San Francisco Peaks from Section 12. © Tom Bean

Point 14. South. Naval Observatory on the horizon from Section 12. © Tom Bean

Point 15. Northwest. Steep slopes on Section 8. © Tom Bean

Point 16. North. View of the San Francisco Peaks from grasslands on Section 12. © Tom Bean

II. Conservation Values

B. Parcel Size

What is the size of the parcel included in the application? Parcel size should include the subject parcel and any adjacent preserved lands. (0, 2, 4, 6, or 8 points)

The size of the parcel is 2,260 acres and there are 623 acres of adjacent preserved land. Lowell Observatory's Astronomical Preserve (Section 17) is located immediately adjacent to the parcel and contains 600 acres of preserved land. This land was granted to Lowell Observatory through an Act of Congress in 1894. The City of Flagstaff's Thorpe Natural Preserve is adjacent to Section 8 and contains 23 acres of preserved land. This land was purchased in 2010 utilizing City of Flagstaff Open Space bond money and is zoned as Public Open Space (P-OS).

II. Conservation Values:
C. Archaeological or Historic Site.
Does the parcel have an archaeological or historic site(s) that is eligible for or on the State or National Register of Historic Places?

No. The parcel does not have an archaeological or historic site that is eligible for or on the State or National Register of Historic Places. Observatory Mesa played a part in pioneer history and Native American history, but there is little physical evidence. There are, however, several old roadbeds up the sides of canyons that are supported by hand-built rock walls. In addition, several of the tanks are vestiges of watering holes built over one hundred years ago. The current railroad bed runs along the southern border of portions of Sections 18 and 19. The old sandstone railroad bridge abutments found just south of the current tracks are the oldest in Flagstaff. These are remnants of the Atlantic and Pacific Railroad line, which came to Flagstaff in 1881, providing the economic stimulation that turned Flagstaff from a settlement to a town. In one sense, these old railroad segments symbolize the beginning of Flagstaff's growth as a town. Protecting the areas to the north of the railroad tracks (parts of Sections 18 and 19) would preserve the integrity and natural setting of these historic sites and provide public access to these locations.

Attachment 2.C. Photo of historic resources

Point 17. South. FUTS trail in tunnel under the BNSF railroad tracks. © Tom Bean

III. Planning and Public Support

A. Planning

1. Local and Regional Plans. How does this parcel meet the needs and/or goals identified in the adopted local and regional plans and policies? Provide copies of the relevant pages of the approved local or regional plan, or the organization's charter and strategic plan, which describe the community's open space needs or goals. (0 to 3 points)

Three planning documents reflect local desire to see the parcel preserved as open space. The acquisition of the project area supports numerous goals of the Open Space and Greenways Plan (OSGP), the existing Flagstaff Regional Land Use and Transportation Plan (RLUTP), and the Coconino County Comprehensive Plan (CCCP).

- Open Spaces and Greenways Plan (1998)
  The importance of Observatory Mesa as a regional asset for conservation and protection began more than 14 years ago when several public and private concerned parties including City of Flagstaff, Coconino County, Sierra Club, Coconino National Forest, Arizona State Land Department, National Park Service, Northern Arizona Homebuilders Association, Northern Arizona Realtors Association, and Flagstaff Chamber of Commerce signed a memorandum of understanding identifying Observatory Mesa for conservation in the Flagstaff Area Open Spaces and Greenways Plan. The above signatories agreed in principle to conserve and protect a package of Flagstaff area lands that included Observatory Mesa State Trust land. The primary goal of the plan is "to maintain Flagstaff's quality of life by finding ways to balance development with the retention of open spaces and natural resources." The OSGP identifies State Trust lands at Observatory Mesa as a priority for conservation as public open space.
  The Flagstaff Open Spaces and Greenways Plan can be viewed online at http://www.flagstaff.az.gov/DocumentCenter/Home/View/7959.

- Regional Land Use and Transportation Plan (2001)
  The Flagstaff Area Regional Land Use and Transportation Plan was adopted by the Flagstaff City Council and Coconino County Board of Supervisors in November 2001 and ratified by city voters in May 2002. The planning area coincides with the Flagstaff Metropolitan Planning Organization boundaries encompassing 525 square miles of the greater Flagstaff region. The acquisition of the Observatory Mesa project area for open spaces purposes is consistent with numerous goals and policies of RLUTP and the adopted Guiding Principles, especially pertaining to sustainability, healthy ecosystems, smart growth and quality development, a vibrant and resilient economy, sense of place and community character, and partnerships.
  - Housing and Neighborhoods Goal 3 states, "Development patterns designed to maintain the open character of rural areas, protect open lands, and to protect and maintain sensitive environmental areas will be promoted."
  - Open Space, Parks, Recreation and Trails Goal 1 states, "The region will have a balanced system or open lands, natural areas, wildlife corridors and habitat areas, trails, greenways, parks and recreation facilities."
  - Natural and Cultural Resources and the Environment Policy 1.10 states: "Historical, archeological and cultural resources shall be identified and preserved

through restoration or adaptive reuse, as links between past, present, and future generations."

- Natural and Cultural Resources and the Environment Policy 1.12 states: "Natural systems, like watersheds and airsheds, and their relationships and impacts to the built environment should be considered when planning for the region."

The following goals and policies also support the preservation of Observatory Mesa:

- OSPR1.2 – Implement Urban and Rural Open Spaces Plans
- OSPR1.4 – Preserve Priority Open Lands
- OSPR1.5 – Protect "Neighborwoods"
- OSPR1.6 – Provide Parks, Open Space, and Recreation Facilities throughout the Region
- OSPR1.7 – Preserve Rural Character and Natural Environment
- CD1.1 – Preserve the Character of the Region's Natural Setting
- CD1.2 – Protect the Region's Mountains and Canyons
- CD1.3 – Protect the Region's Topographic Features
- CD1.5 – Continue Interagency Coordination for Development and Protection for Wildlife Habitat and Corridors

As a component of RLUTP, the Flagstaff Urban Trail System Master Plan includes future trail segments within the parcel to provide further regional recreation and transportation connectivity. *The Flagstaff Regional Land Use and Transportation Plan can be viewed online at* http://www.flagstaff.az.gov/DocumentCenter/Home/View/366.

- Coconino County Comprehensive Plan (2003)

  The Coconino County Comprehensive Plan is a conservation-based plan adopted by the Coconino County Board of Supervisors in 2003. The Comprehensive Plan is different from most county plans in that it is based upon a conservation framework and ecological principles. The underlying philosophy is that healthy functioning ecosystems are critical for healthy functioning human communities. The preservation of Observatory Mesa is consistent with the CCCP at many levels. One goal of the Plan with respect to growth areas is to "concentrate development in designated growth areas while preserving open space and landscapes." As with the Flagstaff Regional Plan, the Comprehensive Plan refers to and incorporates the objectives of the OSGP Plan as it applies to those environmentally and culturally sensitive lands identified as appropriate for conservation and open space purposes. The preservation of Observatory Mesa is clearly consistent with the vision, goals, and policies of the CCCP. *The CCCP can be viewed online at* http://www.coconino.az.gov/comdev.aspx?id=142.

Attachments 3.A. Flagstaff Urban Trail System Master Plan map, related excerpts from local and regional plan documents

III. Planning and Public Support
A. Planning
2. Benefit to Local Community
Please describe how preservation of this specific parcel will provide recreational, educational, and economic benefits to the local community. Please note this question refers to local benefits and not state benefits. (0 to 3 points)

Recreational

Observatory Mesa provides a buffer between developed/developing industrial and residential lands. It serves as "neighborwoods" for the Downtown/Cheshire/Linwood/Coconino Estates neighborhoods and connects open space west of the San Francisco Peaks with that north of Rogers Lake. Neighborwoods is a term used in the Flagstaff Area Open Spaces and Greenways Plan (OSGP) that refers to undeveloped areas near neighborhoods which act as a buffer and provide opportunities for recreation and relaxation. The parcel hosts segments of the Flagstaff Loop Trail and Observatory Mesa trail that promote connectivity for non-motorized transportation and recreation.

Arizona Game & Fish Department (AGFD) has identified Observatory Mesa as an important wildlife habitat and a significant hunting site. Given its proximity to Flagstaff, Observatory Mesa receives high levels of coordinated visitation for wildlife recreation such as wildlife viewing and hunting.

Educational

Since the 1990s, Observatory Mesa has been an outdoor classroom for students in northern Arizona. The abundance of astronomical viewing opportunities has provided extensive educational use of this parcel by Lowell Observatory and local schools. The potential for developing scientific education for K-12 programs, graduate education, life-long learning, and applied research on forest and grassland restoration is outstanding given the rich natural resources found on this parcel. Potential local educational partners including Willow Bend Environmental Education Center, Northern Arizona University Centennial Forest, Lowell Observatory, Museum of Northern Arizona, Flagstaff Unified School District, Coconino Community College, and Coconino National Forest.

Economic

Visitors from all over the world are attracted to Flagstaff's clean mountain air, year-round outdoor recreation opportunities, and western legacy of pioneer ranchers, railroad builders and lumbermen. Some of the West's most beautiful country surrounds Flagstaff, from the Coconino National Forest and the San Francisco Peaks to the Red Rocks of Sedona to the rugged deserts of neighboring Native American nations.

A recent poll of Arizona residents statewide conducted July 2011 by WestGroup Research indicates nearly all (93 percent) categorize parks and open space as essential to Arizona's tourism economy (Arizona Forward). In addition, three in four Arizonans rate parks and open space as important to them personally. Nearly 5.5 million Arizonans participate in active outdoor recreation, generating approximately $350 million in annual state tax revenue, producing close to $5 billion in retail services and supporting 82,000 jobs across Arizona,

according to the Outdoor Industry Foundation (Arizona Forward). The 2009 National Parks Second Century Commission estimated that every $1 in taxpayer money spent on National Parks returned a $4 economic benefit through tourism and private sector spending. Meanwhile, a report released by the Interior Department shows that recreational activities on Arizona's public lands (about 40 percent of the state) supported 21,364 jobs and contributed just under $2 billion to Arizona's economy (Arizona Forward).

Eco-tourism and its related service sector are important components of Flagstaff's economic base. As such, the natural environment and outdoor recreational opportunities are extremely important to the tourism trade in Flagstaff. The project area encompasses both a planned trail corridor that supports the community's connectivity and provides additional tourist opportunities. According to the 2006 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation, 1.3 million wildlife viewing participants spend $838 million in Arizona annually. Sites like Observatory Mesa can significantly contribute to the local tourism economy. Preserving Observatory Mesa will protect important viewsheds for Interstate 40 and Historic Route 66 travelers and Flagstaff Loop Trail hikers.

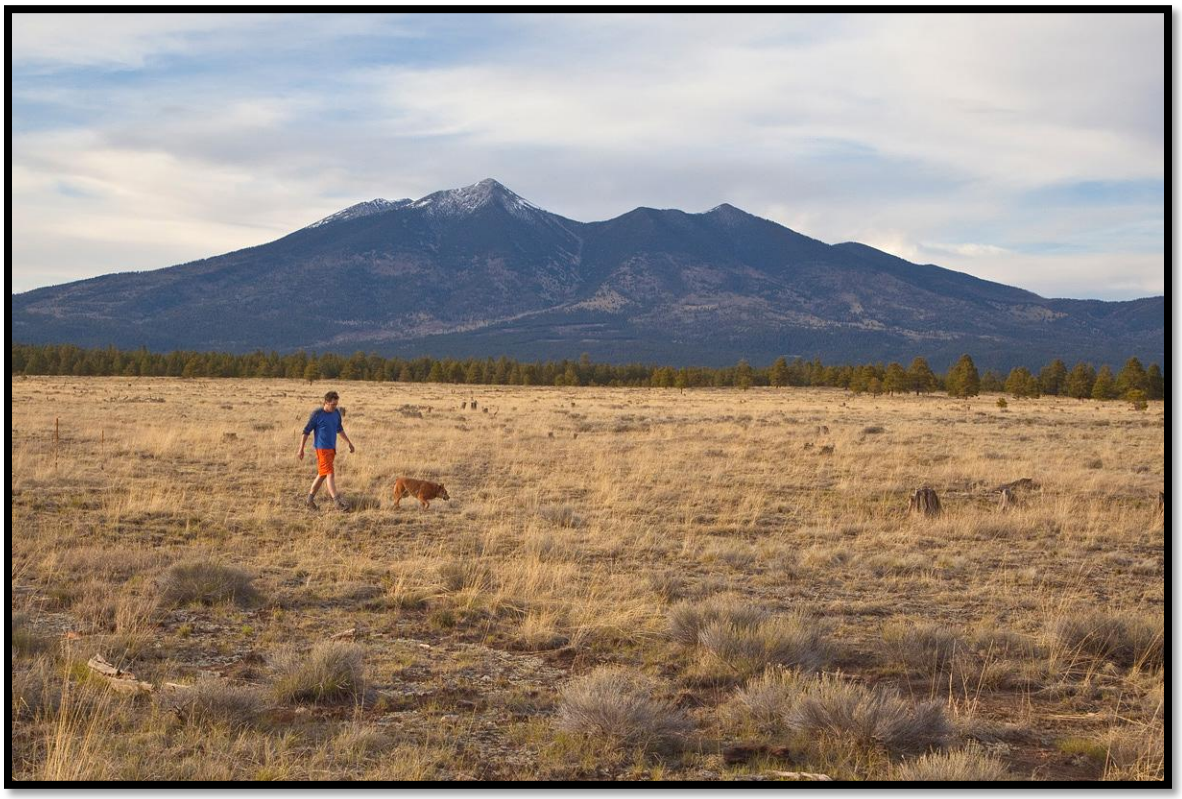
The purchase of this parcel will cause a reduction in the availability of land for future sale and development in the City of Flagstaff while at the same time increasing the amount of quality open space. This reduction should make the remaining developable lands more desirable, especially those located closer to the urban boundary and public services. Research conducted in Arizona and nationwide has shown that the conservation of iconic assets like Observatory Mesa benefits local and regional economies. The purchase of the parcel for conservation purposes may increase the monetary value of the surrounding developable area.

Numerous studies have found that open space has basic enhancement value that increases the value of the surrounding land. A study in Columbus, Ohio found a positive impact (7 to 23 percent) on property values where properties faced open space (Weicher and Zeibst, 1973). Correll et al. found that in Boulder, Colorado, the existence of greenbelts had a significant impact on adjacent residential property values including up to an average of 32 percent more than those 3,200 feet away (1978).

Additionally, Lowell Observatory has been a significant and stalwart Flagstaff economic factor for over 100 years. In particular, its reputation attracted the Flagstaff Station of the U.S. Naval Observatory to locate here more than forty years ago, and later, the Astrogeological branch of the U.S. Geological Survey. Protecting State Trust Land on Observatory Mesa positively impacts the observatories, provides protection from further light pollution, and strengthens the astrogeological sector of our economy. In particular, conservation of State Trust land on Observatory Mesa will protect the $259 million in local investment the United State Navy has made over the past 55 years in telescopes, instrumentation, and personnel.

Attachments 3.A.2. Photos illustrating community benefit, references

Point 18. South. Runners on Observatory Mesa. © Tom Bean



Point 19. North. Man walking dog north of Forest Service Road 515. © Tom Bean

Point 20. West. Woman snowshoeing on Observatory Mesa. Photo credit: McKenzie Jones

Point 21. Dome of the U.S. Naval Observatory's 60 inch telescope. Photo credit: Nat White

III. Planning and Public Support
B. Public and Community Support
1. Community Support. Describe and provide evidence of public and community support for protecting this specific parcel. (0 to 5 points)

In 2002, the City of Flagstaff submitted an Arizona Preserve Initiative petition to reclassify State Trust land on Observatory Mesa for conservation purposes. In 2004, Flagstaff voters approved a $5.5 million bond to acquire State Trust lands on Observatory Mesa as open space. On February 12, 2013, approximately 100 community members attended the State Land Public Comment Hearing and spoke out in unanimous support for the reclassification of Observatory Mesa as suitable for conservation purposes. The City of Flagstaff received 28 letters of support for the preservation process from community members and groups.

In 2009, over 200 community members participated in National Trails Day to construct the Observatory Mesa Trail as part of the Flagstaff Loop Trail. Flagstaff Biking Organization has hosted multiple volunteer work days to construct and maintain the Observatory Mesa Trail.

Attachments 3.B.1. Photos illustrating community support, newspaper articles, letters to the editor, 2004 Open Space bond language, letters of support

Point 22. Volunteers at National Trails Day construction of Observatory Mesa Trail, June 6, 2009. Photo credit: Coconino County

Point 23. Volunteers constructing Observatory Mesa Trail, June 6, 2009. Photo credit: Coconino County

Point 24. Lowell Observatory Trustee William Lowell Putnam speaking at the State Trust Public Comment Hearing. February 12, 2013. © Tom Bean

III. Planning and Public Support
B. Public and Community Support
2. Partnerships
Please describe the parameters of any partnerships created for the purpose of acquiring this parcel. Provide copies of agreements, contracts, or letters from the partnering entity illustrating the partnership. (0 to 3 points)

As partners in constructing the Flagstaff Loop Trail, Coconino County, Coconino National Forest, Flagstaff Biking Organization and the City of Flagstaff have worked together to provide trail connectivity throughout Flagstaff and on Observatory Mesa. Coconino County acquired and maintains the trail easement for the Observatory Mesa Trail segment of the Flagstaff Loop Trail.

Additionally, as 600 acres of unincorporated State Land are included in the City of Flagstaff's application, Coconino County continues to coordinate with the City of Flagstaff to ensure that the fire safety and public safety needs of the land at Observatory Mesa within the County's jurisdiction are met. Moving forward, the City and County will continue to partner to create a strong Management Plan for Observatory Mesa.

Attachments 3.B.2. Flagstaff Loop Trail Memorandum of Understanding

CITY OF FLAGSTAFF

STAFF SUMMARY REPORT

To: The Honorable Mayor and Council

From: Stacey Button, Economic Vitality Director

Date: 05/29/2013

Meeting Date: 06/04/2013

TITLE:

Consideration and Approval/Denial of Real Estate Purchase and Sale Agreement: Approve the Real Estate Purchase and Sale Agreement between the City of Flagstaff and Evergreen Devco, Inc. for the sale of approximately 33.5 acres of property consisting of three (3) parcels located at the southeast and southwest corners of the intersection of Fourth Street and Route 66, and the northwest corner of Fourth Street and Huntington Drive adjacent to the Fourth Street overpass.

RECOMMENDED ACTION:

Approve/deny the Real Estate Purchase and Sale Agreement between the City of Flagstaff and Evergreen Devco, Inc.; and, authorize the City Manager to execute all necessary documents to fulfill the intent of this Purchase and Sale Agreement.

Policy Decision or Reason for Action:

City staff has negotiated the attached Real Estate Purchase and Sale Agreement with Evergreen Devco, Inc. to provide the framework for completing this land sale transaction.

Subsidiary Decisions Points: The City of Flagstaff Charter, Article VII, Section 5, requires the City Council to review and approve Agreements that "provide for acquisition, sale or exchange of public real property."

Financial Impact:

The City has received $212,899.50 as earnest money toward the purchase of this property that has a total current purchase price of Three Million One Hundred Thousand Dollars and No Cents ($3,100,000.00). The acceptance of this agreement by Council will trigger the opening of the escrow account and set in motion the other actions that need to be completed during the due diligence period and prior to closing. Upon successful completion, the balance of funds will be received, and all proceeds from the sale of this land will benefit the Transportation Fund - 4th Street Overpass for debt service payment.

Connection to Council Goal:

1. Retain, expand, and diversify economic base
2. Effective governance

Acceptance of this Real Estate Purchase and Sale Agreement will allow the City and Evergreen Devco, Inc. to pursue a development plan that creates a positive impact on sustainable tax revenues, new job opportunities, and commercial and retail enhancement for the citizens of Flagstaff.

Has There Been Previous Council Decision on This:

Yes. Council accepted the proposal from Evergreen Devco, Inc. for this property on December 6, 2011. The ordinance authorizing this sale was first read on May 15, 2012, and the second read of the ordinance occurred on June 5, 2012.

Options and Alternatives:

1. Approve the Real Estate Purchase and Sale Agreement.
2. Amend the Real Estate Purchase and Sale Agreement.
3. Reject the Real Estate Purchase and Sale Agreement.

Background/History:

The City previously awarded this property for development; however, due to economic conditions, the developer was unable to meet its obligations and returned the property to the City. Subsequently, in October 2010 staff solicited the sale and redevelopment of these same three parcels to allow for revenue generation that would assist with the repayment of debt on the construction of the 4th Street overpass. Only one proposal was received for two of the three parcels. The proposal was significantly below the minimum price requested in the RFP and the development plan did not meet the expectations that were set forth in the RFP. The Council rejected the proposal as it was determined to not be in the best interest of the City. Council then directed staff to reissue the RFP.

A new RFP was issued in July 2011 that no longer had a minimum price requirement and provided for a greater emphasis on the type and timing of development that would occur. The RFP closed on August 3, 2011. One response was received by Evergreen Devco, Inc. The City accepted this proposal on December 6, 2011, and adopted the ordinance that provides Council the authority to sell this property contingent upon the acceptance of the Real Estate Purchase and Sale Agreement.

Key Considerations:

The City desires to promote economic development in a number of modalities. Providing the sale of this property at this time will encourage retail development along the Fourth Street corridor in a more structured and timely manner.

The acceptance of the Purchase and Sale Agreement will allow the City to open escrow on this acquisition and set in motion other actions by Evergreen Devco, Inc. including, but not limited to:

- Environmental and Title Investigations
- Development Agreement
- Regional Plan minor amendment
- Zoning Map Amendment

In addition, Evergreen Devco., Inc. has provided additional assurances to ensure their commitment to proceed in a timely manner in the development of these parcels, including, but not limited to:

- Marketing the site at all ICSC events
- Hiring a broker with strong tenant ties to market the site
- Processing the zoning application for all of the property at one time, and site plan approval requests as tenants are ready to move forward.
- Phasing the development of the property, with the first phase (southwest corner) commencing within approximately 12 months following the close of escrow; and, the southeast corner will be the second phase with the third phase to follow subsequently.
- Ensuring best efforts to place new businesses to the market within the development; and, any relocates to be of greater square footage than existing location(s).

Expanded Financial Considerations:

Due to the recent economic downturn and the previous delays in the development of the property, City staff projects that the Fourth Street portion of the Transportation tax will not adequately meet the need to fund the Fourth Street overpass debt service by the time this tax expires in 2020. By employing a two prong strategy that includes a timely sale of this property and reissuing the debt at a lower interest rate, City staff project that the financial obligation will now be met through the approval of this Real Estate Purchase and Sale Agreement. It is also the staff's recommendation that the City will realize a greater benefit by receiving an incremental increase in sales tax revenues rather than waiting for the real estate market to improve which may or may not realize a greater dollar offer for the property.

Community Benefits and Considerations:

Community benefits include providing greater commercial and retail opportunities, providing for a larger retail tax base and new job opportunities.

Community Involvement:

Collaborate/Inform - The three prior opportunities to bid on the project allowed for public participation and community involvement, as does future public hearings and the various Council and Commission actions noted under Key Considerations.

Expanded Options and Alternatives:

1. Approve the Real Estate Purchase and Sale Agreement.
2. Amend the Real Estate Purchase and Sale Agreement.
3. Reject the Real Estate Purchase and Sale Agreement.

Attachments: Agreement

REAL ESTATE PURCHASE AND SALE AGREEMENT

City of Flagstaff and Evergreen Devco, Inc.

This Real Estate Purchase and Sale Agreement ("Agreement") is entered into by and between the City of Flagstaff, an Arizona municipal corporation ("Seller"), and Evergreen Devco, Inc., a California corporation authorized to do business in the State of Arizona ("Buyer").

RECITALS

A. The City, through the development of the Fourth Street Overpass at the intersection of Route 66 and Fourth Street in Flagstaff, Arizona, acquired additional land adjacent to the Overpass.

B. One of the City Council's long-term goals is the revitalization of the Fourth Street area.

C. The City issued, with respect to the land adjacent to the Fourth Street Overpass, Request for Proposals No. 2011-48 (the "RFP") for the sale and development of three (3) parcels located at the southeast and southwest corners of the intersection of Fourth Street and Route 66, and northwest corner of Fourth Street and Huntington Drive, adjacent to the Fourth Street Overpass, within the City of Flagstaff and containing thirty-three and one-half (33.5) acres of property consisting of three (3) parcels (the "Parcels").

D. Buyer responded to the RFP with an offer to purchase the Parcels on certain terms and conditions, which purchase contemplated the acquisition of the property and subsequent development of the Parcels for retail uses.

E. Seller desires to enter into this Agreement with Buyer in order to sell the Parcels, and Buyer desires to enter into this Agreement in order to set forth the terms and conditions with respect to the acquisition of the Parcels by Buyer.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto state, confirm and agree as follows:

1. BUYER'S OFFER

In response to City of Flagstaff Request for Proposals, No. 2011-48, Buyer offers to purchase from Seller those certain parcels of land situated at the southwest and southeast corners of Fourth Street and Route 66, and northwest corner of Fourth Street and Huntington Drive in the City of Flagstaff, County of Coconino and State of Arizona, which contain thirty-three and one-half (33.5) acres of land described in Exhibit A-1 as parcels A, in Exhibit A-2 as parcel B, and in Exhibit A-3 as parcel D, and collectively shown as parcels A, B, and D in Exhibit A-4 (also depicting parcel C which is not being conveyed to Buyer), attached and made a part of this Agreement, together with all rights, privileges, easements and appurtenances thereto ("Property") at the price and upon the terms and conditions set forth in this Agreement.

2. PURCHASE PRICE AND PAYMENT

2.1 Buyer agrees to purchase the Property for **Three Million One Hundred Thousand Dollars ($3,100,000.00) (**"Purchase Price") and pay such sum, less the Earnest Money, to the Seller at Closing, as defined below. Buyer also agrees to pay all closing costs which are due from Buyer and Seller at closing of escrow.

2.2 The Buyer has deposited with the City **Two Hundred Twelve Thousand Eight Hundred Ninety-Nine and 50/100 Dollars ($212,899.50)** ("Deposit"), which within five (5) business days of the Opening of Escrow shall be transferred to and deposited with the Escrow Agent to be held as earnest money under this Agreement and placed in a federally insured, interest-bearing account (collectively, the "Earnest Money"). The Buyer shall pay the balance of the Closing Funds in cash or wire transfer of cash credit to Seller at the time of Closing.

2.3 In addition to the Purchase Price, Buyer agrees to use commercially reasonable efforts to accomplish the items set forth in Exhibit E of this Agreement.

3. OPENING OF ESCROW; AND DUE DILIGENCE

3.1 DUE DILIGENCE PERIOD FOR ENVIRONMENTAL AND TITLE INVESTIGATIONS. Buyer shall have a period of time beginning on the first day following the date on which Seller communicates to Buyer in writing that Seller has obtained the approval of this Agreement by the Flagstaff City Council and expiring 60 days thereafter ("Due Diligence Period") to conduct an Environmental, Geotechnical, Survey and Title Investigations of the Property and to otherwise assess the physical condition of the Property. During the Due Diligence Period, Buyer may enter onto the Property to undertake any "Environmental, Geotechnical, Survey and Title Investigations," which may include, but not be limited to, a physical inspection of the Property as well as any and all improvements; and as Buyer deems reasonably necessary, a Phase 1 environmental assessment with the scope to be determined by Buyer, at Buyer's expense. Buyer will enter into an environmental right of entry license agreement with Seller before undertaking environmental investigations of the Property. Buyer agrees to indemnify, defend and hold Seller harmless for, from and against any personal injury or property damage claims arising out of Buyer's exercise of the rights granted by this paragraph, unless resulting from Seller's acts or omissions, and this indemnity shall survive the Closing or the cancellation of this Agreement. Notwithstanding the foregoing, Buyer shall have no liability for the mere discovery (but not exacerbation) of environmental conditions on the Property. If any of Buyer's investigations recommend or require additional investigation (including, but not limited to, Phase II testing of the Property), the Due Diligence Period may be extended by mutual consent an additional sixty (60) days. Notwithstanding anything to the contrary contained in this Agreement, at any time on or before the expiration of the Due Diligence Period (as may be extended), Buyer shall have the right, in its sole discretion, to determine whether it will proceed with this transaction or terminate this Agreement for any reason whatsoever. If, on or before the expiration of the Due Diligence Period (as may be extended), Buyer delivers written notice to the City and Escrow Agent that it has determined not to proceed with this transaction, then this Agreement shall terminate on the date of Buyer's delivery of written notice of its election not to proceed. Upon such termination, Escrow Agent shall immediately return

the Earnest Money to Buyer without further instruction. If, at the conclusion of the Due Diligence Period, Buyer has not delivered written notice to the City and Escrow Agent that it has determined not to proceed with this transaction, fifty-thousand dollars ($50,000.00) of the Earnest Money will be transferred to the Seller. Such amount shall be non-refundable, but shall be applicable (i.e., credited) to the Purchase Price.

3.2 For purposes of this Agreement, the Opening of Escrow ("Opening of Escrow") shall be deemed to be the date on which the Deposit and a fully executed copy of this Agreement are delivered to and accepted by First American Title Insurance Company, 2425 E. Camelback Road, Suite 300, Phoenix, Arizona ("Escrow Agent"). The consummation of the transaction contemplated by this Agreement ("Closing") shall occur on the date which is thirty one (31) days after the date of the Council action on the ”Governmental Approvals”, as further detailed in Section 3.4, below. The Closing shall occur at the offices of the Escrow Agent, or at such other place as Seller and Buyer may agree in writing. Closing shall be deemed to have occurred when (i) all closing documents contemplated by this Agreement have been delivered to, received by, and executed by the appropriate parties, (ii) all conditions to such Closing contemplated by this Agreement have been satisfied or waived, (iii) the deed required to convey title to the Property to Buyer has been recorded, and (iv) the funds required to be paid under this Agreement have been properly delivered to Escrow Agent and are available for distribution to Seller by Escrow Agent.

3.3 Buyer and Seller employ Escrow Agent to act as their escrow agent in connection with this transaction. Buyer and Seller agree, upon request of Escrow Agent, to execute the standard form escrow instructions used by Escrow Agent with such modifications as are mutually acceptable, except that this Agreement is controlling in the event of any conflict. At Closing, Seller will execute and deliver a written affidavit stating that Seller is not a “foreign person” within the meaning of the Internal Revenue Code (the “Code”). Escrow Agent, as the person responsible for closing the escrow, must file all necessary information regarding this transaction required by the Code, and provide copies to the parties.

3.4 Those matters necessary for Buyer’s development of the Property, including a related development agreement, a Regional Plan minor amendment, and zoning map amendment (the “Governmental Approvals”) shall have two readings at separate Council meetings, a first and second reading. In addition, prior to a first reading, the Buyer’s application for Government Approvals (“Application”) will be subject to the City’s Inter-Divisional Staff (“IDS”) review process. IDS shall provide substantive comments to the Buyer regarding the Application within seventy-eight (78) working days of submittal. Buyer shall have thirty (30) days from receipt of IDS’ substantive comments (“Review Period”) to determine whether, in its sole discretion, it will proceed with this transaction or cancel this Agreement If, at the conclusion of the Review Period, Buyer has not delivered written notice to the City and Escrow Agent that it has determined not to proceed with this transaction, fifty-thousand dollars ($50,000.00) of the Earnest Money will be transferred to the Seller. Such amount will be in addition to the fifty-thousand dollars ($50,000.00) transferred at the conclusion of the Due Diligence Period, Section 3.1, above, and shall be non-refundable, but shall be applicable (i.e., credited) to the Purchase Price. However, in consideration of those undertakings by Seller related to the processing of Buyer’s Application, should Buyer choose to terminate this transaction and cancel this Agreement during the Review Period, pursuant to this Subsection, all documents submitted in support of the Application, including the concept plan and all impact analyses, shall become the property of the City of

Flagstaff, which the City shall accept without any representations or warranty from Buyer. The Closing Date is thirty-one (31) days after the City Council approves the Governmental Approvals on a second reading. Should the City Council impose additional conditions at the first reading of the Governmental Approvals (meaning stipulations or conditions are added or modified by the City Council during the first reading hearing that are in addition to the stipulations and conditions drafted by the City's IDS as a result of the IDS substantive comments referenced above), Buyer shall have fourteen (14) days within which to determine if the additional/modified initial Council terms and conditions are acceptable to Buyer and are consistent with Buyer's submittal materials, negotiated changes and conditions of approval, and whether, in Buyer's sole and absolute discretion, to cancel this Agreement, whereupon the remainder of Buyer's Earnest Money, and any interest accruing thereon, shall be returned to Buyer. If the terms of the Governmental Approvals are not changed at the first reading, but are changed at the second reading, Buyer will have fourteen days from the second reading to determine if the additional/modified final Council terms and conditions of the Governmental Approvals are acceptable to Buyer and are consistent with Buyer's submittal materials, negotiated changes and conditions of approval, and whether, in Buyer's sole and absolute discretion, to cancel this Agreement, whereupon the remainder of Buyer's Earnest Money, and any interest accruing thereon shall be returned to Buyer. If the terms of the Governmental Approvals are not changed at either of the readings (meaning stipulations or conditions were not added or modified by the City Council during the first or second reading hearings), should Buyer choose to cancel this Agreement after the first reading, the remainder of the Earnest Money, and any interest accruing thereon shall not be returned to the Buyer. Further, in consideration of those undertakings by Seller related to the processing of Buyer's Application, should Buyer choose to cancel this Agreement within the fourteen day period after either the first or second reading, pursuant to this Subsection, all documents submitted in support of the Governmental Approvals, including the concept plan and all impact analyses, shall become the property of the City of Flagstaff, which the City shall accept without any representations or warranty from Buyer. The Governmental Approvals will become "Development Entitlements" upon the expiration of any applicable appeals period with no appeal (including judicial challenge, referendum, or injunction) having been filed, or if an appeal (including judicial challenge, referendum, or injunction) is filed, upon resolution of such challenge in favor of the City. If an appeal is filed, the Closing Date shall be delayed on a day for day basis until such time as the appeal is resolved in the City and Buyer's favor. Any delay relative to the Closing Date by judicial challenge, referendum, or injunction filed by parties acting independently of and not under the control of the City will not be deemed a breach of this Agreement or a default by the City or Buyer. If the resolution of any such challenge is not in favor of the City and Buyer, then this Agreement shall be terminated and the remainder of Buyer's Earnest Money shall be returned to Buyer.

4. TAXES

Real estate taxes shall be prorated at Closing pursuant to Section 8.2 below, with Seller being responsible for taxes related to the period prior to Closing and Buyer being responsible for taxes related to the period after Closing. The obligations set forth in this Section 4 shall survive the Closing.

5. CONVEYANCE AND DEED

Seller shall convey fee simple title to the Property to Buyer by Quit Claim Deed, subject to all matters of record, in the form attached to this Agreement as Exhibit B.

6. SUCCESSORS IN INTEREST

Wherever referred to in this Agreement, the term "Buyer" shall imply, mean and apply to the Buyer, its successors, assigns or designees; provided, however, that Buyer acknowledges, covenants and agrees that it shall have no right to assign this Agreement or its rights hereunder to any other party without Seller's prior written consent, unless such assignment is to a company owned or controlled by or under common control with Buyer (in which case Buyer will provide written notice of such assignment to Seller). Wherever referred to in this Agreement, the term "Seller" shall imply, mean and apply to the Seller, its successors, assigns or designees.

7. TITLE

Within ten (10) business days after the Opening of Escrow, Buyer shall cause Escrow Agent to deliver to Buyer and Seller a current title commitment pertaining to the Property, together with legible copies of all recorded documents referenced therein (collectively, the "Title Commitment"). Seller may not cause any additional title exceptions to be imposed against the Property without Buyer’s prior written consent. If additional title exceptions are added subsequent to the expiration of the Due Diligence Period, Buyer shall have fourteen (14) days after receipt of the new title exceptions within which to accept or object to such additional exceptions. If Buyer’s objections cannot be satisfied by Seller, then Buyer shall have the right to cancel this Agreement. If the new title exceptions were caused or approved by Seller, then Buyer shall be entitled to a full refund of the Earnest Money.

8. TITLE INSURANCE AND OTHER COSTS

8.1 Buyer shall pay the premium for a standard ALTA owner's policy of title insurance with a limit of liability in the amount of the Purchase Price, as well as any additional premium for any extended or other coverage obtained by Buyer. Other costs incurred in the transfer of the Property from Seller to Buyer shall be paid in accordance with the customs of real estate transactions presently in effect in Coconino County, Arizona, as determined by Escrow Agent.

8.2 At Closing, current ad valorem and similar taxes relating to the Property shall be prorated as of the date of Closing based on the latest available information.

8.3 Seller shall not make any material or adverse change to the condition of the Property (including the granting of any encumbrances) prior to Closing. All improvements, equipment and fixtures that are on the Property as of Opening of Escrow shall remain on the Property and in the same condition and shall be conveyed at Closing.

9. CONDITION OF PROPERTY

Buyer hereby acknowledges and agrees that it has examined, or will examine and investigate prior to Closing, to Buyer's full satisfaction, the environmental condition and physical condition of the Property, and that Buyer will accept the Property at Closing in its "as is," "where is"

condition, "with all faults," and Buyer hereby releases Seller from any and all liability, cost, expense, claim, obligation or judgment arising or accruing after the Closing, related to the environmental condition or physical condition of the Property or any work or improvement related thereto, and from all obligations arising or accruing after the Closing under any and all applicable state, federal or local laws concerning the Property, including, without limitation, any environmental law, except to the extent caused by Seller or its agents. Buyer has not relied and will not rely on, and Seller is not liable for, any information in any materials, representations or information pertaining to the Property or relating thereto made or furnished by any person representing or purporting to represent Seller, to whomever made or given, directly or indirectly, orally or in writing.

10. ATTORNEY'S FEES

If any action is brought by either party with respect to its rights under this Agreement, the prevailing party shall be entitled to reasonable attorney's fees and court costs as determined by the court and not by the jury.

11. REMEDIES

11.1 In the event of a default by Seller hereunder, which default continues uncured after five (5) days' written notice from Buyer to Seller, Buyer may either waive the default and proceed with the transaction or seek specific performance of Seller's obligations hereunder. If specific performance is unavailable as a remedy (e.g., if Seller has conveyed the Property to another party), Buyer may terminate this Agreement and receive a full refund of the Earnest Money.

11.2 Buyer and Seller acknowledge that any default or breach by Buyer prior to Closing will cause Seller to incur damages and expenses, which are difficult if not impossible to estimate and ascertain with certainty. Therefore, in the event of a default by Buyer hereunder, prior to Closing, which default continues uncured after five (5) days' written notice from Seller to Buyer, the sole and exclusive remedy of Seller shall be to terminate this Agreement and retain as liquidated damages the Earnest Money. Seller waives all other rights and remedies.

12. NOTICES

All notices, terminations, waivers, and other communications hereunder shall be in writing and shall be delivered personally against receipt or shall be sent registered mail, certified mail, or Express Mail service, postage prepaid and return receipt requested, or by a nationally recognized overnight delivery service, addressed to the parties as follows:

SELLER:

Purchasing Director
City of Flagstaff
211 W. Aspen Avenue
Flagstaff, Arizona 86001

BUYER:

Danny Bockting
Evergreen Devco, Inc.
2390 E. Camelback Road, Suite 410
Phoenix, Arizona 85016

WITH A COPY TO:

City Attorney
City of Flagstaff
211 W. Aspen Avenue
Flagstaff, Arizona 86001

WITH A COPY TO:

Laura Ortiz
Evergreen Devco, Inc.
2390 E. Camelback Road, Suite 410
Phoenix, Arizona 85016

Any notice in accordance herewith shall be deemed received when delivery is received or refused, as the case may be.

13. GOVERNING LAW AND VENUE

This Agreement shall be administered and interpreted under the laws of the State of Arizona. Buyer hereby submits itself to the original jurisdiction of those courts located within Coconino County, Arizona.

14. SEVERABILITY

Wherever possible, each provision of this Agreement shall be interpreted in such manner as to be valid under applicable law, but if any provision shall be invalid or prohibited hereunder, such provision shall be ineffective to the extent of such prohibition or invalidation but shall not invalidate the remainder of such provision or the remaining provisions, unless the overall intent of such provision is thereby vitiated.

15. TIME OF THE ESSENCE

The parties expressly agree that time is of the essence with respect to this Agreement.

16. ACCEPTANCE CONSTITUTES AGREEMENT

This offer of the Buyer to purchase the Property, when duly accepted and signed by the Seller, shall constitute the entire agreement between the parties for the sale and purchase of the Property and shall bind and inure to the benefit of the Seller, the Buyer, and their successors and assigns.

17. BROKER

Seller and Buyer hereby represent each to the other that neither party has had any dealings with any broker, finder or other party concerning Buyer's purchase of the Property and that no brokerage commission shall be payable upon the consummation of the sale of the Property from Seller to Buyer.

18. CONDEMNATION

If, on or prior to the Closing Date, a material portion of the Property is the subject of a pending or contemplated taking by eminent domain which has not been consummated, Seller shall notify Buyer within five (5) days of obtaining knowledge of such fact, and Buyer shall have the option to terminate this Agreement upon giving written notice to Seller prior to Closing. In the event Buyer elects to terminate this Agreement, Buyer shall receive a prompt refund of the Earnest

Money, and neither party shall have any further rights or obligations hereunder. If, after receipt of Seller's notice, as aforesaid, Buyer does not exercise its option to terminate this Agreement, the parties hereto shall remain bound hereunder and Seller shall assign and turn over at Closing, and Buyer shall be entitled to receive and keep, all awards for the taking by eminent domain described in said notice.

19. SELLER DELIVERABLES

Ten (10) business days after any reasonable request from Buyer, Seller shall deliver to Buyer copies of any third party reports or other documentation related to the Property which Seller has in its possession or which it may be able to reasonably obtain.

20. DEVELOPMENT OF THE PROPERTY

20.1 Buyer acknowledges that it is purchasing the Property in "as is" condition, subject to the existing zoning.

20.2 The terms of the City of Flagstaff Request for Proposals No. 2011-48 are hereby incorporated by reference and apply to the development of the Property, including but not limited to the following requirements:

20.2.1 Buyer will modify or build two segments of the Flagstaff Urban Trail System ("FUTS") on the Property. Buyer will construct one segment of the FUTS as a high speed trail across the Property with access to the site at the rear. Buyer will modify the existing segment of the FUTS pedestrian and slow speed trail along Route 66, as depicted in Exhibit C, Flagstaff Urban Trail System Conceptual Plan, attached and incorporated by reference. The high speed trail will have access under the Fourth Street Bridge so that users do not have to stop for traffic. Buyer will be required to modify or build 10-foot wide concrete FUTS trails that meet current standards and guidelines for FUTS trails, including associated landscaping,. At closing, Buyer will record an easement against the Property in favor of the City in the form set forth in Exhibit D, Flagstaff Urban Trail.

20.2.2 The Property is not presently zoned for commercial use, and Buyer will be required to apply for a Regional Plan minor amendment and appropriate rezoning in order to develop the property for commercial uses.

20.2.3 Green Building is the use of environmentally sensitive planning, design, specification, labor management, construction, and commissioning processes and technologies, which result in a holistic building strategy that creates a more sustainable structure that contributes to a more sustainable community. Green Building technology should be used whenever possible.

20.2.4 Buyer will include low-flush toilets, well-insulated hot water piping, low-flow showerheads and faucets, and other appliances or devices that minimize water usage.

21. COMPLIANCE WITH ALL LAWS

Buyer will comply with all applicable Federal, State, County and City laws, regulations and policies.

22. BUSINESS OPERATIONS IN SUDAN/IRAN

In accordance with Arizona Revised Statutes § 35-397, the Buyer certifies that the Buyer and its affiliates and subsidiaries do not have scrutinized business operations in Sudan or Iran. If the Seller determines that the Providers certification is false, the City may impose all legal and equitable remedies available to it, including but not limited to termination of this Agreement.

23. CONFLICT OF INTEREST

The parties agree that this contract may be cancelled for conflict of interest in accordance with Arizona Revised Statutes § 38-511.

24. SEVERABILITY

If any part of this Agreement is determined by a court to be in conflict with any statute or constitution or to be unlawful for any reason, the parties intend that the remaining provisions of this Agreement shall remain in full force and effect unless the stricken provision leaves the remaining Agreement unenforceable.

25. RESALE

The Buyer shall not resell the Property, in its entirety, in one transaction, within twenty-four (24) months of the Closing Date for greater than the Purchase Price set forth in Section 2, above, plus an allowable percentage increase of five (5) percent per annum. The parties acknowledge that Buyer intends to sell individual pads or parcels of land within the Property, and such sale of pads or parcels within said twenty-four (24) months is not a violation of this Agreement.

26. TERM

Within one hundred twenty (120) days of the executed date of this Agreement, Buyer shall file with the City a complete Large-scale Zoning Map Amendment and minor Regional Plan Amendment application. Further, the outside date for the "Closing," as set forth in Section 3.2, shall occur within twelve (12) calendar months of the date of execution. This Agreement will terminate at the conclusion of the one hundred twenty (120) day period, should Buyer fail to submit a fully completed Large-scale Zoning Map Amendment and minor Regional Plan Amendment application, or at the conclusion of twelve (12) calendar month period, should Closing fail to occur. These time limits may be extended by mutual consent of both parties and for such term as agreed to by both parties.

27. GOOD FAITH

The Parties agree to act in good faith and to cooperate fully with each other in carrying out the intent of this Agreement.

28. MEMORANDUM OF AGREEMENT

Concurrent with the execution of this Agreement, the Parties agree to sign and record a Memorandum of Agreement on the Property setting forth Buyer's rights under this Agreement.

[Signature page follows.]

IN WITNESS WHEREOF, the Buyer presents this offer, and the Seller has signed the same this _____ day of _____, 2013.

SELLER, City of Flagstaff

_____
Gerald W. Nabours, Mayor

Attest:

_____
City Clerk

Approved as to form:

_____
City Attorney

BUYER, Evergreen Devco, Inc.

By: _____

Name:_____

Title:_____

Received and Accepted this ____ day of _____, 2013, which date is the "Opening Date" for purposes hereof.

First American Title Company

By:_____

Its:_____

EXHIBIT A-1

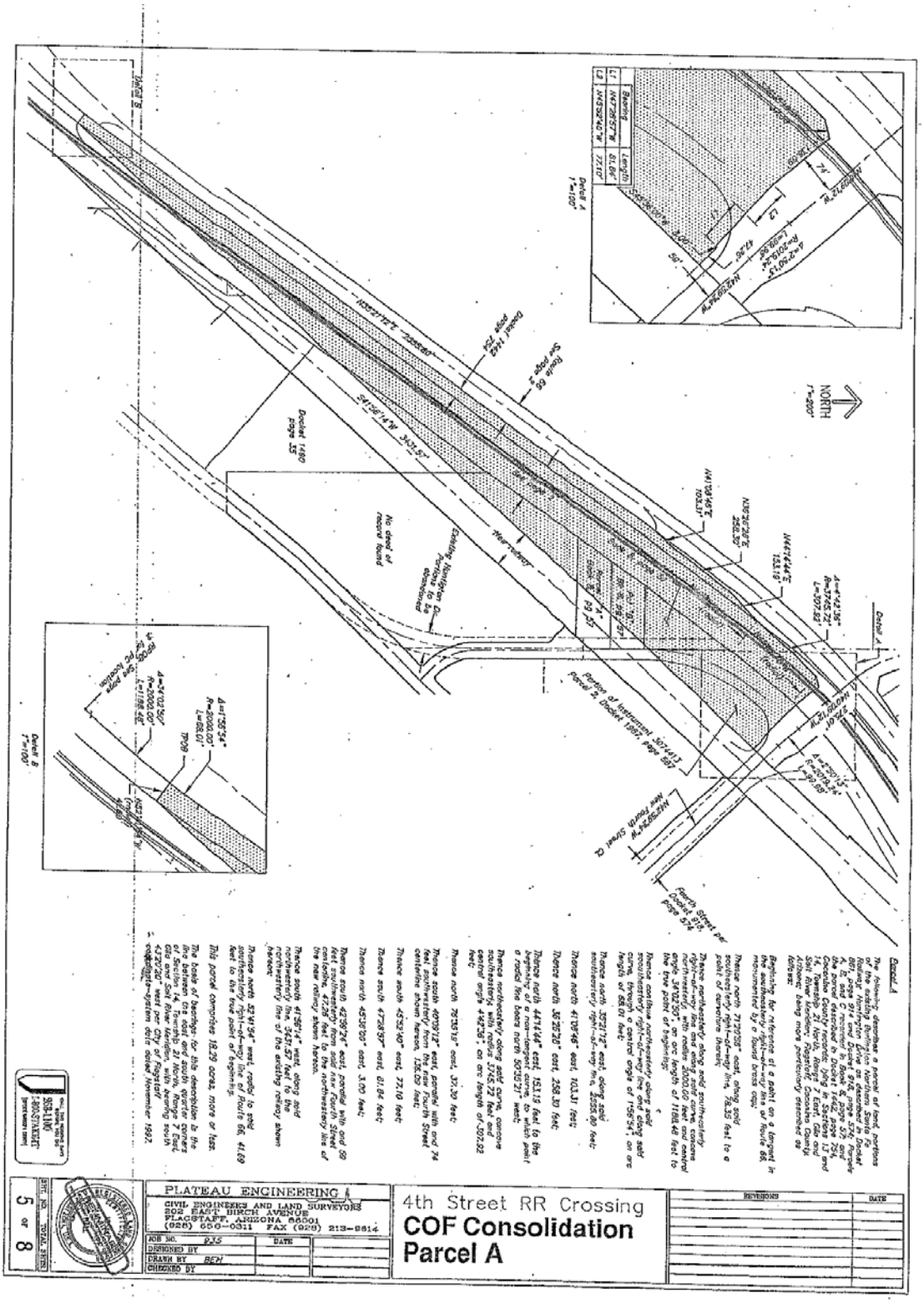

Parcel A
The following describes a parcel of land, portions of the existing Burlington Northern Santa Fe Railway, Huntington Drive as described in Docket 1442, page 754, Coconino County recorder, lying in Sections 13 and 14, T.21N., R.7E., G.&S.R.B.&M., Coconino County, Arizona, being more particularly described as follows:
Beginning for reference at a point on a line and in the southeasterly right-of-way line of Route 66, monumented by a found brass cap;
Thence north 71°20'58" west, along said southeasterly right-of-way line, 78.33 feet to a point of curvature therein;
Thence northeasterly along said southeasterly right-of-way line and along said curve, concave northwesterly, with radius 2000.00 feet and central angle 34°02'30", an arc length of 1188.48 feet to the true point of beginning;
Thence continue northeasterly along said southeasterly right-of-way line and along said curve, with radius 2000.00 feet and central angle 4°12'36", an arc length of 150.34, an arc length of 68.01 feet;
Thence north 32°21'12" east, along said southeasterly right-of-way line, 2555.00 feet;
Thence north 41°09'48" east, 103.31 feet;
Thence north 36°25'20" east, 258.30 feet;
Thence north 44°14'44" east, 153.15 feet to the beginning of a non-tangent curve, to which point a radial line bears north 50°32'21" west;
Thence northeasterly along said curve, concave southeasterly, with radius 1745.72 feet, central angle 4°42'36", an arc length of 207.82 feet;
Thence north 76°35'15" east, 37.30 feet;
Thence south 40°09'12" east, parallel with and 74 feet southwesterly from the raw Fourth Street centerline shown hereon, 135.09 feet;
Thence south 45°53'40" east, 72.10 feet;
Thence south 47°28'37" east, 21.84 feet;
Thence north 45°36'00" east, 3.00 feet;
Thence south 42°59'24" east, parallel with and 59 feet southwesterly from said raw Fourth Street centerline, 47.26 feet to the northwesterly line of the raw railway shown hereon;
Thence south 41°56'14" west, along said northwesterly line, 3431.57 feet to the northeasterly line of the existing railway shown hereon;
Thence north 32°41'34" west, radial to said southeasterly right-of-way line of Route 66, 41.69 feet to the true point of beginning;
This parcel comprises 18.20 acres, more or less.
The basis of bearings for this description is the Arizona State Plane coordinate system of 1927 for Zone 21 North, Clarke 1866 datum, with bearing south 43°20'20" west per City of Flagstaff coordinate system data dated November 1992.
Docket 1490 Page 55
Docket 1442 Page 754
Docket 1 Page 66
Existing Huntington Drive to be abandoned
No deed of record found
Parcel 2, Docket 1987, page 587
Fourth Street RR Docket 576 page 576
Docket A
Detail A 1"=100'
Detail B 1"=100'
NORTH 1"=200'
PLATEAU ENGINEERING
CIVIL ENGINEERS AND LAND SURVEYORS
202 EAST BIRCH AVENUE
FLAGSTAFF, ARIZONA 86001
(928) 556-0311 FAX (928) 213-9814
JOB NO. 935
DESIGNED BY
DRAWN BY RCM
CHECKED BY
4th Street RR Crossing
COF Consolidation
Parcel A
REVISIONS
DATE
SHEET NO. TOTAL SHEETS
5 of 8

EXHIBIT A-2

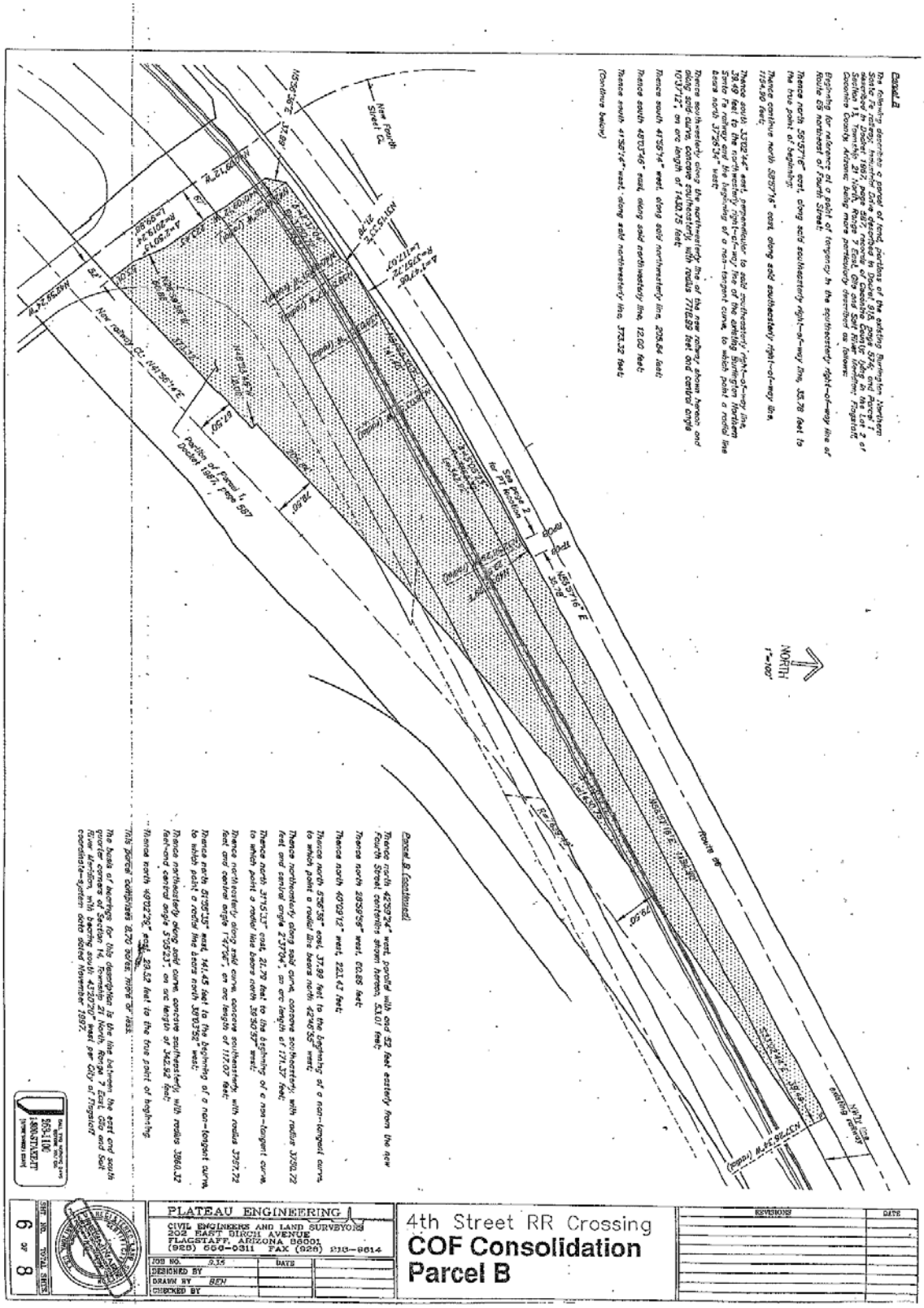

Parcel B
Parcel B (continued)
PLATEAU ENGINEERING
CIVIL ENGINEERS AND LAND SURVEYORS
202 EAST BIRCH AVENUE
FLAGSTAFF, ARIZONA 86001
(928) 556-0311 FAX (928) 213-9614
4th Street RR Crossing
COF Consolidation
Parcel B
REVISIONS
DATE
NORTH
1"=100'
New Fourth Street CL
New railway CL
Route 66
Partition of Parcel 1, Docket 1987, page 587
Site Point 2 for GPS Location
Existing railway
SHT. NO. TOTAL SHTS.
6 OF 8

EXHIBIT A-3

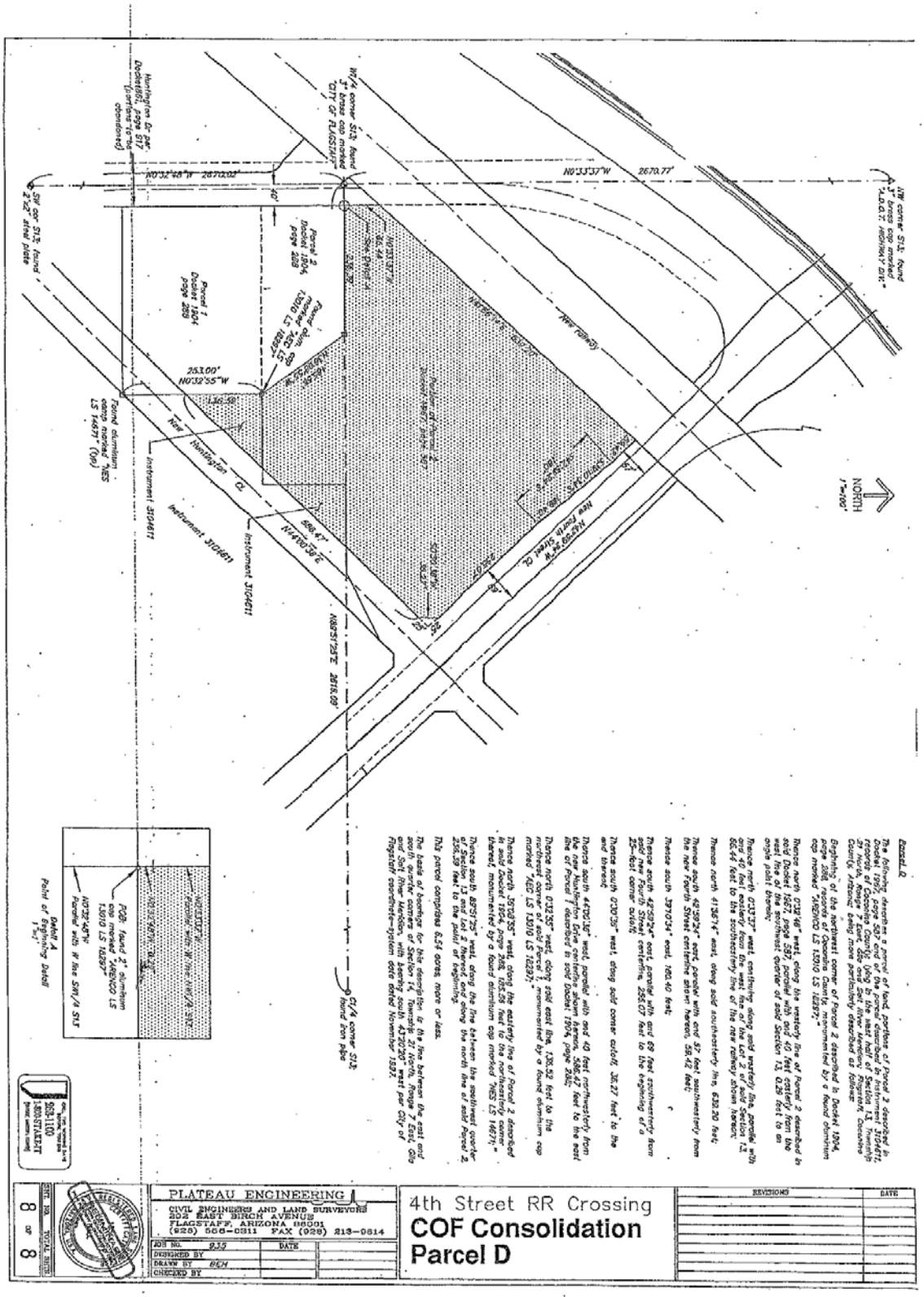


Exhibit D

The following description is a parcel of land, portions of Parcel 2 described in Docket 1904, page 582 and of the parcel described in Instrument 3104611, records of Coconino County, lying to the west half of Section 13, Township 21 North, Range 7 East, Gila and Salt River Meridian, Flagstaff, Coconino County, Arizona, being more particularly described as follows:

Beginning at the northwest corner of Parcel 2 described in Docket 1904, page 588, records of Coconino County, monumented by a found aluminum cap marked "HERCO LS 13010 LS 16297;"

Thence north 0°32'48" west, along the westerly line of Parcel 2 described in said Docket 1867, page 587, parallel with and 40 feet easterly from the west line of the southeast quarter of said Section 13, 0.29 feet to an angle point thereto;

Thence north 0°32'55" west, continuing along said westerly line, parallel with and 40 feet easterly from the west line of lot Lot 2 of said Section 13, 62.44 feet to the southeasterly line of the new railway shown hereon;

Thence north 41°56'14" east, along said southeasterly line, 630.20 feet;

Thence south 42°39'24" east, parallel with and 37' feet southwesterly from the new Fourth Street centerline shown hereon, 58.42 feet;

Thence south 37°01'34" east, 160.40 feet;

Thence south 42°39'24" east, parallel with and 69 feet southwesterly from said new Fourth Street centerline, 256.07 feet to the beginning of a 25-foot corner cutoff;

Thence south 0°30'36" west, along said corner cutoff, 36.27 feet to the end thereof;

Thence south 47°01'34" west, parallel with and 40 feet northwesterly from the southwesterly line of said Parcel 2, 1.41 feet to the east line of Parcel 1 described in said Docket 1904, page 588;

Thence north 0°32'55" west, along said east line, 135.52 feet to the northeast corner of said Parcel 1, monumented by a found aluminum cap marked "HER LS 13010 LS 16297;"

Thence north 35°03'55" west, along the easterly line of Parcel 2 described in said Docket 1904, page 588, 185.26 feet to the northeasterly corner thereof, monumented by a found aluminum cap marked "NES LS 14671;"

Thence south 89°51'29" west, along the line between the southwest quarter of Section 13 and the northeast quarter of Section 24, 2618.09 feet to the point of beginning.

