

ARIZONA DEPARTMENT OF TRANSPORTATION



ADVERTISEMENT FOR BIDS SPECIAL PROVISIONS BIDDERS DOCUMENTS

SUBMITTED BY:

(Company or Firm Name)

(Mailing Address)

(City)

(State)

(Zip Code)

(Street Address - If Different From Above)

(City)

(State)

(Zip Code)

Arizona Commercial License No. _____

License Classifications(s) _____

TRACS/Proj. No.:

040 YV 126 H870301C NHPP-040-A(219)T
KINGMAN - FLAGSTAFF HIGHWAY, I-40
Crookton - Historic 66 (Williams)

Contracts and Specifications Section
1651 West Jackson, Room 121F
Phoenix, Arizona 85007-3217

NOTICE

TO ALL BIDDERS

Read carefully the complete ADVERTISEMENT FOR BIDS and SECTION 102 - BIDDING REQUIREMENTS AND CONDITIONS in the Specifications. Important information is given in both documents which affects the acceptance of your bid proposal. Failure to comply may result in rejection of your bid.

Bids are to be prepared with black ink or typed and any alterations, initials or signatures must be in black ink.

Unit prices must be shown for each item of work in the Bidding Schedule, as well as, the extended bid amount. This applies to all items, including lump sum items.

If goals are established for participation by Disadvantaged Business Enterprises (DBE's), please read carefully the portion of the special provisions which addressed this subject. It is advisable to contact ADOT's Business Engagement and Compliance Office for assistance, particularly when bidding infrequently or for the first time.

It is **NOT** advisable to mail bid proposals. Proposals received in Contracts and Specifications Services, 1651 W. Jackson, Room 121F, Phoenix, Arizona 85007, after the designated time for opening will not be accepted regardless of the reason for not being received on time.

IMPORTANT

PRIOR TO SUBMITTING YOUR BID, PRINT
COMPANY NAME, ADDRESS, CITY, STATE, AND ZIP
IN THE SPACE PROVIDED ON THE COVER OF
YOUR PROPOSAL. PLEASE ENSURE THAT THIS
DATA IS THE SAME AS SHOWN ON THE BIDDING
DOCUMENTS.

ARIZONA DEPARTMENT OF TRANSPORTATION

ADVERTISEMENT FOR BIDS

BID OPENING: FRIDAY, FEBRUARY 10, 2017, AT 11:00 A.M. (M.S.T.)

TRACS NO 040 YV 126 H8703 01C
PROJ NO NHPP-040-A(219)T
TERMINI KINGMAN - FLAGSTAFF HIGHWAY, I-40
LOCATION CROOKTON - HISTORIC 66 (WILLIAMS)

ROUTE NO.	MILEPOST	DISTRICT	ITEM NO.
I-40	126 to 161	NORTHWEST	10217

The amount programmed for this contract is \$2,250,000.00. The location and description of the proposed work and the representative items and approximate quantities are as follows:

The proposed sign rehabilitation project is located on the Interstate 40 within the Coconino and Yavapai Counties from milepost 126 to milepost 161. The proposed work consists of the sign rehabilitation on the Interstate 40 mainline and all the associated TI ramps and crossroads within the project limits, and other related work.

REPRESENTATIVE ITEMS	UNIT	QUANTITY
Remove (Signs, Foundations, Posts)(Various Signs)	EACH	1,034
Breakaway Sign Post (Various Sizes)	L.FT.	3,656
Slip Base (New)	EACH	558
Sign Post (Perforated) (Various Type)	L.FT.	10,339
Warning, Marker, or Regulatory Sign Panel	SQ.FT.	6,758
Extruded Aluminum Sign Panel	SQ.FT.	11,609
Flat Sheet Aluminum Sign Panel	SQ.FT.	1,203
Seeding (Class II)	ACRE	2
Force Account Work (Removing Existing Paved Ramp and Grading)	L.SUM	1

The time allowed for the completion of the work included in this project will be 205 working days.

The Arizona Department of Transportation, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252.42 U.S.C. §§ 2000d-4) and the Regulations, hereby notifies all bidders that it will affirmatively ensure that any contract entered into pursuant to this advertisement, Disadvantaged Business Enterprises will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.

The minimum contract-specified goal for participation by Disadvantaged Business Enterprises in the work, as a percentage of the total amount bid, shall be 4.07.

Project plans, special provisions, and proposal pamphlets may be purchased in paper format from Contracts and Specifications Section, 1651 W. Jackson, Room 121F,

Phoenix, AZ 85007-3217, (602) 712-7221. The cost is \$78, payable at time of order by cash, check, or money order. Please indicate whether a bid proposal package or a subcontractor/supplier set is desired. An additional fee of \$5 will be charged for each set of Special Provisions requested which is not accompanied by the purchase of a related set of project plans. Checks should be made payable to the Arizona Department of Transportation. We cannot guarantee mail delivery. No refund will be made for plans or specifications returned.

Contract documents and other project documents are available as electronic files, at no charge, from the Contracts and Specifications website, pursuant to Subsection 102.02 of the specifications. The Contracts and Specifications Current Advertisements website is located at:
<http://www.azdot.gov/business/ContractsandSpecifications/CurrentAdvertisements>.

Documents should be available within one week following the advertisement for bids.

This project is eligible for electronic bidding.

To submit a valid bid, the bidder must (1) have prequalification from the Department as necessary for the project, and (2) be included on the project Plansholder List as a Prime. The Application for Contractor Prequalification shall be filed at least 15 calendar days prior to the bid opening date. The Application may be obtained from the Contracts and Specifications website.

This contract is subject to the provisions of Arizona Revised Statutes Section 42-5075 -- Prime contracting classification; exemptions; definitions.

No award will be made to any contractor who is not a duly licensed contractor in accordance with Arizona Revised Statutes 32-1101 through 32-1170.03.

All labor employed on this project shall be paid in accordance with the minimum wage rates shown in the General Wage Decision. These rates have been determined in accordance with the requirements of the law and issued by the Secretary of Labor for this project. The wage scale is on file in Contracts and Specifications Section and copies may be obtained at all reasonable times.

A proposal guaranty in the form of either a certified or a cashier's check made payable to the State Treasurer of Arizona for not less than ten percent of the amount of the bid or in the form of a surety (bid) bond for ten percent of the amount of the bid shall accompany the proposal.

Surety (bid) bonds will be accepted only on the form provided by the Department and only from corporate sureties authorized to do business in Arizona.

Proposal pamphlets in paper format shall be submitted only in the envelope provided by the Department to:

Arizona Department of Transportation
Infrastructure Delivery and Operations Division
Contracts and Specifications Section
1651 West Jackson Street, Room 121F
Phoenix, Arizona 85007-3217

Sealed bids will be received until the hour indicated and then publicly opened and read. No bids will be received after the time specified.

Questions and comments concerning the bid package for this project shall be directed to the individuals noted below:

Engineering Specialist: (VRashid@azdot.gov)
Construction Supervisor: (ABaker@azdot.gov)

A handwritten signature in black ink, appearing to read "Steve Beasley", with a horizontal line underneath.

STEVE BEASLEY,
Manager
Contracts & Specifications

040 YV 126 H8703 01C
NHPP-040-A(219)T
PROJECT ADVERTISED ON: 12/23/2016

SPECIAL PROVISIONS

FOR

ARIZONA PROJECT

040 YV 126 H8703 01C

NHPP-040-A(219)T

KINGMAN - FLAGSTAFF HIGHWAY, I-40

CROOKTON – HISTORIC 66 (WILLIAMS)

SIGN REHABILITATION

PROPOSED WORK:

The proposed sign rehabilitation project is located on the Interstate 40 within the Coconino and Yavapai Counties from milepost 126 to milepost 161. The proposed work consists of the sign rehabilitation on the Interstate 40 mainline and all the associated TI ramps and crossroads within the project limits, and other related work.

PROFESSIONAL SEALS:

This book of specifications and related contract documents represents the efforts of the following organizations:

Arizona Department of Transportation

A representative of each firm or group has affixed his/her professional seal below, which attests that those portions of these specifications which relate to the subject areas listed below:



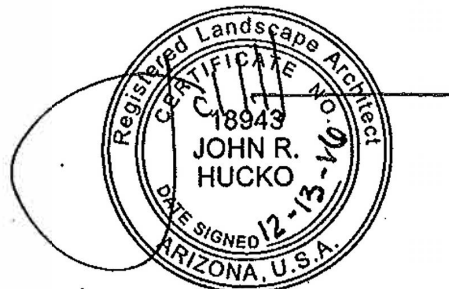
Exp. 9/30/2018



EXPIRES 9/30/2017

Arizona Department of Transportation
Traffic Engineering Design Group
(Traffic Control and Signing)

Arizona Department of Transportation
Contract and Specifications



EXPIRES 3/31/2018

Arizona Department of Transportation
Roadside Development Section

(SPC00FA, 09/21/16)

SPECIFICATIONS:

The work embraced herein shall be performed in accordance with the requirements of the following separate documents:

Arizona Department of Transportation, Standard Specifications for Road and Bridge Construction, Edition of 2008 (Pub. # 31-066),

Arizona Department of Transportation, Intermodal Transportation Division, Standard Drawings, listed in the project plans, and available on the Department's website,

Arizona Department of Transportation, Traffic Group, Manual of Approved Signs, available on the Department's website,

Arizona Department of Transportation, Traffic Group, Traffic Control Design Guidelines, Edition of 2010, available on the Department's website,

Manual on Uniform Traffic Control Devices for Streets and Highways, 2009 edition and Arizona Supplement to the 2009 edition, dated January, 2012,

The Proposal Pamphlet and Non-bid Pamphlet which include the following documents:

These Special Provisions,

Required Contract Provisions Federal-Aid Construction Contracts (Form FHWA 1273 Revised May 1, 2012),

Standard Federal Equal Employment Opportunity Construction Contract Specifications (Executive Order 11246), July 1, 1978, Revised November 3, 1980 and Revised April 15, 1981,

Title VI / Non-Discrimination Assurances,
Appendix A
Appendix E,

Notice of Requirement for Affirmative Action to Ensure Equal Employment Opportunity (Executive Order 11246), July 1, 1978, Revised November 3, 1980 and Revised April 15, 1981,

Equal Employment Opportunity Compliance Reports, Federal-Aid Projects, February 1, 1977, Revised July 1, 1978, Revised November 3, 1980, Revised April 15, 1981, Revised September 7, 1983, Revised October 15, 1998, Revised January 1, 2005, Revised August 1, 2005, and Revised March 1, 2015,

Wage Determination Decision,

Bidding Schedule,

Included in the Proposal Pamphlet only:

Proposal,

Surety (Bid) Bond, 12-1303,

Certification With Regard to the Performance of Previous Contracts or Subcontracts
Subject to the Equal Opportunity Clause and the Filing of Required Reports, Federal
Aid Projects, April, 1969, Rev. July, 2003,

Certification With Respect to the Receipt of Addenda,

Participation in Boycott of Israel Certification Form

Disadvantaged Business Enterprise (DBE) Assurance,

BID SUBMISSION:

In submitting a bid, the holder of a Bid Proposal Pamphlet shall completely execute the following documents:

Proposal,

Bidding Schedule,

Surety (Bid) Bond, 12-1303,

Certification With Regard to the Performance of Previous Contracts or Subcontracts
Subject to the Equal Opportunity Clause and the Filing of Required Reports, Federal
Aid Projects, April, 1969, Rev. July, 2003, and

Certification With Respect to the Receipt of Addenda.

Participation in Boycott of Israel Certification Form

Disadvantaged Business Enterprise (DBE) Assurance,

PROPOSAL GUARANTY:

Each bidder is advised to satisfy itself as to the character and the amount of the proposal guaranty required in the Advertisement for Bids.

CONTRACT DOCUMENTS:

The bidder to whom an award is made will be required to execute a Performance Bond and a Payment Bond, each in 100 percent of the amount of the bid, an Insurance Certificate and the Contract Agreement.

A copy of these documents is not included in the Proposal Pamphlet which is furnished to prospective bidders; however, each bidder shall satisfy itself as to the requirements of each document.

The documents, approved by the Department of Transportation, Highways Division, are identified as follows:

Statutory Performance Bond, 12-1301, September, 1992

Statutory Payment Bond, 12-1302, September, 1992

Contract Agreement, 12-0912, August, 2000

Certificate of Insurance, 12-0100, June, 1998

A copy of each document may be obtained by making a request to Contracts and Specifications Services.

COPIES OF PROJECT DOCUMENTS:

Distribution of a limited number of plans and Special Provisions will be made to the successful low bidder, at no charge, following confirmation of bid prices and DBE submittal, if applicable. The distribution will be made on the following basis:

Contract Size (Dollars)	Full Size Plans	1/2 Size Plans	Bound Bid Books	Unbound Bid Books
\$0 - \$20,000,000	2	10	5	10
over \$\$20,000,000	5	20	5	20

These plans and Special Provisions will be set aside and designated for use by the low bidder along with an equal number held in reserve for the responsible District Office.

Any additional plans or Special Provisions that the low bidder may require beyond the above distribution will be available at the invoice cost of printing by ordering through the Engineer.

MATERIAL AND SITE INFORMATION:

Projects requiring materials, excavation, or site investigation may have additional information available concerning the material investigations of the project site and adjacent projects. This information, when available and applicable, may be examined in the Office of the Bridge Group-Geotechnical Section, located at 1221 N. 21st Avenue, Phoenix, Arizona

85009-3740. The contractor may contact Bridge Group at (602) 712-7481 to schedule an appointment to examine the information. This information will not be attached to the contract documents. Copies of available information may be purchased by prospective bidders.

(EPRISE, 12/07/16)

DISADVANTAGED BUSINESS ENTERPRISES:

1.0 Policy:

The Arizona Department of Transportation (hereinafter the Department) has established a Disadvantaged Business Enterprise (DBE) program in accordance with the regulations of the U.S. Department of Transportation (USDOT), 49 CFR Part 26. The Department has received Federal financial assistance from the U.S. Department of Transportation and as a condition of receiving this assistance, the Department has signed an assurance that it will comply with 49 CFR Part 26.

It is the policy of the Department to ensure that DBEs, as defined in Part 26, have an equal opportunity to receive and participate in USDOT-assisted contracts. It is also the policy of the Department:

1. To ensure nondiscrimination in the award and administration of USDOT-assisted contracts;
2. To create a level playing field on which DBEs can compete fairly for USDOT-assisted contracts;
3. To ensure that the DBE program is narrowly tailored in accordance with applicable law;
4. To ensure that only firms that fully meet 49 CFR Part 26 eligibility standards are counted as DBEs;
5. To help remove barriers to the participation of DBEs in USDOT-assisted contracts;
6. To assist in the development of firms that can compete successfully in the market place outside the DBE program and;
7. To promote the use of DBEs in all types of federally-assisted contracts and procurement activities.

It is also the policy of the Department to facilitate and encourage participation of Small Business Concerns (SBCs), as defined herein in USDOT-assisted contracts. The Department encourages contractors to take reasonable steps to eliminate obstacles to SBCs' participation and to utilize SBCs in performing contracts.

2.0 Assurances of Non-Discrimination:

The contractor, subrecipient, 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 USDOT-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 state deems appropriate, which may include, but not limited to:

- (1) Withholding monthly progress payments;
- (2) Assessing sanctions;
- (3) Liquidated damages; and/or
- (4) Disqualifying the contractor from future bidding as non-responsible.

The contractor, subrecipient, or subcontractor shall ensure that all subcontract agreements contain this non-discrimination assurance.

3.0 Definitions:

- (A) Commercially Useful Function (CUF):** Commercially Useful Function is defined fully in 49 CFR 26.55 which definition is incorporated herein by reference.
- (B) Committed DBE:** A DBE that was identified by the contractor, typically on a DBE Affidavit, to meet an assigned DBE goal as a condition of contract award and performance, and includes any substitute DBE that has subsequently been committed work to meet the assigned contract goal.
- (C) Disadvantaged Business Enterprise (DBE):** a for-profit small business concern which meets both of the following requirements:
- (1) Is at least 51 percent owned by one or more socially and economically disadvantaged individuals or, in the case of any publicly owned business, at least 51 percent of the stock is owned by one or more such individuals; and,
 - (2) Whose management and daily business operations are controlled by one or more of the socially and economically disadvantaged individuals who own it.
- (D) Joint Check:** a two-party check between a subcontractor, DBE and/or non-DBE, a prime contractor and the regular dealer of material supplies.
- (E) Joint Venture:** an association of a DBE firm and one or more other firms to carry out a single, for-profit business enterprise, for which parties combine their property, capital, efforts, skills and knowledge, and in which the DBE is responsible for a distinct, clearly defined portion of the work of the contract and whose share in the capital contribution, control, management, risks, and profits of the joint venture are commensurate with its ownership interest.
- (F) NAICS Code:** The North American Industry Classification System (NAICS) is the standard used by Federal statistical agencies in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the US business economy.

(G) Non-DBE: any firm that is not a DBE.

(H) Race Conscious: a measure or program is one that is focused specifically on assisting only DBEs, including women-owned DBEs.

(I) Race Neutral: a measure or program is one that is, or can be, used to assist all small businesses. For the purposes of this part, race neutral includes gender-neutrality.

(J) Small Business Concern: a business that meets all of the following conditions:

- (1) Operates as a for-profit business;
- (2) Operates a place of business primarily within the U.S., or makes a significant contribution to the U.S. economy through payment of taxes or use of American products, materials, or labor;
- (3) Is independently owned and operated;
- (4) Is not dominant in its field on a national basis; and
- (5) Does not have annual gross receipts that exceed the Small Business Administration size standards average annual income criteria for its primary North American Industry Classification System (NAICS) code.

(K) Socially and Economically Disadvantaged Individuals: any individual who is a citizen (or lawfully admitted permanent resident) of the United States and who is:

- (1) Any individual who is found to be a socially and economically disadvantaged individual on a case-by-case basis.
- (2) Any individual in the following groups, members of which are rebuttably presumed to be socially and economically disadvantaged:
 - (i) "Black Americans," which includes persons having origins in any of the Black racial groups of Africa;
 - (ii) "Hispanic Americans," which includes persons of Mexican, Puerto Rican, Cuban, Dominican, Central or South American, or other Spanish or Portuguese culture or origin, regardless of race;
 - (iii) "Native Americans," which includes persons who are enrolled members of a federally or State recognized Indian tribe, Alaskan Natives or Native Hawaiians;
 - (iv) "Asian-Pacific Americans," which includes persons whose origins are from Japan, China, Taiwan, Korea, Burma (Myanmar), Vietnam, Laos, Cambodia (Kampuchea), Thailand, Malaysia, Indonesia, the Philippines, Brunei, Samoa, Guam, the U.S. Trust Territories of the Pacific Islands (Republic of Palau), the Republic of the Northern Marianas Islands,

Macao, Fiji, Tonga, Kiribati, Tuvalu, Nauru, Federated States of Micronesia, or Hong Kong;

- (v) “Subcontinent Asian Americans,” which includes persons whose origins are from India, Pakistan, Bangladesh, Bhutan, the Maldives Islands, Nepal or Sri Lanka;
- (vi) Women;
- (vii) Any additional groups whose members are designated as socially and economically disadvantaged by the Small Business Administration (SBA), at such time as the SBA designation becomes effective.

4.0 Working with DBEs:

The Department works with DBEs and assists them in their efforts to participate in the highway construction program. All bidders should contact the Department’s Business Engagement and Compliance Office (BECO) by phone, through email, or at the address shown below, for assistance in their efforts to use DBEs in the highway construction program of the Department. BECO contact information is as follows:

Arizona Department of Transportation
Business Engagement and Compliance Office
1801 W. Jefferson Street, Ste. 101, Mail Drop 154A
Phoenix, AZ 85007
Phone (602) 712-7761
FAX (602) 712-8429
Email: contractorcompliance@azdot.gov
Website: www.azdot.gov/bec

4.01 Mentor-Protégé Program:

The Department has established a Mentor-Protégé program as an initiative to encourage and develop disadvantaged businesses in the highway construction industry. The program encourages prime contractors to provide certain types of assistance to certified DBE subcontractors. ADOT encourages contractors and certified DBE subcontractors to engage in a Mentor-Protégé agreement under certain conditions. Such an agreement must be mutually beneficial to both parties and to ADOT in fulfilling the requirements of 49 CFR Part 23. For guidance regarding this program, refer to the Mentor-Protégé Program Guidelines available on the BECO website.

The Mentor-Protégé program is intended to increase legitimate DBE activities. The program does not diminish the DBE rules or regulations, and participants may not circumvent these rules.

5.0 Applicability:

The Department has established an overall annual goal for DBE participation on Federal-aid contracts. The Department intends for the goal to be met with a combination of race conscious and race neutral efforts. Race conscious participation occurs where the contractor uses a percentage of DBEs, as defined herein, to meet the contract-specified goal. Race neutral efforts are those that are, or can be, used to assist all small businesses or increase opportunities for all small businesses. The regulation, 49 CFR 26, describes race neutral participation as when a DBE wins a prime contract through customary competitive procurement procedures or is awarded a subcontract on a prime contract that does not carry a DBE contract goal.

The contractor shall meet the goal specified herein with DBEs, or establish that it was unable to meet the goal despite making good faith efforts to do so. Prime contractors are encouraged to obtain DBE participation above and beyond any goals that may be set for this project.

The DBE provisions are applicable to all bidders including DBE bidders.

6.0 Certification and Registration:

6.01 DBE Certification:

Certification as a DBE shall be predicated on:

- (1) The completion and execution of an application for certification as a "Disadvantaged Business Enterprise".
- (2) The submission of documents pertaining to the firm(s) as stated in the application(s), including but not limited to a statement of social disadvantage and a personal financial statement.
- (3) The submission of any additional information which the Department or the applicable Arizona Unified Certification (UCP) agency may require to determine the firm's eligibility to participate in the DBE program.
- (4) The information obtained during the on-site visits to the offices of the firm and to active job-sites.

Applications for certification may be filed online with the Department or the applicable Arizona Unified Certification agency at any time through the Arizona Unified Transportation Registration and Certification System (AZ UTRACS) website at <http://www.azutracs.com>.

DBE firms and firms seeking DBE certification shall cooperate fully with requests for information relevant to the certification process. Failure or refusal to provide such information is a ground for denial or removal of certification.

ADOT is a member of the AZ Unified Certification Program (AZUCP). Only DBE firms that are certified by the AZUCP are eligible for credit on ADOT projects. A list of DBE firms certified by AZUCP is available on the internet at <http://www.azutracs.com/>. The list will indicate contact information and specialty for each DBE firm, and may be sorted in a variety of

ways. However, ADOT does not guarantee the accuracy and/or completeness of this information, nor does ADOT represent that any licenses or registrations are appropriate for the work to be done.

The Department's certification of a DBE is not a representation of qualifications and/or abilities; only that the firm has met the criteria for DBE certification as outlined in 49 CFR Part 26. The contractor bears all risks of ensuring that DBE firms selected by the contractor are able to perform the work.

6.02 SBC Registration:

To comply with 49 CFR Part 26.39, ADOT's DBE Program incorporates contracting requirements to facilitate participation by Small Business Concerns (SBCs) in federally assisted contracts. SBCs are for-profit businesses authorized to do business in Arizona that meet the Small Business Administration (SBA) size standards for average annual revenue criteria for its primary North American Industry Classification System (NAICS) code.

While the SBC component of the DBE program does not require utilization goals on projects, ADOT encourages contractors to utilize small businesses that are registered in AZ UTRACS on their contracts, in addition to DBEs meeting the certification requirement. The contractor may use the AZ UTRACS website to search for certified DBEs and registered SBCs that can be used on the contract. However, SBCs that are not DBEs will not be counted toward the DBE contract goal.

SBCs can register online at the AZ UTRACS website. The Department's registration of SBCs is not a representation of qualifications and/or abilities. The contractor bears all risks of ensuring that SBC firms selected by the contractor are able to perform the work.

7.0 DBE Financial Institutions:

The Department thoroughly investigates the full extent of services offered by financial institutions owned and controlled by socially and economically disadvantaged individuals in its service area and makes reasonable efforts to use these institutions. The Department encourages prime contractors to use such institutions on USDOT assisted contracts. However, use of DBE financial institutions will not be counted toward the DBE contract goal.

The Department encourages prime contractors to research the Federal Reserve Board website at www.federalreserve.gov to identify minority-owned banks in Arizona derived from the Consolidated Reports of Condition and Income filed quarterly by banks (FFIEC 031 and 041) and from other information on the Board's National Information Center database.

8.0 Time is of the Essence:

TIME IS OF THE ESSENCE IN RESPECT TO THE DBE PROVISIONS.

9.0 Computation of Time:

In computing any period of time described in this DBE special provision, such as calendar days, the day from which the period begins to run is not counted, and when the last day of the period is a Saturday, Sunday, or Federal or State holiday, the period extends to the next day that is not a Saturday, Sunday, or Federal or State holiday. In circumstances where the Department's offices are closed for all or part of the last day, the period extends to the next day on which the Department's offices are open.

10.0 Contractor and Subcontractor Requirements:

10.01 General:

The contractor shall establish a DBE program that will ensure nondiscrimination in the award and administration of contracts and subcontracts.

Agreements between the bidder and a DBE in which the DBE promises not to provide subcontracting quotations to other bidders are prohibited.

10.02 DBE Liaison:

The contractor shall designate a DBE Liaison responsible for the administration of the contractor's DBE program. The name of the designated DBE Liaison shall be included in the DBE Intended Participation Affidavit Summary.

11.0 Bidders/Proposers List and AZ UTRACS Registration Requirement:

Under Title 49 CFR of the Code of Federal Regulations, Part 26.11, DOTs are required to collect certain information from all contractors and subcontractors who seek to work on federally-assisted contracts in order to set overall and contract DBE goals. ADOT collects this information through a Bidders/Proposers List when firms register their companies on the Arizona Unified Transportation Registration and Certification System (AZ UTRACS) web portal at <http://www.azutracs.com/> a centralized database for companies that seek to do business with ADOT. This information will be maintained as confidential to the extent allowed by federal and state law.

Prime contractors and all subcontractors, including DBEs, must be registered in AZ UTRACS. Bidders may verify that their firm and each subcontractors is registered using the AZ UTRACS website.

Bidders may obtain additional information at the AZ UTRACS website or by contacting BECO.

Bidders shall create the Bidders/Proposers List in the AZ UTRACS by selecting all subcontractors, service providers, manufacturers and suppliers that expressed interest or submitted bids, proposals or quotes for this contract. The Bidders/Proposers List form must be complete and must include the names for all subcontractors, service providers, manufacturers and suppliers regardless of the bidders' intentions to use those firms on the project.

All bidders must complete the Bidders/Proposers List online at AZ UTRACS whether they are the apparent low bidder or not. A confirmation email will be generated by the system. The bidders shall submit to BECO a copy of the email confirmation no later than 4:00 p.m. on the fifth calendar day following the bid opening. Faxed copies are acceptable.

FAILURE TO SUBMIT THE REQUIRED BIDDERS/PROPOSERS LIST CONFIRMATION EMAIL TO BECO BY THE STATED TIME AND IN THE MANNER HEREIN SPECIFIED SHALL BE CAUSE FOR THE BIDDER BEING DEEMED INELIGIBLE FOR AWARD OF THE CONTRACT.

12.0 DBE Goals:

The minimum goal for participation by DBEs on this project is as follows:

4.07 Percent

The percentage of DBE participation shall be based on the total bid.

13.0 Submission with Bids:

All bidders are required to certify in their bid proposal on the “Disadvantaged Business Enterprise Goal Assurance” certificate either:

- (1) The bidder has met the established DBE goal and arrangements with certified DBEs have been made prior to the submission of the bid, or
- (2) The bidder has been unable to meet the established DBE goal prior to the submission of the bid and has made good faith efforts to do so.

For the purpose of this section, ‘arrangements’ means, at a minimum, agreement between the bidder and the certified DBE, either written or oral, on unit prices and scope of work.

This certificate may not be revised or corrected after submission of the bid. If the bidder certifies that it has met the goal, the bidder cannot change its position after submission of the bid and submit documentation of a good faith effort. If the bidder certifies that it has been unable to meet the goal and has made a good faith effort, the bidder cannot change its position after submission of the bid and claim to have met or be able to meet the established goal.

Bids submitted with altered, incomplete or unsigned certificates will be considered non-responsive. Bids submitted with certifications on forms other than those furnished by the Department will be considered non-responsive.

14.0 Bidder Meeting DBE Goal:

14.01 General:

In order to be awarded this contract, the apparent low bidder must establish either (1) that it has met the DBE participation goal of the contract or (2) that it has made adequate good faith efforts (GFE) to meet the DBE goal. This requirement is in addition to all other pre-award requirements.

If the bidder indicates in the bid that it has met the DBE goal, the bidder shall submit a DBE Intended Participation Affidavit for each individual DBE it intends to use to meet the project DBE goal if the contract is awarded to their firm, and the Intended Participation Affidavit Summary as follows:

- (1) The DBE Intended Participation Affidavit for each individual DBE, and the Intended Participation Affidavit Summary must be received by BECO no later than 4:00 P.M. on the fifth calendar day following the bid opening. Copies of these forms are available from BECO at the address, phone number or website listed in DBE Subsection 4.0. The affidavits and Summary shall indicate that the bidder has met the DBE goal if this was indicated on the submittal with the bid.
- (2) The Intended Participation Affidavit Summary and the DBE Intended Participation Affidavit for each individual DBE must be accurate and complete in every detail and must be signed by an officer of the contractor(s). Percentages and dollar amounts must be accurate. Percentages shall be listed to two decimal places. The DBE Intended Participation Affidavit Summary must be submitted listing all the DBEs intended to be used and the creditable amounts.
- (3) A separate DBE Intended Participation Affidavit must be submitted for each DBE used to meet the goal of the project. The bidder shall indicate each DBE's name, a description of the work the DBE will perform, bid item number, proposed subcontract amount, and the NAICS code applicable to the kind of work the firm would perform on the contract. A list of certified DBEs with their respective NAICS codes can be located on the DBE Directory at AZ UTRACS website. All partial items must be explained. If not, the DBE will be considered to be responsible for the entire item. The intended DBE must complete and sign the form to confirm its participation in the contract.
- (4) The affidavits and summary may be submitted electronically through email to BECO.
- (5) A bidder must determine DBE credit in accordance with DBE Subsection 18 (Crediting DBE Participation Toward Meeting Goals). The affidavit will be reviewed, and approved or rejected by BECO.
- (6) Only those DBE firms certified by the Arizona Unified Certification Program (AZUCP) as of the deadline for bid submittal will be considered for DBE credit. It shall be the bidder's responsibility to ascertain the certification status of designated DBEs.

- (7) All DBE commitment amounts must be finalized between the DBE subcontractor and the bidder prior to the deadline for affidavit submittal. Bidders shall not inflate DBE awards in order to meet contract goals.
- (8) The bidder bears the risk of late submission or late delivery by the postal service or a delivery service. Affidavits and Summary received by BECO after 4:00 P.M. on the fifth calendar day following the bid opening will not be accepted.
- (9) Reduction of DBE commitments after affidavit submittal and prior to execution of the contract without good cause will result in the bid being rejected or the Department rescinding any award. Scheduling conflicts are not necessarily evidence of good cause as this should have been considered during pre-bid negotiations. The contractor is responsible for ensuring the DBE is available to meet the requirements of the contract.

All bidders are encouraged to submit the information described in this subsection. In the event that the low bid is rejected, the Department will consider award of the contract to the next responsible and responsive bidder. To be considered responsive, the bidder must have submitted the above information no later than five calendar days after bid opening.

14.02 Failure to Comply:

If the apparent low bidder fails to submit the required information by the stated time and in the manner herein specified, or if the submitted information reveals a failure to meet the requirements of the specifications, the apparent low bidder shall be ineligible to receive award of the contract and the bid will be rejected. The proposal guarantee (bid bond) shall be forfeited if no submission is made or if the State Engineer finds the submission was made in bad faith.

15.0 Documented Good Faith Effort:

15.01 General:

If the apparent low bidder has stated in its bid proposal that it has been unable to meet the DBE goal, that bidder must demonstrate, through detailed and comprehensive documentation, that good faith efforts have been made to solicit, assist, and use DBE firms to meet the DBE goal prior to the bid. If the bidder certifies that it has been unable to meet the goal and has made a good faith effort, the bidder cannot change its position after submission of the bid and claim to have met the established goal.

Failure to demonstrate good faith efforts to the satisfaction of ADOT will result in the rejection of the bid. In the event that the low bid is rejected, the Department will consider award of the contract to the next responsible and responsive bidder. To be considered responsive, the bidder must have submitted the information described in either Subsection 14 or 15 of this DBE special provision, no later than five calendar days after bid opening.

The bidder's good faith effort documentation must be submitted to and received by the Department's BECO by 4:00 P.M. on the fifth calendar day after the bids are opened. Good

faith effort documentation may be submitted electronically through email to BECO. Good faith effort documentation submitted after the time specified will not be accepted.

The bidder bears the risk of late submission or late delivery by the postal service or a delivery service.

The documentation of good faith efforts must include copies of each DBE and non-DBE subcontractor quote submitted to the bidder when a non-DBE subcontractor was selected over a DBE for work on the contract. A generalized assertion that the contractor received multiple quotes is not sufficient unless copies of those quotes are provided.

Bidders are encouraged to review Appendix A of 49 CFR Part 26.

Useful information related to encouraging DBE participation and documented good faith efforts can be found in the Department's "Good Faith Effort Guide" and other documents made available on the internet at BECO's website. The information provided in the "Good Faith Effort Guide" does not replace the specifications; bidders must comply with the requirements of this specification.

In order to be awarded a contract on the basis of good faith efforts, a bidder must show that it took all necessary and reasonable steps to achieve the DBE goal which, by their scope, intensity, and appropriateness to the objective, could reasonably be expected to obtain sufficient DBE participation, even if they were not fully successful. The Department will consider the quality, quantity, and intensity of the different kinds of efforts the bidder has made. The efforts employed by the bidder should be those that one could reasonably expect a bidder to make if the bidder were actively and aggressively trying to obtain DBE participation sufficient to meet the DBE goal. Mere pro forma efforts are not sufficient good faith efforts to meet the DBE contract requirements.

The bidder shall, as a minimum, seek DBEs in the same geographic area in which it generally seeks subcontractors for a given project. If the bidder cannot meet the goals using DBEs from this geographic area, the bidder, as part of its effort to meet the goals, shall expand its search to a reasonably wider geographic area.

The following is a list of types of efforts a bidder must address when submitting good faith effort documentation:

- (1) Contacting the Department's BECO prior to the submission of bids, either by email, or by telephone, to inform BECO of the firm's difficulty in meeting the DBE goals on a given project, and requesting assistance. The bidder must document its contact with BECO, and indicate the type of contact, the date and time of the contact, the name of the person(s) contacted, and any details related to the communication. The contact must be made in sufficient time before bid submission to allow BECO to provide effective assistance. The bidder will not be considered to have made good faith efforts if the bidder failed to contact BECO.
- (2) Conducting market research to identify small business contractors and suppliers, and soliciting, through all reasonable and available means the interest of all certified DBEs who have the capability to perform the work of the contract. This may include

attendance at pre-bid meetings and business matchmaking meetings and events, advertising and/or providing written notices, posting of "Notices of Sources Sought" and/or "Requests for Proposals" at reasonable locations, including the contractor's website, written notices or emails to all DBEs listed in the Department's directory of transportation firms that specialize in areas of work desired (as noted in the DBE directory) and which are located in the area or surrounding areas of the project. The bidder should solicit this interest as early in the acquisition process as practicable to allow DBEs to respond to the solicitation and submit a timely offer for the subcontract. The bidder should determine with certainty if the DBEs are interested by taking appropriate steps to follow-up initial solicitations.

- (3) Selecting portions of the work to be performed by DBEs in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units (for example smaller tasks or quantities) to facilitate DBE participation, even when the prime contractor might otherwise prefer to perform these work items with its own forces. This may include, where possible, establishing flexible time frames for performance and delivery schedules in a manner that encourages and facilitates DBE participation.
- (4) Providing interested DBEs with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist DBEs in responding to solicitations.
- (5) Negotiating in good faith with interested DBEs. It is the bidder's responsibility to make a portion of the work available to the DBE subcontractors and suppliers, and to select those portions of work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of DBEs that were considered; a description of the information provided from the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for DBEs to perform work.

Mailings to DBEs requesting bids are not alone sufficient to constitute good faith effort.

A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using DBEs is not in itself sufficient reason for a bidder's failure to meet the DBE goal, as long as such costs are reasonable. Also, the ability or desire of a prime contractor to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. However, prime contractors are not required to accept higher quotes from DBEs if the price difference is excessive or unreasonable. Documentation, such as copies of all other bids or quotes, must be submitted.

- (6) Not rejecting DBEs as being unqualified without sound reasons based on a thorough investigation of their capabilities. The contractor's standing within its industry, membership in specific groups, organizations or associations and political or social affiliations (for example, union vs. non-union employee status) are not legitimate causes for the rejection or non-solicitation of bids in the contractor's efforts to meet the project goal.
- (7) Making efforts to assist interested DBEs in obtaining bonding, lines of credit, or insurance as required by the recipient or contractor.
- (8) Making efforts to assist interested DBEs in obtaining necessary equipment, supplies, materials, or related assistance or services.
- (9) Effectively using the services of available minority/women community organizations; minority/women contractors' groups; local, state, and Federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBEs.

Another practice considered an insufficient good faith effort is the rejection of the DBE because its quotation for the work was not the lowest received. The contractor must submit copies of each DBE and non-DBE subcontractor quote submitted to the bidder when a non-DBE subcontractor was selected over a DBE for work on the contract. A generalized assertion that the contractor has received multiple quotes is not sufficient unless copies of those quotes are provided. The Department may contact rejected DBEs as part of its investigation. However, nothing in this paragraph shall be construed to require the bidder or prime contractor to accept unreasonable quotes in order to satisfy contract goals.

In determining whether a bidder has made good faith efforts, the Department will review the documented efforts of the contractor and will review the performance take into account the ability of other bidders in meeting the contract to meet the DBE goal.

A promise to use DBEs after contract award is not considered to be responsive to the contract solicitation or to constitute good faith efforts.

The Department will evaluate the submittal to determine whether in fact good faith efforts have been demonstrated consistent with the specifications and the Federal regulations, 49 CFR 26, Appendix A.

15.02 Failure to Comply:

If the apparent low bidder fails to submit the required information by the stated time and in the manner herein specified, or if the submitted information reveals a failure to meet the requirements of the specifications, the apparent low bidder shall be ineligible to receive award of the contract and the bid will be rejected. The proposal guarantee (bid bond) shall be forfeited if no submission is made or if the State Transportation Board finds the submission was made in bad faith.

15.03 Appeal and Protest of Good Faith Effort Determination:

Any interested party may appeal the determination of the Business Engagement and Compliance Office to the State Engineer. That appeal must be in writing and personally delivered or sent by certified mail, return receipt requested, to the State Engineer. The protest must be received by the State Engineer no later than seven calendar days after the decision of BECO. Copies of the protest shall be sent by the protestant to every bidder, at the same time the protest is submitted to the State Engineer. Any bidder whose bid is rejected for failure to meet the goal or make GFE will be given the opportunity to meet in person with the State Engineer, at the bidder's written request included in the protest, to discuss the issue of whether it met the goal or made adequate good faith efforts to do so.

Any interested party may submit a response to the appeal no later than seven calendar days after the appeal. Responses from interested parties must also be in writing and personally delivered or sent by certified mail, return receipt requested, to the State Engineer. Any interested party submitting such response shall also provide a copy of its response to every bidder, at the same time the protest is submitted to the State Engineer. The State Engineer shall promptly consider any appeals under this subsection and notify all bidders in writing of the State Engineer's findings and decision.

Any interested party may protest the State Engineer's decision to the Transportation Board, pursuant to the requirements of Subsection 103.10 of the Standard Specifications. In accordance with 49 CFR 26.53(d)(5), the result of the Board's Decision is not subject to administrative appeal to the USDOT.

16.0 Rejection of Low Bid:

If, for any reason, the bid of the apparent low bidder is rejected, a new apparent low bidder will be identified. The Department will notify the new apparent low bidder, and this bidder shall submit its subsequent detailed submission as set forth in DBE Subsections 14 or 15.

17.0 Payment Reporting:

The contractor shall report on a monthly basis indicating the amounts paid to all subcontractors, of all tiers, working on the project. Reporting shall be in accordance with Subsection 109.06(B)(5) of the specifications.

18.0 Crediting DBE Participation Toward Meeting Goals:

18.01 General Requirements:

To count toward meeting a goal, the DBE firm must be certified as of the deadline for submission of bids in each NAICS code applicable to the kind of work the firm will perform on the contract. NAICS for each DBE can be found on the AZ UTRACS under the Firm Directory. General descriptions of all NAICS codes can be found at www.naics.com.

Credit towards the contractor's DBE goal is given only after the DBE has been paid for the work performed.

The entire amount of a contract that is performed by the DBE's own forces, including the cost of supplies and materials purchased by the DBE for the work on the contract and equipment leased by the DBE will be credited toward DBE participation. Supplies and equipment the DBE subcontractor purchases or leases from the prime contractor or its affiliate will not be credited toward DBE participation. Work included in a force account item cannot be listed on the DBE Intended Participation Affidavit.

The contractor bears the responsibility to determine whether the DBE possesses the proper contractor's license(s) to perform the work and, if DBE credit is requested, that the DBE subcontractor is certified for the requested type of work.

If a DBE cannot complete its work due to failure to obtain or maintain its licensing, the contractor bears the responsibility to notify the Engineer and BECO immediately after the contractor becomes aware of the situation, and request approval to replace the DBE with another DBE. The contractor shall follow the DBE termination/substitution requirements described in Subsection 24.0 of these DBE provisions.

The Department's certification is not a representation of a DBE's qualifications and/or abilities. The contractor bears all risks that the DBE may not be able to perform its work for any reason.

A DBE may participate as a prime contractor, subcontractor, joint venture partner with either a prime contractor or a subcontractor, or as a vendor of materials or supplies. A DBE joint venture partner shall be responsible for a clearly defined portion of the work to be performed, in addition to meeting the requirements for ownership and control.

The dollar amount of work to be accomplished by DBEs, including partial amount of a lump sum or other similar item, shall be on the basis of subcontract, purchase order, hourly rate, rate per ton, etc., as agreed to between parties.

With the exception of bond premiums, all work must be attributed to specific bid items. Where work applies to several items, the DBE contracting arrangement must specify unit price and amount attributable to each bid item. DBE credit for any individual item of work performed by the DBE shall be the lesser of the amount to be paid to the DBE or the prime contractor's bid price. If the amount bid by the DBE on any item exceeds the prime contractor's bid amount, the prime contractor may not obtain credit by attributing the excess to other items.

Where more than one DBE is engaged to perform parts of an item (for example, supply and installation), the total amount payable to the DBEs will not be considered in excess of the prime contractor's bid amount for that item.

Bond premiums may be stated separately, so long as the arrangement between the prime contractor and the DBE provides for separate payment not to exceed the price charged by the bonding company.

DBE credit may be obtained only for specific work done for the project, supply of equipment specifically for physical work on the project, or supply of materials to be incorporated in the

work. DBE credit will not be allowed for costs such as overhead items, capital expenditures (for example, purchase of equipment), and office items.

If a DBE performs part of an item (for example, installation of materials purchased by a Non-DBE), the DBE credit shall not exceed the lesser of (1) the DBE's contract or (2) the prime contractor's bid for the item, less a reasonable deduction for the portion performed by the Non-DBE.

When a DBE performs as a partner in a joint venture, only that portion of the total dollar value of the contract which is clearly and distinctly performed by the DBE's own forces can be credited toward the DBE goal.

The contractor may credit second-tier subcontracts issued to DBEs by non-DBE subcontractors. Any second-tier subcontract to a DBE used to meet the goal must meet the requirements of a first-tier DBE subcontract.

A prime contractor may credit the entire amount of that portion of a construction contract that is performed by the DBE's own forces. The cost of supplies and materials obtained by the DBE for the work of the contract can be included so long as that cost is reasonable. Leased equipment may also be included. No credit is permitted for supplies purchased or equipment leased from the prime contractor or its affiliate(s).

When a DBE subcontracts a part of the work of its contract to another firm, the value of the subcontract may be credited towards the DBE goal only if the DBE's subcontractor is itself a DBE and performs the work with its own forces. Work that a DBE subcontracts to a non-DBE firm does not count toward a DBE goal.

A prime contractor may credit the entire amount of fees or commissions charged by a DBE firm for providing a bona fide service, such as professional, technical, consultant, or managerial services, or for providing bonds or insurance specifically required for the performance of a USDOT-assisted contract, provided the fees are reasonable and not excessive as compared with fees customarily allowed for similar services.

18.02 DBE Prime Contractor:

When a certified DBE firm bids on a contract that contains a DBE goal, the DBE firm is responsible for meeting the DBE goal on the contract or making good faith efforts to meet the goal, just like any other bidder. In most cases, a DBE bidder on a contract will meet the DBE goal by virtue of the work it performs on the contract with its own forces. However, all the work that is performed by the DBE bidder or any other DBE subcontractors and DBE suppliers will count toward the DBE goal. The DBE bidder shall list itself along with any DBE subcontractors and suppliers, on the DBE Intended Participation Affidavit and Summary in order to receive credit toward the DBE goal.

18.03 Effect of Loss of DBE Eligibility:

If a DBE is deemed ineligible (decertified) or suspended by the Department in accordance with 49 CFR 26.87 and 26.88, the DBE may not be considered to meet a contract goal on a

new contract, but may be considered to meet the contract goal under a subcontract that was executed before the DBE suspension or decertification is effective.

When a committed DBE firm or a DBE prime contractor loses its DBE eligibility and a subcontract or contract has not been executed before a decertification notice is issued to the DBE firm by its certifying agency, the ineligible firm does not count toward the contract goal. The contractor must meet the contract goal with an eligible DBE firm or firms or demonstrate good faith effort. When a subcontract is executed with the DBE firm before the Department notified the firm of its ineligibility, the contractor may continue to use the firm on the contract and may continue to receive credit toward the DBE goal for the firm's work.

18.04 Notifying the Contractor of DBE Certification Status:

Each DBE contract of any tier shall require any DBE subcontractor or supplier that is either decertified or certified during the term of the contract to immediately notify the contractor and all parties to the DBE contract in writing, with the date of decertification or certification. The contractor shall require that this provision be incorporated in any contract of any tier in which a DBE is a participant.

18.05 Police Officers:

DBE credit will not be permitted for procuring DPS officers. For projects on which officers from other agencies are supplied, DBE credit will be given only for the broker fees charged, and will not include amounts paid to the officers. The broker fees must be reasonable.

18.06 Commercially Useful Function:

A prime contractor can credit expenditures to a DBE subcontractor toward DBE goals only if the DBE performs a Commercially Useful Function (CUF).

A DBE performs a CUF when it is responsible for execution of the work of a contract and carries out its responsibilities by actually performing, managing, and supervising the work involved. To perform a commercially useful function, the DBE must also be responsible, with respect to materials and supplies on the contract, for negotiating price, determining quality and quantity, ordering the material, and installing (where applicable) and paying for the material itself that it uses on the project. To determine whether a DBE is performing a commercially useful function, the Department will evaluate the amount of work subcontracted, industry practices, whether the amount the firm is to be paid under the contract is commensurate with the work it is actually performing and the DBE credit claimed for its performance of the work, and other relevant factors.

A DBE will not be considered to perform a commercially useful function if its role is limited to that of an extra participant in a transaction, contract, or project through which funds are passed in order to obtain the appearance of DBE participation. In determining whether a DBE is such an extra participant, the Department will examine similar transactions, particularly those in which DBEs do not participate.

If a DBE does not perform or exercise responsibility for at least 30 percent of the total cost of its contract with its own work force, or if the DBE subcontracts a greater portion of the work of a contract than would be expected on the basis of normal industry practice for the type of work involved, the Department will presume that the DBE is not performing a commercially useful function.

When a DBE is presumed not to be performing a commercially useful function as provided above, the DBE may present evidence to rebut this presumption. The Department will determine if the firm is performing a CUF given the type of work involved and normal industry practices.

The Department will notify the contractor, in writing, if it determines that the contractor's DBE subcontractor is not performing a CUF. The contractor will be notified within seven calendar days of the Department's decision.

Decisions on CUF may be appealed to the State Engineer. The appeal must be in writing and personally delivered or sent by certified mail, return receipt requested, to the State Engineer. The appeal must be received by the State Engineer no later than seven calendar days after the decision of BECO. BECO's decision remains in effect unless and until the State Engineer reverses or modifies BECO's decision. The State Engineer will promptly consider any appeals under this subsection and notify the contractor of the State Engineer's findings and decisions. Decisions on CUF matters are not administratively appealable to USDOT.

The Department will conduct project site visits on the contract to confirm that DBEs are performing a CUF. The contractor shall cooperate during the site visits and the Department's staff will make every effort not to disrupt work on the project.

18.07 Trucking:

The Department will use the following factors in determining whether a DBE trucking company is performing a commercially useful function. The DBE must be responsible for the management and supervision of the entire trucking operation for which it is responsible on a particular contract, and there cannot be a contrived arrangement for the purpose of meeting DBE goals.

The DBE must itself own and operate at least one fully licensed, insured, and operational truck used on the contract on every day that credit is to be given for trucking.

The contractor will receive credit for the total value of transportation services provided by the DBE using trucks it owns, insures and operates, and using drivers it employs.

The DBE may lease trucks from another DBE firm, including an owner-operator who is certified as a DBE. The DBE who leases trucks from another DBE receives credit for the total value of the transportation services.

The DBE may also lease trucks from a non-DBE firm, including an owner-operator. The DBE who leases trucks with drivers from a non-DBE is entitled to credit for the total value of the transportation services provided by non-DBE leased trucks with drivers not to exceed

the value of transportation services on the contract provided by DBE-owned trucks or leased trucks with DBE employee drivers. Additional participation by non-DBE owned trucks with drivers receives credit only for the fee or commission paid to the DBE as a result of the lease agreement.

Example: DBE Firm X uses two of its own trucks on a contract. It leases two trucks from DBE Firm Y and six trucks from non-DBE firm Z. DBE credit would be awarded for the total value of transportation services provided by Firm X and Firm Y, and may also be awarded for the total value of transportation services provided by four of the six trucks provided by Firm Z. In all, full credit would be allowed for the participation of eight trucks. DBE credit could be awarded only for the fees or commissions pertaining to the remaining trucks Firm X receives as a result of the lease with Firm Z.

The DBE may lease trucks without drivers from a non-DBE truck leasing company. If the DBE leases trucks from a non-DBE leasing company and uses its own employees as drivers, it is entitled to credit for the total value of these hauling services.

Example: DBE Firm X uses two of its own trucks on a contract. It leases three additional trucks from non-DBE Firm Z. Firm X uses its own employees to drive the trucks leased from Firm Z. DBE credit would be awarded for the total value of the transportation services provided by all five trucks.

For purposes of this section, a lease must indicate that the DBE has exclusive use of and control over the truck. This does not preclude the leased truck from working for others during the term of the lease with the consent of the DBE, so long as the lease gives the DBE absolute priority for use of the leased truck. Leased trucks must display the name and identification number of the DBE. Credit will be allowed only for those lease costs related to the time each truck is devoted to the project.

DBE credit for supplying paving grade asphalt and other asphalt products will only be permitted for standard industry hauling costs, and only if the DBE is owner or lessee of the equipment and trucks. Leases for trucks must be long term (extending for a fixed time period and not related to time for contract performance) and must include all attendant responsibilities such as insurance, titling, hazardous waste requirements, and payment of drivers.

18.08 Materials and Supplies:

The Department will credit expenditures with DBEs for material and supplies towards the DBE goal as follows. If the materials or supplies are obtained from a DBE manufacturer, 100 percent of the cost of the materials or supplies is credited. A manufacturer is defined as a firm that operates or maintains a factory or establishment that produces, on the premises, the materials, supplies, articles, or equipment required under the contract, and of the general character described by the specifications.

If the materials or supplies are purchased from a DBE regular dealer, 60 percent of the cost of the materials or supplies is credited. A DBE regular dealer is defined as a firm that owns, operates, or maintains a store or warehouse or other establishment in which the materials, supplies, articles, or equipment of the general character described by the specifications and

required under the contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business. To be a regular dealer, the firm must be an established, regular business that engages, as its principal business and under its own name, in the purchase and sale or lease of the products in question. A firm may be a DBE regular dealer in such bulk items as petroleum products, steel, cement, stone or asphalt without owning, operating, or maintaining a place of business, as provided above, if the person both owns and operates distribution equipment for the products. Any supplementing of regular dealers' own distribution equipment shall be by a long-term lease agreement, and not on an ad-hoc or contract-by-contract basis. Packagers, brokers, manufacturers' representatives, or other persons who arrange or expedite transactions are not regular dealers within the meaning of this paragraph and the paragraph above.

With respect to materials or supplies purchased from a DBE which is neither a manufacturer nor a regular dealer, the Department will credit the entire amount of the fees or commissions charged by the DBE for assistance in the procurement of the materials and supplies, or fees or transportation charges for the delivery of materials or supplies required on a job site, toward DBE goals, provided the fees are determined to be reasonable and not excessive as compared with fees customarily allowed for similar services. The cost of the materials and supplies themselves may not be counted toward the DBE goal.

The Department will credit expenditures with DBEs for material and supplies (e.g. whether a firm is acting as a regular dealer or a transaction expeditor) towards the DBE goal on a contract-by-contract basis. The fact that a DBE firm qualifies under a classification (manufacturer, regular dealer or supplier) for one contract does not mean it will qualify for the same classification on another contract. The bidder shall be responsible for verifying whether a DBE qualifies as a DBE manufacturer, regular dealer or supplier. The bidder may contact BECO for assistance in this determination.

19.0 Effect of Contract Changes:

If for any reason it becomes apparent that the DBE goal will not be met then the contractor shall: (1) immediately notify the Engineer and BECO of the potential or actual decrease in DBE compensation, and (2) make good faith efforts to obtain DBE participation to meet or exceed the project DBE goal. BECO will approve or deny the contractor's good faith efforts. Good faith efforts required under the provisions of this section may vary, depending on the time available, the nature of the change, who initiated the change, and other factors as determined by BECO.

The contractor is not required to take work committed to another subcontractor and assign it to a DBE subcontractor in order to meet the committed DBE percentage.

If the resulting change increases the scope or quantity of work being done by a DBE subcontractor, the DBE shall be given the opportunity to complete the additional work and receive additional compensation beyond their original subcontract amount.

20.0 DBE Participation Above the Goal (Race Neutral Participation):

Additional DBE participation above the DBE participation required to meet the contract DBE goal is an important aspect of the Department's DBE program. The contractor is strongly encouraged to use additional DBEs above the DBE goal requirement in the contract to assist the Department in meeting its overall DBE goal and help the Department to meet the maximum feasible portion of its DBE goals through race neutral participation as outlined in 49 CFR Part 26.

There are fewer administrative requirements on the part of the contractor when using race neutral DBEs (DBEs not listed on the DBE Intended Participation Affidavit Summary). For example, if a DBE is not listed on the DBE Intended Participation Affidavit Summary, the DBE does not have to submit an Affidavit, and the subcontract approval process follows the same process of any other subcontract. The contractor does not have to replace the race neutral DBE with another DBE subcontractor if the race neutral DBE fails to perform. Therefore these DBEs are treated as any other subcontractor on the project.

21.0 Required Provisions for DBE Subcontracts:

All subcontracts of any tier, all supply contracts, and any other contracts in which a DBE is a party shall include, as a physical attachment, DBE Subcontract Compliance Assurances available on BECO's website.

Contractors executing agreements with subcontractors, DBE or non-DBE, that materially modify federal regulation and state statutes such as, prompt payment and retention requirements, through subcontract terms and conditions will be found in breach of contract which may result in termination of the contract, or any other such remedy as the Engineer deems appropriate as outlined in DBE Subsection 2.0.

The Department reserves the right to conduct random reviews of DBE and non-DBE subcontract documentation to ensure compliance with federal requirements.

The contractor shall ensure that all subcontracts or agreements with DBEs to supply labor or materials require that the subcontract and all lower tier subcontracts be performed in accordance with 49 CFR Part 26.

22.0 Contract Performance:

Contract items of work designated by the contractor to be awarded to DBEs shall be performed by the designated DBE or a Department-approved DBE substitute. DBE contract work items shall not be performed by the contractor, or a non-DBE subcontractor without prior approval by BECO. The DBE must perform a commercially useful function; that is, the DBE must manage, perform, and supervise a distinct element of work.

The contractor is required to use DBEs identified to meet the contract goal, so the prime contractor is responsible for ensuring that the DBEs are available to meet scheduling, work and other requirements on the contract.

The Department will visit the contract worksite to conduct reviews to ensure compliance with DBE requirements. The reviews may include, among other activities, interview of DBEs and their employees and the contractor and its employees. The contractor shall cooperate in the review and make its employees available. The contractor shall inform the Engineer in advance when each DBE will be working on the project to help facilitate reviews.

The Department reserves the right to inspect all records of the contractor and all records of the DBEs and non-DBE subcontractors concerning this contract. The contractor must make all documents related to all contracts available to ADOT upon request in accordance with Subsection 107.18.

In accordance with Subsection 108.01 of the specifications, the contractor shall provide to the Engineer, at the pre-construction conference, copies of all completed and signed subcontracts, purchase orders, invoices, etc., with all committed DBEs. These documents shall include the AZ UTRACS Registration number for the subcontractor or materials supplier.

Use of every DBE listed on the DBE Intended Participation Affidavit Summary is a condition of this contract. The contractor shall utilize the specific DBEs listed to perform the work and supply the materials for which each is listed on the Intended Participation Affidavit Summary unless the contractor obtains the Department's written consent. The contractor shall not be entitled to any payment for work or material that is not performed or supplied by the listed DBE, unless the Department has consented in writing.

23.0 Joint Checks:

23.01 Requirements:

A DBE subcontractor and a material supplier (or equipment supplier) may request permission for the use of joint checks for payments from the prime contractor to the DBE subcontractor and the supplier. Joint checks may be issued only if all the conditions in this subsection are met.

1. The DBE subcontractor must be independent from the prime contractor and the supplier, and must perform a commercially useful function. The DBE subcontractor must be responsible for negotiating the price of the material, determining quality and quantity, ordering the materials, installing (where applicable), and paying for the material. The DBE subcontractor may not be utilized as an extra participant in a transaction, contract, or project in order to obtain the appearance of DBE participation.
2. The use of joint checks will be allowed only if the prime contractor, DBE subcontractor, and material supplier establish that the use of joint checks in similar transactions is a commonly recognized business practice in the industry, particularly with respect to similar transactions in which DBE's do not participate.
3. A material or supply contract may not bear an excessive ratio relative to the DBE subcontractor's normal capacity.

4. There may not be any exclusive arrangement between one prime and one DBE in the use of joint checks that may bring into question whether the DBE is independent of the prime contractor.
5. Any arrangement for joint checks must be in writing, and for a specific term (for example, one year, or a specified number of months) that does not exceed a reasonable time to establish a suitable credit line with the supplier.
6. The prime contractor may act solely as the payer of the joint check, and may not have responsibility for establishing the terms of the agreement between the DBE subcontractor and the supplier.
7. The DBE must be responsible for receiving the check from the prime contractor and delivering the check to the supplier.
8. The prime contractor cannot require the DBE subcontractor to use a specific supplier, and the prime contractor may not participate in the negotiation of unit prices between the DBE subcontractor and the supplier.

23.02 Procedure and Compliance:

1. The Business Engagement and Compliance Office must approve the agreement for the use of joint checks in writing before any joint checks are issued. The prime contractor shall submit a DBE joint check request form, available from the BECO website, along with the joint check agreement, to BECO through email within seven calendar days from the time the subcontract is executed.
2. After obtaining authorization for the use of joint checks, the prime contractor, the DBE, and the supplier must retain documentation to allow for efficient monitoring of the agreement.
3. Copies of canceled checks must be submitted, with the payment information for the period in which the joint check was issued, electronically through email to BECO, and made available for review at the time of the onsite CUF review. The prime contractor, DBE, and supplier each have an independent duty to report to the Department in the case of any change from the approved joint check arrangement.
4. Any failure to comply will be considered by the Department to be a material breach of this contract and will subject the prime contractor, DBE, and supplier to contract remedies and, in the case of serious violations, a potential for termination of the contract, reduction or loss of prequalification, debarment, or other remedies which may prevent future participation by the offending party.

24.0 DBE Termination/Substitution:

24.01 General Requirements:

The contractor shall make all reasonable efforts to avoid terminating or substituting a DBE listed on the DBE Intended Participation Affidavit Summary. At a minimum, the contractor shall negotiate in good faith, give timely notices and/or extend deadlines to the extent that it will not jeopardize the contract with the Department. Reasonable methods to resolve

performance disputes must be applied and documentation provided to the Department before attempting to substitute or terminate a DBE.

24.02 Contractor Notice of Termination/Substitution:

All terminations, substitutions, and reductions in scope of work to be performed by DBEs listed on the DBE Intended Participation Affidavit Summary must be approved in writing by BECO. The contractor shall contact the Department within 24 hours from the first sign of any reason for potential DBE termination/substitution.

The contractor shall not terminate a DBE subcontractor listed on the DBE Intended Participation Affidavit or complete the work contracted to the DBE with its own forces or with a non-DBE firm without the Department's written consent. Before submitting a formal request to the Department for DBE termination/substitution, the contractor shall give written notice to the DBE subcontractor with a copy to BECO of its intent to terminate or substitute the DBE identifying the reason for the action. The notice shall include the deadline for the DBE to submit a written response advising the contractor and BECO of its position, which shall be a minimum of five calendar days after the notice is given. The Department will consider both the contractor's request and the DBE firm's response before approving the contractor's termination and substitution request.

24.03 Contractor Request for Termination/Substitution:

The contractor shall formally request the termination or substitution of a DBE listed on the DBE Intended Participation Affidavit Summary by submitting the DBE Termination/Substitution Request form, available from the BECO website, and supporting documentation to BECO. The submission shall include the following information:

- 1) The date the contractor determined the DBE to be unwilling, unable, or ineligible to perform.
- 2) A brief statement of facts describing the situation and citing specific actions or inaction by the DBE firm giving rise to contractor's assertion that the DBE firm is unwilling, unable, or ineligible to perform.
- 3) A brief statement of the good faith efforts undertaken by the contractor to enable the DBE firm to perform.
- 4) The total dollar amount currently paid for work performed by the DBE firm.
- 5) The total dollar amount remaining to be paid to the DBE firm for work completed, but for which the DBE firm has not received payment, and over which the contractor and the DBE firm have no dispute.
- 6) The projected date that the contractor requires a substitution or replacement DBE to commence work, if consent is granted to the request.
- 7) The DBE's response to the notice of intent to terminate. If there is no response from the DBE within the time allowed in the notice of intent to terminate, the contractor shall state that no response was received.

Any requests for substitutions or terminations of DBEs shall be made on the forms provided online by BECO.

Written consent for terminating the performance of any DBE listed on the DBE Intended Participation Affidavit Summary will be granted only where the contractor can demonstrate good cause showing that the DBE is unable, unwilling, or ineligible to perform. Such written consent to terminate any DBE shall concurrently constitute written consent to substitute or replace the terminated DBE. Termination or substitution of a DBE listed on the DBE Intended Participation Affidavit Summary will not be allowed based solely on a contractor's ability to negotiate a more advantageous contract with another subcontractor. The Department will consider both the contractor's request and DBE's response and explanation before approving the contractor's termination and substitution request.

24.04 Good Cause:

The Department will make the determination of good cause by providing written consent to the contractor after evaluating the contractor's good cause to terminate or substitute a DBE firm. Good cause for this purpose includes the following in relation to the listed DBE subcontractor:

1. Fails or refuses to execute a written contract.
2. Fails or refuses to perform the work of its subcontract in a way consistent with normal industry practice standards. However, good cause does not exist if the failure or refusal of the DBE subcontractor to perform its work on the subcontract results from the bad faith or discriminatory action of the prime contractor.
3. Fails or refuses to meet the prime contractor's reasonable, nondiscriminatory bond/insurance requirements.
4. Becomes bankrupt, insolvent, or exhibits credit unworthiness.
5. Is ineligible to work on public works projects because of suspension and debarment proceedings pursuant to federal or state law.
6. Is not a responsible contractor.
7. Voluntarily withdraws from the project and provides written notice of its withdrawal to the Department.
8. Is ineligible under a specific NAICS code to receive DBE credit for the type of work required.
9. A DBE owner dies or becomes disabled with the result that the firm is unable to complete its work on the contract.
10. Other documented good cause that the Department determines compels the termination or substitution of the DBE subcontractor.

24.05 DBE Termination/Substitution Good Faith Effort:

If the Department approves the termination of a DBE, the contractor shall make good faith efforts to find another DBE subcontractor to substitute for the original DBE. The good faith efforts as identified in DBE Subsection 15.0 shall be directed at finding another DBE to perform at least the same amount of work under the contract as the DBE that was terminated, to the extent needed to meet the contract goal. If a replacement DBE is not identified for the original DBE's work, the good faith efforts shall be documented and provided to the Department within seven calendar days from the date the Department

approves the termination. The Department will review when the termination was made, the nature of the efforts to replace the terminated DBE, and other factors as determined by BECO.

A prime contractor's inability to find a replacement DBE at the original price is not alone sufficient to support a finding that good faith efforts have been made to replace the original DBE. The fact that the contractor has the ability and/or desire to perform the contract work with its own forces does not relieve the contractor of the obligation to make good faith efforts to find the replacement DBE, and it is not a sound basis for rejecting a prospective replacement DBE's reasonable quote.

The termination of a DBE firm shall not relieve the contractor of its obligations under this Special Provision, and the unpaid portion of the terminated DBE firm's subcontract will not be counted toward the DBE goal.

If the Department has eliminated items of work subcontracted to a committed DBE, the prime contractor shall still make good faith efforts to replace the DBE with another DBE to the extent necessary to meet the goal. The Department will review the quality, thoroughness, and intensity of those efforts and give consideration to when the change was made, the nature of the change, and other factors as determined by BECO.

When a DBE substitution is necessary, the contractor shall submit an amended DBE Intended Participation Affidavit and Intended Participation Affidavit Summary to BECO for approval with the substitute DBE's name, description of work, NAICS code, AZ UTRACS registration number, and dollar value of work to the Engineer and the Department's BECO. Approval from BECO must be obtained prior to the substituted DBE beginning work.

24.06 Sanctions:

Failure by the contractor to carry out the requirements of the Department's DBE Termination/Substitution specifications is a material breach of contract and will result in such remedies as the Department deems appropriate, which will include, but are not limited to the assessment of liquidated damages. The Department will deduct from monies due or becoming due to the contractor, the dollar amount of the wrongfully substituted/replaced DBE subcontract plus 25 percent of the amount remaining to be paid to the DBE as liquidated damages. These liquidated damages shall be in addition to all other retention or liquidated damages provided for elsewhere in the contract.

In determining whether liquidated damages will be assessed, the extent of the liquidated damages, or additional remedies assessed, the State Construction and Materials Engineer will consider whether there have been other violations on this or other contracts, whether the failure by the contractor to carry out the requirements of the Department's DBE Termination/Substitution was due to circumstances beyond the contractor's control, and other circumstances.

25.0 Certification of Final DBE Payments:

The contractor's achievement of the goal is measured by actual payments made to the DBEs. The contractor shall submit the "Certification of Final DBE Payments form for each DBE firm working on the contract. This form shall be signed by the contractor and the relevant DBE, and submitted to the Engineer no later than 30 days after the DBE receives final payment.

ADOT will use this certification and other information available to determine applicable DBE credit allowed to date by the contractor and the extent to which the DBE firms were fully paid for that work. By the act of filing the forms, the contractor acknowledges that the information is supplied in order to justify the payment of state and federal funds to the contractor.

The contractor will not be released from the obligations of the contract until the "Certification of Final DBE Payments" forms are received and deemed acceptable by the Engineer and BECO.

26.0 Sanctions for Not Meeting Contract DBE Goal:

If the Department determines that the contractor has, without justification, not met the established DBE goal the Department will, at its discretion, deduct up to two times the amount of the unattained portion of established DBE goal from monies due or becoming due the contractor as liquidated damages, based on the circumstances of the noncompliance.

In determining whether liquidated damages will be assessed and the amount of the liquidated damages, the State Construction and Materials Engineer will consider whether there have been other violations on this or other contracts, whether the failure was due to circumstances beyond the control of the contractor, whether the contractor has made good faith efforts to meet the goal, and other appropriate circumstances. The contractor may, within 15 calendar days of receipt of the decision of the State Construction and Materials Engineer, escalate the decision to the State Engineer. If the contractor does not escalate the decision of the State Construction and Materials Engineer, in writing, within 15 calendar days of receipt of the decision, the contractor will be deemed to have accepted the decision and there will be no further remedy for the contractor. If the contractor escalates the decision to the State Engineer, and the contractor does not agree with the State Engineer's decision, the contractor may initiate litigation, arbitration or mediation pursuant to Subsection 105.21(D) and (E) of the Standard Specifications.

In addition to any other sanctions, willful failure of the contractor, DBE or other subcontractor to comply with this contract or with the Federal DBE regulations may result in disqualification from further contracting, subcontracting, or other participation in the Department's projects.

27.0 False, Fraudulent, or Dishonest Conduct:

In addition to any other remedies or actions, the Department will bring to the attention of the US Department of Transportation any appearance of false, fraudulent, or dishonest conduct in connection with the DBE program, so that USDOT can take steps such as referral to the Department of Justice for criminal prosecution, referral to the USDOT Inspector General for possible initiation of suspension and debarment proceedings against the offending parties or application of "Program Fraud and Civil Penalties" rules provided in 49 CFR Part 31.

GENERAL REQUIRMENTS:

Bidders/Proposers List and AZ UTRACS Registration Requirements:

Prime contractors and all subcontractors, including DBEs, must be registered in AZ UTRACS.

Bidders shall create the Bidders/Proposers List in the AZ UTRACS by selecting all subcontractors, service providers, manufacturers and suppliers that expressed interest or submitted bids, proposals or quotes for this contract.

All bidders must complete the Bidders/Proposers List online at AZ UTRACS whether they are the apparent low bidder or not. A confirmation email will be generated by the system. The bidders shall submit a copy of the email confirmation to BECO no later than 4:00 p.m. on the fifth calendar day following the bid opening. Faxed copies are acceptable.

FAILURE TO SUBMIT THE REQUIRED BIDDERS/PROPOSERS LIST CONFIRMATION EMAIL TO BECO BY THE STATED TIME AND IN THE MANNER HEREIN SPECIFIED SHALL BE CAUSE FOR THE BIDDER BEING DEEMED INELIGIBLE FOR AWARD OF THE CONTRACT.

Additional information regarding the Bidders List and AZ UTRACS Registration can be found in the Disadvantaged Business Enterprises Specification herein and by contacting the Business Engagement Compliance Office (BECO).

Availability of Documents:

Project documents will be available as shown below:

Documents	Paper Format	Electronic Format
Project Plans	X	X
Special Provisions	X	X
Proposal Pamphlet	X	X
Additional Documents (if available)		
Cross Sections		X
Earthwork Quantity Sheets		X
Other Reports		X
Existing Ground Digital Terrain Model		X

(DTM)		
Design Digital Terrain Model (DTM)		X

Documents in Electronic Format:

Project documents in electronic format are available on the Contracts and Specifications website.

In the case of any conflict or discrepancy between the project plans, specifications, or proposal pamphlet in paper and electronic format, the paper document shall govern.

The project plans are provided in PDF format. The Department makes no representation or warranties as to the compatibility, usability, or readability of the PDF plans with any system, software, hardware, or application package other than that on which the files were originally saved. The contractor bears the sole risk of any modifications, manipulations, or alterations to the plans.

The special provisions and proposal pamphlet are provided in PDF format. The Department makes no representation or warranties as to the compatibility, usability, or readability of the PDF documents with any system, software, hardware, or application package other than that on which the files were originally saved. The contractor bears the sole risk of any modifications, manipulations, or alterations to the special provisions and proposal pamphlet.

The cross sections, earthwork quantity sheets, and other reports, if applicable, are provided only in PDF format. They are provided for information purposes and contractor convenience only. They are not part of the contract documents. The contractor's use of the information in the cross sections, earthwork quantity sheets, and other reports is at the contractor's sole risk. The Department makes no representation or warranties as to the compatibility, usability, or readability of the PDF documents with any system, software, hardware, or application package other than that on which the files were originally saved. The contractor bears the sole risk of any modifications, manipulations, or alterations to the documents.

The existing ground DTM and the design DTM, if applicable, are provided as DGN files. They are provided for information purposes and contractor convenience only. The DTMs are not part of the contract documents. The contractor's use of the information in the DTMs is at the contractor's sole risk. The Department makes no representation or warranties as to the compatibility, usability, or readability of the DTMs with any system, software, hardware, or application package other than that on which the files were originally prepared. The version of Microstation used to save the DTMs is indicated at <http://www.azdot.gov/business/engineering-and-construction/CADD>.

The Department is providing the electronic project files to bidders for informational purposes in conjunction with work or services to be provided to the Department under this project. Any use of the electronic files for any purposes other than for this project is prohibited.

Cargo Preference Act:

1.0 Description

The Federal Highway Administration (FHWA) in partnership with the Federal Maritime Administration has mandated the implementation of 46 CFR 381 making the requirements of the Cargo Preference Act (CPA) applicable to the Federal Aid Highway Program.

The requirements apply to items transported by ocean vessel.

The requirements of 46 CFR 381 apply to materials or equipment acquired for a specific federal-aid highway project. In general, the requirements are not applicable to goods or materials that come from inventories independent of FHWA-funded contracts.

Information related to the CPA is presented in “Cargo Preference Requirements – Questions and Answers” available from the FHWA at <https://www.fhwa.dot.gov/construction/cqit/cargo/qa.cfm>.

2.0 Contract Requirements

The contractor shall comply with the requirements of the Cargo Preference Act 46 CFR 381.7(a)-(b). By executing a construction contract for this project, the contractor agrees:

- (1) To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels.
- (2) To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, ‘on-board’ commercial ocean bill-of-lading in English for each shipment of cargo described in the paragraph above to both the Engineer and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.
- (3) To insert the substance of the provisions of this clause in all subcontracts issued pursuant to this contract.

BLM Material Sources:

BLM has informed the Department that no BLM Material Source, including commercial operations on BLM land, may be used on this project.

If the contractor elects to pursue the use of material sources on BLM land under Title 30 Code of Federal Regulations, it is at the contractor’s sole risk, and the Department bears no responsibility for any delays or costs associated with the request to use material sources on BLM Land.

The Department will not approve the use of a BLM Materials Source on the basis of an existing ADOT permit or easement under Title 23 Code of Federal Regulations.

The Department will not request or pursue any “free-use permit” under Title 23 Code of Federal Regulations or any other arrangement with BLM on this project.

No extension in contract time or compensation will be granted for any attempt by the contractor to utilize BLM land.

The Department will not request or pursue any permit or any other arrangement with BLM on this project.

Environmental Mitigation Measures:

The project mitigation measures are not subject to change without written approval from ADOT Environmental Planning.

- To prevent invasive species seeds from leaving the site, the contractor shall inspect all construction equipment and remove all attached plant/vegetation and soil/mud debris prior to leaving the construction site.
- All disturbed soils not paved that will not be landscaped or otherwise permanently stabilized by construction shall be seeded using species native to the project vicinity.
- The contractor shall develop a Noxious and Invasive Plant Species Treatment and Control Plan in accordance with the requirements in the contract documents. Plants to be controlled shall include those listed in the state and federal noxious weed and the state invasive species lists in accordance with state and federal laws and executive orders. The plan and associated treatments shall include all areas within the project right-of-way and easements as shown on the project plans. The treatment and control plan shall be submitted to the Arizona Department of Transportation Roadside Development Section for review and approval prior to implementation by the contractor.
- Prior to the start of ground-disturbing activities, the contractor shall arrange for and perform the control of noxious and invasive species in the project area.
- To prevent the introduction of invasive species seeds, the contractor shall inspect all earthmoving and hauling equipment at the equipment storage facility and the equipment shall be washed prior to entering the construction site.
- To prevent invasive species seeds from leaving the site, the contractor shall inspect all construction equipment and remove all attached plant/vegetation and soil/mud debris prior to leaving the construction site.
- The contractor shall keep out of all environmentally sensitive areas delineated on the construction plan sheets as “sensitive areas.”
- If previously unidentified cultural resources are encountered during activity related to the construction of the project, the contractor shall stop work immediately at that location, notify the Engineer, and take all reasonable steps to secure the

preservation of those resources. The Engineer will contact the Arizona Department of Transportation Environmental Planning Group Historic Preservation Team (602.712.8636 or 602.712.7767) immediately and make arrangements for the proper treatment of those resources.