This parcel comprises 6.54 acres, more or less.

The basis of bearings for this description is the line between the east and south quarter corners of Section 14, Township 21 North, Range 7 East, Gila and Salt River Meridian, with bearing south 43°20'20" west per City of Flagstaff coordinate-system data dated November 1997.

SHT. NO.	8
TOTAL SHTS.	8

PLATEAU ENGINEERING
CIVIL ENGINEERS AND LAND SURVEYORS
202 EAST BIRCH AVENUE
FLAGSTAFF, ARIZONA 86001
(928) 556-0311 FAX (928) 213-0614

JOB NO.	935	DATE
DESIGNED BY		
DRAWN BY	BEH	
CHECKED BY		

4th Street RR Crossing
COF Consolidation
Parcel D

REVISIONS	DATE

EXHIBIT A-4

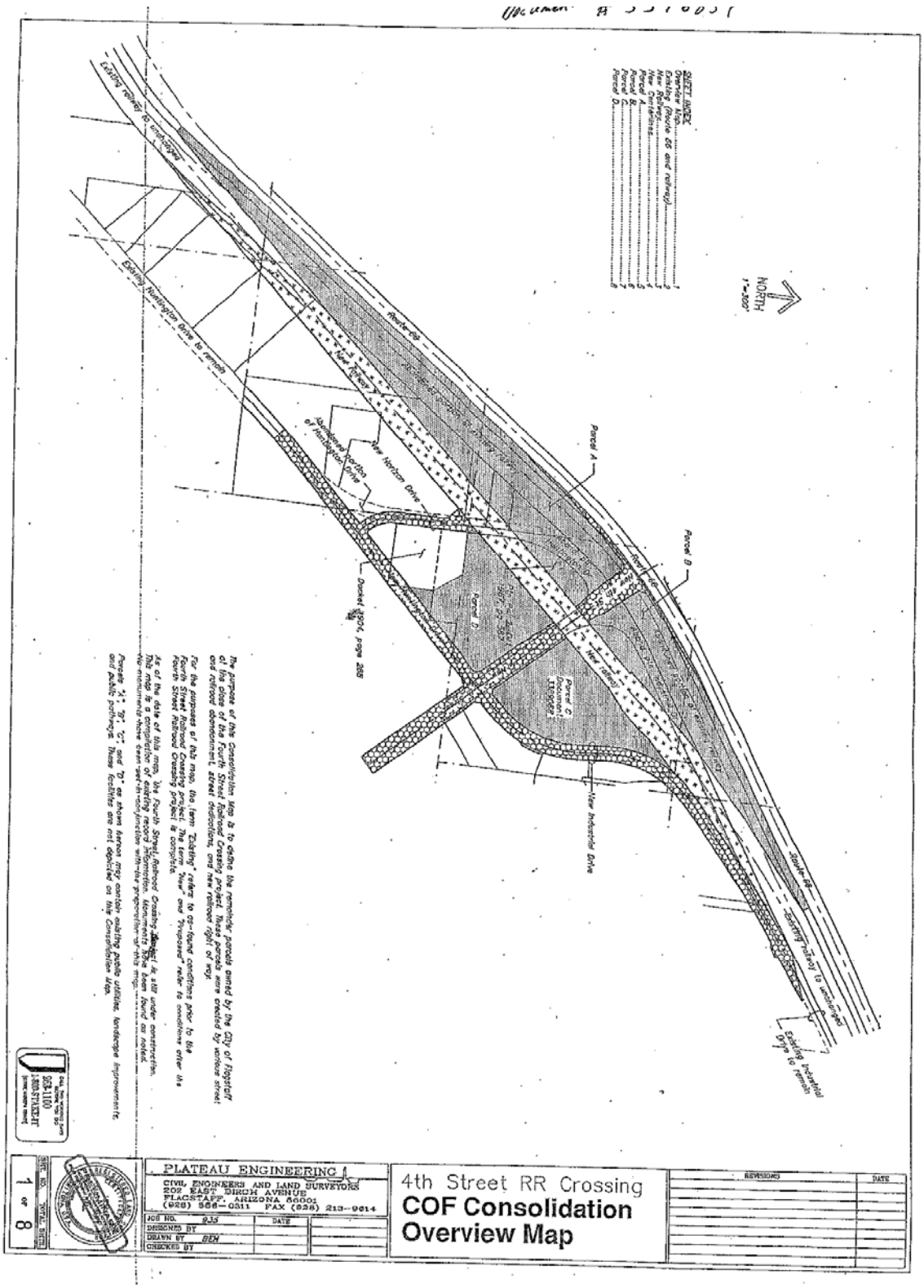

Parcel A
Parcel B
Parcel C
Parcel D
Existing Huntington drive to remain
Abandoned portion of Huntington Drive
New Horizon Drive
Docket 3904, page 265
Existing railroad to abandon
Existing Industrial drive to remain
New Industrial Drive
NORTH
PLATEAU ENGINEERING
CIVIL ENGINEERS AND LAND SURVEYORS
202 EAST BIRCH AVENUE
FLAGSTAFF, ARIZONA 86001
(928) 556-0311 FAX (928) 213-9614
4th Street RR Crossing
COF Consolidation
Overview Map
REVISIONS
DATE
JOB NO. 9JJ
DESIGNED BY
DRAWN BY BEH
CHECKED BY
SHEET NO. 1 OF TOTAL SHEETS 8
SCALE 1:800
SCALE 1:100

EXHIBIT B

City Clerk
211 W. Aspen Avenue
Flagstaff, Az 86001

This transaction is exempted
from the affidavit of value
requirement by A.R.S. § 11-1134(A)(3)

QUITCLAIM DEED

The City of Flagstaff, a municipal corporation organized and existing under and by virtue of the laws of the State of Arizona ("Grantor"), in consideration of the receipt of $10.00 and other valuable consideration hereby remises, releases and quitclaims to Evergreen-Devco, Inc, A California Corporation ("Grantee"), all of the interest of Grantor in the following premises ("Premises") situated in the City of Flagstaff, Coconino County, Arizona:

> THAT PORTION OF THE WEST HALF OF SECTION 13 AND THE EAST HALF OF SECTION 14, TOWNSHIP 21 NORTH, RANGE 7 EAST OF THE GILA AND SALT RIVER MERIDIAN, COCONINO COUNTY, ARIZONA SHOWN AS PARCELS A, B AND D, ON CONSOLIDATION MAP, RECORDED IN DOCUMENT NO. 3396857, RECORDS OF COCONINO COUNTY ARIZONA

SUBJECT TO all valid interests, including, but not limited to, current taxes and other assessments, reservations in patents and all easements, rights-of-way, encumbrances, liens, covenants, conditions, restrictions, obligations and liabilities as may appear of record or otherwise.

IN WITNESS WHEREOF, Grantor has caused this Quitclaim Deed to be executed this _____ day of _____, 2013

GRANTOR
City of Flagstaff

By _____
Gerald W. Nabours
Mayor

Attest: _____
City Clerk

Approved as to Form:

_____
City Attorney

STATE OF ARIZONA)
)ss
County of Coconino)

On this ____ day of ____, 2013, before me, a Notary Public, personally appeared Gerald W. Nabours, Mayor of the City of Flagstaff, known to be or satisfactorily proven to be the person whose name is subscribed to the foregoing instrument and acknowledged that he executed the same on behalf of the City of Flagstaff, for the purposes therein contained.

_____
Notary Public

My Commission Expires:

_____

Flagstaff, Az 86001

Exhibit C

Flagstaff Urban Trail System Conceptual Plan

Exhibit D

Flagstaff Urban Trail System Easement Form

When recorded, mail to:
City Clerk
City of Flagstaff
211 West Aspen Avenue
Flagstaff, Arizona 86001

FLAGSTAFF URBAN TRAILS SYSTEM EASEMENT

For valuable consideration, the sufficiency and receipt of which is hereby acknowledged, _____ ("Grantor"), hereby grants and conveys unto the CITY OF FLAGSTAFF, a municipal corporation organized and existing under and by virtue of the laws of the State of Arizona ("Grantee"), an exclusive easement for a non-motorized public access as part of the Flagstaff Urban Trails System ("Easement") over and across the real property of Grantor situated in Coconino County, Arizona, and described in **Exhibits A** and **A-1** (the "Easement Area"), both of which are attached and incorporated by reference into this Easement, under the terms and conditions set forth below.

1. This Easement is granted to enable the Grantee to locate, repair, replace, alter and maintain a non-motorized public access trail system (the "Improvements") associated with the Flagstaff Urban Trails System. Grantor and Grantee agree to cooperate reasonably, promptly and fully in determining the scope, timing and design of the Improvements.

2. This Easement shall include the rights of ingress and egress across any adjacent property owned or controlled by the Grantor where reasonably required to gain access to the Easement Area for the purposes of repair, alteration, or maintenance of the Improvements. Grantee's access across said adjacent property shall not interfere with the business operations conducted thereon.

3. The granting of this Easement is made on an exclusive basis to the Grantee for the benefit of the public.

4. This Easement shall include the rights to reasonably remove, alter or maintain vegetation, improvements, or obstructions within the limits of the Easement that conflict with the use of the Easement; provided, however, Grantee shall not remove or alter any improvements without first Grantor with one weeks' prior written notice of its intent to do so.

5. Upon completion of any removal, alteration or maintenance of the Improvements by Grantee, the Grantee shall have the obligation to restore the attributes of the property disturbed by any such removal, alteration or maintenance (including both the Easement Area and adjacent property) to as near the pre-disturbance condition or better.

6. To the extent permitted by Arizona law, Grantee shall indemnify and hold Grantor harmless

from any liabilities for injuries or damages to persons or property arising out of Grantee's or its officers', agents', employees', licensees', and invitees' (including the public) use of the Easement, the Improvements or presence in the Easement Area.

7. The Grantor shall have the right to use and enjoy the property burdened by the Easement, provided such use and enjoyment does not interfere with Grantee's or the public's ability to utilize the Easement granted herein, and further provided that the Grantor shall not construct or permit the erection of any structure or improvement that would interfere with the Easement or the operation of the Trail within the Easement without Grantee's written consent. In addition, Grantor reserves the right to grant additional easements in, on, over or under the Easement Area, provided, however, any such grant of additional easements shall not unreasonably interfere with the rights granted hereunder to Grantee. The determination of whether Grantor's use and enjoyment or proposed construction of any structure or improvement would interfere with the Grantee's or the public's ability to utilize the Easement or the operation of the Trail shall be in the reasonable discretion of the Grantee.

IN WITNESS WHEREOF, Grantor has caused this Flagstaff Urban Trails System Easement to be executed in its name by the undersigned officers this ___ day of _____, 2013.

GRANTOR:

_____

By: _____

Title: _____

STATE OF _____)
)
County of _____)

The foregoing instrument was acknowledged before me this ___day of _____, 2013, by _____, the _____ of _____, on behalf of _____.

_____
Notary Public

My Commission Expires:

_____

Exhibit E

1. Buyer will market the site at all ICSC events it attends, including the Real Estate Conventions in Las Vegas and San Diego, in 2013, 2014 and 2015 (and any appropriate extension of time required if significant portions of the Property remain to be developed);
2. Buyer will hire one or more brokers with strong tenant ties to market the Property;
3. Buyer will process the zoning application for all of the Property at one time, and will process site plan approval requests as tenants are ready to move forward.
4. Buyer expects that the Property will be developed in Phases, with the first Phase anticipated to commence at the southwest corner within approximately 12 months following the close of escrow. Buyer further anticipates that the southeast corner of the intersection will be the second Phase and the timing will be user-driven. The portions of the Property located west of the wash and south of the railroad tracks are anticipated to follow in subsequent phases.
5. Buyer will endeavor to attract new businesses that are not within the current trade area of the Property, and will further endeavor to encourage relocations of businesses which are within the current trade area if the relocation will result in a larger building to accommodate the business and/or will result in the business increasing its revenues due to the relocation.

CITY OF FLAGSTAFF

STAFF SUMMARY REPORT

To:	The Honorable Mayor and Council
From:	Brandi Suda, Finance Manager
Date:	05/29/2013
Meeting Date:	06/04/2013

TITLE:

Consideration and Adoption of Resolution No. 2013-13: A resolution of the Council of the City of Flagstaff, Arizona adopting the tentative estimates of the amounts required for the public expense for the City of Flagstaff for Fiscal Year 2013-2014; adopting a Tentative Budget; setting for the receipts and expenditures; the amount proposed to be raised by direct property taxation; giving notice of the time for hearing taxpayers, for adopting of Budget and for fixing the tax levies.

RECOMMENDED ACTION:

1) Read Resolution No. 2013-13 by title only
2) City Clerk reads Resolution No. 2013-13 by title only (if approved above)
3) Adopt Resolution No. 2013-13

Policy Decision or Reason for Action:

Arizona State Statutes (ARS. 42-17101, 42-17102, and 42-17105) require that each municipality adopt and publish, in a specified format, a tentative budget. The adoption of the tentative budget has the effect of establishing an amount that cannot be exceeded in the final adoption of the budget. Furthermore, the adoption of the tentative budget sets into motion a legally mandated time sequence of actions to which the Council must adhere to adopt a final budget and to levy property taxes.

Financial Impact:

The tentative budget must be adopted to set the appropriate sequence of events in place for final budget adoption.

Connection to Council Goal:

Effective governance
Repair, replace, maintain infrastructure (streets & utilities)

Has There Been Previous Council Decision on This:

- November Budget Retreat on November 14 & 15, 2012
- Mini Budget Retreats on December 12, 2012, January 11 & 22, 2013 & February 4, 2013,
- February Budget Retreat on February 14 & 15, 2013
- Council Budget Meetings on April 24, 25 and 26, 2013.

Options and Alternatives:

The City could delay the tentative budget adoption until no later than the 3rd Monday in July. While the City would be able to continue operations through a Continuing Disclosure resolution, the City would not be able to commit to any expenditure directly related to the FY 2013-2014 budget.

Background/History:

The budget is generally presented for tentative adoption in late May or early June to assure funding is appropriated within Council goals and objectives at the beginning of the fiscal year.

At the November 2012 budget retreat Council provided direction to prepare a budget based on a flat primary property tax levy. This is meant to keep the amount of revenue collected at the same level as in FY 2013. This budget agrees to Council direction. Due to no increase in the levy, the City is excluded from Truth in Taxation requirements. We added new construction which amounted to $94,078.

During the February 2013 budget retreat Council provided direction to prepare a budget that addresses needs to maintain infrastructure and increase compensation for City staff. The City Manager presented a budget in April that provided $390,000 for General Fund fleet, facilities, and parks infrastructure needs to maintain current conditions in these areas. The budget also provides $2,450,000 in additional funding for street preservation. The budget, in addition, includes an increase in employee compensation through a 3.2% market adjustment.

During the April budget retreat, Council provided additional adjustments and they are included in the budget. After the April budget retreat divisions provided revised year end estimates and carryover of funding primarily for capital projects. Divisions are provided this opportunity as the previous estimates they provided were in December.

Key Considerations:

The adoption of the tentative budget sets into motion a legally mandated time sequence of actions to which the Council must adhere to adopt a final budget and to levy property taxes. If this time sequence is not met as required by statute, the tentative adoption, final adoption of the budget and property tax levy actions, and related publications must be started over.

The process is prescribed through Arizona State Statute. The tentative budget must be adopted no later than the 3rd Monday in July. The schedules for Council budget and property tax levy actions are as follows:

June 4, 2013	Tentative adoption of budget by Council
June 18, 2013	Proposed budget and property tax levy hearing
June 18, 2013	Final budget adoption (done in a Special Meeting)
June 18, 2013	First reading property tax ordinance
July 2, 2013	Final reading and adoption of property tax ordinance

Expanded Financial Considerations:

Funds must be appropriated to allow for expenditures to occur. The tentative budget must be adopted to set the appropriate sequence of events in place for final budget adoption.

Community Benefits and Considerations:

The Community has the opportunity to present any questions or concerns regarding the budget before the final budget adoption occurs in June.

Community Involvement:

Inform and Involve: The Community has the opportunity to be involved at the public hearing held in conjunction with final adoption. Citizens are welcome to attend Council Budget Retreats. The City Manager's recommended budget was discussed during the Council Budget Retreat on April 24, 25, and 26, 2013. Public participation was available.

Attachments: Res. No. 2013-13
Budget Legal Schedules

RESOLUTION NO. 2013-13

A RESOLUTION OF THE COUNCIL OF THE CITY OF FLAGSTAFF, ARIZONA ADOPTING THE TENTATIVE ESTIMATES OF THE AMOUNTS REQUIRED FOR THE PUBLIC EXPENSE FOR THE CITY OF FLAGSTAFF FOR THE FISCAL YEAR 2013-2014; ADOPTING A TENTATIVE BUDGET; SETTING FORTH THE RECEIPTS AND EXPENDITURES; THE AMOUNT PROPOSED TO BE RAISED BY DIRECT PROPERTY TAXATION; GIVING NOTICE OF THE TIME FOR HEARING TAXPAYERS, FOR ADOPTING OF BUDGET AND FOR FIXING THE TAX LEVIES

ENACTMENTS:

BE IT RESOLVED by the Council of the City of Flagstaff as follows:

SECTION 1. That the accompanying statements and exhibits attached to this Resolution as Schedules A, B, C, D, E, F and G are incorporated herein by this reference, and are hereby adopted as the tentative budget for the City of Flagstaff for the fiscal year 2013-2014.

SECTION 2. That the City Clerk be, and she hereby is, authorized and directed to publish in the manner prescribed by law the estimates of expenditures as set forth in Schedules A, B, C, D, E, F and G together with a notice that the Council will meet on June 18, 2013, for the purpose of final hearing of taxpayers and for adoption of the 2013-2014 Annual Budget for the City of Flagstaff with the final reading and adoption of the property tax ordinance on the 2nd day of July, 2013, at the hour of 6:00 p.m. in the Council Chambers at 211 West Aspen, Flagstaff, Arizona.

SECTION 3. Upon the recommendation by the Manager and with the approval of the Council, expenditures may be made from the appropriation for contingencies. The transfers of any sums within any specific appropriation may be made only upon the approval of the Council.

SECTION 4. Money from any fund may be used for any of these appropriations, except money specifically restricted by State Law or by City Ordinance or Resolution.

PASSED AND ADOPTED by the City Council and approved by the Mayor of the City of Flagstaff this 4th day of June, 2013.

_____
MAYOR

ATTEST:

_____
CITY CLERK

APPROVED AS TO FORM:

_____
CITY ATTORNEY

OFFICIAL BUDGET FORMS

City of Flagstaff

Fiscal Year 2014

City of Flagstaff

TABLE OF CONTENTS

Fiscal Year 2014

Resolution for the Adoption of the Budget

Schedule A—Summary Schedule of Estimated Revenues and Expenditures/Expenses

Schedule B—Tax Levy and Tax Rate Information

Schedule C—Revenues Other Than Property Taxes

Schedule D—Other Financing Sources/<Uses> and Interfund Transfers

Schedule E—Expenditures/Expenses by Fund

Schedule F—Expenditures/Expenses by Department

Schedule G—Full-Time Employees and Personnel Compensation

CITY OF FLAGSTAFF
Summary Schedule of Estimated Revenues and Expenditures/Expenses
Fiscal Year 2014

THE FINAL OPPORTUNITY FOR PUBLIC INPUT ON THE CITY OF FLAGSTAFF FISCAL YEAR 2013-2014 BUDGET WILL OCCUR ON JUNE 18, 2013 AT 6:00 P.M. IN THE CITY COUNCIL CHAMBERS, 211 W. ASPEN AVENUE, FLAGSTAFF, AZ
The budget may be reviewed at the City of Flagstaff in the City Clerks Office, 211 W. Aspen Avenue, Flagstaff AZ 86001
Or the Flagstaff City-County Public Library, 300 W. Aspen Avenue, Flagstaff AZ 86001
Or the East Flagstaff Community Library, 3000 N. 4th Street, Flagstaff, AZ 86004 or the official website "flagstaff.az.gov"

FUND	ADOPTED BUDGETED EXPENDITURES/ EXPENSES* 2013	ACTUAL EXPENDITURES/ EXPENSES** 2013	FUND BALANCE/ NET POSITION*** July 1, 2013**	PROPERTY TAX REVENUES 2014	ESTIMATED REVENUES OTHER THAN PROPERTY TAXES 2014	OTHER FINANCING 2014 SOURCES	OTHER FINANCING 2014 <USES>	INTERFUND TRANSFERS 2014 IN	INTERFUND TRANSFERS 2014 <OUT>	TOTAL FINANCIAL RESOURCES AVAILABLE 2014	BUDGETED EXPENDITURES/ EXPENSES 2014
1. General Fund	$ 55,934,774	$ 47,707,225	$ 19,552,029	Primary: $ 5,355,000	$ 46,448,731	$ 4,000,000	$	$ 3,506,081	$ 8,991,479	$ 69,870,362	$ 60,218,681
2. Special Revenue Funds	45,835,385	29,958,696	16,368,332	Secondary:	39,392,847	1,100,000		13,191,489	12,865,871	57,186,797	46,803,904
3. Debt Service Funds Available	6,364,381	5,508,974	8,886,368	5,530,453	964,800			7,460,125	7,460,125	15,381,621	8,365,725
4. Less: Amounts for Future Debt Retirement											
5. Total Debt Service Funds	6,364,381	5,508,974	8,886,368	5,530,453	964,800			7,460,125	7,460,125	15,381,621	8,365,725
6. Capital Projects Funds	74,559,305	10,325,857	9,255,448		28,345,447	25,200,000		6,326,000		69,126,895	62,277,283
7. Permanent Funds			214,968		22,373					237,341	
8. Enterprise Funds Available	65,410,254	46,725,890	19,535,601		56,905,210	4,578,600		4,665,156	5,831,376	79,853,191	65,807,213
9. Less: Amounts for Future Debt Retirement											
10. Total Enterprise Funds	65,410,254	46,725,890	19,535,601		56,905,210	4,578,600		4,665,156	5,831,376	79,853,191	65,807,213
11. Internal Service Funds											
12. TOTAL ALL FUNDS	$ 248,104,099	$ 140,226,642	$ 73,812,746	$ 10,885,453	$ 172,079,408	$ 34,878,600	$	$ 35,148,851	$ 35,148,851	$ 291,656,207	$ 243,472,806

EXPENDITURE LIMITATION COMPARISON	2013	2014
1. Budgeted expenditures/expenses	$248,104,099	$243,472,806
2. Add/subtract: estimated net reconciling items	3,508,343	3,053,590
3. Budgeted expenditures/expenses adjusted for reconciling items	251,612,442	246,526,396
4. Less: estimated exclusions	124,177,908	123,950,928
5. Amount subject to the expenditure limitation	$127,434,534	$122,575,468
6. EEC or voter-approved alternative expenditure limitation	$130,339,503	$133,177,482

☐ **The city/town does not levy property taxes and does not have special assessment districts for which property taxes are levied. Therefore, Schedule B has been omitted.**

*** Includes Expenditure/Expense Adjustments Approved in current year from Schedule E.**
**** Includes actual amounts as of the date the proposed budget was prepared, adjusted for estimated activity for the remainder of the fiscal year.**
***** Amounts in this column represent Fund Balance/Net Position amounts except for amounts not in spendable form (e.g., prepaids and inventories) or legally or contractually**

CITY OF FLAGSTAFF
EXPENDITURE LIMITATION
AND
TAX LEVY INFORMATION
FISCAL YEAR 2013-2014

	ESTIMATED FY 2012-2013	FY 2013-2014
Expenditure Limitation [Economic Estimates Commission]		$ 133,177,482
Total Estimated Expenditures Subject to Expenditure Limitation		
1. Maximum Allowable Primary Property Tax Levy [ARS 42-17051.A] rev 6/06 HB 2876	$ 5,534,145	$ 5,742,768
2. Amount Received from Primary Property Taxation in FY 2011-2012 in Excess of the Sum of that Year's Maximum Allowable Primary Property Tax Levy [ARS 42-17102.A.18]	$ -	
3. Property Tax Levy Amounts		
A. Primary Property Taxes	$ 5,426,095	$ 5,520,173
B. Secondary Property Taxes	6,402,304	5,530,453
C. Total Property Tax Levy Amount	$ 11,828,399	$ 11,050,626
4. Property Taxes Collected (Estimated)		
A. Primary Property Taxes:		
(1) FY 2012-2013 Levy	$ 5,250,000	
(2) Prior Years' Levies	100,000	
(3) Total Primary Property Taxes Collected	5,350,000	
B. Secondary Property Taxes:		
(1) FY 2012-2013 Levy	6,402,304	
(2) Total Secondary Property Taxes Collected	6,402,304	
C. Total Property Taxes Collected	$ 11,752,304	
5. Property Tax Rates		
A. City of Flagstaff Tax Rate:		
(1) Primary Property Tax Rate	0.7131	0.8429
(2) Secondary Property Tax Rate	0.8366	0.8366
(3) Total City Tax Rate	1.5497	1.6795

B. Special Assessment District Tax Rates:

As of the date of the proposed budget, the city was operating one special assessment district for which secondary property taxes are levied. For information pertaining to this districts and its' tax rates, please contact the City Finance Department.

* Includes actual property taxes collected as of the date the proposed budget was prepared plus estimated property tax collections for the remainder of the fiscal year.

CITY OF FLAGSTAFF
SUMMARY BY FUND OF REVENUES OTHER THAN PROPERTY TAXES
FISCAL YEARS 2013 AND 2014
(WITH ACTUALS FOR FISCAL YEAR 2012)

SOURCE OF REVENUES	ACTUAL REVENUES 2011-2012	BUDGETED REVENUES 2012-2013	ESTIMATED ACTUAL REVENUES 2012-2013	BUDGETED REVENUES 2013-2014	CHANGE (BDGT-BDGT)	% CHANGE
GENERAL FUND						
Local taxes						
City Sales Tax	$ 14,765,828	14,351,925	15,582,500	15,850,368	1,498,443	10.44%
Franchise Tax	2,347,952	2,436,000	2,305,000	2,345,338	(90,662)	-3.72%
Licenses and permits						
Business Licenses	33,690	33,000	33,000	33,000	-	0.00%
Building Permits	1,288,317	600,000	1,100,000	1,119,250	519,250	86.54%
Other Licenses and permits	359,867	157,930	157,930	157,930	-	0.00%
Intergovernmental revenues						
State Income Tax Sharing	5,559,477	6,720,300	6,728,484	7,300,000	579,700	8.63%
State Shared Sales Tax	5,147,101	5,227,250	5,325,000	5,418,188	190,938	3.65%
Vehicle License Tax	2,483,244	2,486,750	2,500,000	2,543,750	57,000	2.29%
Federal Grants	1,178,532	2,575,967	1,359,175	2,158,654	(417,313)	-16.20%
State Grants	1,036,530	1,791,144	958,164	1,547,827	(243,317)	-13.58%
Local Intergovernmental Agreements	872,822	850,000	850,000	850,000	-	0.00%
Charges for services						
General Government	153,961	579,850	184,100	366,100	(213,750)	-36.86%
Parks & Recreation	1,319,732	1,408,830	1,308,830	1,578,830	170,000	12.07%
Public Safety	1,414,238	906,300	906,300	910,863	4,563	0.50%
Cemetery	135,335	134,000	134,000	135,340	1,340	1.00%
Fines and forfeits	1,182,413	1,238,570	1,110,478	1,115,151	(123,419)	-9.96%
Interest on investments	132,369	213,350	215,100	207,500	(5,850)	-2.74%
Miscellaneous revenues	2,077,340	3,885,183	1,626,449	2,810,642	(1,074,541)	-27.66%
Total General Fund	41,488,748	45,596,349	42,384,510	46,448,731	852,382	1.87%
SPECIAL REVENUE FUNDS						
LIBRARY FUND						
Intergovernmental revenues						
State Grants	155,088	52,400	78,697	25,000	(27,400)	-52.29%
Library District Taxes	3,885,243	3,843,535	3,843,537	6,116,924	2,273,389	59.15%
Interest on investments	22,579	27,250	21,105	37,437	10,187	37.38%
Miscellaneous revenues	76,571	2,453,363	612,887	20,474	(2,432,889)	-99.17%
Total Library Fund	4,139,481	6,376,548	4,556,226	6,199,835	(176,713)	-2.77%
HIGHWAY USER REVENUE FUND						
Intergovernmental revenues						
Federal Grants	-	-	-	36,000	36,000	0.00%
Highway User Tax	5,576,167	5,555,000	5,926,167	5,955,798	400,798	7.22%
Interest on investments	6,704	7,000	6,000	6,000	(1,000)	-14.29%
Miscellaneous revenues	1,151	540,000	-	740,000	200,000	-37.04%
Total Highway User Revenue Fund	5,584,022	6,102,000	5,932,167	6,737,798	435,798	7.14%
TRANSPORTATION FUND						
Transportation Tax	10,399,189	10,223,455	10,982,632	11,081,675	858,220	8.39%
Interest on Investments	58,675	40,000	94,000	89,000	49,000	122.50%
Miscellaneous revenues	670,622	4,500,000	-	4,500,000	-	0.00%
Total Transportation Fund	11,128,486	14,763,455	11,076,632	15,670,675	907,220	6.15%
FLAGSTAFF URBAN TRAIL SYSTEM FUND						
Intergovernmental revenues						
State Grants	-	-	-	1,239,339	1,239,339	0.00%
Total Beautification Fund	-	-	-	1,239,339	1,239,339	0.00%
BEAUTIFICATION FUND						
Intergovernmental revenues						
State Grants	236,132	1,392,471	678,392	-	(1,392,471)	-100.00%
BBB Tax	1,111,913	1,106,350	1,166,000	1,186,405	80,055	7.24%
Interest on investments	26,886	10,970	44,000	6,120	(4,850)	-44.21%
Miscellaneous	932	15,890	15,890	-	(15,890)	-100.00%
Total Beautification Fund	1,375,863	2,525,681	1,904,282	1,192,525	(1,317,266)	-52.15%

CITY OF FLAGSTAFF
SUMMARY BY FUND OF REVENUES OTHER THAN PROPERTY TAXES
FISCAL YEARS 2013 AND 2014
(WITH ACTUALS FOR FISCAL YEAR 2012)

SOURCE OF REVENUES	ACTUAL REVENUES 2011-2012	BUDGETED REVENUES 2012-2013	ESTIMATED ACTUAL REVENUES 2012-2013	BUDGETED REVENUES 2013-2014	CHANGE (BDGT-BDGT)	% CHANGE
ECONOMIC DEVELOPMENT FUND						
Intergovernmental revenues						
Federal Grants	$ 373,306	220,000	-	-	(220,000)	-100.00%
State Grants	-	60,000	60,000	100,000	40,000	66.67%
BBB Tax	528,159	525,516	553,850	563,542	38,026	7.24%
Interest on investments	1,356	1,455	2,111	2,977	1,522	104.60%
Miscellaneous revenues	40,020	279,420	40,020	41,637	(237,783)	-85.10%
Total Economic Development Fund	942,841	1,086,391	655,981	708,156	(378,235)	-34.82%
TOURISM FUND						
BBB Tax	1,667,870	1,659,525	1,749,000	1,779,608	120,083	7.24%
Retail Sales	62,323	58,905	62,000	62,620	3,715	6.31%
Interest on investments	2,871	2,000	5,513	6,452	4,452	222.60%
Miscellaneous revenues	28,949	26,483	26,690	25,403	(1,080)	-4.08%
Total Tourism Fund	1,762,013	1,746,913	1,843,203	1,874,083	127,170	7.28%
ARTS AND SCIENCE FUND						
BBB Tax	416,967	414,881	437,250	444,902	30,021	7.24%
Interest on investments	1,778	3,501	3,084	2,866	(635)	-18.14%
Total Arts and Science Fund	418,745	418,382	440,334	447,768	29,386	7.02%
RECREATION-BBB FUND						
BBB Tax	1,834,657	1,825,478	1,923,900	1,957,568	132,090	7.24%
Interest on investments	5,463	6,200	11,200	7,000	800	12.90%
Total Recreation-BBB Fund	1,840,120	1,831,678	1,935,100	1,964,568	132,890	7.26%
HOUSING AND COMMUNITY SVCS FUND						
Intergovernmental revenues						
Federal Grants	836,607	1,109,731	715,810	912,174	(197,557)	-17.80%
State Grants	250,665	630,000	330,000	660,000	30,000	4.76%
Interest on investments	5,370	-	8,332	-	-	0.00%
Miscellaneous revenues	224,254	483,000	501,162	650,000	167,000	34.58%
Total Housing and Community Svcs Fund	1,316,896	2,222,731	1,555,304	2,222,174	(557)	-0.03%
METRO PLANNING ORGANIZATION FUND						
Intergovernmental revenues						
Federal Grants	424,374	380,604	349,068	660,071	279,467	73.43%
Miscellaneous revenues	3,880	105,000	5,000	255,000	150,000	142.86%
Total Metro Planning Organization Fund	428,254	485,604	354,068	915,071	429,467	88.44%
EDA REVOLVING LOAN FUND						
Intergovernmental revenues						
Federal Grants	-	-	-	220,000	220,000	0.00%
Interest on investments	-	-	-	855	855	0.00%
Total EDA Revolving Loan Fund	-	-	-	220,855	220,855	0.00%
TOTAL SPECIAL REVENUE FUNDS	28,936,721	37,559,383	30,253,297	39,392,847	1,649,354	4.39%
DEBT SERVICE FUNDS						
SECONDARY PROPERTY TAX FUND						
Interest on investments	42,387	32,700	57,700	59,700	27,000	82.57%
Total Secondary Property Tax Fund	42,387	32,700	57,700	59,700	27,000	82.57%
SPECIAL ASSESSMENT BONDS						
Special Assessments	8,286,453	904,625	904,625	902,000	(2,625)	-0.29%
Interest on investments	1,303	1,400	3,635	3,100	1,700	121.43%
Total Special Assessment Bonds	8,287,756	906,025	908,260	905,100	(925)	-0.10%
TOTAL DEBT SERVICE FUNDS	8,330,143	938,725	965,960	964,800	26,075	2.78%

CITY OF FLAGSTAFF
SUMMARY BY FUND OF REVENUES OTHER THAN PROPERTY TAXES
FISCAL YEARS 2013 AND 2014
(WITH ACTUALS FOR FISCAL YEAR 2012)

SOURCE OF REVENUES	ACTUAL REVENUES 2011-2012	BUDGETED REVENUES 2012-2013	ESTIMATED ACTUAL REVENUES 2012-2013	BUDGETED REVENUES 2013-2014	CHANGE (BDGT-BDGT)	% CHANGE
CAPITAL PROJECTS FUNDS						
G.O. BONDS PROJECTS						
Intergovernmental revenues						
Federal Grants	$ -	3,000,000	2,389,000	6,000,000	3,000,000	100.00%
Interest on investments	21,100	13,230	15,500	10,355	(2,875)	-21.73%
Miscellaneous Revenue		11,196,000	-	9,711,092	(1,484,908)	-13.26%
Total G.O. Bonds Projects	21,100	14,209,230	2,404,500	15,721,447	1,512,217	10.64%
MUNICIPAL FACILITIES CORP						
Intergovernmental revenues						
Grant Revenues	-	3,762,500	-	4,600,000	837,500	22.26%
Miscellaneous Revenue	-	1,100,000	-	8,024,000	6,924,000	629.45%
Total Municipal Facilities Corp	-	4,862,500	-	12,624,000	7,761,500	
TOTAL CAPITAL PROJECTS FUNDS	21,100	19,071,730	2,404,500	28,345,447	9,273,717	48.63%
PERMANENT FUNDS						
PERPETUAL CARE FUND						
Contributions	15,475	19,908	19,908	20,306	398	2.00%
Interest on investments	1,080	2,056	1,742	2,067	11	0.54%
Total Perpetual Care Fund	16,555	21,964	21,650	22,373	409	1.86%
TOTAL PERMANENT FUNDS	16,555	21,964	21,650	22,373	409	1.86%
ENTERPRISE FUNDS						
WATER AND WASTEWATER FUND						
OPERATING FUND						
Intergovernmental revenues						
State Grants	346,222	432,715	307,200	290,500	(142,215)	-32.87%
Federal Grants	1,343,510	3,169,237	1,405,000	300,000	(2,869,237)	-90.53%
Water Revenues	12,570,940	12,940,449	13,377,684	15,718,170	2,777,721	21.47%
Wastewater Revenues	7,883,022	8,444,905	8,651,874	9,638,072	1,193,167	14.13%
Interest on Investments	58,920	101,505	95,000	95,950	(5,555)	-5.47%
Miscellaneous revenues	116,948	-	70,559	91,000	91,000	0.00%
Total Water and Wastewater Fund	22,319,562	25,088,811	23,907,317	26,133,692	1,044,881	4.16%
AIRPORT FUND						
OPERATING FUND						
Intergovernmental revenues						
Federal Grants	3,053,899	4,846,978	568,162	7,211,173	2,364,195	48.78%
State Grants	102,986	844,368	697,425	466,102	(378,266)	-44.80%
Airport Revenues	1,644,876	1,666,101	1,677,142	1,726,440	60,339	3.62%
Interest on investments	1,814	5,385	1,650	2,160	(3,225)	-59.89%
Miscellaneous revenues	196,215	261,120	42,030	328,520	67,400	25.81%
Total Airport Fund	4,999,790	7,623,952	2,986,409	9,734,395	2,110,443	27.68%
SOLID WASTE						
Intergovernmental revenues						
Federal Grants	430,707	93,500	114,906	-	(93,500)	-100.00%
Solid Waste Revenues	12,003,304	12,392,011	11,928,206	11,384,327	(1,007,684)	-8.13%
Interest on investments	45,793	30,164	47,044	47,044	16,880	55.96%
Miscellaneous revenues	7,716	12,000	107,822	-	(12,000)	-100.00%
Total Environmental Services Fund	12,487,520	12,527,675	12,197,978	11,431,371	(1,096,304)	-8.75%
ENVIRONMENTAL MANANGEMENT						
Environmental Services Revenues	-	-	-	1,001,509	1,001,509	0.00%
Miscellaneous revenues	-	-	-	23,600	23,600	0.00%
Total Environmental Services Fund	-	-	-	1,025,109	1,025,109	0.00%

CITY OF FLAGSTAFF
SUMMARY BY FUND OF REVENUES OTHER THAN PROPERTY TAXES
FISCAL YEARS 2013 AND 2014
(WITH ACTUALS FOR FISCAL YEAR 2012)

SOURCE OF REVENUES	ACTUAL REVENUES 2011-2012	BUDGETED REVENUES 2012-2013	ESTIMATED ACTUAL REVENUES 2012-2013	BUDGETED REVENUES 2013-2014	CHANGE (BDGT-BDGT)	% CHANGE
STORMWATER UTILITY						
Intergovernmental revenues						
Federal Grants	$ 1,189	-	-	25,000	25,000	0.00%
Stormwater Utility Revenues	1,445,828	1,436,764	1,436,262	1,471,171	34,407	2.39%
Interest on investments	5,851	20,761	8,457	4,338	(16,423)	-79.11%
Miscellaneous revenues	329	-	-	-	-	0.00%
Total Stormwater Utility Fund	1,453,197	1,457,525	1,444,719	1,500,509	42,984	2.95%
FLAGSTAFF HOUSING AUTHORITY FUNDS						
Intergovernmental revenues						
Federal Grants	4,439,317	5,634,506	5,383,425	5,542,089	(92,417)	-1.64%
Rents and Other Tenant Income	1,057,705	1,037,472	970,511	990,000	(47,472)	-4.58%
Miscellaneous revenues	537,737	644,258	508,206	548,045	(96,213)	-14.93%
Total Stormwater Utility Fund	6,034,759	7,316,236	6,862,142	7,080,134	(236,102)	-3.23%
TOTAL ENTERPRISE FUNDS	47,294,828	54,014,199	47,398,565	56,905,210	2,891,011	5.35%
TOTAL REVENUES	$ 126,088,095	157,202,350	123,428,482	172,079,408	14,692,948	9.35%

CITY OF FLAGSTAFF
SUMMARY BY FUNDING OF OTHER FINANCING SOURCES
AND INTERFUND TRANSFERS
FISCAL YEAR 2013-2014

FUND	PROCEEDS FROM OTHER FINANCING SOURCES	INTERFUND TRANSFERS IN	INTERFUND TRANSFERS OUT
GENERAL FUND	$ 4,000,000	3,506,081	8,991,479
SPECIAL REVENUE FUNDS			
Library Fund	-	1,224,451	328,391
Highway User Revenue Fund	-	9,102,904	28,401
Transportation Fund	-	-	7,867,486
FUTS Fund		2,580,634	
Beautification Fund	-	-	2,556,619
Economic Development	-	261,000	-
Tourism Fund	-	-	136,185
Recreation-BBB Fund	1,100,000	-	1,948,789
Housing & Community Services	-	-	-
MPO	-	22,500	-
Total Special Revenue Funds	1,100,000	13,191,489	12,865,871
DEBT SERVICE FUNDS			
Secondary Property Tax Fund	-	-	7,460,125
G.O. Bond Fund	-	7,460,125	-
Total Debt Service Funds	-	7,460,125	7,460,125
CAPITAL PROJECTS FUNDS			
G.O. Bond Funded Projects	19,500,000	4,700,000	-
Municipal Facilities Corporation	5,700,000	1,626,000	-
Total Capital Projects Funds	25,200,000	6,326,000	-
ENTERPRISE FUNDS			
Water and Wastewater Fund	628,600	-	182,794
Stormwater Utility	-	3,927,428	425,118
Airport Fund	-	552,000	33,567
Solid Waste Fund	3,950,000	-	4,950,216
Environmental Management Fund		185,728	239,681
Total Enterprise Funds	4,578,600	4,665,156	5,831,376
TOTAL ALL FUNDS	$ 34,878,600	35,148,851	35,148,851

CITY OF FLAGSTAFF
SUMMARY BY DIVISION OF EXPENDITURES/EXPENSES WITHIN EACH FUND
COMPARISON OF FISCAL YEAR 2013 AND 2014
(WITH ACTUAL FOR FISCAL YEAR 2012)

FUND/DIVISION	ACTUAL EXPENDITURES/ EXPENSES 2011-2012	ADOPTED BUDGETED EXPENDITURE/ EXPENSE 2012-2013	ESTIMATED ACTUAL EXPENDITURES/ EXPENSES 2012-2013	PROPOSED BUDGETED EXPENDITURE/ EXPENSE 2013-2014	CHANGE (BDGT-BDGT)	% CHANGE
GENERAL FUND						
General Administration	$ 7,939,695	8,395,367	8,036,576	8,470,643	75,276	0.9%
Community Development	3,497,589	3,715,394	3,579,817	4,293,997	578,603	15.6%
Management Services	2,850,274	3,123,808	3,051,046	3,171,917	48,109	1.5%
Fire	8,543,680	10,215,163	9,826,416	10,346,646	131,483	1.3%
Police	16,185,670	16,875,477	16,576,723	17,556,777	681,300	4.0%
Public Works	4,906,365	7,400,090	5,174,398	10,674,003	3,273,913	44.2%
Economic Vitality	226,401	1,200,701	478,636	612,978	(587,723)	(48.9%)
Community Enrichment	3,310,380	3,222,068	3,218,728	-	(3,222,068)	(100.0%)
Non-departmental	(3,268,704)	636,706	(2,435,115)	3,526,720	2,890,014	453.9%
Contingency	132,020	1,150,000	200,000	1,565,000	415,000	36.1%
Total General Fund	44,323,370	55,934,774	47,707,225	60,218,681	4,283,907	7.7%
SPECIAL REVENUE FUNDS						
LIBRARY FUND						
General Administration	124,645	150,716	150,716	148,678	(2,038)	(1.4%)
Management Services	150,648	134,552	134,552	7,025,781	6,891,229	5,121.6%
Public Works	58,909	87,664	87,664	81,044	(6,620)	(7.6%)
Economic Vitality	27,622	27,272	27,272	14,800	(12,472)	(45.7%)
Community Enrichment	4,803,975	7,102,717	5,051,720	-	(7,102,717)	(100.0%)
Non-departmental	152,915	93,095	93,095	89,293	(3,802)	(4.1%)
Contingency	-	100,000	-	222,000	122,000	122.0%
	5,318,714	7,696,016	5,545,019	7,581,596	(114,420)	(1.5%)
HIGHWAY USER REVENUE FUND						
General Administration	108,282	118,391	118,391	109,645	(8,746)	(7.4%)
Community Development	678,205	533,783	533,783	550,239	16,456	3.1%
Management Services	138,296	73,428	73,428	66,108	(7,320)	(10.0%)
Public Works	9,042,899	13,527,647	9,437,744	16,168,834	2,641,187	19.5%
Economic Vitality	29,053	24,888	24,888	13,892	(10,996)	(44.2%)
Non-departmental	226,418	85,536	85,536	88,851	3,315	3.9%
Contingency	-	100,000	-	100,000	-	0.0%
	10,223,153	14,463,673	10,273,770	17,097,569	2,633,896	18.2%
TRANSPORTATION FUND						
General Administration	46,278	52,014	52,014	41,592	(10,422)	(20.0%)
Management Services	266,540	215,009	215,009	251,419	36,410	16.9%
Economic Vitality	10,449	7,789	7,789	5,455	(2,334)	(30.0%)
Non-departmental	6,299,251	7,798,412	5,974,129	6,943,202	(855,210)	(11.0%)
	6,622,518	8,073,224	6,248,941	7,241,668	(831,556)	(10.3%)
FLAGSTAFF URBAN TRAIL SYSTEM FUND						
Community Development	-	-	-	3,446,341	3,446,341	0.0%
BEAUTIFICATION FUND						
Community Development	537,192	3,210,435	1,197,880	-	(3,210,435)	(100.0%)
Economic Vitality	428,705	3,366,203	1,240,532	2,794,669	(571,534)	(17.0%)
Reserve/Contingency	-	10,000	-	10,000	-	0.0%
	965,897	6,586,638	2,438,412	2,804,669	(3,781,969)	(57.4%)
ECONOMIC DEVELOPMENT FUND						
Economic Vitality	1,227,611	1,389,255	1,015,324	968,885	(420,370)	(30.3%)
Reserve/Contingency	-	265,000	-	45,000	(220,000)	(83.0%)
	1,227,611	1,654,255	1,015,324	1,013,885	(640,370)	(38.7%)
TOURISM FUND						
Economic Vitality	1,540,957	1,624,102	1,653,512	1,879,658	255,556	15.7%
Reserve/Contingency	-	50,000	-	50,000	-	0.0%
	1,540,957	1,674,102	1,653,512	1,929,658	255,556	15.3%

CITY OF FLAGSTAFF
SUMMARY BY DIVISION OF EXPENDITURES/EXPENSES WITHIN EACH FUND
COMPARISON OF FISCAL YEAR 2013 AND 2014
(WITH ACTUAL FOR FISCAL YEAR 2012)

FUND/DIVISION	ACTUAL EXPENDITURES/ EXPENSES 2011-2012	ADOPTED BUDGETED EXPENDITURE/ EXPENSE 2012-2013	ESTIMATED ACTUAL EXPENDITURES/ EXPENSES 2012-2013	PROPOSED BUDGETED EXPENDITURE/ EXPENSE 2013-2014	CHANGE (BDGT-BDGT)	% CHANGE
ARTS AND SCIENCE FUND						
Economic Vitality	$ 392,982	637,056	412,010	642,206	5,150	0.8%
Reserve/Contingency	-	10,000	-	10,000	-	0.0%
	392,982	647,056	412,010	652,206	5,150	0.8%
RECREATION-BBB FUND						
Public Works	-	1,100,000	-	1,100,000	-	0.0%
HOUSING AND COMMUNITY SERVICES FUND						
Community Development	1,697,295	3,386,672	1,945,487	2,740,457	(646,215)	(19.1%)
Non-departmental	54,519	45,652	37,053	38,284	(7,368)	(16.1%)
	1,751,814	3,432,324	1,982,540	2,778,741	(653,583)	(19.0%)
METRO PLANNING ORG FUND						
Community Development	416,870	386,971	368,042	666,445	279,474	72.2%
Non-departmental	24,962	21,126	21,126	21,126	-	0.0%
Contingency	-	100,000	-	250,000	150,000	150.0%
	441,832	508,097	389,168	937,571	429,474	84.5%
EDA REVOLVING LOAN FUND						
Economic Vitality	-	-	-	220,000	220,000	0.0%
Total Special Revenue Funds	28,485,478	45,835,385	29,958,696	46,803,904	968,519	2.1%
DEBT SERVICE FUNDS						
GENERAL OBLIGATION BONDS FUND						
Non-departmental	3,743,832	5,456,156	4,600,749	7,460,125	2,003,969	36.7%
SPECIAL ASSESSMENT BONDS FUND						
Non-departmental	7,381,215	908,225	908,225	905,600	(2,625)	(0.3%)
Total Debt Service Funds	11,125,047	6,364,381	5,508,974	8,365,725	2,001,344	31.4%
CAPITAL PROJECT FUNDS						
G.O. BONDS FUNDED PROJECTS FUND						
Non-departmental	9,083,346	65,447,305	9,889,107	49,203,033	(16,244,272)	(24.8%)
MUNICIPAL FACILITIES CORP FUND						
Non-departmental	63,271	9,112,000	436,750	13,074,250	3,962,250	43.5%
Total Capital Projects Funds	9,146,617	74,559,305	10,325,857	62,277,283	(12,282,022)	(16.5%)
ENTERPRISE FUNDS						
WATER AND WASTEWATER FUND						
General Administration	580,253	626,188	626,188	621,261	- 4,927	(0.8%)
Management Services	983,638	915,248	915,248	857,869	(57,379)	(6.3%)
Public Works	50,698	59,122	59,122	48,039	(11,083)	(18.7%)
Economic Vitality	78,942	73,918	73,918	44,347	(29,571)	(40.0%)
Utilities	21,838,673	26,764,580	19,836,514	26,946,257	181,677	0.7%
Non-departmental	494,338	263,254	263,254	270,184	6,930	2.6%
Contingency	69,702	1,800,000	65,000	1,800,000	-	0.0%
	24,096,244	30,502,310	21,839,244	30,587,957	85,647	0.3%

CITY OF FLAGSTAFF
SUMMARY BY DIVISION OF EXPENDITURES/EXPENSES WITHIN EACH FUND
COMPARISON OF FISCAL YEAR 2013 AND 2014
(WITH ACTUAL FOR FISCAL YEAR 2012)

FUND/DIVISION	ACTUAL EXPENDITURES/ EXPENSES 2011-2012	ADOPTED BUDGETED EXPENDITURE/ EXPENSE 2012-2013	ESTIMATED ACTUAL EXPENDITURES/ EXPENSES 2012-2013	PROPOSED BUDGETED EXPENDITURE/ EXPENSE 2013-2014	CHANGE (BDGT-BDGT)	% CHANGE
AIRPORT FUND						
General Administration	$ 51,062	62,750	62,750	61,759	(991)	(1.6%)
Management Services	99,735	119,449	119,449	94,151	(25,298)	(21.2%)
Public Works	127,108	125,633	125,633	105,195	(20,438)	(16.3%)
Economic Vitality	4,834,876	7,450,799	2,803,777	9,432,657	1,981,858	26.6%
Non-departmental	70,048	57,063	57,063	59,662	2,599	4.6%
Contingency	-	-	-	500,000	500,000	0.0%
	5,182,829	7,815,694	3,168,672	10,253,424	2,437,730	31.2%
SOLID WASTE FUND						
General Administration	311,071	398,292	398,292	425,155	26,863	6.7%
Management Services	373,062	376,834	376,834	323,645	(53,189)	(14.1%)
Public Works	10,756,152	12,387,952	11,614,826	9,508,438	(2,879,514)	(23.2%)
Economic Vitality	60,269	61,828	61,828	44,291	(17,537)	(28.4%)
Non-departmental	297,412	244,599	244,599	282,110	37,511	15.3%
Contingency	49,192	612,000	425,000	612,000	-	0.0%
	11,847,158	14,081,505	13,121,379	11,195,639	(2,885,866)	(20.5%)
ENVIRONMENTAL MANAGEMENT FUND						
General Administration	-	-	-	18,020	18,020	0.0%
Management Services	-	-	-	21,367	21,367	0.0%
Public Works	-	-	-	887,221	887,221	0.0%
Economic Vitality	-	-	-	4,628	4,628	0.0%
Non-departmental	-	-	-	18,560	18,560	0.0%
	-	-	-	949,796	949,796	0.0%
STORMWATER UTILITY FUND						
General Administration	23,401	38,734	38,734	37,905	(829)	(2.1%)
Community Development	19,762	-	-	-	-	0.0%
Management Services	30,331	50,435	50,435	53,860	3,425	6.8%
Public Works	12,249	10,921	10,921	9,626	(1,295)	(11.9%)
Economic Vitality	4,813	3,782	3,782	2,035	(1,747)	(46.2%)
Utilities	1,112,683	5,567,829	1,543,325	5,508,079	(59,750)	(1.1%)
Non-departmental	17,545	15,138	15,138	14,022	(1,116)	(7.4%)
Contingency	5,849	10,000	-	10,000	-	0.0%
	1,226,633	5,696,839	1,662,335	5,635,527	(61,312)	(1.1%)
FLAGSTAFF HOUSING AUTHORITY						
Community Development	6,256,760	6,312,656	5,933,010	6,183,620	(129,036)	(2.0%)
Contingency	-	1,001,250	1,001,250	1,001,250	-	0.0%
	6,256,760	7,313,906	6,934,260	7,184,870	(129,036)	
Total Enterprise Funds	48,609,624	65,410,254	46,725,890	65,807,213	396,959	0.6%
TOTAL ALL FUNDS	$ 141,690,136	248,104,099	140,226,642	243,472,806	(4,631,293)	(1.9%)

CITY OF FLAGSTAFF
BUDGET SUMMARY BY DIVISION OF EXPENDITURES
COMPARISON OF FISCAL YEAR 2013 AND 2014
(WITH ACTUAL FOR FISCAL YEAR 2012)

DIVISION/FUND	ACTUAL EXPENDITURES/ EXPENSES 2011-2012	ADOPTED BUDGETED EXPENDITURE/ EXPENSE 2012-2013	ESTIMATED ACTUAL EXPENDITURES/ EXPENSES 2012-2013	PROPOSED BUDGETED EXPENDITURE/ EXPENSE * 2013-2014	CHANGE (BDGT-BDGT)	% CHANGE
GENERAL ADMINISTRATION						
General Fund	$ 7,939,695	8,395,367	8,036,576	8,470,643	75,276	0.9%
Library Fund	124,645	150,716	150,716	148,678	(2,038)	(1.4%)
HURF Fund	108,282	118,391	118,391	109,645	(8,746)	(7.4%)
Transportation Fund	46,278	52,014	52,014	41,592	(10,422)	(20.0%)
Water and Wastewater Fund	580,253	626,188	626,188	621,261	(4,927)	(0.8%)
Airport	51,062	62,750	62,750	61,759	(991)	(1.6%)
Solid Waste Fund	311,071	398,292	398,292	425,155	26,863	6.7%
Environmental Management Fund	-	-	-	18,020	18,020	0.0%
Stormwater Utility Fund	23,401	38,734	38,734	37,905	(829)	(2.1%)
TOTAL	9,184,687	9,842,452	9,483,661	9,934,658	92,206	0.9%
COMMUNITY DEVELOPMENT						
General Fund	3,497,589	3,715,394	3,579,817	4,293,997	578,603	15.6%
HURF fund	678,205	533,783	533,783	550,239	16,456	3.1%
Beautification Fund	537,192	3,210,435	1,197,880	3,446,341	235,906	7.3%
Housing and Community Services Fund	1,697,295	3,386,672	1,945,487	2,740,457	(646,215)	(19.1%)
Metro Planning Organization Fund	416,870	386,971	368,042	666,445	279,474	72.2%
Stormwater Utility Fund	19,762	-	-	-	-	0.0%
Flagstaff Housing Authority	6,256,760	6,312,656	5,933,010	6,183,620	(129,036)	(2.0%)
TOTAL	13,103,673	17,545,911	13,558,019	17,881,099	335,188	1.9%
MANAGEMENT SERVICES						
General Fund	2,850,274	3,123,808	3,051,046	3,171,917	48,109	1.5%
Library Fund	150,648	134,552	134,552	7,025,781	6,891,229	5,121.6%
HURF Fund	138,296	73,428	73,428	66,108	(7,320)	(10.0%)
Transportation Fund	266,540	215,009	215,009	251,419	36,410	16.9%
Water and Wastewater Fund	983,638	915,248	915,248	857,869	(57,379)	(6.3%)
Airport Fund	99,735	119,449	119,449	94,151	(25,298)	(21.2%)
Solid Waste Fund	373,062	376,834	376,834	323,645	(53,189)	(14.1%)
Environmental Management Fund	-	-	-	21,367	21,367	0.0%
Stormwater Utility Fund	30,331	50,435	50,435	53,860	3,425	6.8%
TOTAL	4,892,524	5,008,763	4,936,001	11,866,117	6,857,354	136.9%
FIRE						
General Fund	8,543,680	10,215,163	9,826,416	10,346,646	131,483	1.3%
TOTAL	8,543,680	10,215,163	9,826,416	10,346,646	131,483	1.3%
POLICE						
General Fund	16,185,670	16,875,477	16,576,723	17,556,777	681,300	4.0%
TOTAL	16,185,670	16,875,477	16,576,723	17,556,777	681,300	4.0%
PUBLIC WORKS						
General Fund	4,906,365	7,400,090	5,174,398	10,674,003	3,273,913	44.2%
Library Fund	58,909	87,664	87,664	81,044	(6,620)	(7.6%)
HURF Fund	9,042,899	13,527,647	9,437,744	16,168,834	2,641,187	19.5%
Recreation-BBB Fund	-	1,100,000	-	1,100,000	-	0.0%
Water and Wastewater Fund	50,698	59,122	59,122	48,039	(11,083)	(18.7%)
Airport Fund	127,108	125,633	125,633	105,195	(20,438)	(16.3%)
Solid Waste Fund	10,756,152	12,387,952	11,614,826	9,508,438	(2,879,514)	(23.2%)
Environmental Management Fund	-	-	-	887,221	887,221	0.0%
Stormwater Utility Fund	12,249	10,921	10,921	9,626	(1,295)	(11.9%)
TOTAL	24,954,380	34,699,029	26,510,308	38,582,400	3,883,371	11.2%
COMMUNITY ENRICHMENT						
General Fund	3,310,380	3,222,068	3,218,728	-	(3,222,068)	(100.0%)
Library Fund	4,803,975	7,102,717	5,051,720	-	(7,102,717)	(100.0%)
TOTAL	8,114,355	10,324,785	8,270,448	-	(10,324,785)	(100.0%)

CITY OF FLAGSTAFF
BUDGET SUMMARY BY DIVISION OF EXPENDITURES
COMPARISON OF FISCAL YEAR 2013 AND 2014
(WITH ACTUAL FOR FISCAL YEAR 2012)

DIVISION/FUND	ACTUAL EXPENDITURES/ EXPENSES 2011-2012	ADOPTED BUDGETED EXPENDITURE/ EXPENSE 2012-2013	ESTIMATED ACTUAL EXPENDITURES/ EXPENSES 2012-2013	PROPOSED BUDGETED EXPENDITURE/ EXPENSE * 2013-2014	CHANGE (BDGT-BDGT)	% CHANGE
ECONOMIC VITALITY						
General Fund	$ 226,401	1,200,701	478,636	612,978	(587,723)	(48.9%)
Library Fund	27,622	27,272	27,272	14,800	(12,472)	(45.7%)
HURF Fund	29,053	24,888	24,888	13,892	(10,996)	(44.2%)
Transportation Fund	10,449	7,789	7,789	5,455	(2,334)	(30.0%)
Beautification Fund	428,705	3,366,203	1,240,532	2,794,669	(571,534)	(17.0%)
Economic Development Fund	1,227,611	1,389,255	1,015,324	968,885	(420,370)	(30.3%)
EDA Revolving Loan Fund	-	-	-	220,000	220,000	0.0%
Tourism Fund	1,540,957	1,624,102	1,653,512	1,879,658	255,556	15.7%
Arts and Science Fund	392,982	637,056	412,010	642,206	5,150	0.8%
Water and Wastewater Fund	78,942	73,918	73,918	44,347	(29,571)	(40.0%)
Airport Fund	4,834,876	7,450,799	2,803,777	9,432,657	1,981,858	26.6%
Solid Waste Fund	60,269	61,828	61,828	44,291	(17,537)	(28.4%)
Environmental Management Fund	-	-	-	4,628	4,628	0.0%
Stormwater Utility Fund	4,813	3,782	3,782	2,035	(1,747)	(46.2%)
TOTAL	8,862,680	15,867,593	7,803,268	16,680,501	812,908	5.1%
UTILITIES						
Water and Wastewater Fund	21,838,673	26,764,580	19,836,514	26,946,257	181,677	0.7%
Stormwater Utility Fund	1,112,683	5,567,829	1,543,325	5,508,079	(59,750)	(1.1%)
TOTAL	22,951,356	32,332,409	21,379,839	32,454,336	121,927	0.4%
NON-DEPARTMENTAL						
General Fund	(3,268,704)	636,706	(2,435,115)	3,526,720	2,890,014	453.9%
Library Fund	152,915	93,095	93,095	89,293	(3,802)	(4.1%)
HURF Fund	226,418	85,536	85,536	88,851	3,315	3.9%
Transportation Fund	6,299,251	7,798,412	5,974,129	6,943,202	(855,210)	(11.0%)
Housing and Community Services Fund	54,519	45,652	37,053	38,284	(7,368)	(16.1%)
Metro Planning Organization Fund	24,962	21,126	21,126	21,126	-	0.0%
General Obligation Bonds Fund	3,743,832	5,456,156	4,600,749	7,460,125	2,003,969	36.7%
Special Assessment Bonds Fund	7,381,215	908,225	908,225	905,600	(2,625)	(0.3%)
G.O. Bonds Funded Projects Fund	9,083,346	65,447,305	9,889,107	49,203,033	(16,244,272)	(24.8%)
Municipal Facilities Corp Fund	63,271	9,112,000	436,750	13,074,250	3,962,250	43.5%
Water and Wastewater Fund	494,338	263,254	263,254	270,184	6,930	2.6%
Airport Fund	70,048	57,063	57,063	59,662	2,599	4.6%
Solid Waste Fund	297,412	244,599	244,599	282,110	37,511	15.3%
Environmental Management Fund	-	-	-	18,560	18,560	0.0%
Stormwater Utility Fund	17,545	15,138	15,138	14,022	(1,116)	(7.4%)
TOTAL	24,640,368	90,184,267	20,190,709	81,995,022	(8,189,245)	(9.1%)
RESERVES/CONTINGENCIES						
General Fund	132,020	1,150,000	200,000	1,565,000	415,000	36.1%
Library Fund	-	100,000	-	222,000	122,000	122.0%
HURF Fund	-	100,000	-	100,000	-	0.0%
Beautification Fund	-	10,000	-	10,000	-	0.0%
Economic Development Fund	-	265,000	-	45,000	(220,000)	(83.0%)
Tourism Fund	-	50,000	-	50,000	-	0.0%
Arts and Science Fund	-	10,000	-	10,000	-	0.0%
Metro Planning Organization Fund	-	100,000	-	250,000	150,000	150.0%
Water and Wastewater Fund	69,702	1,800,000	65,000	1,800,000	-	0.0%
Airport Fund	-	-	-	500,000	500,000	0.0%
Solid Waste Fund	49,192	612,000	425,000	612,000	-	0.0%
Stormwater Utility Fund	5,849	10,000	-	10,000	-	0.0%
Flagstaff Housing Authority Fund	-	1,001,250	1,001,250	1,001,250	-	0.0%
TOTAL	256,763	5,208,250	1,691,250	6,175,250	967,000	18.6%
ALL FUNDS TOTAL	$ 141,690,136	248,104,099	140,226,642	243,472,806	-4,631,293	(1.9%)

* Includes actual expenditures/expenses recognized on the modified accrual or accrual basis as of the date the proposed budget was prepared, plus estimated expenditures/expenses for the remainder of the fiscal year.

CITY OF FLAGSTAFF
FULL-TIME EMPLOYEE AND PERSONNEL COMPENSATION
FISCAL YEAR 2014

FUND	FULL-TIME EQUIVALENTS (FTE) 2013-2014	EMPLOYEE SALARIES AND HOURLY COSTS 2013-2014	RETIREMENT COSTS 2013-2014	HEALTHCARE COSTS 2013-2014	OTHER BENEFIT COSTS 2013-2014		TOTAL ESTIMATED PERSONNEL COMPENSATION 2013-2014
GENERAL FUND	531.03	$ 30,488,086	$ 6,190,770	$ 3,468,067	$ 2,587,255	=	$ 42,734,178
SPECIAL REVENUE FUNDS							
Library	51.40	2,058,353	214,372	321,225	158,321	=	2,752,271
HURF	35.92	1,548,692	157,778	205,301	207,722		2,119,493
Beautification	1.25	97,608	11,264	9,694	7,468		126,034
Economic Development	2.25	166,507	19,609	13,322	13,549		212,987
Tourism	13.18	626,001	66,842	75,777	48,731		817,351
Housing and Comm Services	1.00	54,834	6,328	5,921	4,380		71,463
Metro Planning Organization	2.88	212,638	21,834	20,847	15,879		271,198
Total Special Revenue Funds	107.88	4,764,633	498,027	652,087	456,050	=	6,370,797
ENTERPRISE FUNDS							
Water & Wastewater	61.50	3,501,614	392,300	420,062	327,872	=	4,641,848
Airport	9.75	481,691	54,287	55,365	51,203		642,546
Stormwater	5.50	381,886	42,790	31,891	31,679		488,246
Solid Waste	47.40	2,164,240	251,961	321,708	249,577		2,987,486
Environmental Management	8.48	437,028	48,119	59,564	37,066		581,777
Flagstaff Housing Authority	22.00	1,287,218	145,162	160,925	145,162		1,738,467
Total Enterprise Funds	154.63	8,253,677	934,619	1,049,515	842,559	=	11,080,370
TOTAL ALL FUNDS	793.54	$ 43,506,396	$ 7,623,416	$ 5,169,669	$ 3,885,864	=	$ 60,185,345

CITY OF FLAGSTAFF

STAFF SUMMARY REPORT

To:	The Honorable Mayor and Council
From:	Michael Scheu, Building Official
Date:	05/29/2013
Meeting Date:	06/04/2013

TITLE:

Consideration and Adoption of Ordinance No. 2013-12: An ordinance of the City Council of the City of Flagstaff, Arizona, adopting the "2012 International Family of Codes, and the 2013 Amendments to City Code, Title 4, Building Regulations, and the ICC A117.1 Accessible and Usable Buildings and Facilities Standard, 2009 Edition" by reference and fixing the effective date thereof; repealing all sections of said code in conflict with this ordinance; preserving rights and duties that have already matured and proceedings that have already begun thereunder and providing penalties for the violation thereof.

RECOMMENDED ACTION:

1) Read Ordinance No. 2013-12 by title only for the first time.
2) City Clerk reads Ordinance No. 2013-12 by title only (if approved above).

Policy Decision or Reason for Action:

Adoption of Ordinance No. 2013-12 will incorporate the 2012 International Family of Codes, 2009 Addition, the Accessible and Usable Buildings and Facilities Standard, and the 2013 Building Code Amendments to the Flagstaff City Code, Title 4, Building Regulations into the Flagstaff City Code.

There is a State Legislative House Bill 2404 that has passed the Senate and is currently being considered in the House of Representatives which would prohibit Cities and Towns from requiring a HERS rating greater than 80.

Financial Impact:

Adoption of an amendment eliminating the requirement for waterless urinals and replacing them with a urinal having a maximum 1 pint flush will reduce costs.

There will be some increased costs due to some of the changes in the building codes. For the energy code, a 30% increase in energy efficiency over the 2006 energy code will incorporate numerous changes. According to an energy report conducted in Salt Lake City by the BCAP, Building Codes Assistance Project, there is an average additional cost of $1,926-$2,215 over the the 2006 energy code for a 2,400 square foot home (see attached).

Coconino County has estimated that the prescriptive attic insulation requirements which would require raised heel trusses would have an increased cost of a minimum 5%.

Connection to Council Goal:

11. Effective governance

By Adopting the 2012 International Codes and the proposed 2013 amendments to the City Code, Title 4, the life safety of buildings will be retained along with reduced energy consumption in residential and commenrcial buildings. The City will also take advantage of new technical inovations and the cities ISO rating will change remain level.

Has There Been Previous Council Decision on This:

Yes. The 2009 International Codes was brought before the previous council for adoption in July of 2011. Council voted to bypass the 2009 codes and go to a 6 year code adoption cycle.

Options and Alternatives:

1) Council could adopt all the proposed 2012 Codes as written and the 2013 Building Code Amendments as amended.
2) Council could elect to adopt the proposed 20I2 Building Codes, and adopt the 2009 Energy Code, and the amended 2013 Building Code Amendments.
3) Council could elect to adopt the 2012 Building Codes, adopt 2012 Energy Code but amend to the 2006 or 2009 Energy Code, and adopt the amended 2013 Building Code Amendments.
4) If no updating of the Codes were to occur by October of 2013, the ISO would reaise the insurance rating to a classification 9 causing an increase in insurance rates.

Background/History:

The Building Safety Program is responsible for reviewing and adopting building codes in consideration of current life safety issues and building industry standards. Since April 13, 1937, the City of Flagstaff has been reviewing and adopting various building, plumbing, mechanical, electrical, gas and fire code to better serve the community.The last major code review and adoption was the 2006 Edition of the International Codes, by Ordinance 2007-47, on January 18, 2008. In 2011, the council approved going to a 6 year code cycle instead of a 3 year cycle.

Key Considerations:

By adopting the 2012 codes, there will be 2 cycles of code changes that will be incorporated in the codes. In the Energy Code, Chapter 4 is the residential requirements and Chapter 5 is the commercial requirements. Most of the sections are prescriptive requirements but there are some mandatory requirements also. There is also Section R405 which allows for a performance-based compliance based on simulated energy performance which shows that the proposed design will have an annual energy cost that is less than or equal to the annual energy cost of the standard reference design. In both sections, there are certain “mandatory” requirements that are required for both the prescriptive and performance methods of compliance. This will allow a builder to be innovative to find other methods to meet the energy saving goals.

Expanded Financial Considerations:

There will be a cost of approximately $3,500 for new code books and $2,000 for training of the plans examiners and inspectors.

Community Benefits and Considerations:

By adopting the 2012 codes, the City's ISO rating will remain at a Class 3 rating which will keep local insurance rates from increasing. Also, by constructing new residential and commercial projects to the 2012 International Energy Conservation Code, the community is assuring that the new structures being added to the inventory will save on energy, thus enhancing a viable sustainable future.

Community Involvement:

Public code forums were held from February 2012 to January 2013 with a suspension from May 2012 to October 2012 due to work load. Information and invites were sent to NABA, F3, local architects and engineers, NAGBC, local contractors and designers plus individuals who asked to be placed on the email list, the Sustainability Commission and on May 8, staff will be meeting with the Chamber of Commerce. Coconino county will be considering adopting the 2012 Codes later this year.

Attachments:

Ordinance 2013-12
Resolution 2013-10
City Code Proposed Changes
2009 IECC
2012 IECC
Salt Lake City 2012 IECC ROI

ORDINANCE NO. 2013-12

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF FLAGSTAFF, ARIZONA, ADOPTING THE "2012 INTERNATIONAL FAMILY OF CODES, AND THE 2013 AMENDMENTS TO CITY CODE, TITLE 4, BUILDING REGULATIONS, AND THE ICC A117.1 ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES STANDARD, 2009 EDITION", BY REFERENCE AND FIXING THE EFFECTIVE DATE THEREOF; REPEALING ALL SECTIONS OF SAID CODE IN CONFLICT WITH THIS ORDINANCE; PRESERVING RIGHTS AND DUTIES THAT HAVE ALREADY MATURED AND PROCEEDINGS THAT HAVE ALREADY BEGUN THEREUNDER AND PROVIDING PENALTIES FOR THE VIOLATION THEREOF

RECITALS:

WHEREAS, that certain document known as the "2012 International Family of Codes, and the *2013 Amendments to City Code, Title 4, Building Regulations,* and the ICC A117.1 Accessible and Usable Buildings and Facilities Standard, 2009 Edition", three copies of which are on file in the office of the City Clerk of the City of Flagstaff, Arizona, made a public record by Resolution No. 2013-10; and

WHEREAS, the City Council has determined that adopting the "2012 International Family of Codes and the *2013 Amendments to City Code, Title 4, Building Regulations,* and the ICC A117.1 Accessible and Usable Buildings and Facilities Standard, 2009 Edition," is necessary for regulating and governing the construction, alteration, movement, enlargement, replacement, repair, equipment, location, removal and demolition of buildings and structures; and

WHEREAS, the City Council has determined that adopting the "2012 International Family of Code and the *2013 Amendments to City Code, Title 4, Building Regulations*, and the ICC A117.1 Accessible and Usable Buildings and Facilities Standard, 2009 Edition," is necessary for providing the standards for supplied utilities, facilities and other physical things and conditions essential to ensure that structures are safe, sanitary and fit for occupation and use; and

WHEREAS, the City Council has determined that adoption of the "2012 International Family of Code and the *2013 Amendments to City Code, Title 4, Building Regulations*, and the ICC A117.1 Accessible and Usable Buildings and Facilities Standard, 2009 Edition," is necessary for the issuance of permits and collection of fees pursuant thereto, and for implementing and enforcing each and all of the regulations, provisions, penalties, conditions and terms of an updated Flagstaff Building Code.

ENACTMENTS:

NOW, THEREFORE, BE IT ORDAINED by the Flagstaff City Council as follows:

Section 1: THAT certain document known as the *"2012 International Family of Code and the 2013 Amendments to City Code, Title 4, Building Regulations*, and the ICC A117.1 Accessible and Usable Buildings and Facilities Standard, 2009 Edition", three copies of which are on file in the office of the City Clerk of the City of Flagstaff, Arizona, which document was made a public record by Resolution No. 2013-10 of the City of Flagstaff, is hereby referred to, adopted and

made a part hereof as if fully set out in this ordinance, the provisions thereof to become effective on the_____day of _____, 2013.

Section 2: THAT any person found guilty of violating any provision of this code shall be guilty of a class one misdemeanor. Each day that a violation continues shall be a separate offense punishable as herein above described.

Section 3: THAT the Flagstaff City Code and all ordinances and parts of ordinances in conflict with the provisions of this ordinance or any part of the code adopted herein by reference are hereby repealed, effective as of the _____ day of _____, 2013.

Section 4: THAT the repeal of prior ordinances and parts of ordinances reference in Section 3 above does not affect the rights and duties that matured or penalties that were incurred and proceedings that were begun before the effective date of the repeal.

Section 5: THAT if any section, subsection, sentence, clause, phrase or portion of this ordinance or any part of the code adopted herein by reference is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions thereof.

PASSED AND ADOPTED by the City Council and approved by the Mayor of the City of Flagstaff this _____ day of _____, 2013.

_____
MAYOR

ATTEST:

_____
CITY CLERK

APPROVED AS TO FORM:

_____
CITY ATTORNEY

RESOLUTION NO. 2013-10

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF FLAGSTAFF, ARIZONA, DECLARING AS A PUBLIC RECORD THAT CERTAIN DOCUMENTS FILED WITH THE CITY CLERK ENTITLED THE "2012 INTERNATIONAL FAMILY OF CODES, AND THE *2013 AMENDMENTS TO CITY CODE, TITLE 4, BUILDING REGULATIONS,* AND THE ICC A117.1 ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES STANDARD, 2009 EDITION" WHICH INCLUDES THE INTERNATIONAL BUILDING CODE 2012 EDITION; INTERNATIONAL RESIDENTIAL CODE, 2012 EDITION; INTERNATIONAL PLUMBING CODE, 2012 EDITION; INTERNATIONAL MECHANICAL CODE, 2012 EDITION; INTERNATIONAL FUEL GAS CODE, 2012 EDITION; INTERNATIONAL EXISTING BUILDING CODE, 2012 EDITION; INTERNATIONAL ENERGY CODE, 2012 EDITION; ICC A117.1, ACCESSIBLE AND USABLE BUILDINGS AND FACILITES STANDARD, 2009 EDITION; AND PROVIDING FOR AMENDMENTS, ADDITIONS AND DELETIONS THERETO

ENACTMENTS:

BE IT RESOLVED BY THE COUNCIL OF THE CITY OF FLAGSTAFF AS FOLLOWS:

That certain document entitled "The *2012 International Family of Codes, the 2013 Amendments to City Code Title 4, Building Regulations" and the ICC A117.1, Accessible and Usable Buildings Standard, 2009 Edition, of the City of Flagstaff, Arizona,"* three copies of which are on file in the office of the City Clerk, is hereby declared to be a public record, and said copies are ordered to remain on file with the City Clerk.

PASSED AND ADOPTED by the City of Flagstaff Council and approved by the Mayor of the City of Flagstaff this 21st day of May, 2013.

_____
MAYOR

ATTEST:

_____
CITY CLERK

APPROVED AS TO FORM:

_____
CITY ATTORNEY

2013 AMENDMENTS TO FLAGSTAFF CITY CODE, TITLE 4, BUILDING CODE

TITLE 4
BUILDING REGULATIONS

CHAPTERS:

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2013 AMENDMENTS TO FLAGSTAFF CITY CODE, TITLE 4, BUILDING CODE

CHAPTER 4-01
ADMINISTRATIVE ENACTMENTS

The following applies to Chapters 4-01 through 4-09

SECTIONS:

4-01-001-0001 DEFINITIONS
4-01-001-0002 ADOPTION OF 2012 INTERNATIONAL BUILDING, RESIDENTIAL, AND PLUMBING CODES, WITH AMENDMENTS, ADDITIONS, AND DELETIONS THERETO; 2011 NATIONAL ELECTRICAL CODE, WITH AMENDMENTS, ADDITIONS, AND DELETIONS THERETO; 2012 INTERNATIONAL MECHANICAL CODE, WITH AMENDMENTS, ADDITIONS, AND DELETIONS THERETO; 2012 INTERNATIONAL FUEL GAS CODE WITH AMENDMENTS, ADDITIONS, AND DELETIONS THERETO; 2012 INTERNATIONAL EXISTING BUILDING CODE WITH AMENDMENTS, ADDITIONS, AND DELETIONS THERETO; ICC A117.1-2009 Accessible And Usable Building And Facilities; 1997 UNIFORM HOUSING CODE WITH AMENDMENTS, ADDITIONS, AND DELETIONS THERETO; 1997 UNIFORM ADMINISTRATIVE CODE, WITH AMENDMENTS, ADDITIONS, AND DELETIONS THERETO; AND 1997 UNIFORM CODE FOR THE ABATEMENT OF DANGEROUS BUILDINGS, WITH AMENDMENTS, ADDITIONS, AND DELETIONS THERETO.
4-01-001-0003 SAVING CLAUSE
4-01-001-0004 VIOLATION AND PENALTIES
4-01-001-0005 AMENDMENTS, ADDITIONS AND DELETIONS

4-01-001-0001 Definitions

As used in this City of Flagstaff 2013 Building Code Amendments and all of the referenced herein adopted International Codes, the following terms shall have the meaning herein prescribed:

A. Wherever the word “Municipality” or “[Name of Jurisdiction]”is used, it shall be mean the City of Flagstaff.

B. Wherever the term “Department of Building Safety” is used, it shall mean “Development Services Division.”

C. Wherever the term “Corporation Counsel” is used in this Chapter, it shall mean the Attorney for the City of Flagstaff (Ordinance 587:8-14-62).

D. Wherever the term “Administrative Authority” is used in conjunction with publicly provided utilities (natural gas, electricity, internet and broad band service, telephone, and cable television), it shall mean the current contract company providing the respective service. Wherever the term “Administrative Authority” is used in conjunction with publicly provided utilities or permits (water, sewer, storm water management and/or building permits), it shall mean the City of Flagstaff.

4-01-001-0002 Adoption of 2012 International Building, Residential, and Plumbing Codes, with amendments, additions, and deletions

thereto; 2011 National Electrical Code, with amendments, additions, and deletions thereto;

There are hereby adopted by the City Council of the City of Flagstaff for the purposes of establishing rules and regulations for the construction, alteration, removal, demolition, equipment, use and occupancy, alteration, removal, maintenance of buildings and structures, including permits and penalties, those certain International Codes known and referred to with particularity as the International Building Code (IBC), 2012 Edition, providing for amendments, additions and deletions thereto and International Residential Code (IRC), 2012 Edition, providing for amendments, additions and deletions thereto; International Plumbing Code (IPC), 2012 Edition, providing for amendments, additions and deletions thereto, the 2011 National Electrical Code, providing for amendments, additions and deletions thereto; International Mechanical Code, 2012 Edition, providing for amendments, additions and deletions thereto; International Fuel Gas Code, 2012 Edition, providing for amendments, additions and deletions thereto; International Existing Building Code, 2012 Edition, providing for amendments, additions and deletions thereto; ICC A117.1-2009, Accessible And Usable Building And Facilities; Uniform Housing Code, 1997 Edition, Uniform Administrative Code, 1997 Edition, and Uniform Code for the Abatement of Dangerous Buildings, 1997 Edition, three (3) copies of which are on file in the office of the City Clerk of the City of Flagstaff, and the same made part hereof by this reference as if fully and completely herein set forth. The provisions of the aforestated Codes, 2012 editions, shall be controlling for construction within the corporate limits of the City of Flagstaff.

4-01-001-0003 SAVING CLAUSE

Nothing in this Chapter or in the International Building Codes hereby adopted shall be construed to affect any suit or proceeding now pending in any court, or any rights acquired, or liability incurred, or any cause or causes of action acquired or existing, under any act or ordinances replaced hereby. Nor shall any right or remedy of any character be lost, impaired, or affected by this Chapter.

4-01-001-0004 VIOLATION AND PENALTIES

A. Violations. It shall be unlawful for any person, firm or corporation to erect, construct, enlarge, alter, repair, move, improve, remove, convert, demolish, equip, use or maintain any building or permit the same to be done in violation of this Code.

B. Penalties. Any person, firm, or corporation violating any provision of this Code shall be deemed guilty of a misdemeanor, and upon conviction thereof, shall be punishable by a fine and/or imprisonment set forth by the governing laws of the jurisdiction. Each separate day or any portion thereof, during which any violation of this Code occurs or continues, shall be deemed to constitute a separate offense.

4-01-001-0005 Amendments, Additions, and Deletions

The following provisions shall have the effect of either amending, adding to, or deleting from the International Codes 2012 Editions and the National Electrical Code , 2011 Edition.

2013 AMENDMENTS TO FLAGSTAFF CITY CODE, TITLE 4, BUILDING CODE

(Amended, Ord. 2009-06, 07/18/2009; Amended Ord. No. 2011-12, (July 19, 2011)

CHAPTER 1, ADMINISTRATION

Amend Section R103.1 IRC and 103.1 IBC to read:

The Development Services Section, Building Safety Program, is appointed as the regulating office and the Building Official is known as the code official.

(Amended Ord. No. 2011-12, (July 19, 2011)

Revise the amendments to Sections R104.7, 104.7, and 104.8 by striking the third paragraph:

The Building Official shall keep comprehensive records of applications or permits issued, or certificates issued or inspections made, or reports rendered and of notices of orders issued.

All such records shall be open to public inspection for good and sufficient reasons at the stated office hours but shall not be removed from the office of the Building Official without his written consent. All records are kept in both hard copy and electronic format. The electronic format information may be requested on a “walk-in” basis and reviewed during normal working hours; copies or inspection of original documentation requires written notice and reasonable amount of time for Staff to collect the required records from an off-site warehouse location. Written requests will go through the City Clerk’s office for processing. (Amended Ord. No. 2011-12, (July 19, 2011))

Amend Table R301.2 (1) “Climatic and Geographic Design Criteria” as follows:

This information may be used by Design Professionals in lieu of the tables provided in Chapter 16 of the International Building Code (IBC), 2006 Edition.

Ground Snow Load (where accounting has been given for factored snow loads as given in ASCE 7, Chapter 7. No reduction for slopes less than 45 degrees without providing engineering and/or approval by the Building Official)	50 pounds per square foot
Wind Speed:	90 miles per hour
Wind Exposure Category:	“B”
Seismic Design Category:	“C”
Weathering:	Severe
Frost line depth:	30 inches
Termite:	Moderate to Heavy
Decay:	Moderate
Rain fall – 100 year	2.5 inches per hour
Winter Design Temperature:	4 degrees (F)
Ice Shield Under-layment Req’d:	Yes
Flood Hazards:	1-19-83; 9-18-90*

Air Freezing Index:	1014
Mean Annual Temperature:	45.4 degrees (F)
Climate Zone (IECC, Table 301.1):	Zone 5

* The flood hazard dates reflect the current National Flood Insurance Program and the date of the currently effective "Firm" Map (used by the City of Flagstaff). These maps are updated by the issuing agency and adopted by Storm Water Management without notice.

(Amended Ord. No. 2011-12, (July 19, 2011))

Amend Sections R105.2 and 105.2, Work Exempt from Permits, by adding:

Garden walls, fences less than 6 feet in height, decks/patios less than 30" above finished grade and all shed structures under 200 square feet will require a Minor Improvement permit as approved under COF Ordinance 2006-12

(Amended Ord. No. 2011-12, (July 19, 2011))

Delete Sections R105.5 IRC and 105.5 IBC, Expiration, and replace with:

Every residential permit issued shall become invalid unless the work authorized by such permit is completed within one year (365 days) from the issuance date of the building permit. The Building Official is authorized to grant, when request for extension is received in writing, one extension not to exceed 180 days. The extension shall demonstrate cause such as financial, weather delays, material delivery, etc. The permit may be extended for an additional year (365 days) by paying one half the original permit fee (not including the plan check fee), thereby allowing a maximum time of completing the project to 30 months. Failure to obtain a certificate of occupancy within 30 months shall result in a report being recorded with the Coconino County Recorder's office for incomplete work or no final inspection report of the project. All residential "over-the-counter" permits for plumbing, mechanical, electrical and re-roofing shall be valid for a maximum period of 180 days.

All commercial construction permits for new, remodels, additions, and alterations shall be valid for a maximum period of 720 days. One extension shall be granted for an additional 360 days when requested in writing and justifiable cause is demonstrated. After the one time extension has expired, the next additional extension will require the applicant to pay one-half the permit fee for an additional 360 day extension. Permits not passing final inspection over 1440 days will be expired and the applicant must submit for a new permit and pay all associated fees. All commercial "over-the-counter" permits for plumbing, mechanical, electrical and re-roofing shall be valid for a maximum period of 180 days.

(Amended Ord. No. 2011-12, (July 19, 2011))

Amend Section 105.2, Electrical, by adding:

Approved portable equipment used in conjunction with special events in public locations (parks, parking lots, public owned land, et cetera) of 25 kw or greater will have an over-the-counter electrical permit issued and a licensed electrical contractor for installation or set up.

The issuance of an electrical permit shall not be construed as an approval by the electrical inspector of any diagrams, drawings, specifications, or details of such contemplated work insofar as the same or any portion thereof is in conflict with this Chapter or any other rules or regulations governing electric installations in the City of Flagstaff. The holder of an electrical permit shall not do or perform any work other than that designated in the application for said permit without first notifying the electrical inspector and paying the additional fee therefore. No work shall be permitted at any location other than that designated by the permit. The electrical inspector must be given immediate notice when an installation is ready for either rough or final inspection.

(Amended Ord. No. 2011-12, (July 19, 2011))

Amend Section 105 IBC by adding Section 105.8, Temporary Permit:

Section 105.8. Temporary Permit. Permits may be issued by the Building Official for the use of certain classes of temporary open wiring such as for carnivals, fairs, demonstrations, evangelistic meetings, town parties, auction sales, and others. Such permits shall be granted for a period of two (2) weeks only, with a possible extension of one (1) week if the circumstances are justified in writing to the Building Official. No such temporary permits shall be granted in succession at the same location, and under no circumstances shall any person connect or put into service any temporary wiring until a permit has been obtained.

Temporary permits shall also be granted for the use of temporary wiring for lights and power on buildings under construction. Such permits are void automatically upon cessation of active construction or when, in the judgment of the Building Official, such wiring becomes hazardous. Provisions of Article 525 of the National Electrical Code (NEC), 2011 Edition shall be followed with respect to temporary wiring.

(Amended Ord. No. 2011-12, (July 19, 2011))

Amend Section R106.1.1, Information on Construction Documents, by deleting the first sentence and replace with:

Construction documents shall be drawn upon suitable material, drafting paper, vellum, etc. and shall be a maximum size of 24″ x 36″, size D paper. The minimum size of drawings that have the minimum required drawings (site plan, foundation plan, floor plans for each floor, elevations, framing plans, roof & floor manufactured layout plans, critical sections, and details will be 18″ x 24″). Floor framing, foundation, roof framing and floor plans must be drafted to the same scale, i.e., ¼″=1′-0″. The minimum size for amended cut-sheets or details will be 8-1/2″ x 11″ and will not exceed the maximum sheet size. Larger sized drawings must be approved by the Building Official and

justification established for why drawings can't be presented on the smaller size sheets. [It is expected that larger commercial projects will fall into this exception]. The written scope or description of the work may be provided on the building permit application form as long as it describes accurately the work to be performed.

All structural elements (i.e., posts and beams) shall be on the related plan sheet(s) which corresponds to the work being proposed.

Embedded anchors shall be on the foundation plan. Post bases/caps shall be on the framing plan or shown on specific details for the assembly.

Each floor shall have its own framing plan. First floor framing will not be superimposed on second floor framing or roof framing plans as an example.

(Amended Ord. No. 2011-12, (July 19, 2011)

Amend Section 106.1 IBC, Submittal Documents, by adding:

Residential, single family detached, structures are exempt from the requirements for a Design Professional under Arizona Revised Statutes (ARS 32-121 et. seq.) unless circumstances dictate the need for professional design submittal. Duplexes and triplex units which do not exceed 3,000 square feet, two stories or a total occupant load of 20, may also be designed by a non-registrant as long as the unit(s) has/have only one owner.

Sub-assemblies, such as roof trusses or manufactured floor beams that indicate all imposed loading may be submitted without the "stamp" of an Arizona certified or registered Design Professional.

Any retaining walls having any imposed surcharges from adjacent structural elements or unbalanced loading that exceed four (4) feet (1224 mm), shall be designed by an Arizona certified or registered Design Professional and shall be submitted at the time of permit application.

Pursuant to Arizona Revised Statutes § 32-121 et.seq. governing the regulation of Design Professionals (i.e. architects and engineers), all commercial occupancies for new construction, additions, alterations or repairs within the City of Flagstaff shall be prepared by an Arizona certified or registered Design Professional in good standing when:

1. The total square footage of any building exceeds 3,000 square feet, or
2. The total occupancy of the building exceeds 20 people, or
3. Any structural member required for the project exceeds twenty feet (20') in length.

The certified or registered Design Professional of Record must provide his/her "stamp" upon all working drawings. Drawings not prepared by the Design Professional of Record may be annotated as such, but the "stamp" shall be affixed to all the drawings in the construction working

drawings set to indicate that coordination of the total project has been done by the Design Professional of Record.

A design professional is required for electrical service entrance sections of 600 amps and greater.

(Amended Ord. No. 2011-12, (July 19, 2011)

Amend Sections 108.4 and R108.4 by adding:

Any person who commences any work on a building, structure, electrical, gas, mechanical, or plumbing system before obtaining the necessary permits shall be subject to an investigation fee of $94.00 or twice the permit fee, whichever is greater.

Any person who commences any work on a building, structure, electrical, gas, mechanical, or plumbing system before obtaining the necessary permits shall be subject to an investigation fee of $94.00 or twice the permit fee, whichever is greater.

(Amended Ord. No. 2011-12, (July 19, 2011)

Amend Sections R108.5 IRC and 108.5 IBC, Related Fees, by adding:

The fee schedule shall be based upon the 1997 Uniform Administrative Code, Table 3D, and shall be annually reviewed and the revised fees published by the Building Safety Program, Development Services Section. Valuation fees for commercial work shall be annually reviewed in accordance with the International Code Council Building Safety Journal Fee structure. Residential fee valuation shall be subject to approval for increases by the City of Flagstaff Council based upon the recommendation of the Building Official and shall be published for public review.

(Amended Ord. No. 2011-12, (July 19, 2011))

Amend Sections R108.6 IRC and 108.6 IBC, Refunds, by adding:

The applicant may receive up to 80% refund for the total building permit fee if no work has begun and no inspections have been performed. No refund of the plan review fee is authorized after the permit has been issued. The refund of a plan review fee is also limited to 80%, assuming that no review has been performed. The Building Official shall determine, based upon work done, how much of fees paid are actually refunded. There shall be no refund of any required deposit once the administrative routing and plan review process has begun.

(Amended Ord. No. 2011-12, (July 19, 2011))

Add Sections R108.7 IRC and 108.7 IBC, Re-Inspection Fee(s) as follows:

Re-inspection fees may be assessed for each inspection or re-inspection when the portion of work for which the inspection was scheduled is not complete or when corrections from a previous inspection are not made. Other events which may require the imposition of a re-inspection fee

are: failure to have the inspection record on the job site when the inspector arrives; the approved plans not on the job site for the inspector to review; and failure to provide access to the job site or area to be reviewed by the inspector. Appeals for such fees are made to the Building and Safety Manager. To obtain a re-inspection after the inspector has left notice that a fee must be assessed; the applicant must pay a $94.00 fee.

(Amended Ord. No. 2011-12, (July 19, 2011))

Amend Sections R110.4 IRC and 110.3 IBC, Temporary Occupancy, by adding.

Temporary Certificate of Occupancies for residential construction (detached single family dwellings and duplexes) is not authorized.

Exceptions: (1) When a driveway approach cannot be poured due to weather, then the Building Official can approve a temporary Certificate of Occupancy after the applicant has posted a bond with the City of Flagstaff; (2) If the structure meets all the requirements for habitable space and sanitation, then a Certificate of Occupancy will be granted. Any unfinished items (i.e. extra bonus rooms, basement finishing, etc.,) will be annotated in the inspection record as “not inspected” at the time of Certificate of Occupancy issuance. Applicants moving into a dwelling prior to receiving a Certificate of Occupancy may be evicted as the property is posted “NO OCCUPANCY” by the building inspector or Building Official.

Construction Hours:

Refer to Ordinance 2004-21 of the City Code, Chapter 6-08, Noise Control, Section 6-08-001-0002 for time frames on noise restrictions.

(Amended Ord. No. 2011-12, (July 19, 2011)

Amend Section R112 of the IRC and Section 112 of the IBC, Board of Appeals, by deleting the Sections in their entirety and replacing with:

Board of Appeals, Refer to Ordinance 2011-31 for establishment and requirements of the Board of Appeals.

CHAPTERS 2 OF IRC AND IBC, DEFINITIONS

Amend IBC Section 202 by adding the following definitions:

ACCESSORY DWELLING UNITS. An Accessory Dwelling Unit (ADU) may be either attached or detached and is secondary to the primary residence. The full definitions and application of constructing an ADU is covered under COF Ordinance 2007-20, adopted on 20 March 2007. The ADU is limited in size to be not less than 300 square feet and not greater than 500 square feet in size on lots less than one acre. For lots one acre and larger, the size is limited to 800 square feet maximum. The ADU shall provide complete independent living facilities for one or more

persons, including permanent provisions for living, sleeping, eating, cooking and sanitation.

ACCESSORY ENERGY SYSTEMS. An accessory energy system will include wind turbines, PV solar, thermal solar, geo-thermal, bio-mass and other technologies that provide heating, cooling or electrical energy. The systems will be subject to a building permit and limited by zoning ordinances for visual, design, height and setback requirements.

CITY shall mean the City of Flagstaff.

CONDOMINIUMS. Condominiums are defined in the International Building Code, 2006 Edition as a R-2 occupancy and will not be reviewed using the 2006 IRC. Condominiums are a collection of individually owned parcels or individual units within a common structure, combined with a joint ownership of commonly used property (sidewalks, hallways, stairs, etc.). The condominium is defined as the ownership of air-space with no ground attached.

INSPECTION is an examination by which a qualified person conducts an investigation of a completed trade, such as framing, electrical, plumbing or mechanical to assure compliance with adopted minimum codes, or to investigate sub-standard housing as defined in the Uniform Housing code, or investigate dangerous conditions as defined per the Uniform Code for the Abatement of Dangerous Buildings.

LADDER BACKING shall mean or refer to wood construction used at perpendicular or angular intersections of non-load bearing walls between stud bays.

STOCKPILING shall mean the same as fill, except that it is assumed to be loose un-compacted material that is placed on a site for a temporary period of time. Stockpiling shall require a grading permit when it exceeds 50 cubic yards and shall not remain on the site for more than six (6) months without written permission from the Building Official or the City Engineer.

TEMPORARY shall mean a period not to exceed six (6) months.

TOWNHOUSES. Attached dwelling units with a legally described property line between units (two or more units; shall be reviewed using the International Residential Code, 2006 Edition, unless approved by the Building Official to be reviewed using the International Building Code, 2006 Edition. Developers must maintain a five (5) foot clearance on townhouse end units between the property line and the face of the structure to allow for openings in the side walls of the individual units. Exceptions would be a recording of a “five (5) foot no-build easement on the Final Plat” or the unit is adjacent to a public right-of-way.

USABLE SPACE. Any space which can be either occupied, used for storage of materials and/or service area which houses mechanical equipment. The space may or may not have environmental conditioning. The usable space will include access corridors, utility closets, mezzanines, basements,

crawl space storage, attic areas rated for either storage or floor loading, vestibules, and/or storage spaces.

(Amended, Ord. 2009-06, 07/18/2009) (Amended Ord. No. 2011-12, (July 19, 2011)

2013 AMENDMENTS TO FLAGSTAFF CITY CODE, TITLE 4, BUILDING CODE

CHAPTER 4-02

INTERNATIONAL RESIDENTIAL CODE

Sections:

4-02-001–0001 AMENDMENTS, ADDITIONS, AND DELETIONS

4-02-001-0001 Amendments, Additions, and Deletions

The following provisions shall have the effect of either amending, adding to, or deleting from the International Residential Code adopted in Flagstaff City Code, Title 4, Building Regulations, Chapter 4-01, Administrative Enactments, Section 4-01-001-0002, Adoption.

CHAPTER 3, IRC, BUILDING PLANNING

Revise the amendment to Section R325, Manufactured Housing Design Requirements, as follows:

> All new manufactured housing (housing classified as modular, factory built or manufactured house) installed within the City of Flagstaff will be designed to meet HUD minimum standards. The City of Flagstaff enforces a 40 pounds per square foot roof snow load for site built construction. HUD standards for snow winter areas in Arizona is not consistent with local conditions and owners should be aware of the differences.
>
> For “used” manufactured housing or “resale”/relocated manufactured housing being brought into the City of Flagstaff, the following applies. As per direction from the State of Arizona, Office of Manufactured Housing, A.R.S. Title 41, specifically requires that all manufactured housing units be certified to meet the minimum standards of the United States Department of Housing and Urban Development and are to be designed in accordance with consistent State of Arizona Standards for manufactured homes and related industries. An applicant requesting an installation permit and inspection will be required to provide proof to the Building Official of the current State certification or re-certification of the unit.

Amend Section R309.5 Fire Sprinklers by deleting entire section.

> (Amended, Ord. 2009-06, 07/18/2009) (Amended Ord. No. 2011-12, (July 19, 2011)

CHAPTER 4, IRC, FOUNDATIONS

Revise the amendment to Section Amend R401.4.1 as follows:

> All new residential subdivisions require a geotechnical soils report be prepared with foundation recommendations. In established areas of the City of Flagstaff, “in-fill” or vacant lots in subdivisions established prior to 1996, the designer may use 1500 pounds per square foot. Where the Building

Official determines that in-place soils with an allowable bearing capacity of less than 1500 pounds per square foot (psf) are likely to be present at the site, then allowable bearing capacity shall be determined by a geotechnical investigation at the expense of the permit applicant.

(Amended, Ord. 2009-06, 07/18/2009) (Amended Ord. No. 2011-12, (July 19, 2011))

Amend R403.1 by adding:

All footings located less than 18 inches (457 mm) below existing grade to be air entrained, 3,500 psi concrete (severe weather), and pinned to rock at intervals specified for foundation wall vertical reinforcements or as specified by the Arizona design professional.

Revise the amendment to R403.1.1 by deleting the following language:

Spread footings shall be at least 8 inches (204 mm) in thickness. Footing projections, *P*, shall be at least 4 inches (102 mm) and shall not exceed the thickness of the footing.

(Amended, Ord. 2009-06, 07/18/2009) (Amended Ord. No. 2011-12, (July 19, 2011))

Amend R403.1.2 and R403.1.3 by adding:

Add Seismic "C" category to both sections at all seismic D1 and D2 locations.

Amend R403.1.3 by deleting the exception.

Amend Table R403.1 by changing:

All references to 1,500 and 2,000 psf Load Bearing columns shall be changed from 12 inch (305 mm) and 15 inch (383 mm) minimum width of concrete or masonry footings to 16 inch (408 mm) minimum width for one and two story convention light-frame construction and one story under 4-inch brick veneer and 8-inch solid or fully grouted masonry structures.

Delete R403.1.3.1 in its entirety and add the following language to the replacement amendment:

Foundations with stem-walls shall be provided with a minimum of one No. 4 bar at the top of the wall and two No. 4 bar at the bottom of the footings equally spaced.

Exception: Footing designs without reinforcing steel must be "sealed" by a certified or registered Design Professional.

Delete Section R403.3 in its entirety.

Amend R404.1.1; R404.1.2; R404.1.4, R404.1.8 by adding:

Add Seismic Design Category "C" to all references of D1 and D2.

Amend R404.1.4, Number 1 by deleting "in the upper 12 inches of the wall" and adding:

1. Minimum reinforcement shall consist of one No. 4 horizontal rebar located at top of wall not more than 5 inches (128 mm) below the finished concrete and at the top course of concrete masonry unit walls within close proximity to the anchor bolts.

Amend R404.1.4, second paragraph by changing:

Change the vertical reinforcement bar reference from #3 rebar to #4 rebar.

Amend R407.3 Exception by deleting:

Delete Seismic Design Category "C" from this exception.

CHAPTER 6, IRC, WALL CONSTRUCTION

Amend R602.5 by adding:

Ladder backing shall be spaced a maximum 8 inches (204 mm) on center.

(Amended, Ord. 2009-06, 07/18/2009) (Amended Ord. No. 2011-12, (July 19, 2011))

CHAPTER 9, IRC, ROOF ASSEMBLIES

Revise the amendment to Section R904.2 as follows:

All roofing materials used must be a class "A" or "B" and rolled roofing is to be a Class A or B material and shall be a self-adhering, polymer modified bitumen material.

(Amended Ord. No. 2011-12, (July 19, 2011))

Delete Sections R905.7 and R905.8 in their entirety.

CHAPTER 11, IRC, ENERGY EFFICIENCY

Amend Section 1102.1 by adding:

Section N1102.1.1. Insulation values in 2x6 wall construction will remain the same at R-19. Insulation values in 2x4 wall construction will remain at R-15 (high density). Construction using Structural Insulated Panels (SIPS) and/or straw bail in-fill methods will be a minimum of R-21 (industry standards often show results of R-30 to R-45 depending upon materials and thickness of the wall).

(Amended Ord. No. 2011-12, (July 19, 2011)

Amend Section N1102.1.2 by adding:

Section N1102.1.2.1. All new construction and replacement windows to have National Fenestration Rating Council (NFRC) total unit U-factor of 0.45 or less. Windows shall also be low-E where practical (not recommended for southern exposures) or not being used for solar heat gain to fuel a solar massing device.

(Amended Ord. No. 2011-12, (July 19, 2011)

Amend Section N1103 by adding:

Section N1103.7 Furnaces: All furnaces installed in new construction shall be 90% condensing type furnaces.

Exception: Replacement furnaces are to be voluntary 90% condensing type furnaces.

(Amended Ord. No. 2011-12, (July 19, 2011)

(Amended Ord. No. 2011-12, (July 19, 2011)

Section N1105.10 Dual Plumbing. All new residential single family detached units are "voluntarily" requested to install the piping only for dual plumbed for "gray water" disposal and conservation efforts. Access for future valving must be provided. The initial installation will be connected to sanitary sewer. The piping shall be installed in accordance Appendix C, Gray Water Recycling Systems, of the International Plumbing Code, 2009 Edition, and the regulations established by ADEQ. Reference Type 1 General Permit Best Management Practices for the 13 points of using gray water, at www.adeq.state.az.us or call at 1-800-234-5677.)

(Amended, Ord. 2009-06, 07/18/2009) (Amended Ord. No. 2011-12, (July 19, 2011)

CHAPTER 13 IRC, GENERAL MECHANICAL

Revise the amendments to Section M1305.1.4.3 by adding the following language:

"Furnaces are to be hard-wired (no cord & cap unless specifically supplied by the manufacturer) with a 20 ampere motor rated disconnect within sight of the furnace."

(Amended, Ord. 2009-06, 07/18/2009) (Amended Ord. No. 2011-12, (July 19, 2011)

Revise the amendment to Section M1307.3.1 to read:

See G2408.3 for appliance protection.

(Amended, Ord. 2009-06, 07/18/2009) (Amended Ord. No. 2011-12, (July 19, 2011)

CHAPTER 24, IRC, FUEL GAS

Amend Section G2406.2 by deleting numbers 3 and 4.

Change the amendment to Section G2408.3 to read as follows:

> Appliances shall not be located in a location where subject to mechanical damage unless protected by approved barriers such as steel bollards filled with concrete, poured in place concrete curb, or installed wheel stops, or on a platform with a minimum clearance of 24 inches (460 mm) above the floor. Appliances not subject to mechanical damage shall be installed per Section 305.3. The exception is deleted in its entirety.

(Amended, Ord. 2009-06, 07/18/2009) (Amended Ord. No. 2011-12, (July 19, 2011)

Change the amendments to Sections G2417.4.1 and G2417.4.2 by making the following revisions:

> The test pressure shall be 10 psi (or half the maximum of the gauge) for a period of 15 minutes. Gauges shall be of 1/10 pound increments or less and shall have a pressure range no greater than twice the test pressure.

(Amended, Ord. 2009-06, 07/18/2009) (Amended Ord. No. 2011-12, (July 19, 2011)

In Section G2439.4 (614.5), Makeup Air, change the amendment to read as follows:

> Installations exhausting more than 200 cfm (o.09 m3/s) shall be provided with makeup air. (Amended Ord. No. 2011-12, (July 19, 2011)

CHAPTER 26, IRC, GENERAL PLUMBING REQUIREMENTS

Revise the amendment to Section P2603.6.1 to read as follows:

> Building sewers that connect to private sewage disposal systems must be approved by the Coconino Country Environmental Health Department Building sewers for single family detached buildings shall be a minimum of 18 inches (306 mm) below grade.

(Amended, Ord. 2009-06, 07/18/2009) (Amended Ord. No. 2011-12, (July 19, 2011)

CHAPTER 29, IRC, WATER SUPPLY AND DISTRIBUTION

Amend Section P2904, Dwelling Unit Fire Sprinkler Systems by deleting section in its entirety

CHAPTER 31, IRC, VENTS

Revise the amendment to Section P3101.1, Roof Extension, to read as follows:

Add "12 inches (306 mm) above the roof."

(Amended, Ord. 2009-06, 07/18/2009) (Amended Ord. No. 2011-12, (July 19, 2011)

INTERNATIONAL RESIDENTIAL CODES (IRC), 2006 EDITION, PART X – APPENDICES

Revise the amendments to Part X – Appendices as follows:

APPENDIX F – Radon Control Methods

APPENDIX G – Swimming Pools, Spas and Hot Tubs

APPENDIX H – Patio Covers

APPENDIX J – Existing Buildings and Structures.

APPENDIX M - Home Day Care, R-3 Occupancy (a home occupation permit is required prior to receiving any building permits for conversions or improvements).

APPENDIX O – Gray Water Recycling Systems (cross reference to Chapter 11 and timing for implementation. Applicant must also meet the requirements of ADEQ if systems are larger than what the State of Arizona allows).

APPENDIX R – Straw Bale construction guide for residential use.

Section AR101 TITLE, SCOPE and PURPOSE

AR101.1 Title. These provisions shall be known as the City of Flagstaff Straw Bale Construction Code.

AR101.2 Scope. This appendix shall govern the use of baled straw as a building material, and shall apply to Group R occupancies, Group U occupancies and other occupancies when secondary and appurtenant to Group R or Group U occupancies. Unless stated otherwise in this appendix, all other provisions in this code shall apply to structures using baled straw as a building material.

AR101.3 Purpose. The purpose of this appendix is to provide minimum requirements specific to an alternative building materials, reference

Section R104.11 and associated testing in Section R104.11.1 Tests, with regards to using straw bale as a building material. With the provisions of this appendix, straw bales may be used as a structural or non-structural material. Structural uses include elements designed to support gravity loads, and elements design to resist in-plane wind and seismic loads. Non-structural uses include, but are not limited to, infill walls, insulation, landscape walls and benches.

AR101.3.1 Current test studies done Bou-Ali, Ghailene (1993), University of Arizona, Tucson; Ruppert, Grandsaet (1999), University of Colorado, Boulder; show that structurally bearing elements of straw bale are limited to between 300 - 800 pounds per linear foot depending upon the wall plaster used. The CBC also limits the walls to 20 PSF snow live loads.

AR101.3.2. For Flagstaff, with a 40 PSF snow load, the bearing capacity shall be limited to 150 – 400 pounds per linear foot. No floor loading will be allowed on straw bale walls without structural engineering.

AR101.3.3. Trusses roof spans are limited to fifteen (15) feet in width and top plates and anchoring for uplift must be provided. All other spans or sections of a house which would be two story or more must us a structural "space" frame or post and beam method. In these designs, the straw bale is being used as infill for insulation value.

Section AR102 DEFINITIONS

AR102.1 General. The following words and terms shall, for the purposes of this appendix, have the meanings shown here. Refer to Chapter 2 for general definitions used elsewhere in the International Residential Code.

Bale. Equivalent to "straw bale" for the purposes of this appendix.

Bending. A moment (force) acting on a body will induce bending stress.

Bond. The measure of adhesion; i.e., the bond of concrete or stabilized earth to reinforcing bars and anchor bolts.

Bond Beam. A structural element within a wall (usually at the top) intended to stabilize the wall and facilitate the transfer of loads from above.

Buckling. The collapse of a wall or column by bending and breaking under a vertical load.

Flake. A slab or straw removed from an untied bale. In particular, an intact slab (3-5" thick) as created by the baling machine.

Laid flat. Stacking bales so the sides and the largest area are horizontal and the longest dimension of this area is parallel with the wall plane.

Laid On-Edge. Stacking bales so the sides with the largest area are vertical and the longest dimension of this area is horizontal and parallel with the wall plane.

Mesh. An openwork fabric of linked strands of metal, plastic or natural fiber, embedded in plaster to provide tensile reinforcement and/or bonding. (also sometimes lath).

Moisture Barrier. A continuous barrier capable of stopping the passage of water.

Non-Load-bearing. (See Non-Structural.)

Non-Structural. A straw bale wall or other element which supports only its own weight, and may resist out-of-plane lateral loads.

Pins. Metal rod, wooden dowel or bamboo driven into or secured on the surface of stacked bales for purposes of connection or stability.

Plaster. Gypsum, lime, lime-Cement, or cement plasters, as defined by the code and Section AR106 of this appendix, or clay plaster and earth-cement plaster as defined in Section AR106.9 and AR106.10.

Running Bond. The placement of straw bales such that the head joints in successive courses are offset at least one quarter of the bale length below.

Skin. The compilation of plaster and reinforcing, if any, on the surface of stacked bales.

Structural. A straw bale wall or other element which support gravity loads (dead and live) and/or resists in-plane lateral loads.

Stack Bond. The placement of straw bales such that head joints in successive courses are vertically aligned (similar to the “soldier” courses in masonry construction).

Straw. The dry stems of cereal grains left after the seed heads have been substantially removed.

Straw Bale. A rectangular compressed block of straw, bound by polypropylene strings or baling wire.

Straw-bale. The adjective form of straw bale.

Straw-clay. A mix of loose straw and clay binder.

Three-String Bale. A straw bale bound by three strings or wires. Typically with approximate dimensions of 15”x23”x42” to 48” long.

Truth Window. An area of a straw-bale wall left without its finish, to allow view of the straw otherwise concealed by its finish.

Two-String Bale. A Straw bale found by two strings or wires. Typically wit approximate dimensions of 16” or 14” x 18” x 36” to 45” long.

Vapor-Permeable Membrane. A material or covering having a permeance rating of five (5) perms or grater, when testing in accordance with the desiccant method using Procedure A of ASTM E96. A vapor-permeable material permits the passage of moisture. (This definition is shown for convenience and is identical to that shown in Chapter 2, 2006 IBC.)

Vapor Retarder. A vapor-resistant material, membrane or covering such as foil, plastic sheeting or insulation facing having a permeance rating of one (1) perm or less, when tested in accordance with the desiccant method using Procedure A or ASTM E96. Vapor retarders limit the amount of moisture vapor that passes through material or wall assembly. (This definition is shown for convenience and is identical to that shown in Chapter 2, 2006 IBC.)

Section AR103 BALES

AR103.1. Bales Shall Be Rectangular In Shape. The use of non-rectangular bales, such as circular bales, shall not be used in structural applications.

AR103.2 Size. Bales used with a continuous wall shall be of consistent height and width to ensure even distribution of loads with the wall system.

AR103.3 Ties. Bales shall be bound with ties of polypropylene string or baling wire. Bales with broken or loose ties shall be firmly retied. A visual check by the assigned field inspector of materials delivered to the job site will be done prior to assembly of bale walls.

AR103.4 Moisture Content. The moisture content of bales, at the time of procurement and at the time of application of the first coat of plaster or installation of another weather protective finish, shall not exceed nineteen (19%) percent of the total weight of the bale (ideal moisture content would be the same as kiln dried wood, between 15-17%). The moisture content of bales shall be determined by use of a moisture meter designed for use with baled straw or hay, equipped with a probe of sufficient length to reach the center of the bale. A minimum of five bales, selected by the inspector at random will be tested.

AR103.5 Density. Bales shall have a minimum dry density of 6 pounds per cubic foot. The dry density shall be determined by reducing the actual bale weight by the weight of the moisture content in pounds, and dividing by the volume of the bale in cubic feet. At least five bales and not less than two (2) percent, randomly selected from the bales to be used, may be tested to determine if all of the bales for the building are of acceptable density. This inspection will be done at the same time as the moisture content is done. If equipment is not available, then the builder may elect to use a third party or special inspection to perform the testing.