- If suspected hazardous materials are encountered during construction, work shall cease at that location and the Engineer shall be notified. The Engineer will contact the Arizona Department of Transportation Environmental Planning Group hazardous materials coordinator (602.920.3882 or 602.712.7767) immediately and make arrangements for the assessment, treatment, and disposal of those materials.
- The contractor shall comply with all local air quality and dust control rules, regulations, and ordinances that apply to any work performed pursuant to the contract.

Holidays and Special Events:

The contractor shall coordinate with the Yavapai County and Coconino County for Special Events and shall schedule all restrictions and closures around those events. No partial or full closures will be permitted, unless otherwise approved by the Engineer.

There shall be no full closures on I-40 mainline, crossroads or ramps.

No closures will be allowed during weekends or recognized holidays, unless otherwise approved by the Engineer. Weekends are defined as being from 8:00 PM on Friday through 5:00 AM of following Monday. Holidays are from noon of the last working day prior to the holiday or major event until 5:00 AM of the first working day following the holiday or holiday weekend.

The recognized holidays are:

New Year's Day
Martin Luther King Jr. Civil Rights Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Veterans Day
Thanksgiving Day
Christmas Day

The contractor shall maintain all traffic lanes on all roadways on weekends, on holidays and as directed by the Engineer. During work periods, the contractor shall maintain a minimum of one lane of traffic in each direction on each roadway at all times.

The contractor shall be aware of the short construction window in the Northern Region due to the winter cold and summer monsoons. The contractor shall plan the construction schedule accordingly.

Erosion / Sediment Control and Stormwater Quality:

The contractor shall give attention to the impact of the construction operations upon natural landscape, and shall take care to maintain natural surroundings undamaged. The contractor shall minimize soil disturbance by implementing Low Impact Development (LID) methods to control erosion as close as possible to the source of disturbance.

The contractor shall maintain the independence of discrete locations of construction by accessing through the paved area only. In addition, the contractor shall minimize soil/ground disturbance at each discrete construction location to ensure disturbance is less than twenty percent of one acre (< 0.2 acre). No unpaved temporary construction roads shall be created to directly connect discrete locations of soil/ground disturbance.

The contractor shall use all means necessary to significantly reduce impacts by staging/stockpiling and carrying out project activities in such a way as to minimize the potential for erosion and discharge of pollutants from the project site.

When needed, the contractor shall apply perimeter control Best Management Practices (BMPs) (Wattles) on the down-slope perimeter of construction disturbed areas, unpaved on-site staging/storage, and unpaved on-site stockpiling at no additional cost to the Department. To prevent sediment from bypassing the Wattle ends, the end of the Wattle shall be turned up the slopes for a minimum of three (3) feet to form an "L" shape. No portion of the Wattle shall be installed within six (6) feet from the edge of the pavement. Wattles shall not be placed over any driveways or access roads that intersect with the roadway mainline. Additionally, Wattles shall not be placed on the flow path of inlets and outlets of drainage facilities. Perimeter control BMPs (Wattles) shall be installed in accordance with the manufacturer's instructions. The contractor shall adjust the field layout of erosion control and sediment prevention elements as approved by the Engineer. The contractor shall also observe ADOT traffic safety standards when installing perimeter control BMPs in the traffic clear zone/recovery area.

During construction, the contractor shall minimize vehicular travel or equipment operation on the unpaved soil areas to maximum extent practicable (MEP). The contractor shall develop and implement procedures to avoid earth disturbance, soil compaction, and damage to vegetative cover from vehicular travel or equipment operation during inclement weather or unsuitable soil conditions. The contractor shall stabilize all construction disturbed soil areas at no additional cost to the Department. Furthermore, the contractor shall minimize off-site sedimentation including minor miscellaneous dirt, dust, rock fragments or construction debris by eliminating the tracking of such contaminants from construction sites.

No grout, concrete or wash water shall be disposed within the project limits or its vicinity. The contractor shall install concrete washout BMP as needed and under the direction of the Engineer at no additional cost to the Department. This BMP shall include proper disposal of all excess grout, concrete, and wash water.

The contractor shall not use unpaved areas within the project limits for staging or stockpiling without first installing erosion control and sediment prevention BMPs and as directed and

approved by the Engineer. Staging and stockpiling on the unpaved areas shall be avoided to MEP.

Erosion / Sediment Control Beyond the Project Limits:

The contractor shall apply erosion/sediment and water quality protection BMPs as required by the commercial material source owner and environmental permit standard at no additional cost to the Department.

The contractor shall apply erosion/sediment and water quality protection BMPs for off-project-site staging, material storage, maintenance yard, disposal spots, and stockpiling areas as required by the facility owner and environmental permit standard at no additional cost to the Department.

When needed, the contractor shall only use off-project-site staging, material storage, maintenance yard, disposal spots, and stockpiling areas covered with existing environmental permit for operation.

Areas for Control of Noxious Plants:

Up to 100 Ft² (≈ 11.11 Yd²) surrounding each foundation work zone shall be surveyed and treated for control of noxious plants. The survey and treatment shall be conducted in accordance with the Item 9240181 /Item 9240182, as well as these Special Provisions.

Seeding Maintenance Period:

Item 8050003, SEEDING (Class II) includes a 45 calendar-day maintenance period for each area on which seeding is required. The contractor shall schedule its work activities to ensure that all areas requiring seed are completed in time to allow the 45 calendar-day maintenance stage to be finalized within the specified contract time.

No time extension will be granted for failure to complete the 45 calendar-day maintenance period within the specified contract time.

(101ABRV, 02/04/16)

SECTION 101 DEFINITIONS AND TERMS:

101.01 Abbreviations: of the Standard Specifications is modified to add:

ARPA	Arizona Rock Products Association
IFI	International Fasteners Institute
ISO	International Organization for Standardization
ISSA	International Slurry Surfacing Association

NICET	National Institute for Certification in Engineering Technologies
NEC	National Electrical Code
NRMCA	National Ready Mixed Concrete Association
NSPS	National Society of Professional Surveyors
PPI	Plastic Pipe Institute
SSPC	Society for Protective Coatings

(101DEFN, 02/22/16)

SECTION 101 DEFINITIONS AND TERMS:

101.02 Definitions:

Bidding Schedule: of the Standard Specifications is revised to read:

The prepared schedule containing the estimated quantities of the pay items for which unit bid prices are invited.

Working Day: of the Standard Specifications is revised to read:

A day, exclusive of Saturdays, Sundays and State-recognized holidays, beginning at midnight, extending for a twenty-four hour period, and ending at midnight. Any Saturday, Sunday, or State-recognized holiday on which the contractor has been approved to work will also be counted as a working day. Working days on which weather conditions do not permit work on the project to proceed, as determined by the Engineer, will not be charged.

(102PREQ, 02/22/16)

SECTION 102 BIDDING REQUIREMENTS AND CONDITIONS

102.02 Prequalification of Bidders: the title and text of the Standard Specifications is revised to read:

102.02 Prerequisites for Bidding:

(A) General:

To submit a valid bid, the bidder must:

- (1) have prequalification from the Department as necessary for the project, in accordance with paragraph (B) of this Subsection, and

- (2) be included on the project Plansholder List as a Prime in accordance with paragraph (C) of this Subsection.

(B) Prequalification of Bidders:

Prior to submitting a bid, the bidder will (unless waived by the Department) be required to be prequalified with the Department to bid on the project. The submission of Prequalification information and determination of Prequalification shall be in accordance with the requirements of the Rules for Prequalification of Contractors as approved and adopted by the Department.

(C) Plansholder List:

There are two ways for a bidder to be included on the project Plansholder List as a Prime. It is the bidder's responsibility to ensure that it is on the Plansholder List as a Prime prior to submitting a bid.

If a bidder is issued a proposal pamphlet in paper format by the Department, the Department will place the bidder on the project Plansholder List as a Prime.

Firms can register electronically requesting placement on the project Plansholder List as either a Prime or Subcontractor/Vendor as follows:

- (a) Go to the C&S Website.
- (b) Select "Current Advertisements".
- (c) Identify the project of interest.
- (d) Click on the "Register" icon.
- (e) Select the "Bidder" or "Subcontractor/Vendor" radio button.
- (f) Complete all required fields.
- (g) Click "Save". This submits the request to the Department.
- (h) If all required information is provided, the "ADOT C&S Advertisement Registration Confirmation Screen" will appear. An email will also be sent to the email address provided acknowledging the request.

Requests to be included on the Plansholder List as a Prime will be evaluated by the Department to determine whether the bidder is prequalified for the project. The Department cannot guarantee that requests to be on the Plansholder List will be considered if the request is submitted less than five working days prior to the bid opening. The Department will send an email to the email address provided notifying the contractor of the results of their request.

The Department's email will state whether the request was approved or denied. More information regarding the Department's decision may be obtained by contacting the Contracts and Specifications Section.

If an individual from a firm submits a duplicate request to be placed on the Plansholder List, the request will be denied. The Department will register the contact person listed on the duplicate request to receive email notices of updates to the project. The Department will send an email to the email address provided notifying the contractor of the results of their request.

(D) Registration for Notifications:

Firms on the Plansholder List as a Prime or a Subcontractor/Vendor will receive notification of any changes to the project. Other interested parties can register electronically to receive email notification of any changes to the project as follows:

- (a) Go to the C&S Website.
- (b) Select "Current Advertisements".
- (c) Identify the project of interest.
- (d) Click on the "Register" icon.
- (e) Select the "Other" radio button.
- (f) Select the "Yes" radio button in response to "Are you interested in registering to be notified about any changes made to this advertisement?"
- (g) Complete all required fields.
- (h) Click "Save". This submits the request to the Department.
- (i) If all required information is provided, the "ADOT C&S Advertisement Registration Confirmation Screen" will appear. An email will also be sent to the email address provided acknowledging the request.

All parties registering to receive notifications will be sent an email when changes are made to the project.

(102NOBID, 09/19/12)

SECTION 102 - BIDDING REQUIREMENTS AND CONDITIONS:

102.03 Suspension from Bidding: of the Standard Specifications is revised to read:

The Department may suspend any person and any subsidiary or affiliate of any person from further bidding to the Department and from being a subcontractor or a supplier or otherwise participating in the work:

- (A) If that person or any officer, director, employee or agent of that person is convicted, in this State, or any other jurisdiction, of a crime involving any of the following elements or actions:
 - (1) Entering into any contract, combination, conspiracy or other unlawful act in restraint of trade or commerce;
 - (2) Knowingly and willfully falsifying, concealing, or covering up a material fact by trick, scheme, or device;
 - (3) Making false, fictitious, or fraudulent statements or representations;
 - (4) Making or using a false writing or document knowing it to contain a false, fictitious, or fraudulent statement or entry;
 - (5) Misrepresentation or false statement on any application for bonding;
 - (6) Misrepresentation or false statement on any application for prequalification; or
- (B) If the Department makes a finding of any of the above or finds that the contractor is not a Responsible Bidder or a Responsible Contractor.
- (C) If the Department determines that a contractor, subcontractor, or supplier has repeatedly or willfully failed to comply with federal or state immigration laws.

Under this subsection, a person means any individual, partnership, joint venture, corporation, association or other entity formed for the purpose of doing business as a contractor, subcontractor or supplier.

The signature of the bid proposal by a bidder constitutes the bidder's certification, under penalty of perjury under the laws of the United States, that the bidder, or any person associated therewith in the capacity of owner, partner, director, officer, principal investor, project director, manager, auditor, or any position involving the administration of federal funds, has not been, or is not currently, under suspension, debarment, voluntary exclusion or been determined ineligible by any federal agency within the past three years. Signature of the bid proposal also certifies, under penalty of perjury under the laws of the United

States, that the bidder does not have a proposed debarment pending. In addition, signature of the bid proposal certifies that the bidder has not been indicted, convicted, or had a civil judgment rendered against (it) by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past three years.

Any exceptions to the above paragraph shall be noted and fully described on a separate sheet and attached to the bid proposal.

(102PRPMT, 02/22/16)

SECTION 102 BIDDING REQUIREMENTS AND CONDITIONS:

102.04 Contents of Proposal Pamphlet: the first paragraph of the Standard Specifications is revised to read:

The proposal pamphlet will state the location and description of the contemplated construction and will show the approximate estimate of the various quantities and kinds of work to be performed or materials to be furnished and will have a schedule of items for which unit bid prices are invited. The proposal pamphlet will state the time in which the work must be completed, the type and amount of the proposal guaranty and the date, time and place of the opening of proposals. The pamphlet will also include any Special Provisions or requirements which vary from or are not included in the Standard Specifications. Additional contract documents applicable to the specific project are listed in the Special Provisions.

(102ISSPSL, 02/22/16)

SECTION 102 BIDDING REQUIREMENTS AND CONDITIONS:

102.05 Issuance of Proposals: of the Standard Specifications is revised to read:

The Department reserves the right to refuse to issue proposal documents or to accept bids for any of the following reasons:

- (A) Lack of competency or adequate machinery, plant and other equipment, as revealed by the financial statement and experience questionnaires required under Subsection 102.02.
- (B) Incomplete work which, in the judgment of the Department, might hinder or prevent the prompt completion of additional work if awarded.
- (C) Failure to pay or settle satisfactorily all bills due for work on other contracts.
- (D) Failure to comply with any qualification regulations of the Department.
- (E) Default under previous contracts.

- (F) Unsatisfactory performance on previous work.
- (G) Entering into any contract, combination, conspiracy, or other unlawful act in restraint of trade or commerce.
- (H) Knowingly and willfully falsifying, concealing, or covering up a material fact by trick, scheme, or device.
- (I) Making false, fictitious, or fraudulent statements or representations.
- (J) Making or using a false writing or document knowing it to contain a false, fictitious, or fraudulent statement or entry.
- (K) Misrepresentation or false statement on any application for bonding.
- (L) Misrepresentation or false statement on any application for prequalification.
- (M) Lack of sufficient ability or integrity to complete the contract.

(102EXAM, 02/22/16)

SECTION 102 BIDDING REQUIREMENTS AND CONDITIONS

102.07 Examination of Plans, Specifications and Site of Work: the second paragraph of the Standard Specifications is revised to read:

A set of plans, special provisions, and the proposal pamphlet will be on file at Contracts and Specifications, 1651 W. Jackson, Room 121F, Phoenix.

Project plans, special provisions, proposal pamphlets, and other project documents, if available, will be provided in electronic format, at no charge, on the Contracts and Specifications website. Any interested party can access the advertised project documents.

(102LOBY, 10/01/90)

SECTION 102 - BIDDING REQUIREMENTS AND CONDITIONS:

102.09 Non-Collusion Certification: of the Standard Specifications is modified to add:

(A) Lobbying:

The bidder certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

- (1) No Federally appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract grant, loan, or cooperative agreement.
- (2) If any funds other than Federally appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions. Copies of Form-LLL, "Disclosure Form to Report Lobbying", are available at ADOT Contracts and Specifications Services, 1651 W. Jackson, Room 121F, Phoenix, AZ 85007.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

The bidder also agrees, by submitting his or her bid or proposal, that he or she shall require that the language of this certification be included in all subcontracts and lower tier subcontracts which exceed \$100,000 and that all such subcontractors and lower tier subcontractors shall certify and disclose accordingly.

The Department will keep the prime contractors' certifications on file as part of their original bid proposals. Each prime contractor shall keep individual certifications from all subcontractors and lower tier subcontractors on file. Certifications shall be retained for three years following completion and acceptance of any given project.

Disclosure forms for the prime contractor shall be submitted to the Engineer at the pre-construction conference. Disclosure forms for subcontractors and lower tier subcontractors shall be submitted to the Engineer by the prime contractor along with the submittal of each subcontract or lower tier subcontract, as required under Subsection 108.01, when said subcontracts exceed \$100,000.00. During the performance of the contract the prime contractor and any affected subcontractors shall file revised disclosure forms at the end of each calendar year quarter in which events occur that materially affect the accuracy of any previously filed disclosure form. Disclosure forms will be submitted by the Engineer to the Federal Highway Administration for further processing.

(102IRPSL, 09/26/16)

SECTION 102 BIDDING REQUIREMENTS AND CONDITIONS:

102.10 Irregular Proposals: Item (A) of the Standard Specifications is revised to read:

- (A) Proposals may be considered irregular and may be rejected for any of the following reasons:
 - (1) If any of the proposal documents show unauthorized alterations of any kind.
 - (2) If the proposal contains conditional or uncalled-for alternate bids.
 - (3) If the proposal documents contain erasures not initialed by the person or persons signing the proposal.
 - (4) If there is a submission of any kind which may tend to make the proposal incomplete, indefinite or ambiguous as to its meaning.
 - (5) If the bid is mathematically unbalanced.
 - (6) If the bid is materially unbalanced.
 - (7) If the bidder fails to sign the Participation in Boycott of Israel Certification form when submitting a bid in paper format.

102.10 Irregular Proposals: Item (B) of the Standard Specifications is revised to read:

- (B) Proposals will be considered irregular and will be rejected for any of the following reasons:
- (1) If the bidder is not on the project Plansholder List as a Prime.
 - (2) If the proposal, bid bond or bidding schedule is on a form other than that furnished by the Department.
 - (3) If the bidder or surety fails to provide a proposal guaranty as specified in Subsection 102.12.
 - (4) If the bidder fails to sign the proposal when submitting a bid in the paper format.
 - (5) If the bidding schedule does not contain a unit price for each pay item listed except in the case of authorized alternate pay items.
 - (6) If the bidder fails to meet the required goal for Disadvantaged Business Enterprises (DBE) established in the Special Provisions or show good faith effort as determined by the Department.
 - (7) If the bidder submits a proposal in both the electronic format and in the paper format.

(102BOI, 09/26/16)

SECTION 102 BIDDING REQUIREMENTS AND CONDITIONS:

102.17 Boycott of Israel: is hereby added to the Standard Specifications:

All bidders are required to certify in their bid proposal on the "Participation in Boycott of Israel Certification" form either:

- (1) The bidder does not participate in, and agrees not to participate in during the term of the contract, a boycott of Israel in accordance with ARS 35-393.01, or
- (2) The bidder does participate in a boycott of Israel as defined in ARS 35-393.01.

The Department will not award the contract unless the bidder makes the certification described in subparagraph (1) of this Subsection.

(103RSBTY, 02/22/16)

SECTION 103 AWARD AND EXECUTION OF CONTRACT:

103.03 Responsibility: the third paragraph of the Standard Specifications is revised to read:

Non-responsibility may also be found for any of the following reasons:

- (A) Anti-competitive acts;
- (B) Lack of competency and adequate machinery, plant and other equipment, as revealed by the financial statement and experience questionnaires required under Subsection 102.02;
- (C) Incomplete work which, in the judgment of the Department, might hinder or prevent the prompt completion of additional work if awarded;
- (D) Failure to pay or settle satisfactorily all bills due for work on other contracts;
- (E) Failure to comply with any qualification regulations of the Department;
- (F) Default under previous contracts;
- (G) Unsatisfactory performance on previous work;
- (H) Knowingly and willfully falsifying, concealing, or covering up a material fact by trick, scheme, or device;
- (I) Making false, fictitious, or fraudulent statements or representations;
- (J) Making or using a false writing or document knowing it to contain a false, fictitious, or fraudulent statement or entry;
- (K) Lack of a proper contractor's license; or
- (L) Lack of sufficient ability or integrity to complete the contract.

(103AWARD, 12/14/09)

SECTION 103 - AWARD AND EXECUTION OF CONTRACT:

103.04 Award of Contract: the first paragraph of the Standard Specifications is modified to add:

When a contract is funded, either wholly or in part, by federal funds, an award of contract may be made contingent upon the successful bidder obtaining an appropriate license from

the State Registrar of Contractors, in accordance with Arizona Revised Statutes 32-1101 through 32-1170.03. The license must be obtained within 60 calendar days following opening of bid proposals. No adjustment in proposed bid prices or damages for delay will be allowed as a result of any delay caused by the lack of an appropriate license.

Failure to acquire the necessary licensing within the specified period of time shall result in either award to the next lowest responsible bidder, or re-advertisement of the contract, as may be in the best interests of the Department.

Licensing information is available from:

Registrar of Contractors
3838 N. Central
Suite 400
Phoenix, AZ 85012
Phone: (602) 542-1525

SECTION 104 - SCOPE OF WORK:

104.04 Maintenance of Traffic: of the Standard Specifications is modified to add:

The contractor shall prepare and submit a Traffic Control Plan to the Engineer for review and approval at the Preconstruction Conference. The traffic control plan shall be in accordance with Part VI of the 2009 Edition Manual on Uniform Traffic Control Devices (MUTCD), and ADOT Traffic Control Design Guidelines, dated 2011, the Typical Application Figures contained therein and the Special Provisions and contract documents. The Typical Application Figures are intended to be used by the contractor as an aid in developing specific plans for each work activity. The traffic control plan shall be prepared in accordance with the Standard Specifications and the requirements contained herein. The contractor shall develop and submit for the Engineer's review and approval, a final traffic control plan for each work activity on this project. Activities that impact traffic shall not begin until the traffic plan has been approved by the Engineer.

The Traffic Control Plans shall include the following requirements:

1. Advance Construction Zone Signing:

The contractor shall install "Advance Work Zone" signing on embedded posts as follows:

48" X 48" W20-1aAZ ROAD WORK AHEAD signs in advance of construction limits and shall be installed on the left and right side approximately 1/2 mile in advance of the work zone .

60" x 36" G20-1AZ ROAD WORK NEXT 35 MILES signs shall be installed on the left and right side approximately 1500 feet in advance of the work zone.

A 48" X 36" G20-2AZ END ROAD WORK THANK YOU sign shall be installed on the right side approximately 1,000 feet beyond the work zone. Sign spacing should be adjusted to account for field conditions such as restricted sight distance and existing signs and other traffic control devices.

The signs shall be spaced as necessary with the desired minimum spacing from the work zone being 1000 feet.

The advance signing shall be placed so as not to interfere with work zone signing.

Each advanced construction zone sign, except the G20-2AZ, shall have two flag trees and a Type A flashing warning light.

2. Work Activity Traffic Control:

Traffic control for freeway shoulder closure required for sign removal, replacement and new sign installation shall conform to Figure TA-3 of the Manual on Uniform Traffic Control Devices (MUTCD).

Mainline lane closures for overhead, gore area signs removal and replacement shall conform to the requirements of Figure TA-33 of the MUTCD or Figures SA-5(L) and SA-5(R) of the ADOT Traffic Control Design Guidelines. For double line signing in the work zone area when workers are present, the contractor shall provide traffic control as per SA-12 of the ADOT Traffic Control Design Guidelines.

The contractor shall place two changeable message boards and "road work ahead" signs on I-40 advising motorists of the construction activities on I-40. Changeable message boards shall be installed a minimum of 5 days in advance. Additional changeable message boards may be required by the Engineer or the District based on specific site characteristics.

The contractor shall utilize Type II barricades with Type C steady-burning lights for all shoulder and lane closures. Type II barricades shall be spaced at 40 feet on tapers and 80 feet on tangents. Changeable message boards shall be placed in advance of the lane or shoulder closure to alert motorists of the closure. The Engineer will determine the message on the changeable message board to coincide with construction activities.

The Engineer may also require the contractor to provide a changeable message board as part of the traffic control for other construction activities.

The contractor shall not close any ramps as part of a lane unless otherwise approved by the Engineer. Work in the vicinity of an exit ramp shall conform to requirements TA-42 of MUTCD and TA-43 for partial exit ramp closure. No temporary striping will be required.

For cross street lane closures for median sign removal and replacement, the lane directly adjacent to the median shall be closed. Cross street lane closures shall conform to the requirements of Figure TA-33 of the MUTCD.

The “Keep Right” (R4-7a) and “Keep Left” (RA-8a) signs shall be used along the work zone and lane change over to provide positive direction to traffic. The speed reduction sequence may be modified to reflect the posted speed limit at the work zone. Sign spacing, sizes, and types may be modified as directed or approved by the Engineer.

The Engineer may also require the contractor to provide truck mounted attenuators with flashing arrow for other construction activities and they shall be positioned in the lane adjacent to traffic.

The contractor shall use Off Duty Uniformed Officers with official vehicles in advance of all freeway lane closures.

The contractor shall provide written notification to the Engineer one week in advance of partial freeway or partial crossroad closures. This written notification shall include the day, time, duration and limits of the closure.

All construction access and staging areas shall be located within the existing ADOT right-of-way or ADOT easement for the length of the project.

Signs and Pavement Markings:

Existing signs, markers and related items that conflict with construction operations or the traffic control plan shall be covered or temporarily removed and reinstalled later at the same locations or as approved by the Engineer. The traffic control plan shall identify signs or markers to be covered or removed and their locations. Existing signs, markers, or posts damaged by the contractor’s operations shall be replaced by the contractor. No measurement or direct payment will be made for this work, the cost considered as included in the cost of contract items.

Work Hour Limitations:

No work shall be performed on Saturdays, Sundays or at nights except as necessary for the proper care and protection of work already performed, and as directed by the Engineer. The contractor shall submit a request for approval to work on Saturdays, Sundays or at nights in writing to the Engineer a minimum of 24 hours in advance of the proposed work start. The contractor shall provide all safety equipment, barricades, proper lighting and all other items deemed necessary by the Engineer to perform night time work in a prudent and safe manner. If night work is approved by the Engineer, the contractor shall position a portable light unit at a flagger station. Each portable light unit shall have its own independent power source. The power source shall be capable of supplying adequate continuous power for the light for the duration of the nighttime work and flagging, as directed by the Engineer.

The portable light unit shall illuminate the flagger station during the period night time flagging is in effect. The portable light unit shall consist of not less than two 500 Watt metal halide lighting units which shall have a minimum mounting height of 25 feet. Light shall be aimed in such a way as to minimize glare to motorists, traffic control personnel and workers. The lighting units shall be placed away from vehicular travel ways in locations acceptable to the Engineer. There will be no measurement or direct payment for portable light units. The

cost of those units used in conjunction with the night time flagging will be considered as included in the cost of contract items.

At all times, the contractor shall conduct the construction activities to safeguard pedestrians and vehicular access in the vicinity of the project. All holes or trenches left open overnight shall be reasonably surrounded by Type II barricades and Type A flashing warning lights, connected by warning tape or rope, as directed by the Engineer. The contractor shall provide plywood coverings or some other protection satisfactory to the Engineer over holes. There will be no direct measurement or payment for providing coverings over holes or the warning tape or rope, the costs being considered as included in the cost of contract items.

When installing posts; an off duty police officer or a civilian flagger shall be provided to safely guide traffic around the construction operation.

All signs shall be equipped with two orange construction flags unless noted otherwise.

The retroreflective sheeting on all traffic control signs shall meet the minimum criteria established in accordance with the specifications 608PANEL and 1007REFS.

The minimum sign mounting height measured from the bottom of each sign to the near edge of the pavement or curb shall be 7 feet for signs in areas accessible to pedestrians.

Except as otherwise permitted by the Engineer, all warning signs used for this project shall be 48 inches x 48 inches.

The nearest edge or corner of a sign shall be a minimum of 2 feet from the curb or edge of pavement for all signs mounted on embedded posts.

All temporary devices shall be ballasted with sandbags or other approved ballast.

Access Requirements for Emergency Services:

The contractor shall contact local Police, the DPS, local Fire Department and local ambulance services a minimum of 72 hours in advance of any roadway restrictions.

No measurement or direct payment for the work described herein, the cost will be considered as included in the cost of contract items.

(104STORM, 11/01/95)

SECTION 104 - SCOPE OF WORK:

104.11 Damage by Storm, Flood or Earthquake: Item (D), Idled Equipment and Remobilization, of the Standard Specifications is hereby deleted.

104.11 Damage by Storm, Flood or Earthquake: Items (E) and (F) of the Standard Specifications are revised to read:

(D) Payment for Repair Work:

The State will pay the cost of the repair work as determined in Subsection 109.04.

(E) Termination of Contract:

If the Department elects to terminate the contract, the termination and the determination of the total compensation payable to the contractor shall be governed by the provisions of Subsection 108.11, Termination of Contract for Convenience of the Department.

(105PLNS, 10/18/10)

SECTION 105 CONTROL OF WORK:

105.03 Plans and Working Drawings: the thirteenth paragraph of the Standard Specifications is revised to read:

All working drawings or prints shall be 22 inches in height and 34 inches in length. There shall be 1 1/4-inch margins on the left and right sides, and 3/4-inch margins on the top and bottom. A blank space, four inches wide by three inches high, shall be left inside the margin in the lower right hand corner. All drawings shall be made in such a manner that clear and legible copies can be made from them. When half-size copies are required, they shall be provided on standard 11 by 17 inch sheets.

(105FNL, 12/07/16)

SECTION 105 CONTROL OF WORK:

105.20(B) Final Acceptance: the second paragraph of the Standard Specifications is revised to read:

If, however, the inspection discloses any work, in whole or in part, as being unsatisfactory or not complete, the Engineer will give the contractor written notice of the unsatisfactory or incomplete work and the contractor shall immediately correct such work. In such case, the Engineer will also give the contractor written notice as to whether or not the work is substantially complete.

Final acceptance will not be made until all completed plans and working drawings as required in Subsection 105.03 have been submitted and deemed acceptable by the Engineer. In addition, final acceptance will not be made until all "Certification of Payments to DBE Firms" affidavits, as required in the contract documents, have been submitted and deemed acceptable by the Engineer and the Business Engagement and Compliance Office (BECO).

(106QCMAT, 05/03/16)

SECTION 106 CONTROL OF MATERIAL:

106.04(A) General: the fourth and fifth paragraphs of the Standard Specifications are revised to read:

The sampling, testing, and acceptance of materials shall be in accordance with the requirements of the specifications, in conjunction with the following:

- The ADOT Materials Testing Manual.
- The ADOT Materials Practice and Procedure Directives Manual.
- Applicable Federal, AASHTO, or ASTM specifications or test designations.
- Applicable specifications or test designations of other nationally recognized organizations.

Unless otherwise specified, whenever a reference is made to an Arizona Test Method or an ADOT Materials Practice and Procedure Directive, it shall mean the test method or practice and procedure directive in effect on the bid opening date.

Any reference to the ADOT Materials Policy and Procedure Directives elsewhere in the contract documents shall be understood to mean ADOT Materials Practice and Procedure Directives.

106.04(B) Contractor Quality Control: the second paragraph of the Standard Specifications is revised to read:

Certain construction items may require additional quality control measures, as specified in Subsection 106.04(C). When so specified, the contractor shall provide all the personnel, equipment, materials, supplies, and facilities necessary to obtain samples and perform the tests listed in the applicable section and as given in Subsection 106.04(C). Specific contractor quality control requirements will be shown in the applicable construction items. Payment for such additional work shall be in accordance with the Special Provisions, and will be included in Bidding Schedule Item 9240170.

When the specifications do not require specific contractor quality control measures, the provisions given in Section 106.04(C) do not apply. Bid Item 9240170 will not be included in the Bidding Schedule.

106.04(C)(2) Quality Control Laboratory: the first paragraph is revised to read:

All field and laboratory sampling and testing shall be performed by a laboratory or laboratories approved by the Department. The requirements for approval of laboratories are specified in ADOT Materials Policy and Procedure Directive No. 19, "ADOT System for the Evaluation of Testing Laboratories". Approved laboratories, and the test methods for which they are approved to perform, are listed in the "ADOT Directory of Approved Materials Testing Laboratories". Approved test methods listed in the "ADOT Directory of Approved Materials Testing Laboratories" do not include field sampling and testing procedures. When field sampling and testing procedures are performed, the appropriate valid Arizona Technical Testing Institute (ATTI) and/or American Concrete Institute (ACI) certification(s) are required. ADOT Materials Policy and Procedure Directive No. 19, "ADOT System for the Evaluation of Testing Laboratories" and the "ADOT Directory of Approved Materials Testing Laboratories" may be obtained on the internet from the ADOT Materials Quality Assurance Section website.

106.04(C)(6) Weekly Quality Control Reports: of the Standard Specifications is revised to read:

The contractor shall submit Weekly Quality Control Reports to the Engineer. The weekly reports shall be complete and accurate, and shall state the types of work which have been performed during the report period. The report shall also include the process control measures taken to assure quality. The report shall provide sample identification information for materials tested during the report period, including sample number, date sampled, sample location, first and last name of person obtaining sample, and original source of material. The report shall also provide the results for all required tests and any retests, corrective actions, and other information relevant to quality control. The report shall include daily diaries for each day of testing, a weekly summary, the ADOT TRACS number, and the testing laboratory's project identification number.

Except as stated in the following paragraph, the weekly quality control report shall be prepared using standard forms provided by the Department. The standard forms are available on the Department's website at www.azdot.gov. After accessing the Department's website, select "Business", "Engineering and Construction", "Construction and Materials", "Contractor Information", "Forms and Documents", and then "Weekly Quality Control Forms". Except for the daily diaries, all documentation and information required on the forms shall be typed. Daily diaries may be hand-written if acceptable to the Engineer. The weekly report shall be submitted to the Engineer in paper form with a transmittal letter signed by the contractor's quality control manager.

In lieu of using the standard weekly quality control forms available on the Department's website, the contractor or testing laboratory may prepare the weekly report using proprietary or other software, if acceptable to the Engineer, provided that all required information is

included, the format is comparable to the Department's standard format, and the report is submitted in paper form with the required transmittal letter.

The report period shall end at midnight of each Friday, and the report shall be submitted to the Engineer no later than 5:00 p.m. of the following Wednesday. The Engineer will verify that the report is timely, complete, and accurate.

Reports that are not submitted by the above-referenced deadline shall be considered delinquent. Reports that are submitted by the above-referenced deadline, but are not complete and accurate, shall also be considered delinquent. In either case monies shall be deducted from the contractor's monthly estimate in accordance with the requirements for Contractor Quality Control, as specified in these special provisions.

(106CERT, 09/14/12)

SECTION 106 CONTROL OF MATERIAL:

106.05 Certificates: of the Standard Specifications is revised to read:

(A) General:

The contractor shall submit to the Engineer an original or copy of either a Certificate of Compliance or a Certificate of Analysis, as required, prior to the use of any materials or manufactured assemblies for which the specifications require that such a certificate be furnished.

Certificates shall be specifically identified as either a "Certificate of Compliance" or a "Certificate of Analysis".

The Engineer may permit the use of certain materials or manufactured assemblies prior to, or without, sampling and testing if accompanied by a Certificate of Compliance or Certificate of Analysis, as herein specified. Materials or manufactured assemblies for which a certificate is furnished may be sampled and tested at any time, and, if found not in conformity with the requirements of the plans and the specifications, will be subject to rejection, whether in place or not.

Certificates of Compliance and Certificates of Analysis shall comply with the requirements specified herein, the ADOT Materials Testing Manual, and applicable ADOT Materials Policy and Procedure Directives.

(B) Certificate of Compliance:

A Certificate of Compliance shall be submitted on the manufacturer's or supplier's official letterhead, and shall contain the following information:

- (1) The current name, address, and phone number of the manufacturer or supplier of the material.

- (2) A description of the material supplied.
- (3) Quantity of material represented by the certificate.
- (4) Means of material identification, such as label, lot number, or marking.
- (5) A statement that the material complies in all respects with the requirements of the cited specifications. Certificates shall state compliance with the cited specification, such as AASHTO M 320, ASTM C 494; or specific table or subsection of the Arizona Department of Transportation Standard Specifications or Special Provisions. Certificates may cite both, if applicable.
- (6) A statement that the individual identified in item seven below has the legal authority to bind the manufacturer or the supplier of the material.
- (7) The name, title, and signature of the responsible individual. The date of the signature shall also be given.

Each of the first six items specified above shall be completed prior to the signing of the certificate as defined in item seven. No certificate will be accepted that has been altered, added to, or changed in any way after the authorized signature has been affixed to the original certificate. However, notations of a clarifying nature, such as project number, contractor, or quantity shipped are acceptable, provided the basic requirements of the certificate are not affected.

A copy or facsimile reproduction of the original certificate will be acceptable; however, the original certificate shall be made available upon request.

(C) Certificate of Analysis:

A Certificate of Analysis shall include all the information required for a Certificate of Compliance and, in addition, shall include the results of all tests required by the specifications.

(106APL, 02/10/12)

SECTION 106 - CONTROL OF MATERIAL:

106.14 Approved Products List: of the Standard Specifications is revised to read:

The Approved Products List is a list of products which have been shown to meet the requirements of these Standard Specifications. The Approved Products List is maintained by the Department and updated monthly. Copies of the most current version are available on the internet from the ADOT Research Center, through its Product Evaluation Program.

The contractor shall verify that any products chosen for use from the Approved Products List are selected from the version which was most current at the time of the bid opening.

Unless otherwise specified in the Special Provisions, products not appearing on the Approved Products List at the time of the bid opening may be used if they meet the requirements of the plans and specifications.

When the Special Provisions limit product selection to only those listed on the Approved Products List, other products will not be evaluated or approved.

(106DMAT, 2/15/11)

SECTION 106 - CONTROL OF MATERIALS: of the Standard Specifications is modified to add:

106.15 Domestic Materials and Products:

Steel and iron materials and products used on all projects shall comply with the current "Buy America" requirements of 23 CFR 635.410.

All manufacturing processes to produce steel and iron products used on this project shall occur in the United States. Raw materials used in manufacturing the steel and iron products may be foreign or domestic. Steel or iron not meeting these requirements may be used in products on this project provided that the invoiced cost to the contractor for such steel products incorporated into the work does not exceed either one-tenth of one percent of the total (final) contract cost or \$2,500, whichever is greater.

Any process which involves the application of a coating to iron or steel shall occur in the United States. These processes include epoxy coating, galvanizing, painting, or any other coating which protects or enhances the value of covered material.

The requirements specified herein shall only apply to steel and iron products permanently incorporated into the project. "Buy America" provisions do not apply to temporary steel items, such as sheet piling, temporary bridges, steel scaffolding and falsework, or to materials which remain in place at the contractor's convenience.

The contractor shall furnish the Engineer with Certificates of Compliance, conforming to the requirements of Subsection 106.05, which state that steel or iron products incorporated in the project meet the requirements specified. Certificates of Compliance shall also certify that all manufacturing processes to produce steel or iron products, and any application of a coating to iron or steel, occurred in the United States.

Convict-produced materials may not be used unless the materials were produced prior to July 1, 1991 at a prison facility specifically producing convict-made materials for Federal-aid construction projects.

SECTION 107 - LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC:

107.12 Forest Protection: of the Standard Specifications is modified to add:

Forest Service Regulations:

This project is located on land under the jurisdiction of the Kaibab National Forest.