AR103.6 Partial Bales. Custom-made partial bales shall be firmly retied and where possible, use the same number of ties as the standard size bales.

AR103.7 Types of Straw. Bales of various types of straw, including wheat, rice, rye, barley, oat and similar grain plants, shall be acceptable if they meet the minimum requirements of this Section for density, shape, moisture content and ties. Bales of hay and other grasses containing seed shall not be used as a building material. When securing materials from a supplier, it is practical to remember that straw is for building and hay is for food.

AR103.8 Protection of Bales Prior To Installation. The builder must store the bales in such a manner as to protect them from weather and other sources of moisture damage. Storing bales in direct contact with the earth or uncovered during inclement weather will be subject to rejection by the building inspector.

AR103.9 Unacceptable Bales. Bales which show signs of damage due to moisture, including but not limited to mold or fungus growth or associated discoloration, even if they are of an acceptable moisture content and density, shall not be used. The builder must inspect all deliveries and protect the bales prior to the installation in the wall frames.

AR103.10 Wall Thickness. Nominal minimum bale wall thickness shall be fourteen (14”) inches or greater.

Section AR104 MOISTURE

AR104.1 General. All weather-exposed bale walls, other weather-exposed bale elements and bale walls enclosing showers or steam rooms shall be protected from water damage.

AR104.2 MOISTURE CONTENT of BALES (See definitions, Section AR103.4).

AR104.3 Moisture Barriers and Vapor Retarders. Plastered bale walls may be constructed without any membrane barrier between straw and plaster, except as required elsewhere in this appendix. This is allowed to facilitate transpiration of moisture from the bales and to secure a structural bond between straw and plaster. No vapor permeance rating of less than 5 perms, except as permitted elsewhere in this appendix, or as demonstrated to be necessary by a design professional of record (this must be an Arizona Registered Architect or Engineer in accordance with ARS 32-121)shall be used.

AR104.4 Horizontal Surfaces. Bale walls and other bale elements shall have a moisture barrier at all horizontal surfaces exposed to the weather. This moisture barrier shall be of a material and installation that will prevent water from entering the wall system or other bale elements.

AR104.4.1 These horizontal surfaces include, but are not limited to exterior window sills, sills at exterior niches, bale vaults and arches, tops of landscape walls and weather-exposed benches.

AR104.4.2 The finish material at all “horizontal” surfaces shall be sloped a minimum of one inch per foot (8%) and shall drain beyond and away from all bale walls or bale elements. If the moisture barrier is

below the finish material, it shall be sloped a minimum of one inch per foot (8%) and shall drain beyond the outside vertical surface of the bale's vertical finish.

AR104.4.3 In areas where snow may collect, the moisture barrier and/or flashing element may have to be extended upwards on the vertical surface to prevent damage to the bale(s).

AR104.5 ***Parapets – Prohibited Construction*****.** Parapets made of straw bales are prohibited. The roof over-hang must always extend over the top of the straw bale walls.

AR104.6 Bale/Concrete Separation. There shall be a moisture barrier and a capillary break between bales and support concrete. The moisture barrier may be of any durable sheet or liquid applied membrane that is impervious to water. The capillary break may be any material that prevents the "wicking" of moisture across the material and into the bale(s). Where bales abut a concrete or masonry wall that retains earth, there shall be a moisture barrier between the wall and the bales.

AR104.7 No Plumbing Trees Will Be Allowed in Straw Bale Walls. Conventional framed walls will be provided. Plumbing will not be installed in interior non-load bearing straw bale walls. The use of wood framed "false" walls or furred out sections in front of walls will be allowed.

AR104.7.1 ***Exception*****:** Hose bibs will be allowed to penetrate a straw bale exterior wall as long as the plumbing is sleeved and the bib/sleeve extends a minimum of six (6")inches beyond the exterior/interior surfaces of the wall.

Section AR105 STRUCTURAL USE OF STRAWBALE

AR105.1 Scope. Buildings constructed with straw bales shall comply with this Section, and with all other structural provisions of the International Residential Code, 2006 Edition, Chapters 4, 5, 6 (as it pertains to those areas of a straw bale structure which is conventionally framed) and 8, unless stated otherwise in this appendix. The design considerations for Flagstaff, Arizona is found in Table R301.2(1) as amended in Title 4, City Codes, City of Flagstaff 2011 Building Code Amendments.,
AR105.1.1 Energy Considerations. The use of straw bale construction may enable the builder to meet or surpass many of the requirements of the International Energy Conservation Code (IECC).

AR105.2 General. Straw bale buildings may use any type of structural system allowed by this code and this appendix.

AR105.3 Foundations. Foundations for straw bale walls and other straw bale elements may be of any foundation type permitted by this code and amendments thereto. The frost depth requirements remain the same at 30" below finished grade. The amount of steel will remain the same at two (2), #4 rebar laid continuously at the bottom of the footing (three inches above the bottom of the footing). The straw bales may not be buried below finished grade and the first row must be placed a minimum

of six (6) inches above the finished grade on a concrete slab (see detail).

AR105.4. Alternative Foundations. Alternate foundations and foundation systems may be used if designed by an Arizona Registered design professional (Architect or Engineer).

AR105.6 Configuration of Bales. Bales may be laid flat or on-edge as limited in height by AR105.5. Bales in walls with reinforced plasters may be a running or stack bond. Bales in walls with un-reinforced plaster shall be in a running bond only.

AR105.7 Pre-Compression of Straw bale Walls.

AR105.7.1 When not required:

AR105.7.1.1. For non-structural walls

AR105.7.1.2. For walls designed or allowed to resist lateral forces only.

AR105.7.1.3. For walls bearing gravity roof loads, when the full dead load of the roof is imposed and remains on the wall for at least 28 days before plastering. No design snow load greater than 40 psf is allowed (see restrictions on spans in Section AR101.3.3). No floor loads may be supported by walls which are not pre-compressed.

AR105.7.2 When required. All walls bearing gravity loads, which are not described in AR105.6.1, shall be pre-compressed to a force equal to or greater than the design loads on the wall.

AR105.8 Voids and Stuffing. Voids in the field of structural straw bale walls shall be limited to six (6) inches in width and shall be firmly stuffed with flakes of straw or with straw-clay, before the application of plaster.

AR105.9 PLASTER SKINS.

AR105.9.1 General. Plaster skins on structural walls may be of any type allowed in Section AR106, except gypsum plaster, and shall also be limited by Table AR105-A and Table AR105-B.

AR105.9.2 Straightness. On structural walls (load bearing), plaster skins shall be straight as a function of the bale wall surface they are applied to as follows:

AR105.9.2.1. Across the face of the bale – straw bulges shall not protrude more than ¾″ across two feet of its height or length.

AR105.9.2.2 Across the face of a bale wall – straw bulges shall not protrude from the vertical plane of the bale wall more than 2-1/2″ over eight (8) feet.

AR105.9.2.3 Offset of bales – the vertical face of adjacent bales may not be offset more than ¾".

AR105.9.3 Plaster and Membranes. Structural bale walls shall have no membrane between straw and plaster; or shall have sufficient attachment through the bale wall from one plaster skin to the other as designed by an Arizona Registered design professional (Architect or Engineer). See sections AR106.5 and AR106.6.

AR105.10 Transfer of Loads into Plaster Skins. When plastered straw bale walls are used to bear gravity and/or lateral loads, such loads shall be transferred into the plaster skins by direct bearing or by other adequate transfer mechanism (alternatives must be provided to the Building Official for approval).

AR105.11 SUPPORT of PLASTER SKINS.

AR105.11.1 For Structural Walls. Plaster skins for structural straw-bale walls shall be continuously supported along their bottom edge to allow a load path into the foundation system. Acceptable supports include, but are not limited to: concrete or masonry footings, concrete slab, wood framed flooring which is adequately blocked for the width of the imposing load, wood beam or steel angle adequately anchored for the imposed weight of the plaster skin.

AR105.11.2 For Non-Structural Walls. Plaster skins for non-structural walls need not to be supported along their bottom edge. Maximum length of walls without cross bracing (either straw bale or conventional framing is twenty (20) feet.

TABLE AR105-A
Allowable gravity Loads (pounds per foot)
for plastered Straw bale walls (18-23" width)

WALL PLASTER[a]	SILL PLATES[bc]	Anchor, Bolts or Other Sill Fastening[c]	Mesh[d]	Staples	Allowable Bearing Capacity[h]
A. Clay	c	c	None P	None P	300
B. Soil-Cement[k]	c	c	d	e,f,g	800
C. Lime	c	c	d	e,f,g	450
D. Cement-line	c	c	d	e,f,g	800
E. Portland Cement[I]	c	c	d	e,f,g	800

[a] Plasters shall conform with AR106.9 through AR106.11.2.3 for makeup and thickness with AR10.92 for straightness and with AR105.11.1 and AR105.11.2 for support of plaster skins.

[b] Sill plates shall support and be flush with each face of the bale wall.

[c] For walls supporting gravity loads only (or for non-structural walls), use sill plates and fasteners as required for framed walls in 2308.2 and 2308.3. See table AR 105-B for requirements for shear walls and braced panel walls.

[d] May be any metal mesh allowed by this code and must be installed throughout the plaster with minimum four (4″) inch laps. Fasten with staples per footnote "e". Staples shall be at maximum spacing of two (2″) inches o.c. to roof or floor bearing assembly, or as shown necessary to transfer loads into the plaster skins per AR105.10 and at a maximum spacing of four (4″) inches o.c. to sill plates.

[e] Staples shall be gun staples (stainless steel or electro-galvanized, 16 gauge with 1-1/4″ legs, 7/16″ crown) or manually driven staples (galvanized 15 gauge with 7/8″ legs, 3/16″ inner spread and rounded shoulder). Other staples may be used as designed by an Arizona Registered design professional.

[f] Staples shall be firmly driven, diagonally across mesh intersections at spacing indicated. For walls with a different plaster on each side, use the lower value.

[g] For walls with a different plaster on each side, use the lower value.

[I] Minimum 1-1/2″ thickness. Building Official may require a compression test to demonstrate a minimum 100 psi compressive strength.

[i] Except as necessary to transfer roof or floor loads into the plaster skins per AR105.10.

[j] Minimum 1-1/2″ thickness. Building official may require a compression test to demonstrate a minimum 1000 psi compressive strength.

[k] Containing lime as described in AR106.11

Table AR105-B
Allowable Shear (pounds per foot) for Plastered straw bale walls
(18″ and 23″ inch think)

Wall	Plaster[a] (both sides)	Sill Plates[b]	Anchor[c] Bolts (on center)	Mesh[d]	Staples[efg] (on center)	Allowable Shear[hi]
A1	Clay[1]	2x4	2′8″	None	None	100
A2	Clay[1]	2x4	2′8″	3″x3″ knotted hemp	3″	120
A3	Clay[8]	4x4	2″0″	2″x2″ high-density polypropylene	2″	180
B	soil-cement[1]	4x4	2″0″	2″x2″ 14 ga[k]	2″	300
C1	lime	2x4	2′8″	17 ga. Woven wire	2″	200
C2	lime	4x4	2′0″	2″x2″ 14 ga[k]	2″	250
D1	cement-lime	4x4	2′8″	17 ga. Woven wire	2″	400
D2	cement-lime	4x4	2′0″	2″x2″ 14 ga[k]	2″	450

[a] Plasters shall conform with AR106.9 through AR106.11.2.3 for makeup and thickness, with AR105.9.2 for straightness and with AR105.11 for support of plaster skins.

[b] Sill plates shall be pressure treated or foundation red wood.

[c] Anchor bolts shall be ½″ diameter with washers with a minimum seven (7″) inch embedment in the concrete foundation.

AR105.11.2 Resistance to out-of-plane lateral loads. Plastered straw bale walls are capable of withstanding out-of-plane design loads prescribed in this code with the following limitations:

AR105.11.2.1. Walls with reinforced plasters shall be limited by a 6:1 ratio of stacked bale height to bale width per AR105.5 (this limits the 23 inch wide bale to 11′-6″ in height and 18″ inch wide bales to 9′ in height).

AR105.11.2.2 Walls with un-reinforced plasters shall be limited by a 4:1 ratio of stacked bale height to bale width (this limits the 23 inch wide bale to 7′-8″ and the 18″ inch wide bales to 6′ in height). Walls may not be built using the overall length of the bale (often 36 to 48″ in length to increase the height). An exception can be made for custom made bales is the ratios of height, width and length are maintained. Regardless, no straw bale walls will be allowed to be greater than fourteen (14′) feet in height without (1) being engineered by an Arizona Registered design professional or (2) being part of a post and beam structure in which the straw bales are only used as in-fill.

AR105.11.2.3 Wall with un-reinforced plasters or no plaster, and with internal or external pins, shall be limited by a 6:1 ratio of stacked bale height to bale width. Pins may be ½″ diameter steel (# 4 rebar), wood or bamboo. Internal pins shall be installed vertically at a maximum of two (2′) foot spacing into the bales from the top course to bottom course, with the bottom course being connected to its support similarly with pins or other approved means. Pins may be continuous or may overlap through one bale course. External pins shall have full lateral bearing on the sill plate and the roof or floor bearing member and shall be tightly tied though the wall to an opposing pin with polypropylene string or bailing wire at a thirty (30″) inch maximum spacing.

AR105.11.3 PRESCRIPTIVE DESIGN USING STRUCTURAL STRAW BALE WALLS.

AR105.11.3.1 General. Plastered straw bale walls may be used structurally, without design by an Arizona design professional (Architect or Engineer), as described in this subsection. Such walls shall also comply with AR105.5 through AR 105.11.2.3 of this Section and shall comply with other Sections of this appendix as applicable.

AR105.11.3.2 Load and Other Limitations. As described in 2308.2-3 through 7, and 2308.2.2.

AR105.11.3.3 Gravity Load Bearing Walls. Limited to wall types B, C, D and E, shown in Table AR105-A. Type A walls may be used if they are demonstrated to support design loads no greater than the allowable load.

AR105.3.4 Braced panels. Straw bale shear walls may be used as braced panels per the requirements and limitations in IBC Section 2308.9.3 Bracing, and per IBC Section 2308.12. Additional requirements for conventional construction in Seismic Design Category C. Straw bale shear wall types B, C, D and E shown in Table AR105-B may be used in situations where braced wall panel types 2, 3, 4, 6 and 7 are allowed. Straw bale shear wall type A may be used in situations where braced wall panels types 1 and 5 are allowed.

AR105.12 Connection of Framed Walls to Straw bale Walls. Framed walls perpendicular to or at an angle to a straw bale wall assembly, need only be fastened to the bottom and top wood members of the straw bale wall per framing connections permissible in this code. Where such connection is not possible, the abutting stud shall be connected to alternating straw bale courses with a ½″ diameter steel (#4 rebar), wood or bamboo dowel with minimum of eight (8″) penetration into the straw bale.

AR105.13 Alternate Performance Design Criteria (must provide structural calculations and be stamped by an Arizona Registered design professional). When plastered straw bale walls or other elements are engineered, they may use the model of retained, thin shell, reinforced concrete, as in the American Concrete Institute's ACI-318 Manual. This model may be used for all reinforced plasters, including those without cement. Such design and analysis shall be made in accordance with the following:

AR105.13.1 General. Straw bale structural systems and elements shall be designed using engineering principles, fundamental engineering behavior and principles of mechanics.

AR105.13.2 Rationality. Straw bale structural elements shall be designed based on a rational analysis in accordance with established principles of mechanics. These elements shall provide a complete load path capable of transferring all loads and forces from their point of origin to the load-resisting elements based on a rational connection of components.

AR105.13.3 System Characteristics. Strength, stiffness and toughness (ductility) characteristics or the bales and their skins shall be considered in the design of the system.

Section AR 106 FINISHES

AR106.1 General. Finishes applied to straw bale walls may be of any type permitted by this code and shall comply with this Section and the provisions of Chapter 14 (Exterior Walls, 2006 IBC) and Chapter 25 (Gypsum Board and Plaster, 2006 IBC) unless stated otherwise in this Section.

AR106.2 Purpose and Where Required. Straw bale walls and other straw bale elements shall be finished so as to provide mechanical and fire

protection of the bales, restrict the passage of air through the bales and to protect them from weather.

AR106.3 Vapor Retarders. No vapor retarder may be used on a bale wall, nor shall any other materials be used which has a vapor permeance rating of less than 5 perms; except as permitted elsewhere in this appendix or as demonstrated to be necessary by an Arizona Registered design professional (Architect or Engineer).

AR106.4 Plaster. Plaster applied to bales may be of any type described in this section.

AR106.5 Plaster and Membranes. Plaster may be applied directly to straw bale walls and other straw bale elements, in order to facilitate transpiration of moisture from the bales and to secure a mechanical bond between the skin and the bales; except where a membrane is allowed or required elsewhere in this appendix. Structural bale walls shall have no membrane between straw and plaster or shall have sufficient attachment through the bale wall from one plaster skin to the other, as designed by an Arizona Registered design professional (Architect or Engineer).

AR106.6 Lath and Mesh for Plaster. In straw bale construction the surface of the straw bales functions as lath and no other lath or mesh is necessary; except as required for tensile strength of the plaster and/or wall assembly in particular structural applications (see AR105). Straw bales laid flat or on-edge provide a sufficient mechanical bonding surface between plaster and straw.

AR106.7 Plaster on Non-Structural Walls. Plaster on walls that do not carry gravity loads and are not designed to resist in-plane lateral forces, may be any plaster as described in this Section.

AR106.8 Plaster on Structural Walls. Plaster on structural walls shall comply with AR105.9 through AR105.11. Plaster on walls that carry gravity loads shall comply with Table AR105-A. Plaster on walls designed to resist in-plain lateral forces, shall comply with Table AR105-B.

AR106.9 Clay Plaster (Also known commonly as earth or earthen plaster).

AR106.9.1 General. Clay plaster is any plaster whose binder is comprised primarily of clay. Clay plasters may also contain sand or other inert granular material and may contain reinforcing fibers. Acceptable reinforcing fibers include, but are not limited to, chopped straw, hemp fiber, nylon fiber and animal hair.

AR106.9.2 Mesh. Clay plaster may have no mesh.
Exception: A natural fiber mesh, corrosion-resistant metal mesh or high-density polypropylene mesh may be used.

AR106.9.3 Thickness. Clay plaster shall be a minimum one (1”) inch thick, unless required to be thicker for structural or fire-resistance as described in this appendix.

AR106.9.4 Rain-Exposed. Clay plaster, where exposed to rain (snow) shall be finished with lime plaster or other erosion resistant finish.

AR106.9.5 Prohibited Finish Coat. Cement plaster and cement-lime plaster are prohibited as a finish coat over clay plasters.

AR106.9.6 Additives. Additives may be used to increase the plasters workability, durability, strength or water resistance.

AR106.9.7 Separation of Wood and Clay Plaster. No separation or moisture barrier is required between untreated wood and clay plaster. (Wood, earth and foundation separation requirements are still enforced and covered in Section R319 and R403 of 2006 IRC).

AR106.10 Earth-Cement Plaster (also know commonly as soil-cement, stabilized earth or pise').

AR106.10.1 General. Earth-cement plaster is comprised of earth (free or organic matter), Portland cement and may include sand or other inert granular material. May contain reinforcing fibers.

AR106.10.2 Mesh. Earth-cement plaster shall use any corrosive-resistant metal mesh permitted by this code and as described in Section AR105 if used on a structural wall.

AR106.10.3 Thickness. Earth-cement plaster shall be a minimum of 1-1/2″ thick.

AR106.11 Gypsum Plaster.

AR106.11.1 General. Gypsum plaster shall comply with Section 2511 of the 2006 IBC.

AR106.11.2 Restriction of Use. Gypsum plaster is limited to use on interior surfaces and on non-structural walls, except as a finish coat over an allowed structural plaster.

AR106.12 Lime Plaster.

AR106.12.1 General. Lime plaster is any plaster whose binder is comprised primarily of calcium hydroxide (CaOH). This includes Type N or Type S hydrated lime, natural hydraulic lime or quicklime. Lime plasters shall comply with ASTM Standards C5 and C206. The plaster may be applied in two coats, provided that the combined thickness is a least 7/8″ thick and each coat is not great than 5/8″ thick. The combined thickness of all plaster coats (regardless of numbers) shall be no more than 1-1/2″ thick.

AR106.13. Cement-Lime Plaster.

AR106.13.1. General. Cement-lime plaster shall comply with Section 2508 of the 2006 IBC, except that the plaster may be applied in two (2) coats, provided that the combined thickness is at least 7/8″ thick and each coat is no greater than 5/8″ thick.

AR 106.14 Portland Cement Plaster.

AR106.14.1 General. Portland cement plaster shall comply with Section 2512 (2006 IBC) of this code, except that the amount of lime in all plaster coats shall be a minimum of one (1) part lime per six (6) parts cement so as to allow a minimum acceptable vapor permeability. The plaster may be applied in two (2) coats, provided that the combined thickness is at least 7/8″ thick and each coat is not great than 5/8″ thick. The combined thickness of all plaster coats (regardless of numbers) shall be no more than 1-1/2″ thick.

AR106.15 Alternative Plasters. Plasters or variations of plasters, which do not fit in any other category described in this Section, may be allowed if such plasters are demonstrated to be appropriate for the particular application. Approval shall be made by the Building Official.

AR106.16. Finishes Over Plaster. Other finishes, as permitted elsewhere in this code, may be applied over the plaster, except as prohibited in Section AR106.17.

AR106.17. Prohibited Plasters and Finishes. Any plaster or finish with a cumulative perm rating of less than 5 perms is prohibited on straw bale walls or other bale elements, unless demonstrated to be necessary by the Arizona Registered design professional (Architect or Engineer).

AR106.18. Separation of Wood and Plaster. Where wood framing or wood sheathing occur in straw bale walls, such wood surfaces shall be separated from any plaster finish with No. 15 asphalt felt, Grade ‘D’ paper or other approved material per Section 1404.2 of this code, unless the wood is preservative-treated or naturally durable.

Exception: Clay plasters, see Section AR106.9.7

Section AR107 FIRE-RESISTANCE

AR107.1 Fire-Resistance Rating.

AR107.2. Rating with Plaster Finish. Plastered straw bale walls have a one-hour fire resistance rating, provide the components of the wall fit with all of the following parameters:

AR107.2.1 Bales may be laid flat or on-edge.

AR107.2.2 The bale wall must have a minimum un-plastered thickness of fourteen (14″) inches.

AR107.2.3. Bales may be installed in a running bond or stack bond, but vertical joints in a stack bond and continuous vertical gaps at any posts within both types of wall, must be fire-stopped with straw-clay

AR107.2.4. The wall must be finished on both sides and exposed ends with a plaster of any type allowed by this appendix. Clay plaster must be a minimum 1-1/2″ thick and a minimum of two layers.

AR107.2.5 The wall may be no closer than five (5′) to a property line.

AR107.2.6 Rating with other finishes. Straw bale walls covered with finish materials other than or in addition to plaster, shall be deemed to have the equivalent fire resistive rating as wood-frame construction covered with the same finish materials.

AR107.3 Permitted in Types of Construction. Straw bale walls with a one-hour fire resistance rating per Section AR107.2 are permitted wherever combustible one-hour walls are allowed by Chapter 6 of the IBC. Such walls and unrated straw bale walls with any finish allowed by this code are permitted whenever combustible no-hour walls are allowed in Chapter 6 of the IBC.

AR107.4 Openings in Rated Walls. Openings and penetrations in any straw bale wall rated and required to be rated for a particular fire-resistance rating and for a particular applications, shall satisfy the same requirements for openings and penetrations in walls with the same fire-resistive rating and application as stated elsewhere in this code.

AR107.5 Clearance to Fireplaces and Chimneys. Straw bale surfaces adjacent to fireplaces or chimneys shall have a minimum of 2″ clearance from the surfaces of the plaster coat and the chimney structure. The space between can be bridged by non-combustible materials, such as flashing and aluminum or other metal channel materials.

Section AR108 ELECTRICAL

AR108.1 Scope. Wiring and other elements of the electrical system within or mounted to straw bale walls shall comply with all Sections of this code which govern electrical systems and with the 2011 National Electric Code.

AR108.2 Wiring. Type NM or UF cable may be used, or wiring may be in metallic or non-metallic conduit (which is the preferred method). Wiring which is unprotected by conduit shall be installed a minimum of two (2″) inches from the face of the bale, except as necessary to enter or exit a junction box. The wiring shall be pushed into joints between bales or into the bale itself or the bales may be channeled to receive the wire.

AR108.3 Wiring Attachment. Where not held securely between bales or within a bale and not attached via staples to a wood member, wiring on straw bale walls shall be attached with minimum 17 gauge wire in a “U” configuration with a minimum eight (8″) long legs.

AR108.4 Attachment of Electrical Boxes. Electrical boxes on bale walls shall be securely fastened to non-bale structural elements or to wooden stakes driven a minimum of twelve (12″) into the bales or shall be secured by a combination of wire mesh and plaster, or by an acceptable equivalent method.

AR108.5 Attachment of Service and Sub-panels. Electrical service and sub-panels on bale walls shall be securely fastened to wood structural

members, or to other wood members that have been adequately fastened to the straw bales. All proposed service panel and sub-panel support members shall be approved by the field inspector prior to attachment. The administrative authority, Arizona Public Service, retains the right to make any adjustments for support requirements and should be contacted prior to installation.

Section AR109 WALL AND ROOF BEARING ASSEMBLY ANCHORAGE AND CONSTRUCTION

AR109.1 General. The following is a recommended construction technique for straw bale construction. A designer or Arizona Registered design professional may submit other proposed methods as long as the general requirements of this Section and the International Building Codes are followed.

AR109.2 Bale interconnection support. Vertical reinforcing bars with a minimum diameter of ½″ (#4 rebar), shall be embedded in the foundation at a minimum depth of six (6″) inches and shall extend above the foundation a minimum of twelve (12″) for the purpose of impaling the first course of bales. These vertical bars shall be located along the centerline of the bale wall, spaced not more than two (2) feet apart. A vertical bar shall also be located within one (1) foot of any opening (doors or window element) or corner, except at locations occupied by anchor bolts. These pins or bars will be wet set along with the anchor bolts.

AR109.3 Intersecting walls. Wall of other materials intersecting the straw bale walls shall be attached to the bale wall by means of one or more of the following methods or an acceptable equivalent.

(Adopted, Ord. No. 2009-06, 07/17/2009 (Amended Ord. No. 2011-12, (July 19, 2011)

2013 AMENDMENTS TO FLAGSTAFF CITY CODE, TITLE 4, BUILDING CODE

CHAPTER 4-03

INTERNATIONAL BUILDING CODE

Sections:

4-03-001-0001 **AMENDMENTS, ADDITIONS, AND DELETIONS**

Section 4-03-001-0001 Amendments, Additions, and Deletions

The following provisions shall have the effect of either amending, adding to, or deleting from the International Building Code adopted in Flagstaff City Code, Title 4, Building Regulations, Chapter 4-01, Administrative Enactments, Section 4-01-001-0002, Adoption.

Amend IBC Section 105.1.1, Annual permit and Section 105.1.2 by replacing with the following:

> **Section 105.1.1 Annual Facilities Permit Requirements - General.** The Annual Facility Permit is intended to simplify the permitting and inspection process for Qualified Facilities. The Annual Facility Permit simplified the process by allowing City inspectors to review plans without being processed through formal plan review. Instead, it allows the Qualified Agent and /or the Qualified Facility Maintenance Staff member, who are familiar with the construction history of the Qualified Facility, to review work without requiring a standard building permit. The process provides a limited exemption from the Building Code compliance. The Annual Facility Permit is issued to a business owner(s) for one building or a series of related buildings in a single complex owned by the same owner(s). The Annual Facility Permit fee shall be $3,500 initially and $2,000 for the Annual Facility Permit renewal fee. The business owner(s) covered under the Annual Facility Permit shall provide annual certification for the Qualified Agent and shall provide a detailed description of the anticipated work to be performed under the Annual Facility Permit.

Add 105.1.1.1 Definitions: For the purposes of this section, certain terms are defined as follows:

> **INSPECTOR** is a person employed by the City of Flagstaff (either through contractual services or as a full time City employee) to perform field and/or plan review inspections of buildings and structures in order to enforce the City's Building Code requirements.
>
> **PROJECT SCOPE LIMITATIONS** are restrictions on the size of a project for eligibility for the Qualified Facility building permit exemption under an Annual Facility Permit. The exemption eligibility is limited to projects not to exceed $35,000 in construction costs or twenty-five percent (25%) of the existing square footage of the structures.
>
> **QUALIFIED FACILITY MAINTENANCE STAFF MEMBER** is a person(s) either employed by or contracted with the Qualified Facility owner(s) and who

is certified by the State of Arizona in the case of specialized inspections, such as (elevators, boiler, and fire sprinkler suppression systems) and/or is authorized by the Qualified Facility owner(s) to engage a Licensed contractor for the type of work being performed.

QUALIFIED AGENT is a person(s) authorized to represent the business Owner(s) of a Qualified Facility, registered and residing in the State of Arizona, and who shall be responsible to the business owner(s) for compliance with the substantive provisions of this code.

QUALIFIED FACILITY is an existing structure(s) owned by an individual(s), firm, corporation, or legal entity engaged in the business of manufacturing, processing, providing services or other commercial enterprise. The Qualified facility includes all existing Specialized Buildings and related building service equipment, all of which shall be an integral part of the business of manufacturing, processing, providing services, or other commercial enterprises of business owner(s). Subject to Project Scope Limitations, the Qualified facility under an Annual Facility Permit is generally exempt from the standard building permit requirements pertain to remodeling, repairs, alterations, improvements and conversions constructed completely within the original "footprint" of the existing structure(s). Any Qualified Facility which requires new additions, new detached facilities, or new facilities associated with all operations, shall require Development Review Board approval and shall meet all standard building permit requirements as set forth in Section 105.

SPECIALIZED BUILDING is an existing structure(s) that serves as an accessory building(s) as defined by Section 10-14-004-0001 of the City's Land Development Code, COF Ord.1690, and is used for the business of manufacturing, processing, provision of services, or other commercial enterprise of the Qualified Facility.

Add 105.1.2.2. Permit Issuance. Each applicant for an Annual Facilities Permit shall fill out an "Application for BUILDING/GRADING Permit" form. Each Qualified Facility shall require a separate application form. The information on the form shall include the following:

A. The name, address, phone number, and business operation of the Qualified Facility owner(s). The name, address, and phone number of the Qualified Agent (if any) for the business and proof of current technical registration and licensing by the State of Arizona. If the Qualified Agent is not an employee of the Qualified Facility owner(s), the contract shall be for at least a one-year term.

B. The name and phone number of the Qualified Facility Maintenance Staff Member for the Qualified Facility owner(s).

C. A statement that the Qualified Agent may on behalf of the Qualified Facility owner(s), contract with third party on-site inspectors and/or superintendents for completing work under the Annual Facility Permit. In addition, a statement that the Qualified Facility owner(s) assumes all Responsibility for

assuring that all work performed under the Annual Facility Permit meets the current Building Code standards.

D. A site plan clearly indicating the existing location and total square footage of the entire Qualified Facility at the site intended to be covered under the Annual Facility Permit, including all Specialized Buildings and building service equipment.

E. A statement describing the nature and extent of all work expected to be performed at the Qualified Facility under the Annual Facility Permit.

Add 105.1.2.2.1 The Annual Facility Permit applicant may schedule inspections using the blanket permit issued after pre-paying an hourly fee (currently $47/hour, Section 107 of the 1997 Uniform Administrative Code) and scheduling the inspection prior to any time limitations provided by the City of Flagstaff.

Add 105.1.2.2.2 The appropriate routing action shall be taken by the City's Building Official for review of each Annual Facility Permit application. The applicant shall be notified upon approval or denial. If the application is disapproved, the applicant may appeal such decision to the Building and Fire Code Board of Appeals (Resolution 2001-42, 19 June 2001) no later than fourteen (14) calendar days after receipt of notice of disapproval. The fee for filing an appeal is $250, which is non-refundable.

Add 105.1.2.3 Permit Expiration. The Annual Facility Permit(s) shall be valid for a period of one year from the date of issue. The Annual Facility Permit shall be renewed annually and timely payment of annual renewal fee shall be made prior to performing any further permitted work.

Add 105.1.2.3.1 If the Qualified Agent's contract or employment at the Qualified Facility terminates prior to the expiration of the Annual Facility Permit, the Qualified Facility owner(s) shall notify the City's Building Official in writing within seven (7) calendar days. The Qualified Facility owner(s) shall engage a replacement Qualified Agent within fifteen (15) calendar days or the Annual Facility Permit shall automatically terminate. Application for a new Annual Facility Permit(s) shall be submitted with payment of new fees after fifteen (15) calendar days if no new Qualified Agent is contracted with or employed under the original Annual Facility Permit by that time. If the original Annual Facility Permit terminates and no new Annual Facility Permit is issued, then the Qualified Facility owner(s) shall complete any unfinished work with inspections provided by the City of Flagstaff at a regular hourly rate. No new projects may be started at the Qualified Facility under a terminated Annual Facility Permit.

105.1.2.4 Scope of Work. Project Scope Limitations shall be determined by project size (both dollar amount and physical area). Projects for remodeling, repairs, alterations, improvements, and conversions within the original "footprint" of the existing building(s) shall be limited

to $35,000 per project or no more than 25% of the original footprint area of the existing building(s) comprising the Qualified Facility.

Add 105.1.2.4.1 Projects may not alter or modify egress or required fire sprinkler systems without specific review and approval by the City's Building Official. Fire sprinkler systems shall require a separate permit issued through the City of Flagstaff Fire Department. Plan review shall be reimbursed at the hourly rate currently in effect.

Add 105.1.2.4.1 Projects may not be phased to circumvent the Project Scope Limitations. If the entire building is going to be renovated, or if there will be a significant change in occupancy, or if there will be a change in use, or if the portions of the building(s) will require demolition prior to renovation, then the Development Review Board and standard building permit process shall apply.

Add 105.1.2.4.3 A list of all projects underway or completed under the Annual Facility Permit shall be maintained by the Qualified Agent and made available for review by the City of Flagstaff Building Official upon request.

Add 105.1.2.4.4 All commercial demolition shall be subject to the rules established by Title 40, Code of Federal Regulations, Part 61, Subpart M, Asbestos NESHAP; Arizona Revised Statutes Title 49, § 49-421 et. seq. and § 49-471 et seq.; and Arizona Administrative Code, Title 18, Chapter 2, R18-2-1101. (See exemptions on page 3, Sec 61.145(a) Applicability).

CHAPTER 5 of IBC, GENERAL BUILDING HEIGHTS AND AREAS

Amend Section 509, "Tenant Space Separation" by adding:

Section 509.1 All tenant spaces within a single structure shall be separated by a wall constructed of wood or metal studs and covered with a minimum of ½" drywall material on each side from the finished floor to the underside of the roof deck or flooring above. Walls can be constructed of any material approved by the Building Code. Requirements for fire rated separations will be governed by the different types of occupancy and materials and protection requirements are covered in Chapter 7, 8 and 9 of this code.

CHAPTER 15 IBC, ROOF ASSEMBLIES AND ROOFTOP STRUCTURES

Revise the amendment to Section 1506.3 with the following language:

All roofing materials used must be a class "A" or "B" material and rolled roofing is to be of a self-adhering polymer bitumen type material. (Amended, Ord. 2009-06, 07/18/2009)

Amend Sections 1507.8 and 1507.9 by deleting each section in their entirety.

CHAPTER 18 of IBC, SOILS AND FOUNDATIONS

Amend Sections 1805.2 and 1805.4 by adding:

1805.2.4 and 1805.4.6 Footing Reinforcement. A minimum of 2–#4 steel reinforcement spaced per ACI 318, Section 7.5 shall be required in all footings.

Amend 1805.4.1 by changing the last line of the first paragraph to:

The minimum width of footings shall be 16 inches.

Amend Table 1805.4.2 by changing:

12 and 15 inch width of footing to 16 inches minimum.

6 inch thickness of footing to 8 inches minimum.

Amend Section 1805.5.2.2 by adding paragraph number 8:

8. Masonry foundation walls shall be solid grouted up to floor slab.

CHAPTER 31, IBC, SPECIAL CONSTRUCTION

Revise the amendment to Section 3109, Swimming Pool Enclosures and Safety Devices, as follows:

Refer to the Arizona Revised States (ARS) governing pool enclosure requirements. (Amended Ord. No. 2011-12, (July 19, 2011)

INTERNATIONAL BUILDING CODES (IBC), 2012 EDITION – APPENDICES

Adopt as the following appendices with the exceptions and/or amended language as follows:

Appendix B – Board of Appeals

Appendix C – Group U – Agricultural Buildings

APPENDIX I – Patio Covers

APPENDIX J – Grading

Amend Appendix J, by adding Section J104.5 Storm Water requirements:

1. Contractor shall submit to the Arizona Department of Environmental Quality a Notice of Intent (NOI) and a Notice of Termination (NOT) pursuant to the requirements of ARS Title 49, Chapter 2, Article 3.1. A copy of the submitted NOI and the NOT shall be provided to the City of Flagstaff Stormwater Section. The NOI shall be submitted prior to issuance of any City of Flagstaff grading or offsite permits. The NOT shall be submitted prior to final acceptance of off-site improvements and the certificate of occupancy.

2. An Arizona certified or Registered Civil Engineer shall prepare and submit for review and approval a Storm water Pollution Prevention Plan (SWPPP) in accordance with the Arizona Department of Transportation (ADOT) Best Management Practices (BMP) Manual (or other BMP's as may be approved by the Storm water Manager). Submittal shall be made concurrent with the Civil Plan submittal and attached to the Civil Plan set. Review timeframes shall be the same as other civil reviews.

3. Prior to commencement of Grading Activities, the SWPPP shall be in place and the City of Flagstaff contacted for inspection. The grading permit shall be issued upon City of Flagstaff approval of the implementation of the approved SWPPP.

4. During construction, the SWPPP shall remain in place, and shall be maintained until project completion as witnessed by a Final Grading Certification and the filing of a NOT. Failure to maintain structural controls may result in a Stop Work Order.

5. In accordance with the provisions of this section, the City of Flagstaff may withhold permits, occupancy or enforce by other remedy in order to ensure compliance.

(Amended Ord. No. 2007-47, 12/18/2007; Amended Ord. 2007-48, 01/15/2008; Amended, Ord. 2009-06, 07/18/2009; Amended Ord. 2011-12, July 19, 2011)

2013 AMENDMENTS TO FLAGSTAFF CITY CODE, TITLE 4, BUILDING CODE

CHAPTER 4-04
INTERNATIONAL PLUMBING CODE

Sections:

4-04-001-0001 AMENDMENTS, ADDITIONS, AND DELETIONS

4-04-001-001 **Amendments, Additions, and Deletions**

The following provisions shall have the effect of either amending, adding to, or deleting from the International Plumbing Code adopted in Flagstaff City Code, Title 4, Building Regulations, Chapter 4-01, Administrative Enactments, Section 4-01-001-0002, Adoption.

CHAPTER 3, GENERAL REGULATIONS

Amend Section 301.3 by adding to the end of the paragraph:

This section shall not be construed to prevent indirect waste systems required by Chapter 8.

Exception: Bathtubs, showers, lavatories, clothes washers and laundry trays shall not be required to discharge to the sanitary drainage system where such fixtures discharge to an approved gray water system for flushing of water closets and urinals or for subsurface landscape irrigation.

(Amended Ord. No. 2011-12, (July 19, 2011)

Amend Section 301.7 to read:

Where conflicts between this Code and the conditions of the listing or the manufacturer's installation instructions occur, the listing or manufacturer's installation requirements shall apply.

Amend last sentence of Section 305.6 to read:

Exterior Water supply piping shall be installed not less than thirty (30) inches (765 mm) below grade.

Change the amendment to Section 305.6.1 by adding the following language:

Building sewers that connect to private sewage disposal systems shall be regulated by the Coconino County Health Department. Building sewers for single family detached buildings on City provided sewer shall be a minimum of twelve (12) inches (306 mm) below grade.

(Amended Ord. No. 2011-12, (July 19, 2011)

Amend Section 312.1, changing the ninth sentence to read:

All plumbing system piping shall be tested with either water or air.

Amend Section 312.4 to DELETE in its entirety.

Amend Section 312.6 to DELETE in its entirety.

Amend Section 312.7 to DELETE in its entirety.

CHAPTER 4, FIXTURES, FAUCETS AND FIXTURE FITTINGS

Amend Section 419, Urinals by adding a new sub-section:

419.4 Urinals. All new commercial, institutional, and public facility construction or additions and alterations to restrooms in commercial, institutional, and public facilities shall install waterless urinals with a minimum 1 pint flush.

Amended Ord. 2007-48, 01/15/2008; Amended, Ord. 2009-06, 07/18/2009; Amended Ord. No. 2011-12, July 19, 2011

CHAPTER 6, WATER SUPPLY AND DISTRIBUTION

Amend Table 604.4 by changing the following values:

Maximum Flow Rate or Quantity for a Water Closet to Max. 1.3 gal.(HET)

Amend Section 607.2 by deleting the section in its entirety.

Amend Section 610 to DELETE in its entirety.

CHAPTER 7 SANITARY DRAINAGE

Amend Section 703 by adding a new section:

703.6 Building Sewer Locating Means. All non-metallic building sewer piping shall be installed with a plastic covered No. 12 AWG Type UF 600V tracer wire taped to the top of the piping with a minimum 10 mil tape. The building sewer tracer wire shall be green in color.

CHAPTER 9, VENTS

Revise the amendment to Section 904.1 to read:

"…terminated at least 12 inches (306 mm) above the roof."

(Amended Ord. No. 2011-12, (July 19, 2011)

Adopt the Appendix C, Gray Water Recycling Systems, as written.

Amended Ord. No. 2007-47, 12/18/2007; Amended Ord. 2007-48, 01/15/2008

2013 AMENDMENTS TO FLAGSTAFF CITY CODE, TITLE 4, BUILDING CODE

CHAPTER 4-05

NATIONAL ELECTRICAL CODE

Sections:

4-05-001-0001 AMENDMENTS, **ADDITIONS, AND DELETIONS**

4-05-001-0001 Amendments, Additions, and Deletions

The following provisions shall have the effect of either amending, adding to, or deleting from the National Electrical Code adopted in Flagstaff City Code, Title 4, Building Regulations, Chapter 4-01, Administrative Enactments, Section 4-01-001-0002, Adoption.

ARTICLE 110, REQUIREMENTS FOR ELECTRICAL INSTALLATIONS

Amend Article 110.2 by adding:

All electrical conductors, components, material and equipment shall be listed and labeled.

Amend Article 110.5 to read:

Conductors used to carry current shall be of copper only. Where the conductor material is not specified, the material and the sizes given in this Code shall apply to copper conductors. The use of aluminum wire shall be approved for feeders and service entrance conductors only and shall not be used for branch circuit wiring.

Amend Article 110.7 by adding:

All equipment rated at 1000 amperes or more shall be tested for insulation breakdown, mechanical integrity, and workmanship prior to the equipment being energized. A certified Hi-pot test shall be performed and a certificate issued to the City of Flagstaff Project Inspection Program, Development Services Section. This test shall be performed in the presence of a City of Flagstaff Building Inspector and conducted by a testing firm approved by the Building Official.

Said test shall be performed for a period of one (1) minute, the application of a 60 hertz alternating potential of 1000 volts plus twice the rated phase to phase voltage of the equipment.

This test shall be performed between all phases to ground, phase to phase, and neutral if isolated.

ARTICLE 210, CIRCUITS

Amend Article 210.5 by adding:

(D) Color Code. Where 15, 20, or 30 amp branch circuits requiring a neutral are installed in race ways or cable assemblies, the conductor of branch circuits connected to the same system shall conform to the following color code:

Volts	Phase	System	Phase A	Phase B	Phase C	Neutral
120/208	3	Wye	Black	Red	Blue	White
120/240	3	Delta	Black	Orange	Blue	White
277/480	3	Wye	Brown	Orange	Yellow	Gray

ARTICLE 250, GROUNDING

Amend Article 250.30 (A) (2) by adding:

(a) All new building construction shall have a one piece concrete-encased electrode and electrode conductor (Ufer), a minimum twenty (20) feet in the footing, sized from the following table:

0-200 Amp Service	1 piece #4 copper (electrode and electrode conductor)
400 Amp Service	1 piece 1/0 copper (electrode and electrode conductor)
600 Amp Service	1 piece 2/0 copper (electrode and electrode conductor)
Larger than 800 Amp Service	1 piece 3/0 copper (electrode and electrode conductor)

Where the Ufer has been lost, damaged, or un-located, a ground ring or modification of the same consisting of thirty (30) feet of #2 bare copper wire, buried a minimum of thirty (30) inches deep in a trench, or a Plate electrode per 250.53 (H) and per 250.56 shall be required in lieu of a concrete-encased electrode. Services larger then 200A shall be sized from the table above.

(Amended Ord. No. 2007-47, 12/18/2007; Amended Ord. 2007-48, 01/15/2008; Amended Ord. No. 2009-06, 07/18/2009; Amended Ord. 2011-12, July 19, 2011)

2013 AMENDMENTS TO FLAGSTAFF CITY CODE, TITLE 4, BUILDING CODE

CHAPTER 4-06

INTERNATIONAL MECHANICAL CODE

Sections:

4-06-001-0001 AMENDMENTS, ADDITIONS, AND DELETIONS

Section 4-06-001-0001 Amendments, Additions, and Deletions

The following provisions shall have the effect of either amending, adding to, or deleting from the International Mechanical Code adopted in Flagstaff City Code, Title 4, Building Regulations, Chapter 4-01, Administrative Enactments, Section 4-01-001-0002, Adoption.

CHAPTER 3, General Regulations

Revise the amendment to Section 303.4 as follows:

Refer to amendments to the IFGC Section 305.5 for requirements.

(Amended Ord. No. 2011-12, (July 19, 2011)

Amend Section 304.2 to read:

Where conflicts between this Code and the conditions of the listing or the manufacturer's installation instructions occur, the listing and manufacturer's installation requirements shall apply.

Amend Section 304.6 to read:

Appliances located in private garages and carports shall be installed per Section 303.3 and/or 304.4.

Amend Section 306.1 by adding to the last sentence "or the removal of any other appliances."

CHAPTER 9, IMC, SPECIFIC APPLIANCES, FIREPLACES, AND SOLID FUEL-BURNING EQUIPMENT

Amend Section 903.3 to read:

An unvented gas log heaters shall not be installed at any time unless first approved by the local gas utility company. A signed and dated letter of such approval shall be submitted to the Building Official before a permit can be issued.

Amend Section 928, Unvented Room Heaters, by adding:

928.1 Installation. Vent free appliances shall not be installed unless first approved by the local gas utility company. A signed and dated letter of such approval shall be submitted to the Building Official before a permit can be issued.

CHAPTER 10, BOILERS, WATER HEATERS and PRESSURE VESSELS

Amend Section 1002.1 by changing the second sentence to read:

All water heaters shall be capable of being removed without first removing a permanent portion of the building structure or removing another appliance.

(Amended Ord. No. 2007-47, 12/18/2007; Amended Ord. 2007-48, 01/15/2008 Amended Ord. No. 2009-06, 07/18/2009; Amended Ord. No. 2011-12, July 19, 2011)

2013 AMENDMENTS TO FLAGSTAFF CITY CODE, TITLE 4, BUILDING CODE

CHAPTER 4-07

INTERNATIONAL FUEL GAS CODE

Sections:

4-07-001-0001 AMENDMENTS, ADDITIONS, AND DELETIONS

Section 4-07-001-0001 Amendments, Additions, and Deletions

The following provisions shall have the effect of either amending, adding to, or deleting from the International Fuel Gas Code adopted in Flagstaff City Code, Title 4, Building Regulations, Chapter 4-01, Administrative Enactments, Section 4-01-001-0002, Adoption.

(Amended Ord. 2011-12, July 19, 2011)

CHAPTER 3, GENERAL REGULATIONS

Amend Section 303.3 by deleting numbers 3 and 4.

Delete the following amendments to Chapter 3:

Amend Section 305.5. Private Garages by deleting in its entirety and replacing with:

> Appliances shall not be installed in a location where subject to mechanical damage unless protected by approved barriers such as steel bollards filled with concrete, poured in place concrete curb, or installed a minimum 24 inches above the floor. Appliances not subject to mechanical damage shall be installed per Section 305.3

Amended Ord. No. 2007-47, 12/18/2007; Amended Ord. 2007-48, 01/15/2008; Amended Ord. No. 2009-06, 07/18/2009) (Amended Ord. No. 2011-12, July 19, 2011)

CHAPTER 4, GAS PIPING IMSTALLATIONS

Amend Section 403.4.3. Copper and Brass, delete and replace with:

> Copper and brass pipe, threaded copper, brass and aluminum piping shall not be used for gas piping installations within the City of Flagstaff.

Amend Section 406.4.1. Test Pressure, to read:

> The test pressure to be used shall be no less than ten (10) pounds per square inch gauge pressure or six (6) inches of mercury measured with a manometer or slope gauge for single family dwellings or for systems with less than fifteen (15) pounds per square inch or fourteen (14) inches of water column. Welded piping and piping that carries gas at pressure in excess of fourteen (14) inches of water column or fifteen

(15) pounds per square inch shall be tested with no less than sixty (60) pounds per square inch. The test gauge shall not be more than twice the test pressure and in 1/10 pound increments or less.

Amended Ord. No. 2007-47, 12/18/2007; Amended Ord. 2007-48, 01/15/2008; Amended Ord. No. 2009-06, 07/18/2009) (Amended Ord. No. 2011-12, July 19, 2011)

Amend Section 406.4.2. **Test Duration,** to read:

Test duration shall be no less than fifteen (15) minutes for single family dwellings or systems with less than fifteen (15) pounds per square inch, fourteen (14) inches of water column. Welded piping, and systems with fifteen (15) pounds per square inch (14 inches of water column) or more shall be tested for no less than thirty (30) minutes.

CHAPTER 6, SPECIFIC APPLIANCES

Amend Section 614.5. **Makeup air**, by deleting the first sentence:

Installations exhausting more than 200 cfm (0.09 m3/s) shall be provided with makeup air.

Amend Section 621. **Unvented Room Heaters**, to be deleted in its entirety.

Amended Ord. No. 2007-47, 12/18/2007; Amended Ord. 2007-48, 01/15/2008; Amended Ord. No. 2009-06, 07/18/2009) (Amended Ord. No. 2011-12, July 19, 2011)

2013 AMENDMENTS TO FLAGSTAFF CITY CODE, TITLE 4, BUILDING CODE

CHAPTER 4-08

INTERNATIONAL EXISTING BUILDING CODE

Sections:

4-08-001-0001 AMENDMENTS, ADDITIONS, AND DELETIONS

4-08-001-0001 Amendments, Additions, and Deletions

The following provisions shall have the effect of either amending, adding to, or deleting from the International Existing Building Code adopted in Flagstaff City Code, Title 4, Building Regulations, Chapter 4-01, Administrative Enactments, Section 4-01-001-0002, Adoption.

CHAPTER 1, ADMINISTRATION

Amend Section 105.1.1. **Annual Permit**, by referencing City of Flagstaff 2011 Code Amendments to the International Building Code (IBC), 2006 Edition for requirements and compliance issues.

Amend Section 105.5. **Expiration**, by referencing City of Flagstaff 20011 Code Amendments to the International Residential Code (IRC), 2006 Edition and International Building Code (IBC), 2006 Edition for requirements and compliance issues on the duration of building permits.

CHAPTER 11, HISTORIC BUILDINGS

Revise the amendment to Section 101.2 as follows:

Amend Section 1101.2 Report by adding Section 1001.2.1 as follows:

Section 1101.2.1, Any changes to a structure in a historic district or to buildings listed on the City of Flagstaff Historic Registry shall be reviewed by the Community Investment Division, Historic Preservation representative, and Project Management Section, Development Services Division prior to issuing a building permit. The project may be referred to the Development Review Board and/or the Historic Preservation Commission for complete staff review by the board members.

(Amended Ord. No. 2011-12, July 19, 2011)

Amended Ord. No. 2007-47, 12/18/2007; Amended Ord. 2007-48, 01/15/2008; Amended Ord. No. 2009-06, 07/18/2009) (Amended Ord. No. 2011-12, July 19, 2011)

2013 AMENDMENTS TO FLAGSTAFF CITY CODE, TITLE 4, BUILDING CODE

CHAPTER 4-09

INTERNATIONAL ENERGY CONSERVATION CODE

Sections:

4-09-001-0001 **AMENDMENTS, ADDITIONS, AND DELETIONS**

Section 4-09-001-0001 Amendments, Additions, and Deletions

The following provisions shall have the effect of either amending, adding to, or deleting from the International Energy Conservation Code adopted in Flagstaff City Code, Title 4, Building Regulations, Chapter 4-01, Administrative Enactments, Section 4-01-001-0002, Adoption.

CHAPTER 4, RESIDENTIAL ENERGY EFFICIENCY

Add the following amendments to Chapter 4:

Amend Section 402.1.1 by adding:

Insulation values in 2x6 wall construction will remain the same at R-19.

Exception: Insulation values in existing 2x4 wall construction will remain at R-15 (high density).

(Amended Ord. No. 2011-12, July 19, 2011)

Amend Section 402.1.3.1 Window Fenestration

All new construction and replacement windows to have National Fenestration Rating Council (NFRC) total unit U-factor of 0.45 or less. Windows shall also be low-E where practical (not recommended for southern exposures) or not being used for solar heat gain to fuel a solar massing device. (Amended Ord. No. 2011-12, July 19, 2011)

(Amended Ord. No. 2011-12, July 19, 2011)

Section 403.7 Furnaces: All furnaces installed in new construction shall be 90% condensing type furnaces.

Exception: Replacement furnaces are to be voluntarily 90% condensing type furnaces.

(Amended Ord. No. 2011-12, July 19, 2011)

Section 403.11 All newly installed toilets must be “high efficiency toilets” (HET) units which have a maximum of 1.3 gallons for solids.

(Special attention to this change needs to be addressed by suppliers and home improvement centers which stock the older style units).

(Amended Ord. No. 2011-12, July 19, 2011)

Section N1105.10 Dual Plumbing. All new residential single family detached units are "voluntarily" requested to install the piping only for dual plumbed for "gray water" disposal and conservation efforts. Access for future valving must be provided and the initial installation will be connected to sanitary sewer. The piping shall be installed in accordance Appendix C, Gray Water Recycling Systems, of the International Plumbing Code, 2009 Edition, and the regulations established by ADEQ. Reference Type 1 General Permit Best Management Practices for the 13 points of using gray water, at www.adeq.state.az.us or call at 1-800-234-5677.)

(Amended Ord. No. 2011-12, July 19, 2011)

CHAPTER 5 COMMERCIAL ENERGY EFFICIENCY

Amend Chapter 5 by deleting Sections 505.6.1 through 505.6.2 and replace with:

City of Flagstaff has an exterior lighting permit requirement, enforces a "Dark Sky Ordinance" and requires review by zoning enforcement and the Project Management Section prior to installation. Lumen calculations are required and amounts are limited by property size and use.

(Amended Ord. No. 2007-47, 12/18/2007; Amended Ord. 2007-48, 01/15/2008; Amended Ord. No. 2009-06, 07/18/2009; Amended Ord. No. 2011-12, July 19, 2011)

CHAPTER 4

RESIDENTIAL ENERGY EFFICIENCY

SECTION 401
GENERAL

401.1 Scope. This chapter applies to residential buildings.

401.2 Compliance. Projects shall comply with Sections 401, 402.4, 402.5, and 403.1, 403.2.2, 403.2.3, and 403.3 through 403.9 (referred to as the mandatory provisions) and either:

1. Sections 402.1 through 402.3, 403.2.1 and 404.1 (prescriptive); or
2. Section 405 (performance).

401.3 Certificate. A permanent certificate shall be posted on or in the electrical distribution panel. The certificate shall not cover or obstruct the visibility of the circuit directory label, service disconnect label or other required labels. The certificate shall be completed by the builder or registered design professional. The certificate shall list the predominant *R*-values of insulation installed in or on ceiling/roof, walls, foundation (slab, *basement wall*, crawlspace wall and/or floor) and ducts outside conditioned spaces; *U*-factors for fenestration and the solar heat gain coefficient (SHGC) of fenestration. Where there is more than one value for each component, the certificate shall list the value covering the largest area. The certificate shall list the types and efficiencies of heating, cooling and service water heating equipment. Where a gas-fired unvented room heater, electric furnace, or baseboard electric heater is installed in the residence, the certificate shall list "gas-fired unvented room heater," "electric furnace" or "baseboard electric heater," as appropriate. An efficiency shall not be *listed* for gas-fired unvented room heaters, electric furnaces or electric baseboard heaters.

SECTION 402
BUILDING THERMAL ENVELOPE

402.1 General (Prescriptive).

402.1.1 Insulation and fenestration criteria. The *building thermal envelope* shall meet the requirements of Table 402.1.1 based on the climate *zone* specified in Chapter 3.

402.1.2 *R*-value computation. Insulation material used in layers, such as framing cavity insulation and insulating sheathing, shall be summed to compute the component *R*-value. The manufacturer's settled *R*-value shall be used for blown insulation. Computed *R*-values shall not include an *R*-value for other building materials or air films.

TABLE 402.1.1
INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT[a]

CLIMATE ZONE	FENESTRATION *U*-FACTOR[b]	SKYLIGHT[b] *U*-FACTOR	GLAZED FENESTRATION SHGC[b, e]	CEILING *R*-VALUE	WOOD FRAME WALL *R*-VALUE	MASS WALL *R*-VALUE[i]	FLOOR *R*-VALUE	BASEMENT[c] WALL *R*-VALUE	SLAB[d] *R*-VALUE & DEPTH	CRAWL SPACE[c] WALL *R*-VALUE
1	1.2	0.75	0.30	30	13	3/4	13	0	0	0
2	0.65[j]	0.75	0.30	30	13	4/6	13	0	0	0
3	0.50[j]	0.65	0.30	30	13	5/8	19	5/13[f]	0	5/13
4 except Marine	0.35	0.60	NR	38	13	5/10	19	10/13	10, 2 ft	10/13
5 and Marine 4	0.35	0.60	NR	38	Exp R19 20 or 13+5[h]	13/17	30[g]	10/13	10, 2 ft	10/13
6	0.35	0.60	NR	49	20 or 13+5[h]	15/19	30[g]	15/19	10, 4 ft	10/13
7 and 8	0.35	0.60	NR	49	21	19/21	38[g]	15/19	10, 4 ft	10/13

For SI: 1 foot = 304.8 mm.

a. *R*-values are minimums. *U*-factors and SHGC are maximums. R-19 batts compressed into a nominal 2 × 6 framing cavity such that the *R*-value is reduced by R-1 or more shall be marked with the compressed batt *R*-value in addition to the full thickness *R*-value.

b. The fenestration *U*-factor column excludes skylights. The SHGC column applies to all glazed fenestration.

c. "15/19" means R-15 continuous insulated sheathing on the interior or exterior of the home or R-19 cavity insulation at the interior of the basement wall. "15/19" shall be permitted to be met with R-13 cavity insulation on the interior of the basement wall plus R-5 continuous insulated sheathing on the interior or exterior of the home. "10/13" means R-10 continuous insulated sheathing on the interior or exterior of the home or R-13 cavity insulation at the interior of the basement wall.

d. R-5 shall be added to the required slab edge *R*-values for heated slabs. Insulation depth shall be the depth of the footing or 2 feet, whichever is less in Zones 1 through 3 for heated slabs.

e. There are no SHGC requirements in the Marine Zone.

f. Basement wall insulation is not required in warm-humid locations as defined by Figure 301.1 and Table 301.1.

g. Or insulation sufficient to fill the framing cavity, R-19 minimum.

h. "13+5" means R-13 cavity insulation plus R-5 insulated sheathing. If structural sheathing covers 25 percent or less of the exterior, insulating sheathing is not required where structural sheathing is used. If structural sheathing covers more than 25 percent of exterior, structural sheathing shall be supplemented with insulated sheathing of at least R-2.

i. The second *R*-value applies when more than half the insulation is on the interior of the mass wall.

j. For impact rated fenestration complying with Section R301.2.1.2 of the *International Residential Code* or Section 1608.1.2 of the *International Building Code*, the maximum *U*-factor shall be 0.75 in Zone 2 and 0.65 in Zone 3.