Forest Service Officials:

Throughout the Fire Plan the term Forest Service Officer is used. This person shall be understood to be the District Ranger or any person authorized or duly appointed to act in all matters affecting the Kaibab National Forest, William Ranger District.

Forest Service Officers on this project are as follows:

Kaibab National Forest	Name	Phone	
		Day	Night
Kaibab NF Liaison	Deirdre A. McLaughlin	(928) 635-5662	(928) 635-2601
Williams District Ranger	Danelle D. Harrison	(928) 635-5630	(928) 635-2601
Kaibab Fire Dispatcher	Williams Dispatch Center	(928) 635-2601	(928) 635-2601

(107INS, 7/10/12)

SECTION 107 - LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC:

107.14 Insurance: the first paragraph of the Standard Specifications is revised to read:

Prior to the execution of the contract, the contractor shall file with the Department a certificate or certificates of insurance evidencing insurance as required by this contract has been placed with an insurer authorized to transact insurance in the State of Arizona pursuant to ARS Title 20, Chapter 2, Article 1, or with a surplus lines insurer approved and identified by the Director of the Department of Insurance pursuant to ARS Title 20, Chapter 2, Article 5.

All insurers shall have an "A.M. Best" rating of A- VII or better.

The State of Arizona in no way warrants that the above-required minimum insurer rating is sufficient to protect the contractor from potential insurer insolvency.

The contractor's submission of the required insurance certificates constitutes a representation to the Department that:

1. The contractor has provided a copy of these specifications to every broker who has obtained or filed a certificate of insurance and has communicated the necessity of compliance with these specifications to the broker; and
2. To the best of the contractor's knowledge, each certificate of insurance and each insurance coverage meets the requirements of these specifications.

The contractor shall provide the Department with certificates of insurance (ACORD form or equivalent acceptable to the State of Arizona) as required by the contract. The certificates for each insurance policy shall be signed by a person authorized by that insurer.

SECTION 107 - LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC:

107.15 Contractor's Responsibility for Utility Property and Services: of the Standard Specifications is modified to add:

The contractor shall be ADOT's underground utility field locator, and perform all requirements as prescribed in A.R.S. 40-360.21 through .29, for all underground facilities that have been installed by the contractor on the current project, until the project is accepted by ADOT.

At least two working days prior but no more than 15 working days prior to commencing excavation, the contractor shall contact ARIZONA 811, between the hours of 6:00 a.m. and 5:00 p.m., Monday through Friday, excluding holidays, for information relative to the location of buried utilities. The contractor can call 811 from anywhere in Arizona or can contact ARIZONA 811 at the number below:

Projects Outside Maricopa County (800) 782-5348

Contractors can also create and manage utility locate tickets online by using the Arizona 811 E-Stake tool at www.Arizona811.com.

Copies of existing ADOT permits, subject to availability, may be obtained from the ADOT Area Permit Supervisor as listed below:

NORTHWEST DISTRICT

Kingman Area:

(928) 681-6019
(928) 681-6010

3660 E. Andy Devine Ave.
Kingman, AZ 86401

NORTHCENTRAL DISTRICT

(928) 779-7520 1801 S. Milton Rd.
(928) 774-1491 Flagstaff, AZ 86001

Due to the nature of this project, which is sign rehab, locations of existing utilities are not shown on sheets. Conflicts are not anticipated with utilities. However, it shall be the contractor's responsibility to determine the exact location of utilities in accordance with Arizona 811 law. Arizona 811 must be called at least two (2) working days prior to commencing any construction activities on the project.

The contractor is also to be aware that if any additional work is added by change order which requires ground penetration such as guardrail installation; etc. He/she is to do specific research in these areas to avoid utility conflict.

We also caution the contractor to be aware of any overhead utilities in the area of the project and is to keep a safe distance from all overhead facilities:

POWER LINES:

Power lines and other utilities may be at various locations throughout the project limits. However, they are not anticipated to be in conflict. All work at or in close proximity to said lines shall be performed in accordance with all Federal, State, and local laws and regulations, including but not limited to:

- (1) Arizona law regarding "Underground Facilities" (A.R.S. 40-360.21, .22, .24, .26 and .28).
- (2) Arizona law regarding "High Voltage Power Lines and Safety Restrictions" (A.R.S. 40-360.41-.45).
- (3) The Occupational Safety and Health Administration.
- (4) The National Electric Safety Code.

The following utility company has facilities in close proximity with the proposed construction, and contractor will field adjust sign poles during project construction as needed:

NORTHWEST DISTRICT

SELIGMAN MAINTENANCE DISTRICT – MP 72.6 to MP 146.23

Mike Ulloa
1-40 Exit 121 Business Loop
Seligman, AZ 86337
(928) 422-3482

NORTHCENTRAL DISTRICT

WILLIAMS MAINTENANCE DISTRICT – MP 146.23 to MP 185.89

Robert (Bob) Freson
1200 E Route 66
William, AZ
(928) 635-4301

ADOT owns drainage, lighting and landscaping facilities within the project limits. The contractor shall contact ADOT District Arizona 811 Office before construction.

UNISOURCE ENERGY SERVICES

Trenton Brooks
1480 N. 16th Street
Show Low, AZ 86901
(928) 525-8145

Unisource owns gas line within the project limits and to be protected in place. The contractor shall contact ADOT District Arizona 811 Office before construction. Notify Trenton Brooks 5 working days prior to in the area of any gas lines.

At the following locations the contractor will need to hand dig and field adjust sign locations:

1. Approximately MP 145.84 crossing I-40
2. Crossing I-40 Country Club West TI near MP 161

The following agencies and utility companies have facilities in the area but are not anticipated to be in conflict:

Arizona Public Service

(APS)
Henry Miranda
P.O. Box 53733
Mail Station 3177
Phoenix, AZ 85201
(602) 371-6605

APS owns overhead powerlines within the project limits and to be protected in place.

EL PASO NATURAL GAS CO.(Kinder Morgan)

Steve Fuller
3920 E. El Paso Dr.
Flagstaff, AZ 86004
(928) 707-1011

El Paso owns gas lines parallel to I-40 east of Yavapai Countyline and west of Mohave Countyline within the project limits and to be protected in place.

The contractor is cautioned to use care when operating near these facilities.

It shall be the contractor's responsibility to determine the exact location of the utilities prior to any construction operations and to notify the above mentioned utility companies at least two (2) working days prior to commencing any work on the project.

(107FINA, 09/19/12)

SECTION 107 - LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC:

107.19 Federal Immigration and Nationality Act: of the Standard Specifications is revised to read:

(A) General:

The contractor and all subcontractors shall comply with all federal, state and local immigration laws and regulations, as set forth in Arizona Executive Order 2005-30, relating to the immigration status of their employees who perform services on the contract during the duration of the contract. The State shall retain the right to perform random audits of contractor and subcontractor records or to inspect papers of any employee thereof to ensure compliance.

The contractor shall include the provisions of Subsection 107.19 in all its subcontracts.

In addition, the contractor shall require that all subcontractors comply with the provisions of Subsection 107.19, monitor such subcontractor compliance, and assist the Department in any compliance verification regarding any subcontractor.

(B) Compliance Requirements for A.R.S. § 41-4401, Government Procurement, E-Verify Requirement; Sanctions:

By submission of a bid, the contractor warrants that the contractor and all proposed subcontractors are and shall remain in compliance with:

- (1) All federal, state and local immigration laws and regulations relating to the immigration status of their employees who perform services on the contract, and
- (2) A.R.S. Section 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.").

A breach of a warranty regarding compliance with immigration laws and regulations shall be deemed a material breach of the contract, and the contractor and subcontractors are subject to sanctions specified in Subsection 107.19(D).

Failure to comply with a State audit process to verify the employment records of contractors and subcontractors shall be deemed a material breach of the contract, and the contractor and subcontractors are subject to sanctions specified in Subsection 107.19(D).

(C) Compliance Verification:

The State may, at any time and at its sole discretion, require evidence of compliance from the contractor or subcontractor.

Should the State request evidence of compliance, the contractor shall complete and return the State Contractor Employment Record Verification Form and Employee Verification Worksheet, provided by the Department, no later than 21 days from receipt of the request for such information.

Listing of the compliance verification procedure specified above does not preclude the Department from utilizing other means to determine compliance.

The State retains the legal right to inspect the papers of any employee who works on the contract to ensure that the contractor or subcontractor is complying with the warranty specified in Subsection 107.19(B).

(D) Sanctions for Non-Compliance:

For purposes of this paragraph, non-compliance refers to either the contractor's or subcontractor's failure to follow immigration laws or to the contractor's failure to provide records when requested. Failure to comply with the immigration laws or to submit proof of compliance constitutes a material breach of contract. At a minimum, the Department will reduce the contractor's compensation by \$10,000 for the initial instance of non-compliance by the contractor or a subcontractor. If the same contractor or subcontractor is in non-compliance within two years from the initial non-compliance, the contractor's compensation will be reduced by a minimum of \$50,000 for each instance of non-compliance. The third instance by the same contractor or subcontractor within a two-year period may result, in addition to the minimum \$50,000 reduction in compensation, in removal of the offending contractor or subcontractor, suspension of work in whole or in part or, in the case of a third violation by the contractor, termination of the contract for default.

In addition, if a contractor is in non-compliance three times within a two-year period, the Department will revoke the contractor's prequalification for a minimum of one year. Subcontractors and suppliers who are in non-compliance three times within a two-year period will be prohibited from participating in Department contracts for a minimum of one year.

Subcontractors who are in non-compliance three times within a two-year period, and who are prequalified with the Department as prime contractors, will also have such prequalifications revoked for a minimum of one year.

After the minimum one-year suspension, contractors, subcontractors, and suppliers may be considered eligible to participate in Department contracts, but only after successful demonstration, to the satisfaction of the Department, that their hiring practices comply with the requirements specified herein. If considered eligible, contractors shall be required to re-apply for prequalification and be accepted prior to bidding on Department contracts. Subcontractors interested in bidding on Department contracts as prime contractors shall also be required to re-apply for prequalification and be accepted prior to bidding. For purposes of considering suspension: (1) non-compliance by a subcontractor does not count as a violation by the contractor, and (2) the Department will count instances of non-compliance on other Department contracts.

The sanctions described herein are the minimum sanctions; in case of major violations the Department reserves the right to impose any sanctions up to and including termination, revocation of prequalification, and prohibition from participation in Department contracts, regardless of the number of instances of non-compliance.

Contractors, subcontractors, and suppliers may appeal the sanctions to the State Engineer. That appeal must be in writing and personally delivered or sent by certified mail, return receipt requested, to the State Engineer. The appeal must be received by the State Engineer no later than seven calendar days after the Department's determination. The State Engineer shall promptly consider any appeals and notify the interested party of the State Engineer's findings and decision. The State Engineer's decision shall be considered administratively final.

Any delay resulting from a compliance verification or a sanction under this subsection is a non-excusable delay. The contractor is not entitled to any compensation or extension of time for any delays or additional costs resulting from a compliance verification or a sanction under subsection 107.19.

An example of the minimum sanctions under this subsection is presented in the following table:

Offense by:			Minimum Reduction in Compensation
Contractor	Subcontractor A	Subcontractor B	
First			\$10,000
	First		\$10,000
	Second		\$50,000
		First	\$10,000
	Third		\$50,000 *
* Will, in addition, result in removal of the subcontractor, prohibition from participating in Department contracts, and revocation of any Department prequalifications that the subcontractor may have obtained.			

(108SUBLT, 02/22/16)

SECTION 108 PROSECUTION AND PROGRESS:

108.01 Subletting of Contract: the fifth paragraph of the Standard Specifications is revised to read:

The Department may also refuse to approve any entity as a subcontractor or supplier for any of the reasons for which it could refuse to allow an entity to submit a bid, suspend the entity from bidding, or declare the entity non-responsible.

108.01 Subletting of Contract: the sixth paragraph of the Standard Specifications is modified to add:

- (G) Verification that an alternative dispute resolution process to resolve payment and prompt payment disputes is included in each subcontract. The alternative dispute resolution process shall include a means of prompt escalation beyond the project level and provide the opportunity to hire a mediator.

108.01 Subletting of Contract: the seventh paragraph of the Standard Specifications is revised to read:

The Engineer will not consent to subletting of any portion of the contract until:

- (a) The Engineer receives a copy of the subcontract or lower tier subcontract, and
- (b) The AZUTRACS Registration Number for the subcontractor has been provided.

The contractor's schedule shall allow seven calendar days for the Department's subcontract review of each subcontract.

The Engineer's consent shall in no way be construed to be an endorsement of the subcontractor or its ability to complete the work in a satisfactory manner.

If a subcontractor, of any tier, begins work on the contract prior to the contractor submitting the required documentation and receiving consent from the Engineer, the Department will withhold \$1,000 from monies due or becoming due the contractor as liquidated damages. The liquidated damages will be withheld for each subcontractor, of any tier, that starts work without the consent of the Engineer. These liquidated damages shall be in addition to all other retention or liquidated damages provided for elsewhere in the contract.

If a subcontractor, of any tier, is found working on the project without an approved contract the Engineer will immediately stop work on the subcontract. Work shall not resume until all required documentation is submitted and approved by the Engineer. The contractor shall not be entitled to additional compensation or an extension of contract time for any delays to the work because of the contractor's failure to submit the required documentation.

(108PRCN, 05/03/16)

SECTION 108 PROSECUTION AND PROGRESS:

108.03 Preconstruction Conference: the seventh paragraph of the Standard Specifications is revised to read:

The contractor shall submit a traffic control plan in accordance with Subsection 701-1. The contractor shall designate an employee who is competent and experienced in traffic control to implement and monitor the traffic control plan. The qualifications of the designated employee must be satisfactory to the Engineer. Such designated employee shall have successfully completed a recognized traffic control supervisor training program. The traffic control supervisor training provided by the American Traffic Safety Services Association (A.T.S.S.A.) or the International Municipal Signal Association (IMSA) shall be acceptable. Training through other programs must be approved in advance by the Engineer. The contractor shall submit proof that the proposed individual has completed an approved training program at the preconstruction conference. The training shall be current, and must be valid throughout the duration of the project. In order to remain current with the Department, the traffic control supervisor training shall be completed or renewed every four years.

108.03 Preconstruction Conference: the fifth paragraph of the Standard Specifications is hereby deleted.

(108TIME, 10/12/01)

SECTION 108 - PROSECUTION AND PROGRESS:

108.08 Determination and Extension of Contract Time: the first paragraph of the Standard Specifications is revised to read:

The time allowed for the completion of the work included in the contract will be **205** working days, and will be known as the "Contract Time."

(108FCWT, 7/01/14)

SECTION 108 - PROSECUTION AND PROGRESS:

108.09 Failure to Complete the Work on Time: the Schedule of Liquidated Damages table of the Standard Specifications is revised to read:

SCHEDULE OF LIQUIDATED DAMAGES			
Original Contract Amount		Liquidated Damages Per Day	
From More Than:	To and Including:	Calendar Day or Fixed Date:	Working Day:
\$ 0	\$ 100,000	\$ 430	\$ 600

SCHEDULE OF LIQUIDATED DAMAGES			
Original Contract Amount		Liquidated Damages Per Day	
From More Than:	To and Including:	Calendar Day or Fixed Date:	Working Day:
100,000	500,000	640	900
500,000	1,000,000	1,000	1,400
1,000,000	2,000,000	1,290	1,800
2,000,000	5,000,000	1,860	2,600
5,000,000	10,000,000	2,710	3,800
10,000,000	20,000,000	2,790	3,900
20,000,000	30,000,000	3,570	5,000
30,000,000	60,000,000	5,500	7,700
60,000,000	90,000,000	9,430	13,200
90,000,000	-----	9,430	13,200

(109FORCE, 02/20/08)

SECTION 109 - MEASUREMENT AND PAYMENT:

109.04(D)(3)(a) Rental Rates (Without Operators): of the Standard Specifications is modified to add:

The Rental Rate Blue Book adjustment factor (F) will be 0.933.

(109RET, 06/09/16)

SECTION 109 MEASUREMENT AND PAYMENT:

109.06(A) Partial Payments: the first paragraph of the Standard Specifications is revised to read:

If satisfactory progress is being made, the contractor will receive a payment each month based on the amount of work completed during the preceding month. The Department will prepare a draft monthly estimate for review by the contractor. The contractor shall work with the Engineer to finalize the monthly estimate. When the Engineer and the contractor have reached agreement, the final monthly estimate will be prepared and signed by the contractor and the Engineer. The contractor's signature constitutes a certification that the work was satisfactorily performed, meets the specifications, and the quantities reported are accurate regardless of whether the work was performed by the contractor or a subcontractor. The Engineer will submit signed monthly estimate for payment.

Except as herein provided, the Department will not retain monies from the monthly payments.

109.06(B) Subcontractor Payments: of the Standard Specifications is revised to read:

(1) Retention:

If the prime contract does not provide for retention, the contractor and each subcontractor of any tier shall not withhold retention on any subcontract. If the prime contract provides for retention, the prime contractor and each subcontractor of any tier shall not retain a higher percentage than the Department may retain under the prime contract.

(2) No Set-offs Arising from Other Contracts:

If a subcontractor is performing work on multiple contracts for the same contractor or subcontractor of any tier, the contractor or subcontractor of any tier shall not withhold or reduce payment from its subcontractors on the contract because of disputes or claims on another contract.

(3) Partial Payment:

The contractor and each subcontractor of any tier shall make prompt partial payments to its subcontractors within seven days of receipt of payment from the Department. Notwithstanding any provision of Arizona Revised Statutes Section 28-6924, the parties may not agree otherwise.

(4) Final Payment:

The contractor and each subcontractor of any tier shall make prompt final payment to each of its subcontractors. The contractor and each subcontractor of any tier shall pay all monies, including retention, due to its subcontractor within seven days of receipt of payment. Notwithstanding any provision of Arizona Revised Statutes Section 28-6924, the parties may not agree otherwise.

(5) Payment Reporting and Sanctions:

For the purposes of this subsection "Reportable Contracts" means any subcontract, of any tier, DBE or non-DBE, by which work shall be performed on behalf of the contractor and any contract of any tier with a DBE material supplier.

The requirements of this subsection apply to all Reportable Contracts.

Payment Reporting for all Reportable Contracts shall be done through the Department's web-based DBE System. The DBE System can be accessed from the Department's BECO website. No later than fifteen calendar days after the preconstruction conference, the contractor shall log into the Department's web-based DBE system and enter or verify the name, contact information, and subcontract amounts for Reportable Contracts on the project. As Reportable Contracts are approved over the course of the contract, the contractor shall enter them in the system. Reportable contracts shall be entered into the system no later than five calendar days after approval by the Department.

The contractor shall report on a monthly basis indicating the amounts actually paid and the dates of each payment under any Reportable Contract on the project. In addition, the contractor shall require that all participants in any Reportable Contract electronically verify receipt of payment on the contract by the last day of the month and the contractor shall actively monitor the Department's DBE System to ensure that the verifications are input. The contractor shall proactively work to resolve any payment discrepancies in the DBE System between payment amounts it reports and payment confirmation amounts reported by others.

The contractor shall ensure that all Reportable Contract activity is reported to the Department. This includes all lower-tier Reportable Contracts.

The contractor shall maintain records for each payment explaining the amount requested by the subcontractor, and the amount actually paid pursuant to the request, which may include but are not limited to, estimates, invoices, pay requests, copies of checks or wire transfers, and lien waivers in support of the monthly payments in the ADOT DBE System.

The contractor shall provide information for payments made on all Reportable Contracts during the previous month by the 15th day of the current month. In the event that no payments were made during a given month, the contractor shall identify that by entering a dollar value of zero. If the contractor does not pay the full amount of any invoice from a subcontractor, the contractor shall note that and provide the reasons in the comment section of the Monthly Payment Audit of the ADOT DBE System.

For each Reportable Contract on which the contractor fails to submit timely and complete payment information the Department will retain \$1,000.00 as liquidated damages, from the monies due to the contractor. Liquidated damages will be deducted each month for each Reportable Contract on which the contractor fails to submit payment information until the contractor provides the required information as described herein. After 90 consecutive days of non-reporting, the liquidated damages will increase to \$2,000.00 for each subsequent month, for each Reportable Contract on which the contractor fails to report until the information is provided. These liquidated damages shall be in addition to all other retention or liquidated damages provided for elsewhere in the contract.

The contractor shall ensure that a copy of this Subsection is included in every Reportable Contract of every tier.

(6) Completion of Work:

A subcontractor's work is satisfactorily completed when all the tasks called for in the subcontract have been accomplished, documented, and accepted by the Department.

(7) Disputes:

If there is a discrepancy between what is reported by the contractor in the ADOT DBE System and what the subcontractor indicates an alert email will automatically be sent to the contractor. The email will be sent to the email address provided by the contractor in the Department's DBE System. It is the contractor's responsibility to ensure that the email address in the DBE System is kept current.

The contractor shall provide a verifiable explanation of the discrepancy in the DBE System as early as practicable but in no case later than seven days after the date of the alert email.

The Engineer will determine whether the contractor has acted in good faith concerning any such explanations. The Department reserves the right to request and receive documents from the contractor and all subcontractors of any tier, in order to determine whether prompt payment requirements are met.

The contractor shall implement and use the dispute resolution process outlined in the subcontract, as described in Subsection 108.01, to resolve payment disputes.

(8) Non-compliance:

Failure to make prompt partial payment, or prompt final payment including any retention, within the time frames established above, will result in remedies, as the Department deems appropriate, which may include but are not limited to:

- (a) Liquidated Damages: These liquidated damages shall be in addition to all other retention or liquidated damages provided for elsewhere in the contract.
 - (i) The Department will withhold two times the disputed dollar amount not paid to each subcontractor.
 - (ii) If full payment is made within 30 days of the Department's payment to the contractor, the amount withheld by the Department will be released.
 - (iii) If full payment is made after 30 days of the Department's payment to the contractor, the Department will release 75 percent of the funds withheld. The Department will retain 25 percent of the monies withheld as liquidated damages.
- (b) Additional Remedies. If the contractor fails to make prompt payment for three consecutive months, or any four months over the course of one project, or if the contractor fails to make prompt payment on two or more projects within 24 months, the Department may, in addition, invoke the following remedies:
 - (i) Withhold monthly progress payments until the issue is resolved and full payment has been made to all subcontractors, subject to the requirements of paragraph (a) above,
 - (ii) Terminate the contract for default in accordance with Subsection 108.10, and/or
 - (iii) Disqualify the contractor from future bidding, temporarily or permanently, depending on the number and severity of violations.

In determining whether liquidated damages will be assessed, the extent of the liquidated damages, or additional remedies assessed, the State Construction and Materials Engineer will consider whether there have been other violations on this or other contracts, whether

the failure to make prompt payment was due to circumstances beyond the contractor's control, and other circumstances. The contractor may, within 15 calendar days of receipt of the decision of the State Construction and Materials Engineer, escalate the decision to the State Engineer. If the contractor does not escalate the decision of the State Construction and Materials Engineer, in writing to the State Engineer, within 15 calendar days of receipt of the decision, the contractor will be deemed to have accepted the decision and there will be no further remedy for the contractor. If the contractor escalates the decision to the State Engineer, and the contractor does not agree with the State Engineer's decision, the contractor may initiate litigation, arbitration or mediation pursuant to Subsection 105.21(D) and (E) of the Standard Specifications.

109.06(C) Payroll Submittals: of the Standard Specifications is revised to read:

The contractor shall submit payrolls electronically through the internet to the Department's web-based certified payroll tracking system. This requirement shall also apply to every lower-tier subcontractor that is required to provide certified payroll reports.

If, by the 15th of the month, the contractor has not submitted its payrolls for all work performed during the preceding month, the Engineer will provide written notification of the discrepancies to the contractor. For each payroll document that the contractor fails to submit within 10 days after the written notification, the Department will retain \$2,500.00 from the progress payment for the current month. The contractor shall submit each complete and correct payroll within 90 days of the date of written notification. If the payroll is complete and correct within the 90-day time frame, the Department will release the \$2,500.00 on the next monthly estimate. For each payroll that is not acceptable until after the 90-day time frame, the Department will only release \$2,000.00 of the \$2,500.00 retained. The Department will retain \$500.00 as liquidated damages. Such \$500.00 retentions will not relieve the contractor of its responsibility to provide each required payroll, complete and correct, as specified above. These liquidated damages shall be in addition to all other retention or liquidated damages provided for elsewhere in the contract.

109.07 Partial Payment for Material on Hand: the fifth paragraph of the Standard Specifications is hereby deleted.

(201CLGB, 10/18/10)

SECTION 201 - CLEARING AND GRUBBING:

201-3.02 Removal and Disposal of Materials: the second and third paragraphs of the Standard Specifications are revised to read:

In the disposal of all tree trunks, stumps, brush, limbs, roots, vegetation and other debris, the contractor shall comply with the requirements of Title 49, Chapter 3, of the Arizona Revised Statutes, and with the Rules and Regulations for Air Pollution Control, Title 18, Chapter 2, Article 6, adopted by the Arizona Department of Environmental Quality pursuant to the authority granted by the Arizona Administrative Code.

Burning will be permitted only after the contractor has obtained a permit from the Arizona Department of Environmental Quality and from any other Federal, State, County or City Agency that may be involved.

SECTION 202 - REMOVAL OF STRUCTURES AND OBSTRUCTIONS:

202-5 **Basis of Payment:** the first paragraph of the Standard Specifications is revised to read:

Payment for the accepted quantities of removal of structures and obstructions will be made by lump sum or by specific removal items or by a combination of both. Payment for removal of structures and obstructions not listed in the bidding schedule, but necessary to perform the construction operations designated on the project plans or specified in the Special Provisions shall be considered as included in the prices of contract items.

When saw cutting is not included as a contract pay item, full compensation for any saw cutting necessary to perform the construction operations designated on the plans shall be considered as included in the price of contract items.

ITEM 2020053 - REMOVE (SIGNS, FOUNDATIONS & POSTS)(RWM/FDA SIGNS):

ITEM 2020054 - REMOVE (SIGNS, FOUNDATIONS & POSTS)(EXTRUDED SIGNS):

ITEM 2020155 - REMOVE (SIGNS, STRUCTURES, FOUNDATIONS, AND POSTS):

Description:

The work under this item shall consist of removing all u-channel, perforated, or breakaway posts; sign panels; foundations; hardware used to mount existing signing to existing poles, posts, or other roadway features; and other existing hardware in accordance with Section 202 of the Standard Specifications and as indicated on the project plans.

Construction Requirements:

Foundations shall be removed entirely or at least 12 inches below grade, at the contractor's option. The contractor shall backfill the hole resulting from the partial or entire removal of the foundation with native material in accordance with subsection 202- 3.01 of the Standard Specifications.

All sign panels, posts, foundations, and other materials removed shall become the property of the contractor and shall be disposed of at an acceptable location off the project limits and may not be used on this or any other ADOT project in place of new materials.

Where a new sign installation will replace an existing sign installation, the existing sign installation shall not be removed until the new sign installation has been completed, unless otherwise directed by the Engineer. If the Engineer allows the contractor to remove existing signing prior to the complete installation of the new signing, the contractor shall install temporary signing or shall position the existing or new sign panels on temporary supports at

no cost to the Department. The contractor shall utilize existing signing items instead of temporary signing at the locations of the existing signing wherever possible. For an installation involving only the replacement of the existing sign panel(s) and the installation of new hardware with the existing sign posts, the new sign panel(s) shall be installed as soon as practicable after the removal of the existing sign panel(s).

The contractor shall remove existing concrete sidewalk, tops of raised median islands, and any paving surrounding sign posts, where applicable, as necessary to remove the existing foundations and sign posts, as indicated on the project plans and the special provisions. After the contractor has installed the new sign posts and foundations, where applicable, the contractor shall replace the concrete and/or paving as necessary to support the sign posts reinstalled in concrete and to provide safe access for pedestrians and vehicular traffic. The contractor shall remove and place new concrete in a manner acceptable to the Engineer.

Method of Measurement:

Remove (Signs, Structures, Foundations and Posts) will be measured by the unit for each remove (signs, structures, foundations and posts). The work shall include all materials, tools, equipment, and labor necessary to remove and dispose of the items identified on the plans and in this special provision.

Basis of Payment:

The accepted quantity of Remove (Signs, Structures, Foundations and Posts) measured as provided above will be paid for at the contract unit price, which price shall be full compensation for the work, complete in place, as specified herein and as shown on the project plans.

(207DSP, 02/20/08)

SECTION 209 FURNISH WATER: of the Standard Specifications is hereby deleted.

SECTION 207 BLANK of the Standard Specifications is revised to read:

SECTION 207 DUST PALLIATIVE:

207-1 Description:

The work under this section shall consist of applying all water required for the control of dust as considered necessary for the safety and convenience of the traveling public, and for the reduction of the dust nuisance to adjacent property.

207-2 Blank

207-3 Construction Requirements:

The use of pressure pumps and spray bars on all sprinkling equipment used for the application of dust palliative will be required. The use of gravity flow spray bars and splash plates will not be permitted.

Water applied for dust control shall be as approved or directed by the Engineer. The contractor shall provide appropriate equipment for effective control of dust.

207-4 Method of Measurement and Basis of Payment:

No measurement will be made for application of dust palliative, including furnishing water and all necessary equipment and labor, the cost being considered as included in contract items.

(607POST, 9/08/11)

SECTION 607 ROADSIDE SIGN SUPPORTS:

607-1 Description: the first paragraph of the Standard Specifications is revised to read:

The work under this section shall consist of furnishing and installing roadside sign supports in accordance with the details shown on the plans and the requirements of the specifications.

607-2.05 Concrete: the last paragraph of the Standard Specifications is revised to read:

Reinforcing steel bars for breakaway sign post foundations shall conform to the requirements of ASTM A 615. Unless otherwise specified, steel bars meeting the requirements of ASTM A 706 may be substituted for ASTM A 615 steel bars. When ASTM A 706 bars are used, tack welding of the reinforcement will not be permitted unless approved in writing by the Engineer. Reinforcing steel wire shall conform to the requirements of ASTM A 82.

ITEM 6070038 - SLIP BASE (NEW):

Description:

The work under this item shall consist of furnishing all materials, tools, equipment, and labor necessary to install slip bases in accordance with the project plans and the requirements of these specifications.

Materials:

All materials for the slip bases shall be new.

Method of Measurement:

Slip Base (New) will be measured by the unit for each slip base installed complete in place.

Basis of Payment:

The accepted quantities of Slip Base (New), measured as provided above, will be paid for at the contract unit price, which price shall be full compensation for the work, complete in place, as specified herein and as shown on the project plans.

(608PANEL, 01/26/16)

SECTION 608 - SIGN PANELS:

608-1 Description: of the Standard Specifications is revised to read:

The work under this section shall consist of furnishing and installing sign panels in accordance with the details shown on the plans and the requirements set forth herein.

The sign panels shall be of the following types:

- Extruded Aluminum Sign Panels with Direct-Applied, Digitally-Imaged, or Demountable Characters
- Flat Sheet Aluminum Sign Panels With Direct-Applied, Digitally-Imaged, Electronic-Cut, or Screen-Printed Characters
- Warning, Marker, and Regulatory Sign Panels
- Route Shields for Installation on Sign Panels
- EXIT ONLY Panels for Installation on Sign Panels

608-2.01 General: of the Standard Specifications is modified to add:

Signs shall be fabricated in accordance with the recommendations established by the manufacturer of the sign sheeting. All processes and materials used to make a sign shall in no way impact the performance, uniform appearance (day and night), or durability of the sheeting, or invalidate the sign sheeting manufacturers' warranty.

All sheeting used for background and legend shall be from the same manufacturer. Sign panels shall not be overlaid.

All text and numerals shall all be installed at the same orientation: either zero degrees or 90 degrees.

Design of letters and numbers shall be in accordance with the project plans with a tolerance of $\pm 1/16$ th of an inch.

The contractor shall not paint the bolts or the washers unless otherwise specified.

608-2.02 Extruded Aluminum Sign Panels With Demountable Characters: the title of the Standard Specifications is revised to read:

608-2.02 Extruded Aluminum Sign Panels With Direct-Applied, Digitally-Imaged, or Demountable Characters:

608-2.02 Extruded Aluminum Sign Panels With Demountable Characters: the third paragraph of the Standard Specifications is revised to read:

The letters, numerals, symbols, borders and other features of the sign message shall be direct-applied, digitally-imaged, or demountable, and shall conform to the requirements of Subsection 608-2.14, Demountable Characters, Subsection 608-2.15, Screen-Printed, Direct-Applied, or Electronic-Cut Characters, or Subsection 608-2.16, Digitally-Imaged Characters.

608-2.07 Flat Sheet Aluminum Sign Panels With Direct-Applied or Silk-Screened Characters: the title and text of the Standard Specifications are revised to read:

608-2.07 Flat Sheet Aluminum Sign Panels With Direct-Applied, Digitally-Imaged, Electronic-Cut, or Screen-Printed Characters:

Panels shall be fabricated from 0.125-inch thick 5052-H36, or 5052-H38 Aluminum Alloy conforming to the requirements of ASTM B 209.

Panel facing shall be prepared and covered with retroreflective sheeting in accordance with the recommendations of the sheeting manufacturer. The color of the sheeting shall be as specified on the plans or as shown in the Manual of Approved Signs.

All surfaces not covered shall be etched to reduce glare from reflected sunlight.

The retroreflective sheeting shall conform to the requirements of Section 1007. Splicing of retroreflective sheeting shall not be allowed on sign panels having a minimum dimension up to and including four feet.

Messages shall be reflectorized white or, if called for on the plans, opaque black, and shall be produced by either screen printing, direct-applying, digital imaging, or electronic cutting, as specified under Subsections 608-2.15 and 608-2.16.

608-2.09 Warning, Marker, and Regulatory Sign Panels: of the Standard Specifications is revised to read:

Panels shall be fabricated from flat sheet aluminum and shall be reflectorized as specified herein.

Panels shall be fabricated in one piece from 0.125-inch thick 5052-H36, 5052-H38, or 6061-T6 Aluminum Alloy conforming to the requirements of ASTM B 209.

All surfaces of panels to be covered with retroreflective sheeting shall be prepared in accordance with the recommendations of the sheeting manufacturer. Surfaces not covered shall be etched to reduce glare from reflected sunlight. Retroreflective sheeting shall conform to the requirements of Section 1007.

Warning signs shall be reflectorized with fluorescent yellow retroreflective sheeting.

Regulatory signs shall be reflectorized with white retroreflective sheeting.

Reflectorized red signs shall be reflectorized with white retroreflective sheeting. The red color shall be produced by screen printing.

Regulatory signs with reflectorized red circles and slashes shall be reflectorized with white retroreflective sheeting. The red color shall be produced by screen printing.

Interstate route markers shall be cut to shape. The colors and legend shall be as shown on the plans and shall be reflectorized with white retroreflective sheeting. The Interstate route colors shall be screen-printed. The numerals may be screen-printed, electronic-cut, or direct-applied characters.

United States, State Route, and Cardinal Direction markers shall be reflectorized with white retroreflective sheeting unless otherwise shown on the plans.

Splicing of retroreflective sheeting shall not be allowed on sign panels having the minimum dimension up to and including four feet.

608-2.11 Route Shields (For Installation on Sign Panels): of the Standard Specifications is revised to read:

Route shields may be demountable, direct-applied, or digitally-imaged.

Demountable route shields shall be cut to shape and shall consist of 0.063-inch thick, 5052-H36, or 5052-H38 Aluminum Alloy conforming to the requirements of ASTM B 209. The aluminum shall be degreased and etched in accordance with the recommendations of the sheeting manufacturer. Retroreflective sheeting shall be white and shall conform to the requirements of Section 1007. Route shields shall be attached to the sign panel with self-plugging aluminum blind rivets.

608-2.12 EXIT ONLY (For Installation on Sign Panels): the title and text of the Standard Specifications are revised to read:

608-2.12 EXIT ONLY Panels (For Installation on Sign Panels):

EXIT ONLY panels may be demountable, direct-applied, or digitally-imaged. Demountable EXIT ONLY panels shall be attached to the sign panel with self-plugging aluminum blind rivets.

Demountable EXIT ONLY panels shall be fabricated from 0.063-inch thick, 5052-H36 or 5052-H38 Aluminum Alloy conforming to the requirements of ASTM B 209 with fluorescent yellow retroreflective sheeting adhered to the face side. The aluminum shall be degreased and etched in accordance with the recommendations of the sheeting manufacturer. Retroreflective sheeting shall conform to the requirements of Section 1007.

608-2.13 Retroreflective Sheeting, Inks and Opaque Film: the second and third paragraphs of the Standard Specifications are hereby deleted.

608-2.14(A) General: the second paragraph of the Standard Specifications is revised to read:

Flat sheet aluminum substrates used for characters and borders shall be either aluminum alloy 3105-H14, 3003-H14, 5052-H36, or 5052-H38 as specified in ASTM B 209. Characters produced from the flat sheet aluminum alloy shall sit flat on the face of the sign panel without visible gap or deformation.

608-2.14(B) Sheeting and Colors: the third, fourth, and fifth paragraphs of the Standard Specifications are revised to read:

The color for demountable letters, numbers, symbols, and route shields on green, blue, and brown background signs shall be white, and shall conform to the requirements of Section 1007. Demountable legends on white and yellow background signs shall be black, and shall be opaque and non-reflective. Black characters shall be finished with laminated black opaque acrylic film.

When borders are used with demountable characters, white legend and border shall be used on green, blue, or brown sign backgrounds, and black legend and border shall be used on white or yellow sign backgrounds. Sign sheeting conforming to Section 1007 shall be used for white borders. Black borders shall be laminated black opaque acrylic film.

Laminated black opaque acrylic film to be used for characters or borders, as specified above, shall be applied in accordance with the coating manufacturer's recommendations. The contractor shall provide copies of any warranties provided by the manufacturer to the Engineer.

608-2.15 Silk-Screened or Direct-Applied Characters: the title and text of the Standard Specifications is revised to read:

608-2.15 Screen-Printed, Direct-Applied, and Electronic-Cut Characters:

Screen-printed letters, numerals, arrows, symbols, and borders, shall be applied on the retroreflective sheeting background of the sign by direct or reverse screen process. Messages and borders of a color darker than the background shall be applied to the retroreflective sheeting by direct process. Messages and borders of a color lighter than the sign background shall be produced by the reverse screen process.

Opaque or transparent colors, inks, and paints used in the screen process shall be of the type and quality recommended by the manufacturer of the retroreflective sheeting.

The screening shall be performed in a manner that results in a uniform color and tone, with sharply defined edges of legends and borders and without blemishes on the sign background that will affect intended use.

Signs, after screening, shall be air dried or baked in accordance with the manufacturer's recommendations to provide a smooth hard finish. Any signs on which blisters appear during the drying process will be rejected.

Direct-applied letters, numerals, symbols, borders, and other features of the sign message shall be cut from black opaque or retroreflective sheeting of the color specified and applied to the retroreflective sheeting of the sign background in accordance with the instructions of the manufacturer of the retroreflective sheeting.

Direct-applied legend may be moved vertically 1/2 inch to avoid placing only a small amount of material over the adjacent extruded panel. The bottom of all characters for a line of legend shall line up within 1/8 of an inch.

Electronic-cut characters shall be cut from translucent acrylic sheeting using computerized automated cutting processes.

608-2 Materials: of the Standard Specifications is modified to add:

608-2.16 Digitally-Imaged Characters:

Digitally-imaged characters shall consist of characters produced through ultraviolet jet-printing or thermal transfer. Signs with digitally-imaged characters shall be manufactured using matched component ink, transparent electronic-cuttable film, and/or overlay film as supplied by the reflective sheeting manufacturer. For digitally-imaged copy on white sheeting, the coefficient of retroreflection shall be not less than 70 percent of the original values for the corresponding integral color. When characters are spread over two adjacent extruded panels, the characters shall align with each other within 1/16th of an inch.

608-3.01 Fabrication: of the Standard Specifications is modified to add:

During fabrication of the sign panels, the contractor shall ensure the bolt holes on each sign panel are placed so the holes will not coincide with any legend and any bolts, washers, or other hardware used will not cover any portion of the legend. If the bolt holes on a sign panel do not comply with these requirements, the Engineer may reject the sign panel or accept the sign panel and require the contractor to paint the bolts, washers, and any hardware coinciding with the sign legend to match the color of the legend.

608-3.02 Installation of Sign Panels: of the Standard Specifications is revised to read:

The sign panels shall be installed on overhead sign structures and roadside sign supports in accordance with the details shown on the plans and in accordance with the recommendations of the manufacturers of the sign panel components.

Minor scratches and abrasions resulting from fabrication, shipping and installation of panels may be patched; however, patching shall be limited to one patch per 50 square feet of sign area with the total patched area being less than five percent of the sign area. Panels requiring more patching than the specified limit will be rejected. Patches shall be edge sealed by a method approved by the retroreflective sheeting manufacturer.

Sign panels shall be attached to the posts with hex head bolts as shown in the Standard Drawings; slotted head bolts shall not be used. A cadmium-plated or zinc-plated fender washer shall be placed between the bolt head and panel face.

For flat sheet panels, bolts shall be fastened with a cadmium-plated or zinc-plated fender washer and two standard nuts. Nylon washers shall not be used. The fender washer shall be placed against the sign post, the first nut shall be tightened against the fender washer, and the second nut shall be tightened against the first nut. Bolts shall be tightened from the back by holding the bolt head stationary on the face of the panel. Twisting of the bolt head on the panel face will not be allowed.

The contractor shall provide two copies of a detailed list of all new signs installed on the project to the Engineer. The list shall include the sign identification code, the date each sign was installed (month and year), the fabricator of the sign, and the materials used to make the sign (manufacturer, type of sheeting, ink and film). The list shall be provided in a commonly used electronic spreadsheet format, such as EXCEL, and the two copies shall be submitted on CD-ROM disks. Signs shall be listed in numerical order by route, direction, and milepost and, where more than one sign is installed at the same general location, a letter subscript.

Sign panels within the same sign assembly shall be placed at the same orientation along the roadway so that the entire legend of the signs appear uniform under normal viewing conditions, both day and night.

Upon fabrication or installation of each sign, the contractor shall place information on the back of the sign showing the sign identification code, the sign fabricator, the manufacturer

of the sheeting used, and the month and year of the installation. The formatting of the required information shall be as shown on the standard drawings. The information shall be positioned to be readily visible from a vantage point outside the flow of traffic and not obstructed by sign posts, extrusions, stringers or brackets. All letters shall be made of a long life material such as a black opaque acrylic film. Signs not marked as required will not be eligible for payment.

Temporary traffic control signs are exempt from the installation information requirement unless noted otherwise on the project plans.

608-3.04 **Inspection:** the second paragraph of the Standard Specifications is revised to read:

Each sign panel face shall be cleaned thoroughly just prior to the inspection by a method recommended by the manufacturer. The cleaning material shall in no way scratch, deface or have any adverse effect on the sign panel components.

608-4 **Method of Measurement:** of the Standard Specifications is revised to read:

Sign panels will be measured by the square foot for each type or types of sign panels furnished and installed. Individual sign panels will be measured to the nearest 0.1 square foot. The total area of each type of sign panel will be summed and rounded to the nearest square foot.

The area of each sign panel, except for warning, regulatory and marker sign panels, will be measured per plans dimensions.

For warning, regulatory and marker sign panels, the area of each sign panel will be determined as follows:

The areas of each rectangular, square or triangular sign panel will be determined from the dimensions shown on the plans.

The area of irregular shaped signs, such as stop signs and route markers, will be determined by multiplying the maximum height in feet by the maximum width in feet, using the dimensions shown on the plans.

Miscellaneous Work (Sign Panels) will be measured on a lump sum basis.

608-5 **Basis of Payment:** first and second paragraphs of the Standard Specifications are revised to read:

The accepted quantities of each type of sign panel designated in the bidding schedule, measured as provided above, will be paid for at the contract unit price per square foot, complete in place, regardless of the type of sheeting or type of character used on the sign panel. Payment shall be made on the total area of each type of sign panel to the nearest square foot.

No additional payment will be made for signs with sheeting applied to both sides, the cost being considered as included in the contract unit price for the sign panel.

No measurement or payment will be made for Route Shields and EXIT ONLY Panels (for installation on sign panels), the cost being considered as included in the contract unit price for the sign panel.

ITEM 6080010 - SIGN PANEL (F-DA, HINGED/FOLDING SIGN):

Description:

The work under this item shall include furnishing, fabricating and installing new folding sign panels, as identified on the project plans.

Materials:

The sign panel shall be fabricated from flat sheet aluminum and shall have retroreflective sheeting meeting the minimum criteria for Type IX or XI sheeting in accordance with ASTM D 4956.

Panels shall be fabricated in one piece from 0.125-inch thick, 5052-H36 or 5052-H38 Aluminum Alloy conforming to the requirements of ASTM B 209.

The sign panel shall be divided horizontally into two sections. The sections shall be connected with a minimum of four 4 in. x 4 in. door hinges. Piano hinges will not be acceptable. The four hinges shall be placed so they do not overlap text on the sign. The top section shall be mounted to the sign supports with a minimum of two bolts. In addition, the bottom panel shall have two holes at the bottom so that the bottom panel can be folded against the top panel and bolted shut in accordance with Signing and Striping Standard Drawing S-15 sheets 1 and 2.

The contractor shall submit shop drawings for the folding sign to the Engineer for approval prior to fabrication.

Construction Requirements:

The contractor shall fabricate and install the hinged/folding sign panels in accordance with the requirements of subsection 608-3 of the Standard Specifications.

Method of Measurement:

Sign panels will be measured by the square foot for each sign panel furnished and installed in accordance with subsection 608-4 of the Standard Specifications.

Basis of Payment:

The accepted quantity of sign panels, measured as provided above, will be paid for at the contract unit price per square foot, complete in place, which price shall be full compensation for the work as shown on the project plans and as specified herein.

(701PDMPT, 11/01/16)

SECTION 701 MAINTENANCE AND PROTECTION OF TRAFFIC:

701-1 Description: the first and third paragraphs of the Standard Specifications are revised to read:

The work under this section shall consist of providing flagging services and pilot trucks, and furnishing, installing, maintaining, moving and removing barricades, warning signs, lights, signals, cones, and other traffic control devices to provide safe and efficient passage through and/or around the work and to protect workers in or adjacent to the work zone. The work shall be done in accordance with the requirements of Part 6 of the Manual on Uniform Traffic Control Devices (MUTCD) and the associated Arizona Department of Transportation supplement. When referred to herein, these documents will be referred to as MUTCD and associated ADOT Supplement.

When a traffic control plan is included in the project plans, this plan shall govern unless an alternate plan, acceptable to the Engineer, is submitted by the contractor. If no traffic control plan is provided or if the contractor desires to deviate from the provisions for maintaining traffic as described in this section, it shall submit to the Engineer for approval a proposed sequence of operations and a compatible method of maintaining traffic.

The contractor's submittal shall be prepared by an individual meeting one of the following criteria:

- (a) Has successfully completed a recognized traffic control supervisor training and certification program. The traffic control supervisor training and certification provided by the American Traffic Safety Services Association (A.T.S.S.A.) or the International Municipal Signal Association (IMSA) shall be acceptable. Training and certification through other programs must be approved in advance by the Engineer. The individual's training and certification shall be current and must be valid throughout the duration of the project. In order to remain current with the Department, training and certification shall be completed or renewed at least once every four years.
- (b) Be a licensed professional engineer registered in the State of Arizona and have completed an approved traffic control supervisor training program, as specified in Subsection 108.03. The training shall be current and must be valid throughout the duration of the project. In order for the training to remain current with the Department, it shall be completed or renewed every four years.

The contractor shall submit proof of the proposed individual's credentials at the preconstruction conference. The contractor bears all responsibility for any such contractor-submitted traffic control plan, whether prepared by its direct employee or other individual.

The contractor's proposal shall be submitted early enough to allow at least two weeks for review and approval before use of the proposed traffic control plan.

701-2.01(B)(1) General Requirements: item (d) of the second paragraph of the Standard Specifications is revised to read:

- (d) The name, title and signature of a person having legal authority to bind the manufacturer or supplier of the Category I and II devices. The binding authority shall be in accordance with the applicable requirements of Subsection 106.05(B).

701-2.03 Temporary Concrete Barrier: the second paragraph of the Standard Specifications is revised to read:

The contractor shall provide, at the preconstruction conference, a certificate of compliance, conforming to the requirements of Subsection 106.05, stating that any temporary concrete barrier to be used on the project conforms to Signing and Marking Standard Drawing C-3. The contractor shall include the project number on the submittal.

701-2.04 Temporary Impact Attenuation Devices: the second paragraph of the Standard Specifications is revised to read:

Temporary impact attenuation devices shall also meet evaluation criteria for Test Level 3 per NCHRP (National Cooperative Highway Research Program) Report 350, or for Test Level 3 per MASH (AASHTO Manual for Assessing Safety Hardware). The contractor shall provide, at the preconstruction conference, a certificate of compliance, conforming to the requirements of Subsection 106.05, certifying that any temporary impact attenuation devices to be used on the project will meet the above requirement. The contractor shall include the project number on the submittal.

701-2.08 Barricades: the title and second paragraph of the Standard Specifications are revised to read:

701-2.08 Barricades and Other Channelizing Devices:

All sheeting for barricades and other channelizing devices shall conform to the requirements of Section 1007.

701-3.05 Temporary Pavement Markings (Application and Removal):

(C) Preformed Pavement Markings: the first paragraph of the Standard Specifications is revised to read:

Preformed pavement markings for temporary applications shall be Type II (Temporary-Removable) and III (Temporary-Nonremovable) and shall conform to the requirements of Section 705 of the specifications.

701-3.07 Truck-Mounted Attenuator: the title and text of the Standard Specifications are revised to read:

701-3.07 Truck-Mounted and Trailer-Mounted Attenuators:

The contractor shall provide trucks and truck-mounted attenuators, or trailer-mounted attenuators and host vehicles, at the locations shown on the project plans and/or as directed by the Engineer.

Attenuators shall meet either NCHRP Report 350, Test Level 3 criteria, or MASH (Manual for Assessing Safety Hardware), Test Level 3 criteria, passing both mandatory and optional tests. The truck and attenuator combination shall only be used in the configuration tested. Either the truck or attenuator shall have a sequential arrow display panel or changeable message board.

Attenuators that require chocking or blocking of the vehicle to meet NCHRP Report 350 or MASH certification shall not be used.

Attenuators shall have rear-mounted, retroreflective chevron stripes and a standard trailer lighting system, including brake lights, turn signals, ICC-bar lights, and two yellow rotating beacons, strobe lights, or LED lights mounted on opposite rear corners of the truck or attenuator approximately 4-1/2 feet above the bottom of the tires. A Type C arrow panel or changeable message board shall be provided and shall be installed in accordance with the NCHRP 350/ MASH Crashworthiness Certification or FHWA Letter of Acceptance. There shall be a minimum of seven feet from the roadway to the bottom of the panel or board. Frame work shall be an integral part of the truck and be permanently mounted in such a way as to prevent the unit from separating from the truck in the case of a collision.

For each proposed truck-mounted or trailer-mounted attenuator, the contractor shall provide a Certificate of Compliance, in accordance with Subsection 106.05, to the Engineer for approval prior to use. For truck-mounted attenuators, the certificate shall also include the certified weigh bill for the truck, and for trailer-mounted attenuators the certificate shall state the minimum weight for the host vehicle. The certificate shall state that the attenuator meets the specified criteria, and shall clearly state the roll-ahead distance. When trucks require ballasting to comply with NCHRP 350/MASH Crashworthiness Certifications, the contractor shall provide a letter from the owner supplying the attenuator and truck stating that the ballast is in compliance with the manufacturer's recommendations and that it is anchored to the truck frame.

The letter shall be on the supplier's official company letterhead and shall include:

- (1) the current name, address, and phone number of the supplier of the attenuator,
- (2) a statement that the individual signing the letter has the legal authority to bind the supplier,
- (3) the name, title and signature of the responsible individual, and
- (4) the date of the signature.

A copy of the Certificate of Compliance and if required, the letter regarding ballast shall be kept in the truck cab or host vehicle, available for immediate inspection when requested by the Engineer.

When in use for attenuation, trucks shall be used exclusively for attenuators. When in use for attenuation, such trucks shall not be used to carry or store equipment or devices, secured or unsecured. No modification in configuration or use shall be allowed without a resubmitted certified weigh bill for the Engineer's approval.

Truck-mounted or trailer-mounted attenuators used as shadow vehicles per the MUTCD shall be positioned at a distance greater than the roll-ahead distance in advance of the workers or equipment being protected so that there will be sufficient distance, but not so much that errant vehicles will travel around the shadow vehicle and strike the protected workers and/or equipment.

The contractor shall cease operations when a truck-mounted or trailer-mounted attenuator is damaged. The contractor shall not resume operations until the attenuator has been repaired or replaced, unless authorized by the Engineer.

701-3.08 Changeable Message Board: of the Standard Specifications is revised to read:

Changeable message boards shall be furnished and maintained by the contractor at the locations shown on the plans and as specified by the Engineer. The operations and messages programmed into the board controller shall be as directed by the Engineer. The changeable message board shall be a complete and operational portable unit which shall consist of a wheeled trailer with an adjustable, changeable message board, board message controller and self-contained power supply.

The power supply for the changeable message board shall be a fully independent self-contained trailer-mounted system. The changeable message board power supply shall be battery operated and rechargeable from a solar panel mounted above the changeable message board.

The message characters shall be delineated by either electromagnetically actuated reflective dots or optically enhanced light emitting diode pixels (LED) operating under the control of a digital computer.

The contractor shall submit, at the pre-construction conference, a Certificate of Compliance that the changeable message board to be used on this project shall be as described herein.

The character formation system and components shall conform to the following requirements:

- (1) The changeable message board shall be programmable, and shall be capable of displaying a minimum of three lines of message copy, with a minimum of eight characters per line, in various alphanumeric combinations.
- (2) The changeable message board matrix configuration shall be 35 dots or pixels per character in a five horizontal by seven vertical arrangement of the dots or pixels.
- (3) The dot or pixel size shall be a 2.5-inch high by 1.625-inch wide rectangle (minimum), or equivalent area.
- (4) Each character shall be 18 inches in height and 12 inches in width (minimum).
- (5) The horizontal character separation shall be three inches or more.
- (6) Dot color shall be fluorescent yellow upon activation and flat black when not activated. The LED pixels shall emit amber light upon activation and be dark when not activated.
- (7) The line separation shall be five to 12 inches.
- (8) Changeable message boards shall be protected with a clear lexan-type or equivalent shield that shall not interfere with or diminish the visibility of the sign message.
- (9) The programmable message board shall be capable of displaying moving arrow patterns as one of the operator-selected programs.
- (10) The message board shall also be capable of displaying up to two messages in sequence, with variable timing in a minimum of quarter-second increments.
- (11) The message board shall be clearly visible and legible from a distance of 800 feet under both day and night conditions. The dot-matrix board shall have an internal illumination system that shall automatically activate under low light conditions to achieve the visibility requirements. The LED-pixel matrix board shall adjust light output (pulse width modulation) to achieve the visibility requirements.

- (12) The power supply achieved from the battery and solar panel recharging system shall have sufficient capacity to operate the changeable message board for a minimum of 20 days without direct sunshine. The solar panel array shall be capable of recharging the batteries such that 2.5 to 3.5 hours of direct sunshine shall provide for a minimum of one 24-hour period of usage. Additionally, the battery recharging controller shall have an ambient temperature sensing device which will automatically adjust the voltage supplied from the solar panels to the batteries. The sensing device shall ensure that the batteries are properly charged in hot or cold weather and shall provide the sign with sufficient power to operate the sign as specified.

When in operation, the changeable message board trailer shall be offset a minimum of eight feet from the nearest edge of pavement. If the trailer is located behind temporary concrete barrier, a minimum offset of six feet will be required. Should the specified shoulder width not be available, a minimum two-foot offset from the nearest edge of pavement or temporary concrete barrier shall be required. When positioned on the highway, the changeable message board trailer shall be delineated with a minimum of 10 Type II barricades or vertical panels with Type C steady burn lights at a spacing of 10 to 20 feet, or as shown on the approved traffic control plan.

When not in operation, the changeable message board shall be moved a minimum of 30 feet from the edge of pavement.

The changeable message board trailer shall be placed on a level surface and be secured as recommended by the manufacturer and as directed by the Engineer. The contractor shall provide any necessary incidental grading and clearing work required to provide a level surface and clear area for the sign.

701-3.10 Sign Sheetings: of the Standard Specifications is revised to read:

Sign sheeting for all temporary work zone signs shall conform to the requirements of Section 1007.

701-3.13 Flagging Services: of the Standard Specifications is revised to read:

Flagging services shall consist of either civilian, local enforcement officers and their vehicles, or DPS (Department of Public Safety) officers and their vehicles. The Engineer will determine the type of flagger needed, and may adjust the relative number of hours of each type of flagger specified in the traffic control plan.

If available, only DPS officers shall be used on Interstate Highways and Urban Freeways. DPS officers shall also be used on other construction projects except when a local law enforcement agency has jurisdiction, in which case a local law enforcement officer and vehicle shall be used.

The contractor shall be responsible to procure civilian flaggers, DPS officers, and local enforcement officers. When procuring DPS officers, the contractor shall contact DPS at

least two business days before flagging services will be required. Such contact must be made between the hours of 7:00 A.M. and 5:00 P.M. (M.S.T.).

In the event that local enforcement officers or DPS officers are temporarily unable to provide flagging services, the contractor shall ensure that traffic control is maintained and all personnel are protected, either by providing civilian flaggers or through other means as approved by the Engineer. No adjustments to the contract will be allowed for any delays resulting from the unavailability of local enforcement officers or DPS officers.

A DPS or local enforcement officer shall not work more than 12 consecutive hours unless an emergency situation exists which, in the opinion of the Engineer, requires that the officer remain in the capacity of a flagger.

The contractor shall furnish verification to the Engineer that all civilian flaggers have completed a recognized training and certification program. Flaggers certified by the American Traffic Safety Services Association (A.T.S.S.A.) or by the National Safety Council shall be acceptable. Certification through other programs offering flagger training must be approved by the Engineer. Flagger certification must be current. Training and certification shall be required at least once every four years.

701-4.03(E) Limitation of Measurement: the second paragraph of the Standard Specifications is revised to read:

Measurement will be made after the initial installation and once weekly thereafter for items in continuous use and at any other times changes are made in the use of traffic control elements listed under Subsection 701-4.01(B). The contractor shall notify the Engineer when any changes are made in the use or location of traffic control elements.

701-4.04 Measurement of Work Elements: Sub-paragraph (A) of the Standard Specifications is revised to read:

- (A) Temporary concrete barrier will be measured by the linear foot along the center line of the uppermost surface upon its initial installation (Complete-in-Place), and upon any subsequent relocations, as defined in Subsection 701-5.01. Barrier will be measured by linear foot for each 24-hour day for the "In-Use" condition.

701-4.04 Measurement of Work Elements: Sub-paragraph (C) of the Standard Specifications is revised to read:

- (C) Truck-Mounted Attenuators, including driver, and Trailer-Mounted Attenuators, including host vehicle and driver, will be measured by the day for each 24-hour day that a truck-mounted or trailer-mounted attenuator and operator are used to protect the work site.

701-4.04 Measurement of Work Elements: Sub-paragraph (F) of the Standard Specifications is revised to read:

- (F) Civilian flagging services will be measured by the hour for each hour that a civilian flagger is provided. Flagging services by DPS officers and local enforcement officers will be measured for each hour that a uniformed, off-duty DPS officer or law enforcement officer with vehicle is employed directly by the contractor as a flagger within the project limits, when authorized in advance by the Engineer. Quantities will be rounded to the nearest 0.5 hour.

Civilian, DPS, or local enforcement flagging services and traffic control devices required to permit contractors' traffic to enter safely into normal traffic within the project limits will be paid under their respective items. Flaggers required by a written local permit agreement will be measured for payment under this item. Additional civilian, DPS, or local enforcement flagging services used within the project limits shall be measured for payment under this item, subject to the approval of the Engineer.

Civilian, DPS, or local enforcement flagging services and traffic control devices used outside the project limits will be measured under their respective items. The Department will pay 50 percent of the unit bid price for such flaggers and traffic control devices used as described in this paragraph, subject to the approval of the Engineer. The project limits are defined as the construction work zone as shown on the approved traffic control plan for the specific section of highway under construction.

701-5.01 Temporary Concrete Barrier (Installation and Removal): of the Standard Specifications is revised to read:

Temporary concrete barrier, measured as provided above, will be paid for at the contract unit price, which price shall be full compensation for the work, complete in place, as specified herein and as shown on the plans, including furnishing, placing, dismantling, and removal. The price bid shall also include any required connection devices, barrier markers, and glare screen.

Fifty percent of the contract unit price for temporary concrete barrier will be paid upon satisfactory installation.

Should it be necessary to dismantle, pick up and relocate a portion of the barrier installation during construction, whether laterally or vertically, that portion of the removed and relocated barrier will be considered a new installation and paid for at 100 percent of the contract unit price.

Fifty percent of the contract unit price will be paid upon final removal.

No payment will be made for portions of the barrier which the contractor can adjust or realign without dismantling and picking up, such cost being considered as included in the bid price for Temporary Concrete Barrier "Installation and Removal." The Engineer will be

the sole judge as to whether devices are to be dismantled, picked up and reinstalled, or are to be adjusted or realigned.

701-5.02 Temporary Impact Attenuators (Installation and Removal): of the Standard Specifications is revised to read:

Temporary Impact Attenuation Devices shall include Sand Barrels and Energy Absorbing Terminals. Temporary Impact Attenuation Devices, measured as provided above, will be paid for at the contract unit price, which price shall be full compensation for the work, complete in place, as specified herein and as shown on the plans, including furnishing the devices with replacement parts, installing, removing and stockpiling the devices.

Fifty percent of the contract unit price for temporary impact attenuators will be paid upon satisfactory installation.

Should it be necessary to dismantle, pick up and reinstall attenuation devices during construction, the work of removing and reinstalling the devices will be considered a new installation and paid for at 100 percent of the contract unit bid price.

Fifty percent of the contract unit price will be paid upon final removal.

The Engineer will be the sole judge as to whether devices are to be dismantled, picked up and reinstalled or are to be adjusted or realigned. No additional payment will be made for devices which are adjusted or realigned, the cost being considered as included in the contract unit price paid for Temporary Impact Attenuator "Installation and Removal."

Measurement and payment for furnishing materials, equipment and labor and repairing attenuation devices that are damaged by the traveling public will be made in accordance with the requirements of Subsection 109.04 of the specifications.

No measurement or direct payment will be made for furnishing replacement parts and repairing devices damaged by other than the traveling public.

701-6.05 Truck-Mounted Attenuators: of the Standard Specifications is revised to read:

The accepted quantities of truck-mounted attenuators or trailer-mounted attenuators, measured as provided above, will be paid for at the unit bid price for truck-mounted attenuators per day of work site protection, which rate shall be full compensation for the work, complete, including, but not limited to, furnishing all materials; equipment; attached arrow panel or changeable message board; and labor (including the operator); and maintaining and repairing the truck and truck-mounted attenuator, or trailer-mounted attenuator and host vehicle, as specified herein and on the project plans. No adjustment to the unit bid price for truck-mounted attenuators will be made when trailer-mounted attenuators are provided, such price being considered as full compensation for the work, as specified herein, regardless of which type of attenuator is used to protect the work site. It shall be the contractor's responsibility to replace any damaged or destroyed parts of the truck-mounted attenuator or trailer-mounted attenuator and host vehicle at no additional cost to the Department.

701-6.06 Flashing-Arrow Panels, and Changeable Message Boards: the second paragraph of the Standard Specifications is revised to read:

The accepted quantities of changeable message boards, measured as provided above, will be paid for at the unit bid price per day, which price shall be full compensation for the work, complete, including incidental grading; furnishing, operating, maintaining, and relocating the boards on the work site; and providing all necessary labor. Signs, sign stands, Type II barricades, or vertical panels and lights that are used to delineate changeable message boards shall be paid for at the respective unit bid prices.

701-6.07 Pilot Services, and Flagging Services: the last paragraph of the Standard Specifications is revised to read:

The accepted quantities of flagging services provided by the DPS officers, measured as provided above, will be paid for at the predetermined hourly rate of \$65.26, as shown in the bidding schedule. Of this amount, \$44.00 per hour shall be remitted to the DPS officer, and \$12.75 per hour shall be remitted to DPS. The remaining \$8.51 per hour represents profit and overhead for both the prime contractor and subcontractor. Such price shall be considered full compensation for the work. No additional payment will be made for costs in excess of the predetermined rate, for overtime hours, and for travel time to and from the project, such costs being considered as included in contract items.

(708PPM, 06/15/09)

SECTION 708 - PERMANENT PAVEMENT MARKINGS:

708-2.02(B) Physical Requirements: of the Standard Specifications is modified to add:

(6) Heavy Metal Concentration:

Heavy metal concentration in glass beads shall be as specified in the following table, when tested by an independent laboratory, approved by the Engineer, using EPA Method 3052 and EPA Method 6010B. A Certificate of Analysis conforming to Subsection 106.05 shall be furnished to the Engineer prior to use.

Heavy Metal	Concentration
Arsenic	< 75 ppm
Antimony	< 75 ppm
Lead	< 100 ppm

708-3.02 **Application:** the last paragraph of the Standard Specifications is revised to read:

Tolerances for Placing Paint, Beads, and Primer:

The length of painted segment and gap shall not vary more than six inches in a 40-foot cycle.

The finished line shall be smooth, aesthetically acceptable and free from undue waviness.

Painted lines shall be four, eight, or 12 inches wide as shown on the plans with a tolerance of $\pm 1/8$ inch and shall be placed at a minimum rate of 16 gallons per mile for a solid four-inch line and four gallons per mile for a broken four-inch line, based on a 10-foot stripe and a 30-foot gap (40-foot cycle aggregate).

Glass reflectorizing beads shall be applied on the wet paint at a minimum rate of eight pounds per gallon of paint.

Wet thickness shall not be less than 15 mils, unless otherwise shown on the plans.

(709DCPM, 8/12/14)

SECTION 709 - DUAL COMPONENT PAVEMENT MARKINGS:

709-2.02(J) **Retroreflectance:** the first paragraph of the Standard Specifications is revised to read:

White and yellow dual component marking materials shall have the following minimum retroreflectance values at 86.5 degrees illumination angle and 1.5 degrees observation angle as measured by the Department, using an LTL-X Delta Retrometer or similar device, within 30 days after application to the roadway surface. The readings shall be taken from sample plates of markings applied in the field on the project to the specified thickness and bead application rate. The contractor and Engineer shall coordinate on procedures for sampling and handling of samples.

709-2.03 **Glass Beads:** the second paragraph of the Standard Specifications is modified to add:

Heavy metal concentration in glass beads shall conform to the requirements of Subsection 708-2.02(B)(6) of the specifications.

ITEM 8050003 - SEEDING (CLASS II):

The work under this item shall consist of furnishing all materials, preparing the soil, applying Class II seed, and establishing the seeded areas.

Areas to be seeded are those disturbed or unvegetated areas listed herein, shown on the plans, called for in the contractor's erosion control plan, or designated by the Engineer. Seeding is required to stabilize the unpaved disturbed dry area within the Waters of the U.S. Seeding area below the Ordinary High Water Mark (OHWM) shall exclude any definable low flow channels.

Seeding may be included as part of a landscape project as specified in Section 807, or used for erosion control as part of a Storm Water Pollution Prevention Plan (SWPPP) as specified in Subsection 104.09 of the specifications, or both.

In either case, seeding shall be accomplished in two (2) stages. The first stage shall consist of tillage; furnishing and applying compost, chemical fertilizer, and sulfur; furnishing and planting the contract-specified seed mix; and furnishing, applying and affixing final mulch cover. The second stage, beginning after the first stage has been accepted by the Engineer, shall be a 45 calendar-day period during which time the contractor shall be responsible for maintaining and stabilizing the seeded and mulched areas, and restoring damaged or eroded areas.

Seeding used as part of a SWPPP shall be completed, including the 45 calendar-day maintenance period, before the end of the contract time, or sooner as required in the SWPPP. Seeding used as part of a landscape project shall be completed, including the 45 calendar-day maintenance period, before the end of the Construction Phase. When seeding is part of a landscape project, the maintenance activities described herein shall be in addition to the work specified in Section 807 for landscape establishment. No time extension will be granted for seeding not completed as specified herein, including the 45 calendar-day maintenance period, before the end of the contract time or Construction Phase as applicable.

2.0 Materials:

2.01 General:

Appropriate documentation, as specified below, shall be submitted to the Engineer a minimum of 30 calendar days before the start of a scheduled seeding activity. No materials shall be delivered to the site until the documentation has been approved by the Engineer.

Unless otherwise specified, Certificates of Compliance conforming to the requirements of Subsection 106.05 of the specifications shall be provided for all materials.

The contractor shall also provide test from accredited laboratories for all materials, as specified herein. Should the contractor perform its own testing, such test results shall also be provided to the Engineer.

2.02 Seed:

(A) General Requirements:

The species, variety, and strain of seed (designated elsewhere herein as contract-specified seed) shall be as shown on the plans or as specified herein. The contract-specified seed shall be obtained from seed suppliers through harvesting of wildland collections, or field-grown seeds grown prior to or during the contract period.

A Certificate of Analysis for each seed species shall be furnished to the Engineer at least four (4) weeks prior to seeding construction. No seed shall be furnished to, or delivered to the project until approved by the Engineer and Roadside Development. The Certificates of Analysis shall contain the following information for each seed sample: the test results of the Fifty States Noxious Weed list, all seeds including weed seeds listed, purity and germination, tetrazolium test results, when used and any pathology found to be present. The sample testing, when available for the native plant species, shall use the rules for testing seeds published by the "Association of Official Seed Analysts" or the "Society of Commercial Seed Technologists".

If the samples indicate species listed as noxious, restricted or invasive, the lot will be rejected or evaluated for use on the project. The list of noxious, restricted or invasive species is located at Roadside Development and linked to the following website:

<http://www.azdot.gov/business/engineering-and-construction/roadway-engineering/roadside-development>

Within 30 calendar days after the award of contract, the contractor shall submit the name of the seeding subcontractor to be used, along with written confirmation from seed suppliers and collectors, on their letterhead, that the source(s) for the contract-specified seed has been secured. If any of the contract-specified seed is expected to be unavailable prior to the time specified for seeding, in accordance with Subsection 2.02(B) below, the contractor shall notify the Engineer at this same time.

The seed shall be delivered to the project site unmixed in standard, sealed, undamaged containers for each seed species. Each container shall be labeled in accordance with the appropriate provisions of the Arizona Revised Statutes and the U.S. Department of Agriculture rules and regulations under the Federal Seed Act. Labels shall indicate the variety or strain of seed, the percentage of germination, purity and weed content, the date of analysis which shall not be more than twelve (12) months prior to the delivery date, and testing information. A Certificate of Analysis from an accredited seed-testing laboratory, and conforming to Subsection 106.05 of the specifications, shall accompany each container of seed.

Unless otherwise approved by the Engineer, weed content of the contract-specified seed mix shall not exceed 0.5 percent.

The contractor shall provide all seed tag labels to the Engineer. No payment will be made for seed until tag labels and Certificates of Analysis from all seed to be used on the project have been submitted as specified.

Both the contractor and the seed supplier shall store seed under dry conditions, at temperatures of between 35 °F and 120 °F, and out of direct sunlight. Prior to using the seed, the contractor, as well as seed supplier, shall both provide a certification letter to the Engineer verifying that the seed was stored as specified herein.

Legume seed shall be inoculated with appropriate bacteria cultures approved by the Engineer, in accordance with the culture manufacturer's instructions.

Tetrazolium staining shall be acceptable to test for germination and hard seed. Cut or fill testing will not be allowed. As directed by the Engineer, seeds with an expiration date past the acceptable test date or not meeting the specified conditions for storage shall be retested by the contractor. The Engineer may perform random sampling of seeds throughout the project. Mixing of the specified seed at the project site shall be under the supervision of the Engineer.

Application rates of seed as specified are for Pure Live Seed (PLS). PLS is determined by multiplying the sum of the percent germination of seeds, including hard or dormant seeds, by the percent purity.

Seed mix species and the PLS rates are shown in Table 1 below:

TABLE 1			
SEED MIX - for All Unpaved Disturbed Areas, Unvegetated Areas, and/or Designated Areas			
Botanical Name	Common Name	PLS Rate (Pounds Per Acre)	Per Pound Value for Substitution (see text)
Artemisia frigida	Fringed Sagebrush	1	\$50
Bouteloua curtipendula cv. Vaughn *	Sideoats Grama	2	\$13
Bouteloua gracilis cv. Bad River	Blue Grama	1	\$15
Cleome serrulata	Rocky Mountain Beeplant	2.5	\$23
Ephedra viridis	Green Mormon Tea	1	\$20
Festuca arizonica	Arizona Fescue	1	\$15
Koeleria macrantha	Prairie Junegrass	0.75	\$35
Linum lewisii	Blue Flax	3	\$10
Muhlenbergia montana	Mountain Muhly	0.1	250
Oryzopsis hymenoides	Indian Ricegrass	3	\$10
Pascopyrum smithii	Western Wheatgrass	3	\$15
Penstemon eatonii	Firecracker Penstemon	0.75	\$70

Ratibida columnaris	Yellow Prairie Coneflower	0.5	\$20
Ratibida columnaris forma pulcherrima	Red Mexican Hat	0.5	\$20
Schizachyrium scoparium	Little Bluestem	1	\$15
Sitanion hystrix (syn. Elymus elymoides)	Squirrel-tail Grass	2	\$45
Sporobolus cryptandrus	Sand Dropseed	0.5	\$10
Per Acre Subtotal Value			\$522.25

* Niner may be furnished if Vaughn is determined by ADOT Roadside Development as unavailable from seed sources.

(B) Seed Substitution:

No substitution of the contract-specified seed will be allowed unless evidence is submitted documenting that the contractor has made a diligent effort to obtain the contract-specified seed from either seed suppliers or collectors, and that the contract-specified seed will not become available prior to the time specified for seeding in the contractor's approved construction schedule.

The contractor may also request a substitution if the lowest price available for the contract-specified seed is greater than two (2.0) times the value shown in Table 1. The contractor shall provide documentation from a minimum of three (3) seed suppliers or collectors supporting such request. Documentation shall include copies of the invoices from each supplier or collector. Only those invoices obtained within three (3) weeks of the time specified for seeding in the contractor's approved construction schedule will be acceptable.

Should a substitution of the contract-specified seed be requested for one of the two (2) reasons specified above, and the contractor's documentation is approved by the Engineer, the Department's Roadside Development Section will specify an alternate seed within five (5) working days of the Engineer's approval of the contractor's documentation. The alternate seed will only be allowed when there is an insufficient quantity of the contract-specified seed, as determined in the previous two (2) paragraphs, for the areas to be seeded as called for herein or as required for erosion control. The contractor shall obtain and apply the alternate seed, as required, to all such remaining areas. Unless otherwise approved by the Engineer, the approved alternate seed will only be allowed until such time that contract-specified seed meeting the availability and price requirements specified herein can be provided.

For each pound of contract-specified seed not provided by the contractor, the value indicated in Table 1 will be deducted from the contract amount. The price per pound for the alternate seed selected by the Department, as specified above, will be determined in accordance with Subsection 109.04(D)(2) of the specifications. No additional adjustments will be made for substituting the alternate seed, the costs being considered as included in the contract item for seeding.

No payment will be made for areas seeded with unapproved seed.

2.03 Tacking Agent:

Tacking agent shall be a naturally occurring organic compound, and shall be non-toxic. The tacking agent shall be a product typically used for binding soil and mulch in seeding or erosion control operations. Approved types shall consist of mucilage or gum by dry weight as active ingredient obtained from guar or plantago. The tacking agent shall be labeled indicating the type and mucilage purity.

The contractor shall have the tacking agent swell volume tested by an approved testing laboratory using the USP method. The standard swell volume shall be considered as 30 milliliters per gram. Material shall have a swell volume of at least 24 milliliters per gram. Certified laboratory test results for homogenous consistency shall be furnished to the Engineer for each shipment of tacking agent to be used on project areas. Tacking agent rates shall be adjusted to compensate for swell volume variation. Material tested with lesser swell volume shall have the tacking agent rate increased by the same percentage of decrease in swell volume from the standard 30 milliliters per gram. Material tested with greater volume may reduce tacking agent rates by the same percentage of increase in swell volume from the standard 30 milliliters per gram. Tacking agent shall be pure material without starches, bentonite, or other compounds that would alter the swell volume test results of mucilage, or the effectiveness of the tacking.

2.04 Thermally-Refined Wood Fiber:

Wood cellulose fiber mulch shall conform to the requirements of Subsection 805-2.03 of the Standard Specifications, except as modified herein, and shall be from thermo-mechanically processed wood, processed to contain no growth germination inhibiting factors. The mulch shall be from virgin wood manufactured and processed so the fibers will remain in uniform suspension in water under agitation to form homogenous slurry. Paper products will not be considered as virgin wood. The thermally-refined wood fiber mulch shall have the properties shown in Table 2 below:

TABLE 2	
Virgin Wood Cellulose Fiber	90% min.
Recycled Cellulose Fiber	10% max.
Ash Content	0.8% +/-0.3%
pH	4.5 +/-1.0
Water Holding Capacity	10:1 (water:fiber) Min.