TABLE 402.1.3
EQUIVALENT *U*-FACTORS[a]

CLIMATE ZONE	FENESTRATION *U*-FACTOR	SKYLIGHT *U*-FACTOR	CEILING *U*-FACTOR	FRAME WALL *U*-FACTOR	MASS WALL *U*-FACTOR[b]	FLOOR *U*-FACTOR	BASEMENT WALL *U*-FACTOR	CRAWL SPACE WALL *U*-FACTOR[c]
1	1.20	0.75	0.035	0.082	0.197	0.064	0.360	0.477
2	0.65	0.75	0.035	0.082	0.165	0.064	0.360	0.477
3	0.50	0.65	0.035	0.082	0.141	0.047	0.091[c]	0.136
4 except Marine	0.35	0.60	0.030	0.082	0.141	0.047	0.059	0.065
5 and Marine 4	0.35	0.60	0.030	0.057	0.082	0.033	0.059	0.065
6	0.35	0.60	0.026	0.057	0.060	0.033	0.050	0.065
7 and 8	0.35	0.60	0.026	0.057	0.057	0.028	0.050	0.065

a. Nonfenestration *U*-factors shall be obtained from measurement, calculation or an approved source.
b. When more than half the insulation is on the interior, the mass wall *U*-factors shall be a maximum of 0.17 in Zone 1, 0.14 in Zone 2, 0.12 in Zone 3, 0.10 in Zone 4 except Marine, and the same as the frame wall *U*-factor in Marine Zone 4 and Zones 5 through 8.
c. Basement wall *U*-factor of 0.360 in warm-humid locations as defined by Figure 301.1 and Table 301.2.

402.1.3 *U*-factor alternative. An assembly with a *U*-factor equal to or less than that specified in Table 402.1.3 shall be permitted as an alternative to the *R*-value in Table 402.1.1.

402.1.4 Total UA alternative. If the total *building thermal envelope* UA (sum of *U*-factor times assembly area) is less than or equal to the total UA resulting from using the *U*-factors in Table 402.1.3 (multiplied by the same assembly area as in the proposed building), the building shall be considered in compliance with Table 402.1.1. The UA calculation shall be done using a method consistent with the ASHRAE *Handbook of Fundamentals* and shall include the thermal bridging effects of framing materials. The SHGC requirements shall be met in addition to UA compliance.

402.2 Specific insulation requirements (Prescriptive).

402.2.1 Ceilings with attic spaces. When Section 402.1.1 would require R-38 in the ceiling, R-30 shall be deemed to satisfy the requirement for R-38 wherever the full height of uncompressed R-30 insulation extends over the wall top plate at the eaves. Similarly, R-38 shall be deemed to satisfy the requirement for R-49 wherever the full height of uncompressed R-38 insulation extends over the wall top plate at the eaves. This reduction shall not apply to the *U*-factor alternative approach in Section 402.1.3 and the total UA alternative in Section 402.1.4.

402.2.2 Ceilings without attic spaces. Where Section 402.1.1 would require insulation levels above R-30 and the design of the roof/ceiling assembly does not allow sufficient space for the required insulation, the minimum required insulation for such roof/ceiling assemblies shall be R-30. This reduction of insulation from the requirements of Section 402.1.1 shall be limited to 500 square feet (46 m²) or 20 percent of the total insulated ceiling area, whichever is less. This reduction shall not apply to the *U*-factor alternative approach in Section 402.1.3 and the total UA alternative in Section 402.1.4.

402.2.3 Access hatches and doors. Access doors from conditioned spaces to unconditioned spaces (e.g., attics and crawl spaces) shall be weatherstripped and insulated to a level equivalent to the insulation on the surrounding surfaces. Access shall be provided to all equipment that prevents damaging or compressing the insulation. A wood framed or equivalent baffle or retainer is required to be provided when loose fill insulation is installed, the purpose of which is to prevent the loose fill insulation from spilling into the living space when the attic access is opened, and to provide a permanent means of maintaining the installed *R*-value of the loose fill insulation.

402.2.4 Mass walls. Mass walls for the purposes of this chapter shall be considered above-grade walls of concrete block, concrete, insulated concrete form (ICF), masonry cavity, brick (other than brick veneer), earth (adobe, compressed earth block, rammed earth) and solid timber/logs.

402.2.5 Steel-frame ceilings, walls, and floors. Steel-frame ceilings, walls and floors shall meet the insulation requirements of Table 402.2.5 or shall meet the *U*-factor requirements in Table 402.1.3. The calculation of the *U*-factor for a steel-frame envelope assembly shall use a series-parallel path calculation method.

Exception: In Climate Zones 1 and 2, the continuous insulation requirements in Table 402.2.4 shall be permitted to be reduced to R-3 for steel frame wall assemblies with studs spaced at 24 inches (610 mm) on center.

TABLE 402.2.5
STEEL-FRAME CEILING, WALL AND FLOOR INSULATION (*R*-VALUE)

WOOD FRAME *R*-VALUE REQUIREMENT	COLD-FORMED STEEL EQUIVALENT *R*-VALUE[a]
Steel Truss Ceilings[b]	
R-30	R-38 or R-30 + 3 or R-26 + 5
R-38	R-49 or R-38 + 3
R-49	R-38 + 5
Steel Joist Ceilings[b]	
R-30	R-38 in 2 × 4 or 2 × 6 or 2 × 8 R-49 in any framing
R-38	R-49 in 2 × 4 or 2 × 6 or 2 × 8 or 2 × 10
Steel-Framed Wall	
R-13	R-13 + 5 or R-15 + 4 or R-21 + 3 or R-0 + 10
R-19	R-13 + 9 or R-19 + 8 or R-25 + 7
R-21	R-13 + 10 or R-19 + 9 or R-25 + 8
Steel Joist Floor	
R-13	R-19 in 2 × 6 R-19 + 6 in 2 × 8 or 2 × 10
R-19	R-19 + 6 in 2 × 6 R-19 + 12 in 2 × 8 or 2 × 10

a. Cavity insulation *R*-value is listed first, followed by continuous insulation *R*-value.

b. Insulation exceeding the height of the framing shall cover the framing.

402.2.6 Floors. Floor insulation shall be installed to maintain permanent contact with the underside of the subfloor decking.

402.2.7 Basement walls. Walls associated with conditioned basements shall be insulated from the top of the *basement wall* down to 10 feet (3048 mm) below grade or to the basement floor, whichever is less. Walls associated with unconditioned basements shall meet this requirement unless the floor overhead is insulated in accordance with Sections 402.1.1 and 402.2.6.

402.2.8 Slab-on-grade floors. Slab-on-grade floors with a floor surface less than 12 inches (305 mm) below grade shall be insulated in accordance with Table 402.1.1. The insulation shall extend downward from the top of the slab on the outside or inside of the foundation wall. Insulation located below grade shall be extended the distance provided in Table 402.1.1 by any combination of vertical insulation, insulation extending under the slab or insulation extending out from the building. Insulation extending away from the building shall be protected by pavement or by a minimum of 10 inches (254 mm) of soil. The top edge of the insulation installed between the *exterior wall* and the edge of the interior slab shall be permitted to be cut at a 45-degree (0.79 rad) angle away from the *exterior wall*. Slab-edge insulation is not required in jurisdictions designated by the *code official* as having a very heavy termite infestation.

402.2.9 Crawl space walls. As an alternative to insulating floors over crawl spaces, crawl space walls shall be permitted to be insulated when the crawl space is not vented to the outside. Crawl space wall insulation shall be permanently fastened to the wall and extend downward from the floor to the finished grade level and then vertically and/or horizontally for at least an additional 24 inches (610 mm). Exposed earth in unvented crawl space foundations shall be covered with a continuous Class I vapor retarder in accordance with the *International Building Code*. All joints of the vapor retarder shall overlap by 6 inches (153 mm) and be sealed or taped. The edges of the vapor retarder shall extend at least 6 inches (153 mm) up the stem wall and shall be attached to the stem wall.

402.2.10 Masonry veneer. Insulation shall not be required on the horizontal portion of the foundation that supports a masonry veneer.

402.2.11 Thermally isolated sunroom insulation. The minimum ceiling insulation *R*-values shall be R-19 in Zones 1 through 4 and R-24 in Zones 5 through 8. The minimum wall *R*-value shall be R-13 in all zones. New wall(s) separating a sunroom from *conditioned space* shall meet the *building thermal envelope* requirements.

402.3 Fenestration. (Prescriptive).

402.3.1 *U*-factor. An area-weighted average of fenestration products shall be permitted to satisfy the *U*-factor requirements.

402.3.2 Glazed fenestration SHGC. An area-weighted average of fenestration products more than 50 percent glazed shall be permitted to satisfy the SHGC requirements.

402.3.3 Glazed fenestration exemption. Up to 15 square feet (1.4 m²) of glazed fenestration per dwelling unit shall be permitted to be exempt from *U*-factor and SHGC requirements in Section 402.1.1. This exemption shall not apply to the *U*-factor alternative approach in Section 402.1.3 and the Total UA alternative in Section 402.1.4.

402.3.4 Opaque door exemption. One side-hinged opaque door assembly up to 24 square feet (2.22 m²) in area is exempted from the *U*-factor requirement in Section 402.1.1. This exemption shall not apply to the *U*-factor alternative approach in Section 402.1.3 and the total UA alternative in Section 402.1.4.

402.3.5 Thermally isolated sunroom *U*-factor. For Zones 4 through 8, the maximum fenestration *U*-factor shall be 0.50 and the maximum skylight *U*-factor shall be 0.75. New windows and doors separating the sunroom from *conditioned space* shall meet the *building thermal envelope* requirements.

402.3.6 Replacement fenestration. Where some or all of an existing fenestration unit is replaced with a new fenestration product, including sash and glazing, the replacement fenestration unit shall meet the applicable requirements for *U*-factor and SHGC in Table 402.1.1.

402.4 Air leakage (Mandatory).

402.4.1 Building thermal envelope. The *building thermal envelope* shall be durably sealed to limit infiltration. The sealing methods between dissimilar materials shall allow for differential expansion and contraction. The following shall be caulked, gasketed, weatherstripped or otherwise sealed with an air barrier material, suitable film or solid material:

1. All joints, seams and penetrations.

2. Site-built windows, doors and skylights.
3. Openings between window and door assemblies and their respective jambs and framing.
4. Utility penetrations.
5. Dropped ceilings or chases adjacent to the thermal envelope.
6. Knee walls.
7. Walls and ceilings separating a garage from conditioned spaces.
8. Behind tubs and showers on exterior walls.
9. Common walls between dwelling units.
10. Attic access openings.
11. Rim joist junction.
12. Other sources of infiltration.

402.4.2 Air sealing and insulation. Building envelope air tightness and insulation installation shall be demonstrated to comply with one of the following options given by Section 402.4.2.1 or 402.4.2.2:

402.4.2.1 Testing option. Building envelope tightness and insulation installation shall be considered acceptable when tested air leakage is less than seven air changes per hour (ACH) when tested with a blower door at a pressure of 33.5 psf (50 Pa). Testing shall occur after rough in and after installation of penetrations of the building envelope, including penetrations for utilities, plumbing, electrical, ventilation and combustion appliances.

During testing:

1. Exterior windows and doors, fireplace and stove doors shall be closed, but not sealed;
2. Dampers shall be closed, but not sealed, including exhaust, intake, makeup air, backdraft and flue dampers;
3. Interior doors shall be open;
4. Exterior openings for continuous ventilation systems and heat recovery ventilators shall be closed and sealed;
5. Heating and cooling system(s) shall be turned off;
6. HVAC ducts shall not be sealed; and
7. Supply and return registers shall not be sealed.

402.4.2.2 Visual inspection option. Building envelope tightness and insulation installation shall be considered acceptable when the items listed in Table 402.4.2, applicable to the method of construction, are field verified. Where required by the *code official*, an *approved* party independent from the installer of the insulation shall inspect the air barrier and insulation.

402.4.3 Fireplaces. New wood-burning fireplaces shall have gasketed doors and outdoor combustion air.

402.4.4 Fenestration air leakage. Windows, skylights and sliding glass doors shall have an air infiltration rate of no more than 0.3 cfm per square foot (1.5 L/s/m^2), and swinging doors no more than 0.5 cfm per square foot (2.6 L/s/m^2), when tested according to NFRC 400 or AAMA/WDMA/CSA 101/I.S.2/A440 by an accredited, independent laboratory and *listed* and *labeled* by the manufacturer.

Exceptions: Site-built windows, skylights and doors.

402.4.5 Recessed lighting. Recessed luminaires installed in the *building thermal envelope* shall be sealed to limit air leakage between conditioned and unconditioned spaces. All recessed luminaires shall be IC-rated and *labeled* as meeting ASTM E 283 when tested at 1.57 psf (75 Pa) pressure differential with no more than 2.0 cfm (0.944 L/s) of air movement from the *conditioned space* to the ceiling cavity. All recessed luminaires shall be sealed with a gasket or caulk between the housing and the interior wall or ceiling covering.

402.5 Maximum fenestration *U*-factor and SHGC (Mandatory). The area-weighted average maximum fenestration *U*-factor permitted using trade-offs from Section 402.1.4 or 404 shall be 0.48 in Zones 4 and 5 and 0.40 in Zones 6 through 8 for vertical fenestration, and 0.75 in Zones 4 through 8 for skylights. The area-weighted average maximum fenestration SHGC permitted using trade-offs from Section 405 in Zones 1 through 3 shall be 0.50.

SECTION 403
SYSTEMS

403.1 Controls (Mandatory). At least one thermostat shall be provided for each separate heating and cooling system.

403.1.1 Programmable thermostat. Where the primary heating system is a forced-air furnace, at least one thermostat per dwelling unit shall be capable of controlling the heating and cooling system on a daily schedule to maintain different temperature set points at different times of the day. This thermostat shall include the capability to set back or temporarily operate the system to maintain zone temperatures down to 55°F (13°C) or up to 85°F (29°C). The thermostat shall initially be programmed with a heating temperature set point no higher than 70°F (21°C) and a cooling temperature set point no lower than 78°F (26°C).

403.1.2 Heat pump supplementary heat (Mandatory). Heat pumps having supplementary electric-resistance heat shall have controls that, except during defrost, prevent supplemental heat operation when the heat pump compressor can meet the heating load.

403.2 Ducts.

403.2.1 Insulation (Prescriptive). Supply ducts in attics shall be insulated to a minimum of R-8. All other ducts shall be insulated to a minimum of R-6.

Exception: Ducts or portions thereof located completely inside the *building thermal envelope*.

403.2.2 Sealing (Mandatory). All ducts, air handlers, filter boxes and building cavities used as ducts shall be sealed.

Joints and seams shall comply with Section M1601.4.1 of the *International Residential Code*.

Duct tightness shall be verified by either of the following:

1. Postconstruction test: Leakage to outdoors shall be less than or equal to 8 cfm (226.5 L/min) per 100 ft^2 (9.29 m^2) of *conditioned floor area* or a total leakage less than or equal to 12 cfm (12 L/min) per 100 ft^2 (9.29 m^2) of *conditioned floor area* when tested at a pressure differential of 0.1 inches w.g. (25 Pa) across the entire system, including the manufacturer's air handler enclosure. All register boots shall be taped or otherwise sealed during the test.
2. Rough-in test: Total leakage shall be less than or equal to 6 cfm (169.9 L/min) per 100 ft^2 (9.29 m^2) of *conditioned floor area* when tested at a pressure differential of 0.1 inches w.g. (25 Pa) across the roughed in system, including the manufacturer's air handler enclosure. All register boots shall be taped or otherwise sealed during the test. If the air handler is not installed at the time of the test, total leakage shall be less than or equal to 4 cfm (113.3 L/min) per 100 ft^2 (9.29 m^2) of *conditioned floor area*.

Exceptions: Duct tightness test is not required if the air handler and all ducts are located within *conditioned space*..

TABLE 402.4.2
AIR BARRIER AND INSULATION INSPECTION COMPONENT CRITERIA

COMPONENT	CRITERIA
Air barrier and thermal barrier	Exterior thermal envelope insulation for framed walls is installed in substantial contact and continuous alignment with building envelope air barrier. Breaks or joints in the air barrier are filled or repaired. Air-permeable insulation is not used as a sealing material. Air-permeable insulation is inside of an air barrier. - Not in IRC
Ceiling/attic	Air barrier in any dropped ceiling/soffit is substantially aligned with insulation and any gaps are sealed. Attic access (except unvented attic), knee wall door, or drop down stair is sealed.
Walls	Corners and headers are insulated. Junction of foundation and sill plate is sealed.
Windows and doors	Space between window/door jambs and framing is sealed.
Rim joists	Rim joists are insulated and include an air barrier.
Floors (including above-garage and cantilevered floors)	Insulation is installed to maintain permanent contact with underside of subfloor decking. Air barrier is installed at any exposed edge of insulation.
Crawl space walls	Insulation is permanently attached to walls. Exposed earth in unvented crawl spaces is covered with Class I vapor retarder with overlapping joints taped.
Shafts, penetrations	Duct shafts, utility penetrations, knee walls and flue shafts opening to exterior or unconditioned space are sealed.
Narrow cavities	Batts in narrow cavities are cut to fit, or narrow cavities are filled by sprayed/blown insulation.
Garage separation	Air sealing is provided between the garage and conditioned spaces.
Recessed lighting	Recessed light fixtures are air tight, IC rated, and sealed to drywall. Exception—fixtures in conditioned space.
Plumbing and wiring	Insulation is placed between outside and pipes. Batt insulation is cut to fit around wiring and plumbing, or sprayed/blown insulation extends behind piping and wiring.
Shower/tub on exterior wall	Showers and tubs on exterior walls have insulation and an air barrier separating them from the exterior wall.
Electrical/phone box on exterior walls	Air barrier extends behind boxes or air sealed-type boxes are installed.
Common wall	Air barrier is installed in common wall between dwelling units.
HVAC register boots	HVAC register boots that penetrate building envelope are sealed to subfloor or drywall.
Fireplace	Fireplace walls include an air barrier.

403.2.3 Building cavities (Mandatory). Building framing cavities shall not be used as supply ducts.

403.3 Mechanical system piping insulation (Mandatory). Mechanical system piping capable of carrying fluids above 105°F (41°C) or below 55°F (13°C) shall be insulated to a minimum of R-3.

403.4 Circulating hot water systems (Mandatory). All circulating service hot water piping shall be insulated to at least R-2. Circulating hot water systems shall include an automatic or readily *accessible* manual switch that can turn off the hot-water circulating pump when the system is not in use.

403.5 Mechanical ventilation (Mandatory). Outdoor air intakes and exhausts shall have automatic or gravity dampers that close when the ventilation system is not operating.

403.6 Equipment sizing (Mandatory). Heating and cooling equipment shall be sized in accordance with Section M1401.3 of the *International Residential Code*.

403.7 Systems serving multiple dwelling units (Mandatory). Systems serving multiple dwelling units shall comply with Sections 503 and 504 in lieu of Section 403.

403.8 Snow melt system controls (Mandatory). Snow- and ice-melting systems, supplied through energy service to the building, shall include automatic controls capable of shutting off the system when the pavement temperature is above 50°F, and no precipitation is falling and an automatic or manual control that will allow shutoff when the outdoor temperature is above 40°F.

403.9 Pools (Mandatory). Pools shall be provided with energy-conserving measures in accordance with Sections 403.9.1 through 403.9.3.

403.9.1 Pool heaters. All pool heaters shall be equipped with a readily *accessible* on-off switch to allow shutting off the heater without adjusting the thermostat setting. Pool heaters fired by natural gas shall not have continuously burning pilot lights.

403.9.2 Time switches. Time switches that can automatically turn off and on heaters and pumps according to a preset schedule shall be installed on swimming pool heaters and pumps.

Exceptions:

1. Where public health standards require 24-hour pump operation.
2. Where pumps are required to operate solar- and waste-heat-recovery pool heating systems.

403.9.3 Pool covers. Heated pools shall be equipped with a vapor-retardant pool cover on or at the water surface. Pools heated to more than 90°F (32°C) shall have a pool cover with a minimum insulation value of R-12.

Exception: Pools deriving over 60 percent of the energy for heating from site-recovered energy or solar energy source.

SECTION 404
ELECTRICAL POWER AND LIGHTING SYSTEMS

404.1 Lighting equipment (Prescriptive). A minimum of 50 percent of the lamps in permanently installed lighting fixtures shall be high-efficacy lamps.

SECTION 405 - Not in IRC
SIMULATED PERFORMANCE ALTERNATIVE (Performance)

405.1 Scope. This section establishes criteria for compliance using simulated energy performance analysis. Such analysis shall include heating, cooling, and service water heating energy only.

405.2 Mandatory requirements. Compliance with this section requires that the mandatory provisions identified in Section 401.2 be met. All supply and return ducts not completely inside the *building thermal envelope* shall be insulated to a minimum of R-6.

405.3 Performance-based compliance. Compliance based on simulated energy performance requires that a proposed residence (*proposed design*) be shown to have an annual energy cost that is less than or equal to the annual energy cost of the *standard reference design*. Energy prices shall be taken from a source *approved* by the *code official*, such as the Department of Energy, Energy Information Administration's *State Energy Price and Expenditure Report*. *Code officials* shall be permitted to require time-of-use pricing in energy cost calculations.

Exception: The energy use based on source energy expressed in Btu or Btu per square foot of *conditioned floor area* shall be permitted to be substituted for the energy cost. The source energy multiplier for electricity shall be 3.16. The source energy multiplier for fuels other than electricity shall be 1.1.

405.4 Documentation.

405.4.1 Compliance software tools. Documentation verifying that the methods and accuracy of the compliance software tools conform to the provisions of this section shall be provided to the *code official*.

405.4.2 Compliance report. Compliance software tools shall generate a report that documents that the *proposed design* complies with Section 405.3. The compliance documentation shall include the following information:

1. Address or other identification of the residence;
2. An inspection checklist documenting the building component characteristics of the *proposed design* as listed in Table 405.5.2(1). The inspection checklist shall show results for both the *standard reference design* and the *proposed design*, and shall document all inputs entered by the user necessary to reproduce the results;
3. Name of individual completing the compliance report; and

4. Name and version of the compliance software tool.

Exception: Multiple orientations. When an otherwise identical building model is offered in multiple orientations, compliance for any orientation shall be permitted by documenting that the building meets the performance requirements in each of the four cardinal (north, east, south and west) orientations.

405.4.3 Additional documentation. The *code official* shall be permitted to require the following documents:

1. Documentation of the building component characteristics of the *standard reference design*.
2. A certification signed by the builder providing the building component characteristics of the *proposed design* as given in Table 405.5.2(1).
3. Documentation of the actual values used in the software calculations for the *proposed design*.

405.5 Calculation procedure.

405.5.1 General. Except as specified by this section, the *standard reference design* and *proposed design* shall be configured and analyzed using identical methods and techniques.

405.5.2 Residence specifications. The *standard reference design* and *proposed design* shall be configured and analyzed as specified by Table 405.5.2(1). Table 405.5.2(1) shall include by reference all notes contained in Table 402.1.1.

405.6 Calculation software tools.

405.6.1 Minimum capabilities. Calculation procedures used to comply with this section shall be software tools capable of calculating the annual energy consumption of all building elements that differ between the *standard reference design* and the *proposed design* and shall include the following capabilities:

1. Computer generation of the *standard reference design* using only the input for the *proposed design*. The calculation procedure shall not allow the user to directly modify the building component characteristics of the *standard reference design*.
2. Calculation of whole-building (as a single *zone*) sizing for the heating and cooling equipment in the *standard reference design* residence in accordance with Section M1401.3 of the *International Residential Code*.
3. Calculations that account for the effects of indoor and outdoor temperatures and part-load ratios on the performance of heating, ventilating and air-conditioning equipment based on climate and equipment sizing.
4. Printed *code official* inspection checklist listing each of the *proposed design* component characteristics from Table 405.5.2(1) determined by the analysis to provide compliance, along with their respective performance ratings (e.g., *R*-value, *U*-factor, SHGC, HSPF, AFUE, SEER, EF, etc.).

405.6.2 Specific approval. Performance analysis tools meeting the applicable sections of Section 405 shall be permitted to be *approved*. Tools are permitted to be *approved* based on meeting a specified threshold for a jurisdiction. The *code official* shall be permitted to approve tools for a specified application or limited scope.

405.6.3 Input values. When calculations require input values not specified by Sections 402, 403, 404 and 405, those input values shall be taken from an *approved* source.

CHAPTER 4 [RE]

RESIDENTIAL ENERGY EFFICIENCY

SECTION R401
GENERAL

R401.1 Scope. This chapter applies to residential buildings.

R401.2 Compliance. Projects shall comply with Sections identified as "mandatory" and with either sections identified as "prescriptive" or the performance approach in Section R405.

R401.3 Certificate (Mandatory). A permanent certificate shall be completed and posted on or in the electrical distribution panel by the builder or registered design professional. The certificate shall not cover or obstruct the visibility of the circuit directory label, service disconnect label or other required labels. The certificate shall list the predominant *R*-values of insulation installed in or on ceiling/roof, walls, foundation (slab, *basement wall,* crawlspace wall and/or floor) and ducts outside conditioned spaces; *U*-factors for fenestration and the solar heat gain coefficient (SHGC) of fenestration, and the results from any required duct system and building envelope air leakage testing done on the building. Where there is more than one value for each component, the certificate shall list the value covering the largest area. The certificate shall list the types and efficiencies of heating, cooling and service water heating equipment. Where a gas-fired unvented room heater, electric furnace, or baseboard electric heater is installed in the residence, the certificate shall list "gas-fired unvented room heater," "electric furnace" or "baseboard electric heater," as appropriate. An efficiency shall not be *listed* for gas-fired unvented room heaters, electric furnaces or electric baseboard heaters.

SECTION R402
BUILDING THERMAL ENVELOPE

R402.1 General (Prescriptive). The *building thermal envelope* shall meet the requirements of Sections R402.1.1 through R402.1.4.

R402.1.1 Insulation and fenestration criteria. The *building thermal envelope* shall meet the requirements of Table R402.1.1 based on the climate zone specified in Chapter 3.

R402.1.2 *R*-value computation. Insulation material used in layers, such as framing cavity insulation and insulating sheathing, shall be summed to compute the component *R*-value. The manufacturer's settled *R*-value shall be used for

TABLE R402.1.1
INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT[a]

CLIMATE ZONE	FENESTRATION *U*-FACTOR[b]	SKYLIGHT[b] *U*-FACTOR	GLAZED FENESTRATION SHGC[b, e]	CEILING *R*-VALUE	WOOD FRAME WALL *R*-VALUE	MASS WALL *R*-VALUE[i]	FLOOR *R*-VALUE	BASEMENT[c] WALL *R*-VALUE	SLAB[d] *R*-VALUE & DEPTH	CRAWL SPACE[c] WALL *R*-VALUE
1	NR	0.75	0.25	30	13	3/4	13	0	0	0
2	0.40	0.65	0.25	38	13	4/6	13	0	0	0
3	0.35	0.55	0.25	38	20 or 13+5[h]	8/13	19	5/13[f]	0	5/13
4 except Marine	0.35	0.55	0.40	49	20 or 13+5[h]	8/13	19	10 /13	10, 2 ft	10/13
5 and Marine 4	0.32	0.55	NR	49	20 or 13+5[h]	13/17	30[g]	15/19	10, 2 ft	15/19
6	0.32	0.55	NR	49	20+5 or 13+10[h]	15/20	30[g]	15/19	10, 4 ft	15/19
7 and 8	0.32	0.55	NR	49	20+5 or 13+10[h]	19/21	38[g]	15/19	10, 4 ft	15/19

For SI: 1 foot = 304.8 mm.

a. *R*-values are minimums. *U*-factors and SHGC are maximums. When insulation is installed in a cavity which is less than the label or design thickness of the insulation, the installed *R*-value of the insulation shall not be less than the *R*-value specified in the table.

b. The fenestration *U*-factor column excludes skylights. The SHGC column applies to all glazed fenestration. Exception: Skylights may be excluded from glazed fenestration SHGC requirements in Climate Zones 1 through 3 where the SHGC for such skylights does not exceed 0.30.

c. "15/19" means R-15 continuous insulation on the interior or exterior of the home or R-19 cavity insulation at the interior of the basement wall. "15/19" shall be permitted to be met with R-13 cavity insulation on the interior of the basement wall plus R-5 continuous insulation on the interior or exterior of the home. "10/13" means R-10 continuous insulation on the interior or exterior of the home or R-13 cavity insulation at the interior of the basement wall.

d. R-5 shall be added to the required slab edge *R*-values for heated slabs. Insulation depth shall be the depth of the footing or 2 feet, whichever is less in Climate Zones 1 through 3 for heated slabs.

e. There are no SHGC requirements in the Marine Zone.

f. Basement wall insulation is not required in warm-humid locations as defined by Figure R301.1 and Table R301.1.

g. Or insulation sufficient to fill the framing cavity, R-19 minimum.

h. First value is cavity insulation, second is continuous insulation or insulated siding, so "13+5" means R-13 cavity insulation plus R-5 continuous insulation or insulated siding. If structural sheathing covers 40 percent or less of the exterior, continuous insulation *R*-value shall be permitted to be reduced by no more than R-3 in the locations where structural sheathing is used – to maintain a consistent total sheathing thickness.

i. The second *R*-value applies when more than half the insulation is on the interior of the mass wall.

TABLE R402.1.3
EQUIVALENT *U*-FACTORS[a]

CLIMATE ZONE	FENESTRATION *U*-FACTOR	SKYLIGHT *U*-FACTOR	CEILING *U*-FACTOR	FRAME WALL *U*-FACTOR	MASS WALL *U*-FACTOR[b]	FLOOR *U*-FACTOR	BASEMENT WALL *U*-FACTOR	CRAWL SPACE WALL *U*-FACTOR
1	0.50	0.75	0.035	0.082	0.197	0.064	0.360	0.477
2	0.40	0.65	0.030	0.082	0.165	0.064	0.360	0.477
3	0.35	0.55	0.030	0.057	0.098	0.047	0.091[c]	0.136
4 except Marine	0.35	0.55	0.026	0.057	0.098	0.047	0.059	0.065
5 and Marine 4	0.32	0.55	0.026	0.057	0.082	0.033	0.050	0.055
6	0.32	0.55	0.026	0.048	0.060	0.033	0.050	0.055
7 and 8	0.32	0.55	0.026	0.048	0.057	0.028	0.050	0.055

a. Nonfenestration *U*-factors shall be obtained from measurement, calculation or an approved source.
b. When more than half the insulation is on the interior, the mass wall *U*-factors shall be a maximum of 0.17 in Climate Zone 1, 0.14 in Climate Zone 2, 0.12 in Climate Zone 3, 0.087 in Climate Zone 4 except Marine, 0.065 in Climate Zone 5 and Marine 4, and 0.057 in Climate Zones 6 through 8.
c. Basement wall *U*-factor of 0.360 in warm-humid locations as defined by Figure R301.1 and Table R301.1.

blown insulation. Computed *R*-values shall not include an *R*-value for other building materials or air films.

R402.1.3 *U*-factor alternative. An assembly with a *U*-factor equal to or less than that specified in Table R402.1.3 shall be permitted as an alternative to the *R*-value in Table R402.1.1.

R402.1.4 Total UA alternative. If the total *building thermal envelope* UA (sum of *U*-factor times assembly area) is less than or equal to the total UA resulting from using the *U*-factors in Table R402.1.3 (multiplied by the same assembly area as in the proposed building), the building shall be considered in compliance with Table R402.1.1. The UA calculation shall be done using a method consistent with the ASHRAE *Handbook of Fundamentals* and shall include the thermal bridging effects of framing materials. The SHGC requirements shall be met in addition to UA compliance.

R402.2 Specific insulation requirements (Prescriptive). In addition to the requirements of Section R402.1, insulation shall meet the specific requirements of Sections R402.2.1 through R402.2.12.

R402.2.1 Ceilings with attic spaces. When Section R402.1.1 would require R-38 in the ceiling, R-30 shall be deemed to satisfy the requirement for R-38 wherever the full height of uncompressed R-30 insulation extends over the wall top plate at the eaves. Similarly, R-38 shall be deemed to satisfy the requirement for R-49 wherever the full height of uncompressed R-38 insulation extends over the wall top plate at the eaves. This reduction shall not apply to the *U*-factor alternative approach in Section R402.1.3 and the total UA alternative in Section R402.1.4.

R402.2.2 Ceilings without attic spaces. Where Section R402.1.1 would require insulation levels above R-30 and the design of the roof/ceiling assembly does not allow sufficient space for the required insulation, the minimum required insulation for such roof/ceiling assemblies shall be R-30. This reduction of insulation from the requirements of Section R402.1.1 shall be limited to 500 square feet (46 m^2) or 20 percent of the total insulated ceiling area, whichever is less. This reduction shall not apply to the *U*-factor alternative approach in Section R402.1.3 and the total UA alternative in Section R402.1.4.

R402.2.3 Eave baffle. For air permeable insulations in vented attics, a baffle shall be installed adjacent to soffit and eave vents. Baffles shall maintain an opening equal or greater than the size of the vent. The baffle shall extend over the top of the attic insulation. The baffle shall be permitted to be any solid material.

R402.2.4 Access hatches and doors. Access doors from conditioned spaces to unconditioned spaces (e.g., attics and crawl spaces) shall be weatherstripped and insulated to a level equivalent to the insulation on the surrounding surfaces. Access shall be provided to all equipment that prevents damaging or compressing the insulation. A wood framed or equivalent baffle or retainer is required to be provided when loose fill insulation is installed, the purpose of which is to prevent the loose fill insulation from spilling into the living space when the attic access is opened, and to provide a permanent means of maintaining the installed *R*-value of the loose fill insulation.

R402.2.5 Mass walls. Mass walls for the purposes of this chapter shall be considered above-grade walls of concrete block, concrete, insulated concrete form (ICF), masonry cavity, brick (other than brick veneer), earth (adobe, compressed earth block, rammed earth) and solid timber/logs.

R402.2.6 Steel-frame ceilings, walls, and floors. Steel-frame ceilings, walls, and floors shall meet the insulation requirements of Table R402.2.6 or shall meet the *U*-factor requirements of Table R402.1.3. The calculation of the *U*-factor for a steel-frame envelope assembly shall use a series-parallel path calculation method.

R402.2.7 Floors. Floor insulation shall be installed to maintain permanent contact with the underside of the subfloor decking.

R402.2.8 Basement walls. Walls associated with conditioned basements shall be insulated from the top of the *basement wall* down to 10 feet (3048 mm) below grade or to the basement floor, whichever is less. Walls associated with unconditioned basements shall meet this requirement unless the floor overhead is insulated in accordance with Sections R402.1.1 and R402.2.7.

TABLE R402.2.6
STEEL-FRAME CEILING, WALL AND FLOOR INSULATION (*R*-VALUE)

WOOD FRAME *R*-VALUE REQUIREMENT	COLD-FORMED STEEL EQUIVALENT *R*-VALUE[a]
Steel Truss Ceilings[b]	
R-30	R-38 or R-30 + 3 or R-26 + 5
R-38	R-49 or R-38 + 3
R-49	R-38 + 5
Steel Joist Ceilings[b]	
R-30	R-38 in 2 × 4 or 2 × 6 or 2 × 8 R-49 in any framing
R-38	R-49 in 2 × 4 or 2 × 6 or 2 × 8 or 2 × 10
Steel-Framed Wall 16″ O.C.	
R-13	R-13 + 4.2 or R-19 + 2.1 or R-21 + 2.8 or R-0 + 9.3 or R-15 + 3.8 or R-21 + 3.1
R-13 + 3	R-0 + 11.2 or R-13 + 6.1 or R-15 + 5.7 or R-19 + 5.0 or R-21 + 4.7
R-20	R-0 + 14.0 or R-13 + 8.9 or R-15 + 8.5 or R-19 + 7.8 or R-19 + 6.2 or R-21 + 7.5
R-20 + 5	R-13 + 12.7 or R-15 + 12.3 or R-19 + 11.6 or R-21 + 11.3 or R-25 + 10.9
R-21	R-0 + 14.6 or R-13 + 9.5 or R-15 + 9.1 or R-19 + 8.4 or R-21 + 8.1 or R-25 + 7.7
Steel Framed Wall, 24″ O.C	
R-13	R-0 + 9.3 or R-13 + 3.0 or R-15 + 2.4
R-13 + 3	R-0 + 11.2 or R-13 + 4.9 or R-15 + 4.3 or R-19 + 3.5 or R-21 + 3.1
R-20	R-0 + 14.0 or R-13 + 7.7 or R-15 + 7.1 or R-19 + 6.3 or R-21 + 5.9
R-20 + 5	R-13 + 11.5 or R-15 + 10.9 or R-19 + 10.1 or R-21 + 9.7 or R-25 + 9.1
R-21	R-0 + 14.6 or R-13 + 8.3 or R-15 + 7.7 or R-19 + 6.9 or R-21 + 6.5 or R-25 + 5.9
Steel Joist Floor	
R-13	R-19 in 2 × 6, or R-19 + 6 in 2 × 8 or 2 × 10
R-19	R-19 + 6 in 2 × 6, or R-19 + 12 in 2 × 8 or 2 × 10

a Cavity insulation *R*-value is listed first, followed by continuous insulation *R*-value.

b. Insulation exceeding the height of the framing shall cover the framing.

R402.2.9 Slab-on-grade floors. Slab-on-grade floors with a floor surface less than 12 inches (305 mm) below grade shall be insulated in accordance with Table R402.1.1. The insulation shall extend downward from the top of the slab on the outside or inside of the foundation wall. Insulation located below grade shall be extended the distance provided in Table R402.1.1 by any combination of vertical insulation, insulation extending under the slab or insulation extending out from the building. Insulation extending away from the building shall be protected by pavement or by a minimum of 10 inches (254 mm) of soil. The top edge of the insulation installed between the *exterior wall* and the edge of the interior slab shall be permitted to be cut at a 45-degree (0.79 rad) angle away from the *exterior wall*. Slab-edge insulation is not required in jurisdictions designated by the *code official* as having a very heavy termite infestation.

R402.2.10 Crawl space walls. As an alternative to insulating floors over crawl spaces, crawl space walls shall be permitted to be insulated when the crawl space is not vented to the outside. Crawl space wall insulation shall be permanently fastened to the wall and extend downward from the floor to the finished grade level and then vertically and/or horizontally for at least an additional 24 inches (610 mm). Exposed earth in unvented crawl space foundations shall be covered with a continuous Class I vapor retarder in accordance with the *International Building Code* or *International Residential Code*, as applicable. All joints of the vapor retarder shall overlap by 6 inches (153 mm) and be sealed or taped. The edges of the vapor retarder shall extend at least 6 inches (153 mm) up the stem wall and shall be attached to the stem wall.

R402.2.11 Masonry veneer. Insulation shall not be required on the horizontal portion of the foundation that supports a masonry veneer.

R402.2.12 Sunroom insulation. All *sunrooms* enclosing conditioned space shall meet the insulation requirements of this code.

Exception: For *sunrooms* with *thermal isolation*, and enclosing conditioned space, the following exceptions to the insulation *requirements* of this code shall apply:

1. The minimum ceiling insulation *R*-values shall be R-19 in Climate Zones 1 through 4 and R-24 in Climate Zones 5 through 8; and
2. The minimum wall *R*-value shall be R-13 in all climate zones. Wall(s) separating a *sunroom* with a *thermal isolation* from *conditioned space* shall meet the *building thermal envelope* requirements of this code.

R402.3 Fenestration (Prescriptive). In addition to the requirements of Section R402, fenestration shall comply with Sections R402.3.1 through R402.3.6.

R402.3.1 *U*-factor. An area-weighted average of fenestration products shall be permitted to satisfy the *U*-factor requirements.

R402.3.2 Glazed fenestration SHGC. An area-weighted average of fenestration products more than 50-percent glazed shall be permitted to satisfy the SHGC requirements.

R402.3.3 Glazed fenestration exemption. Up to 15 square feet (1.4 m^2) of glazed fenestration per dwelling unit shall be permitted to be exempt from *U*-factor and SHGC requirements in Section R402.1.1. This exemption shall not apply to the *U*-factor alternative approach in Section R402.1.3 and the Total UA alternative in Section R402.1.4.

R402.3.4 Opaque door exemption. One side-hinged opaque door assembly up to 24 square feet (2.22 m^2) in area is exempted from the *U*-factor requirement in Section R402.1.1. This exemption shall not apply to the *U*-factor alternative approach in Section R402.1.3 and the total UA alternative in Section R402.1.4.

R402.3.5 Sunroom *U*-factor. All *sunrooms* enclosing conditioned space shall meet the fenestration requirements of this code.

Exception: For *sunrooms* with *thermal isolation* and enclosing conditioned space, in Climate Zones 4 through 8, the following exceptions to the fenestration requirements of this code shall apply:

1. The maximum fenestration *U*-factor shall be 0.45; and
2. The maximum skylight *U*-factor shall be 0.70. New fenestration separating the *sunroom* with *thermal isolation* from *conditioned space* shall meet the *building thermal envelope* requirements of this code.

R402.3.6 Replacement fenestration. Where some or all of an existing fenestration unit is replaced with a new fenestration product, including sash and glazing, the replacement fenestration unit shall meet the applicable requirements for *U*-factor and SHGC in Table R402.1.1.

TABLE R402.4.1.1
AIR BARRIER AND INSULATION INSTALLATION

COMPONENT	CRITERIA[a]
Air barrier and thermal barrier	A continuous air barrier shall be installed in the building envelope. Exterior thermal envelope contains a continuous air barrier. Breaks or joints in the air barrier shall be sealed. Air-permeable insulation shall not be used as a sealing material.
Ceiling/attic	The air barrier in any dropped ceiling/soffit shall be aligned with the insulation and any gaps in the air barrier sealed. Access openings, drop down stair or knee wall doors to unconditioned attic spaces shall be sealed.
Walls	Corners and headers shall be insulated and the junction of the foundation and sill plate shall be sealed. The junction of the top plate and top of exterior walls shall be sealed. Exterior thermal envelope insulation for framed walls shall be installed in substantial contact and continuous alignment with the air barrier. Knee walls shall be sealed.
Windows, skylights and doors	The space between window/door jambs and framing and skylights and framing shall be sealed.
Rim joists	Rim joists shall be insulated and include the air barrier.
Floors (including above-garage and cantilevered floors)	Insulation shall be installed to maintain permanent contact with underside of subfloor decking. The air barrier shall be installed at any exposed edge of insulation.
Crawl space walls	Where provided in lieu of floor insulation, insulation shall be permanently attached to the crawlspace walls. Exposed earth in unvented crawl spaces shall be covered with a Class I vapor retarder with overlapping joints taped.
Shafts, penetrations	Duct shafts, utility penetrations, and flue shafts opening to exterior or unconditioned space shall be sealed.
Narrow cavities	Batts in narrow cavities shall be cut to fit, or narrow cavities shall be filled by insulation that on installation readily conforms to the available cavity space.
Garage separation	Air sealing shall be provided between the garage and conditioned spaces.
Recessed lighting	Recessed light fixtures installed in the building thermal envelope shall be air tight, IC rated, and sealed to the drywall.
Plumbing and wiring	Batt insulation shall be cut neatly to fit around wiring and plumbing in exterior walls, or insulation that on installation readily conforms to available space shall extend behind piping and wiring.
Shower/tub on exterior wall	Exterior walls adjacent to showers and tubs shall be insulated and the air barrier installed separating them from the showers and tubs.
Electrical/phone box on exterior walls	The air barrier shall be installed behind electrical or communication boxes or air sealed boxes shall be installed.
HVAC register boots	HVAC register boots that penetrate building thermal envelope shall be sealed to the subfloor or drywall.
Fireplace	An air barrier shall be installed on fireplace walls. Fireplaces shall have gasketed doors.

a. In addition, inspection of log walls shall be in accordance with the provisions of ICC-400.

R402.4 Air leakage (Mandatory). The building thermal envelope shall be constructed to limit air leakage in accordance with the requirements of Sections R402.4.1 through R402.4.4.

R402.4.1 Building thermal envelope. The *building thermal envelope* shall comply with Sections R402.4.1.1 and R402.4.1.2. The sealing methods between dissimilar materials shall allow for differential expansion and contraction.

R402.4.1.1 Installation. The components of the *building thermal envelope* as listed in Table R402.4.1.1 shall be installed in accordance with the manufacturer's instructions and the criteria listed in Table R402.4.1.1, as applicable to the method of construction. Where required by the *code official*, an *approved* third party shall inspect all components and verify compliance.

R402.4.1.2 Testing. The building or dwelling unit shall be tested and verified as having an air leakage rate of not exceeding 5 air changes per hour in Climate Zones 1 and 2, and 3 air changes per hour in Climate Zones 3 through 8. Testing shall be conducted with a blower door at a pressure of 0.2 inches w.g. (50 Pascals). Where required by the *code official*, testing shall be conducted by an *approved* third party. A written report of the results of the test shall be signed by the party conducting the test and provided to the *code official*. Testing shall be performed at any time after creation of all penetrations of the *building thermal envelope*.

During testing:

1. Exterior windows and doors, fireplace and stove doors shall be closed, but not sealed, beyond the intended weatherstripping or other infiltration control measures;
2. Dampers including exhaust, intake, makeup air, backdraft and flue dampers shall be closed, but not sealed beyond intended infiltration control measures;
3. Interior doors, if installed at the time of the test, shall be open;
4. Exterior doors for continuous ventilation systems and heat recovery ventilators shall be closed and sealed;
5. Heating and cooling systems, if installed at the time of the test, shall be turned off; and
6. Supply and return registers, if installed at the time of the test, shall be fully open.

R402.4.2 Fireplaces. New wood-burning fireplaces shall have tight-fitting flue dampers and outdoor combustion air.

R402.4.3 Fenestration air leakage. Windows, skylights and sliding glass doors shall have an air infiltration rate of no more than 0.3 cfm per square foot (1.5 L/s/m^2), and swinging doors no more than 0.5 cfm per square foot (2.6 L/s/m^2), when tested according to NFRC 400 or AAMA/WDMA/CSA 101/I.S.2/A440 by an accredited, independent laboratory and *listed* and *labeled* by the manufacturer.

Exception: Site-built windows, skylights and doors.

R402.4.4 Recessed lighting. Recessed luminaires installed in the *building thermal envelope* shall be sealed to limit air leakage between conditioned and unconditioned spaces. All recessed luminaires shall be IC-rated and *labeled* as having an air leakage rate not more than 2.0 cfm (0.944 L/s) when tested in accordance with ASTM E 283 at a 1.57 psf (75 Pa) pressure differential. All recessed luminaires shall be sealed with a gasket or caulk between the housing and the interior wall or ceiling covering.

R402.5 Maximum fenestration *U*-factor and SHGC (Mandatory). The area-weighted average maximum fenestration *U*-factor permitted using tradeoffs from Section R402.1.4 or R405 shall be 0.48 in Climate Zones 4 and 5 and 0.40 in Climate Zones 6 through 8 for vertical fenestration, and 0.75 in Climate Zones 4 through 8 for skylights. The area-weighted average maximum fenestration SHGC permitted using tradeoffs from Section R405 in Climate Zones 1 through 3 shall be 0.50.

SECTION R403
SYSTEMS

R403.1 Controls (Mandatory). At least one thermostat shall be provided for each separate heating and cooling system.

R403.1.1 Programmable thermostat. Where the primary heating system is a forced-air furnace, at least one thermostat per dwelling unit shall be capable of controlling the heating and cooling system on a daily schedule to maintain different temperature set points at different times of the day. This thermostat shall include the capability to set back or temporarily operate the system to maintain *zone* temperatures down to 55°F (13°C) or up to 85°F (29°C). The thermostat shall initially be programmed with a heating temperature set point no higher than 70°F (21°C) and a cooling temperature set point no lower than 78°F (26°C).

R403.1.2 Heat pump supplementary heat (Mandatory). Heat pumps having supplementary electric-resistance heat shall have controls that, except during defrost, prevent supplemental heat operation when the heat pump compressor can meet the heating load.

R403.2 Ducts. Ducts and air handlers shall be in accordance with Sections R403.2.1 through R403.2.3.

R403.2.1 Insulation (Prescriptive). Supply ducts in attics shall be insulated to a minimum of R-8. All other ducts shall be insulated to a minimum of R-6.

Exception: Ducts or portions thereof located completely inside the *building thermal envelope*.

R403.2.2 Sealing (Mandatory). Ducts, air handlers, and filter boxes shall be sealed. Joints and seams shall comply

with either the *International Mechanical Code* or *International Residential Code*, as applicable.

Exceptions:

1. Air-impermeable spray foam products shall be permitted to be applied without additional joint seals.
2. Where a duct connection is made that is partially inaccessible, three screws or rivets shall be equally spaced on the exposed portion of the joint so as to prevent a hinge effect.
3. Continuously welded and locking-type longitudinal joints and seams in ducts operating at static pressures less than 2 inches of water column (500 Pa) pressure classification shall not require additional closure systems.

Duct tightness shall be verified by either of the following:

1. Postconstruction test: Total leakage shall be less than or equal to 4 cfm (113.3 L/min) per 100 square feet (9.29 m^2) of conditioned floor area when tested at a pressure differential of 0.1 inches w.g. (25 Pa) across the entire system, including the manufacturer's air handler enclosure. All register boots shall be taped or otherwise sealed during the test.
2. Rough-in test: Total leakage shall be less than or equal to 4 cfm (113.3 L/min) per 100 square feet (9.29 m^2) of conditioned floor area when tested at a pressure differential of 0.1 inches w.g. (25 Pa) across the system, including the manufacturer's air handler enclosure. All registers shall be taped or otherwise sealed during the test. If the air handler is not installed at the time of the test, total leakage shall be less than or equal to 3 cfm (85 L/min) per 100 square feet (9.29 m^2) of conditioned floor area.

   Exception: The total leakage test is not required for ducts and air handlers located entirely within the building thermal envelope.

R403.2.2.1 Sealed air handler. Air handlers shall have a manufacturer's designation for an air leakage of no more than 2 percent of the design air flow rate when tested in accordance with ASHRAE 193.

R403.2.3 Building cavities (Mandatory). Building framing cavities shall not be used as ducts or plenums.

R403.3 Mechanical system piping insulation (Mandatory). Mechanical system piping capable of carrying fluids above 105°F (41°C) or below 55°F (13°C) shall be insulated to a minimum of R-3.

R403.3.1 Protection of piping insulation. Piping insulation exposed to weather shall be protected from damage, including that caused by sunlight, moisture, equipment maintenance, and wind, and shall provide shielding from solar radiation that can cause degradation of the material. Adhesive tape shall not be permitted.

R403.4 Service hot water systems. Energy conservation measures for service hot water systems shall be in accordance with Sections R403.4.1 and R403.4.2.

R403.4.1 Circulating hot water systems (Mandatory). Circulating hot water systems shall be provided with an automatic or readily *accessible* manual switch that can turn off the hot-water circulating pump when the system is not in use.

R403.4.2 Hot water pipe insulation (Prescriptive). Insulation for hot water pipe with a minimum thermal resistance (*R*-value) of R-3 shall be applied to the following:

1. Piping larger than $^3/_4$ inch nominal diameter.
2. Piping serving more than one dwelling unit.
3. Piping from the water heater to kitchen outlets.
4. Piping located outside the conditioned space.
5. Piping from the water heater to a distribution manifold.
6. Piping located under a floor slab.
7. Buried piping.
8. Supply and return piping in recirculation systems other than demand recirculation systems.
9. Piping with run lengths greater than the maximum run lengths for the nominal pipe diameter given in Table R403.4.2.

All remaining piping shall be insulated to at least R-3 or meet the run length requirements of Table R403.4.2.

TABLE R403.4.2
MAXIMUM RUN LENGTH (feet)[a]

Nominal Pipe Diameter of Largest Diameter Pipe in the Run (inch)	$^3/_8$	$^1/_2$	$^3/_4$	> $^3/_4$
Maximum Run Length	30	20	10	5

For SI: 1 inch = 25.4 mm, 1 foot 304.8 mm.

a. Total length of all piping from the distribution manifold or the recirculation loop to a point of use.

R403.5 Mechanical ventilation (Mandatory). The building shall be provided with ventilation that meets the requirements

TABLE R403.5.1
MECHANICAL VENTILATION SYSTEM FAN EFFICACY

FAN LOCATION	AIR FLOW RATE MINIMUM (CFM)	MINIMUM EFFICACY (CFM/WATT)	AIR FLOW RATE MAXIMUM (CFM)
Range hoods	Any	2.8 cfm/watt	Any
In-line fan	Any	2.8 cfm/watt	Any
Bathroom, utility room	10	1.4 cfm/watt	< 90
Bathroom, utility room	90	2.8 cfm/watt	Any

For SI: 1 cfm = 28.3 L/min.

of the *International Residential Code* or *International Mechanical Code*, as applicable, or with other approved means of ventilation. Outdoor air intakes and exhausts shall have automatic or gravity dampers that close when the ventilation system is not operating.

R403.5.1 Whole-house mechanical ventilation system fan efficacy. Mechanical ventilation system fans shall meet the efficacy requirements of Table R403.5.1.

Exception: Where mechanical ventilation fans are integral to tested and listed HVAC equipment, they shall be powered by an electronically commutated motor.

R403.6 Equipment Sizing (Mandatory). Heating and cooling equipment shall be sized in accordance with ACCA Manual S based on building loads calculated in accordance with ACCA Manual J or other *approved* heating and cooling calculation methodologies.

R403.7 Systems serving multiple dwelling units (Mandatory). Systems serving multiple dwelling units shall comply with Sections C403 and C404 of the IECC—Commercial Provisions in lieu of Section R403.

R403.8 Snow melt system controls (Mandatory). Snow- and ice-melting systems, supplied through energy service to the building, shall include automatic controls capable of shutting off the system when the pavement temperature is above 50°F, and no precipitation is falling and an automatic or manual control that will allow shutoff when the outdoor temperature is above 40°F.

R403.9 Pools and inground permanently installed spas (Mandatory). Pools and inground permanently installed spas shall comply with Sections R403.9.1 through R403.9.3.

R403.9.1 Heaters. All heaters shall be equipped with a readily *accessible* on-off switch that is mounted outside of the heater to allow shutting off the heater without adjusting the thermostat setting. Gas-fired heaters shall not be equipped with constant burning pilot lights.

R403.9.2 Time switches. Time switches or other control method that can automatically turn off and on heaters and pumps according to a preset schedule shall be installed on all heaters and pumps. Heaters, pumps and motors that have built in timers shall be deemed in compliance with this requirement.

Exceptions:

1. Where public health standards require 24-hour pump operation.
2. Where pumps are required to operate solar- and waste-heat-recovery pool heating systems.

R403.9.3 Covers. Heated pools and inground permanently installed spas shall be provided with a vapor-retardant cover.

Exception: Pools deriving over 70 percent of the energy for heating from site-recovered energy, such as a heat pump or solar energy source computed over an operating season.

SECTION R404
ELECTRICAL POWER AND LIGHTING SYSTEMS (MANDATORY)

R404.1 Lighting equipment (Mandatory). A minimum of 75 percent of the lamps in permanently installed lighting fixtures shall be high-efficacy lamps or a minimum of 75 percent of the permanently installed lighting fixtures shall contain only high efficacy lamps.

Exception: Low-voltage lighting shall not be required to utilize high-efficiency lamps.

R404.1.1 Lighting equipment (Mandatory). Fuel gas lighting systems shall not have continuously burning pilot lights.

SECTION R405
SIMULATED PERFORMANCE ALTERNATIVE (PERFORMANCE)

R405.1 Scope. This section establishes criteria for compliance using simulated energy performance analysis. Such analysis shall include heating, cooling, and service water heating energy only.

R405.2 Mandatory requirements. Compliance with this section requires that the mandatory provisions identified in Section R401.2 be met. All supply and return ducts not completely inside the *building thermal envelope* shall be insulated to a minimum of R-6.

R405.3 Performance-based compliance. Compliance based on simulated energy performance requires that a proposed residence (*proposed design*) be shown to have an annual energy cost that is less than or equal to the annual energy cost of the *standard reference design*. Energy prices shall be taken from a source *approved* by the *code official*, such as the Department of Energy, Energy Information Administration's *State Energy Price and Expenditure Report*. *Code officials* shall be permitted to require time-of-use pricing in energy cost calculations.

Exception: The energy use based on source energy expressed in Btu or Btu per square foot of *conditioned floor area* shall be permitted to be substituted for the energy cost. The source energy multiplier for electricity shall be 3.16. The source energy multiplier for fuels other than electricity shall be 1.1.

R405.4 Documentation. Documentation of the software used for the performance design and the parameters for the building shall be in accordance with Sections R405.4.1 through R405.4.3.

R405.4.1 Compliance software tools. Documentation verifying that the methods and accuracy of the compliance software tools conform to the provisions of this section shall be provided to the *code official*.

R405.4.2 Compliance report. Compliance software tools shall generate a report that documents that the *proposed*

design complies with Section R405.3. The compliance documentation shall include the following information:

1. Address or other identification of the residence;
2. An inspection checklist documenting the building component characteristics of the *proposed design* as listed in Table R405.5.2(1). The inspection checklist shall show results for both the *standard reference design* and the *proposed design,* and shall document all inputs entered by the user necessary to reproduce the results;
3. Name of individual completing the compliance report; and
4. Name and version of the compliance software tool.

Exception: Multiple orientations. When an otherwise identical building model is offered in multiple orientations, compliance for any orientation shall be permitted by documenting that the building meets the performance requirements in each of the four cardinal (north, east, south and west) orientations.

R405.4.3 Additional documentation. The *code official* shall be permitted to require the following documents:

1. Documentation of the building component characteristics of the *standard reference design.*
2. A certification signed by the builder providing the building component characteristics of the *proposed design* as given in Table R405.5.2(1).
3. Documentation of the actual values used in the software calculations for the *proposed design.*

R405.5 Calculation procedure. Calculations of the performance design shall be in accordance with Sections R405.5.1 and R405.5.2.

R405.5.1 General. Except as specified by this section, the *standard reference design* and *proposed design* shall be configured and analyzed using identical methods and techniques.

R405.5.2 Residence specifications. The *standard reference design* and *proposed design* shall be configured and analyzed as specified by Table R405.5.2(1). Table R405.5.2(1) shall include by reference all notes contained in Table R402.1.1.

R405.6 Calculation software tools. Calculation software, where used, shall be in accordance with Sections R405.6.1 through R405.6.3.