2.05 Straw Mulch:

(A) General:

Straw mulch shall conform to the requirements of Subsection 805-2.03 of the Standard Specifications, except as modified herein, and shall be from the current season's crop. A letter of certification from the supplier shall be required stating that the straw was baled less than twelve (12) months from the delivery date.

All straw, including hydraulically applied straw, shall be free from noxious weeds in compliance with the standards and procedures of the North American Weed Management Association (NAWMA) or the Arizona Crop Improvement Association (ACIA). The contractor shall provide documentation, including a transit certificate, and appropriate labels and/or marking twine, from the ACIA or NAWMA that straw materials to be used for mulch are free of noxious weeds. The straw shall be accompanied by the certification, labels and/or marking twine at the time of delivery to the project site. Straw delivered to the project without such information will be rejected, and promptly removed from the project.

Rye straw and oat straw will not be acceptable.

(B) Straw Mulch for Hydraulic Application:

Hydraulically applied straw mulch shall be wheat or rice straw processed to various particle sizes, mixed with water and tacking material, and applied as a non-clogging slurry using a hydroseeder. A minimum of 70 percent of the wheat or rice straw in the mix shall be not less than 1/2 inch \pm 1/4 inch in length. Straw particles may be longer provided that the particles can be used with the selected hydroseeder without clogging. Hydraulically applied straw mulch, as furnished by the manufacturer, may contain up to ten (10) percent paper or cotton materials in dry weight. Hydraulically applied straw mulch shall also contain 20 percent of wood fiber in dry weight. The combined dry weight percentage of paper, cotton, and wood fiber materials together shall be not less than 15 percent nor more than 30 percent of the hydraulically applied straw mulch.

Hydraulically applied straw mulch material from the following sources shall be acceptable:

Hydra Matrick
North American Green
5401 St Wendel-Cynthia Road
Poseyville, IN 47633
Phone: 1-800-772-4297

Hydro Straw
Hydrostraw LLC
3676 W 9000 N Road
Manteno, IL 60950
Phone: 1-800-545-1755

Shot Straw
Rio Ranches LLC
PO Box 156
Palo Verde, AZ 85343
Phone: 602-680-8320

DuraBlend 361
PrimeOne Products LLC
PO Box 30816
Spokane, WA 99223
Phone: 509-981-8555

2.06 Slow-release Chemical Fertilizer and Sulfur:

Chemical fertilizer shall conform to the requirements of Subsection 805-2.06 of the specifications and shall be the kind hereafter specified. Fertilizer shall be composed of a mixture of one part sulfur-coated urea 25-4-8, one part monammonium phosphate 11-52-0, and one part methylene urea 38-0-0. The sulfur-coated urea, a blended fertilizer 25-4-8, shall have approximately 80 percent of the nitrogen defined as slow release, and contain five (5) percent Iron, ten (10) percent sulfur and trace amounts of zinc and manganese. The result shall be a 24-18-2 chemical blended fertilizer, as specified herein.

In addition to the fertilizer mixture, agricultural sulfur compounds, comprised of between 80 percent and 96 percent sulfur, shall be applied at the rate specified in Section 3.02. Chemical fertilizer and sulfur shall not be applied for the seeding area below the OHWM.

2.07 Water:

Water shall be free of oil, acid, salts or other substances which are harmful to plants. The source shall be as approved by the Engineer prior to use.

2.08 Compost:

Compost in bulk or furnished in containers or bags, shall consist of composted organic vegetative materials and may contain worm castings. No animal manures or city biosolids shall be used in the composting or added to the compost. Prior to being furnished on the project, compost samples shall be tested for the specified microbiological and nutrient conditions, including maturity and stability, by a testing laboratory approved for testing of organic materials. During pre-activity seeding construction meeting, compost test written results submitted to the Engineer for approval shall be within nine (9) months from the date of the official lab test.

Compost material shall be dark brown in color with the parent material composted and no longer visible. The structure shall be a mixture of fine and medium size particles and humus crumbs. The maximum particle size shall be within the capacity of the contractor's equipment for application to the constructed slopes. The odor shall be that of rich humus with no ammonia or anaerobic odors.

Bulk Compost shall also meet the requirements of Table 3:

TABLE 3	
Cation Exchange Capacity (CEC)	Greater than 45 meq/100 g
Carbon : Nitrogen Ratio (C : N)	Less than 20 : 1
PH (of extract)	6.5 – 8.5
Organic Matter Content	Greater than 30%
Total Nitrogen (not added)	Greater than 1%
Maturity Index	Greater than 50% on Maturity Index at a 10 : 1 ratio
Stability Indicator, CO ₂ Evolution: Biologically Available C (BAC)	Less than 4mg CO ₂ -C/g OM/day is desirable. From 4 through 8mg CO ₂ -C/g OM/day is acceptable. Greater than 8mg CO ₂ -C/g OM/day is <u>not</u> acceptable.
The CEC lab testing method shall refer to EPA9081 at the web link: http://epa.gov/osw/hazard/testmethods/sw846/pdfs/9081.pdf	

Bulk compost is preferred and shall be applied to areas designated for seeding at the specified rate of **15 cubic yards per acre** prior to final tillage for incorporation into the soil seedbed. Unless otherwise approved by the Engineer, bulk compost shall be engaged to

all areas where equipment can be operated for final tillage in order to incorporate into the soil seedbed.

In areas where bulk compost cannot be applied by broadcast methods, compost shall be applied hydraulically as per the approval of the Engineer. Hydraulically applied compost shall be applied at the rate of 1,500 Pounds per acre to mini-benched slopes or on other approved areas for incorporation into the soil seedbed. Hydraulically applied compost may be combined with soil amendments and fertilizer in the same slurry under the approval of the Engineer. Seed shall be employed separately after the implementation of hydraulically applied compost and prior to the final mulch cover.

Hydraulically applied compost shall meet the requirements of Table 4 below:

TABLE 4	
Cation Exchange Capacity (CEC)	Greater than 55 meq/100 g *
Carbon : Nitrogen Ratio (C : N)	Less than 20 : 1
PH (of extract)	6.5 – 8.5
Organic Matter Content	Greater than 35%
Total Nitrogen (not added)	Greater than 1%
Micronutrients (added)	S, Ca, Mg, Na, Fe, Al, Mn, Cu, Zn, B
Stability Indicator, CO ₂ Evolution: Biologically Available C (BAC)	Less than 4mg CO ₂ -C/g OM/day is desirable. From 4 through 8mg CO ₂ -C/g OM/day is acceptable. Greater than 8mg CO ₂ -C/g OM/day is <u>not</u> acceptable.
The CEC lab testing method shall refer to EPA9081 at the web link: http://epa.gov/osw/hazard/testmethods/sw846/pdfs/9081.pdf	

* When CEC is from 50 meq/100 g through 55 meq/100 g, in order to be approved, the contractor may add 100 pounds additional Hydraulically Applied Compost per acre to compensate for the lower-than-standard CEC value.

Compost shall not be applied for the seeding area below the OHWM.

2.09 Soil Conditioners:

Soil conditioners, when required, will be as shown in the Special Provisions.

3.0 Construction Requirements:

3.01 General:

(A) Seeding Operations:

At least two (2) weeks prior to beginning seeding, the contractor shall complete and submit a batch mix and seed application form to the Engineer for approval. The batch mix form will be supplied by the Engineer.

After acceptance of the form, the Engineer and contractor shall determine a one-acre sample area to be seeded and mulched prior to applying seed to the remainder of the project. Both regular straw mulch and hydraulically applied straw mulch shall be applied to the sample area. Both straw mulches shall be representative of the materials proposed for use on the project. If the seeding and mulching procedures are acceptable, the contractor shall begin seeding operations as specified herein.

The contractor shall notify the Engineer at least two (2) days prior to commencing any phase of seeding operations for the remainder of the project.

The equipment and methods used to distribute seeding materials shall provide an even and uniform application of seed, mulch, and other materials at the specified rates.

Unless specified otherwise in the Special Provisions, seeding operations shall not be performed on undisturbed soil outside the clearing and grubbing limits of the project or on steep rock cuts.

The contractor shall coordinate the seeding operations with the grading operations to determine mobilization frequency as embankment and cut slopes are finished throughout the duration of the project. Seeding shall be done during suitable weather and soil conditions for tillage and placement of materials. Seeding operations shall not be performed when wind exceeds ten (10) miles per hour or, if in the opinion of the Engineer, conditions would prevent uniform application of materials or would carry seeding materials into areas not designated for seeding.

The contractor shall not expose an area greater than 750,000 square feet at any one location within the project limits until the seeding proposed for that portion of the project has been installed and accepted by the Engineer. Seeding shall be accomplished within 14 days after slopes and disturbed areas have been completed. Seeding operations shall comply with Subsection 104.09 and the applicable portions of Section 203 of the specifications, and as directed by the Engineer.

Frequent mobilizations may be required to accomplish seeding as specified herein. The Department will consider the cost of such multiple mobilizations to be included in the price bid for the seeding. No adjustments will be made to the contract for the number of seeding mobilization activities. Should the contractor fail to provide seeding for a sub-area as specified herein, the Engineer will immediately notify the contractor of such non-compliance. Should the contractor fail to immediately remedy the unstabilized area,

the Engineer may suspend work until such seeding stabilization has been completed, or proceed to provide the necessary seeding stabilization. The entire cost of such work will be deducted from the monies due or to become due to the contractor. In addition, no adjustment to the contract time will be made for suspensions resulting from the contractor's failure to provide seeding for a sub-area within the time periods specified herein.

3.02 Tillage:

Where equipment can operate, the area to be seeded shall be prepared with a ripper bar, chisel plow, or with other devices to provide thorough soil cultivation to the depth specified below.

Where equipment is not suitable for operation, hand tillage and/or other manual methods shall be utilized as approved by the Engineer. Tillage depth shall follow the requirements specified herein to maximum extent practicable (MEP).

For areas too steep to be prepared for seeding after the slope has been completed, as determined by the Engineer, tillage shall be accomplished with appropriate equipment as the slope is being constructed. On slope areas, all tillage shall be horizontal and parallel to the contours of the areas involved in order to create a roughened surface condition. All seeded areas suitable for tillage shall be pre-tilled to promote on-site stormwater infiltration and alleviate stormwater surface runoffs, as a part of stormwater Volume Reduction Approaches (VRAs). All areas which are eroded shall be restored to the specified condition, grade, and slope as directed prior to seeding.

Cut slopes shall be prepared with ridges and deep tillage, or shall be mini-benched. On fill slopes, the operations shall be conducted in such a manner as to form minor ridges thereon to assist in retarding erosion and favor germination of the seed.

Except as specified herein, slopes shall be constructed in accordance with Subsection 203-3.03(B) of the specifications. Cut slopes flatter than 3:1 (horizontal to vertical) shall be tilled a minimum of 12 inches in depth, and fill slopes flatter than 3:1 shall be tilled to a six-inch minimum depth. All slopes steeper than 3:1, and areas which could potentially be affected by underground utilities, shall be tilled to a minimum six (6) inches in depth, and left in a roughened surface condition as they are constructed.

Tillage shall be a minimum of two (2) inches in depth for the first ten (10) feet from the toe of AC wedge including shoulder build-up areas (edge of pavement build-up areas) or from the outside edge of curb and gutter.

Care shall be taken during the seeding operations to prevent damage to existing trees and shrubs in the seeding area in accordance with the requirements of Subsection 107.11 of the specifications.

Tillage may require passing the equipment over the area several times to provide thorough soil cultivation. Furrows from tillage shall be no more than 12 inches apart. No work shall be done when the moisture content of the soil is unfavorable to tillage.

All competitive vegetation shall be uprooted prior to seeding and the soil shall be left in a friable roughened surface condition free of clods or large stones over four (4) inches in any dimension, and other foreign material that would interfere with the seeding operation. Exposed stones larger than four (4) inches shall be removed and disposed of in an approved manner prior to grading and seeding.

Regardless of the method of seeding application, all areas prepared with tilling shall have chemical fertilizer and soil amendments (sulfur and compost) uniformly applied and incorporated into the soil prior to final tillage and seeding.

Chemical fertilizer and sulfur shall be applied at the rate of 200 pounds each per acre. Compost shall be applied at the rate of **15 cubic yards per acre**.

Unless otherwise approved by the Engineer, bulk compost shall be applied using broadcast methods to all areas where equipment can be operated. For areas where bulk compost cannot be applied by broadcast methods, as determined by the Engineer, compost shall be applied hydraulically at the rate of 1,500 pounds per acre. Hydraulically applied compost shall not be combined with seed and/or final mulch cover in the same slurry. However, sulfur and fertilizer may be utilized together with hydraulically applied compost in the same slurry with the approval of the Engineer.

Slopes 3:1 and flatter shall have fertilizer, sulfur, and compost tilled into a minimum of the top four (4) inches of the surface. Slopes steeper than 3:1 shall have fertilizer, sulfur, and compost uniformly broadcast for incorporation into the soil as directed by the Engineer. Unless otherwise operated together with hydraulically applied compost for the approved locations, fertilizer and sulfur shall not be applied hydraulically to areas for seeding.

For mini-benched slopes, fertilizer, compost, and sulfur shall be applied at the specified rates with no tillage or incorporation.

3.03 Seeding:

(A) General:

Drill seeding with straw mulch shall be considered as the preferred method of seed application when practicable. Unless otherwise approved by the Engineer, drill seeding shall be used for all areas with slopes of 3:1 or less.

Hydroseeding shall be the alternative method for seed distribution for slopes in excess of 3:1, and where drill seeding is not practicable or suitable for soil conditions and seed types, as determined by the Engineer.

Seeds not suitable for drill seeding and hydroseeding methods shall be broadcast manually. Areas to be seeded manually shall be completed after the final soil tillage and prior to any drill or hydroseeding.

Straw mulch or hydraulically applied straw mulch shall be applied on all seeded areas, as specified in Sections 3.04 or 3.05, within 24 hours of seed application. Seeding application

shall be accomplished prior to application of straw mulch or hydraulically applied straw mulch. Combining the seed application process with the mulching process will not be acceptable.

Unless otherwise specified in the Special Provisions, Class II seeding areas shall not be watered after planting.

(B) Drill Method:

After the tillage and incorporation of fertilizer, sulfur, and compost is completed and accepted by the Engineer, seed shall be planted with a drill seeder capable of accurately metering the specific seed mix. Use of a drill seeder shall not damage the prepared seedbed, and shall provide a soil cover over the planted seed.

Seed shall be planted approximately 1/4 inch deep, with a maximum depth of 1/2 inch. The distance between the furrows produced using the drill process shall not be more than eight (8) inches. If the furrow openers on the drill exceed eight (8) inches, the area shall be drilled twice. Seeding shall be done with grass seeding equipment with double disc openers, depth bands, packer wheels or drag chains, rate control attachments, seed boxes with agitators and separate boxes for small seed. Seed of different sizes shall be sowed from at least two (2) separate boxes adjusted or set to provide the planting rate as specified.

(C) Hydroseed Method:

Areas and seed types not suitable for drill-seeding, as determined by the Engineer, shall be hydroseeded. The contract-specified seed shall be applied in a slurry containing 200 pounds of thermally-refined wood fiber and a minimum of 40 pounds tacking agent per acre. Seed shall not be in the slurry for more than 30 minutes. Hydroseeded areas shall also be mulched, as specified in Sections 3.04 or 3.05, within 24 hours of application of the seed.

(D) Manual Application:

Manually applied seeds shall be broadcast evenly to produce uniform distribution over the seeded areas.

3.04 Applying Straw Mulch:

(A) General:

Within 24 hours after each area is planted, straw mulch shall be uniformly applied at the minimum rate of 2 1/2 tons per acre for areas to be crimped and tacked, and minimum two (2) tons per acre for tacked-only areas. Except for edge of pavement build-up areas, and unless otherwise specified by the Engineer, straw mulch shall be applied to all seeded areas. Areas to receive hydraulically applied straw mulch, if directed by the Engineer, shall be mulched in accordance with Section 3.05.

During seeding and mulching operations, care shall be exercised to prevent drift and displacement of materials. Mulch material which is placed upon trees and shrubs, roadways, structures, and upon any areas where mulching is not specified, or which is placed in excessive depths on mulching areas, shall be removed as directed. Mulch materials which are deposited in a matted condition shall be loosened and uniformly spread to the specified depth over the mulching areas. Any unevenness in materials shall be immediately corrected by the contractor. In addition, the contractor shall minimize production of dust or other airborne particulate matter during application of straw mulch, either by moistening the straw, modifying equipment with misters, or through other means approved by the Engineer.

Except as specified in the next paragraph, straw mulch applied to seeded areas shall be immediately affixed by crimping and tacking after application. No mulch shall be applied to seeding areas which cannot be crimped and/or tacked by the end of each day. Any drifting or displacement of mulch before crimping and/or tacking shall be corrected by the contractor at no additional cost to the Department.

Crimping shall not be required for areas that are steeper than 3:1. Crimping may also be waived, when specifically directed by the Engineer, for drill seeded or hydroseeded areas with rocky conditions or other areas deemed unsuitable by the Engineer for crimping. Straw mulch applied to such areas shall only be tacked, as specified in Subsection 3.04(C) below.

Prior to the application of a tacking agent, protective covering shall be placed on all structures and objects where stains would be objectionable. All necessary precautions shall be taken to protect the traveling public and vehicles from damage due to drifting spray.

(B) Anchorage by Crimping:

Except as specified above in 3.04(A), crimping shall be required for all straw mulched areas. Straw mulch shall be anchored into the soil with a heavy disc. Discs shall be flat and serrated, with at least 1/4 inch thickness having dull edges, and spaced no more than nine (9) inches apart. Straw mulch shall be anchored to a depth of at least two (2) inches and shall not be covered with an excessive amount of soil. Anchoring operations shall be across the slopes where practical, with no more than two (2) passes of the anchoring equipment. Immediately following the crimping operation, the crimped area shall be tacked as specified in Subsection 3.04(C) below.

(C) Anchorage by Tacking:

Straw mulch shall be anchored by tacking, using a slurry consisting of a minimum of 150 pounds of tacking agent, 500 pounds of thermally refined wood fiber mulch, and 300 gallons of water per acre. The contractor may increase the quantities of components to ensure the stability of the straw mulch to provide erosion control during the 45 calendar-day maintenance period at no additional cost to the Department.

3.05 Hydraulically Applied Straw Mulch with Tacking Agent:

Areas seeded but not practical for straw mulch, as determined by the Engineer, shall have hydraulically applied straw mulch with tacking agent applied at the variable rates shown in the Table 5 below.

TABLE 5			
Slope (H:V)	Hydraulically Applied Straw Mulch (pounds per acre - dry weight)	Tacking Agent (pounds pure mucilage per acre - dry weight)	Thermally-Refined Wood Fiber (pounds per acre - dry weight)
Flat to 6:1	2,000	150	400
From greater than 6:1 to 3:1	2,500	150	500
Greater than 3:1	3,000	200	600
Erosive Soil Slopes or Highly Erosive Areas*	3,500	250	700
* As determined by Engineer			

The contractor shall submit a batch (tank) mix quantity schedule for mulch application to the Engineer for approval prior to mixing hydraulically applied straw mulch, thermally-refined wood fiber, and tacking agent in a slurry. Batch mixing and coverage will be monitored throughout the seeding operations. The contractor shall coordinate the mixing and application operations with the Engineer in advance of all mixing. Fertilizer or seed shall not be mixed into any slurry for temporary erosion control mulch application.

3.06 Shoulder Build-up Areas - Edge of Pavement Build-up Areas:

Seeding shall be applied to all new earthen and milled asphaltic concrete edge of pavement build-up areas. Edge of pavement build-up areas shall be tilled two (2) inches deep from the toe of AC wedge to the toe of the edge of pavement build-up area prior to seeding.

After the two-inch tillage is complete, compost, fertilizer, seeding, and mulching shall be done in three (3) separate steps. For the first step, fertilizer and compost shall be broadcast evenly over both types of edge of pavement build-up areas. For the next step, seed shall be applied by hydroseeding for both types of areas. For the third step, seeded edge of pavement build-ups comprised of milled asphaltic concrete shall have hydraulically applied straw mulch and tacking agent applied, and earthen edge of pavement build-up areas shall have straw mulch or hydraulically applied straw mulch applied, with a tacking agent in either case. No crimping shall be required.

The application rate of hydraulically applied straw mulch and tacking agent shall be as specified in Table 5 above.

3.07 Seeding Acceptance:

After application the Engineer will inspect seeded areas or sub-areas for conformance to the contract requirements. The contractor shall correct, to the satisfaction of the Engineer, any areas not conforming to the specifications. The 45-day maintenance period will begin upon acceptance of the area by the Engineer.

The contractor shall maintain and stabilize each area or sub-area, including edge of pavement build-up areas, for a minimum period of 45 calendar days after application of the seeding and mulching materials, and acceptance by the Engineer. Any areas damaged from erosion, or that have less than 90 percent of applied mulch remaining, shall be re-seeded, re-mulched, and re-tacked at no additional cost to the Department.

Except for projects with Landscape Establishment, seeding shall be completed, including the 45 calendar-day maintenance period, before the end of the contract time, or sooner if required in the SWPPP or elsewhere in the contract documents. Seeding used as part of a landscape project shall be completed, including the 45 calendar-day maintenance period, before the end of the Construction Phase.

4.0 Method of Measurement:

Seeding (Class II) will be measured by the acre, to the nearest one acre of ground surface seeded. Measurements will be along the ground surface for the areas seeded and mulched, as approved by the Engineer.

5.0 Basis of Payment:

The accepted quantities for Seeding (Class II), measured as provided above, will be paid in two (2) phases corresponding to the application stage and the 45 calendar-day maintenance stage.

Upon completion of the application stage and acceptance by the Engineer, the contractor will be paid 70 percent of the contract bid price per acre for the completed work. Such price will be considered full compensation for furnishing and applying the contract-specified seed mix, fertilizers, soil amendments, tillage, mulch materials, and tacking agent, all required testing, and all equipment and labor required to complete the work as specified herein.

Upon completion of the 45 calendar-day maintenance stage, and acceptance by the Engineer, the contractor will be paid 30 percent of the contract bid price per acre for the completed work. Such price will be considered full compensation for seeding maintenance, including all equipment, labor, and materials required to correct deficiencies in seeded, mulched areas, as specified herein.

No measurement or payment will be made for the mobilizations required to apply and stabilize the seeding for each area or sub-area, as specified herein, the cost being considered as included in the contract price for Seeding (Class II).

An adjustment to the contract will be made if a contractor-requested seed substitution is approved as specified in Subsection 2.02(B) above.

(901MOBE, 09/18/12)

SECTION 901 MOBILIZATION:

901-5 Basis of Payment: of the Standard Specifications is revised to read:

Payment for mobilization, measured as provided above, will be made at the contract lump sum price, which shall be full compensation for supplying and furnishing all materials, facilities and services and performing all the work involved as specified herein.

Partial payments under this item will be made in accordance with the following provisions. Reference herein to the adjusted contract shall mean the original contract amount exclusive of mobilization:

The first payment of the lump sum price for mobilization will be paid after the Preconstruction Conference provided that all submissions required under Subsection 108.03 are submitted by the contractor at the Preconstruction Conference to the satisfaction of the Engineer. The amount paid for the first partial payment will be in accordance with Table 901-1.

The second payment of the lump sum price for mobilization will be made when the Engineer has determined that a significant amount of equipment has been mobilized to the project site which will be used to perform portions of the contract work. The amount paid for the second partial payment will be in accordance with Table 901-1.

The third payment of the lump sum price for mobilization will be made on the first estimate following completion of five percent of the adjusted contract. Such percentage determination will not include partial payments for material on hand. The amount paid for the third payment will be in accordance with Table 901-1.

The fourth payment of the lump sum price for mobilization will be made on the first estimate following completion of 10 percent of the adjusted contract. Such percentage determination will not include partial payments for material on hand. The amount paid for the fourth payment will be in accordance with Table 901-1.

The total sum of all payment shall not exceed the original contract lump sum price for mobilization, regardless of the fact that the contractor may have, for any reason, shut down its work on the project or moved its equipment away from the project and back again.

TABLE 901-1 AMOUNT ALLOWED FOR MOBILIZATION DURING THE LIFE OF THE CONTRACT		
Contract Amount: \$	% Of Contract	Basis Of Payment
0 - 5,000,000	12% *	25% of the lump sum price for mobilization or 3% of the original contract amount, whichever is less.
5,000,000 +	10% *	25% of the lump sum price for mobilization or 2.5% of the original contract amount, whichever is less.
* If the price bid for mobilization exceeds this percentage, any excess will be paid to the contractor upon completion of the contract.		

The adjustment provisions in Section 104 and the retention of funds provisions in Section 109 shall not apply to the item of mobilization.

When other contract items are adjusted as provided in Section 104, and if the costs applicable to such items of work include mobilization costs, such mobilization costs will be considered as recovered by the contractor in the lump sum price paid for mobilization, and will be excluded from consideration in determining compensation under Section 104.

When mobilization is not included as a contract item, full compensation for any necessary mobilization required will be considered as included in the prices paid for the various contract items involved and no additional compensation will be made.

(923CBOJT, 11/01/16)

ITEM 9230002 CONTRACTOR BASED ON-THE-JOB TRAINING:

1.0 Description:

1.01 Purpose:

The contractor shall provide on-the-job training (OJT) aimed at moving minorities, women, economically disadvantaged, and veteran trainees into journey-level positions in various types of construction trades or job classifications through a contractor-based OJT program. The contractor-based approach assigns contractors annual training goals for a specific number of trainees and hours. The contractor is provided the flexibility to meet the annual trainee and training hour goals on any transportation projects in the United States throughout the year, rather than on a project-by-project basis. Contractors may include ADOT and non-ADOT projects as long as more than 40 percent of the training hours are completed on ADOT projects.

Training of minorities and women toward journey-level status is a primary objective of this Training Special Provision. Accordingly, the contractor shall make every effort to enroll

minority, women, economically disadvantaged, and veteran trainees to the extent that such persons are available within a reasonable area of recruitment. The contractor will be responsible for demonstrating the steps that it has taken in pursuance thereof, prior to a determination as to whether the contractor is in compliance with this Training Special Provision. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training, whether a member of a minority group or not.

1.02 Program Summary:

The Department has established a Contractor Based On-The-Job Training Pilot Program for a two year period from July 1, 2015 to June 30, 2017. All contractors awarded an ADOT federally funded construction contract will automatically be placed in the Pilot Program beginning on July 1, 2015. Standard OJT requirements associated with individual projects will no longer be applied at the project level for new projects. OJT requirements will be applicable on an annual basis for each contractor performing work on ADOT projects. During the OJT Pilot Program each contractor meeting the threshold described in Subsection 1.04 of this Training Special Provision will be required to provide training for **one trainee** for a minimum of **1000 hours** per fiscal year. The 1000 hours may be completed by one or more trainees; if a trainee reaches program completion before completion of the 1000 hours then an additional enrolled trainee may be used to complete the remaining training hours. For example, if a trainee reaches program completion after 700 hours, the contractor is required to provide an additional 300 hours of training to an enrolled trainee in order to meet its annual OJT goal.

Contractors may also assign OJT Trainees to be trained by subcontractors on any project with ADOT approval. However, the contractor will only receive credit towards its annual goal for hours earned by its own OJT Trainees. The contractor's OJT Trainees must be employed by the contractor and be enrolled in an approved training program as described in Subsection 2.01 of this Training Special Provision.

Hours earned by a subcontractor's OJT Trainees on a project will be credited to that subcontractor's annual training goal and the contractor shall reimburse the subcontractor in accordance with Subsection 2.02 of this Training Special Provision.

No employee shall be employed as a trainee in any classification in which they have successfully completed a training course leading to journey-level status or in which they have been employed at journey-level status. The contractor shall satisfy this requirement by including appropriate questions in the employment application or by other suitable means. Regardless of the method used, the contractor's records shall document the findings in each case.

The trainees shall be distributed among the work classifications on the basis of the contractor's needs and the availability of journey-level status individuals in the various classifications. The ratio of apprentices and OJT Trainees to journey persons shall not be greater than permitted by the terms of the approved training program being utilized. When a specific ratio is not provided, the ratio of apprentices and OJT Trainees to journey persons expected to be on the contractor's work force during normal operations shall fall between 1:10 and 1:4, pursuant to 23 CFR 230.111(c)(10).

1.03 Definitions:

“OJT Trainee” herein refers to (a) a minority, female, veteran or economically disadvantaged individual enrolled in either a State of Arizona registered apprenticeship program or ADOT’s OJT program and (b) any other individual ADOT approves for enrollment in such an apprenticeship or OJT program and for credit toward the OJT Goals. “Program Completion” herein refers to the point in time when a trainee in the ADOT OJT Program has completed the required number of levels and hours of training within a calendar year for a designated craft classification or a registered Apprenticeship program, or has achieved journey-level status.

“Journey-Level Status” applies to a person who has completed a registered apprenticeship program or is an experienced worker, not a trainee, and is fully qualified and able to perform all of the duties of a specific trade without supervision.

“Economically Disadvantaged Persons” applies to a person who:

- Receives, or is a member of a family and/or household, which receives cash payments under a Federal, State, or local income-based public assistance program.
- Is a member of a family and/or household that receives (or has been determined within the 6-month period prior to registration for the program involved to be eligible to receive) Food Stamps/EBT card under the Food Stamp Act of 1977.
- Is a foster child on behalf of whom State or local government payments are made.
- Does not have a high school diploma or GED.
- Is from a family whose total annual household income is below the federal poverty limits. See Appendix A of the *OJT Guidelines and Procedures* document found at: <http://azdot.gov/business/business-engagement-and-compliance/on-the-job-training-program/ojt-contract-compliance>.

1.04 Annual Training Goal:

During the OJT Pilot Program, each contractor that was awarded ADOT federally funded construction contracts, as a prime contractor, for \$2,000,000 or more between October 1, 2013 and September 30, 2014 or October 1, 2014 and September 30, 2015 will be assigned an annual OJT goal to train a minimum of one trainee for a minimum of 1000 hours. The trainee shall receive training in the same construction trade or job classification with the aim of eventually achieving journey-level status. If the contractor is not awarded an ADOT federally funded contract during the pilot program period, they will not be required to meet the assigned annual OJT goal.

If a contracting firm is not assigned an annual OJT goal, it is not required to provide on-the-job training on ADOT projects regardless of whether OJT hours are included in the project bid schedule. If the contractor chooses to provide training to a registered OJT trainee on an ADOT federal-aid project although they do not meet the above criteria, the contractor will be reimbursed as described in Subsection 2.02 of this Training Special Provision.

The contractor shall make every possible effort to provide additional trainees with training and shall see that all trainees are afforded every opportunity to participate in as much

training as is practically possible to provide. Contractors will not be required to meet OJT goals on individual contracts, but must meet the assigned annual training goal for the assigned number of OJT Trainees and hours by the end of the year.

Since not every OJT Trainee that enrolls in the program will complete the program, the contractor is encouraged to enroll sufficient numbers of OJT Trainees (well beyond the number of its annual training goal) to help ensure that it will meet its annual OJT goal if some OJT Trainees drop out of the program during the year. The contractor must carefully screen, hire, and support trainees that are likely to meet or exceed the 1000 hours of OJT during the calendar year, eventually earn journey-level status, and be retained as part of its workforce.

2.0 Requirements:

2.01 Approved Training Programs:

For this Contractor-Based OJT Program, the ADOT Business Engagement & Compliance Office (BECO) will only recognize two types of contractor based training programs. The programs are:

- The Department's OJT Program as approved by FHWA and described at: <http://azdot.gov/business/business-engagement-and-compliance/on-the-job-training-program/ojt-contract-compliance> or
- Registered Apprenticeship and OJT programs registered with the Bureau of Apprenticeship, U.S. Department of Labor and/or the State of Arizona.

Contractors must use one or both of these programs. The contractor shall indicate which OJT program it is using for each trainee on his/her Trainee Enrollment form. It is the intention of these provisions that training be provided in the construction crafts rather than for office support positions. Some off-site training is permissible as long as the training is an integral part of an approved training program and does not comprise a significant part of the overall training.

All training programs shall be administered in a manner consistent with the equal employment obligations of federal-aid highway construction contracts. The Department reserves the right to request documentation that the contractor's training program fulfills these obligations. Contractors shall ensure that each trainee does not exceed the maximum number of training hours required for the completion of the selected training program unless prior approval is received from the Engineer.

2.02 Reimbursement:

The contractor will be reimbursed \$3.00 per hour of training provided to a trainee on an ADOT federal-aid project up to the maximum number of hours approved for reimbursement on the project and shown in the project bid schedule. Reimbursement will not be made for a trainee's hours that exceed the maximum number of training hours required for the completion of his/her training program. In addition, the contractor will not be reimbursed for

hours in excess of the maximum training hours shown on the project bid schedule unless written approval is received in advance from the Engineer.

The maximum number of hours approved for reimbursement on each ADOT federal-aid contract will be calculated by the Department, based on the engineer's estimate for the project and the contract time.

Contractors will not be required to re-enroll trainees that are already enrolled in the ADOT Contractor Based OJT Program when transferring trainees between projects. For reimbursement purposes, anytime a trainee is transferred to an ADOT federally funded project, the contractor shall upload a an apprenticeship certificate to the web-based Labor Compliance System, LCPTracker, for apprentices registered in a program approved by the Bureau of Apprenticeship, US Department of Labor or the State of Arizona. For all other trainees registered in the pilot program, contractors shall upload a copy of an approved OJT Enrollment Form to LCPTracker.

The trainee will be paid the appropriate trainee Davis-Bacon wage rates for training classifications/crafts on federally-funded projects. The contractor shall compensate OJT Trainees according to pay levels and percentages outlined in the ADOT Training Program Manual found at: <http://azdot.gov/business/business-engagement-and-compliance/on-the-job-training-program/ojt-contract-compliance>.

Contractors will reimburse subcontractors for the subcontractor's trainees on ADOT federally funded projects at least 75-percent of the amount paid to the contractor by the Department per training hour.

2.03 Submittals:

The contractor shall complete and submit the following documents. Submittals to BECO shall be made through the Contractor Compliance mailbox at contractorcompliance@azdot.gov:

- *OJT Program Trainee Enrollment Form* to BECO for approval for each proposed minority, female, veteran, economically disadvantaged, and other OJT Trainee throughout the year for each new individual hired to work on an ADOT or non-ADOT project. The form shall be submitted to BECO within the first week of hire. The contractor shall also submit the Enrollment Form if the contractor wants to enroll a current employee into the training program. The contractor will not receive training credit until the enrollment form is received and approved by BECO.

If the contractor is working on an ADOT project, the contractor shall upload the approved form to LCPTracker and submit the approved form to the Engineer.

- Prior to an apprentice, registered with a union or other approved apprenticeship program, starting work on an ADOT project the contractor shall upload a current, signed apprentice certificate from the union or approved apprenticeship program to LCPTracker.

In cases where the Arizona Office of Apprenticeship Representative's signature is missing from the apprentice certificate, the contractor shall also upload the apprentice's US Department of Labor, Office of Apprenticeship Certificate to LCPTracker.

- Contractors shall enter trainee hours worked on ADOT construction projects on a weekly basis into LCPtracker. Trainee hours not entered into LCPtracker by the 15th of each month for the preceding month will be considered delinquent.
- *OJT Monthly Trainee Report Forms* shall be submitted to BECO for each month by the 15th of the following month. The contractor shall use this form to report all hours performed by each trainee on ADOT and non-ADOT contracts. The contractor shall also use this form to report when an OJT Trainee completes 1000 or more hours in the same construction trade or job classification within a calendar year, achieves journey-level status, terminates employment with the contractor or withdraws from the OJT program.
- OJT Progression of Training Form (Level Up) shall be submitted by the contractor when a trainee achieves a new pay level. The form shall be submitted to BECO for approval. Once the form is approved the contractor shall upload it to LCPTracker for every ADOT federally funded project the trainee is currently working on.
- *OJT Annual Summary Report Form* by July 15 of each fiscal year for the Pilot Program as described in Subsection 4.02 of this Training Special Provision.

The contractor's June monthly reports and uploads into LCPtracker submitted after July 31st will not be accepted or considered towards goal attainment for the previous calendar year.

All forms and Guidelines and Procedures for the Contractor-Based OJT program are available online at: <http://azdot.gov/business/business-engagement-and-compliance/on-the-job-training-program/ojt-contract-compliance>.

The contractor shall retain the training records for all OJT Trainees for a period of five years following the completion of the trainee's work on contracts documenting his performance under this Training Special Provision. Such records shall be available at reasonable times and places for inspection or review by ADOT and the Federal Highway Administration.

The contractor is required to meet the assigned annual OJT goal if they are awarded federally funded ADOT construction contract(s) during the year. In anticipation of obtaining an ADOT contract, contractors are encouraged to begin registering trainees with the Department using the OJT Program Trainee Enrollment Form at the beginning of the year. In order to count training hours toward the goal, the trainee must be registered with the Department and their hours must be entered monthly into the LCPtracker system as described in this specification.

2.04 OJT Liaison:

The contractor shall designate an OJT Liaison that shall be responsible for monitoring and administering its OJT Program and monitoring the trainees' progress. The OJT Liaison shall serve as the point of contact for the Department regarding information, documentation, and conflict resolution relating to the contractor's OJT program. The contractor shall furnish each trainee a copy of the Training Program, monthly reports that reflect their training hours accumulated to date and other documentation related to the training program. The contractor shall further make every reasonable effort to provide training that develops the skills outlined in the training program. The contractor shall furnish each trainee, upon successful completion of their training program, a certificate showing the type and length of training satisfactorily completed.

2.05 Training Hours:

Credit towards the contractor's annual training goal shall be earned as follows:

- Credit will be allowed towards the contractor's annual goal for the year in which the trainee entered training.
- Credit will be allowed for each trainee employed on a project for which an enrollment form was received by BECO pending official enrollment, for all documented hours completed.
- Credit will be allowed for a terminated trainee if the contractor demonstrated a good faith effort to meet the goal and the trainee completed more than 90% of the training hours required for the year.

Credit will not be allowed when the contractor fails to enroll the trainee, provide the required training or does not make a satisfactory good faith effort to meet the requirements of the program.