R405.6.1 Minimum capabilities. Calculation procedures used to comply with this section shall be software tools capable of calculating the annual energy consumption of all building elements that differ between the *standard reference design* and the *proposed design* and shall include the following capabilities:

1. Computer generation of the *standard reference design* using only the input for the *proposed design.* The calculation procedure shall not allow the user to directly modify the building component characteristics of the *standard reference design.*
2. Calculation of whole-building (as a single *zone)* sizing for the heating and cooling equipment in the *standard reference design* residence in accordance with Section R403.6.
3. Calculations that account for the effects of indoor and outdoor temperatures and part-load ratios on the performance of heating, ventilating and air-conditioning equipment based on climate and equipment sizing.
4. Printed *code official* inspection checklist listing each of the *proposed design* component characteristics from Table R405.5.2(1) determined by the analysis to provide compliance, along with their respective performance ratings (e.g., *R*-value, *U*-factor, SHGC, HSPF, AFUE, SEER, EF, etc.).

R405.6.2 Specific approval. Performance analysis tools meeting the applicable sections of Section R405 shall be permitted to be *approved.* Tools are permitted to be *approved* based on meeting a specified threshold for a jurisdiction. The *code official* shall be permitted to approve tools for a specified application or limited scope.

R405.6.3 Input values. When calculations require input values not specified by Sections R402, R403, R404 and R405, those input values shall be taken from an *approved* source.

BCAP Dedicated to the adoption, implementation, and advancement of building energy codes

Salt Lake City Residents Buying 2012 IECC Homes Will Save Thousands

An Analysis of Homeowner Profit after Paying Incremental Construction Costs for New Single Family Homes Meeting the Building Energy Code

HIGHLIGHTS

- **Energy savings of $29 - $30 each month, more than three times incremental mortgage payment.**
- **Break-even on additional down payment and incremental mortgage payment in 17 – 22 months.**
- **Energy cost savings are estimated at between $347 and $361 per year, depending on the exterior wall type used by builders.**
- **2012 IECC home owners pocket $6,926 - $7,800 in net profits over mortgage term.**

SUMMARY

Salt Lake City residents buying new single family homes meeting the 2012 International Energy Conservation Code (IECC) will pocket between $6,926 to $7,800 in net energy savings over a 30 year mortgage term, according to an analysis of energy savings and incremental construction costs by the Building Codes Assistance Project and ICF, International.

The energy savings from the 2012 code are enough to pay back the buyer's additional down payment and incremental mortgage cost in approximately 17 to 22 months (*sooner if the homebuyer puts less than 20% down*). **After that date, the owner continues to pocket between $245 and $273 in estimated profit annually—money that would otherwise go to pay higher utility bills.** These net savings will be even greater if energy costs rise over the next 30 years.

This report assesses energy savings and incremental construction costs of new, 2,400 square foot single family homes in Salt Lake City that meet the latest model energy code, the 2012 IECC, compared to the current code in effect, the 2006 IECC. Specifically, this analysis finds an average new home meeting the 2012 IECC will cost an additional $1,926 to $2,215 over the construction costs of meeting the current energy code. Energy cost savings are estimated at between $347 and $361 per year, depending on the exterior wall type used by builders.

Stated differently**, monthly utility bill savings to the homeowner are more than three times as much as the additional mortgage payment needed to cover the added first-cost of energy saving features required by the 2012 code.**

ENERGY SAVINGS AND CONSTRUCTION COST METHODOLOGY

To calculate energy savings and incremental construction costs, this analysis defined a "typical" single family house to represent new residential development in Salt Lake City. The home modeled is two stories in height, with exterior dimensions of 30 by 40 feet with wood-framed walls and a full basement foundation. This size and foundation type is based on regional construction practices. The home size modeled is 2,400 square feet—which is also the approximate size of the average new home built nationwide.

For the purposes of this analysis we assume a baseline home that meets the requirements of the 2006 IECC, which is the city's current code. Although some leading builders are already meeting or exceeding many elements of the 2012 IECC already, for purposes of this analysis we assume a baseline home that

exactly meets the requirements of the 2006 IECC. Also, although we err on the side of good building practice, in an effort to be conservative we have included some incremental costs that may not be necessary. For instance, although it is a good building practice for builders to install conventional "hard ducted" return air ducts, some builders may be using joist cavities (panned floor or enclosed interior wall cavities) in lieu of conventional "hard ducted," metal or other return ducts. In an effort to anticipate this possible cost (and others) for some builders, we include the incremental costs of upgrading to hard ducted return ducts, which are required in the 2012 IECC.

Using the 2,400 square foot model home as a baseline, we calculated incremental costs by identifying the building components that would have to be upgraded from the current 2006 IECC, according to the prescriptive requirements in the 2012 IECC. These changes include increased ceiling insulation from R-38 to R-49 blown-in insulation, a window upgrade to meet a lower U-factor, improved house air sealing and testing, insulating hot water pipes, increasing the percentage of compact florescent bulbs in hard-wired fixtures from 0 to 75 percent, a bathroom vent fan upgrade, upgrading from panned to "hard ducted" return ducts, sealing and insulating the attic hatch, and upgrading to programmable thermostats. Additionally, meeting the latest code will require an upgrade of basement insulation from R-10 to R-15.

Energy savings were modeled by ICF International (ICFI), an international energy consulting firm with extensive experience in the use of hourly building energy simulation software to estimate energy performance and energy savings of alternative building codes and design concepts. Although the values included in the analysis represent a careful, independent technical judgment by ICFI staff, it should be kept in mind that – like any such analysis – the results depend on a number of assumptions about the physical features of a typical new home, operating practices, energy prices, and other factors.

Both the existing 2006 IECC and the new 2012 IECC codes allow a builder to choose among a number of alternatives to comply with the code. In this case, ICFI conservatively chose to compare the results from the prescriptive path of each version of the code. ICFI uses BeaconTM, an hourly simulation model that utilizes DOE-2 or EnergyPlus, and summarizes building performance in terms of estimated annual energy costs, based on long-term average weather conditions in a given climate zone (city), DOE/EIA state level energy costs. ICFI also estimates energy consumption by end-use, fuel type, electricity peak demand, and air conditioner size in each prototype home. More details of the modeling assumptions used in this analysis are available on request.

INCREMENTAL COSTS

To estimate incremental costs, we rely on construction costs from the well-regarded *2011 RS Means Contractor's Pricing Guide* to approximate actual costs of new home construction. This resource is known to be conservative and is useful for this analysis because all estimated construction costs are inclusive of material costs, labor, and contractor overhead and profit.[1]

Attic Insulation

Among other changes, the 2012 IECC requires builders to upgrade blown-in ceiling (attic) insulation from R-38 to R-49, which is estimated by RS Means to cost an additional $399 per new home. Builders will also need to make window upgrades to meet the 2012 IECC. To meet the improved U- factors for the 2012 IECC (.32 from .35). This added cost is conservatively estimated by the Efficient Windows Collaborative (EWC) as no more than $1.00 per square foot of window area. It is important to note that many builders may

[1] RS Means also includes a location factor, which provides an estimate of local costs as a percentage of RS Means national average estimates. For this analysis, the location factor is 81%, indicating that construction costs in Salt Lake City are approximately 19% lower than the national average.

already install windows that already meet the 2012 IECC slightly-improved requirements, but in an effort to be conservative (and strictly compare the two codes) this analysis assumes that builders are currently using the least-cost window to meet existing code requirements.[2] Total window incremental costs are estimated as $357.

Whole House Air Leakage

Additionally, we estimate that the additional required air sealing in the 2012 IECC and the required whole house air leakage (commonly known as "blower door") and duct leakage testing will add about $350 per new home.[3] Because the resulting home will have fewer air and duct leaks to the outside, ventilation will have to be improved, a cost we estimate at $180 for upgrading one bathroom vent fan to a unit with an Energy Star rating along with the installation of an automatic control which is set to automatically exhaust indoor air.[4]

Hot Water Distribution Lines

An additional 2012 IECC code change will require builders to insulate hot water distribution lines to kitchens. We believe the cost impact of this change is small, as R-3 insulation costs less than 50 cents per linear foot and most insulation products can be "clipped" around supply pipes after the plumbing rough-in.[5] As a result, this cost is estimated at $100 per new home. Builders will also have to install high-efficiency lights in 75 percent of hard-wired fixtures, up from 10 percent in the 2006 IECC. Usually, this requirement is met with compact florescent lights (CFLs). Our analysis estimates that the upgrade of 75 percent of fixtures will cost no more than $50. Builders will also have to upgrade conventional thermostats to programmable thermostats, a cost which is estimated as $50.

Sealing and Insulate Attic Hatch

To meet the 2012 IECC we also estimate an additional $100 to seal and insulate the attic hatch. This cost varies by home, and depends on whether or not attic access is achieved through a wall opening (such as a door) or via an overhead pull-down stair, or simple hatch. For wall openings, cost is expected to be much lower, as builders can simply adhere surplus insulation to the unconditioned side of the door. For attic pull-down stairs, builders can place a variety of kits over stair hatch, but costs are higher. Prior analysis for pull-down stair insulation and sealing completed in conjunction with the Home Builders Association (HBA) of South Carolina estimated this cost to be $100—an estimate which has also been used in this analysis in an effort to default to the most conservative option.

Hard Ducted Returns

For builders that are currently using "panned" floor joists as return air ducts, meeting the 2012 IECC will require an upgrade to conventional "hard ducted" returns in basement ceilings. Many builders already use conventional ducts as returns, but this cost has been included in this analysis regardless. Calculating the cost change between panned and conventional ducts is challenging, as panned ducts are not priced in RS Means and many construction cost sources. After consulting with HVAC contractors, who indicated the

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[2] As a result, many builders will be able to reduce or avoid incremental costs for better windows.

[3] $350 is a commonly used as an expected air sealing and testing cost for new single-family detached homes nationwide.

[4] Ventilation system and costs are described in an August 2005 report from Lawrence Berkeley National Laboratory "Review of Residential Ventilation Technologies." Although the costs of these components have decreased in recent years, the 2005 estimate ($180 per new home) is quoted in this analysis.

[5] It is difficult to determine what combination of redesign, resizing, and/or partial insulation of hot water lines would be done in a typical new home. Insulating distribution lines to the kitchen and very long runs would add costs while downsizing lines would reduce costs; in any case we believe the net effect would be small.

cost of panned ducts was roughly half of conventional ducts, incremental costs are estimated in this analysis as one-half of cost of flexible return ducts. We believe this cost is reasonable due to the significant amount of labor required for panned ducts, as contractors must screw sheet metal between two adjacent joists and seal the edges with mastic. RS Means estimates the installed cost of flexible, non-insulated, 6" diameter flexible ducts at $4.58 per linear foot.[6] As such, the cost to upgrade ducts is estimated at $2.29 per linear foot, or $139 for the estimated 75 feet of return duct which some builders will have to upgrade under the 2012 IECC.

Interior Basement Insulation

Additionally, many builders will have to upgrade the interior basement insulation. According to local building experts, most builders currently meet the 2009 IECC by installing basement wall fiberglass batt insulation to the inside of basement walls. To meet the 2012 code, these builders will have to upgrade from R-10 to R-15 batts. R-15 Hanging batts are not priced in RS Means and calls to local building suppliers yielded only the cost R-19 hanging insulation, which is priced at an additional $0.18 per square foot. Although the R-15 insulation should be less expensive than the quoted R-19, the $0.18 cost per square foot is used in this analysis, which adds $202 in incremental costs.

Exterior Walls

Finally, some builders may have to make a small upgrade to exterior walls. The 2006 IECC requires new home walls to meet R-19 or R-13+5, while the 2012 IECC requires either R-20 or R-13+5. For builders who already build R13+5 walls, the code does not require a change, and these builders will not incur any additional incremental costs. However, for builders currently meeting the 2006 code with R-19 walls (a 2 x 6 framed wall with R-19 fiberglass batts) they will have to upgrade batt insulation slightly, to an R-20 high density fiberglass batt, a cost which is estimated by RS Means as 15 cents per square foot of wall area. This cost, as well as all other estimated incremental costs are summarized in a **Table 1**, below.

Table 1: Salt Lake City 2012 IECC Incremental Costs

Building Component	Total Area	Incremental Cost/Square Ft	Total	Location Factor	Adjusted Total
Ceiling Insulation Upgrade from R-38 to R-49 (both blown-in)	1,200	$0.41	$ 492.00	81%	$399
1st Floor Panned Return Ducts Upgraded to Flexible Ducts	75 linear ft	$2.29/lf	$ 171.75	81%	$139
Basement Wall Insulation Upgrade from R-10 to R-15 (R-19)	1,120	$0.18	$ 201.60	N/A	$202
Upgrade Windows from U-.35 to U-.32	357	$1.00	$ 357.00	N/A	$357
Increased Air Sealing and Testing	N/A	N/A	N/A	N/A	$350
Insulating Hot Water Pipes	N/A	N/A	N/A	N/A	$100
75% CFLs in hardwired fixtures	N/A	N/A	N/A	N/A	$ 50
Upgrade to Programmable Thermostats	N/A	N/A	N/A	N/A	$ 50
Bathroom Vent Fan Upgrade and Addition of Automatic Timer	N/A	N/A	N/A	N/A	$180
Sealing/Insulating Attic Hatch	N/A	N/A	N/A	N/A	$100
Upgrade R-19 walls to R-20 with high density fiberglass batts (R-13+5 walls exempted from this cost)	2,380	$0.15	$357	81%	$289
Incremental Cost (R-13+5 Walls) $1,926 OR					
Incremental Cost (2 x 6 Walls - includes R-19 to R-20 insulation cost) $2,215					

[6] Less expensive duct options are available, but this product matches the modeling assumptions used by ICFI.

ENERGY COST SAVINGS

According to the model used in this analysis, **upgrading to the 2012 IECC will result in significant energy cost savings for Salt Lake City homeowners , resulting in savings of between $347 and $361 per year,** depending on the type of exterior wall type builders select. In energy modeling simulations, R13+5 walls perform slightly better than R-20 walls, saving an additional $14 per year. It is noteworthy that these savings assume constant energy prices; if energy prices continue to rise consistent with historical trends, savings will be greater in future years.

MORTGAGE PAYBACK FOR HOMEOWNERS

Homebuyers will be able to include the incremental first-costs of meeting the 2012 IECC in their mortgage, while benefiting from lower utility bills starting on day one. With estimated energy cost savings of between $347 and $361 per year, monthly utility bill savings are more than three times as much as the additional mortgage payment needed to cover the added first-cost of energy saving features required by the 2012 code.

This cash-flow difference is enough to pay back the buyer's added down payment in approximately 17 to 22 months (or sooner if the loan allows a down payment below 20%). After that date, the owner continues to realize a profit of at least $245 annually due to lower utility bills – and even more if energy prices increase.

This payback analysis assumes that homebuyers purchase a new home with 20% down at the current nationwide interest rate of 4.03 percent. This scenario would result in an increased down payment of between $385 to $443 with an additional mortgage cost of $7 or $8 per month. Taking into account energy savings and lower utility bills, a cash flow analysis indicates that the homebuyer would break even within as little as 17 months. After that break-even date, **homeowners would continue to save between $245 and $273 annually,** after additional mortgage costs are subtracted from energy savings. Homebuyers with a lower down payment—such as 5 or 10 percent—will realize payback more quickly. Mortgage payback to homeowners is presented below in Table 2, below.

Table 2: Mortgage Payback for Homebuyers by Exterior Wall Type

Exterior Wall Type	Incremental Costs	Energy Savings/ Year and Month per home	Down Payment Increase (and Mortgage Increase per Month)	Breakeven Point	Annual Profit for Homeowner after Breakeven Point
R-13+5 Walls	$1,926	$361/year ($30/month)	$385 (plus $7/month)	**17 months**	**$273**
R-20 Walls, Studs 16" on center	$2,215	$347/year ($29/month)	$443 (plus $8/month)	**22 months**	**$245**

CONCLUSIONS

- As estimated in this analysis, incremental costs for new 2,400 square foot homes built to the 2012 IECC in Salt Lake City total $1,926 to $2,215 per new home.
- Annual energy savings for Salt Lake City homeowners attributable to the 2012 IECC range from $347 to $361, depending on which exterior wall type builders select.
- Assuming a conservative 20% down payment, new home buyers will break even on their initial investment in as few as 17 months and no more than 22 months after purchase.

About BCAP

As an independent judge of the efficacy of energy codes, BCAP strives to use data to address energy code barriers, including the real or perceived construction costs incurred by code changes. To address concern in the building community that upgrading to the latest version of the residential energy code, the 2012 IECC, will result in cost prohibitive increases in construction cost for new single-family homes, BCAP has completed a nationwide incremental cost analysis as well as analysis for states on demand. Funding for this work is provided by the Environmental Protection Agency, the Department of Energy, and the National Association of State Energy Officials.

Contact Information:

2012 IECC Adoption and Energy Codes Policy

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bfay@ase.org

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CITY OF FLAGSTAFF

STAFF SUMMARY REPORT

To: The Honorable Mayor and Council

From: Stephanie Smith, Executive Assistant to City Manager

Submitted For: Mark Sawyers

Date: 05/31/2013

Meeting Date: 06/04/2013

TITLE:

Consideration and Approval of Consulting Agreement: With True Life Companies (TLC) D.B.A. Pine Canyon regarding change to zoning condition and disposition of fees.

RECOMMENDED ACTION:

Approve the Agreement between TLC PC Infrastructure, LLC and the City of Flagstaff, AZ and authorize the City Manager to sign the Agreement and any other necessary and appropriate documents; and authorize staff to take other actions as needed to further the Council direction.

Policy Decision or Reason for Action:

In late 2012, the new owners of Pine Canyon (TLC Partners) have requested a change to general condition related to Ordinance 2000-11 that states “all private roads within the Development remain open to the public and never gated”.The agreement commits staff support to amend the rezoning ordinance to modify the gated provision. The zoning amendment process must be processed to the Planning and Zoning Commission and City Council through a public hearing process.

The agreement extends and modifies conditions, requirement and terms of the Development Agreement between the City of Flagstaff and the owners of Pine Canyon. The agreement expired on September 08, 2010.

The Agreement commits the City to erect and maintain a directional sign at the intersection of Lake Mary Road and John Wesley Powell.

The Agreement extends the transportation improvement contribution of $1,855.55 per lot for 10 additional years in Pine Canyon. The funds will be utilized for current or future transportation improvement associated with Pine Canyon. To date the City has collected approximately $800,000.00

The Agreement returns the Regional Park Funds the City collected (approximately $130,000) to TLC Partners. The funds were to be used on a new regional park to be located on Forest Service property along with property connected to the Ruskin land trade.

If the Council approves this Agreement, TLC will file an application to amend the zoning condition in an effort to modify general condition 8 of Ordinance 2000-11.

Financial Impact:

This agreement will extend the City's collection of $1,855.55 per lot for 10 additional years related to transportation improvement associated with Pine Canyon. The City will return approximately $130,000 for funds collected for the Regional Park.

Connection to Council Goal:

Repair Replace maintain infrastructure (streets & utilities)

Has There Been Previous Council Decision on This:

This Council has not taken any previous actions on this situation.

Options and Alternatives:

1. Adopt the agreement as presented.

2. Comply with the Development Agreement as written. This would require the TLC to perform a revised transportation impact analysis to address any measurable impacts created by the development utilizing the transportation collected to date. All Regional Park Recreation Fees would need to be reimbursed to the developer.

3. Modify the agreement.

Community Involvement:

Inform
Consult
Involve
Collaborate
Empower

(Choose one of the above and then delete remaining text. For a fuller definition, hover over the title bar above for this text box.)

Attachments: Pine Canyon Gate Agreement
Original Development Agreement with Pine Canyon
Amendment to Development Agreement

AGREEMENT

THIS AGREEMENT ("Agreement") is made and entered into as of this ___ day of _____, 2013 by and between: (i) the CITY OF FLAGSTAFF, an Arizona municipal corporation ("City"); and (ii) TLC PC INFRASTRUCTURE, L.L.C., an Arizona limited liability company ("TLC Infrastructure"), and TLC PC DEVELOPERS, LLC, an Arizona limited liability company ("TLC Developers"). TLC Infrastructure and TLC Developers are referred to collectively in this Agreement as "TLC," and the City and TLC are referred to collectively in this Agreement as the "Parties."

RECITALS

A. On June 5, 2000, the City Council of the City ("Council") adopted Ordinance No. 2000-11 ("Ordinance"), rezoning that certain real property then known as "Fairway Peaks," and now known as "Pine Canyon" ("Pine Canyon"), subject to the conditions set forth in the Ordinance. General Condition 8 of the Ordinance ("GC 8") provided that "all private roads within the Development remain open to the public and never be gated." The Ordinance was recorded on July 17, 2000, as Instrument No. 3056859 in the Official Records of Coconino County, Arizona ("County").

B. The City, Vanderbilt Farms, L.L.C., an Arizona limited liability company ("Original Developer"), and San Francisco Peaks Associates, LP, an Arizona limited partnership ("Original Owner"), then entered into the Development Agreement for Fairway Peaks dated September 5, 2000, and recorded on September 8, 2000, as Instrument No. 3063582 in the Official Records of the County, as amended by the Amendment to Development Agreement dated January 30, 2007, and recorded on January 31, 2007 as Instrument No. 3423547 in the Official Records of Coconino County (collectively, "Development Agreement").

C. On November 18, 2002, Lone Tree Investment Holdings, LLC, an Arizona limited liability company ("Original Beneficiary") established Trust No. B178 under the governing Trust Agreement dated as of November 18, 2002, as amended, administered by Fidelity National Title Insurance Company, as Trustee ("Trust").

D. Section 9(m) of the Development Agreement provided, among other things, for the collection and disbursement of Original Developer's "fair share contribution" to the construction of the Lone Tree and I-40 Interchange or, in the alternative, to the completion of a revised traffic impact analysis and mitigation of all measurable impacts, if any, created by the Pine Canyon development. Section 9(k) of the Development Agreement provided, among other things, for the collection and disbursement of Original Developer's regional park contributions. The Trust, among other things, provided for the collection and disbursement of Original Developer's obligations under Sections 9(k) and 9(m) of the Development Agreement.

E. The Development Agreement expired by its terms on or about September 8, 2010.

F. TLC Infrastructure is the successor in interest to Original Developer and Original Owner with respect to all existing and future roadways and associated access, utility and drainage easements and tracts located within Pine Canyon. TLC Developers is the successor to Original Beneficiary as "Beneficiary" under the Trust.

G. TLC and the City have entered into this Agreement in order to: (i) establish a mechanism that replaces Section 9(m) of the Development Agreement in order to provide for the collection and disbursement of Pine Canyon's "fair share contribution" to current or future transportation infrastructure improvements associated with Pine Canyon's impact on the regional transportation system; (ii) amend GC 8 in order to allow for the placement and operation of access control gates, with an associated keypad security; and (iii) evidence certain other related agreements between TLC and the City.

IN CONSIDERATION OF the mutual representations, warranties, covenants and agreements set forth in this Agreement, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:

AGREEMENT

1. **Recitals.** The Recitals are true and correct and are incorporated in this Agreement.

2. **Amendment to Ordinance No. 2000-11.** City Staff agrees to support TLC's application to amend GC 8 ("GC 8 Amendment") for the limited purpose of permitting TLC Infrastructure to install, operate and maintain access control gates between the hours of 11:00 p.m. and 6:00 a.m., with associated keypad security, at all points of public vehicular entry into Pine Canyon (collectively, "Access Gates"). TLC Infrastructure acknowledges the City desires to solicit public input regarding the Access Gates and will process the GC 8 Amendment as if it constituted a rezoning of the property upon which the Access Gates will be located and that the City will require, among other things, advertisement and notification of affected property owners otherwise consistent with the rezoning requirements set forth in the City's 2011 Zoning Code ("2011 Zoning Code"). TLC Infrastructure further acknowledges the GC 8 Amendment will be subject to Council approval. The GC 8 Amendment will require that: (i) the Access Gates be located outside of the public rights-of-way and at the minimum setback distance required by the applicable zoning designation; (ii) TLC Infrastructure shall be responsible for the installation and maintenance of the Access Gates; and (iii) the Access Gates will not impair pedestrian passage. TLC Infrastructure will work with affected landowners to determine appropriate locations for the Access Gates. In connection with submitting the GC 8 Amendment for Council approval, TLC Infrastructure will pay all applicable fees and otherwise comply with the City's municipal requirements; provided, however: (y) neither TLC Infrastructure nor any affiliate of TLC Infrastructure will be required to obtain any resource reports or impact studies as result of the GC 8 Amendment; and (z) other than the limited amendment to GC 8 permitting the

installation, operation and maintenance of the Access Gates, no aspect of Pine Canyon's current zoning or entitlement will be impacted, amended or modified.

3. **Signage.** The City shall erect and maintain a directional sign within the City's right-of-way at the intersection of Lake Mary Road and John Wesley Powell Boulevard ("Directional Sign"). The Directional Sign shall indicate to the travelling public the entrance to Pine Canyon and shall conform to the standards for location, size, shape, material, color and design set forth in the Manual on Uniform Traffic Control Devices for Streets and Highways. The City agrees that it shall be its sole responsibility to obtain all required governmental approvals, if any, in connection with the erection of the Directional Sign.

4. **Transportation Infrastructure Improvement Funds.**

a. ***Existing Escrow Funds***. Within five (5) business days following the Effective Date, TLC Developers will cause all funds currently held in the Escrow Account pursuant to Section 9(m) of the Development Agreement, together with any accrued interest (collectively, "Existing Transportation Funds"), to be transferred from the Escrow Account to the City for the funding of current or future transportation infrastructure improvements associated with Pine Canyon's impact on the regional transportation system. For purposes of this Agreement, "Escrow Account" shall have the same meaning and definition as set forth in Section 9(k) of the Development Agreement.

b. ***Future Payment Obligation***. TLC Developers further agrees, for a period of ten years from the Effective Date of this Agreement, to pay the City the sum of $1855.55 per Lot in Pine Canyon, with each payment being made on a Lot-by-Lot basis, as a condition precedent to the issuance of a final certificate of occupancy (collectively, "Future Transportation Funds"). The Future Transportation Funds shall constitute a lien in the amount of $1855.55 against each respective Lot until paid. These funds will be used solely for the funding of current or future transportation infrastructure improvements associated with Pine Canyon's impact on the regional transportation system. For purposes of this Agreement, "Pine Canyon" shall have the same meaning as "Project" in the Development Agreement, and "Lot" shall have the same meaning as in the Development Agreement.

c. ***Obligations Fully Satisfied***. The City acknowledges and agrees that TLC (and its affiliates) are released from and are no longer obligated to perform or fulfill those duties and acts set forth in the Development Agreement (including, without limitation, Sections 9(k) and 9(m) of the Development Agreement). The City further acknowledges and agrees that payment of the Existing Transportation Funds and the Future Transportation Funds satisfies, in full, any obligation relating to current or future transportation infrastructure improvements arising from Pine Canyon's impact on the regional transportation system. Upon payment of the Existing Transportation Funds to the City, the City waives and relinquishes any claim to, or rights in or under, either the Escrow Account or the Trust.

5. **Regional Park Funds.** All funds currently held in the Escrow Account pursuant to Section 9(k) of the Development Agreement, together with any accrued interest, shall be transferred from the Escrow Account to TLC Developers.

6. **Notices.** Any notice, demand, request, consent, approval or communication under this Agreement shall be in writing and either served personally or sent by prepaid, first-class mail to the address set forth below. Either party may change its address by notifying the other party of the change of address in writing. Notice shall be deemed given (a) upon personal delivery or (b) forty-eight (48) hours from deposit of such notice in the United States mail, postage prepaid.

To City:

City Manager
City of Flagstaff
211 West Aspen Avenue
Flagstaff, Arizona 86001

To TLC:

AVG Service Corporation
8777 N. Gainey Center Dr. #191
Scottsdale, Arizona 85258

and

Russ Schaeffer
Chief Operating Officer
The TLC Companies
2555 E. Camelback Rd. #770
Phoenix, Arizona 85016

7. **Representation and Warranties by the City.**

a. The City has the full right, power, and authorization from its City Council to enter into and perform this Agreement and each of the City's obligations, representations, covenants and undertakings under this Agreement. The City's execution, delivery and performance of this Agreement has been duly authorized and agreed to in compliance with the requirements of the Flagstaff City Charter, the Flagstaff City Code and all applicable State and Federal law.

b. All consents and approval necessary to the execution, delivery and performance of this Agreement have been obtained, and the City will execute all documents and take all actions necessary to implement, evidence and enforce this Agreement.

c. The City knows of no litigation, proceeding, initiative, referendum, investigation or threat of any of the same contesting the powers of the City or its officials with respect to this Agreement.

8. **Representations and Warranties by TLC.**

a TLC has the full right, power and authorization to enter into and perform this Agreement, and TLC's execution, delivery and performance of this Agreement has been duly authorized and agreed to in accordance with its organization documents, and upon this Agreement's Effective Date, it shall be binding and enforceable against TLC.

b. All consents and approvals necessary to the execution, delivery and performance of this Agreement have been obtained, and TLC will execute all documents and take all actions necessary to implement, evidence and enforce this Agreement.

c. TLC knows of no litigation, proceedings, investigation or threat of any of the same contesting the powers of TLC or its officials with respect to this Agreement.

d. The execution, delivery and performance of this Agreement by TLC is not prohibited by, and does not conflict with, any other agreements, laws, instruments or judgments to which TLC is a party or is otherwise subject.

e. TLC has been assisted by counsel of its own choosing, and has had the opportunity to discuss this Agreement and its consequences with its chosen legal counsel.

9. **General Provisions.**

a. This Agreement shall not be altered, modified or amended except by written agreement signed by the Parties.

b. This Agreement shall be governed, construed and enforced in accordance with the laws of the State of Arizona.

c. The City and TLC have had an opportunity to participate in the drafting of this Agreement, and no term or provision of this Agreement shall be construed against either party by virtue of its drafting the Agreement.

d. This Agreement is subject to, and may be terminated by, the City in accordance with the provisions of A.R.S. § 38-511, Arizona's conflict of interest statute.

e. This Agreement constitutes the entire agreement between the Parties. The City and TLC each acknowledge that they have not executed this Agreement in reliance on any promise, representation or warranty not contained herein.

f. Should any litigation be commenced between the Parties concerning the terms of this Agreement, or the rights and duties of TLC or the City under this Agreement, the prevailing party or parties in such proceeding or litigation shall be entitled, in addition to such other relief as may be granted, to payment of all of its costs, expenses (including, but not limited to, expert fees), and reasonable attorneys' fees incurred in connection with the dispute.

10. **Future Cooperation.** Each Party to this Agreement will reasonably cooperate and in good faith and diligently perform any further acts, deeds and things and execute and deliver any documents that may from time to time be reasonably necessary or otherwise reasonably required to consummate, evidence, confirm and/or carry out the intent and provisions of this Agreement, all without undue delay or expense and without further consideration.

12. **Effective Date.** This Agreement shall be deemed to be effective and fully enforceable as of the date of its approval by the Flagstaff City Council (the "Effective Date").

EXECUTED as of the Effective Date, by:

TLC PC INFRASTRUCTURE, L.L.C
an Arizona limited liability company

By: _____
Its: _____

TLC PC DEVELOPERS, LLC, an Arizona limited liability company

By: _____
Its: _____

CITY OF FLAGSTAFF, an
Arizona municipal corporation

_____
Mayor

ATTEST:

_____
City Clerk

APPROVED AS TO FORM:

_____
City Attorney

For Pine Canyon Meeting @ 2:30p

Official Records of Coconino County 3423547
Candace Owens - Recorder 01/31/2007 04:12 PM Pgs: 5
FIDELITY NATIONAL TITLE AM $14.00

When recorded, return to:

A2000-0905.2

City Clerk
211 W. Aspen Avenue
Flagstaff, AZ 86001

AMENDMENT TO DEVELOPMENT AGREEMENT

This Amendment to the Development Agreement between the City of Flagstaff ("**City**") and Vanderbilt Farms, L.L.C. dated September 5, 2000, is made and entered into as of the 30th day of January, 2007 by the City and Lone Tree Investments, LLC ("**Developer**"), successor to Vanderbilt Farms, L.L.C., collectively referenced herein as the "**Parties**," as follows:

RECITALS

A. On June 5, 2000, the City adopted Rezoning Ordinance 2000-11 (the "**Ordinance**"), rezoning certain real property legally described therein then known as "Fairway Peaks" and now known as "Pine Canyon" (hereinafter referred to as "**Pine Canyon**"), subject to the conditions set forth in the Ordinance. General Condition 8 ("**GC 8**") of the Ordinance provided that "all private roads within the Development remain open to the public and never be gated." General Condition 9 ("**GC 9**") of the Ordinance required Developer to enter into a development agreement with the City providing for affordable housing units as part of the development of Pine Canyon. The Ordinance was recorded with the Coconino County Recorder's Office on July 17, 2000 as instrument 3056859.

B. On or about September 5, 2000, the Parties entered into a Development Agreement, recorded with the Coconino County Recorder's Office on September 8, 2000, as instrument 3063582 ("**Original Agreement**"), concerning development of Pine Canyon, legally described as in the Original Agreement and incorporated herein by reference ("**Property**").

C. A.R.S. § 9-500.05 authorizes the City to enter into a development agreement with a landowner or any other person having an interest in real property located in the City concerning, among other things, permitted uses on the Property, density of the development, conditions and terms for public infrastructure, and any other matter relating to development of the property. Additionally, A.R.S. § 9-500.11 authorizes the City to appropriate and spend public monies for and in conjunction with economic development activities. The Parties acknowledge and agree that this Amendment is a development agreement pursuant to A.R.S. § 9-500.05.

D. Certain disputes have arisen between the Parties with respect to the Ordinance and the Original Agreement, including, but not limited to, disputes as to the validity, enforceability, and meaning of GC 8, the rights and obligations of the parties under GC 9, and the phasing and platting of Pine Canyon. These disputes resulted in the filing of a lawsuit by the

City and a counterclaim by Developer, captioned *City of Flagstaff v. Lone Tree Investments, LLC*, Coconino County Superior Court Cause No. CV-20050530 (the "**Lawsuit**").

E. To resolve these disputes and the Lawsuit, the Parties hereto now desire to make certain adjustments, amendments and clarifications to the Original Agreement for their mutual benefit.

AGREEMENT

NOW, THEREFORE, in consideration for the Parties entering into this Amendment, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties acknowledge and expressly agree as follows:

1. Developer acknowledges and reconfirms the validity and binding effect of GC 8, which conditioned the rezoning of Pine Canyon upon the requirement that all private roads within the Pine Canyon development shall remain open to the public and shall never be gated.

2. The City acknowledges and agrees that GC 8 and the Ordinance do not prevent Developer from constructing guardhouses at entrances to Pine Canyon, staffing same with security personnel, and enforcing reasonable security measures concerning access.

3. Developer may, at its option, abandon the third entrance to Pine Canyon shown on conceptual plans to be located off John Wesley Powell Boulevard near the northeast corner of Pine Canyon, providing that the main entrance and the clubhouse entrance remain open and available for ingress and egress to the public. Developer may construct and maintain guardhouses and security guards at the main entrance and the clubhouse entrance, under the terms set forth in Paragraph 2 of this Amendment.

4. Within ten (10) business days of the City's written request to Developer, Developer shall convey to the City, by Special Warranty Deeds, and free and clear of all encumbrances, mortgages, liens, or other interests, fee title to up to five (5) strips of land across Tract 13 of The Estates at Pine Canyon – Unit One for roadway purposes. Each such strip shall be no more than 100 feet in width and shall cross all of Tract 13 from south to north so as to provide public access from John Wesley Powell Boulevard to the parcel or parcels of land adjoining Tract 13 to the north. Each written request from the City to Developer pursuant to this Paragraph 4 shall include a legal description of the strip of land to be dedicated to the City which legal description shall be obtained at the sole cost of the City. Recordation expenses of the Special Warranty Deed or Deeds given by Developer pursuant to this Paragraph 4 shall be borne by Developer. Upon conveyance of each strip, the provisions of the Original Agreement and this Amendment shall be released as to each such strip without further action by the Parties.

5. Contemporaneous with the recordation of this Amendment, Developer shall convey to the City, at no cost to the City, by Special Warranty Deed (the "Deed"), and free and clear of all encumbrances, mortgages, liens, or other interests, insured fee title to the following parcel:

> Tract 2, THE ESTATES AT PINE CANYON UNIT ONE, a Resubdivision of Tract "X" of THE ESTATES AT PINE CANYON UNIT ONE, according to the

plat in Case 8, Map 79 and in Case 8, Map 92, records of Coconino County, Arizona

Upon the transfer of title to said tract, Developer will be deemed to have fully satisfied its obligations under GC 9 of the Ordinance and Section 11 of the Original Agreement relating to affordable housing.

6. Upon the recordation of this Amendment and of the Deed, the Original Agreement will be deemed released as to the following two parcels of real property:

Tract 2, THE ESTATES AT PINE CANYON UNIT ONE, a Resubdivision of Tract "X" of THE ESTATES AT PINE CANYON UNIT ONE, according to the plat in Case 8, Map 79 and in Case 8, Map 92, records of Coconino County, Arizona

Tract P, THE ESTATES AT PINE CANYON UNIT ONE, a Resubdivision of Tract "X" of THE ESTATES AT PINE CANYON UNIT ONE, according to the plat in Case 8, Map 79 and in Case 8, Map 92, records of Coconino County, Arizona.

7. The City acknowledges and agrees that, subject to the Flagstaff Land Development Code and other applicable laws or regulations, and notwithstanding any provision of the Original Agreement to the contrary, Developer may proceed concurrently through the remaining phases of the development of Pine Canyon, without necessarily completing one phase before beginning the next phase.

8. This Amendment shall be recorded by the City in the Official Records of Coconino County, Arizona within ten (10) calendar days after execution. This Amendment may be amended or cancelled, in whole or in part and with respect to all or any portion of the Property, only with the mutual written consent of the Parties.

9. Except as provided herein, all provisions of the Original Agreement shall remain in full force and effect.

10. In executing this Amendment, each party hereto acknowledges that it has consulted with and had the advice of counsel of its own choosing in negotiations for and preparation of this Amendment and was fully advised by counsel with respect to all rights which are affected by this Amendment.

11. For purposes of construction and interpretation, this Amendment shall be deemed to have been jointly drafted by counsel for both Parties, and ambiguities, if any, shall not be construed for or against any party.

12. This is the entire Amendment among the Parties with respect to the subject matter hereof. It includes all of the terms, promises, representations and understandings made by the Parties, and it supersedes any earlier written or oral understandings or Amendments between the Parties concerning this Amendment. No party hereto nor its respective attorneys or advisors or agents have made any promise, representation or warranty, whether expressed, implied or

statutory, not contained herein, concerning the subject matter of this Amendment in order to induce the parties hereto to execute this Amendment, and each signatory acknowledges that such party has not executed this instrument in reliance on any promise, representation or warranty not contained herein.

13. Each party to this Amendment certifies that it has read all of this Amendment and fully understands all of the same.

14. Each party to this Amendment will cooperate reasonably and in good faith and diligently perform any further acts, deeds and things and execute and deliver any documents that may from time to time be reasonably necessary or otherwise reasonably required to consummate, evidence, confirm and/or carry out the intent and provisions of this Amendment, all without undue delay or expense and without further consideration.

15. By executing this Amendment, the City warrants that this Amendment has been duly and lawfully approved at a properly noticed meeting of the City Council of the City of Flagstaff.

16. Each of the Parties hereto hereby acknowledges that the rights granted the other party hereunder are unique and that, accordingly, the other party's obligations hereunder should be specifically enforceable, and that it would be equitable for a court of competent jurisdiction to order the specific performance of the other party's obligations under this Amendment.

17. This Amendment is subject to the cancellation provisions of A.R.S. § 38-511, but the Parties hereto do not believe any such reasons for cancellation of this Amendment pursuant to said statute now exist.

18. This Amendment shall be effective upon the occurrence of both the following events: (i) execution by the Parties hereto; and (ii) recordation in the Official Records of Coconino County, Arizona.

19. The Recitals set forth above and exhibits attached hereto are acknowledged by the Parties to be true and correct and are incorporated herein by this reference.

IN WITNESS WHEREOF, Developer and the City have executed this Agreement.

LONE TREE INVESTMENTS, LLC

By: Central and Osborn Properties, Inc., an Arizona corporation, its manager

By: Patricia E. Nolan

Patricia E. Nolan, President

CITY OF FLAGSTAFF

By _____

Scott Overton, Vice-Mayor

Attest:

_____

City Clerk

Approved as to form:

_____

City Attorney

STATE OF ARIZONA)
) ss.
County of Maricopa)

The foregoing instrument was acknowledged before me this 24 day of January, 2007, by Patricia E. Nolan, President of Central and Osborn Properties, Inc., Manager of Lone Tree Investments, LLC.

_____

Notary Public

My Commission Expires:

_____

PATRICIA MELOSERDOFF
Notary Public - Arizona
MARICOPA COUNTY
My Commission Expires
DECEMBER 7, 2008

STATE OF ARIZONA)
) ss.
County of Coconino)

The foregoing instrument was acknowledged before me this 30th day of January, 2007, by Scott Overton, for and on behalf of the City of Flagstaff.

_____

Notary Public

My Commission Expires:

8/16/2010

OFFICIAL SEAL
PATRICIA A. TENCZA
Notary Public - State of Arizona
COCONINO COUNTY
My Comm. Expires Aug. 16, 2010

Candace Owens - RECORDER
OFFICIAL RECORDS OF COCONINO COUNTY
CITY OF FLAGSTAFF GA 12.00
3056859
07/17/2000 11:40A

3056859
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GA

ORDINANCE NO. 2000-11

AN ORDINANCE REZONING APPROXIMATELY 660.03 ACRES OF LAND AT THE 3000 BLOCK OF SOUTH LONE TREE ROAD FROM: RR, RURAL RESIDENTIAL DISTRICT TO R1, RESIDENTIAL DISTRICT (615 ACRES); RR, RURAL RESIDENTIAL DISTRICT TO HR, HIGH DENSITY RESIDENTIAL DISTRICT (18.3 ACRES); AND RR, RURAL RESIDENTIAL DISTRICT TO MH, MANUFACTURED HOUSING DISTRICT (26.64 ACRES) CONDITIONAL.

WHEREAS, the Council finds that the applicant has complied with Section 10-10-004-0007 of the Land Development Code by virtue of having paid the required fee and having supplied the required documentation; and

WHEREAS, the Council has read and considered the staff reports prepared by the Planning Division and has reviewed the Conceptual Site Plan and considered the narrative prepared by the applicant, and the Council finds that the Conceptual Site Plan and related stipulations further the application by providing for affordable housing; and

WHEREAS, the Planning and Zoning Commission has formally considered the present rezoning application following proper notice and hearing with the result that the Planning and Zoning Commission has recommended approval of the requested zoning application, subject to the applicant's compliance with certain general conditions set forth hereinbelow; and

WHEREAS, the staff has recommended approval of the rezoning application, subject to the general conditions proposed by the Planning and Zoning Commission, as modified by staff, and the Council has considered each of the conditions and has found them to be appropriate for the site and necessary for the proposed development; and

WHEREAS, the Council finds that the proposed rezoning and approved Conceptual Site Plan with conditions will not be detrimental to the uses of adjoining parcels or to other uses within the vicinity;

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF FLAGSTAFF AS FOLLOWS:

SECTION 1. That the subject property, consisting of several parcels, be rezoned from: RR, Rural Residential District to R-1, Residential District Conditional (615 Acres), as depicted in Exhibits A and A-1 attached to and made a part hereof; RR, Rural Residential District to HR, High Density Residential District Conditional (18.3 Acres), as depicted in Exhibits B and B-1 attached to and made a part hereof; and RR, Rural Residential District to MH, Manufactured Housing District Conditional (26.64 Acres), as depicted in Exhibits C and C-1 attached to and made a part hereof, in accordance with the Conceptual Site Plan presented with the rezoning request.

SECTION 2. That the Fairway Peaks Development Agreement ("Development Agreement") prepared by the applicant and the City be reviewed and approved by the City Council prior to the City Council's second reading and adoption of this Ordinance.

SECTION 3. That the rezoning be conditional upon compliance with the provisions of the Land Development Code to construct the improvements shown upon the approved Conceptual Site Plan and be further conditioned upon the applicant's satisfaction of the following nine (9) conditions proposed by the Planning and Zoning Commission, as modified and recommended by staff:

GENERAL CONDITIONS:

1. That the subject property be developed according to the Conceptual Site Plan for Fairway Peaks as presented with the rezoning request.

2. That all other requirements of the Land Development Code and other City codes, ordinances and regulations, including the conditions of the Development Review Board of January 6, 2000, be met by the proposed Fairway Peaks Development ("Development").

3. That the applicant have a solid fence and landscaped buffer constructed to screen the Flagstaff Urban Trail from the maintenance facility.

4. That the applicant grant permanent public pedestrian easements on trails within the Development.

5. That all of the terms, conditions, and restrictions set forth in the Development Agreement be fully satisfied.

6. That if the City's Planning Division should determine that a pedestrian underpass (14' x 8' minimum) at the intersection of Lone Tree Road and the John Wesley Powell Boulevard connecting to the Flagstaff Urban Trail System be the best pedestrian alternative, then the applicant shall construct the same in accordance with an approved engineering plan.

7. That the applicant's failure to obtain site plan, final plat or grading permit approval for any of the three (3) subject parcels within two (2) years of the effective date of the rezoning ordinance, or within an extension of said two (2) year period granted by the Planning and Zoning Commission, shall cause the City to conduct a public hearing for the purpose of reverting the R1, Residential zoning; the HR, High Density Residential zoning; and the MH, Manufactured Housing zoning to their former respective classifications of RR, Rural Residential District in accordance with Arizona Revised Statute § 9-462.01.

8. That all private roads within the Development remain open to the public and never be gated.

9. That the Development Agreement require the applicant to provide affordable housing units rather than permit the applicant to make payments in lieu of constructing affordable housing units.

PASSED AND ADOPTED by the Council and approved by the Mayor of the City of Flagstaff, this 6th day of June, 2000.

MAYOR

ATTEST:

CITY CLERK

APPROVED AS TO FORM:

CITY ATTORNEY

Candace Owens - RECORDER
OFFICIAL RECORDS OF COCONINO COUNTY
CITY OF FLAGSTAFF AM 44.50
3063582
09/08/2000 04:40P
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AM

A2000-0905.2

DEVELOPMENT AGREEMENT

FOR

FAIRWAY PEAKS

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Exhibit "A"	Legal Description of Property
Exhibit "B"	Concept Plan
Exhibit "C"	USDA Forest Service Decision of No Significant Impact
Exhibit "D"	Reclaimed Wastewater Agreement
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Exhibit "H"	Legal Description of Affordable Property
Exhibit "I"	Avigation Easement Agreement
Exhibit "J"	Conceptual Development Phasing Schedule

DEVELOPMENT AGREEMENT

September This Development Agreement (the "Agreement") is made as of the 5th day of ~~July,~~ 2000, by and between the CITY OF FLAGSTAFF, an Arizona municipal corporation organized and existing under the laws of the State of Arizona, (the "City") and VANDERBILT FARMS, L.L.C., an Arizona limited liability company and/or nominee, (the "Developer"), and SAN FRANCISCO PEAKS ASSOCIATES, LP., an Arizona limited partnership, the owner of that certain portion of the property depicted on **Exhibit H** attached hereto (the "Owner").

RECITALS

A. The Developer is the owner of certain real property located within the incorporated boundaries of Flagstaff. This real property is depicted and legally described in **Exhibit A**, a copy of which is attached hereto and incorporated herein by reference.

B. Owner is the current owner of certain real property located within the incorporated boundaries of Flagstaff. This real property is depicted and legally described in **Exhibit H**, a copy of which is attached hereto and incorporated herein by reference. The Owner and Developer have entered into an agreement whereby the Developer will purchase the Owner's property. For purposes of this Agreement, the property described in Recitals A and B shall be collectively referred to as the "Property".

C. Developer and Owner agree that Owner will be bound by the terms and conditions of the Development Agreement, the Avigation Easement Agreement **(Exhibit I)**, and the Reclaimed Wastewater Agreement **(Exhibit D)**, even though Owner is not a signatory to the Avigation Easement Agreement or the Reclaimed Wastewater Agreement, for as long as Owner retains title to that portion of the Property which it currently owns **(Exhibit H)**. Once the Owner conveys its portion of the Property **(Exhibit H)** and title is transferred to the Developer, Owner will have no further involvement or obligation, legal or otherwise, pursuant to this Development Agreement, the Avigation Easement Agreement, or the Reclaimed Wastewater Agreement.

D. It is the desire and intention of the Developer to develop the Property subject to the planning and regulation of the City pursuant to all applicable laws, regulations, ordinances and resolutions described herein and pursuant to this Agreement (the "Project").

E. The Developer and the City desire to enter into this Agreement in order to, among other things, facilitate development of the Property by providing for and establishing the community character of the Property, the type of land uses and the location, density, and intensity of such land uses, site and architectural design, and other matters relating to the development of the Property as depicted in the concept plan (the "Concept Plan") for Fairway Peaks as may be approved by the City's Planning and Zoning Commission and the City Council. A copy of the Concept Plan is attached hereto as **Exhibit B**.

F. The Developer and the City acknowledge that the ultimate development of the Property within and as an integral part of the City is a project of significance that the Developer desires assurances from the City of the City's willingness to proceed with a rezoning request for the Property.

G. The City believes that the development of the Property pursuant to this Agreement will be beneficial to the City. The Developer believes that the development of the Property pursuant to this Agreement is beneficial and advantageous to the Developer.

H. The Developer and the City understand and acknowledge that this Agreement is a "Development Agreement" within the meaning of, and entered into pursuant to the terms of Arizona Revised Statutes Sec. 9-500.05 (pertaining to development agreements) to establish the terms, conditions, and requirements for the development of the Property.

NOW, THEREFORE, in consideration of the foregoing and the mutual promises and agreements set forth herein, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties hereto state, confirm and agree as follows:

AGREEMENT

1. Implementation of Concept Plan through Rezoning. The Developer will submit an application to rezone the Property in accordance with the Concept Plan as attached per **Exhibit B**. The rezoning is intended to implement and facilitate the development proposal of the Property described in the Concept Plan. The parties hereto acknowledge that certain stipulations (the "Stipulations") are likely to be required in connection with the rezoning. The purpose of the Stipulations is to provide for, among other things, adequate access and circulation, drainage, wastewater and water infrastructure facilities, resource protection, density, affordable housing, active and passive recreation, pedestrian circulation, as well as other factors required by the City's policies, codes and ordinances. In the event a conflict exists between the language set forth in one or more of the Stipulations and the terms of this Agreement, the terms of this Agreement shall govern. The City agrees to process said application to rezone the Property and, subject to the outcome of the rezoning hearings as required by A.R.S. Sec. 9-462.04, will assist the Developer in meeting the necessary requirements to implement the Concept Plan. In the event that the City approves the application to rezone the Property, and upon receipt of site, engineering and building, and safety plans for the Property (the "Plans"), the City agrees to process the Plans in accordance with Arizona law and all City codes and ordinances. In the event the City rezones the Property and the Developer either fails to obtain a site plan, final plat or grading permit within two (2) years from the effective date of the rezoning ordinance or fails to obtain an extension from the two (2) year deadline from the Planning and Zoning Commission, the City Council, after notification by certified mail to the owner and applicant who requested the rezoning, shall schedule a public hearing to take administrative action to extend, remove

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or determine compliance with the schedule for development or take legislative action to cause the Property to revert to its former zoning classification. Upon the City Council's approval of the zoning reversion, this Agreement shall automatically become null and void and neither party shall have any further obligation to the other hereunder. Notwithstanding the foregoing, the City and Developer agree that Developer may apply for an extension of such two-year period by providing to the City and the Planning and Zoning Commission a request for extension, along with a progress report and revised schedule of development, within sixty (60) days prior to the expiration of the such two-year period.

2. **Conditions of Development.** In the event the City approves the rezoning contemplated in Section 1 of this Agreement, the City's Community Development Department shall place a notation on the official zoning maps for the Property to reflect the zoning district classification and boundaries approved in the rezoning. These maps may include appropriate indications that said zoning district is conditional and that the district will not be vested on the zoning map until the Stipulations for the development of the Property or portions thereof are satisfied, as provided for herein. The satisfaction of the Stipulations for a portion or portions of the Property shall not entitle the Developer to develop any other portion of the Property for which the requirements of the Stipulations have not been met.

3. **Site Layout and Design Considerations.** The City acknowledges that the Concept Plan inclusive of the provisions contained herein with associated elevations meet the following site layout and design considerations.

(a) The Concept Plan will reflect and be accompanied by a Development Master Plan for the area around the Property which will, among other items, address development potential of parcels around the Property, provisions for access to allow the orderly development of those parcels, and infrastructure master planning for utility service and transportation for the area.

(b) The Concept Plan shall follow all applicable City ordinances, rules, guidelines and official policies, and meet the requirements of this Agreement and the Stipulations;

(c) Site design will be derived from an analysis of existing resources and constraints on the site, including slopes and forested areas. Development on the site shall be designed to work with and minimize disruption to resources, and be considerate of higher quality forest resources;

(d) Street width for private internal streets will be determined based on function and anticipated traffic volumes, but in all cases should be reduced to the greatest extent possible. Street sections should incorporate the concept of "shared" street space for travel, parking, bike lanes, and other transportation purposes insofar as this is consistent with safe operation;

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(e) The development of the multi-family dwelling units (condominiums) and affordable housing units shall conform substantially to the individual conceptual site plans and elevations that were reviewed and approved by the City Council, and which are filed within the Community Development Department.

4. **Modifications of Development Standards.** Development of the Property shall be governed by the City's ordinances, rules, guidelines and official policies controlling permitted uses of the Property, the density and intensity of uses, the maximum height and size of the buildings within the Property, as well as the standards for off-site and on-site public improvements in existence as of the effective date of this Agreement; provided, however, that Developer obtains construction permits for one or more components of the Project within three (3) years following the effective date of this Agreement. If Developer fails to obtain final plat approval on the first phase within this three (3) year period, then development of the Project shall be subject to the City's ordinances, rules, guidelines, and official policies in effect at the time Developer applies for construction permits for the Project.

The parties acknowledge that the terms of this Agreement in no way limit the City's authority to apply development impact fees at such later date such impact fees are adopted and applicable. Such future fees will not be due by Developer until three (3) years after the date of this Agreement. The City will credit the Developer's verifiable costs of all infrastructure and capital improvements required by the City to offset impacts to the community against any future impact fees assessed to the Developer for like kind infrastructure and capital improvements. The City also retains the authority to administer design review as may be adopted as a City-wide process in the future if the Developer proposes changes to the building elevations as proposed in this Agreement.

5. **Changes to the Rezoning.** For the term of this Agreement, the City shall not initiate any changes or modifications to the zoning districts that may be approved for the Property pursuant to this Agreement, except at the request of the Developer of that portion of the Property for which such zoning change is sought or as otherwise allowed pursuant to Section 1.

6. **Guiding Principals.** Because of the physical characteristics of the Property, as well as the special circumstances giving rise to this Agreement, the parties acknowledge that development activities for the Property may extend over several years. Conceivably, many of the requirements and procedures provided for in this Agreement (and in the Stipulations) contemplate that use of the Property in the future may be subject to procedures, requirements, regulations and ordinances not presently in effect, as well as actions and decisions by City staff and officials which cannot be provided for with particularity at the time the Agreement was executed. As such, the parties agree that they will act in good faith and with reasonableness in implementing, operating under, and exercising the rights, powers, privileges and benefits conferred or reserved by this Agreement or by law.

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7. **Project Description.** The Project contemplated by this Agreement and as illustrated in the Concept Plan shall consist of residential development of no more than 1,170 dwelling units, consisting of 210 multi-family units, a minimum of 125 affordable housing units, 311 estate townhouses, and 524 estate home sites; approximately 23,550 square feet of private club house and recreational facilities; two acres of land dedicated for parking and a staging area for the FUTS; approximately 12,000 square feet in buildings used for maintenance and storage facilities; approximately 220 acres to an 18-hole private golf course with accessory facilities; all located on approximately 660 acres.

8. **Golf Course, Club House, and Practice Area.** An 18-hole golf course is to be constructed. The golf course and practice area will be designed and constructed in areas where there are no trees or where trees have been previously cleared and in some areas that will require tree removal, with homes and other structures to be built in the forested areas surrounding the golf course. Water for both the golf course and practice area will be through the use of reclaimed water, with all reclaimed water to be connected to lakes on the property for onsite storage. The reclaimed water line, more specifically described herein, shall include a pedestrian easement, which pedestrian easement will be obtained through the joint efforts of both the Developer and the City. The club house anticipated to be constructed will contain, at a minimum, a dining room, cocktail lounge, pro shop, equipment rental, office space for administrative personnel, locker rooms, and golf cart storage.

9. **Construction of Public and Other Related Improvements; Dedication of Public Rights-of-way and Easements.** Prior to final plat approval for any component of the Project, Developer shall provide security in a form satisfactory to the City as set forth in the City's Public Improvements Ordinance that public and other related improvements will be constructed in accordance with approved plans. Developer shall at its expense, construct or cause to be constructed all public improvements as required by the City's code or ordinances and in accordance with approved specifications. Following construction of the described public improvements and dedication of same to the City, the City shall assume, at its expense, the maintenance and repairs of all public improvements in accordance with City policies.

Specifically, the scope and nature of the on-site and off-site rights-of-way and other infrastructure improvements to be constructed in connection with the Project are as follows:

(a) **Private Streets.** The Developer will install street improvements for each unit of the Project. All interior private streets and easements will be governed by the homeowners through a Homeowner's Association, which will assume the expense for any and all maintenance and repairs, including snow plowing and ice removal.

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(b) **Public Roads.**

(1) Developer will provide a minimum five foot (5') parkway between the sidewalk/FUTS and the back of the curb on all public roads. The sidewalks and FUTS will be placed so that they meander.

(2) The typical section for John Wesley Powell Boulevard (hereinafter "JWP") from Lake Mary Road to the subdivision boundary will be a divided roadway (2-18' back-of-curb to edge of pavement sections) separated by a sixteen foot (16') median/twelve foot (12') turn lane. The north side of the roadway shall include a ten foot (10') paved FUTS. The Developer must also construct right and left turn lanes at intersections.

(3) The typical section of JWP through the Project subdivision must be a divided roadway (2-20' back-of-curb to back-of-curb sections [11' lane and 5' bike lane]) separated by a sixteen foot (16') median/twelve foot (12') turn lane. West of the Old Lone Tree Road the south side of the roadway must have a five foot (5') sidewalk, and the north side must have a ten foot (10') paved FUTS. East of the Old Lone Tree Road, the north side of the roadway must have a five foot (5') sidewalk, and the south side must have a ten foot (10') FUTS. A pedestrian underpass (14' x 9' minimum) must be constructed at the intersection of Lone Tree Road and JWP to connect to the FUTS, if this should be the best alternative determined by staff. The Developer must also construct right and left turn lanes at intersections.

(4) The typical section for the Old Lone Tree Road within the Project subdivision boundary will be a Type IV-A, thirty-seven foot (37') back-of-curb to back-of-curb (2-12.5' lanes with 2-4' bike lanes), five foot (5') sidewalk on the west side and a ten foot (10') paved FUTS on the east side.