2.06 Program Completion:

A trainee will be considered to have completed the program once the trainee completes the required number of levels and hours of training for the same craft or classification within a year, completes a registered apprenticeship program, or achieves journey-level status. Once a trainee completes a specific training level for a classification, the contractor will not be permitted to resubmit that trainee for enrollment or reimbursed at that same level.

Upon completion of the program, the contractor shall notify BECO so that a Certificate of Completion can be issued to the trainee showing the type and length of training satisfactorily completed.

3.0 Good Faith Efforts:

Whenever a contractor requests ADOT approval of someone other than a minority, economically disadvantaged individual, woman, or veteran for credit towards its annual

training goal, the contractor shall submit documented evidence of its Good Faith Efforts to fill that trainee position with a minority, female, veteran, or economically disadvantaged individual. Documentation of Good Faith Efforts shall be made by completing and submitting the Good Faith Effort form and supporting documentation to BECO.

Good Faith Efforts are those efforts designed to achieve equal opportunity through positive, proactive, and continuous result-oriented measures (23 CFR 230.409(g)(4)). Good Faith Efforts should be made as trainee hiring opportunities arise. More information on Good Faith Efforts is available in the *OJT Guidelines and Procedures* document available on BECO's website.

4.0 ADOT Program Monitoring:

4.01 Site Visits:

BECO may conduct periodic site visits to a contractor's worksite to review OJT Program compliance, as part of a FHWA required Contractor Compliance Program Review process. The site reviews may include, among other activities, interview of trainees, the contractor, and its employees. The contractor shall cooperate in the review and make its employees available. The contractor's OJT Liaison shall be available to meet with BECO staff as well as be available to respond to periodic emails and phone calls from BECO to check on the progress of OJT Trainees. BECO will make every effort to ensure minimal disruption to a contractor's work.

4.02 Determination of Compliance:

An OJT Annual Summary Report Form for the previous 12 months shall be submitted to BECO by July 15 of each fiscal year for the Pilot Program. The report shall provide an accurate account of all trainee hours; identifying each trainee by name, ethnicity, and gender and identifying each project and/or contract, listing the contracting agency, whether they are ADOT projects/contracts, whether they are federally funded projects/contracts, and the trainee hours attributed thereto. The report shall include written explanation and documentation of Good Faith Efforts, if the contractor fails to meet its goal.

BECO will review the contractor's OJT Monthly and Annual Reports and Good Faith Effort documentation. BECO will determine whether the contractor has met the assigned annual training goal or made a good faith effort to do so. BECO will communicate its decisions in writing to the contractor.

If a contractor has neither attained its goal nor submitted adequate Good Faith Efforts documentation, ADOT will issue a Show Cause Notice outlining its findings of non-compliance. Within 30 days of receiving the Show Cause Notice, the contractor may submit a written response to the Show Cause Notice providing argument and evidence in opposition to the Department's findings of non-compliance.

If a contractor fails to submit a written response to the Show Cause Notice within the specified period or the written response to the Show Cause Notice does not cause ADOT to

change its findings of non-compliance, ADOT will issue its Final Notice to the Contractor regarding the non-compliance.

ITEM 9240010 - FORCE ACCOUNT WORK (REMOVING EXISTING PAVED RAMP AND GRADING):

Description:

The work under this shall consist of removal of the existing entrance ramp pavement to the weigh station, scarifying, excavating, grading, seeding and striping, including furnishing, placing and compacting embankment material as required, as directed by the Engineer and the requirements of these specifications.

Construction Requirements:

For reconstruction of the area once occupied by existing long standing pavements, the contractor shall make their best effort to regrade and contour the remaining surface to leave a generally smooth appearance conforming to the general shape of the surrounding terrain to the satisfaction of the Engineer. All objectionable material, trash, brush, weeds, and stones larger than three inches in diameter shall be removed from the site and disposed of in a manner acceptable to the Engineer. The Engineer will determine the actual reconstruction area during construction.

The reconstructed area shall be seeded per seeding item 8050003 SEEDING (CLASS II) Specifications.

The pavement marking shall be applied to match with the existing edge line.

Method of Measurement and Basis of Payment:

Force Account Work (Removing Existing Paved Ramp and Grading), measured and paid for on a Force Account basis in accordance with the requirements of Subsection 109.04(D) of the Standard Specifications and the Special Provisions

ITEM 9240119 - MISCELLANEOUS WORK (2-CLAMP BRACKET):

Description:

The work under this item shall consist of, but not limited to, furnishing all materials, tools, equipment and labor necessary to install 2-clamp brackets to light poles, signal poles and mast arms in order to properly install signs in accordance with the project plans and the requirement of these specifications.

Description:

All materials for the new 2-clamp bracket shall be new.

Except as otherwise indicated, all stringers and associated hardware shall conform to ASTM A325 and subsections 607-2.02 and 607-2.03 of the standard specifications.

Construction Requirements:

The contractor shall provide clamps with sufficient diameters to attach to the poles and mast arms indicated on the plans even if nominal diameters differ from the nominal diameter indicated on the project plans and Std. Dwg. S-9. The Engineer may require the contractor to offset the stringers relative to a pole to provide a greater offset from the sign being mounted on the pole to the nearest edge of the pavement. Unless otherwise permitted by the Engineer, each offset shall be at least two feet. Each bracket shall be installed so that the bottom of the attached sign will be at the least seven feet above the roadway and at least seven feet above the ground, curb, or sidewalk under the sign. The contractor shall attach the required signing to the clamps and the clamps to the poles and mast arms indicated on the plans in such a way as to ensure no slippage after the installations. The contractor shall also ensure the attachment of the clamps and signing will not interfere with the installation of the lighting and signal components.

In addition to the 2-clamps bracket installation, the contractor shall provide stringers for the attachment of the signing as indicated on the project plans or as otherwise directed by the Engineer.

Method of Measurement:

Miscellaneous Work (2-Clamp Bracket) will be measured by the unit for each bracket furnished and installed complete in place. Each installation shall include all clamps, stringers, welds, and associated hardware indicated on Std. Dwg. S-9.

Basis of Payment:

The accepted quantities of Miscellaneous Work (2-Clamp Bracket) will be paid as each for at the contract unit price.

- ITEM 9240181 - MISCELLANEOUS WORK (CONTROL OF NOXIOUS PLANTS)
(MANUAL / MECHANICAL METHODS):**
- ITEM 9240182 - MISCELLANEOUS WORK (CONTROL OF NOXIOUS PLANTS)
(HERBICIDE):**

Description:

The work under these items shall consist of controlling noxious and invasive plant species, manually / mechanically or with the application of herbicides, in the areas designated by the Engineer, and throughout the duration of the contract, as required in a Noxious Species Control Plan (NSCP) prepared by the contractor as specified herein. When noxious or invasive plant species are determined to be present within the project limits or all anticipated construction zones, the control procedures in the NSCP shall be implemented with the approved weed management measures achieved prior to earth moving activities of

infested areas. The weed control procedures in the NSCP shall also be implemented during all stages of construction and in advance of seeding. In addition, all construction related equipment, materials, and personnel moving in and/or out of project site shall be inspected and treated for noxious and invasive plant species (seeds, seed heads / pods) at no additional cost to the Department.

For projects that include Landscape Establishment, as specified in Section 807 of the Standard Specifications and these Special Provisions, control of noxious and invasive plant species will also be required throughout the landscape establishment phase, and shall be included in the contractor's NSCP.

The control of plant species not on the State or Federal Noxious or Invasive lists - especially Forest Service Regional/BLM lists noted below will be paid only when control is directed by the Engineer based on the original or amended NSCP approved by the ADOT construction Professional Landscape Architect (PLA) licensed in the State of Arizona.

The areas to be designated by the Engineer for Control of Noxious Plants shall be coordinated with ADOT construction PLA.

Materials:

General:

The types of herbicide to be used and the methods of application shall conform to U. S. Environmental Protection Agency (EPA), and/or Arizona Department of Environmental Quality (ADEQ) requirements, and the product's label instructions, as approved by the Engineer. When applicable, the contractor shall file a Notice of Intent (NOI) and Notice of Termination (NOT) to EPA and/or ADEQ for compliance with the National Pollutant Discharge Elimination System (NPDES) and/or Arizona Pollutant Discharge Elimination System (AZPDES) Pesticide General Permit.

All materials to be used shall be listed and protocol information provided in the Noxious Species Control Plan, as specified below. The contractor shall provide the container with the original chemical label for inspection and confirmation of the chemicals used. All containers shall be disposed of as recommended by the manufacturer.

Herbicides proposed in the plan for use on projects adjacent to BLM and/or USFS Lands shall be in conformance with the following current environmental documents including: "Environmental Assessment for ADOT Herbicide Treatment Program on Bureau of Land Management Lands in Arizona", which is available at <https://eplanning.blm.gov/epl-front-office/eplanning/projectSummary.do?methodName=renderDefaultProjectSummary&projectId=34810> or the "Environmental Assessment for Management of Noxious Weeds and Hazardous Vegetation on Public Roads on National Forest System Lands in Arizona" is available at: <http://azmemory.azlibrary.gov/cdm/ref/collection/feddocs/id/486> . Additionally, Tonto National Forest Herbicide Application Information is available at: http://www.fs.usda.gov/detail/tonto/landmanagement/resourcemanagement/?cid=fsbdev3_018789 . The Environmental Documents include a list of approved Herbicides, Mitigations

and Best Management Practices (BMPs), which as appropriate, should be included by the contractor in the submitted NSCP.

Web links of noxious weeds and invasive plant species environmental analysis for the six (6) National Forests within Arizona:

- 1.** Final EIS (Environmental Impact Statement) and Record of Decision for Noxious Weed Treatment on the Coconino, Kaibab, and Prescott National Forests:
<http://www.fs.usda.gov/project/?project=30>
- 2.** Coronado National Forest EA (Environmental Assessment) for Noxious Weed Treatments:
<http://www.fs.usda.gov/detail/coronado/landmanagement/resourcemanagement/?cid=stelprdb5123160>
- 3.** Apache-Sitgreaves National Forest EIS for Noxious Weed Treatments:
http://data.ecosystem-management.org/nepaweb/nepa_project_exp.php?project=4967
- 4.** Tonto National Forest EA for Treatment of Noxious Weeds:
http://data.ecosystem-management.org/nepaweb/nepa_project_exp.php?project=4454

All materials used shall also be in accordance with the approved NSCP and Pesticide Use Proposal (PUP).

Construction Requirements:

The contractor shall develop a NSCP for state and federal listed noxious and invasive plant species, and other undesirable plant species shown on the Roadside Development web site (<http://www.azdot.gov/business/engineering-and-construction/roadway-engineering/roadside-development>) for approval by ADOT construction PLA. Four copies of the proposed NSCP in standard three (3) ring binders shall be submitted to the Engineer within seven (7) calendar days after the Execution of Contract. ADOT construction PLA shall review and respond to the proposed NSCP within 14 calendar days upon receiving the submittal. If requested, additional copies may be submitted for review and comments by Native American Community designated representative as approved by the Engineer. Native American Community designated representative shall also review and comment the proposed NSCP within 14 calendar days upon receiving the submittal. The contractor proposed NSCP shall include as minimum the following information applicable to the project area, location and conditions listed below:

- (1) A list of Noxious and Invasive Species and other Roadside Development approved plant species that would be anticipated for control based on existing vegetation and the project biotic communities. The weed species shall include but not be limited to the TABLE - I listed below:

TABLE - I	
Scientific Name	Common Name
<i>Linaria dalmatica</i> ssp. <i>dalmatica</i> (syn. <i>Antirrhinum dalmaticum</i>)	Dalmatian Toadflax / Balkan Toadflax / Broadleaf Toadflax
<i>Onopordum acanthium</i>	Scotch Thistle / Cotton Thistle

- (2) The methods of control of noxious and invasive plant species shall be determined based on the species present within the project limits prior to earth moving activities as well as subsequent project construction phases before seeding. Pre-emergent herbicide shall NOT be applied for all project seeding areas. The contractor shall provide information / resolutions on how the application of herbicides will NOT harm the expected seed germination and establishment as specified in the Section 805 of these Special Provisions.
- (3) The proposed method(s) of control, either manual / mechanical control or herbicide application, to be used for each anticipated plant species at each of stage of plant development.
- (4) The herbicides, method and frequency of application, and rates to be used for each listed plant species.
- (5) Copies of herbicide and surfactant labels and Safety Data Sheet (SDS) for all chemicals proposed for use.

- (6)** Procedure for collection, removal, containment and disposal of noxious and invasive plants. All components of noxious and invasive plants such as roots, stems, leaves, flowers, seeds, seed heads, or seed pods shall be subject to collection, removal, containment and disposal at no additional cost to the Department.
- (7)** Methods and procedures to be followed to protect existing, transplanted, and new emerging vegetation in seeded areas.
- (8)** Responsible Applicator and required Office of Pest Management Applicator Licensing information, as specified in Section 806.
- (9)** Record procedures to be followed for control work completed.
- (10)** Record procedures to be followed for reporting all chemicals used annually within the project right of way adjacent to BLM or USFS Lands within two (2) months to ADOT construction PLA.
- (11)** Projects on right of way adjacent to BLM Lands shall include a completed Pesticide Use Proposal (PUP) form for all proposed herbicide uses prepared for submittal to BLM for approval.
- (12)** Projects on right of way adjacent to USFS Lands shall include the USFS, ADOT approved PUP.
- (13)** When applicable, other information and explanations required in the PUP or to implement the NSCP.
- (14)** Process to be used for amending the NSCP to add additional plants or treatments that may be required as the project progresses.
- (15)** A copy of the original Special Provisions for Control of Noxious Plants that the contractor bid shall be attached to the NSCP.
- (16)** Plans and methods to protect Threatened and Endangered Species in accordance with the Environmental Document.

The NSCP submitted to the Engineer shall not be implemented until it is approved by ADOT construction PLA and the contractor is so directed by the Engineer.

The contractor shall keep a copy of the approved NSCP and furnish to the Engineer a copy of the approved NSCP for record keeping. The NSCP copy of the contractor and Engineer shall be maintained up-to-date with the contractor providing submittals of completed work activities within five (5) working days following completion of the work for each area directed by the Engineer for control. The NSCP shall be maintained up-to-date with submittals of the above completed NSCP information for the duration of the project.

The Engineer will designate the location of the areas to be treated, and when required the frequency of treatment as per the NSCP. Payment will be made for the initial treatment of

each area, whether with manual / mechanical methods or using herbicides, and for each subsequent treatment ordered and approved by the Engineer.

The contractor shall begin control of the designated areas within five (5) working days of the Engineer's notice, and complete the treatment within ten (10) working days of the notice approved by the Engineer.

If other plant species listed in the Arizona Noxious Weed List, the Forest Service Regional/BLM lists, or the Arizona Invasive Non-Native Plants' Categorized List <http://www.swvma.org/InvasiveNon-NativePlantsThatThreatenWildlandsInArizona.pdf> occur within the project area that are not included in the NSCP, the contractor shall modify the Noxious Species Control Plan to add such species, including acceptable control measures and where applicable a PUP, and submit this information as an amendment of the NSCP to the Engineer and ADOT construction PLA for acceptance.

ADOT Invasive and Noxious Plant Species Lists are available electronically at the following Roadside Development web address:

<http://www.azdot.gov/docs/business/adot-invasive-noxious-plant-species-list-for-construction-projects.pdf?sfvrsn=0>

The project areas will be surveyed by ADOT construction PLA, with the approval of the Engineer, prior to earthmoving activities and following rainfall events and during plant germination and growth periods for listed noxious and invasive plant species. To update NSCP, the contractor shall also furnish field inspection/observation reports for new growth of noxious/invasive plant species between four (4) weeks to six (6) weeks after each rainfall events of 0.5 inches (≥ 12.7 mm) or more. When surveys determine that noxious, invasive or other designated plants species listed in the NSCP for control are found to be present within the project right-of-way, the contractor shall treat the areas designated by the Engineer in accordance with the approved NSCP. Such treatments shall be completed and approved by the Engineer before ground disturbing or earthmoving activities occur from those areas.

The contractor shall mark those areas receiving manual / mechanical control with an application of a photosensitive dye. Herbicides shall be mixed with a photosensitive dye which will produce a contrasting color when sprayed upon the ground. The color shall disappear between three (3) and five (5) days after being applied. The dye shall not stain any surfaces nor injure non-target plant or animal species when applied at the manufacturer's recommended application rate.

Application of herbicide shall be in accordance with the manufacturer's instructions and the approved NSCP. Responsible herbicide applicator shall be licensed under the appropriate category as required by the State Law.

Mowing shall be allowed if it is proven to be a successful permanent control method of annual noxious / invasive plant species as approved by the Engineer. If approved, mowing shall be performed before the annual noxious / invasive plant species are able to set seed. Mowing shall NOT be operated in areas where there are perennial noxious / invasive plant species. Mowing shall NOT be utilized for noxious / invasive plant species that carry existing seeds (seed heads / pods). All project areas and plant species to be mowed shall

be carefully evaluated / identified by ADOT construction PLA with approval from the Engineer.

Unless otherwise called out in the plans/details, specified in these Special Provisions, or as directed by the Engineer, the contractor shall remove the identified noxious / invasive woody vegetation to the finished grade level without uprooting it (flush cutting). In order to stop stump regrowth, the applicable remaining stumps shall be promptly treated with suitable herbicide so the identified noxious / invasive woody vegetation will not sprout new growth from the stumps. Herbicide stump treatment shall NOT be conducted to plant species such as common evergreen coniferous shrubs and trees, which will unlikely generate stump regrowth. Manual / mechanical removal of remaining woody vegetation stumps and rootballs in erosive areas shall be avoided to maximum extent practicable (MEP). The removal method and process shall be evaluated by ADOT construction PLA with approval from the Engineer.

Removal of soil seed bank that has been contaminated by the natural storage of seeds from noxious / invasive plant species shall be required for projects involving soil / ground disturbance from roadway / drainage excavations or as designated by the Engineer. The contractor shall remove top three (3) inches of the existing undisturbed surface soil from the project areas infested with noxious / invasive plant species as evaluated / identified by ADOT construction PLA with approval from the Engineer. All removed contaminated soil seed bank shall be properly disposed of or placed (buried) below the top two feet (2'-0") of the final finished grade as directed by the Engineer. The removal, stockpile, burial, or disposal of contaminated soil seed banks shall be well contained / concealed during construction. The contractor shall then return all soil-seed-bank removal disturbed area, to an acceptable surface condition (finished grade), as approved by the Engineer.

No earthmoving activities to the treated areas shall be approved until the employed weed management measures have been inspected to be successfully achieved as per the approval of the Engineer.

For projects on right of way within BLM jurisdiction, PUPs shall be prepared and submitted to the Engineer and ADOT construction PLA as required in the NSCP. The PUPs will be submitted by the Department to BLM and must be approved by the BLM before being approved by the Engineer.

For projects on right of way within Forest Service jurisdiction, application of the herbicide shall be in accordance with the USFS, ADOT approved PUPs for the chemicals to be used.

The contractor shall keep records of all herbicide applications. A copy of this record shall be added to the NSCP and also submitted to the Engineer after each application. The contractor shall be responsible for the proper transport, storage, and application of all materials necessary for herbicide control treatments.

As a part of the integrated management approach, all areas to be treated for noxious and invasive plant species shall ultimately be seeded, landscaped, or permanently stabilized to minimize and prevent from weed re-invasion / re-infestation, as specified in these Special Provisions.

Method of Measurement:

Control of noxious and invasive plant species, either manually (mechanically) or with herbicides, will be measured by the square yard (SQ.YD.) of each treated area, as directed and approved by the Engineer.

Basis of Payment:

During pre-construction meeting, the contractor in conjunction with Engineer shall verify and be in agreement with the quantity of areas to be treated as evaluated by Construction PLA. The quantity of areas to be treated shall be in compliance with environmental requirements.

The accepted quantities of control of noxious and invasive plant species, either manually (mechanically) or with herbicides, measured as provided above, will be paid for at the contract unit price for each soil treatment directed and approved by the Engineer. Such price will be considered to include all labor, materials, equipment, and mobilization costs required to complete the work as specified herein. Such price shall also cover collection, removal, containment and disposal of noxious and invasive plant species.

No measurement or payment will be made for treatment of those areas, manually / mechanically or with herbicides, not authorized and approved by the Engineer. No measurement or payment will be made for the removal and proper disposal of waste materials, the cost being considered is included in contract items.

No measurement or payment will be made for preparation of the NSCP and, when applicable, the PUP, including the initial submittal and modifications, or for monitoring, the costs being considered is included in contract items.

No separate measurement or direct payment will be made for Control of Noxious Plants under Landscape Establishment as specified in Section 807 of the Standard Specifications and these Special Provisions; the cost being considered is included in the respective contract item of Landscape Establishment.

For projects engaging roadway / drainage excavations, no separate measurement or direct payment will be made for the removal, stockpile, burial, or disposal of contaminated soil seed banks, as well as returning all soil-seed-bank removal areas to an acceptable surface condition (finished grade); the cost being considered is included in the respective contract item of roadway / drainage excavations.

(925SRVY, 02/20/08)

SECTION 925 - CONSTRUCTION SURVEYING AND LAYOUT:

925-5 Basis of Payment: the first two sentences of the second paragraph of the Standard Specifications are revised to read:

If additional staking and layout are required as a result of additional work ordered by the Engineer, such work will be paid under ITEM 9250101 - ONE-PERSON SURVEY PARTY at the predetermined rate of \$65 per hour, ITEM 9250102 - TWO-PERSON SURVEY PARTY at the predetermined rate of \$100 per hour, ITEM 9250103 - THREE-PERSON SURVEY PARTY at the predetermined rate of \$135 per hour, ITEM 9250106 – SURVEY MANAGER at the predetermined rate of \$100 per hour, and ITEM 9250105 - OFFICE SURVEY TECHNICIAN at the predetermined rate of \$70 per hour.

(1006PCC, 10/03/14)

SECTION 1006 PORTLAND CEMENT CONCRETE:

1006-1 General Requirements: of the Standard Specifications is revised to read:

Portland cement concrete shall consist of a mixture of hydraulic cement, fine aggregate, coarse aggregate, and water. It may also contain air-entraining admixtures, chemical admixtures, and supplementary cementitious materials.

The contractor shall determine the mix proportions and shall furnish concrete which conforms to the requirements of the specifications. All concrete shall be sufficiently workable, at the slump proposed by the contractor within the specified range, to allow proper placement of the concrete without harmful segregation, bleeding, or incomplete consolidation. It shall be the responsibility of the contractor to proportion, mix, place, finish, and cure the concrete properly in accordance with the requirements of the specifications.

1006-2.01 Hydraulic Cement: the second through the fifth paragraphs of the Standard Specifications are revised to read:

Portland cement shall conform to the requirements of ASTM C 150 for Type II, III, or V, and shall be low alkali cement containing not more than 0.60 percent total alkali (Na₂O equivalent).

Portland-pozzolan cement shall conform to the requirements of ASTM C 595 for blended hydraulic cement with moderate sulfate resistance, Type IP (MS).

Cementitious material is defined as an inorganic material or a mixture of inorganic materials that sets and develops strength by chemical reaction with water by formation of hydrates and is capable of doing so under water. In this specification, cementitious materials are

defined as: hydraulic cement (Portland cement or Portland-pozzolan cement) and supplementary cementitious material (Fly Ash, Natural Pozzolan, or Silica Fume).

Hydraulic cement shall be approved prior to its use in accordance with ADOT Materials Policy and Procedure Directive No. 13, "Certification and Acceptance of Hydraulic Cement, Fly Ash, Natural Pozzolan, Silica Fume, and Lime".

1006-2.02 Water: the first sentence of the first paragraph of the Standard Specifications is revised to read:

The water used shall be free of injurious amounts of oil, acid, alkali, clay, vegetable matter, silt, or other harmful matter.

1006-2.03(A) General Requirements: the first paragraph of the Standard Specifications is revised to read:

When concrete is to be placed at elevations above 4,500 feet, the fine aggregate and the coarse aggregate shall be subjected to five cycles of the sodium sulfate soundness test, and the weighted percentage loss determined separately for each, in accordance with the requirements of AASHTO T 104. The weighted percentage loss determined for each shall not exceed 10 percent. Tests for soundness may be waived when aggregates from the same source have been approved and the approved test results apply to the current production from that source.

1006-2.03(A) General Requirements: the second paragraph of the Standard Specifications is hereby deleted:

1006-2.03(A) General Requirements: the fifth paragraph of the Standard Specifications is revised to read:

When aggregates are stored on the ground, the sites for the stockpiles shall be level and clear of all vegetation. The bottom one-foot layer of aggregate shall not be disturbed or used.

1006-2.03(A) General Requirements: "Lightweight particles" in the table of the ninth paragraph of the Standard Specifications is revised to read:

Lightweight particles (Specific gravity less than 2.0)	AASHTO T 113 (See Note)
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1006-2.03(B) Fine Aggregate: "Lightweight particles" in the table of the second paragraph of the Standard Specifications is revised to read:

Lightweight particles (Specific gravity less than 2.0)	AASHTO T 113 (Except that the percent of lightweight particles shall be reported to the nearest 0.01%.)	1.25% (0.25% Max. Coal and Lignite*)
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1006-2.03(B) Fine Aggregate: the last paragraph of the Standard Specifications is revised to read:

Fine aggregate shall be made into mortar and subjected to testing under AASHTO T 71, except that the mortar shall develop a compressive strength at seven and 28 days of not less than 90 percent of that developed by a mortar prepared in the same manner with the same Type II cement and graded sand conforming to the requirements of ASTM C 778.

1006-2.03(C) Coarse Aggregate: "Lightweight particles" in the table of the second paragraph of the Standard Specifications is revised to read:

Lightweight particles (Specific gravity less than 2.0)	AASHTO T 113 (Except that the percent of lightweight particles shall be reported to the nearest 0.01%.)	1.25% (0.25% Max. Coal and Lignite*)
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1006-2.04(A) General Requirements: the first paragraph of the Standard Specifications is hereby deleted.

1006-2.04(B) Air-Entraining Admixtures: the first paragraph of the Standard Specifications is revised to read:

Air-entraining admixtures shall conform to the requirements of ASTM C 260.

Air-entraining admixtures shall be approved prior to their use in accordance with ADOT Materials Policy and Procedure Directive No. 2, "Certification and Acceptance of Chemical and Air-Entraining Admixtures for Portland Cement Concrete".

1006-2.04(C) Chemical Admixtures: the first paragraph of the Standard Specifications is revised to read:

Chemical admixtures shall conform to the requirements of ASTM C 494.

Chemical admixtures shall be approved prior to their use in accordance with ADOT Materials Policy and Procedure Directive No. 2, "Certification and Acceptance of Chemical and Air-Entraining Admixtures for Portland Cement Concrete".

1006-2.04(D) Supplementary Cementitious Material (Fly Ash, Natural Pozzolan, and Silica Fume): the first paragraph of the Standard Specifications is revised to read:

Supplementary cementitious materials may be used in addition to hydraulic cement. Supplementary cementitious materials shall be approved prior to their use in accordance with ADOT Materials Policy and Procedure Directive No. 13, "Certification and Acceptance of Hydraulic Cement, Fly Ash, Natural Pozzolan, Silica Fume, and Lime".

1006-2.04(D) Supplementary Cementitious Material (Fly Ash, Natural Pozzolan, and Silica Fume): the last two paragraphs of the Standard Specifications are revised to read:

When a supplementary cementitious material with a calcium oxide content greater than 15 percent is proposed, the hydraulic cement/supplementary cementitious material blend shall be tested for sulfate expansion in accordance with ASTM C 1012. The maximum expansion shall be 0.10 percent at six months.

When either moderate or high sulfate resistant concrete is specified in the Special Provisions, the proposed hydraulic cement/supplementary cementitious material blend shall be tested for sulfate expansion in accordance with ASTM C 1012. When moderate sulfate resistance is specified, the maximum expansion shall be 0.10 percent at six months. When high sulfate resistance is specified, the maximum expansion shall be 0.05 percent at six months or 0.10 percent at one year.

1006-2.05 Concrete Curing Materials: the second paragraph of the Standard Specifications is revised to read:

Acceptance of concrete curing materials shall be as specified in ADOT Materials Policy and Procedure Directive No. 3, "Curing Compounds".

1006-3.01 Design Criteria: Table 1006-A of the Standard Specifications is revised to read:

TABLE 1006-A				
Class of Concrete	Minimum 28-Day Compressive Strength Required: psi (See Note 1)	Cementitious Material Content: Lbs per Cu Yd Minimum - Maximum (See Notes 2, 3, and 4)	Maximum Water/Cementitious Material Ratio (w/cm): Lb./Lb.	Slump Range: Inches
B	2,500	470 – 658	None	(See Note 6)
S	2,500	520 – 752	0.55	
	3,000 (See Note 5)			
	3,500			
	4,000	564 – 752	0.50	
	4,500			
	Greater than 4,500	564 - 800	0.45	
P	4,000	564 – 658	None	0 – 4.5
H	High performance concrete as specified in project special provisions.			
Note 1: Testing for compressive strength of cylinders for all classes of concrete shall be in accordance with the requirements of Arizona Test Method 314.				

Note 2: A supplementary cementitious material (fly ash, natural pozzolan, or silica fume) conforming to the requirements of Subsection 1006-2.04(D) may be used, as specified in paragraphs (a) through (f) below.

(a) When Portland cement is used, a maximum of 25 percent, by weight of the cementitious material, may be an approved fly ash or natural pozzolan, except as specified in paragraphs (d), (e), and (f) below.

(b) When Portland-pozzolan cement [Type IP (MS)] is used, fly ash or natural pozzolan is not allowed, except as specified in paragraphs (d), (e), and (f) below.

(c) When silica fume is used, a maximum of 10 percent, by weight of either Portland cement or Portland-pozzolan cement, may be used.

(d) When a compressive strength greater than 4,500 psi is required, supplementary cementitious material may be added in excess of the maximum cementitious material content. Fly ash or natural pozzolan may exceed 25 percent, by weight of the cementitious material, if approved by the Engineer.

(e) When increased sulfate resistance is specified, the required amount of fly ash or natural pozzolan shall be incorporated into the concrete and may exceed 25 percent, by weight of the cementitious material.

(f) For Class S concrete used in bridge decks, a minimum of 20 percent, by weight of the cementitious material, must be an approved Class F fly ash or natural pozzolan, unless otherwise approved by the Engineer.

Note 3: For any concrete mix, other than for precast and/or prestressed bridge members, with a Portland cement content greater than 545 pounds per cubic yard, **one** of the options specified in paragraphs (a) through (e) below for the mitigation of a potential alkali silica reaction (ASR) shall be used:

(a) A minimum of 20 percent Class F fly ash or natural pozzolan, by weight of the cementitious material, shall be used. The Class F fly ash or natural pozzolan shall have a calcium oxide content of 15 percent or less.

(b) Instead of using Portland cement, Type IP (MS) Portland-pozzolan cement with a Class F fly ash or natural pozzolan content of at least 20 percent, by weight of the cementitious material, shall be used. The Class F fly ash or natural pozzolan shall have a calcium oxide content of 15 percent or less.

(c) Limit the total alkali (Na_2O equivalent) to a maximum of 3.00 pounds per cubic yard of concrete, when calculated as follows:

$$\left[\begin{array}{l} \text{Pounds of total} \\ \text{alkali per cubic} \\ \text{yard of concrete} \end{array} \right] = \frac{\left(\begin{array}{l} \text{Pounds of Portland} \\ \text{cement per cubic} \\ \text{yard of concrete} \end{array} \right) \times \left(\begin{array}{l} \text{Na}_2\text{O equivalent}(\%) \\ \text{in Portland cement} \end{array} \right)}{100}$$

(d) Introduce a lithium nitrate admixture, which has been approved by the Engineer, at a minimum dosage of 0.55 gallons of 30 percent lithium nitrate solution per pound of total alkali (Na₂O equivalent) per cubic yard of concrete. The required amount of lithium nitrate is calculated as follows:

$$\left[\begin{array}{l} \text{Required gallons} \\ \text{of 30 percent} \\ \text{lithium nitrate} \\ \text{solution} \end{array} \right] = \frac{\left(\begin{array}{l} \text{Pounds of} \\ \text{Portland cement} \\ \text{per cubic yard} \\ \text{of concrete} \end{array} \right) \times \left(\begin{array}{l} \text{Na}_2\text{O equivalent}(\%) \\ \text{in Portland cement} \end{array} \right)}{100} \times (0.55)$$

(e) The coarse aggregate and the fine aggregate shall be tested separately in accordance with ASTM C 1260 to determine the potential for alkali silica reaction (ASR). When aggregates show the potential for ASR, as indicated by expansions of 0.10% or greater at 16 days after casting, sufficient mitigation for the expansion shall be determined in accordance with ASTM C 1567. The use of fly ash or natural pozzolan may exceed 25 percent, by weight of the cementitious material.

Note 4: Unless otherwise specified, the cementitious material content shall be as shown.

Note 5: Unless otherwise shown on the plans.

Note 6: The proposed slump shall be chosen by the contractor. Concrete at the proposed slump shall be sufficiently workable to allow proper placement without harmful segregation, bleeding, or incomplete consolidation.

1006-3.01 Design Criteria: the second, third, and fourth paragraphs of the Standard Specifications are revised to read:

Air-entraining admixtures will be required for all classes of concrete placed at an elevation of 3,000 feet or above. The air content of the concrete mixture shall not be less than four percent nor more than seven percent by volume. However, no air-entrainment will be required for minor precast structures, precast pipe, and precast, prestressed structural members supporting a concrete deck slab or impervious overlay. Also, no air-entrainment will be required for any precast items constructed using the dry pack or no-slump method.

For elevations below 3,000 feet, air-entraining admixtures may be used at the option of the contractor. If air-entraining admixtures are used, the air content of the concrete mixture shall not exceed seven percent by volume.

Concrete that fails to conform to the air content requirements listed above for the respective elevation as determined by the Engineer, shall be rejected prior to placement.

1006-3.01 Design Criteria: the first and second sentences of the sixth paragraph of the Standard Specifications are revised to read:

The coarse aggregate size designation for Class S or Class B concrete shall be chosen by the contractor and approved by the Engineer and shall conform to the size designation and grading requirements of AASHTO M 43. In choosing the size designation, the maximum size of coarse aggregate shall not be larger than one fifth of the narrowest dimension between the sides of adjacent forms, or two thirds of the minimum clear spacing between reinforcing bars, or two thirds of the minimum clear spacing between reinforcing bars and the sides of adjacent forms, or one third of the depth of the slab, whichever is least.

1006-3.01 Design Criteria: the first sentence of the seventh paragraph of the Standard Specifications is revised to read:

Coarse aggregate for Class P concrete used to construct Portland cement concrete pavement without load transfer dowels shall be separated into two or more stockpiles.

1006-3.02 Design Procedures: the first paragraph of the Standard Specifications is revised to read:

At least two weeks prior to the appropriate concreting operation, the contractor shall furnish a mix design for each class of concrete and each strength of Class S concrete for review and approval. More than one mix design for each class of concrete and each strength of Class S concrete may be submitted for approval provided specific items and locations of intended uses accompany the mix design. The contractor shall substantiate each mix design by furnishing test data and providing all details of the mixtures proposed for use. Mix designs, for other than precast or prestressed concrete, shall be prepared by or under the direction of, and signed by, a registered professional engineer, a NICET Level III or higher certified technician in the concrete subfield, a NRMCA Level 3 Certified Concrete Technologist, or an ACI certified Concrete Laboratory Testing Technician Level 2 or Grade II. Mix designs for precast or prestressed concrete shall be prepared by or under the direct supervision of, and signed by, either one of the individuals listed above or a PCI Quality Control Technician/Inspector Level II or higher. Individuals preparing and submitting mix designs shall have experience in the development of mix designs and mix design testing for the respective type of concrete.

1006-3.02 Design Procedures: the second and third paragraphs of the Standard Specifications are revised to read:

The complete solid volume mix designs submitted for approval shall include all weights and volumes of all ingredients. The brand, type, and source of hydraulic cement and

admixtures, the coarse aggregate size number designation, source of aggregates, the specific gravities of all ingredients, the proposed slump, the water/cementitious material ratio, a product code to identify the mix design, and the intended use of each mix design shall be an integral part of each mix design.

The use of new and previously used mix designs, and the requirements for trial batches, will be as required by ADOT Materials Policy and Procedure Directive No. 15, "Submittal and Approval of Portland Cement Concrete Mix Designs".

1006-4.01 General Requirements: of the Standard Specifications is revised to read:

The contractor may obtain concrete for each class of concrete and for each strength of Class S concrete from a source approved by the Engineer in lieu of establishing a batch plant at the project site.

For each class of concrete and each strength of Class S concrete, except for Class P concrete produced in a batch plant at the site and used exclusively for Class P work, the contractor shall furnish a delivery ticket for each batch of concrete. The minimum information to be shown on each delivery ticket shall be the date, time batched, truck identification number, name or identification of batch plant, name of contractor, name and location of project, the quantity of concrete, the batch weights/volumes or mix design product code, the amount of permissible additional water to meet the design water/cementitious material ratio, and the number of revolutions that the concrete has been mixed at mixing speed in a truck mixer. An authorized representative of the contractor shall be responsible for each delivery ticket and shall sign each delivery ticket accepting the contractor's responsibility for the concrete. The representative shall immediately furnish the delivery ticket to the Engineer.

When requested by the Engineer, the contractor shall supply a separate record for each batch of concrete which shows the batch weight/volume of each individual ingredient.

1006-4.02(A) Hydraulic Cement: the last sentence of the first paragraph of the Standard Specifications is hereby deleted:

1006-4.03(A) General Requirements: the last sentence of the first paragraph of the Standard Specifications is revised to read:

Concrete may be mixed in a mobile mixer at the site for Class S or Class B concrete, provided written permission of the Engineer is granted.

1006-4.03(B) Mixing in a Stationary Mixer: the last sentence of the third paragraph of the Standard Specifications is revised to read:

The mixing time shall be not less than 60 seconds for one cubic yard and shall be increased 15 seconds for each additional cubic yard or fraction thereof for Class S or Class B concrete.

1006-4.03(C) Mixing in Truck Mixers: the first sentence of the last paragraph of the Standard Specifications is revised to read:

If additional mixing water is required to maintain the mix design water/cementitious material ratio, the concrete shall be mixed by a minimum of 30 revolutions of the drum at mixing speed after the water has been added, prior to discharge of any concrete for placement.

1006-4.03(D) Mixing in Mobile Mixers: of the Standard Specifications is revised to read:

Concrete mixing in mobile mixers for Class S or Class B concrete shall be performed in accordance with the requirements of AASHTO M 241.

1006-4.04 Consistency: the second paragraph of the Standard Specifications is revised to read:

The contractor shall furnish Class S and Class B concrete having the slump shown on the approved mix design, with a permissible variation of \pm one inch when the slump shown on the approved mix design is four inches or less, and a permissible variation of $\pm 1\frac{1}{2}$ inches when the slump shown on the approved mix design is greater than four inches. However, when an approved high range water reducing chemical admixture (ASTM C 494, Type F or Type G) conforming to the requirements of Subsection 1006-2.04 is used, the permissible variation will be \pm two inches, regardless of the slump shown on the approved mix design.

1006-5 Weather Limitations: the title of the Standard Specifications is revised to read:

1006-5 Concrete Temperature and Weather Limitations:

1006-5.01 General Requirements: of the Standard Specifications is revised to read:

The temperature of the concrete mixture immediately before placement shall not be less than 50 degrees F nor greater than 90 degrees F. Concrete that fails to conform to this temperature requirement shall be rejected prior to placement.

Under rainy conditions, placing of concrete shall be stopped before the quantity of surface water is sufficient to cause a flow or wash of the concrete surface or have a detrimental effect on the finished concrete and acceptance parameters.

Placing of concrete shall immediately cease if the hauling vehicles or any equipment or pedestrian traffic tracks mud on the prepared base or changes the allowable subgrade dimensional tolerances for Class P concrete and slabs placed on subgrade for Class S or Class B concrete.

1006-5.02 Hot Weather Concreting: of the Standard Specifications is revised to read:

Forms, subgrade, and reinforcing steel shall be sprinkled with cool water just prior to the placement of concrete.

Mix water may be cooled by refrigeration, liquid nitrogen, or well-crushed ice of a size that will melt completely during the mixing operation. If crushed ice is used, it shall be substituted for part of the mix water on a pound for pound basis.

1006-5.03 Cold Weather Concreting: of the Standard Specifications is revised to read:

Concrete shall not be placed on or against ice-coated forms, reinforcing steel, structural steel, conduits, or construction joints; nor on or against snow, ice, or frozen earth materials. Immediately prior to placing concrete, the temperature of forms, reinforcing steel, earthen material, or any other material that will come in contact with the freshly placed concrete shall be a minimum temperature of 40 degrees F. If artificial heat is used to adjust the temperature of the items that will come in contact with the freshly mixed concrete, the temperature of these items shall not exceed 10 degrees F greater than that of the concrete being placed.

Concrete operations shall be discontinued when a descending ambient temperature in the shade and away from artificial heat falls below 40 degrees F. Concrete operations shall not be resumed until an ascending ambient temperature in the shade and away from artificial heat exceeds 35 degrees F unless otherwise approved by the Engineer.

Mixing and placing concrete shall continue no later in any day than that time which will allow sufficient time to place and protect the concrete already poured before the ambient temperature drops to 35 degrees F.

Concrete shall be protected in a manner to maintain all concrete surface temperatures at not less than 50 degrees F for a period of 72 hours after placement and at not less than 40 degrees F for an additional 96 hours.

The contractor may use equipment to heat the aggregates or water, or both, prior to mixing. If aggregates are heated, the minimum temperature of the heated aggregate shall be 60 degrees F and the aggregates shall have no chunks of ice or frozen aggregate present. Equipment used to heat the aggregates shall be such that consistent temperatures are obtained throughout the aggregate within each batch and from one batch to another. Water shall not be heated in excess of 150 degrees F unless the water is mixed with the aggregate prior to the addition of cement to the batch. During the heating or mixing process, cement shall not be added to water and aggregate combinations which exceed 100 degrees F.

When weather forecasts indicate a probability that ambient temperatures will fall below 35 degrees F during the placement or curing periods, the contractor shall submit a cold weather concreting plan to the Engineer for approval prior to concrete placement. The cold

weather concreting plan shall detail methods and equipment which will be used to ensure that the required concrete temperatures are maintained. The contractor shall provide adequate cold weather protection in the form of insulation and/or heated enclosures to protect the concrete after placement. For bridge decks and suspended structures, the cold weather concreting plan shall include protection measures for both the top and bottom surfaces of the concrete. This protection shall maintain concrete surface temperatures as specified above at all locations in the structure. When artificial heating is required, the heating units shall not locally heat or dry the surface of the concrete.

When a cold weather concreting plan is required, the Engineer may require concrete temperatures to be measured and continuously recorded by the use of temperature sensing devices during the entire curing period. The contractor shall provide the temperature sensing devices and recording instruments. The contractor shall install temperature sensing devices near the surface of the concrete at locations and depths designated by the Engineer. When concrete is placed on a bridge deck or suspended structure, both the bottom surface and the top surface shall be monitored with temperature sensing devices. Temperature sensing devices and recording instruments shall be approved by the Engineer. The contractor shall continuously monitor the concrete temperature and provide the recorded data to the Engineer at any time upon request.

If the surface concrete temperature at any location in the structure falls below 35 degrees F during the curing period, the Engineer may direct the contractor to core the areas in question at the locations indicated by the Engineer. The contractor shall submit the cores to a petrographer for examination in accordance with ASTM C 856. Concrete damaged by frost, as determined by the petrographer, shall be removed and replaced at no additional cost to the Department. All costs associated with coring, transmittal of cores, and petrographic examination shall be borne by the contractor regardless of the outcome of the petrographic examination.

The placing of concrete will not be permitted until the Engineer is satisfied that all the necessary protection equipment and materials are on hand at the site and in satisfactory working condition.

Concrete requiring cold weather protection shall have such protection removed at the end of the required curing period in such a manner that will permit a gradual drop in the concrete temperatures.

1006-7.01 **General:** the second paragraph of the Standard Specifications is revised to read:

Rejection of concrete will also occur due to insufficient compressive strength. Concrete compressive strength requirements consist of the specified strength which the concrete shall attain before various loads or stresses are applied and a minimum strength at 28 days.

1006-7.01 General: the last sentence of the third paragraph of the Standard Specifications is revised to read:

Sampling and testing for compressive strength will be performed on all classes of concrete furnished, including each strength specified on the project plans for Class S concrete.

1006-7.02 Sampling and Testing of Concrete: the first sentence of item (1) of the second paragraph of the Standard Specifications is revised to read:

(1) Concrete for Class S or Class B shall be sampled only once during discharge in the middle portion of the batch.

1006-7.02 Sampling and Testing of Concrete: of the Standard Specifications is modified to add:

If approved by the Engineer, and unless otherwise specified, Arizona Test Method 318 may be used to estimate concrete strength by the maturity method. The maturity method shall not substitute for compressive strength acceptance testing (28-day test cylinder breaks). The contractor shall submit a written request to the Engineer prior to using the maturity method. If its use is approved by the Engineer, the contractor shall be responsible to develop the strength-maturity relationship and shall also be responsible to provide the maturity meter(s) and digital data loggers necessary, as well as performing all required testing, all at no additional cost to the Department.

1006-7.03(A) Class S and Class B Concrete: of the Standard Specifications is revised to read:

For Class S concrete with a compressive strength requirement less than 4000 psi, a sample of concrete for the required tests, as specified in Subsection 1006-7.02, will be taken on a daily basis for each 100 cubic yards, or fraction thereof, of continuously placed concrete from each batch plant. For Class S concrete with a compressive strength requirement equal to or greater than 4000 psi, a sample of concrete for the required tests, as specified in Subsection 1006-7.02, will be taken on a daily basis for each 50 cubic yards, or fraction thereof, of continuously placed concrete from each batch plant. For Class B concrete, a sample of concrete for the required tests, as specified in Subsection 1006-7.02, will be taken for each 100 cubic yards placed from each batch plant. For Class S or Class B concrete placed at elevations of 3,000 feet or above, air content testing shall be performed for each 50 cubic yards placed, regardless of the compressive strength requirement. An additional sample or samples for any of the required tests may be taken at an interval of less than the sampling frequency specified above, at the discretion of the Engineer, on any batch or load of concrete. A sample for the required tests on daily placements of 10 cubic yards or less may be taken at the discretion of the Engineer.

1006-7.03(B) Class E Concrete: of the Standard Specifications is revised to read:

1006-7.03(B) BLANK

1006-7.06(A) Class P Concrete: the fourth sentence of the second paragraph of the Standard Specifications is revised to read:

Cores must be obtained under the observation of an ADOT representative and delivered to the Engineer in time to allow complete testing within 48 days of placement. Testing shall be performed by the Department.

1006-7.06(B) Class S and Class B Concrete: the second paragraph of the Standard Specifications is revised to read:

Concrete failing to meet at least 85 percent of the 28-day compressive strength for specified strengths of 3,000 pounds per square inch and below, 90 percent for a specified strength of 3,500 pounds per square inch, or 95 percent for specified strengths of 4,000 pounds per square inch and above, or any concrete failing to meet the other requirements of Subsection 1006-7.01, will be rejected and removed at no additional cost to the Department and replaced with concrete which meets the specified requirements, unless the contractor can submit evidence that will indicate to the Engineer that the strength and quality of the concrete is such that the concrete should be considered acceptable and be allowed to remain in place.

1006-7.06(B) Class S and Class B Concrete: the third sentence of the last paragraph of the Standard Specifications is revised to read:

All cores shall be obtained and tested in accordance with the requirements of Arizona Test Method 317. Testing shall be performed by the Department.

1006-7.06(C) Class E Concrete: of the Standard Specifications is revised to read:

1006-7.06(C) BLANK

(1007REFS, 11/05/13)

SECTION 1007 - RETROREFLECTIVE SHEETING:

1007-1 General Requirements: the last two sentences of the first paragraph of the Standard Specifications are revised to read:

Sheeting shall conform to criteria listed in the most current version of ASTM D 4956 for the applicable type and class, unless otherwise specified.

1007-2 Material Types: of the Standard Specifications is revised to read:

Sheeting for permanent warning signs, regulatory signs, and overhead-mounted guide signs, including all sign legends and borders, shall be ASTM Type XI.

Sheeting for all warning signs with yellow backgrounds shall be Type XI fluorescent retroreflective yellow.

Sheeting for information signs, ground-mounted guide signs, and marker signs, including all sign legends and borders, shall be ASTM Type IX or XI.

Sheeting for permanent object markers and delineators on a rigid substrate with yellow backgrounds, including guardrail end treatments, guardrail markers, rigid delineators, and impact attenuators, shall be Type XI fluorescent retroreflective yellow.

Sheeting for permanent object markers and delineators on a rigid substrate in colors other than yellow, including guardrail end treatments, guardrail markers, rigid delineators, and impact attenuators, shall be ASTM Type IX or XI.

Sheeting for object markers and delineators on a flexible or plastic substrate, including flexible delineators and sand barrels, shall be ASTM Type VIII, IX or XI.

For temporary regulatory and guide signs on a rigid substrate with fluorescent retroreflective orange sheeting, ASTM sheeting Types VIII, IX, or XI shall be used.

For temporary regulatory and guide signs on a rigid substrate in colors other than fluorescent retroreflective orange, ASTM sheeting Types IV, VIII, IX, or XI shall be used.

For retroreflective orange temporary signs on a flexible or roll-up substrate, ASTM Type VI sheeting shall be used.

All temporary signs (rigid, flexible, or roll-up) with orange backgrounds shall use fluorescent retroreflective orange sheeting, except that non-reflective sign materials may be used for temporary signs where the signs will be clearly visible under available natural light.

For barricades and other temporary channelizing devices, ASTM sheeting Types IV, VIII, IX, or XI shall be used.

Sheeting for Adopt-A-Highway signs shall be ASTM Type I, IV, or XI.

Logo signs shall be ASTM Type I, IX, or XI.

When more than one sheeting type is allowed, the contractor may use any of the types listed, provided that materials used for a particular application shall be of the same ASTM type, manufacturer, and product for all signs of the same type in the project.

Opaque films used with sheeting shall be acrylic type films.
Direct-applied and demountable black characters shall be non-reflective.

1007-3 Visual Appearance, Luminance and Color Requirements: of the Standard Specifications is revised to read:

Except as specified herein, the color of the sheeting, ink or film shall conform to the ADOT Manual of Approved Signs, the Manual on Uniform Traffic Control Devices (MUTCD), and the plans.

All sheeting, inks and film used shall be uniformly colored so there is no visual variation in their appearance on the same sign or from sign to sign of the same colors.

Standard colors specified for sheeting, processing inks, and films shall, as applicable, match visually and be within the color tolerance limits required by Highway Tolerance Charts issued by the Federal Highway Administration. Additionally, for the retroreflective sheeting, unless otherwise noted, the Luminance Factor (Daytime Luminance) and Color Specification Limits (Daytime) shall conform to the applicable requirements of ASTM D 4956.

In addition to the luminance and color requirements, fluorescent orange sheeting and fluorescent yellow sheeting shall have the capacity to effectively fluoresce outdoors under low light conditions. For all applications requiring fluorescent orange sheeting or fluorescent yellow sheeting, the contractor shall provide a letter to the Engineer from the manufacturer certifying that the sheeting to be used is fluorescent.

1007-6 Adhesive: the first paragraph of the Standard Specifications is revised to read:

Reflective sheeting and film adhesives shall be Class I as specified in ASTM D 4956 and as modified herein.

1007-6 Adhesive: the third paragraph of the Standard Specifications is hereby deleted:

1007-8 Durability Requirements: the second and third paragraphs of the Standard Specifications are revised to read:

Sheeting shall be weather-tested as specified above in Subsection 1007-7. Sheeting weather-testing periods and durability ratings shall be as specified in Table 1007-8. In all cases, the related inks and films shall be tested along with the respective sheeting, and shall be subject to the same durability requirements as the sheeting.

TABLE 1007-8			
ASTM Sheeting Type	Color	Weather-testing period, months	Durability rating, years
XI	Fluorescent yellow	42	7
XI	Fluorescent orange	18	3
XI	All other colors	60	10
IX	Fluorescent orange	18	3
IX	All other colors	60	10
VIII	Fluorescent orange	18	3
VIII	All other colors	30	5
VI	Fluorescent orange	18	3
IV	All colors	30	5
I	All colors	30	5

REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- I. General
- II. Nondiscrimination
- III. Nonsegregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Compliance with Governmentwide Suspension and Debarment Requirements
- XI. Certification Regarding Use of Contract Funds for Lobbying

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. **Equal Employment Opportunity:** Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under

this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.

b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: 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, pre-apprenticeship, and/or on-the-job training."

2. **EEO Officer:** The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

3. **Dissemination of Policy:** All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. **Recruitment:** When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

5. **Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. **Training and Promotion:**

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are

applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar

with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurance Required by 49 CFR 26.13(b):

a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.

b. 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 contracting agency deems appropriate.

11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor

will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages

a. 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 regulations issued 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 equivalents 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.d. 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 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 paragraph 1.b. 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 be easily seen by the workers.

b.(1) 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:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is utilized in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) 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, DC 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.

(3) 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 Wage and Hour Administrator for determination. The Wage and Hour 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.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, 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.

c. 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.

d. 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 contracting agency 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 Davis-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 the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, 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

a. 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 section 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 cost 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.

b.(1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..

(2) 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:

(i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(ii) That each laborer or 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;

(iii) 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.

(3) 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.b.(2) of this section.

(4) 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.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, 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 FHWA may, after written notice to the contractor, the contracting agency or the State DOT, 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

a. Apprentices (programs of the USDOL).

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, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, 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 Office of Apprenticeship Training, Employer and Labor Services 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 Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, 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.

b. Trainees (programs of the USDOL).

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.

c. 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.

d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

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 Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 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 5.5.

7. Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 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.

a. 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).

b. 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).

c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

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 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.) of this section, the contractor and any subcontractor responsible therefor 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.) of this section, 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.) of this section.

3. Withholding for unpaid wages and liquidated damages. The FHWA or the contracting agency 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 moneys 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.) of this section.

4. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors 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.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:

- (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
- (2) the prime contractor remains responsible for the quality of the work of the leased employees;
- (3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
- (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is

evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.
2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more — as defined in 2 CFR Parts 180 and 1200.

1. Instructions for Certification – First Tier Participants:

- a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.
- b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this

covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which

this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contract). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

h. 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 clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the

department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 (49 CFR 20).

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. 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 Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-L.L.L., "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

**ATTACHMENT A - EMPLOYMENT AND MATERIALS
PREFERENCE FOR APPALACHIAN DEVELOPMENT
HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS
ROAD CONTRACTS**

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY
CONSTRUCTION CONTRACT SPECIFICATIONS
EXECUTIVE ORDER 11246, July 1, 1978

(Revised November 3, 1980)

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, United States 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:

(i) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);

(ii) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);

(iii) 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

(iv) 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 or 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 must 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 7 a through p 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

5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has 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 nonworking training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must 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 on-site 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 site 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 therefor, 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 women 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 on site supervisory personnel such as 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

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.

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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 nonsegregated 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 supervisors' 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 actions obligations (7a through p). The efforts of a contractor association, joint contractor- union, contractor community, or other similar group of which the contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7a through p 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, the Contractor may be in violation of the Executive Order if a 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 under utilized).

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 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 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 numbers, 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 an imitation 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).

Title VI/Non-Discrimination Assurances

APPENDIX A

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. **Compliance with Regulations:** The contractor (hereinafter includes consultants) will comply with the Acts and the Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, the *Federal Highway Administration*, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.
2. **Non-discrimination:** The contractor, with regard to the work performance by it during the contract, will 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 will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.
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 will be notified by the contractor of the contractor's obligations under this contract and the Acts and Regulations relative to Non-discrimination on the grounds of race, color, or national origin.
4. **Information and Reports:** The contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the *Federal Highway Administration* to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the Recipient or the *Federal Highway Administration*, as appropriate, and will set forth what efforts it has made to obtain the information.
5. **Sanctions for Noncompliance:** In the event of a contractor's noncompliance with the Non-discrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the *Federal Highway Administration* may determine to be appropriate, including, but not limited to:
 - a. withholding payments to the contractor under the contract until the contractor complies; and/or
 - b. cancelling, terminating, or suspending a contract, in whole or in part.
6. **Incorporation of Provisions:** The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor will take action with request to any subcontract or procurement as the Recipient or the *Federal Highway Administration* may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

Title VI/Non-Discrimination Assurances**APPENDIX E**

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

Pertinent Non-Discrimination Authorities:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d *et seq.*, 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21.
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 *et seq.*), (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 *et seq.*), as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 *et seq.*), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131-12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;
- The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1687 *et seq.*).

NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION
TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY
(EXECUTIVE ORDER 11246)

JULY 1, 1978 (Revised November 3, 1980)

(Revised April 15, 1981)

1. The bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Specifications" set forth herein.

2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate work force in each trade on all construction work in the covered area, are as follows:

	Minority	Female
Tucson and balance of Pima County	24.1	6.9
Cochise, Graham, Greenlee and Santa Cruz Counties	27.0	6.9
Phoenix and balance of Maricopa County	15.8	6.9
Apache, Coconino, Gila, Mohave, Navajo, Pinal, Yavapai and Yuma Counties	19.6	6.9

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally assisted) performed in all areas where he has Federal or federally assisted work.

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 must 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.

EQUAL EMPLOYMENT OPPORTUNITY
COMPLIANCE REPORTS

(Project, Training and Annual)

Federal-Aid Projects

February 1, 1977; Revised July 1, 1978; Revised November 3, 1980
Revised April 15, 1981; Revised September 7, 1983
Revised October 15, 1998; Revised August, 1, 2005;
Revised March 1, 2015

ANNUAL REPORT:

For each contract in the amount of \$10,000 or more, and for each subcontract, regardless of tier not including material suppliers, in the amount of \$10,000 or more, the contractor and each subcontractor regardless of tier shall submit an annual Equal Employment Opportunity (EEO) Report containing all the information required on Form FHWA-1391. Contractors and subcontractors are required to submit the required information through the LCPtracker system, a labor compliance software monitoring certified payroll and prevailing wage.

The staffing figures to be reported should represent the project workforce on board in all or any part of the last payroll period preceding the end of July.

The report shall be submitted no later than September 1.

General Decision Number: AZ160008 11/25/2016 AZ8

Superseded General Decision Number: AZ20150008

State: Arizona

Construction Type: Highway

Counties: Coconino, Maricopa, Mohave, Pima, Pinal, Yavapai
and Yuma Counties in Arizona.

HIGHWAY CONSTRUCTION PROJECTS

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.15 for calendar year 2016 applies to all contracts subject to the Davis-Bacon Act for which the solicitation was issued on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.15 (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2016. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/08/2016
1	10/07/2016
2	11/25/2016

CARP0408-005 10/01/2015

	Rates	Fringes
CARPENTER (Including Cement Form Work).....	\$ 24.63	11.54

* ENG10428-001 09/01/2016

	Rates	Fringes
POWER EQUIPMENT OPERATOR		
Group 1.....	\$ 22.34	9.68
Group 2.....	\$ 26.61	9.68
Group 3.....	\$ 27.69	9.68
Group 4.....	\$ 28.72	9.68

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 08/01/2015

COCONINO, MARICOPA, MOHAVE, YAVAPAI & YUMA COUNTIES

	Rates	Fringes
Ironworker, Rebar.....	\$ 26.00	21.77

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 06/01/2016

	Rates	Fringes
Laborers:		
Group 1.....	\$ 17.18	5.01
Group 2.....	\$ 18.08	5.01
Group 3.....	\$ 18.78	5.01
Group 4.....	\$ 19.72	5.01
Group 5.....	\$ 20.58	5.01

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.

PAIN0086-001 04/01/2014

	Rates	Fringes
PAINTER		
PAINTER (Yavapai County only), SAND BLASTER/WATER BLASTER (all Counties).....	\$ 19.50	4.85
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
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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.

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 a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 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. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that

no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

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

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
CONTRACTS AND SPECIFICATIONS SECTION

BID SCHEDULE

CONTRACT # 2016101

TRACS No.	Project No.	Item	County	District	Gross Length	Net Length	Prepared By:
040 YV 126 H870301C	040-A-(219)T	10217	YAVAPAI	NORTHWEST	35		Vian Rashid

Highway Termini	Location	Work Description
• KINGMAN-FLAGSTAFF HWY, I-40	• CROOKTON-HISTORIC 66 (WILLIAMS)	• SIGN REHABILITATION

BID SCHEDULE

040 YV 126 H870301C

Item No.	Item Description	Unit	Quantity	Unit Price	Extended Amount
2010001	CLEARING AND GRUBBING	L.SUM	1		
2020053	REMOVE (SIGNS, FOUNDATIONS & POSTS)(RWM/FDA SIGNS)	EACH	794		
2020054	REMOVE (SIGNS, FOUNDATIONS & POSTS)(EXTRUDED SIGNS)	EACH	148		
2020155	REMOVE (SIGNS,STRUCTURES, FOUNDATIONS AND POSTS)	EACH	92		
6070002	BREAKAWAY SIGN POST S4X7.7	L.FT.	188		
6070004	BREAKAWAY SIGN POST W6X12	L.FT.	1,455		
6070006	BREAKAWAY SIGN POST W8X18	L.FT.	1,767		
6070008	BREAKAWAY SIGN POST W10X22	L.FT.	246		
6070022	FOUNDATION FOR BREAKAWAY SIGN POST S4X7.7	EACH	14		
6070024	FOUNDATION FOR BREAKAWAY SIGN POST W6X12	EACH	99		
6070026	FOUNDATION FOR BREAKAWAY SIGN POST W8X18	EACH	119		
6070028	FOUNDATION FOR BREAKAWAY SIGN POST W10X22	EACH	15		
6070038	SLIP BASE (NEW)	EACH	558		
6070054	SIGN POST (PERFORATED) (2 S)	L.FT.	1,292		

BID SCHEDULE

040 YV 126 H870301C

Item No.	Item Description	Unit	Quantity	Unit Price	Extended Amount
6070055	SIGN POST (PERFORATED) (2 1/2 S)	L.FT.	1,199		
6070057	SIGN POST (PERFORATED) (2 1/2 T)	L.FT.	7,848		
6070060	FOUNDATION FOR SIGN POST (CONCRETE)	EACH	787		
6080005	WARNING, MARKER, OR REGULATORY SIGN PANEL	SQ.FT.	6,758		
6080010	SIGN PANEL (F-DA, HINGED/FOLDING SIGN)	SQ.FT.	372		
6080018	EXTRUDED ALUMINUM SIGN PANEL	SQ.FT.	11,609		
6080025	FLAT SHEET ALUMINUM SIGN PANEL	SQ.FT.	1,203		
7016030	BARRICADE (TYPE II, VERT.PANEL, TUBULAR MARKER)	EACH-DAY	40,250		
7016032	PORTABLE SIGN STANDS (RIGID)	EACH-DAY	6,370		
7016033	PORTABLE SIGN STANDS (SPRING TYPE)	EACH-DAY	1,168		
7016035	WARNING LIGHTS (TYPE A)	EACH-DAY	7,283		
7016037	WARNING LIGHTS (TYPE C)	EACH-DAY	40,250		
7016038	TRAFFIC CONE (28 INCHES)	EACH-DAY	19,390		
7016039	EMBEDDED SIGN POST	EACH-DAY	3,840		
7016050	TRUCK MOUNTED ATTENUATOR	EACH-DAY	150		

BID SCHEDULE

040 YV 126 H870301C

Item No.	Item Description	Unit	Quantity	Unit Price	Extended Amount
7016051	TEMPORARY SIGN (LESS THAN 10 S.F.)	EACH-DAY	2,499		
7016052	TEMPORARY SIGN (10 S.F. OR MORE)	EACH-DAY	4,784		
7016061	FLASHING ARROW PANEL	EACH-DAY	97		
7016067	CHANGEABLE MESSAGE BOARD (CONTRACTOR FURNISHED)	EACH-DAY	167		
7016078	FLAGGING SERVICES (LOCAL ENFORCEMENT OFFICER)	HOURL	280		
7016080	FLAGGING SERVICES (DPS)	HOURL	280	\$65.26	\$18,272.80
7030080	OBJECT MARKER (M-23) (TYPE 3(1))	EACH	72		
7030084	OBJECT MARKER (M-23) (TYPE 1 OR 4)	EACH	4		
7030090	REFERENCE MARKER (M-30)	EACH	39		
7030095	MILEPOST MARKER (S-10)	EACH	73		
8050003	SEEDING (CLASS II)	ACRE	2		
9010001	MOBILIZATION	L.SUM	1		
9240010	FORCE ACCOUNT WORK (REMOVING EXISTING PAVED RAMP AND GRADING)	L.SUM	1	\$35,000.00	\$35,000.00
9240119	MISCELLANEOUS WORK (2-CLAMP BRACKET)	EACH	6		

BID SCHEDULE

040 YV 126 H870301C

Item No.	Item Description	Unit	Quantity	Unit Price	Extended Amount
9240181	MISCELLANEOUS WORK (CONTROL OF NOXIOUS PLANTS)(MANUAL / MECHANICAL METHODS)	SQ.YD.	6,010		
9240182	MISCELLANEOUS WORK (CONTROL OF NOXIOUS PLANTS)(HERBICIDE)	SQ.YD.	7,346		
9250001	CONSTRUCTION SURVEYING AND LAYOUT	L.SUM	1		

BID TOTAL :

PROPOSAL

TO THE ARIZONA DEPARTMENT OF TRANSPORTATION:

Gentlemen:

The following Proposal is made for constructing project

040 YV 126 H870301C NHPP-040-A(219)T
KINGMAN - FLAGSTAFF HIGHWAY, I-40
Crookton - Historic 66 (Williams)

in the State of Arizona.

The following Proposal is made on behalf of _____

and no others.

(NAME OF COMPANY, FIRM, OR CORPORATION)

The undersigned hereby certifies that (s)he has been duly authorized to submit a proposal on behalf of the company, firm, or corporation mentioned above; and further certifies, pursuant to Subsection 112(c) of Title 23, United States Code and Title 44, Chapter 10, Article 1 of the Arizona Revised Statutes, that neither (s)he nor anyone associated with the company, firm, or corporation mentioned above has, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with such project and furthermore that no member or employee of the Arizona Department of Transportation is personally or financially interested, directly or indirectly, in the Proposal, or in any purchase or sale of any materials or supplies for the work to which it relates, or in any portion of the profits thereof.

The undersigned certifies that the approved Plans, Standard Specifications, Special Provisions and forms of Contract and Bond authorized by the Arizona Department of Transportation and constituting essential parts of this proposal, have been carefully examined, and also that the site of the work has been personally inspected. The undersigned declares that the amount and nature of the work to be done is understood and that at no time will misunderstanding of the Plans, Specifications, Special Provisions, or conditions to be overcome, be plead. On the basis of Plans, Specifications, Special Provisions, and the forms of Contract and Bond proposed for use, the undersigned proposes to furnish all the necessary equipment, materials, machinery, tools, apparatus, and other means of construction, and labor to do all the work in the manner specified, and to accept, as full compensation therefor, the sum of the various products obtained by multiplying each unit price, herein bid for the work or materials, by the quantity thereof actually incorporated in the complete project, as determined by the State Engineer. The undersigned understands that the quantities mentioned herein are approximate only and are subject to increase or decrease and hereby proposes to perform all quantities of work as either increased or decreased, in accordance with the provisions of the Specifications, at the unit price bid in the Bidding Schedule.

The undersigned further proposes to perform all extra work that may be required on the basis provided in the Specifications and to give such work personal attention and to secure economical performance.

The undersigned further proposes to execute the Contract Agreement and furnish satisfactory Bond within ten calendar days from the date of Notice of Award, time being of the essence. The undersigned further proposes to begin work as specified in the contract attached hereto, and to complete the work on or before expiration of the contract time as defined in the Specifications, and maintain at all times a Payment Bond and a Performance Bond, approved by the State Engineer, in an amount equal to one hundred (100) percent of the total bid. These bonds shall serve not only to guarantee the completion of the work on the part of the undersigned, but also to guarantee the excellence of both workmanship and material and the payment of all obligations incurred, until the work is finally accepted and the provisions of the Plans, Standard Specifications and Special Provisions fulfilled.

A Proposal Guaranty in the amount and character named in the Advertisement for Bids is enclosed, which Proposal Guaranty is submitted as a guaranty of the good faith of the bidder, and that the bidder will enter into written contract, as provided, to do the work, if successful in securing the award thereof, and it is hereby agreed that if at any time other than as provided in the Proposal there should be failure on the part of the undersigned to execute the Contract and furnish satisfactory Bond as herein provided, the State of Arizona, in either of such events, shall be entitled and is hereby given the right to retain the said Proposal Guaranty as liquidated damages.

If by a Corporation:

(Seal)

Corporate Name: _____

Corporate Mailing Address: _____ Zip Code: _____

Incorporated under the laws of the State of: _____

By (Signature): _____ Date: _____

President: _____

Secretary: _____

Treasurer: _____

If by a Firm or Partnership:

Firm or Partnership Mailing Name: _____

Firm or Partnership Address: _____

By (Signature): _____ Date: _____

Name and Address of Each Member: _____

If by an Individual:

Signature: _____ Date: _____

Mailing Address: _____

ARIZONA DEPARTMENT OF TRANSPORTATION
SURETY (BID) BOND
(Penalty of this bond must not be less than 10% of the bid amount)



KNOW ALL MEN BY THESE PRESENTS, THAT _____

as Principal, hereinafter called the Principal, and _____

_____ a corporation duly organized under the laws of the state of _____ hereinafter called the Surety, holding a certificate of authority to transact surety business in this State issued by the Director of the Department of Insurance, are held and firmly bound unto the Arizona Department of Transportation, as Obligee, hereinafter called the Obligee, in the sum of Ten Percent (10%) of the amount of the bid of Principal, submitted by Principal to the Arizona Department of Transportation for the work described below, for the payment of which sum well and truly to be made, the said Principal and the said Surety bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal is herewith submitting its proposal for TRACS/Project No.

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KINGMAN - FLAGSTAFF HIGHWAY, I-40
Crookton - Historic 66 (Williams)

NOW THEREFORE, if the Obligee, acting by and through its Transportation board, shall accept the proposal of the Principal and the Principal shall enter into contract with the Obligee in accordance with the terms of such proposal, and give such bonds and certificates of insurance as may be specified in the contract documents with good and sufficient surety for the faithful performance of such contract and for the prompt payment of labor and material furnished in the prosecution thereof, or in the event of the failure of the Principal to enter into such contract and give such bonds and certificates of insurance, if the Principal shall pay to the Obligee the difference not to exceed the penalty of the bond between the amount specified in the proposal and such larger amount for which the obligee may in good faith contract with another party to perform the work covered by the proposal then this obligation is void. Otherwise it remains in full force and effect.

IN WITNESS WHEREOF, we hereunto set our hands and seals:

Principal

Surety

By

By Attorney-in-Fact

Title

Address Attorney-in-Fact

Subscribed and sworn before me
this _____ day of _____, 20 _____.

My Commission expires: _____

**CERTIFICATION WITH REGARD TO THE PERFORMANCE OF
PREVIOUS CONTRACTS OR SUBCONTRACTS SUBJECT TO THE
EQUAL OPPORTUNITY CLAUSE AND THE FILING OF REQUIRED REPORTS
APRIL, 1969**

The bidder _____, proposed subcontractor _____, hereby certifies that he has _____, has not _____, participated in a previous contract or subcontract subject to the equal opportunity clause, as required by Executive Orders 10925, 11114, or 11246, and that he has _____, has not _____, filed with the Joint Reporting committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements.

(Company)

By: _____

(Title)

Date: _____

Note: The above certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor (41 CFR 60-1.7b (1),) and must be submitted by bidders and proposed subcontractors only in connection with contracts and subcontracts which are subject to the equal opportunity clause. Contracts and subcontracts which are exempt from the equal opportunity clause are set forth in 41 CFR 60-1.5 (Generally only contracts or subcontracts of \$10,000 or under are exempt.)

Currently, Standard Form 100 (EEO-1) is the only report required by the Executive Orders or their implementing regulations.

Information concerning Standard Form 100 (EEO-1) is available from:

Joint Reporting Committee
P.O. Box 19100
Washington, D.C. 20036-9100

Proposed prime contractors and subcontractors who have participated in a previous contract or subcontract subject to the Executive Orders and have not filed the required reports should note that 41 CFR 60-1.7(b)(1) prevents the award of contracts and subcontracts unless such contractor submits a report covering the delinquent period or such other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U.S. Department of Labor.

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R7/03

**CERTIFICATION WITH RESPECT TO THE
RECEIPT OF ADDENDA**

In the submission of a bid and by the signing of the Proposal, this will certify that the following numbered addenda issued on this project have been brought to my personal attention and furthermore that I understand and agree that those will be made a part of the Contract.

Addendum No. _____, _____, _____, _____, _____

PRINT NAME OF CONTRACTOR

SIGNATURE

TITLE

DATE

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**ARIZONA DEPARTMENT OF TRANSPORTATION
PARTICIPATION IN BOYCOTT OF ISRAEL CERTIFICATION FORM**

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This Certification is required in response to legislation enacted to prohibit the State from contracting with companies currently engaged in a boycott of Israel. To ensure compliance with A.R.S. §35-393.01, this form must be completed and returned with the bid. The bidder understands that this response will become public record and may be subject to public inspection.

As defined by A.R.S. §35-393.01:

1. "Boycott" means engaging in a refusal to deal, terminating business activities or performing other actions that are intended to limit commercial relations with Israel or with persons or entities doing business in Israel or in territories controlled by Israel, if those actions are taken either:
 - (a) In compliance with or adherence to calls for a boycott of Israel other than those boycotts to which 50 United States Code section 4607(c) applies.
 - (b) In a manner that discriminates on the basis of nationality, national origin or religion and that is not based on a valid business reason.
2. "Company" means a sole proprietorship, organization, association, corporation, partnership, joint venture, limited partnership, limited liability partnership, Limited Liability Company or other entity or business association, and includes a wholly owned subsidiary, majority-owned subsidiary, parent company or affiliate.
3. "Direct holdings" means all publicly traded securities of a company that are held directly by the state treasurer or a retirement system in an actively managed account or fund in which the retirement system owns all shares or interests.
4. "Indirect holdings" means all securities of a company that are held in an account or fund, including a mutual fund, that is managed by one or more persons who are not employed by the state treasurer or a retirement system, if the state treasurer or retirement system owns shares or interests either:
 - (a) Together with other investors that are not subject to this section.
 - (b) That are held in an index fund.
5. "Public entity" means this State, a political subdivision of this STATE or an agency, board, commission or department of this state or a political subdivision of this state.
6. "Public fund" means the state treasurer or a retirement system.
7. "Restricted companies" means companies that boycott Israel.
8. "Retirement system" means a retirement plan or system that is established by or pursuant to title 38.

All Bidders must select one of the following:

_____ The bidder does not participate in, and agrees not to participate in during the term of the contract a boycott of Israel in accordance with A.R.S. §35-393.01.

_____ The bidder **does** participate in a boycott of Israel as defined by A.R.S. §35-393.01.

By submitting this response, the bidder agrees to indemnify and hold the State, its agents and employees, harmless from any claims or causes of action relating to the State's action based upon reliance on the above representations, including the payment of all costs and attorney fees incurred by the State in defending such an action.

_____ Company Name	_____ Signature of Person Authorized to Sign
_____ Address	_____ Printed Name
_____ City State Zip	_____ Title

ARIZONA DEPARTMENT OF TRANSPORTATION

**DISADVANTAGED BUSINESS ENTERPRISE (DBE)
GOAL ASSURANCE**

The undersigned, fully cognizant of the requirements and of the goal established, hereby certifies that in the preparation of this bid for federal aid project:

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(CHECK ONE)

_____ The bidder has met the established DBE goal and arrangements with certified DBEs have been made prior to the submission of the bid, or

_____ The bidder has been unable to meet the established DBE goal prior to the submission of the bid and has made good faith efforts to do so.

THIS CERTIFICATE MAY NOT BE REVISED OR CORRECTED AFTER SUBMISSION OF THE BID.

If the bidder certifies that it has met the goal, the bidder cannot change its position after submission of the bid and submit documentation of a good faith effort. If the bidder certifies that it has been unable to meet the goal and has made a good faith effort, the bidder cannot change its position after submission of the bid and claim to have met or be able to meet the established goal.

In accordance with the DBE Special Provisions, the bidder shall specify its DBE participation on the "DBE Intended Participation Affidavit", or provide documentation of its good faith efforts, by 4:00 p.m. on the seventh calendar day following the bid opening. The apparent low bidder shall obtain the required affidavit from the Business Engagement & Compliance Office (BECO) website at <http://www.azdot.gov/bec> or email contractorcompliance@azdot.gov

Print Name of Firm

Print Name of Authorized Officer of Firm

Signature of Authorized Officer of Firm

Title