(5) The typical section for Old Lone Tree Road outside the Project subdivision boundary will be thirty-two feet (32') wide from edge of pavement to edge of pavement (2-12.5' lanes with 2-4' bike lanes) and a ten foot (10') paved FUTS on the east side.

Landscaping for the medians will consist of small conifers and native greenery that is removed from the development site during construction, and specifically during construction of the proposed golf course. The City will supply water through the reclaimed water system as described herein. An easement across Forest Service land necessary for construction of JWP has been obtained as evidenced by the "Decision of Notice/Finding of no Significant Impact" issued by the Forest Service and attached hereto as **Exhibit C**. If the transplanted landscaping is not successful, the Developer will be required to landscape the medians to a 0.3 opacity, as defined in the Land Development Code.

(c) **Secondary Access.** The Developer will build a secondary access through the development as shown on the Concept Plan. Developer agrees that this

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secondary access will be constructed pursuant to City of Flagstaff design specifications for such roadways. Developer agrees that it will not transport combustible materials into the Property until such time that a temporary secondary means of access is established to the Property and meets the following criteria.

(1) The temporary access (roadway) will meet minimum width standards of at least 20 feet.

(2) The temporary access (roadway) will be comprised of the necessary all-weather compaction and material to withstand the weight of a 67,000 pound fire truck.

(3) The temporary accesses will be provided pursuant to the City of Flagstaff Fire Department standards. All temporary accesses will remain temporary until improved as set forth herein.

(d) **Reclaimed Water System.** Developer shall, subject to the Reclaimed Wastewater Agreement with the City, a copy of which is attached to this Agreement as **Exhibit D**, extend a 16" main from the 20" main at the intersection of Woodland Drive and Lone Tree Road, south on Lone Tree Road to the proposed intersection of JWP. From this point a 12" main shall be extended to the main golf course lake and another 12" main shall be extended to the regional park site. The reclaimed water system shall conform to the Reclaimed Water Impact Analysis completed by the City of Flagstaff.

(e) **Water System.** The Developer shall extend a 20" water transmission main within the alignment of JWP from Lake Mary Road to the eastern boundary of Section 27, T21N, R7E. The Developer shall also realign the existing 27" transmission main within the Project subdivision boundary. The realigned segment of this main must be replaced with a 30" pipe running north along the western boundary line of Section 16 to JWP, then northeasterly within JWP to the point where the 27" main crosses the road. The Developer must connect to the 30" and 20" water mains with a 16" waterline, which loops internally through the Project and from which various 10" and 8" water lines branch off. The water system must conform to the Fairway Peaks Golf Course Community Water and Sewer Impact Analysis produced by the City's Utilities Department and bearing an engineering seal and date of January 29, 2000 ("Water Impact Analysis").

(f) **Waste Water Collection System.**

All on-site gravity wastewater system lines shall be constructed in accordance with the City of Flagstaff Engineering Standards. Upon completion of construction and approval by the City, the Developer shall dedicate the on-site gravity wastewater system lines to the City, and the City shall assume, at its expense, the maintenance and repairs thereof. The lift stations and all pressure sewer lines shall be the sole responsibility of the Developer and/or the Homeowners Association. The

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wastewater system shall conform to the Wastewater Impact Analysis completed by the City.

(g) **Pneumatic System (Pressure Sewer System).**

The pneumatic system shall comply with the Sewer Impact Analysis.

(h) **FUTS Easement Dedication and Public Park Improvements.** As part of the development of the Project Property and to facilitate the expansion of the Flagstaff Urban Trail System (referred to herein as "FUTS"), the Developer agrees to dedicate a sixteen foot (16') wide FUTS public pedestrian easement and construct the trail system in the configuration and dimensions as depicted in the Concept Plan prior to completion of Phase IV, the fourth phase of the subdivision. The FUTS easement and trail construction will be in accordance with existing guidelines currently in place. Developer will construct a solid fence and landscaped buffer to screen the FUTS from the maintenance facility. The path within the FUTS easement will be ten feet (10') wide. Furthermore, the Developer shall construct a paved FUTS staging area and parking lot containing a minimum of twelve parking spaces prior to completion of JWP along the frontage of the subject site in the location depicted in the Concept Plan.

(i) **Avigation Easement.** Developer acknowledges that the property is within the Pulliam Airport corridor for airplane flights. As such, Developer will grant an avigation easement over the entire project for use of the Airport for airplane travel in the form set forth in **Exhibit I** attached hereto

(j) **Ingress/Egress.** Ingress and egress to and from the Project must be designed to meet Fire Department standards as previously approved by the Fire Department.

(k) **Regional Park.** The Developer acknowledges that the proposed Regional Park, as shown on the City's master plan, will be affected by this Project. The Developer agrees to contribute the sum of $285.00 per lot, parcel or dwelling unit (collectively "Lot") to be paid upon the sale of each Lot in the Project development, which sum shall constitute a lien against each respective Lot until paid, for a total of up to $333,450.00, to the City of Flagstaff Parks and Recreation Division to be used for construction of the Regional Park as described on **Exhibit E**.

City and Developer further agree that as part of this Agreement, the funds paid to City by the Developer for construction of the Regional Park will be deposited into an interest bearing escrow account ("Escrow Account") by the Developer in accordance with established City procedures. The City shall withdraw funds, including principal and interest, from the Escrow Account, from time to time, as may be needed for construction of the Regional Park. The Developer shall bear the cost of any escrow fees with respect to the Escrow Account. Such funds, including all interest, shall be reimbursed to Developer from the Escrow Account if the Regional Park has not been constructed or scheduled for construction in a City 5-year capital improvement program by the City

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within ten (10) years from the effective date of this Agreement. If for any reason the Regional Park is not constructed within five (5) years after being included in a City capital improvement program, and provided the ten (10) years as set forth above has expired, then and in that event all funds, including all interest, shall be reimbursed to Developer from the Escrow Account. Those funds will be designated as Developer's fair share contribution towards construction of the Regional Park.

(l) **Public Streets.** The Developer acknowledges that an essential nexus exists between the City's policy requiring development to pay for the costs or to construct improvements directly associated with the impact of the development on the City's street transportation system, and the City's need to maintain an acceptable level of service on its surface streets and at its intersections. Developer further acknowledges that a rough proportionality exists between the City's requirement for certain street and intersection improvements located downstream from the proposed development and the impact said development would have on those certain streets and intersections.

(m) **Lone Tree Interchange.** The Developer agrees to contribute the sum of $1,855.55 per Lot to the City upon the sale of each Lot in the Project development, which sum shall constitute a lien against each respective Lot until paid, for a total of $2,171,000.00, to be used for the construction of the Lone Tree/I-40 Interchange (the "Interchange"). The Developer will deposit the funds to be paid to the City by the Developer for construction of the Interchange into the interest bearing Escrow Account referenced above in Section 9(k). These funds will be designated as Developer's fair share contribution towards construction of the Interchange. As with the funds deposited by the Developer into the Escrow Account for the construction of the Regional Park, the City shall withdraw funds, including principal and interest, from the Escrow Account, from time to time, as may be needed for construction of the Interchange, or as the case may be, for construction of other impact mitigations described below in this Section 9(m).

The City and the Developer further agree that if the Interchange has neither been constructed by the Arizona Department of Transportation ("ADOT") nor approved through an ADOT Improvement Plan within fifteen (15) years from the effective date of this Agreement, the Developer shall be required, at its expense, to provide the City with a revised traffic impact analysis ("TIA") which addresses measurable impacts, if any, resulting from the Project development. The Developer's obligations to provide the revised TIA shall be required within six (6) months of the fifteenth (15th) year from the effective date of this Agreement. The above language notwithstanding, if at any time during said fifteen (15) year period the City determines that the Interchange will not likely be constructed, the City may require the Developer, at the Developer's expense, to provide the City with a revised TIA which addresses measurable impacts, if any, resulting from the Project development, other than impacts which would, otherwise, be addressed by construction of the Interchange. The City, in consultation with the Developer, shall determine the scope of the revised TIA and the measurable impacts, if any. Mitigation of all measurable impacts, if any, created by the Project development as a result of the failure of the Interchange to be constructed will be

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calculated and be paid from the funds contributed to the City by Developer for construction of the Interchange and deposited by the Developer into the Escrow Account.

The City and the Developer further agree that if the Interchange has neither been constructed by ADOT nor approved through an ADOT Improvement Plan with fifteen (15) years from the effective date of this Agreement, and to the extent that any funds remain after mitigation of any other measurable impacts identified in the TIA, then and in that event, any remaining funds for construction of the Interchange, including interest, shall be reimbursed to the Developer from the Escrow Account.

(n) **Subdivision Trust.** In order to guarantee payment of Developer's fair share of costs to the Parks and Recreation Department for the Regional Park, and Developer's fair share contribution of the Lone Tree/I-40 Interchange, Developer will establish a Subdivision Trust with a title company of its choosing. Upon the sale and close of escrow of each lot within the development, the property will not be transferred to the buyer through the recording of a deed or otherwise until such time as all funds are paid to the appropriate department within the City of Flagstaff representing payment of Developer's fair share costs for the construction and improvements as set forth herein.

(o) **Development Schedule.**

The City and the Developer acknowledge that the Developer may take several years to complete development of the Project. As a result of the possible time frame and in order to provide the City with a conception of the phasing and timeline for development of the Project, the Developer has prepared a Conceptual Development Phasing Schedule ("Development Schedule"), attached hereto as **Exhibit J**. The Development Schedule sets forth a general tentative phasing schedule to be followed by the Developer in construction of the Project beginning with the year 2000 through 2005. The City and the Developer acknowledge that the Developer may wish to modify the Development Schedule in order to substitute certain on-site or off-site improvements from one phase to another, or to obtain extensions as a result of unforeseen events or acts of God, or other factors not under the control of the Developer. Upon the Developer's written request to the City, and review of the request by the City's Planning Director and City Engineer and their collective conclusion that such request will have no impact to the Project or the City's policies, requirements, regulations or ordinances, or to any other applicable local, state or federal law, the City will grant the Developer's request to modify the Development Schedule. However, notwithstanding the foregoing, nothing in this paragraph concerning the Development Schedule is intended to, or shall, modify any other time periods set forth in this Agreement pertaining to any obligation of the Developer.

(p) **Public Improvement Ordinance.** All provisions of the City's public improvements ordinance shall apply.

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(q) **Water and Sewer.** Water and sewer mains and services within the Project shall be designed and installed per the City of Flagstaff's Engineering Design and Construction standards and Maricopa Association of Governments standards as modified by the City of Flagstaff. Following construction of the above described public improvements and dedication of same to the City, the City shall assume, at its expense, the maintenance and repairs of all public improvements.

(r) **One Year Warranty.** The Developer shall provide the City with a one year warranty on all public and related improvements after acceptance by the City.

10. Resource and Floodplain Protection. The Developer agrees to provide subregional on-site detention for the entire Project subdivision for the two through the one hundred year design storms. The subdivision design must consolidate the detention areas into a limited number of larger facilities. Detention facilities must be incorporated into the golf course design whenever physically possible and designed to preserve and use the natural topography. The design of the golf course will respect the natural features of the land, minimizing the need for earthmoving and reducing the need to mass clear vegetation. In this regard, the golf course has been planned from the initial stages of the Project to be sensitive to the wildlife habitat, wetland features, and natural drainage ways, and to incorporate them into the open space systems of the Project. Through these efforts, a physical framework has been established to protect and enhance existing habitats, and water resources. Through careful attention to grading, and the incorporation of adequate buffer zones, golf course drainage will be controlled and filtered to ensure the water quality of off-site drainage and ground water infiltration. These planning and design efforts in conjunction with proper management and monitoring techniques comprise the essence of Best Management Practices and will be utilized to ensure the long-term viability of the Project. The Developer and City agree that resource protection provisions as set forth in the City's Land Development Code are applicable to the entire Project. The application of said provisions and the resource calculations required to be performed by said provisions shall be applied to each phase of development as it is individually developed as opposed to the application of said provisions to the entire Project upon the development of the initial unit or component of the Project, with the exception of off-site improvements.

Additionally, and pursuant to the "Fuel Management Operational Procedures" dated June 1999, Developer has retained the services of a Professional Forester who is working with the City to perform and submit a forest stewardship plan on the site.

A proposal to address water quality and wildlife habitat issues, as well as the Best Management Practices Manual referenced above, will be submitted to the City for review prior to initial grading on the property.

11. Affordable Housing. The Developer is aware of the City of Flagstaff's affordable housing set-aside requirements upon a rezoning request for higher residential density. The project as described herein shall be constructed as a residential subdivision with up to 1,170 dwelling units with all required infrastructure improvements and homes

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for sale to owner-occupants, and as such, falls within those affordable housing set-aside procedures. Each unit will be constructed to meet or exceed HUD guidelines. The Developer, desirous to offer Affordable Properties to the City of Flagstaff, agrees as follows:

(a) **Affordable Properties.** Developer agrees to construct or cause to be constructed a minimum of 125 homes (hereinafter referred to as "Affordable Properties"). The Affordable Properties will be constructed in substantial conformance to the Floor Plan and Elevations, with the minimum standards and amenities, as outlined in **Exhibit "F"** attached hereto.

(b) **Affordable Properties Price Schedule.** The Developer agrees to offer the prices ("Developer Prices") for the Affordable Housing Properties as outlined on **Exhibit F** attached hereto. The Developer Prices were negotiated between the City and the Developer based on the need to provide homes affordable to households within the City of Flagstaff meeting City "Target Incomes".

Developer Prices will remain constant, except Developer Prices will be adjusted annually on the anniversary date of the signing of this Agreement based on the then current Construction Cost Index as prepared by the Bureau of Labor Statistics.

(c) **Eligible Buyers.** The Affordable Properties shall be sold only to households having incomes not in excess of those indicated by the City's "Affordable Housing Reference Schedules", attached hereto as **Exhibit G**, referred to as "Eligible Buyer". The City's Affordable Housing Reference Schedules correlates prices to income based on first time homebuyer underwriting standards and the prevailing mortgage interest rate for a thirty (30) year mortgage. The income is represented as a percentage of the United States Department of Housing and Urban Development Area Median Income for Coconino County ("HUD AMI").

(d) **Certification of Eligible Buyers.** The Developer, or agency designated by the Developer, will certify the income of the Eligible Buyers in accordance with the income qualification rules of the Federal HOME program or other similar standards which take into account income, adjustments to family size, and assets. The Developer agrees to allow the City to audit Developer files to verify certifications on all Affordable Properties.

(e) **Affordable Property Location.** The Affordable Properties shall be located on that certain parcel of land as described on **Exhibit H** attached hereto.

(f) **Affordable Housing Restrictive Covenant.** Affordable Properties will be sold initially with a restrictive covenant approved by the City (the "Affordability Covenant"). The Affordability Covenant for Affordable Properties shall consist of a Right of First Refusal and a lien, as more fully set forth in subparagraphs (g) and (h) below.

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(g) **Affordability Lien.** Developer will conduct an appraisal on the Affordable Properties at the time of sale. Should an appraised value of an Affordable Property exceed the Developer Price, as listed on **Exhibit F**, the Developer will record a lien on the Affordable Property for an amount equal to the difference between the appraised value and the Developer Price. Such lien will be assumed by the Eligible Buyer of the Affordable Property and will create an obligation to repay the City, or agency designated by the City. Developer agrees to submit any legal instruments related to long-term affordability to the City for review and approval before recording any such instrument.

The lien, described above, will be due and payable in one lump sum with no accrued interest upon sale, lease, refinancing, title change, or other transfer of the Affordable Property by the Eligible Buyer. The City at its sole discretion may release the lien without payment if the Affordable Properties depreciate in value.

Proceeds received by the City from the liens herein will be used solely to subsidize the subsequent purchase of Affordable Properties by Eligible Buyers or to assist other Eligible Buyers in similar housing developments meeting City Target Incomes.

(h) **Right of First Refusal.** Affordable Properties will be sold initially to Eligible Buyers with a Right of First Refusal granted by the Developer to the City, or agency designated by the City. The Right of First Refusal may be used by the City, or agent of the City, to purchase the Affordable Property and re-sell said property to another Eligible Buyer.

The beneficiary of the lien shall in all cases hold the Right of First Refusal on the Affordable Properties enabling the lien to be used both to reduce the purchase price and to help refinance the sales price of the Affordable Properties.

(i) **Enforcement.** The Final Plat shall identify the Affordable Properties by legal description and contain a notice, approved by the City, that title to Affordable Properties is subject to the terms of the Development Agreement. For the Affordable Properties, the notice shall also state: 1) the Development Agreement sets forth price controls on the initial conveyance; and 2) the Eligible Buyers may be subject to a lien obligation. If the Developer does not comply with the Development Agreement with regard to the construction and sales of Affordable Properties, the City reserves the right to withhold building or occupancy permits for any unit(s) in the development.

12. Indemnity for Environmental Matters. Developer represents and warrants that upon dedication or conveyance of any real property or real property rights to the City by the Developer pursuant to this Agreement, the condition of the real property or real property rights dedicated or conveyed will not violate any federal, state or local law, ordinance or regulation related to industrial hygiene or environmental conditions on or under the property subject to the dedication or conveyance. The Developer agrees to indemnify, defend and hold the City harmless from and against any

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and all costs and expenses of any nature, including attorneys' fees and costs, and all damages or other liability, including, but not limited to, natural resource damages, or requirements to perform, removal or remedial actions under any statute, regulation, ordinance, decree or order of any governmental agency or court, as a result of the condition of any real property or relating to rights dedicated or conveyed to the City by the Developer pursuant to this Agreement. Nothing in this Agreement shall require the City to accept any property which it has reason to believe may be contaminated by any toxin, hazardous material or waste, as those terms are defined in state or federal law. Developer agrees to keep the City informed with regards to environmental matters pertaining to the Project property.

13. Notices. Unless otherwise specifically provided herein, all notices, demands or other communications given hereunder shall be in writing and shall be deemed to have been duly delivered upon personal delivery as of the third business day after mailing by United States mail, postage prepaid, by registered or certified mail, return receipt requested, addressed as follows:

if to the City:	Attention: City Manager 211 West Aspen Avenue Flagstaff, Arizona 86001
with a copy to:	Attention: City Attorney 211 West Aspen Avenue Flagstaff, Arizona 86001
if to the Developer:	Attention: John Beerling 1121 West Warner Road, Suite 109 Tempe, Arizona 85284
with a copy to:	Tony S. Cullum Esq. Post Office Drawer X Flagstaff, Arizona 86002

Notice of change of address may be made by either party by giving notice to the other party in writing of change of address. Such notice shall be deemed to have been effectively given ten (10) days after mailed by the party changing the address.

14. General Provisions.

14.1 Amendment. This Agreement may be amended at any time by written amendment executed by both parties, which written amendment shall be recorded in the official records of Coconino County, Arizona, within ten (10) days following any such amendment.

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14.2 Assignment. The rights of Developer under this Agreement may be transferred or assigned, in whole or in part, by written instrument, to any subsequent owner of all or any portion of the Property without further consent from the City.

14.3 Authorization. The parties to this Agreement represent and warrant that the persons executing this Agreement on their behalves have full authority to bind the prospective parties.

14.4 Cancellation. This Agreement is subject to the cancellation provisions of A.R.S. Sec. 38-511.

14.5 Captions. The captions used herein are for convenience only and are not a part of this Agreement and do not in any way limit or amplify the terms and provisions hereof.

14.6 Consents and Approvals. City and Developer shall at all times act reasonably with respect to any and all matters which require either party to review, consent, or approve any act or matter herein.

14.7 Consistent With General Plan. This Agreement ensures that all development on the Property shall be consistent with the City's General Plan recommendation for the Property as required by A.R.S. Sec. 9-500.05 B.

14.8 Construction of Agreement. This Agreement has been arrived at by negotiation and shall not be construed against either party to it or against the party who prepared the last draft.

14.9 Counterparts. This Agreement may be executed in multiple counterparts, each of which shall constitute an original, but all of which together shall constitute one and the same instrument. The signature pages from one or more counterparts may be removed from such counterparts and such signature pages shall be attached to a single instrument so that the signatures of all parties may be physically attached to a single document.

14.10 Dispute Resolution.

(a) Breach of Agreement. Should either party breach any provision of this Agreement, the party alleging the breach must notify the other party in writing of the nature of the breach and the expected action to cure the deficiency. If the deficiency is not cured within 30 days of transmission of the notice, the party alleging the breach may seek the remedies set forth below, no remedy of which is intended to be mutually exclusive.

(b) Mediation. If a dispute arises out of or relates to this Agreement and if the dispute cannot be settled through negotiation, the parties agree first to try in good faith to resolve the dispute by mediation before resorting to litigation or some other

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dispute resolution procedure. Mediation will be self-administered and conducted under the procedures in use by the Alternative Dispute Resolution Program of the Coconino County Superior Court, unless the parties agree upon other procedures. Each party agrees to bear its own costs in mediation. The parties will not be obligated to mediate if any indispensable party is unwilling to join the mediation. This section does not constitute a waiver of the parties' right to arbitrate or initiate legal action if a dispute is not resolved through good faith negotiation or mediation, or if provisional relief is required under the Arizona Rules of Civil Procedure.

(c) **Litigation.** Except as otherwise agreed by the parties, any litigation brought by either party against the other to enforce the provisions of this Agreement must be filed in the Coconino County Superior Court. In the event any action at law or in equity is instituted between the parties in connection with this Agreement, the prevailing party in this action will be entitled to its costs including reasonable attorneys' fees and court costs from the non-prevailing party.

14.11 Effective Date of Agreement. This Agreement shall be effective upon the execution of the parties hereto, recordation in accordance with Section 14.21 herein, and upon expiration of thirty (30) days following the approval of the rezoning contemplated hereby by the City; provided, however, that in the event the rezoning is delayed in its effect by judicial challenge, or by referendum or injunction, the effective date of this Agreement shall be delayed until resolution or termination of such judicial challenge, referendum or injunction. In the event of judicial challenge, referendum, or injunction resulting in delay in the effect of the contemplated rezoning which extends for a period of more than one hundred eighty (180) days following its approval by the City Council, then this Agreement may be terminable by the Developer upon written notice to the City in accordance with this Agreement at any time within an additional one hundred eighty (180) days. Upon termination, this Agreement shall be of no further force or effect and neither party shall have any further obligation hereunder. Any delay relative to the effective date of this Agreement by judicial challenge, referendum, or injunction filed by parties acting independently of and not under the control of the City shall not be deemed a default hereunder by the City.

14.12 Entire Agreement. This Agreement constitutes the entire agreement between the parties hereto pertaining to the subject matter hereof and all prior and contemporaneous agreements, representations, negotiations, and understandings of the parties, whether oral or written, are hereby superseded and merged herein. The foregoing sentence shall in no way affect the validity of any instruments executed by the parties in the form of the exhibits attached to this Agreement.

14.13 Exhibits. All exhibits attached hereto are incorporated herein by reference as though fully set forth herein.

14.14 Further Acts. Each of the parties hereto shall execute and deliver all such documents and perform all such acts as reasonably necessary, from time to time, to carry out the matters contemplated by this Agreement. Without limiting the generality

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of the foregoing, the City shall cooperate in good faith and endeavor to process promptly any request and applications for plat or permit approvals or revisions, and other necessary approval relating to the development of the Property by the Developer and/or its successors.

14.15 Gender and Number. In this Agreement (unless the context requires otherwise), the masculine, feminine and neuter genders and the singular and the plural include one another.

14.16 Governing Law. This Agreement shall be governed by and construed under the laws of the State of Arizona. This Agreement shall be deemed made and entered into in Coconino County, Arizona.

14.17 Modification. No modification of this Agreement shall be deemed effective unless in writing and signed by the parties hereto, and any waiver granted shall not be deemed effective except for the instance and in the circumstances particularly specified therein and unless in writing, executed by the party against whom enforcement of the waiver is sought.

14.18 Negation of Partnership. The parties specifically acknowledge that the Project will be developed as private property, that neither party is acting as the agent of the other in any respect hereunder, and that each party is an independent contracting entity with respect to the terms, covenants, and conditions in this Agreement. None of the terms or provisions of this Agreement are intended to create a partnership or other joint enterprise between the parties.

14.19 No Obligation to Develop Property. Except as specifically set forth herein, nothing contained herein shall be deemed to obligate the City or the Developer to complete any part or all of the development of the Property.

14.20 No Third Party Beneficiaries. The City and Developer acknowledge and agree that the terms, provisions, and conditions hereof are for the sole benefit of, and may be enforceable solely by, the City and Developer, and none of such terms, provisions, conditions, and obligations are for the benefit of or may be enforced by any third party.

14.21 Recordation of Agreement. In accordance with A.R.S. Sec. 9-500.05 D, this Agreement shall be recorded in its entirety in the official records of the Coconino County Recorder no later than ten (10) days from the date of its execution by the City.

14.22 Recitals. The recitals set forth at the beginning of this Agreement are acknowledged by the parties to be true and correct and are incorporated herein by reference.

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14.23 Rights Run With the Land. Upon recordation of this Agreement in accordance with Section 14.21 of this Agreement, all rights and obligations shall constitute covenants that run with the land and are binding on all successors-in-interest, except as otherwise provided in Section 14.27 of this Agreement.

14.24 Severability. In the event that any phrase, clause, sentence, paragraph, section, article, or other portion of this Agreement shall become illegal, null, or void or against public policy, for any reason, or shall be held by any court of competent jurisdiction to be illegal, null, or void or against public policy, the remaining portions of this Agreement shall not be affected thereby and shall remain in full force and effect to the fullest extent permissible by law.

14.25 Successors and Assigns. All of the covenants and conditions set forth herein, shall inure to the benefit of and shall be binding upon the successors-in-interest of each of the parties hereto.

14.26 Term. The term of this Agreement shall commence on the effective date of this Agreement as defined in Section 14.11 herein, and shall automatically terminate on the tenth (10th) anniversary of such date, unless previously terminated pursuant to Section 1 of this Agreement, or as otherwise agreed by the parties in writing.

14.27 Termination Upon Sale to Public. Notwithstanding the provisions set forth in Section 14.23 above, it is the intention of the parties that this Agreement shall automatically terminate without exception or recordation of any further document or instrument as to any lot or parcel which has received site/subdivision approval and individually (and not in "bulk" as defined under Arizona law) leased for a period of one year or longer or sold to the purchaser or user thereof, and with respect to which the Developer's Regional Park contribution in the sum of $285.00 per lot and the Developer's contribution in the sum of $1,855.55 per lot for construction of the Lone Tree/I-40 Interchange have been paid to the City as set forth above. Upon the occurrence of the aforementioned events, said lot or lots shall be released from and no longer be subject to or burdened by the provisions of this Agreement.

14.28 Time of the Essence. For purposes of enforcing the provisions of this Agreement, time is of the essence.

14.29 Waiver. No waiver by either party of a breach of any of the terms, covenants, or conditions of this Agreement shall be construed or held to be a waiver of any succeeding or preceding breach of the same or any other term, covenant or condition herein contained. Nothing herein or in the Stipulations shall constitute or be deemed to be a waiver by the Developer of its right to request future rezonings or changes in development standards for all or any portion(s) of the Property pursuant to City procedures and requirements existing at the time of the request. Nothing herein contained shall be deemed to be a waiver by the City of the right to act, by approval or denial, on

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such rezoning or change, to the extent such action would not otherwise be in breach of this Agreement.

15. Zuni Heights Access. Developer is aware of the City's approval of the Zuni Heights Development ("Zuni Heights") located immediately to the north of the proposed Project. Approval of Zuni Heights included the necessity for Zuni Heights to obtain right-of-ways and/or easements for construction of roadways through the property, which roadways will connect with the proposed Project. Developer herein agrees that, as shown on the Concept Plan, access will be provided to Zuni Heights. The cost of such access will be negotiated by Developer and Zuni Heights, and upon the acquisition of those right-of-ways and/or easements by Zuni Heights, the Developer will provide access through the proposed Project.

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IN WITNESS WHEREOF, the City has caused this Agreement to be duly executed in its name and on its behalf by its Mayor and its seal to be hereunder duly affixed and attested by its City Clerk, and the Developer has signed the same on or as of the day and year first above written.

CITY:

CITY OF FLAGSTAFF, an Arizona municipal corporation

By: _____
Mayor

ATTEST:

By: _____
City Clerk

APPROVED AS TO FORM:

By: _____
City Attorney

DEVELOPER:

VANDERBILT FARMS, L.L.C., an Arizona limited liability company

By: _____
Title: _____

SAN FRANCISCO PEAKS ASSOCIATES, L.P.

By: _____
Title: _____

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STATE OF ARIZONA)
) ss.
COUNTY OF COCONINO)

On this 5th day of July, 2000, before me the undersigned Notary Public personally appeared JOHN BEERLING known to me as the person whose name is subscribed to the within instrument and acknowledged that he executed the same on behalf of Vanderbilt Farms, L.L.C., an Arizona limited liability company, for the purposes contained therein.

IN WITNESS WHEREOF, I have hereunto set my hand and official seal.

Crismon Cooper
Notary Public

My Commission Expires:
11/12/03

OFFICIAL SEAL
CRISMON COOPER
NOTARY PUBLIC - STATE OF ARIZONA
COCONINO COUNTY
My commission expires Nov. 12, 2003.

ACKNOWLEDGMENT

The foregoing Development Agreement was acknowledged before me this 10th day of July, 2000 by Eva Sperber-Porter, the Executive Vice-President of Ponderosa Pines Land Corporation, the general partner of San Francisco Peaks Associates Limited Partnership, on behalf of the limited partnership.

OFFICIAL SEAL
SALLY F. PERL
NOTARY PUBLIC - ARIZONA
MARICOPA COUNTY
My Comm. Expires Nov. 29, 2002

Sally F. Perl
Notary Public

My commission expires:
11/29/02

EXHIBITS TO DEVELOPMENT AGREEMENT

Exhibit "A"	Legal Description of Property
Exhibit "B"	Concept Plan
Exhibit "C"	USDA Forest Service Decision of No Significant Impact
Exhibit "D"	Reclaimed Wastewater Agreement
Exhibit "E"	Location of Proposed Regional Park
Exhibit "F"	Developer's Affordable Prices
Exhibit "G"	Affordable Housing Reference Schedules
Exhibit "H"	Legal Description of Affordable Properties
Exhibit "I"	Avigation Easement Agreement
Exhibit "J"	Conceptual Development Phasing Schedule

EXHIBIT "A"

COCONINO ENGINEERING
2708 NORTH FOURTH STREET, SUITE A1
FLAGSTAFF, ARIZONA 86004
PHONE: 520.527.1008 FAX: 520.527.1805

Project No. 96901.01
January 27, 2000

EXHIBIT A

LEGAL DESCRIPTION
FOR FAIRWAY PEAKS
(Attachment to Development Agreement)

PARCEL 1

All of Section 34 of Township 21 North, Range 7 East, Gila and Salt River Meridian, in the City of Flagstaff. Coconino County, Arizona, EXCEPT the Southwest quarter of the Southwest quarter (SW¼ SW¼) thereof.

Containing approximately 606.454 Acres

PARCEL 2

A portion of that parcel of land described in Docket 1551, Page 396, Records of Coconino County, Arizona. located in the Southeast quarter of Section 27, Township 21 North. Range 7 East, Gila and Salt River Meridian, within the limits of the City of Flagstaff, Coconino County (R.C.C.). Arizona, more particularly described as follows:

Commencing at the Southeast Corner of said Section 27, from whence the South quarter Corner (S¼ Cor) of said Section 27 bears S 89°58'16" W a distance of 2656.62 feet (Basis of Bearings); Thence S 89°58'16" W. along the South line of the said Southeast quarter, a distance of 1920.91feet to the TRUE POINT OF BEGINNING;

Thence continue S 89°58'16" W, along the South line of the said Southeast quarter, a distance of 74.88feet to a non-tangent point of curvature of a curve concave to the Northwest; from whence the radius point bears N 11°06'10" W a distance of 4,360.80 feet;

Thence Northeasterly along the arc of said curve a distance of 491.27 feet, through a central angle of 06°27'17" to a point of tangency;

Thence N 72°26'33" E a distance of 57.43 feet;

Thence N 03°54'07" E a distance of 116.74 feet;

(Continued on Page 2)

Thence N 22°42'39" W a distance of 643.28 feet;

Thence N 52°03'09" E a distance of 1,157.83 feet;

Thence N 77°43'18" E a distance of 172.16 feet;

Thence S 27°25'34" E a distance of 707.70 feet to a non-tangent point of curvature of a curve concave to the Southeast, from whence the radius point bears S 47°22'42" E a distance of 1776.75 feet;

Thence Southwesterly along the arc of said curve a distance of 125.48 feet through a central angle of 04°02'47" to a point of tangency;
Thence S 38°34'31" W a distance of 350.00 feet to a point of curvature of a curve to the right, having a radius of 1140.00 feet;

Thence 673.85 feet along the arc of said curve, through a central angle of 33°52'02" to a point of tangency;

Thence S 72°26'33" W a distance of 387.89 feet to a point of curvature of a curve to the right, having a radius of 4375.80 feet;

Thence 419.47 feet along the arc of said curve, through a central angle of 05°29'33" to the Point of Beginning being a point on the South line of the said SE¼ of Section 27, also being a point on the South boundary of that parcel of land described in said Docket 1551, Page 396, R.C.C.;

Containing approximately 26.644 acres.

PARCEL 3

A portion of that parcel of land described in Docket 1551, Page 396, Records of Coconino County, Arizona, located in the Southeast quarter of Section 27, Township 21 North, Range 7 East, Gila and Salt River Meridian, within the limits of the City of Flagstaff, Coconino County (R.C.C.), Arizona, more particularly described as follows:

BEGINNING at the Southeast Corner of said Section 27, from whence the South quarter Corner (S¼ Cor) of said Section 27 bears S 89°58'16" W a distance of 2656.62 feet (Basis of Bearings); Thence S 89°58'16" W, along the South line of the said Southeast quarter, a distance of 1,455.78 feet;

Thence N 72°26'33" E a distance of 363.19 feet to a point of curvature of a curve to the left having a radius of 1,260.00 feet;

Thence 744.78 feet along the arc of said curve through a central angel of 33°52'02" to a point of tangency;

(Continued on Page 3)

Thence N 38°34'31" E a distance of 350.00 feet to a point of curvature of a curve to the right, having a radius of 1,656.75 feet;

Thence along the arc of said curve a distance of 369.84 feet more or less, through a central angle of 12°47'24" more or less, to a point on the East line of the said SE¼ of Section 27, being also a point on the East boundary of that parcel of land described in said Docket 1551, Page 396, R.C.C.;

Thence S 01°22'39" E along said East line and boundary, a distance of 1,059.51 feet to the Point of Beginning

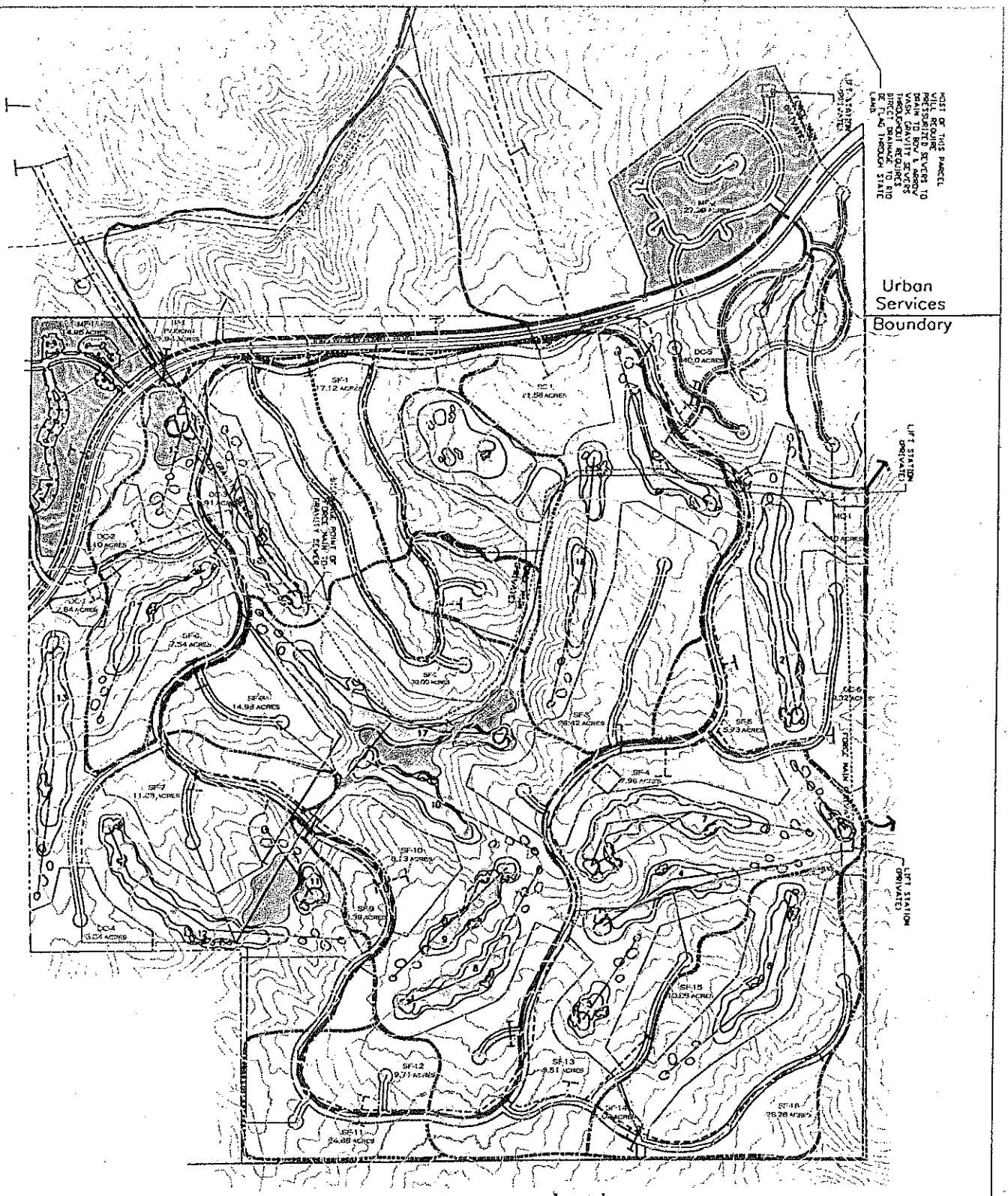
Containing approximately 13.465 acres.

Containing in aggregate 646.563 acres.

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
23372
NICHOLAS
GABRIEL, III
1-27-2000
Date Signed
ARIZONA, U.S.A.

NICHOLAS GABRIEL, III
R.L.S. 23372

EXHIBIT "B"



Legend

- Public Pedestrian Trail
- Public Bicycle Trail
- Public F.U.T.S. Trail
- Sewer - Forced Main
- Sewer - New 8" Sanitary
- Sewer - Existing
- Water - Future
- Water - Effluent
- Drainage

NORTH

4/17/2000

Scale: 1"=900'

Fairway Peaks

Figure 6: Development Master Plan

FOR LOCATION PURPOSES ONLY

Redstone
Development Services

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LAND USE SUMMARY TABLE FOR FAIRWAY PEAKS

Parcel	Acre	Lots	DU/ Acre
SF-1	17.12	41	2.39
SF-2	30.09	72	2.39
SF-3	28.42	67	2.36
SF-4	7.96	19	2.39
SF-5	5.73	13	2.27
SF-6	7.54	18	2.39
SF-7	11.03	26	2.36
SF-8	14.98	36	2.40
SF-9	3.39	8	2.36
SF-10	8.13	20	2.46
SF-11	24.98	56	2.24
SF-12	19.71	45	2.28
SF-13	6.51	15	2.30
SF-14	1.03	2	1.94
SF-15	10.88	26	2.39
SF-16	27.32	60	2.20
Subtotal	**224.82**	**524**	
DC-1	2.57	14	5.45
DC-2	5.00	28	5.60
DC-3	0.91	5	5.49
DC-4	5.84	32	5.48
DC-5	40.00	180	4.50
DC-6	9.32	52	5.58
Subtotal	**63.64**	**311**	
MF-1	14.95	210	14.05
MF-2	27.99	125	4.47
Subtotal	**42.94**	**335**	
P-1	1.94		
RC-1	11.58		
MC-1	2.10		
Golf & ROW	303.86		
Subtotal	**319.48**		
Total	**650.88**	**1170**	

Worksheet in planning-16.xls

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EXHIBIT "C"

DECISION NOTICE/FINDING OF NO SIGNIFICANT IMPACT

Segment of Fourth Street Extension

USDA Forest Service
Coconino National Forest
Coconino County, Arizona

An Environmental Assessment (EA) for the construction of the second phase of the Fourth Street Extension across National Forest System land is available for review at the Forest Supervisors Office located at 2323 East Greenlaw Lane, Flagstaff, Arizona. The EA was prepared by SWCA, Inc. and reviewed by a Forest Service Interdisciplinary Team. The proposed construction is consistent with the City of Flagstaff's Master Plan 2000.

There was very little difference between the four alternatives examined by the report. Alternative A was eliminated from consideration in the report because it did not adequately address the purpose and the need of the proposed project.

- Alternative B would require the most cut and fills.

- Alternative C would cost the most to construct.

- Alternative D affects more City of Flagstaff land and less National Forest Land, however the total impacts are very similar to alternatives B & C.

- Alternative E would create the least amount of cuts and fills and would cost the least to construct.

- Alternative F, the no action alternative did not meet the objectives of the assessment.

It is my decision to select Alternative E. An easement for this route will be issued to the City of Flagstaff. A temporary special-use permit for construction may be issued in the interim, pending issuance of the easement.

I did not select the other alternatives because of the higher cost and greater impacts. Alternative B and D would create two separate corridors, one for the road and one for the water and sewer. Alternative C would cost approximately $100,000 more to construct.

Alternative F is the environmentally preferred alternative because it is the only alternative that does not have some environmental impacts. However, it was not selected because it does not meet the transportation objectives of the City of Flagstaff's Master Plan 2000.

I have determined through the environmental assessment that this is not a major Federal action that would significantly affect the quality of the human environment; therefore, an environmental impact statement is not needed. This determination is based on the following factors:

1. There are minimal irreversible resource commitments and irretrievable loss of timber production.

2. There are no significant cumulative effects.

3. The physical and biological effects are limited to the area of planned activity.

4. No known threatened or endangered wildlife or plants are affected.

5. The proposal is within the scope of the Coconino National Forest Plan.

This decision may be implemented immediately.

This decision is subject to administrative review in accordance with the provisions of 36 CFR 211.18. Notice of appeal must be made in writing and submitted to Neil Paulson, Forest Supervisor, 2323 East Greenlaw Lane, Flagstaff, Arizona 86004, within 45 days from the date of this decision. A statement of reasons to support the appeal and any request for oral presentation must be filed within the 45-day period for filing a notice of appeal.

for NEIL R. PAULSON
Forest Supervisor

10/31/88
Date

EXHIBIT "D"

H2000-0307.1

RECLAIMED WASTEWATER AGREEMENT

This Agreement is made and entered into this 7th day of March, 2000, by and between the CITY OF FLAGSTAFF, ARIZONA (hereinafter "City"), a municipal corporation of the State of Arizona, whose address is 211 West Aspen Avenue, Flagstaff, Arizona 86001, and VANDERBILT FARMS, L.L.C., an Arizona limited liability company, and/or nominee, whose address is 1121 West Warner Road, Suite 109, Tempe, Arizona 85284 (hereinafter "Reuser").

WHEREAS, Reuser agrees to purchase from the City treated sewage effluent from the City of Flagstaff Wastewater Treatment Plant(s) to be used for irrigation of a golf course proposed to be constructed at a new housing development located within the City of Flagstaff; and

WHEREAS, City agrees to sell treated wastewater effluent to Reuser subject to the following terms and conditions; and

NOW, THEREFORE, for and in consideration of the mutual promises and obligations of the parties, the parties agree as follows:

AGREEMENT

1. **Definitions.**

A. **Effluent:** Wastewater that has completed its passage through a wastewater treatment process.

B. **Open Access Irrigation Site:** A reclaimed wastewater irrigation site where access by the general public is uncontrolled.

C. **Point of Delivery:** A location designated by the City for acceptance and measuring of the reclaimed wastewater by the Reuser. The point of delivery may include a vault, pit, meter, valves, and other appurtenances necessary to meter reclaimed water to the Reuser

D. **Potable Water:** Water that does not contain pollution, contamination, objectionable minerals, or infective agents and is considered satisfactory for domestic consumption.

E. **Reclaimed Wastewater:** Effluent which meets the standards for the specific reuses contained in the Arizona Administrative Code R18-9-703.

2. **Regulation.** Reclaimed wastewater as used in this contract shall refer to effluent which meets the standards for specific reuses contained in the Arizona Administrative Code R18-9-703 that is produced at the City of Flagstaff Wastewater Treatment Plant(s). All deliveries of reclaimed wastewater shall be made in accordance with City's ordinances, rules, and regulations. Reuser shall obtain any additional City, State, or Federal permits for the use of reclaimed wastewater for irrigation of open access landscaped areas should such permits become necessary in the future. As a courtesy and not as an obligation, the City will endeavor to advise Reuser of any such permit requirements of which it becomes aware. Reuser shall use such reclaimed wastewater in accordance with the applicable laws of the United States of America (including, but not limited to, the regulations of the Environmental Protection Agency), the State of Arizona, and the Rules and Regulations of the Arizona Department of Environmental Quality; provided, however, that in the event any such laws or regulations shall be amended in the future so as to make it impossible or infeasible for Reuser to use the reclaimed wastewater, Reuser at its option, shall have the right to cancel and terminate this Agreement upon giving thirty (30) days' notice in writing to the City. Reuser shall also abide by the conditions of the City's permit for reuse of reclaimed wastewater (issued by the State of Arizona to the City) and agrees to comply with the following requirements:

A. Hose bibs discharging reclaimed wastewater shall be secured to prevent any use by the public.

B. Irrigation pipe shall be color coded, buried with colored tape, or otherwise suitably marked to indicate nonpotable water.

C. Areas shall be irrigated only at such times as to minimize contact with the public and be reasonably dry and free from standing or ponding water during normal usage.

D. Signs reading "Irrigation with reclaimed wastewater, do not drink" or similar warnings shall be prominently displayed at each reuse site. Signs shall be placed at all logical points of entry to the site, at the entrance to all lakes and ponds, all plumbing outlets, golf score cards and hose bibs providing reclaimed water.

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E. Drinking water fountains, potable water hose bibs, and private residences shall not be exposed to the mist from sprinklers.

F. Irrigation of orchards, fruit, or vegetables shall not be allowed with reclaimed wastewater.

3. **Reclaimed Wastewater Quality.** City hereby agrees to provide reclaimed wastewater under this Agreement that meets the quality requirements of the Reclaimed Wastewater Reuse Permit issued by the Arizona Department of Environmental Quality to the City of Flagstaff. City represents it is now and will attempt to remain in compliance with all regulatory and health and water laws, rules, and regulations applicable to wastewater discharge. Reuser acknowledges that the reclaimed wastewater supplied under this Agreement is not intended nor offered for potable use. Reclaimed wastewater delivered under this Agreement shall not be directly or indirectly utilized or transferred for uses other than irrigation of open access landscaped areas owned or controlled by Reuser without the prior written consent of the City. Reuser shall not be obligated to accept delivery of or to pay for inadequately treated wastewater which cannot, as received, be lawfully used for irrigation of open access landscaped areas in accordance with the Rules and Regulations of the Arizona Department of Environmental Quality. Reuser assumes all risks and liabilities in connection with the use of reclaimed wastewater which meets the quality requirements of the City's Reclaimed Wastewater Reuse Permit described above and agrees that its remedies against the City for any breach by the City are limited to refusal to accept delivery except to the extent that any breach by the City is a result of its own negligence.

4. **Responsibility for Damage.** City shall not be liable for any damage to Reuser or its property resulting from curtailment, interruption, or apportionment of supply of reclaimed wastewater occasioned by necessary repairs or maintenance of City's sewerage system, threatened or actual reclaimed wastewater shortage or other causes beyond the City's control.

5. **Contract Term.** The term of this Agreement shall be for a period of five (5) years from the date reclaimed wastewater is made available to the Reuser at the point of delivery. As long as reclaimed water is available to the City of Flagstaff through its reclaimed water system to meet the requirements of this Agreement, this Contract will automatically renew every five (5) years for a total of twenty (20) years, subject to the terms set forth in Paragraphs 3 and 7 of this Agreement. At the end of the twenty-year automatic renewals, Reuser may exercise options to

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renew the Agreement for the use of reclaimed wastewater for additional five (5) year extensions as long as reclaimed water is available to the City of Flagstaff through its reclaimed water system to meet the requirements of this Agreement and subject to the terms set forth in Paragraphs 3 and 7 of this Agreement. All options to renew this Agreement shall be exercised in writing forty-five (45) days prior to the expiration of the term of this Agreement and be contingent on City receiving renewal of its permit for reuse of reclaimed water from the Arizona Department of Environmental Quality and the Reuser fulfilling the requirements of this Agreement. The terms of renewal of this Agreement shall be subject to any City, State and Federal regulations in effect at the time of renewal and such renewal shall not be unreasonably withheld. It is expressly understood and agreed by City and Reuser that Reuser has pending with the City an application to rezone the property upon which the reclaimed wastewater will be used. Should such rezoning request be denied by the City Council of the City of Flagstaff, this Agreement shall become null and void.

6. **Reclaimed Wastewater Rate.** Reuser agrees to pay the City for the treatment and delivery of all reclaimed wastewater acquired at the point of delivery. The rate shall be that rate established by the Flagstaff City Council and identified in the City Code of Flagstaff, Arizona. For the term of this Agreement the rate shall not exceed, on a per gallon basis, seventy-five (75%) percent of the then current commodity rate charged by the City for the sale of potable water used on the property. In addition, Reuser agrees to pay any applicable taxes, fees or surcharges that regulatory agencies may impose on reclaimed wastewater. Reuser may recapture the costs directly attributable to converting an existing irrigation system to use reclaimed wastewater or extending public reclaimed wastewater pipelines up to the point of delivery over a period of ten (10) years. Said costs shall be agreed to by the City and Reuser prior to delivery of reclaimed wastewater and may be recovered by the Reuser through an annual rebate of ten (10%) percent of the total agreed to costs of the extension and/or conversion up to the point of delivery. The rebate for the recovery of said costs shall be paid to the Reuser by the City annually starting from the end of the first year of actual use by the Reuser of reclaimed wastewater. Cost recovery after the cessation of use shall not be allowed in the event Reuser ceases to use reclaimed wastewater or by any non-performance of this Agreement which non-performance is not cured within thirty (30) days after written notice thereof is received by Reuser. If City either fails to provide reclaimed wastewater that meets the water quality requirements of this permit, or reclaimed wastewater is not available to the Reuser and the City's performance is not excused pursuant to Paragraph 19, Excusable Non-

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Performance, cost recovery shall continue to the Reuser for that period of time reclaimed wastewater is not available. Examples of said costs include installation and materials required for underground piping, meters, vaults, valves, and other appurtenances necessary to convert existing irrigation systems to use reclaimed wastewater.

7. **Default.** Subject to the provisions of Paragraph 23, Dispute Resolution, in the event Reuser fails to make any payment when due or is in default of any other provision of this Agreement, the City may notify Reuser of the default in writing, and if Reuser does not cure the default within thirty (30) days of receipt of the notice, the City may upon written notice thereof to Reuser, cease delivery of reclaimed water to Reuser, and cease making any remaining rebate payments to Reuser until such default is cured. The above, notwithstanding, the City shall have all remedies available at law or in equity, including, but not limited to, specific performance. In the event that the City is in default of any provision of this Agreement, Reuser may notify the City of the default in writing, and if the City does not cure the default within thirty (30) days of receipt of the notice, Reuser shall have all remedies available at law and in equity including, but not limited to, specific performance.

8. **Insurance.** Reuser shall provide the City of Flagstaff with a certificate of insurance that shall be kept in force for the duration of the Agreement to cover any liability arising from the acts and omissions of the Reuser. The certificate of insurance shall be for general liability coverage in the amount of one million ($1,000,000) dollars and shall name the City as an additional insured and provide no less than ten (10) days notice to the City prior to cancellation.

9. **Use of Reclaimed Wastewater by Others.** Reuser agrees that this Agreement shall not restrict the right of the City to use reclaimed wastewater for City operations or sell reclaimed wastewater to others.

10. **Amount of Effluent.** To the extent that the operation of the City of Flagstaff wastewater treatment plant(s) shall produce any reclaimed wastewater for users of the City and subject to the Paragraph 19, Excusable Non-Performance, the amount of reclaimed wastewater available for delivery to Reuser shall be a minimum of 125,000,000 gallons per year, which the City agrees shall not be an obligation of Reuser to purchase said minimum amount but is provided solely to guarantee that the City will provide a minimum of 125,000,000 gallons per year. If Reuser uses less than 125,000,000 gallons per year, City is not obligated to hold such

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amount for Reuser's use and shall use such reclaimed wastewater for any purpose it deems necessary. Further, the amount of reclaimed wastewater may not be restricted up to the maximum flow specified in the water balance section of the City's Reclaimed Wastewater Reuse Permit, providing the requirements of this Agreement are met by Reuser. A copy of the water balance for the uses identified in this Agreement is included as Exhibit "A".

11. **Operation, Maintenance and Replacement Costs.** The operation, maintenance and replacement costs for that portion of the conveyance system for the reclaimed wastewater to the point of delivery (as defined in Paragraph 1 of this Agreement under "Definitions" and specified in Paragraph 12 below) shall be the responsibility of the City. The operation, maintenance and replacement costs of the conveyance system beyond the point of delivery shall be the responsibility of the Reuser.

12. **Point of Delivery.** The vault, pit, meter, valves, and other appurtenances that constitute the point of delivery (as defined in Paragraph 1 of this Agreement under "Definitions"), and as depicted on Exhibit "B" attached hereto and made a part hereof, shall be installed by the Reuser and shall become the property of the City ("Point of Delivery"). The Reuser shall require that its contractor warranty all pipelines, vaults, pits, meters, valves, and other appurtenances installed by the contractor of the Reuser for a period one (1) year from the date of final acceptance by the City. All appurtenances associated with the Point of Delivery shall be constructed and installed in accordance with City engineering standards or shall otherwise be approved by the City. Reuser may recapture costs of installing said metering appurtenances in accordance with Paragraph 6 of this Agreement.

13. **Acceptance and Transmission of Reclaimed Wastewater.** Reuser assumes all costs of and responsibility for transportation of the reclaimed wastewater by means of a conveyance system downstream of the Point of Delivery, which shall be constructed, owned, operated, and maintained by Reuser.

14. **Protection of City Potable Water System.** Reuser agrees to install City approved backflow prevention devices at all potable water service connections to the property served by the point of delivery. Such backflow prevention device(s) shall be installed, tested, and operational prior to the delivery of reclaimed wastewater to the Reuser by the City. Such backflow prevention device(s) shall be tested annually at Reuser's expense, and verification of such testing shall be provided to the City. Backflow prevention testing shall be done by a

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certified backflow prevention device tester in accordance with City regulations. The costs to the Reuser for the installation of such devices shall be considered part of the cost of converting the water system to use reclaimed wastewater unless such backflow devices would normally be required in accordance with State of Arizona regulations. The cost to the Reuser for the annual testing of backflow prevention devices shall not be considered part of the cost of converting the water system to use reclaimed water.

If potable water is used for irrigation at the reuse site, a dye test shall be performed on the reuse system that demonstrates to the satisfaction of the Coconino County Health Department that no cross-connections with potable water exist. This test shall be performed by the City prior to the delivery of reclaimed wastewater to the reuse site. This requirement does not apply to reuse facilities specifically designed to use reclaimed wastewater. A color coding system shall be used on all new piping and outlets to prevent any accidental cross-connection between the potable and reuse water supplies. The color code shall conform to the standards set forth by the Coconino County Health Department. Should a County color code not exist, purple shall be used for all reuse plumbing.

15. **Location of Improvements**. Any future Reuser conveyance line and associated easements therefor on City property shall be located so as not to interfere with present or future City operations and the location of all such improvements shall be approved, in advance and in writing, by the City.

16. **Limitations on Use.** Reuser shall use reclaimed wastewater in accordance with the terms of this Agreement and only within its boundaries. Reuser shall not sell reclaimed wastewater within or without its boundaries to other users. Reuser has identified the specific reuse locations subject to this Agreement as the following:

For the golf course located within the proposed development.

The aforesaid location shall be shown on a plot plan, identified as Exhibit "B" and included with this Agreement. The plot plan shall identify the irrigation system, containment structures (10-year, 24-hour storm), storm water flow paths, and protection of the drinking water facilities. Approval for extensions of reclaimed wastewater pipelines and uses for irrigation of areas other than those identified in Exhibit "B" must be requested in writing by the Reuser and incorporated into this Agreement by Amendment along with an additional plot plan.

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17. **Disposal of Excess Reclaimed Wastewater.** Excess reclaimed wastewater not used for irrigation by the Reuser shall be disposed of in the City's sanitary sewer system after notification to the City by the Reuser and approval by the City. Reuser shall notify the City Utilities Department Wastewater Treatment Division in writing of a request to discharge reclaimed wastewater into the City sanitary sewer system.

18. **Successors and Assigns.** This Agreement shall be binding upon the successors and assigns of the City and Reuser, but shall not be assigned by Reuser absent written consent of City, which consent shall not be unreasonably withheld, and a legally enforceable contract between Reuser and assignee, filed with the Arizona Department of Environmental Quality, which notifies and obligates the assignee of the requirements of this Agreement.

19. **Excusable Non-Performance.** In the event of an Act of God, natural catastrophe, war, civil insurrection, accidents, acts of governmental or judicial bodies other than the City, the failure of either party to perform its obligation under this Agreement shall be excused so long as the condition interfering with performance continues.

20. **Severability.** In the event any portion of this Agreement shall be determined to be invalid, such invalidity shall not render the remaining portions of this Agreement void unless the deletion of the invalid portion shall materially and substantially alter the rights of the parties under the remaining portions of this Agreement.

21. **Cancellation for Conflict of Interest.** This Agreement may be cancelled by City or by Reuser for conflict of interest in accordance with A.R.S. Sec. 38-511.

22. **Fees.** City agrees to not charge Reuser for building inspection, building permit or other fees in connection with Reuser's construction and installation of any pipes, structures or other appurtenances necessary to accept, distribute and dispose of any reclaimed wastewater under this Agreement.

23. **Dispute Resolution.**

A. **Mediation.** If a dispute arises out of or relates to this Agreement and if the dispute cannot be settled through negotiation, the parties agree first to try in good faith to resolve the dispute by mediation before resorting to litigation or some other dispute resolution procedure. Mediation will be self-administered and conducted under

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the procedures in use by the Alternative Dispute Resolution Program of the Coconino County Superior Court, unless the parties agree upon other procedures. Each party agrees to bear its own costs in mediation. The parties will not be obligated to mediate if any indispensable party is unwilling to join the mediation. This section does not constitute a waiver of the parties' right to arbitrate or initiate legal action if a dispute is not resolved through good faith negotiation or mediation, or if provisional relief is required under the Arizona Rules of Civil Procedure.

B. **Litigation.** Except as otherwise agreed by the parties, any litigation brought by either party against the other to enforce the provisions of this Agreement must be filed in the Coconino County Superior Court. In the event any action at law or in equity is instituted between the parties in connection with this Agreement, the prevailing party in this action will be entitled to its costs including reasonable attorneys' fees and court costs from the non-prevailing party.

24. **Entire Agreement.** This Agreement constitutes the entire agreement between the parties hereto pertaining to the subject matter hereof and all prior and contemporaneous agreements, representations, negotiations, and understandings of the parties, whether oral or written, are hereby superseded and merged herein. The foregoing sentence shall in no way affect the validity of any instruments executed by the parties in the form of the exhibits attached to this Agreement.

25. **Modification.** No modification of this Agreement shall be deemed effective unless in writing and signed by the parties hereto, and any waiver granted shall not be deemed effective except for the instance and in the circumstances particularly specified therein and unless in writing, executed by the party against whom enforcement of the waiver is sought.

26. **Severability.** In the event that any phrase, clause, sentence, paragraph, section, article, or other portion of this Agreement shall become illegal, null, or void or against public policy, for any reason, or shall be held by any court of competent jurisdiction to be illegal, null, or void or against public policy, the remaining portions of this Agreement shall not be affected thereby and shall remain in full force and effect to the fullest extent permissible by law.

27. **Waiver.** No waiver by either party of a breach of any of the terms, covenants, or conditions of this Agreement shall be construed or held to be a waiver of any succeeding or proceeding breach of the same or any other term, covenant or condition herein contained.

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IN WITNESS WHEREOF, the parties hereto have hereunto set their hands the day and year first above written.

CITY:

CITY OF FLAGSTAFF, an Arizona municipal corporation

By: _____
Christopher J. Bavasi
Mayor

ATTEST:

By: _____
City Clerk

APPROVED AS TO FORM:

By: _____
City Attorney

REUSER:

VANDERBILT FARMS, L.L.C., an Arizona limited liability company

By: _____
Title: John Beerling, Authorized Agent

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Site name:	FAIRWAY PEAKS
Location:	FLAGSTAFF, ARIZONA
System average daily flow: (MG/D)	0.0830
Yearly evaporation rate: (in/year):	57.90
Total lake and free water surface area:	6.75
Landscape acreage:	130.00
Summer crop:	Kentucky Blue grass
Winter crop:	Rye grass
Estimated Storage required (gal./mo.):	5,901,771,926
Water balance total/year:	2,537,497,702

A positive value indicates insufficient water usage, a negative value is indicated by (parentheses).

	K Value	% Daytime hours	Mean monthly temperature (F)
January	0.65	7.05	28.7
February	0.70	6.89	31.5
March	0.75	8.36	35.3
April	0.75	8.82	42.3
May	0.74	9.52	50.4
June	1.06	9.76	59.8
July	1.17	9.93	66.3
August	1.10	9.37	64.1
September	0.90	8.36	57.3
October	0.80	7.87	47.2
November	0.75	6.98	36.8
December	0.75	6.86	29.6

	Number of trees in project area:	Gallons per day used per tree:	Total consumptive usage per day:
Cottonwood	0	400	0
Fan palm	0	40	0
Oleander	0	10	0
Eucalyptus	0	0	0
Pine	44	50	2200
Olive	0	130	0
Misc.	0	50	0
Desert	0	50	0
Rhus	0	20	0
Totals:	44		2200

Basis for calculations: Blaney, H.F., and Criddle, W.D., 1962, Determining Consumptive Use Irrigation Water Requirements. USDA Technical Bulletin Number 1275, 59 pages.

References: 1. Arizona State University, Climatology Department: 2. University of Arizona 3. USDA Consumptive Use of Water by Major Crops in the Southwestern United States, Conservation Research Report Number 29, May 1982.

	Monthly effluent available: gallons:	Rainfall inches per month:	Rainfall gallons per month:	Total evaporation: gallons per month:	System leakage and percolation if allowable: gallons per month:	Consumptive use of grasses: inches per acre:	Consumptive use of grasses: gallons per month:	Consumptive use of trees: gallons per month:	Total landscape water demand: gallons per month:	Total water available: gallons per month:	Net water balance: gallons per month:
January	124,000,000	1.87	6,943,480	319,416		0.00	0	68,200	68,200	130,624,063	130,555,863
February	112,000,000	1.50	5,569,636	454,823		0.00	0	61,600	61,600	117,114,813	117,053,213
March	124,000,000	1.87	6,943,480	709,295		0.00	0	68,200	68,200	130,234,184	130,165,984
April	120,000,000	1.33	4,938,411	969,179		1.55	5,471,209	66,000	5,537,209	123,969,232	118,432,023
May	124,000,000	0.59	2,190,724	1,326,480		2.73	9,636,387	68,200	9,704,587	124,864,244	115,159,657
June	120,000,000	0.65	2,413,509	1,456,368		4.34	15,319,384	66,000	15,385,384	120,957,140	105,571,756
July	124,000,000	2.50	9,282,727	1,456,368		6.21	21,920,133	68,200	21,988,333	131,826,358	109,838,026
August	124,000,000	2.81	10,433,785	1,326,480		7.95	28,062,005	68,200	28,130,205	133,107,305	104,977,100
September	120,000,000	1.69	6,275,123	1,012,475		4.54	16,025,346	66,000	16,091,346	125,262,648	109,171,301
October	124,000,000	1.11	4,121,531	779,652		2.21	7,800,885	68,200	7,869,085	127,341,879	119,472,795
November	1,240,000,000	1.58	5,866,683	481,884		0.00	0	66,000	66,000	1,245,384,800	1,245,318,800
December	124,000,000	2.20	8,168,800	319,416		0.00	0	68,200	68,200	131,849,383	131,781,183
SUMS:	2,580,000,000	19.70	73,147,887	10,611,837	0	29.53	104,235,348	803,000	105,038,348	2,642,536,050	2,537,497,702

Registered Professional Engineer (Civil) CERTIFICATE NO. 28424 FRANKLIN REED PROTIVA Date Signed 12-27-99 ARIZONA, U.S.A.

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EXHIBIT "E"

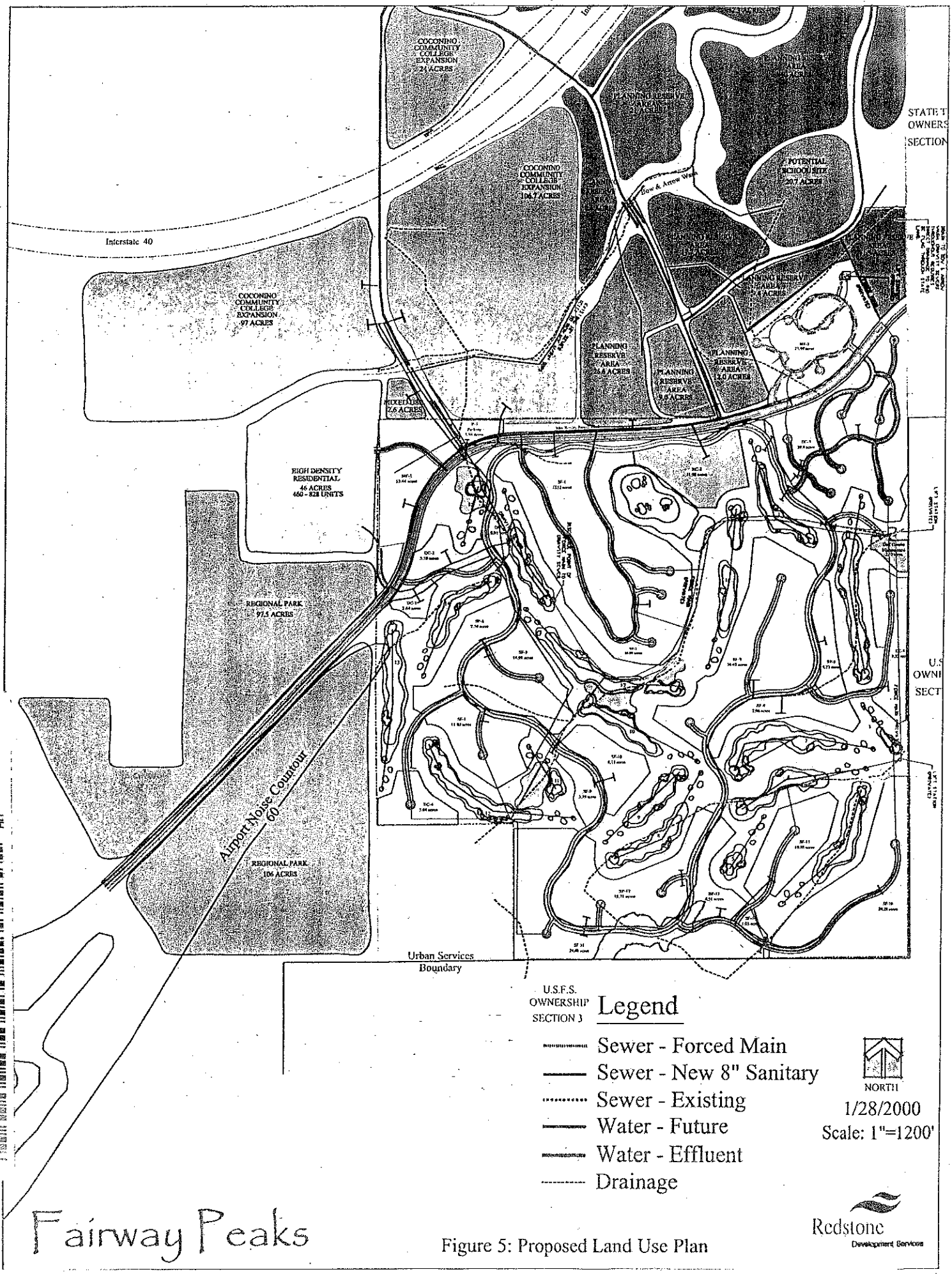

Figure 5: Proposed Land Use Plan

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EXHIBIT "F"

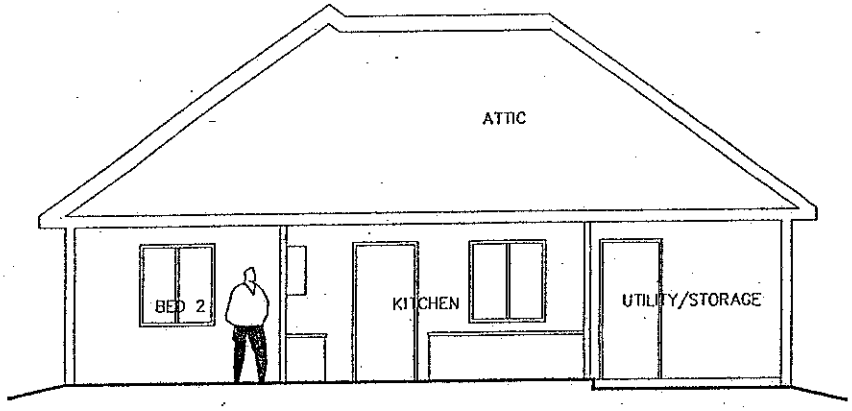
FAIRWAY PEAKS

Affordable Housing Properties

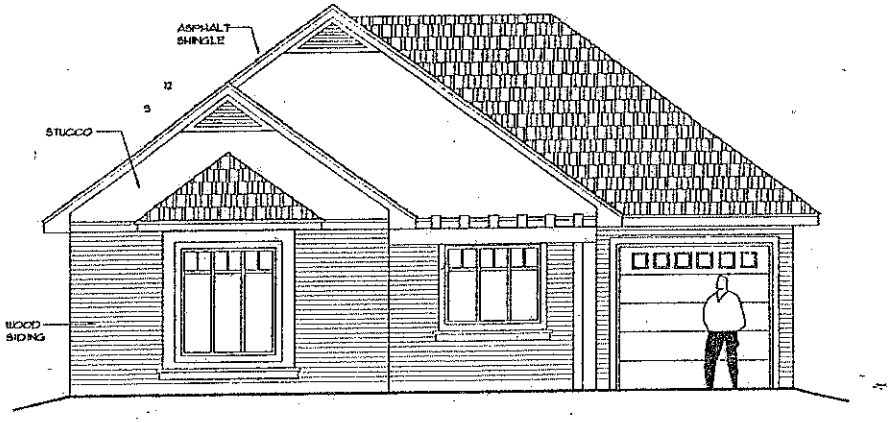
No.	Type	Bedroom/ Bath	Garage	Min. Sq.Ft.	Prices
25	Single Family Homes	1/1	1	900	$ 92,000
50	Single Family Homes	2/1	1	1,000	$108,000
50	Single Family Homes	3/2	1	1,250	$116,000

The City and Developer further agree that as a result of the time period between the date of this Development Agreement and the time the Units will be designed and constructed, many changes may occur within the construction industry as those changes may relate to design, products and materials.

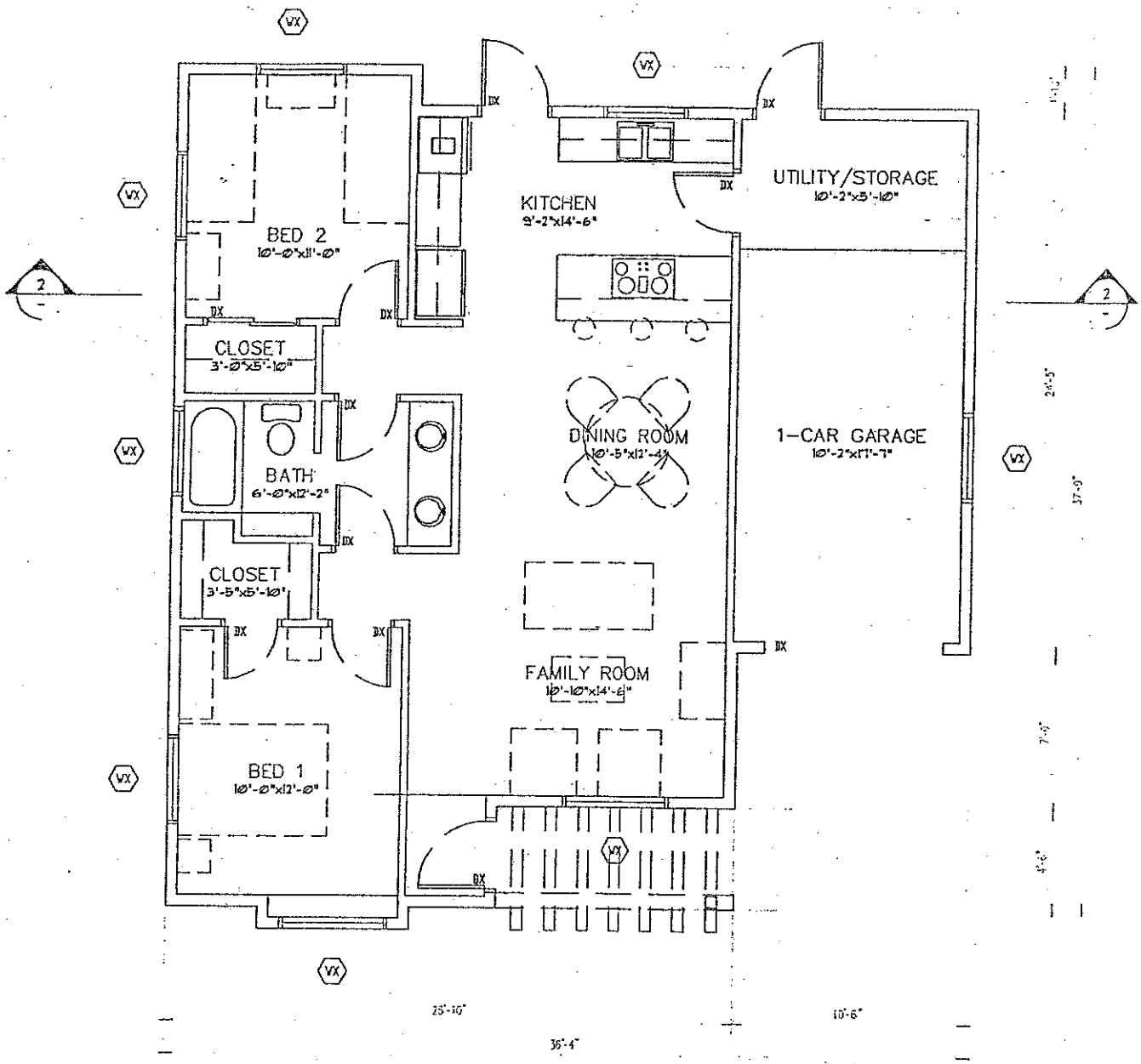
Developer agrees that prior to construction of the Affordable Housing Units, Developer will present to City design and construction site plans, elevations, and specifications. Developer further agrees to meet all minimum standards and specifications as then required by City for design, construction and amenities to be incorporated for all Units. Additionally, Developer will provide City with a comprehensive and complete list of all amenities to be included in each Unit at the time of site plan review and prior to approval by the City. However, as an example of such minimum standards and amenities, Developer will design each Unit based on the most current design standards at that time and as required by the City. Each Unit will be constructed to meet or exceed HUD guidelines, and will be constructed pursuant to the City's policies, requirements, regulations and ordinances, using quality construction materials. Inside amenities, while not yet fully determined, will include kitchen appliances (stove and dishwasher); kitchen cabinetry, storage areas, and dual sink; dual pane windows; bathroom fixtures, including medicine cabinet, vanity mirror and storage areas; quality carpet and pad throughout, with the exception of the kitchen/bath areas; furnace; towel bars in each bath; ceiling lights where such are determined to be appropriate; and wiring for ceiling fans where determined to be appropriate. Other amenities may be added upon design review and City requirements, regulations and ordinances in effect at the time of presentation to the City for final approval.



1-STORY SECTION (2)



1-STORY ELEVATION (3)



1-STORY PLAN

902 SQ FT

1

EXHIBIT "G"

CITY OF FLAGSTAFF PLANNING DIVISION
AFFORDABLE HOUSING REFERENCE SCHEDULES

Aug-99

INTEREST RATE	7.80%
TERM	30
% PAYMENT MORT INSUR, FIRE INSUR,TAXES, HOA	20%
PAYMENT TO INCOME RATIO	29%
HUD AMI	$ 45,500.00

%AMI	PAYMENT	HOME PRICE	INCOME	LOAN AMT
3% DOWN	3% DOWN		3% DOWN	3% DOWN
140%	$ 1,542	$ 184,000	$ 63,798	$ 178,480
139%	$ 1,533	$ 183,000	$ 63,451	$ 177,510
139%	$ 1,525	$ 182,000	$ 63,105	$ 176,540
138%	$ 1,517	$ 181,000	$ 62,758	$ 175,570
137%	$ 1,508	$ 180,000	$ 62,411	$ 174,600
136%	$ 1,500	$ 179,000	$ 62,065	$ 173,630
136%	$ 1,492	$ 178,000	$ 61,718	$ 172,660
135%	$ 1,483	$ 177,000	$ 61,371	$ 171,690
134%	$ 1,475	$ 176,000	$ 61,024	$ 170,720
133%	$ 1,466	$ 175,000	$ 60,678	$ 169,750
133%	$ 1,458	$ 174,000	$ 60,331	$ 168,780
132%	$ 1,450	$ 173,000	$ 59,984	$ 167,810
131%	$ 1,441	$ 172,000	$ 59,637	$ 166,840
130%	$ 1,433	$ 171,000	$ 59,291	$ 165,870
130%	$ 1,424	$ 170,000	$ 58,944	$ 164,900
129%	$ 1,416	$ 169,000	$ 58,597	$ 163,930
128%	$ 1,408	$ 168,000	$ 58,251	$ 162,960
127%	$ 1,399	$ 167,000	$ 57,904	$ 161,990
126%	$ 1,391	$ 166,000	$ 57,557	$ 161,020
126%	$ 1,383	$ 165,000	$ 57,210	$ 160,050
125%	$ 1,374	$ 164,000	$ 56,864	$ 159,080
124%	$ 1,366	$ 163,000	$ 56,517	$ 158,110
115%	$ 1,259	$ 162,000	$ 52,117	$ 145,800
123%	$ 1,349	$ 161,000	$ 55,823	$ 156,170
122%	$ 1,341	$ 160,000	$ 55,477	$ 155,200
121%	$ 1,332	$ 159,000	$ 55,130	$ 154,230
120%	$ 1,324	$ 158,000	$ 54,783	$ 153,260
120%	$ 1,316	$ 157,000	$ 54,437	$ 152,290
119%	$ 1,307	$ 156,000	$ 54,090	$ 151,320
118%	$ 1,299	$ 155,000	$ 53,743	$ 150,350
117%	$ 1,290	$ 154,000	$ 53,396	$ 149,380
117%	$ 1,282	$ 153,000	$ 53,050	$ 148,410
116%	$ 1,274	$ 152,000	$ 52,703	$ 147,440
115%	$ 1,265	$ 151,000	$ 52,356	$ 146,470
114%	$ 1,257	$ 150,000	$ 52,009	$ 145,500
114%	$ 1,249	$ 149,000	$ 51,663	$ 144,530
113%	$ 1,240	$ 148,000	$ 51,316	$ 143,560
112%	$ 1,232	$ 147,000	$ 50,969	$ 142,590
111%	$ 1,223	$ 146,000	$ 50,622	$ 141,620

CITY OF FLAGSTAFF PLANNING DIVISION
AFFORDABLE HOUSING REFERENCE SCHEDULES

Aug-99

INTEREST RATE	7.80%
TERM	30
% PAYMENT MORT INSUR, FIRE INSUR,TAXES, HOA	20%
PAYMENT TO INCOME RATIO	29%
HUD AMI	$ 45,500.00

%AMI	PAYMENT	HOME PRICE	INCOME	LOAN AMT
3% DOWN	3% DOWN		3% DOWN	3% DOWN
110%	$ 1,215	$ 145,000	$ 50,276	$ 140,650
110%	$ 1,207	$ 144,000	$ 49,929	$ 139,680
109%	$ 1,198	$ 143,000	$ 49,582	$ 138,710
108%	$ 1,190	$ 142,000	$ 49,236	$ 137,740
107%	$ 1,181	$ 141,000	$ 48,889	$ 136,770
107%	$ 1,173	$ 140,000	$ 48,542	$ 135,800
106%	$ 1,165	$ 139,000	$ 48,195	$ 134,830
105%	$ 1,156	$ 138,000	$ 47,849	$ 133,860
104%	$ 1,148	$ 137,000	$ 47,502	$ 132,890
104%	$ 1,140	$ 136,000	$ 47,155	$ 131,920
103%	$ 1,131	$ 135,000	$ 46,808	$ 130,950
102%	$ 1,123	$ 134,000	$ 46,462	$ 129,980
101%	$ 1,114	$ 133,000	$ 46,115	$ 129,010
101%	$ 1,106	$ 132,000	$ 45,768	$ 128,040
100%	$ 1,098	$ 131,000	$ 45,422	$ 127,070
99%	$ 1,089	$ 130,000	$ 45,075	$ 126,100
98%	$ 1,081	$ 129,000	$ 44,728	$ 125,130
98%	$ 1,073	$ 128,000	$ 44,381	$ 124,160
97%	$ 1,064	$ 127,000	$ 44,035	$ 123,190
96%	$ 1,056	$ 126,000	$ 43,688	$ 122,220
95%	$ 1,047	$ 125,000	$ 43,341	$ 121,250
94%	$ 1,039	$ 124,000	$ 42,994	$ 120,280
94%	$ 1,031	$ 123,000	$ 42,648	$ 119,310
93%	$ 1,022	$ 122,000	$ 42,301	$ 118,340
92%	$ 1,014	$ 121,000	$ 41,954	$ 117,370
91%	$ 1,006	$ 120,000	$ 41,608	$ 116,400
91%	$ 997	$ 119,000	$ 41,261	$ 115,430
90%	$ 989	$ 118,000	$ 40,914	$ 114,460
89%	$ 980	$ 117,000	$ 40,567	$ 113,490
88%	$ 972	$ 116,000	$ 40,221	$ 112,520
88%	$ 964	$ 115,000	$ 39,874	$ 111,550
87%	$ 955	$ 114,000	$ 39,527	$ 110,580
86%	$ 947	$ 113,000	$ 39,180	$ 109,610
85%	$ 938	$ 112,000	$ 38,834	$ 108,640
85%	$ 930	$ 111,000	$ 38,487	$ 107,670
84%	$ 922	$ 110,000	$ 38,140	$ 106,700
83%	$ 913	$ 109,000	$ 37,793	$ 105,730
82%	$ 905	$ 108,000	$ 37,447	$ 104,760

CITY OF FLAGSTAFF PLANNING DIVISION
AFFORDABLE HOUSING REFERENCE SCHEDULES

Aug-99

INTEREST RATE	7.80%
TERM	30
% PAYMENT MORT INSUR, FIRE INSUR,TAXES, HOA	20%
PAYMENT TO INCOME RATIO	29%
HUD AMI	$ 45,500.00

%AMI	PAYMENT	HOME PRICE	INCOME	LOAN AMT
3% DOWN	3% DOWN		3% DOWN	3% DOWN
82%	$ 897	$ 107,000	$ 37,100	$ 103,790
81%	$ 888	$ 106,000	$ 36,753	$ 102,820
80%	$ 880	$ 105,000	$ 36,407	$ 101,850
79%	$ 871	$ 104,000	$ 36,060	$ 100,880
78%	$ 863	$ 103,000	$ 35,713	$ 99,910
78%	$ 855	$ 102,000	$ 35,366	$ 98,940
77%	$ 846	$ 101,000	$ 35,020	$ 97,970
76%	$ 838	$ 100,000	$ 34,673	$ 97,000
75%	$ 830	$ 99,000	$ 34,326	$ 96,030
75%	$ 821	$ 98,000	$ 33,979	$ 95,060
74%	$ 813	$ 97,000	$ 33,633	$ 94,090
73%	$ 804	$ 96,000	$ 33,286	$ 93,120
72%	$ 796	$ 95,000	$ 32,939	$ 92,150
72%	$ 788	$ 94,000	$ 32,593	$ 91,180
71%	$ 779	$ 93,000	$ 32,246	$ 90,210
70%	$ 771	$ 92,000	$ 31,899	$ 89,240
69%	$ 763	$ 91,000	$ 31,552	$ 88,270
69%	$ 754	$ 90,000	$ 31,206	$ 87,300
68%	$ 746	$ 89,000	$ 30,859	$ 86,330
67%	$ 737	$ 88,000	$ 30,512	$ 85,360
66%	$ 729	$ 87,000	$ 30,165	$ 84,390
66%	$ 721	$ 86,000	$ 29,819	$ 83,420
65%	$ 712	$ 85,000	$ 29,472	$ 82,450
64%	$ 704	$ 84,000	$ 29,125	$ 81,480
63%	$ 695	$ 83,000	$ 28,779	$ 80,510
62%	$ 687	$ 82,000	$ 28,432	$ 79,540
62%	$ 679	$ 81,000	$ 28,085	$ 78,570
61%	$ 670	$ 80,000	$ 27,738	$ 77,600
60%	$ 662	$ 79,000	$ 27,392	$ 76,630
59%	$ 654	$ 78,000	$ 27,045	$ 75,660
59%	$ 645	$ 77,000	$ 26,698	$ 74,690
58%	$ 637	$ 76,000	$ 26,351	$ 73,720
57%	$ 628	$ 75,000	$ 26,005	$ 72,750
56%	$ 620	$ 74,000	$ 25,658	$ 71,780
56%	$ 612	$ 73,000	$ 25,311	$ 70,810
55%	$ 603	$ 72,000	$ 24,965	$ 69,840
54%	$ 595	$ 71,000	$ 24,618	$ 68,870
53%	$ 587	$ 70,000	$ 24,271	$ 67,900

CITY OF FLAGSTAFF PLANNING DIVISION
AFFORDABLE HOUSING REFERENCE SCHEDULES

Aug-99

INTEREST RATE	7.80%
TERM	30
% PAYMENT MORT INSUR, FIRE INSUR,TAXES, HOA	20%
PAYMENT TO INCOME RATIO	29%
HUD AMI	$ 45,500.00

%AMI	PAYMENT	HOME PRICE	INCOME	LOAN AMT
3% DOWN	3% DOWN		3% DOWN	3% DOWN
53%	$ 587	$ 70,000	$ 24,271	$ 67,900
53%	$ 578	$ 69,000	$ 23,924	$ 66,930
52%	$ 570	$ 68,000	$ 23,578	$ 65,960
51%	$ 561	$ 67,000	$ 23,231	$ 64,990
50%	$ 553	$ 66,000	$ 22,884	$ 64,020
50%	$ 545	$ 65,000	$ 22,537	$ 63,050
49%	$ 536	$ 64,000	$ 22,191	$ 62,080
48%	$ 528	$ 63,000	$ 21,844	$ 61,110
47%	$ 520	$ 62,000	$ 21,497	$ 60,140
46%	$ 511	$ 61,000	$ 21,150	$ 59,170
46%	$ 503	$ 60,000	$ 20,804	$ 58,200
45%	$ 494	$ 59,000	$ 20,457	$ 57,230
44%	$ 486	$ 58,000	$ 20,110	$ 56,260
43%	$ 478	$ 57,000	$ 19,764	$ 55,290
43%	$ 469	$ 56,000	$ 19,417	$ 54,320
42%	$ 461	$ 55,000	$ 19,070	$ 53,350
41%	$ 452	$ 54,000	$ 18,723	$ 52,380
40%	$ 444	$ 53,000	$ 18,377	$ 51,410
40%	$ 436	$ 52,000	$ 18,030	$ 50,440
39%	$ 427	$ 51,000	$ 17,683	$ 49,470
38%	$ 419	$ 50,000	$ 17,336	$ 48,500
37%	$ 411	$ 49,000	$ 16,990	$ 47,530
37%	$ 402	$ 48,000	$ 16,643	$ 46,560
36%	$ 394	$ 47,000	$ 16,296	$ 45,590
35%	$ 385	$ 46,000	$ 15,950	$ 44,620
34%	$ 377	$ 45,000	$ 15,603	$ 43,650
34%	$ 369	$ 44,000	$ 15,256	$ 42,680
33%	$ 360	$ 43,000	$ 14,909	$ 41,710
32%	$ 352	$ 42,000	$ 14,563	$ 40,740
31%	$ 344	$ 41,000	$ 14,216	$ 39,770
30%	$ 335	$ 40,000	$ 13,869	$ 38,800
30%	$ 327	$ 39,000	$ 13,522	$ 37,830
29%	$ 318	$ 38,000	$ 13,176	$ 36,860
28%	$ 310	$ 37,000	$ 12,829	$ 35,890
27%	$ 302	$ 36,000	$ 12,482	$ 34,920
27%	$ 293	$ 35,000	$ 12,136	$ 33,950
26%	$ 285	$ 34,000	$ 11,789	$ 32,980
25%	$ 277	$ 33,000	$ 11,442	$ 32,010
24%	$ 268	$ 32,000	$ 11,095	$ 31,040

EXHIBIT "H"

ORDINANCE NO. _____

COCONINO ENGINEERING
2708 NORTH FOURTH STREET, SUITE A1
FLAGSTAFF, ARIZONA 86004
PHONE: 520.527.1008 FAX: 520.527.1805

Project No. 96901.01
January 19, 2000

EXHIBIT C

A portion of that parcel of land described in Docket 1551, Page 396, Records of Coconino County, Arizona, located in the Southeast quarter of Section 27, Township 21 North, Range 7 East, Gila and Salt River Meridian, within the limits of the City of Flagstaff, Coconino County (R.C.C.), Arizona, more particularly described as follows:

Commencing at the Southeast Corner of said Section 27, from whence the South quarter Corner (S¼ Cor) of said Section 27 bears S 89°58'16" W a distance of 2656.62 feet (Basis of Bearings); Thence S 89°58'16" W, along the South line of the said Southeast quarter, a distance of 1920.91feet to the TRUE POINT OF BEGINNING;

Thence continue S 89°58'16" W, along the South line of the said Southeast quarter, a distance of 74.88feet to a non-tangent point of curvature of a curve concave to the Northwest, from whence the radius point bears N 11°06'10" W a distance of 4,360.80 feet;

Thence Northeasterly along the arc of said curve a distance of 491.27 feet, through a central angle of 06°27'17" to a point of tangency;

Thence N 72°26'33" E a distance of 57.43 feet;

Thence N 03°54'07" E a distance of 116.74 feet;

Thence N 22°42'39" W a distance of 643.28 feet;

Thence N 52°03'09" E a distance of 1,157.83 feet;

Thence N 77°43'18" E a distance of 172.16 feet;

Thence S 27°25'34" E a distance of 707.70 feet to a non-tangent point of curvature of a curve concave to the Southeast, from whence the radius point bears S 47°22'42" E a distance of 1776.75 feet;

Thence Southwesterly along the arc of said curve a distance of 125.48 feet through a central angle of 04°02'47" to a point of tangency;

(Continued on Page 2)

ACCEPTED
CITY OF FLAGSTAFF
ENGINEERING DIV
P.M. 4/21/00
INT DATE

Thence S 38°34'31" W a distance of 350.00 feet to a point of curvature of a curve to the right, having a radius of 1140.00 feet;

Thence 673.85 feet along the arc of said curve, through a central angle of 33°52'02" to a point of tangency;

Thence S 72°26'33" W a distance of 387.89 feet to a point of curvature of a curve to the right, having a radius of 4375.80 feet;

Thence 419.47 feet along the arc of said curve, through a central angle of 05°29'33" to the Point of Beginning being a point on the South line of the said SE¼ of Section 27, also being a point on the South boundary of that parcel of land described in said Docket 1551, Page 396, R.C.C.;

Containing approximately 26.644 acres, all as shown on the attached "Exhibit C-1" made a part hereof by this reference.

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
23372
NICHOLAS
GABRIEL, III
1-19-2000
Date Signed
ARIZONA, U.S.A.

NICHOLAS GABRIEL, III
R.L.S. 23372

ACCEPTED
CITY OF FLAGSTAFF
ENGINEERING DIV
P.M. 4/21/00
INT DATE

Fairway Peaks C
Description

City File No. 04-99107

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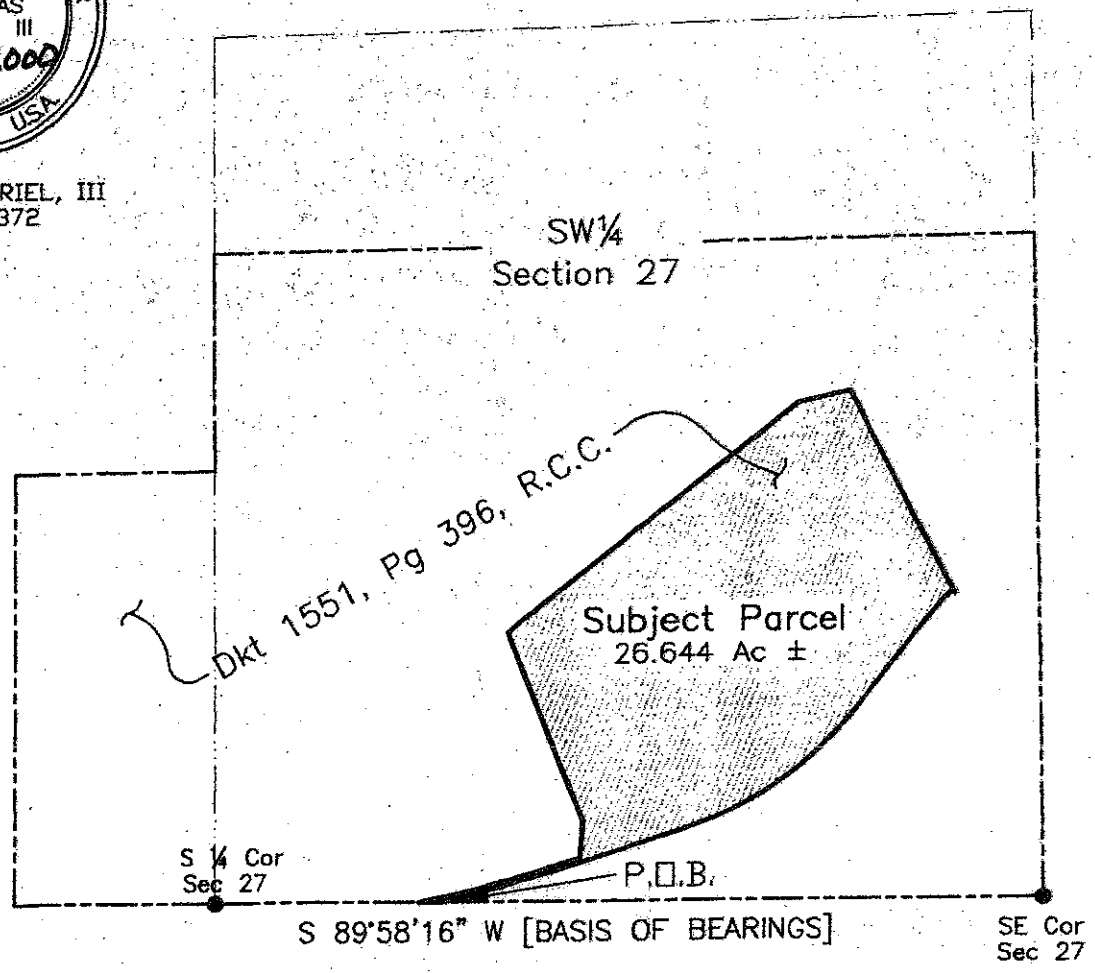
Page: 65 of 60
AM

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
23372
NICHOLAS
GABRIEL, III
2-11-2000
Date Signed
ARIZONA, U.S.A.

NICHOLAS GABRIEL, III
R.L.S. 23372



ACCEPTED
CITY OF FLAGSTAFF
ENGINEERING DIV
P.M. 4/21/00
INT DATE

SCALE: 1" = 600'

600 0 300 600

City File No. 04-99107

SCALE: 1"=___ft. Vert 1"=___ft. Horiz	**Coconino Engineering** 2708 North Fourth Street – Suite A-1 Flagstaff, Arizona 86004 (520) 527-1008	
DRAWN: N. Gabriel		
DESIGN: N. Gabriel	REVISIONS DATE INIT. 2/10/00 NG	EXHIBIT C-1
CHECKED:		A parcel of land in the SE1/4 of Sec 27 T.21N., R.7E., G & SRM, Coconino County, AZ
DATED: 19 JAN 2000		

SHEET 1 OF 2

JOB No. 96901.01

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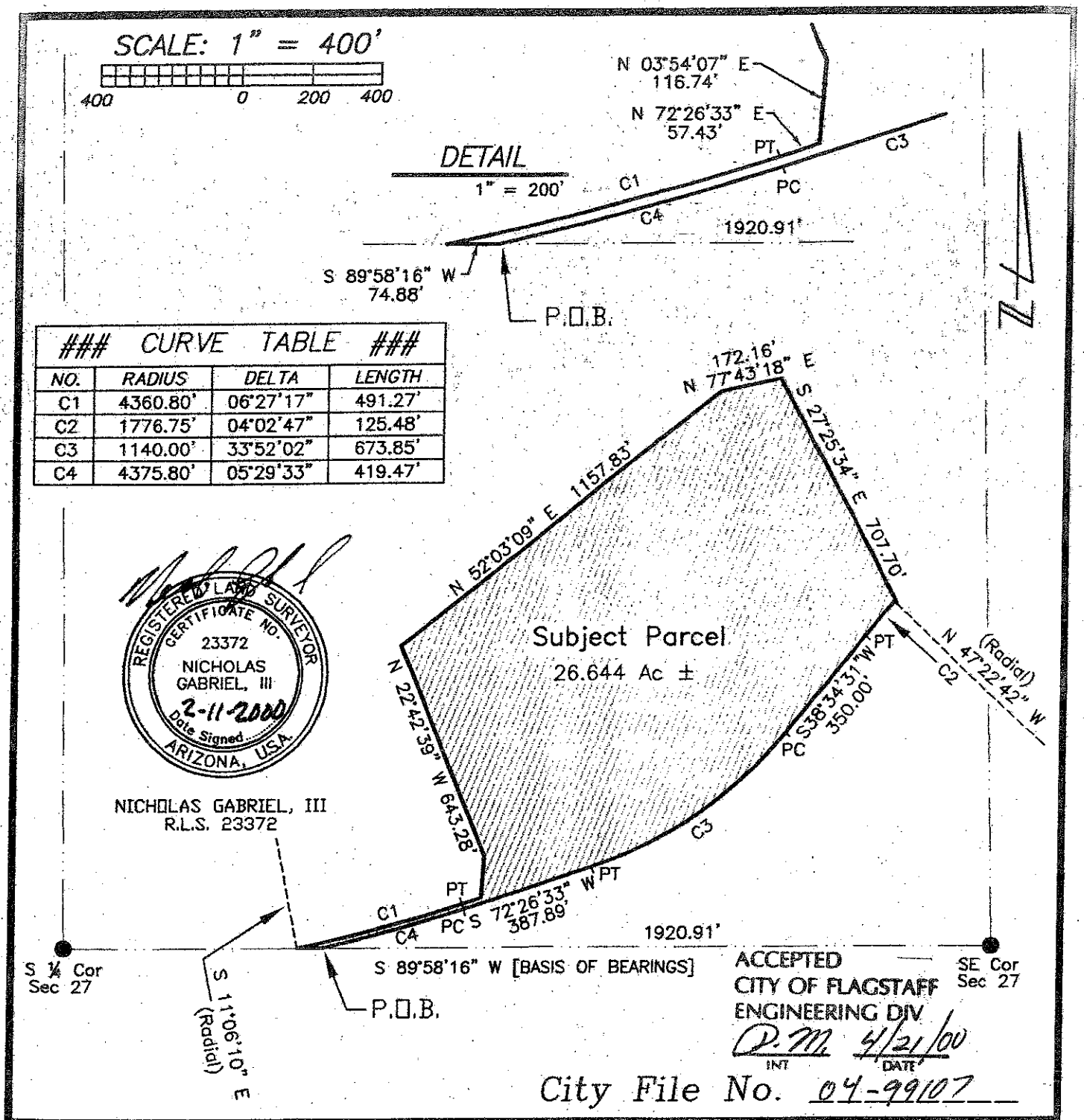

CURVE TABLE

NO.	RADIUS	DELTA	LENGTH
C1	4360.80'	06°27'17"	491.27'
C2	1776.75'	04°02'47"	125.48'
C3	1140.00'	33°52'02"	673.85'
C4	4375.80'	05°29'33"	419.47'

City File No. 04-99107

SCALE:
1"=___ft. Vert
1"=___ft. Horiz

DRAWN: N. Gabriel

DESIGN: N. Gabriel

CHECKED:

DATED: 10 FEB 2000

Coconino Engineering

2708 North Fourth Street – Suite A-1
Flagstaff, Arizona 86004 (520) 527-1008

REVISIONS

DATE	INIT.
__/__/__	__
__/__/__	__
__/__/__	__
__/__/__	__
__/__/__	__

EXHIBIT C-1

A parcel of land in the SE1/4 of Sec 27
T.21N., R.7E., G & SRM, Coconino County, AZ

SHEET 2 OF 2

JOB No. 96901.01

EXHIBIT "I"

AVIGATION EASEMENT AGREEMENT

This Avigation Easement Agreement (the "**Agreement**") is made this ____ day of _____, 2000, between Vanderbilt Farms, L.L.C., an Arizona limited liability company (the "**Grantor**"), and the City of Flagstaff, a municipal corporation, organized and existing under and by virtue of the laws of the State of Arizona (the "**City**").

RECITALS

A. Grantor is the developer and owner of that certain parcel of land situated in the County of Coconino, State of Arizona, more particularly described and set forth in Exhibit "A," attached hereto and incorporated by reference herein (the "**Property**").

B. Grantor desires to obtain approval for one or more of the following legislative and/or administrative actions respecting Grantor's property: rezoning; subdivision plat, conditional use permit; variance; lot split; comprehensive plan amendment or building permit.

C. Grantor's Property is located within an area over which existing and future flight operations of the Flagstaff Pulliam Airport (the "**Airport**") will occur.

D. The City has an avigation easement policy with respect to airspace in the vicinity of the Airport.

E. Grantor acknowledges that an essential nexus exists between the City's avigation easement policy and the City's need to protect the public's investment in the Airport improvements, to maintain and enhance flight operations of the Airport for the benefit of the public, and to ensure the compatibility of the Grantor's proposed use with the existing and future operations of the Airport. Grantor recognizes and acknowledges that developing and/or utilizing properties in close proximity to airports may lead to aircraft noise and that a rough proportionality exists between the City's avigation easement policy and the impact that Grantor's use would have on the Airport.

F. The City desires that Grantor grant an avigation easement to the City, and the Grantor desires to make such a grant to the City.

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///
///

AGREEMENT

NOW, THEREFORE, in consideration of the foregoing and the mutual promises and convenants contained herein, and for other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the parties agree as follows:

1. Grantor hereby grants to the City for the benefit of the public a perpetual and exclusive easement to utilize the airspace 350 feet or higher above the Property for avigation purposes (the "**Easement**"). The Easement shall be used by the City for the passage of aircraft in connection with the existing and future flight operations of the Airport. Grantor specifically acknowledges that the Easement will be utilized for overflights above the Property from a minimum altitude of 350 feet to an infinite height above the surface of the Property (the "**Airspace**") by all aircraft landing or taking off from, or operated at or on the Airport (the "**Airport Operations**").

2. Grantor agrees that the Easement further allows aircraft the right to conduct all flight operations that are reasonable and necessary within the Airspace which shall include, but not be limited to, emitting all amounts of light and noise as are typically associated with such flight operations, and discharge of all amounts of dust, exhaust, fuel and lubricant particles as are typically associated with such flight operations. Grantor further acknowledges that the operation of aircraft within the Airspace may also cause noise and vibrations to occur on or near the Property.

3. Grantor further waives, releases, and discharges the City, including the mayor, city council and all employees thereof, from any and all liability for any and all claims of damages of any kind to persons or property that may presently exist or arise in the future in connection with the Airport Operations. Grantor further acknowledges that the frequency of aircraft takeoff and landing operations at the Airport, as well as noise levels related to expansion in the Airport Operations are likely to increase. In this regard, Grantor acknowledges that the rights, obligations and covenants contained herein shall not terminate or vary in the event of changes in the frequency flights and/or levels of noise, traffic patterns, runway lengths or locations, terminal locations or characteristics, or types or category of aircraft using the Airport.

4. This Agreement does not release the owners and operators of aircraft from liability for damages or injury to person or property of any nature, including without limitation those caused by falling aircraft or falling physical objects from aircraft, except as stated herein with respect to the emission of all amounts of light and noise as are typically associated with flight operations from the Airport, and the discharge of all amounts of dust, exhaust, fuel and lubricant particles as are typically associated with such flight operations.

5. The parties acknowledge that for the purposes of this Agreement, the term "**aircraft**" shall include any device presently known or hereafter invented, used or designated for navigation or flight in the air.

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OM

6. Grantor agrees that it will not conduct or permit any use to be developed or operated on the Property that causes a discharge into the air of fumes, smoke, dust or vapor to an extent that will obstruct visibility and adversely affect the operation of aircraft or cause interference with navigational facilities necessary to aircraft operation. The City acknowledges and agrees that the one and two story 1,170 dwelling units, together with golf and related recreational uses (including an eighteen hole golf course, a clubhouse and pro shop facilities) on the Property, under normal and typical circumstances will not obstruct visibility or adversely affect the safe operation of aircraft in the Airspace or cause interference with navigational facilities necessary to aircraft operation.

7. Grantor further understands and acknowledges that all provisions of the relevant ordinances will be enforced to ensure that no structures or uses will interfere in any way with the safe operation of aircraft in the Airspace.

8. This Agreement shall be binding upon Grantor and its assigns and successors in interest to the Property. The parties further agree that this Agreement shall represent in all respects a covenant which shall run with the land and shall be recorded in the office of the County Recorder of Coconino County, Arizona.

9. The parties acknowledge that the Easement is necessary to ensure the continued and long term viability of the Airport. The parties further acknowledge that the continued viability of the Airport is necessary to promote the health, safety, and general welfare of the public.

10. No modification of this Agreement shall be deemed effective unless in writing and signed by the parties thereto, and any waiver granted shall not be deemed effective except for the instance and the circumstances particularly specified therein and unless in writing, executed by the party against whom enforcement of the waiver is sought.

11. This Agreement constitutes the entire agreement, whether written or oral, between the parties. Any written or oral understandings, terms or conditions between the parties regarding the Easement not set forth herein shall be deemed to be superseded hereby.

12. This Agreement shall be governed by and construed in accordance with the laws of the State of Arizona.

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Page: 71 of 80
DM

The Grantor hereby executes this Agreement on the date set forth above.

GRANTOR

Vanderbilt Farms, L.L.C., an Arizona limited liability company

By: _____

Its: Authorized Agent

STATE OF ARIZONA)
)
COUNTY OF Maricopa)

On this 2nd day of June, 2000, before me the undersigned Notary Public personally appeared JOHN BEERLING known to me as the person whose name is subscribed to the within instrument and acknowledged that he executed the same on behalf of Vanderbilt Farms, L.L.C., an Arizona limited liability company, for the purposes contained therein.

IN WITNESS WHEREOF, I have hereunto set my hand and official seal.

Kay S. Etheridge
Notary Public

My Commission expires:

8-10-2001

KAY S. ETHERIDGE
Notary Public - Arizona
MARICOPA COUNTY
My Commission Expires
AUGUST 10, 2001

ACCEPTANCE

The City of Flagstaff, Arizona, a municipal corporation, does hereby accept the foregoing grant and easement and the terms and conditions thereof.

IN WITNESS WHEREOF, the City of Flagstaff has caused this acceptance to be executed by its Mayor pursuant to authority granted by its City Council, this _____ day of _____, 2000.

CITY OF FLAGSTAFF

By _____
MAYOR

ATTEST:

By _____
CITY CLERK

APPROVED AS TO FORM:

By _____
CITY ATTORNEY

Exhibit "A"

COCONINO ENGINEERING
2708 NORTH FOURTH STREET, SUITE A1
FLAGSTAFF, ARIZONA 86004
PHONE: 520.527.1008 FAX: 520.527.1805

Project No. 96901.01
January 27, 2000

EXHIBIT A

LEGAL DESCRIPTION
FOR FAIRWAY PEAKS
(Attachment to Development Agreement)

PARCEL 1

All of Section 34 of Township 21 North, Range 7 East, Gila and Salt River Meridian, in the City of Flagstaff, Coconino County, Arizona, EXCEPT the Southwest quarter of the Southwest quarter (SW¼ SW¼) thereof.

Containing approximately 606.454 Acres

PARCEL 2

A portion of that parcel of land described in Docket 1551, Page 396, Records of Coconino County, Arizona, located in the Southeast quarter of Section 27, Township 21 North, Range 7 East, Gila and Salt River Meridian, within the limits of the City of Flagstaff, Coconino County (R.C.C.), Arizona, more particularly described as follows:

Commencing at the Southeast Corner of said Section 27, from whence the South quarter Corner (S¼ Cor) of said Section 27 bears S 89°58'16" W a distance of 2656.62 feet (Basis of Bearings); Thence S 89°58'16" W, along the South line of the said Southeast quarter, a distance of 1920.91feet to the TRUE POINT OF BEGINNING;

Thence continue S 89°58'16" W, along the South line of the said Southeast quarter, a distance of 74.88feet to a non-tangent point of curvature of a curve concave to the Northwest; from whence the radius point bears N 11°06'10" W a distance of 4,360.80 feet;

Thence Northeasterly along the arc of said curve a distance of 491.27 feet, through a central angle of 06°27'17" to a point of tangency;

Thence N 72°26'33" E a distance of 57.43 feet;

Thence N 03°54'07" E a distance of 116.74 feet;

(Continued on Page 2)

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Thence N 22°42'39" W a distance of 643.28 feet;

Thence N 52°03'09" E a distance of 1,157.83 feet;

Thence N 77°43'18" E a distance of 172.16 feet;

Thence S 27°25'34" E a distance of 707.70 feet to a non-tangent point of curvature of a curve concave to the Southeast. from whence the radius point bears S 47°22'42" E a distance of 1776.75 feet;

Thence Southwesterly along the arc of said curve a distance of 125.48 feet through a central angle of 04°02'47" to a point of tangency;
Thence S 38°34'31" W a distance of 350.00 feet to a point of curvature of a curve to the right, having a radius of 1140.00 feet;

Thence 673.85 feet along the arc of said curve, through a central angle of 33°52'02" to a point of tangency;

Thence S 72°26'33" W a distance of 387.89 feet to a point of curvature of a curve to the right, having a radius of 4375.80 feet;

Thence 419.47 feet along the arc of said curve, through a central angle of 05°29'33" to the Point of Beginning being a point on the South line of the said SE¼ of Section 27, also being a point on the South boundary of that parcel of land described in said Docket 1551, Page 396, R.C.C.;

Containing approximately 26.644 acres.

PARCEL 3

A portion of that parcel of land described in Docket 1551, Page 396, Records of Coconino County, Arizona. located in the Southeast quarter of Section 27, Township 21 North, Range 7 East. Gila and Salt River Meridian. within the limits of the City of Flagstaff, Coconino County (R.C.C.). Arizona. more particularly described as follows:

BEGINNING at the Southeast Corner of said Section 27, from whence the South quarter Corner (S¼ Cor) of said Section 27 bears S 89°58'16" W a distance of 2656.62 feet (Basis of Bearings); Thence S 89°58'16" W, along the South line of the said Southeast quarter, a distance of 1,455.78 feet;

Thence N 72°26'33" E a distance of 363.19 feet to a point of curvature of a curve to the left having a radius of 1,260.00 feet;

Thence 744.78 feet along the arc of said curve through a central angel of 33°52'02" to a point of tangency;

(Continued on Page 3)

Thence N 38°34'31" E a distance of 350.00 feet to a point of curvature of a curve to the right, having a radius of 1,656.75 feet;

Thence along the arc of said curve a distance of 369.84 feet more or less, through a central angle of 12°47'24" more or less, to a point on the East line of the said SE¼ of Section 27, being also a point on the East boundary of that parcel of land described in said Docket 1551, Page 396, R.C.C.;

Thence S 01°22'39" E along said East line and boundary, a distance of 1,059.51 feet to the Point of Beginning

Containing approximately 13.465 acres.

Containing in aggregate 646.563 acres.

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
23372
NICHOLAS
GABRIEL, III
1-27-2000
Date Signed
ARIZONA, U.S.A.

NICHOLAS GABRIEL, III
R.L.S. 23372

EXHIBIT "J"

FAIRWAY PEAKS
Conceptual Development Phasing Schedule
2000-2005

2000 - Phase I - Golf Course clearing and grading and temporary FUTS trail.

2001 - Phase II

Off-Site Construction

1. Reclaimed wastewater transmission line;
2. 20" water line along west subdivision boundary;
3. Sewer outfall to Bow and Arrow Wash;
4. JWP from Lake Mary Road to first intersection inside west Subdivision boundary (temporary Main Entrance);
5. Temporary unpaved access to Zuni Drive and Lone Tree Road.

On-Site Construction

1. Commence Golf Course and regional detention facilities;
2. Single Duplex Lots - 113 Units
3. Duplex Lots - 47 Units

160 Units

2002 - Phase III

Off-Site Construction

1. JWP to permanent entrance (at permanent Clubhouse site), including paved FUTS and 20" waterline;
2. Unpaved FUTS section to east Subdivision boundary;
3. Lone Tree Road connection and permanent FUTS parking area.

On-Site Construction

1. Commence construction of clubhouse and recreational facilities;
2. Commence maintenance facility;
3. Single Family Lots - 99 Units
4. Duplex Lots - 50 Units

149 Units

2003 - Phase IV

Off-site Construction

1. Extend JWP and paved FUTS from clubhouse to the Affordable Housing Site, including a 20" waterline.

On-Site Construction

1. Complete main Loop Road;
2. Complete permanent clubhouse and recreational facilities;
3. Single Family Lots - 98 Units
4. Duplex Lots - 113 Units
5. Affordable Housing - 40 Units

   251 Units

2004 - Phase V

On-Site Construction

1. Single Family Lots - 100 Units
2. Duplex Lots - 50 Units
3. Affordable Housing - 45 Units

   195 Units
4. Complete JWP to east subdivision boundary.

2005 - Phase VI

On-Site Construction

1. Single Family Lots - 114 Units
2. Duplex Lots - 51 Units
3. Condominiums - 210 Units
4. Affordable Housing - 40 Units

   415 Units

NOTE: The number of units in each phase are estimated.

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RECEIVED
APR 17 2006
City Attorney's Office

April 14, 2006

Client Matter No. 9381-11N

Harry M. Lane, Esq.
Flagstaff City Attorney
211 W. Aspen
Flagstaff, Arizona 86001-5359
Facsimile: 928-779-7656

Re: PINE CANYON SUBDIVISION
SUBDIVISION IMPROVEMENTS THIRD PARTY TRUST

Dear Harry:

Enclosed for your files is a copy of the letter agreement we put in place in connection with the development of our townhome project. We have transferred the Mountain Villas Lots to our wholly owned and controlled entity. Please call me with any comments or questions.

Sincerely,

CHANDLER & UDALL, LLP

Lawrence S. Rollin

LSR/mf
CC: Patricia E. Nolan, Esq.

ELK PASS, L.L.C.

March 24, 2006

LONE TREE INVESTMENTS, LLC
C/O PATRICIA E. NOLAN
POLESE PIETZSCH WILLIAMS & NOLAN, P.A.
2702 N. THIRD STREET, SUITE 3000
PHOENIX, ARIZONA 85004-4607

RE: Assumption Under Third Party Trust Agreement

Ms. Nolan:

Reference is made to that certain Agreement to Contribute Towards Subdivision Related Improvements – Third Party Trust by and between Lone Tree Investments, LLC, Fidelity National Title Agency, Inc. and the City of Flagstaff, Arizona. Said Agreement relates to the subdivision commonly known as Pine Canyon located in Flagstaff, Arizona. As partial consideration for the conveyance of all of the residential lots created by the Mountain Villas at Pine Canyon Plat, recorded in Docket No. 3369051, the undersigned agrees to be bound by all of the terms, conditions, provisions and contribution obligations set forth in said Agreement as they relate to the Lots created by said Plat as if the undersigned was a party to said Agreement.

ELK PASS, L.L.C., an
Arizona limited liability company

LONE TREE INVESTMENTS, LLC, an
Arizona limited liability company,
Sole Member

By: Flagstaff Acquisitions, L.L.C., an
Arizona limited liability company,
Manager

By: Central and Osborn Properties, Inc.,
an Arizona corporation,
Manager

By: Patricia E. Nolan
Patricia E. Nolan
President

CITY OF FLAGSTAFF

STAFF SUMMARY REPORT

To:	The Honorable Mayor and Council
From:	Elizabeth A. Burke, City Clerk
Date:	05/29/2013
Meeting Date:	06/04/2013

TITLE

Consideration of Changing August City Council Meeting Date: Tuesday, August 27, 2013, to Monday, August 26, 2013.

RECOMMENDED ACTION:

Authorize staff to move the August 27, 2013, Council Meeting to August 26, 2013.

INFORMATION

The Flagstaff City Council is scheduled for a Summer Break between Wednesday, July 17, 2013, through Monday, August 26, 2013, with the Council Meeting for August, as required by the City Charter, scheduled for Tuesday, August 27, 2013. However, this year's Annual Conference of the League of Arizona Cities and Towns will be held this last week in August and many Councilmembers will be traveling that Tuesday to attend the conference in Tucson. Staff is recommending that the August Council Meeting be changed to Monday, August 26, 2013, to accommodate this travel.

Attachments: