



## **ADVERTISEMENT FOR BIDS**

### **SPECIAL PROVISIONS**

### **BIDDERS DOCUMENTS**

#### **TRACS/Proj. No.:**

040 CN 159 F085701C 040-C(235)T  
ASHFORK-FLAGSTAFF HIGHWAY (I-40)  
(WEST OF WILLIAMS (ER))

**Contracts and Specifications Group**  
**205 S. 17<sup>TH</sup> Ave., 2<sup>nd</sup> Floor, M/D 121F**  
**Phoenix, Arizona 85007-3217**

**ARIZONA DEPARTMENT OF TRANSPORTATION**

**ADVERTISEMENT FOR BIDS**

BID OPENING: Friday, January 09, 2026, AT 11:00 A.M. (M.S.T.)

TRACS NO            040 CN 159 F085701C  
PROJECT NO        040-C(235)T  
TERMINI            ASHFORK – FLAGSTAFF HIGHWAY (I-40)  
LOCATION             WEST OF WILLIAMS (ER)

ROUTE NO.	MILEPOST	DISTRICT	ITEM NO.
I-40	159.2	NORTHCENTRAL	105472

The amount programmed for this contract is \$920,000. The location and description of the proposed work are as follows:

The proposed project is located in Coconino County along Interstate 40 at approximately milepost 159.2, near Williams. The work includes removing the existing Portland cement concrete pavement and installing new Portland cement concrete pavement. The work also includes removing existing asphaltic concrete on the shoulders and installing new asphaltic concrete, guardrail, signing, pavement marking, rumble strip, seeding and other related work.

The time allowed for the completion of the work included in this contract will be 70 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 to §§ 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.

Contract documents, and other project documents, if applicable, are available as electronic files, at no charge, from the Department's website through the ADOT Contracts and Specifications Group (<https://azdot.gov/business/contracts-and-specifications/current-advertisements>).

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

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 may be obtained from the Contracts and Specifications website.

This project requires electronic bidding. If a request for approval to bid as a Prime Contractor is received less than five working days prior to bid opening, the Department cannot guarantee the request will be acted on.

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.

Persons that require a reasonable accommodation based on language or disability should contact ADOT's Contracts and Specifications Office by phone (602) 712-7221. Requests should be made as early as possible to ensure the State has an opportunity to address the accommodation.

*Las personas que requieran asistencia (dentro de lo razonable) ya sea por el idioma o discapacidad deben ponerse en contacto con ADOT (602) 712-7221.*

The bidder shall provide an electronic proposal guaranty payable to the Arizona Department of Transportation for 10 percent of the amount of the bid.

Prior to the bid opening date, any questions pertaining to the project documents shall be submitted to the Department in a written format through the Bid Express (Bidx) website at <https://www.bidx.com/az/lettings>. Questions shall be submitted through the Questions and Answers (Q&A) link located within the corresponding letting date and project proposal number links. The Department may not answer all questions, and any decision on whether a question is answered will be within the sole discretion of the Department. Any questions received less than three working days prior to the bid opening date may not be answered.

The Engineering Specialist assigned to this project is: Jakob Rassi, [jrassi@azdot.gov](mailto:jrassi@azdot.gov), any correspondence with the Engineering Specialist is subject to posting onto Bidx through the project's Q&A link. Answers to questions will not be given verbally, but will be posted exclusively to the Bidx website.

Brahama Singh, PE,  
Group Manager,  
Contracts & Specifications

Project Advertised on: 09-11-2025

## **SPECIAL PROVISIONS**

FOR

ARIZONA PROJECT

**040 CN 159 F085701C**

**040-C(235)T**

**ASHFORK - FLAGSTAFF HWY (I-40)**

West of Williams

### **Pavement Rehabilitation**

#### **PROPOSED WORK:**

The proposed project is located in Coconino County along Interstate 40 at approximately milepost 159.2, near Williams. The work includes removing the existing Portland cement concrete pavement and installing new Portland cement concrete pavement. The work also includes removing existing asphaltic concrete on the shoulders and installing new asphaltic concrete, guardrail, signing, pavement marking, rumble strip, seeding and other related work.

**PROFESSIONAL ENGINEER SEALS:**

These Special Provisions represent the combined efforts of the following organization:

- (1) Arizona Department of Transportation

A representative of each Group/Section within the organization has affixed their seal below, which attests that portions of these Special Provisions were prepared under their direction.



**Contracts and Specifications Group**



*E. Leroy Brady*  
**Roadside Development Section**

**(SPC00FA, 06/19/25)**

**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 2021,

Arizona Department of Transportation, Roadway Engineering Group, Construction Standard Drawings, listed in the project plans, and available on the Department's website,

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

Arizona Department of Transportation, Traffic Engineering Group, Temporary Traffic Control Design Guidelines, dated April, 2025, 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 which includes the following documents:**

These Special Provisions,

Required Contract Provisions Federal-Aid Construction Contracts (Form FHWA 1273 Revised October 23, 2023),

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,

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,

Forced Labor of Ethnic Uyghurs Ban Certification Form, Rev. November 2022.

**BID SUBMISSION:**

**In submitting a bid, the bidder 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,

Certification With Respect to the Receipt of Addenda,

Participation in Boycott of Israel Certification Form, and

Forced Labor of Ethnic Uyghurs Ban Certification Form, Rev. November 2022.

**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; 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 & Specifications.

### **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 Services, located at 205 S. 17<sup>th</sup> Avenue, Phoenix, AZ 85007-3212. 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.

**(EPRISENGL, 12/19/24)**

### **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 Code of Federal Regulation Part 26 (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 (hereinafter DBE or DBE firm), 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:

- (A) To ensure nondiscrimination in the award and administration of USDOT-assisted contracts;
- (B) To create a level playing field on which DBEs can compete fairly for USDOT-assisted contracts;

- (C) To ensure that the DBE program is narrowly tailored in accordance with applicable law;
- (D) To ensure that only firms that fully meet 49 CFR Part 26 eligibility standards are counted as DBEs;
- (E) To help remove barriers to the participation of DBEs in USDOT-assisted contracts,
- (F) To assist in the development of firms that can compete successfully in the market place outside the DBE program; and
- (G) 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, sex or national origin 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 are not limited to:

- (A) Withholding monthly progress payments;
- (B) Assessing sanctions; and/or
- (C) 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 in 49 CFR Part 26.55. That definition is incorporated herein by reference.
- (B) Disadvantaged Business Enterprise (DBE):** A DBE, as defined in 49 CFR Part 26.5, is a for-profit small business concern which meets both of the following requirements:
  - (1) Is at least 51 percent owned by one or more individuals who are both socially and economically disadvantaged; and,

- (2) Whose management and daily business operations are controlled by one or more of the socially and economically disadvantaged individuals who own it.
- (C) **Joint Check:** a two-party check between a subcontractor, DBE and/or non-DBE, a prime contractor and the regular dealer of material supplies.
- (D) **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.
- (E) **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.
- (F) **Non-DBE:** any firm that is not a DBE.
- (G) **Race Conscious:** a measure or program is one that is focused specifically on assisting only DBEs, including women-owned DBEs.
- (H) **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.
- (I) **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.
- (J) **Socially and Economically Disadvantaged Individuals:** Socially and Economically Disadvantaged Individuals is defined in 49 CFR Part 26.5. That definition is directly incorporated here.

- (1) Any individual who is a citizen (or lawfully admitted permanent resident) of the United States and who has been subjected to racial or ethnic prejudice or cultural bias within American society because of his or her identity as a member of a group and without regard to his or her individual qualities. The social disadvantage must stem from circumstance beyond the individual's control.
- (2) Any individual who is found to be a socially and economically disadvantaged individual on a case-by-case basis. An individual must demonstrate that he or she has held himself or herself out, as a member of a designated group.
- (3) 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) Being born in a particular country does not, standing alone, mean that a person is necessarily a member of one of the groups listed in this definition.

#### **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  
Email: [contractorcompliance@azdot.gov](mailto:contractorcompliance@azdot.gov)  
Website: [www.azdot.gov/business/business-engagement-and-compliance](http://www.azdot.gov/business/business-engagement-and-compliance)

#### **4.01 Business Development Program:**

The Department has established the Business Development Program as an initiative to encourage and develop disadvantaged businesses in the highway construction industry. The Department is committed to providing new, emerging, developmental and transitional DBEs with general and firm-specific training and technical assistance. The Department intends for this assistance to aid DBEs to become competitive within the heavy highway and construction industry market places. In particular, the Department's DBE Supportive Services Program (DBE/SS) is designed to work in collaboration with stakeholder organizations (including departments and agencies of State and Federal Governments, small business organizations, tribal governments, profit and nonprofit corporations) to help DBEs to successfully compete for highway construction projects and become self-sufficient. The program provides educational opportunities for DBEs regarding current market conditions, Federal regulatory compliance, and best business practices. These efforts are reinforced with one-on-one business counseling for DBEs certified in areas that directly support Federal-aid highway projects, small group workshops, conferences, business expositions, regular in-person training opportunities, and regular virtual training opportunities. For guidance regarding this program, refer to the Business Development Program Guidelines available on the BECO website at <https://azdot.gov/business/business-engagement-and-compliance/dbe-supportive-services/business-development-program/disadvantaged-business-enterprise-dbe-program/dbe>.

The Business Development Program is intended to increase legitimate DBE activities. The program operates in conformity with the Federal DBE rules and regulations. The Department's DBE/SS participants may not circumvent the Federal DBE rules or regulations.

#### **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 efforts 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 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:

- (A) The completion and execution of an application for certification as a "Disadvantaged Business Enterprise".
- (B) 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.
- (C) 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.
- (D) 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 UCP agency at any time through the Arizona Unified Transportation Registration and Certification System (AZ UTRACS) website at <https://utracs.azdot.gov/Home/>.

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.

The Department is a member of the AZ Unified Certification Program (AZUCP). Only DBE firms that are certified by the AZUCP are eligible for credit on Department projects. A list of DBE firms certified by AZUCP is available on the internet at <https://utracs.azdot.gov/Home/>. The list will indicate contact information and specialty for each DBE firm, and may be sorted in a variety of ways. However, the Department does not guarantee the accuracy and/or completeness of this information, nor does the Department 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, the Department's DBE Program incorporates contracting requirements to facilitate participation by Small Business Concerns (SBCs) in federally assisted contracts. SBCs are for-profit businesses registered 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, the Department 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 DBE participation.

SBCs can register online at the AZ UTRACS website at <https://utracs.azdot.gov/Home/>. 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 DBE participation.

The Department encourages prime contractors to research the Federal Reserve Board website at [www.federalreserve.gov](http://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. 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. When 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 49 CFR 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. The Department 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 <https://utracz.azdot.gov/Home/> a centralized database for companies that seek to do business with the Department. This information will be maintained as confidential to the extent allowed by Federal and State law.

All prime contractors, subcontractors, and DBEs, shall: 1) register in AZ UTRACS, and 2) maintain their profile with current and accurate firm information. Bidders may verify that their firm and each subcontractor 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 Department has not established contract goals for DBE participation in this contract. Contractors are still encouraged to employ reasonable means to obtain DBE participation. Contractors must retain records in accordance with these DBE specifications. The

contractor is notified that this record keeping is important to the Department so that it can track DBE participation where only race neutral efforts are employed.

### **13.0 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.

### **14.0 Crediting DBE Participation:**

#### **14.01 General Requirements:**

To count toward DBE participation, the DBE firm must be certified 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](http://www.naics.com).

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.

The contractor bears the responsibility to determine whether the DBE possesses the proper contractor's license(s) to perform the work.

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 agreements such as: subcontract, purchase order, hourly rate, and rate per ton.

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.

The contractor may credit second-tier subcontracts issued to DBEs by non-DBE subcontractors. Any second-tier subcontract to a DBE 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 DBE participation 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 towards DBE participation.

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.

#### **14.02 Effect of Loss of DBE Eligibility:**

If a DBE or a DBE prime contractor is deemed ineligible, decertified, or suspended by the Department in accordance with 49 CFR Part 26.87 and 49 CFR Part 26.88, the following provisions shall apply:

- (A) If a DBE firm loses its DBE eligibility because the DBE firm was acquired by a non-DBE firm, no work performed by the DBE firm after the Decision Date will be counted toward DBE participation.
- (B) If a subcontract, contract, or supplier arrangement has been executed before the Decision Date, work performed by the DBE firm will be counted toward DBE participation.
- (C) If neither paragraph (A) nor paragraph (B) above applies, the work performed by the DBE firm after the Decision Date will be counted toward DBE participation.
- (D) If the contractor extends or adds work to the DBE firm's subcontract, that work will not be counted towards DBE participation unless the contractor has obtained prior approval from the Department for DBE credit. Any requests to extend or add work to the DBE firm's subcontract to count towards DBE participation shall be submitted using the request form, made available on BECO's website at <https://azdot.gov/business/business-engagement-and-compliance/dbe-contract-compliance/contract-specs-and-forms>, to extend Decertified DBE contract for DBE credit.
- (E) The Department will consent to such DBE credit only if the added work is within the foreseeable range of added work, given the circumstances of the original DBE contract.
- (F) For the purposes of this subsection, "Decision Date" means the date the Department notifies the DBE that it has become ineligible, decertified, or suspended under 49 CFR Part 26.87(c)(4), (g).

#### **14.03 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.

#### **14.04 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.

#### **14.05 Commercially Useful Function:**

A prime contractor can credit expenditures to a DBE subcontractor only if the DBE performs a commercially useful function (CUF) on the contract.

In conformity with 49 CFR Part 26.55(c), 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 within 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 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.

#### **14.06      Trucking:**

In conformity with 49 CFR Part 26.55(d), 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.

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 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. DBE participation 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.

#### **14.07 Materials and Supplies:**

In conformity with 49 CFR Part 26.55(e), the Department will credit expenditures with DBEs for material and supplies towards DBE participation as follows:

- (A) If the materials or supplies are obtained from a DBE manufacturer, 100 percent of the cost of the materials or supplies is credited.
  - (1) A DBE manufacturer is defined as: a firm that owns, or leases, and operates 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.
  - (2) Manufacturing includes blending or modifying raw materials or assembling components to create the product to meet contract specifications. When a DBE makes minor modifications to the materials, supplies, articles, or equipment, the DBE is not a manufacturer. Minor modifications are additional changes to a manufactured product that are small in scope and add minimal value to the final product.
- (B) If the materials or supplies are purchased from a DBE regular dealer, 60 percent of the cost of the materials or supplies, (including transportation costs), is credited.
  - (1) A DBE regular dealer is defined as: a firm that owns, or leases, and 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 sufficient quantities, and regularly sold or leased to the public in the usual course of business.
    - (a) 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.
    - (b) Items kept and regularly sold by the DBE are of the “general character” when they share the same material characteristics and application as the items specified by the contract.
  - (2) A firm may be a DBE regular dealer in such bulk items as petroleum products, steel, concrete or concrete products, stone or asphalt without owning and operating a place of business, as provided above, if the person both owns and operates distribution equipment used to deliver the products. Any supplementing of regular dealers’ own distribution equipment must be by a long-term operating lease, and not on an ad-hoc or contract-by-contract basis.
  - (3) A DBE supplier performs a CUF as a regular dealer and receives credit for 60 percent of the cost of materials or supplies, including transportation cost, when all, or at least 51 percent of, the items under a purchase order or subcontract are provided from the DBE's inventory, and when necessary, any minor quantities

delivered from and by other sources are of the general character as those provided from the DBE's inventory.

- (4) A DBE supplier of items that are not typically stocked due to their unique characteristics (e.g., limited shelf life or items ordered to specification) should be considered in the same manner as a regular dealer of bulk items as described above. If the DBE supplier of these items does not own or lease distribution equipment, as described above, it is not a regular dealer.
  - (5) Packagers, brokers, manufacturers' representatives, or other persons who arrange, facilitate or expedite transactions are not regular dealers within the meaning of this paragraph and the paragraph above.
- (C) If the materials or supplies are purchased from a DBE distributor that neither maintains sufficient inventory nor uses its own distribution equipment for the products in question, 40 percent of the cost of materials or supplies (including transportation costs) count for credit.
- (1) A DBE distributor is defined as: an established business that engages in the regular sale or lease of the items specified by the contract. A DBE distributor assumes responsibility for the items it purchases once they leave the point of origin (e.g., a manufacturer's facility), making it liable for any loss or damage not covered by the carrier's insurance.
  - (2) A DBE distributor performs a CUF when it demonstrates ownership of the items in question and assumes all risk for loss or damage during transportation, evidenced by the terms of the purchase order or a bill of lading (BOL) from a third party, indicating Free on Board (FOB) at the point of origin or similar terms that transfer responsibility of the items in question to the DBE distributor.
  - (3) If paragraph (1) and paragraph (2), above, are met, DBE distributors may receive 40 percent for drop-shipped items.
  - (4) Terms that transfer liability to the distributor at the delivery destination (e.g., FOB destination), or deliveries made or arranged by the manufacturer or another seller do not satisfy this requirement.
- (D) With respect to materials or supplies purchased from a DBE which is neither a manufacturer, a regular dealer, nor a distributor, the following standards shall apply:
- (1) The Department will credit the entire amount of the fees or commissions charged by the DBE for: (1) assistance in the procurement of the materials and supplies, or (2) fees or transportation charges for the delivery of materials or supplies required on a job site, toward DBE participation.
  - (2) The Department will only credit the fees or commissions charged by the DBE if the Department determines the fees to be reasonable and not excessive as compared with fees customarily allowed for similar services.

- (3) The cost of the materials and supplies themselves may not be counted toward DBE participation.
- (E) The Department will credit expenditures with DBEs for material and supplies (e.g. whether a firm is acting as a regular dealer, distributor or a transaction facilitator) towards DBE participation on a contract-by-contract basis.
- (F) The fact that a DBE firm qualifies under a classification (manufacturer, regular dealer, distributor or supplier) for one contract does not mean it will qualify for the same classification on another contract.
- (G) The bidder shall be responsible for verifying whether a DBE qualifies as a DBE manufacturer, regular dealer, distributor or supplier.
- (1) For each DBE firm listed as a regular dealer or distributor, the bidder must assess a DBE firm's eligibility for 60 or 40 percent credit, respectively, of the cost of materials and supplies based on its demonstrated capacity and intent to perform as a regular dealer or distributor.
- (2) To receive credit toward DBE participation, the bidder shall use and submit the form made available on BECO's website at <https://azdot.gov/business/business-engagement-and-compliance/dbe-contract-compliance/contract-specs-and-forms>, to affirm the DBE firm's capacity and intent to perform as a regular dealer or distributor.

## **15.0 Joint Checks:**

### **15.01 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.

- (A) 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.
- (B) 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.
- (C) A material or supply contract may not bear an excessive ratio relative to the DBE subcontractor's normal capacity.

- (D) 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.
- (E) 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.
- (F) 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.
- (G) The DBE must be responsible for receiving the check from the prime contractor and delivering the check to the supplier.
- (H) 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.

#### **15.02 Procedure and Compliance:**

- (A) 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.
- (B) 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.
- (C) 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.
- (D) 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.

#### **16.0 Certification of Final DBE Payments:**

DBE participation on the contract 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 completes its work.

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.

**17.0 False, Fraudulent, or Dishonest Conduct:**

In addition to any other remedies or actions, the Department will bring to the attention of the USDOT 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.

**(TITLEVI, 08/19/21)**

**STANDARD TITLE VI SPECIFIC ASSURANCES:**

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 to 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.

**GENERAL REQUIREMENTS:**

**BLM Material Sources:**

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 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.

**Use of Prohibited Products:**

The contractor shall not commit any of the following actions:

- (1) Deliver, install, or include any prohibited product under this contract.
- (2) Propose to deliver, install, or include any prohibited product under this contract.
- (3) Enter into a new contract to procure or obtain any prohibited product.

For the purpose of this Section, "Prohibited Product" is defined as any telecommunication or video surveillance equipment, systems, or services produced by:

- (1) Huawei Technologies Company.
- (2) ZTE Corporation.
- (3) Hytera Communications Corporation.
- (4) Hangzhou Hikivision Digital Technology Company.
- (5) Dahua Technology Company.
- (6) Any subsidiary or affiliate of the entities mentioned in this Section.

The contractor shall identify the known subsidiaries and affiliates of the aforementioned from the following Website: [https://umd.service-now.com/itsupport?id=kb\\_article\\_view&sysparm\\_article=KB0014132&sys\\_kb\\_id=28015b70d96193f1a51d96193f](https://umd.service-now.com/itsupport?id=kb_article_view&sysparm_article=KB0014132&sys_kb_id=28015b70d96193f1a51d96193f)

### **Erosion, Sediment Control and Stormwater Quality Protection:**

The contractor shall give attention to the impact of the construction operations upon the natural landscape and shall take care to maintain the 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. For project areas above/outside the Jurisdictional Waters of the U.S., the contractor shall minimize off-pavement (off-road) soil/ground disturbance at each discrete construction location to ensure disturbance is less than one acre (< 1 acre) beyond all new shoulder build-up areas (edge of pavement build-up areas). No unpaved temporary construction roads shall be created to directly connect discrete locations of soil/ground disturbance above/outside the Jurisdictional Waters of the U.S.

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

In addition to what is shown in the plans and/or details, the contractor shall apply perimeter/containment control Best Management Practices (BMPs) or temporary stormwater quality Control Measures (CMs) 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. The contractor shall also apply perimeter/containment control BMPs/CMs parallel to the slope contours and beyond the toe of new guardrail end treatment pad disturbed slopes. To prevent sediment from bypassing the perimeter control BMP/CM end, the end of the BMP/CM shall be turned up the slopes for a minimum of three (3) feet to

form an “L” shape. No portion of the BMPs/CMs shall be installed within six (6) feet from the edge of the pavement. BMPs/CMs shall not be placed over any driveways or access roads that intersect with the roadway mainline. Unless otherwise called out in the plans/details and approved by the Engineer, such BMPs/CMs shall not be placed on the flow path of inlets and outlets of drainage facilities. All BMPs/CMs shall be installed in accordance with the manufacturer’s instructions. Moreover, perimeter/containment control BMPs/CMs shall be applied outside and above adjacent wetlands, as well as water courses. The contractor shall adjust the field layout of erosion control and sediment prevention elements according to the actual limits of soil/ground disturbance as approved by the Engineer. The contractor shall also observe ADOT traffic safety standards when installing perimeter/containment control BMPs/CMs in the traffic clear zone/recovery area.

Wattles/logs, bio-socks, filter socks, compost socks, or compost tubes shall be deemed as temporary stormwater quality CMs/BMPs. The non-biodegradable and/or non-photodegradable components of such temporary CMs/BMPs shall be removed when the project site has achieved stabilization as approved by the Engineer. Rock materials used for temporary stormwater quality protection CMs/BMPs may be left on-site to cover unpaved disturbed soil area for permanent stabilization as approved by the Engineer. If approved, on-site rock materials shall be flattened and re-graded to match with the final unpaved finished grade.

The contractor is responsible for maintaining the functional longevity and good working conditions of all stormwater quality protection CMs/BMPs during the entire contract time. No separate measurement or direct payment will be made for the maintenance and/or replacement of such CMs/BMPs to assure manufacturer-specified functionality; the cost being considered is included in the price of the respective contract items.

The contractor is also responsible for protecting Storm Drain Inlets within the project limits from pollutants/contaminants discharged by construction at no additional cost to the Department.

Fine particles including minor miscellaneous dirt, dust, rock fragments, milled asphaltic concrete (AC) or construction debris that may be associated with stormwater discharges into catch basins / Storm Drain Inlets shall be prevented and controlled to maximum extent practicable (MEP) at no additional cost to the Department. Such compliance measures may include frequent dry vacuuming and/or pavement sweeping during construction to ensure no debris, dirt, dust, and material fragments will be built up within twenty-five (25) feet from catch basins / Storm Drain Inlets. On-site staging, material storage and stockpiling shall not be allowed within fifty (50) feet from catch basins / Storm Drain Inlets.

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 of within the project limits or its vicinity. The contractor shall install concrete washout CM/BMP as needed and under the direction of the Engineer at no additional cost to the Department. This CM/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 CMs/BMPs and as directed and approved by the Engineer. Staging and stockpiling on the unpaved areas shall be avoided to MEP.

### **Erosion and Sediment Control beyond the Project Limits:**

The contractor shall apply erosion/sediment and water quality protection CMs/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 CMs/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.

If the contractor elects to obtain off-project site for staging, stockpiling, material storage, maintenance yard, or waste disposal, the contractor shall meet the requirements for erosion control, sediment prevention, and stormwater quality protection measures within the written agreements with facility and/or the landowner, as well as environmental permits for such operations.

### **Ground Disturbance on areas above and outside the Waters of the United States (WOTUS):**

The contractor shall minimize the ground disturbance of any unpaved areas within the project limits. If the disturbance is not avoidable due to construction activities, the disturbance areas at each discrete location shall be less than one contiguous acre. If the disturbed areas equal or exceed one contiguous acre, the contractor shall conform to all applicable requirements of Subsection 104.09 of the specifications, the Arizona Pollutant Discharge Elimination System (AZPDES), and/or National Pollution Discharge Elimination System (NPDES) at no additional cost to the Department. Shoulder build-up areas will not be considered as disturbed areas.

**(101DEFN, 04/21/22)**

## **SECTION 101 DEFINITIONS AND TERMS:**

### **101.02 Definitions:**

**Acceptance:** of the Standard Specifications is hereby deleted:

**Characteristic:** of the Standard Specifications is revised to read:

A measurable or an observable property of a material, product, or item of construction.

**City, County, Township, or Town:** of the Standard Specifications is hereby deleted:

**Contract Bonds (Performance Bond and Payment Bond):** the title and text of the Standard Specifications is revised to read:

**Contract Bonds:**

Surety Bonds that include Performance Bond and Payment Bond.

**Highway, Street, or Road:** of the Standard Specifications is revised to read:

A general term denoting a public way for purposes of travel, vehicular, pedestrian or by other means, including the entire area within the right-of-way.

**Roadbed:** of the Standard Specifications is revised to read:

The graded portion of a highway, prepared as a foundation for the pavement structure and shoulders.

**Roadside Development:** of the Standard Specifications is revised to read:

Activities which provide for the preservation of landscape materials and features; the rehabilitation and protection against erosion of all areas disturbed by construction through seeding, sodding, mulching and the placing of other ground covers; or such planting and other improvements as may increase the effectiveness and enhance the appearance of the highway.

**State:** of the Standard Specifications is revised to read:

The State of Arizona, acting through its authorized representatives.

**(102NOBID, 09/19/12)**

**SECTION 102 BIDDING REQUIREMENTS AND CONDITIONS:**

**102.03 Suspension from Bidding:** of the Standard Specifications is modified to add:

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.

**(102LOBY, 01/21/21)**

**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 its 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 Group, 205 South 17<sup>th</sup> Avenue, 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 the bid or proposal, that it 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.

**(103AWARD, 09/17/20)**

## **SECTION 103 - AWARD AND EXECUTION OF CONTRACT:**

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

The Department will make the award to the lowest responsible bidder who has the proper licenses.

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 in accordance with the requirements of Subsection 102.16 of the specifications. 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.

## **SECTION 104 SCOPE OF WORK:**

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

Prior to construction, alterations to contract phasing, detours, and Maintenance and Protection of Traffic plans shall be reviewed by the Engineer at the preconstruction

conference or a pre-activity meeting based on the contractor's preliminary schedule and proposed contract phasing.

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

**(D) Project Specific Traffic Control, Workshifts, Holidays & Closures:**

The contractor shall maintain a minimum of one lane of traffic on I-40 WB during working hours, except as otherwise specified herein.

Construction activities shall be limited to the time period between 8:00 PM on a Sunday, Monday, Tuesday, Wednesday, or Thursday night and 6:00 AM the following morning unless otherwise approved by the Engineer. The contractor shall comply with the requirements specified in Subsection 108.05 of the specifications for performing nighttime work.

The contractor shall maintain traffic on the paved surface at all times.

The contractor shall preserve all existing roadway signs, sign supports, foundations, object markers, and milepost markers. The contractor shall replace any signs, sign supports, foundations, and markers, which are damaged due to a result of contractor's operations at no additional cost to the Department.

If double fines in work zones signing is requested and approved by the Engineer the plans shall conform to Figure SA-12 of the ADOT Traffic Control Design Guidelines, 2010. Such signing shall only be in place during work periods when workers are present in accordance with the guidelines for signing for double fines in work zones. If the contractor fails to remove the signs at the end of the work shift, the contractor will not be allowed to establish double fine work zones in advance and within the work zone.

Cones will not be permitted for use as channelizing devices.

Temporary traffic control devices shall not be set up in advance of the start time of a closure unless approved by the Engineer.

The contractor shall coordinate all traffic control closures with the contractors on adjacent projects and in accordance with Subsection 105.09 of the Specifications.

Traffic control devices will not be permitted to remain stockpiled on the shoulder until the next closure.

No lane or complete roadway closures shall occur on WB I-40 or on any other roadway during a holiday or holiday weekend.

Holidays are from 12:01 PM on the last working day preceding any holiday through 06:00 AM of the first working day following that holiday. However, when the holiday falls on Tuesday, the Monday before the holiday will also be considered a holiday and, when the holiday falls on a Thursday, the Friday following the holiday will also be considered a holiday.

The recognized holidays are:

<b>Holiday</b>
New Year's Day
MLK/Civil Rights Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Veterans Day
Thanksgiving Day
Christmas Day

**(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.

**(104ENVIR, 06/17/21)**

**SECTION 104 SCOPE OF WORK:**

**104.12**            **Environmental Analysis:** the fifth and sixth paragraphs of the Standard Specifications are revised to read:

If the contractor elects to do an environmental analysis and use any site, source, or access for the reasons listed above, they choose to do so at their own risk. It is the contractor's responsibility to exercise due diligence when selecting these sites and areas. The contractor shall bear all costs associated with the use of proposed sites, sources, and accesses.

The contractor shall promptly advise the Engineer that it is preparing the environmental analysis and shall submit to the Engineer for review and consultation. The Department will review the submittal and send it to the appropriate agencies and/or jurisdictions for consultation or return it to the contractor for revision. The contractor shall allow a minimum of 60 calendar days after submittal, or subsequent resubmittals, to the Department for the Department to review the environmental analysis and to consult with the appropriate jurisdictions and/or agencies. At the end of the review period, the Engineer will notify the contractor whether or not the environmental analysis is acceptable.

If the approval of the environmental analysis causes a delay to a controlling activity of the project due to the Department's actions in the aforementioned review process, the contractor may seek, and the Engineer may grant, an extension of time in accordance with the terms of Subsection 108.08 of the specifications. The time extension shall not exceed 30 working days for a working-day contract, or 45 calendar days for a calendar-day project. The time extension will not be considered unless the contractor can show evidence of the delay resulting due to the Department's actions in the review process. A time extension request will not be considered or granted for any other reason. No time extension will be granted for a fixed completion date contract.

**104.12**            **Environmental Analysis:** the items (G) and (O) of the seventh paragraph of the Standard Specifications is revised to read:

- (G) The archaeological survey of the proposed source prepared by a person who meets the Secretary of the Interior's Professional Qualification Standards (48 FR 44716) and possesses a current permit for archaeological survey issued by the Arizona State Museum (ASM). The survey shall be prepared in a State Historic Preservation Office (SHPO) standardized format. The survey shall identify all historic properties within the area of potential effect (APE), as defined by the National Historic Preservation Act (36 CFR 800.4). This includes the materials source, processing area, and the haul road. Additionally, the survey report shall identify the effects of the proposed source on any historic properties within the APE, and recommend measures to avoid, minimize, or mitigate those effects. The survey report shall be prepared by the contractor in accordance with SHPO and ASM formatting style for the Historic Preservation Specialist's initial review. After the initial review, the Department will consult with the landowner, SHPO, and Tribes for a minimum of 35 days for the final approval of the survey report.
- (O) A description of the impact on federally or state protected or other agency-specific special status wildlife and plants and their habitat, as defined in ADOT's consultant biological procedures on the Department's website. Compliance with the Arizona Native Plant Law shall be coordinated through the Arizona Commission of Agriculture and Horticulture.

**104.12 Environmental Analysis:** the eighth paragraph of the Standard Specifications is revised to read:

Guidance and forms for preparing the environmental analysis are available on the Department's website through the Environmental Planning Group, or by calling Environmental Planning Group at 602-712-7767.

**(104VEPC, 03/20/25)**

**SECTION 104 SCOPE OF WORK:**

**104.13 Value Engineering Proposals by the Contractor:** the third paragraph of the Standard Specifications is revised to read:

Any cost savings generated to the contract as a result of VEP offered by the contractor and approved by the Department will be shared between the contractor and the Department, with the contractor receiving 60 percent and the Department receiving 40 percent, as specified in Subsection 104.13(D) of the specifications.

**104.13(C) Conditions:** of the Standard Specifications is modified to add:

- (13) The contractor may submit a previously approved VEP from another project.

**104.13(D) Acceptance, Rejection and Payment:** the seventh paragraph of the Standard Specifications is revised to read:

- (6) The executed supplemental agreement shall provide that the contractor be paid 60 percent of the net savings amount as reflected by the difference between the cost of the revised work and the cost of the related construction required by the original contract computed at contract bid prices. The net savings will take into account the contractor's cost of developing the VEP and implementing the change, and reducing this amount by the Department's cost for investigating and evaluating the VEP, including any ascertainable collateral costs to the Department. Such collateral costs may include increased costs for maintenance, operation, related work items, additional work items, or elements of related or additional work items.

**SECTION 105 CONTROL OF WORK:**

**105.18 Opening of Sections of Project to Traffic:** of the Standard Specifications is modified to add:

Damage to the project resulting from a third-party shall be reported to the Engineer. Damages to permanent project features, determined by the Engineer as eligible for payment in accordance with the requirements of Subsection 104.04 of the specifications, will be paid for in accordance with Subsection 109.04 of the specifications.

**(106DMAT, 02/15/11)**

**SECTION 106 CONTROL OF MATERIALS:**

**106.15 Blank:** of the Standard Specifications is revised to read:

**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 0.1 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.

**(106CMATLS, 12/21/23)**

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

**106.17 Construction Materials:**

A construction material, when used on a federal-aid construction project shall comply with the requirements of Build America, Buy America (BABA) Act specified in Title IX, Subtitle A, Part 1, Sections 70901 and 70911-70918 (Pub. L. No. 117-58 §§ 70901; §§ 70911-70918) of the Infrastructure Investment and Job Act (IIJA).

A "construction material" that is permanently incorporated on the project shall include an article, material, or supply that is or consists primarily of the following:

1. Non-ferrous metals;
2. Plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables);
3. Glass (including optic glass);
4. Fiber optic cable (including drop cable);
5. Optical fiber;
6. Lumber;
7. Engineered wood; or
8. Drywall.

Items manufactured through a combination of either two or more materials listed above, or at least one of the materials listed above and a material not listed shall be considered as a manufactured product, rather than as a construction material.

Build America, Buy America provisions specified for manufactured products in Section 70912(6)(B) of the IIJA, do not apply to federal-aid construction projects per FHWA's existing statutory requirement applicable to manufactured products. A "manufactured product" is considered to be an item that undergoes one or more manufacturing processes before the item can be used on a federal-aid construction project.

Construction materials shall not include cement and cementitious materials; bituminous materials; aggregates such as stone, sand, or gravel; or aggregate binding agents or additives.

All construction materials shall be produced in the United States. This means, all manufacturing processes to produce the construction materials shall occur in the United States. All manufacturing processes for construction materials shall mean the final manufacturing process and the immediately preceding manufacturing stage for the construction material.

The contractor shall furnish the Engineer with Certificates of Compliance, conforming to the requirements of Subsection 106.05 of the specifications, which shall state that the construction materials incorporated in the project meet the requirements specified herein. Certificates of Compliance shall also certify that all manufacturing processes to produce construction materials occurred in the United States.

If the total cost of construction materials incorporated in the project is no more than 5% of the original contract amount or \$1,000,000, whichever is lesser, the requirements specified herein will not apply for such construction materials.

Convict-produced materials are prohibited in accordance with the requirements of 23 CFR 635.417.

**(107UINSLMTS, 02/20/25)**

## **SECTION 107 LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC:**

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

Without limiting any liabilities or any other obligations of the contractor, the contractor shall provide and maintain, if commercially available, the minimum insurance coverage listed below until all obligations under this contract are satisfied:

- (A) General Liability insurance with a minimum combined single limit of \$1,000,000 each occurrence applicable to all premises and operations, and a minimum general aggregate limit of \$2,000,000. The policy shall include coverage for bodily injury, broad form property damage (including completed operations), personal injury (including coverage for contractual and employee acts), blanket contractual, independent contractors, products and completed operations. Further, the policy shall include coverage for the hazards commonly referred to as XCU (explosion, collapse and underground). The products and completed operations coverage shall extend for one year past acceptance, cancellation or termination of the work. The policy shall contain a severability of interests provision.
- (B) Comprehensive Automobile Liability insurance with a combined single limit for bodily injury and property of not less than \$1,000,000 each occurrence with

respect to contractor's owned, hired, or non-owned vehicles, assigned to or used in performance of the work.

- (C) Workers' Compensation insurance to cover obligations imposed by Federal and State statutes having jurisdiction of its employees engaged in the performance of the work, and Employers' Liability insurance with a minimum limit of \$1,000,000. Evidence of qualified self-insured status will suffice for this subsection.

(107UTIL, 04/17/25)

## **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:

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

#### **NORTHCENTRAL DISTRICT**

(928) 774-1491

1959 S. Woodlands Village Blvd.  
Flagstaff, AZ 86001

**Email address:**

[northcentralpermit@azdot.gov](mailto:northcentralpermit@azdot.gov)

Due to the nature of this project, which is classed as pavement rehabilitation, conflicts are not anticipated with utilities. However, it shall be the contractor's responsibility to determine the exact location of all utilities in accordance with arizona 811 prior to commencing construction operations.

Power lines may exist at various locations throughout the project; however, they are not anticipated to be in conflict. The contractor shall keep a safe distance from all facilities. All work at or in close proximity to any utility 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 through .32).
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.

There is a railroad within ½ mile of the project limits. There is no railroad work on this project.

### **107.15(F) Sewage Discharge Damage Assessments:** of the Standard Specifications is revised to read:

The Department will assess sanctions in accordance with the Table 107.15-1 below for each 24-hour period, or portion thereof, for each unplanned breakage that occurs in an active sanitary sewer line as a result of the contractor's operation. The rate of these sanctions is based on the type and quantity of effluent discharged as determined by the Engineer.

These sanctions do not relieve the contractor from any of its responsibilities under the contract, including any liquidated damages that may be assessed under Subsection 108.09 of the specifications for late completion of the project.

The sanctions specified in this subsection will be independent of any penalties imposed by others.

The contractor acknowledges that Regulatory agencies may assess or impose civil or criminal penalties on the contractor resulting from sewer discharges.

The Department will not be responsible for any civil or criminal penalties, fines, damages, or other charges imposed on the contractor by any regulatory agency or court for sewage discharges that are a result, directly or indirectly, of the contractor's work performed under this contract.

<b>TABLE 107.15-1 SANCTIONS (EACH 24-HOUR PERIOD, OR PORTION THEREOF)</b>		
<b>Volume of Discharge</b>	<b>Raw Sewage or Industrial Wastewater</b>	<b>Treated Effluent</b>
Less than 10,000 gallons	\$5,000	\$1,000
10,000 to 99,999 gallons	\$10,000	\$2,000
100,000 to 1 million gallons	\$25,000	\$3,000
Greater than 1 million gallons	\$40,000	\$5,000

These sanctions will be assessed for each 24-hour period, or portion thereof, until the contractor has completed all of the following tasks:

- (1) Stopped the discharge;
- (2) Repaired the damaged pipe;
- (3) Restored normal service; and
- (4) Fully cleaned and disinfected the site to the satisfaction of the Engineer.

Upon completion of tasks (1), (2), and (3) above, and prior to completion of Task (4), the sanctions for the current 24-hour period will be at the rate shown in Table 107.15-1. However, for each subsequent 24-hour period, the assessment will be 1/2 of the rate shown in Table 107.15-1.

The sanctions will continue at the reduced rate until the site has been fully cleaned and disinfected to the satisfaction of the Engineer.

As an example, the amounts assessed each 24-hour period for an unplanned discharge of 20,000 gallons of raw sewage, in which the contractor completes tasks (1), (2), and (3) within the second 24-hour period but does not complete full cleanup until the third 24-hour period, will be as follows:

First 24-hour period:	\$10,000
Second 24-hour period:	\$10,000
Third 24-hour period:	\$5,000

For this example, the total sanction will be \$25,000 (\$10,000 + \$10,000 + \$5,000).

**(108SUBLT, 10/20/22)**

## **SECTION 108 PROSECUTION AND PROGRESS:**

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

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 retain \$1,000 from monies due or becoming due the contractor. The money retained will be for each subcontractor, of any tier, that starts work without the consent of the Engineer. These sanctions will be in addition to all other retention or liquidated damages provided for elsewhere in the contract.

**(108PRCN, 08/19/21)**

## **SECTION 108 PROSECUTION AND PROGRESS:**

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

At the preconstruction conference the contractor shall submit a progress schedule showing the order in which the contractor proposes to carry out the work, the dates on which the contractor and its subcontractors will start the work, including procurement of materials, equipment, etc.; the ordering of articles of special manufacture; the furnishing of drawings, plans and other data required under Subsection 105.03 of the specifications for the review and approval of the Engineer; the inspection of structural steel fabrication; and the contemplated dates for the completion. The schedule shall be in a critical path method format. No schedule activity shall be shorter than one day or longer than 20 days. The schedule must show interrelationships among the activities, and the controlling items of work throughout the project shall be identified. If requested by the Engineer, the contractor shall furnish information needed to justify activity time durations. Such information shall include estimated manpower, equipment, unit quantities, and production rates. The schedule shall illustrate the completion of the work not later than the contract completion date.

**108.04 Prosecution and Progress:** the third paragraph of the Standard Specifications is revised to read:

At a mutually convenient location and time, the contractor shall meet weekly with the Engineer to discuss construction activities; however, a meeting may be waived if mutually agreed to, due to weather conditions, work progress, or for other reasons. At the meetings, the contractor shall provide the Engineer with a detailed, written schedule of construction activities and phases of work for the current week, forthcoming three week period as well as the construction activities which were performed during the previous week. This schedule shall detail the anticipated start dates and anticipated completion dates of work activities. The weekly schedule should reflect, at a minimum, all activities from the most recently updated project schedule. For work which was completed during the previous week, this schedule shall detail the actual start and completion dates of work activities as well as indicate the status of major ongoing activities. Upon the second occurrence of the contractor failing to provide an accurate schedule as describe herein and after written notification by the Engineer of the first occurrence, the Department will deduct \$500 from the contractor's progress payment per each occurrence thereafter. Minutes of the weekly meetings will be kept by the Engineer and a copy given to the contractor for review and acceptance.

**(108TIME, 10/15/20)**

**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 70 working days, and will be known as the "Contract Time."

**(108RSLD, 06/19/2025)**

**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:

<b>SCHEDULE OF LIQUIDATED DAMAGES</b>			
<b>Original Contract Amount</b>		<b>Liquidated Damages Per Day</b>	
<b>From More Than:</b>	<b>To and Including:</b>	<b>Calendar Day or Fixed Date:</b>	<b>Working Day:</b>
\$ 0	\$ 500,000	\$ 300	\$ 1,000

<b>SCHEDULE OF LIQUIDATED DAMAGES</b>			
\$ 500,000	\$ 1,000,000	\$ 850	\$ 1,700
\$ 1,000,000	\$ 2,000,000	\$ 1,250	\$ 2,650
\$ 2,000,000	\$ 5,000,000	\$ 2,100	\$ 3,800
\$ 5,000,000	\$ 10,000,000	\$ 3,300	\$ 6,850
\$ 10,000,000	\$ 30,000,000	\$ 7,300	\$ 10,550
\$ 30,000,000	\$ 60,000,000	\$ 9,350	\$ 17,750
\$ 60,000,000	\$ 90,000,000	\$ 19,900	\$ 27,850
\$ 90,000,000	-----	\$ 27,450	\$ 38,400

**(109RRBB, 04/18/24)**

**SECTION 109 MEASUREMENT AND PAYMENT:**

**109.04(D)(3) Equipment:** the first paragraph of the Standard Specifications is revised to read:

Equipment which the Engineer considers necessary for the performance of work will be eligible for payment at the established rates only during the hours that it is operated except as otherwise allowed elsewhere in these specifications. Equipment hours will be recorded to the nearest one-half hour. For the use of equipment owned by the contractor and approved by the Engineer, the contractor will be paid the rental rates, as modified herein, outlined in the Rental Rate Blue Book® (RRBB) for Construction Equipment which is updated by EquipmentWatch™, a division of Fusable, 3200 Rice Mine Road NE, Tuscaloosa, Alabama 35406, phone (888) 307-1713. All rate determinations will be based on the RRBB quarterly rate revisions that are applicable at the time equipment is being used.

**(109FAEU, 08/15/24)**

**SECTION 109 MEASUREMENT AND PAYMENT:**

**109.04(D)(3)(a) Rental Rates (Without Operators):** the equation of the first paragraph of the Standard Specifications is revised to read:

The hourly equipment rental rate (HERR) will be determined by the following formula:

$$HERR = F \times \left[ \frac{1.15 \times R}{176} \right] + HOC$$

Where: F= Adjustment Factor to R is 0.933

R= Current RRBB Monthly Rate

HOC= Hourly Operating Cost

**(109WFADF, 05/15/25)**

**SECTION 109 MEASUREMENT AND PAYMENT:**

**109.04(D)(6) Statements:** the title and text of the Standard Specifications is revised to read:

**109.04(D)(6) Forms:**

The contractor shall prepare the Weekly Force Account Detail form for each week of force account activity. The Weekly Force Account Detail form is a standardized, fillable form made available by the Department on the ADOT Construction Group's website.

The form shall detail the labor, equipment, and material charges utilized to accomplish the force account work along with all supporting documentation. The contractor shall furnish copies of original receipts (paid invoice cost) for materials, rental equipment cost, including freight and transportation charges, copies of rental rate blue book equipment sheets and certified payrolls.

If materials used on the force account work are not specifically purchased for such work but are taken from the contractor's stock, then instead of invoices, the forms shall contain or be accompanied by an affidavit of the contractor certifying that such materials were taken from stock, that the quantity claimed was actually used, and that the price and transportation claimed represent the actual cost to the contractor.

Force account work shall be tracked daily; however, the contractor shall compile no more than one full week's worth of daily records into a Weekly Force Account Detail form. Each reporting period runs from Saturday through Friday. The contractor shall submit the form within 30 calendar days of the respective week's force account performance. The completed form shall be submitted to the Engineer for review and approval. The Engineer will review the form and supporting documentation against the ADOT Inspector's Daily Force Account Reports, and will verify that the form is timely, complete, and accurate. Payment will not be made until the contractor has furnished applicable forms, detailing the costs of the force account work, including but not limited to the following information:

- (a) Labor: name, classification, date, daily hours, hourly rate and fringe rate, and certified payrolls for each foreman and laborer.
- (b) Equipment: dates, equipment number, description, operator name, hours used, approved stand-by hours, monthly rental rate, hourly operating cost and rental rate blue book sheets for each unit of equipment.

- (c) Rental Equipment (Third Party): invoice, dates used, vendor name, description of equipment, operator name, hours used, invoice rate, hourly operating cost and rental rate blue book sheets for each rental equipment.
- (d) Materials: invoice, date used, supplier name, description, quantity, unit of measure and unit cost.
- (e) Transportation: freight and express charges on materials, FOB jobsite.

**(109RET, 10/20/22)**

**SECTION 109 MEASUREMENT AND PAYMENT:**

**109.06(B)(3) Partial Payment:** of the Standard Specifications is modified to add:

Notwithstanding any provision of Arizona Revised Statutes Section 28-6924, the parties may not agree otherwise.

**109.06(B)(4) Final Payment:** of the Standard Specifications is modified to add:

Notwithstanding any provision of Arizona Revised Statutes Section 28-6924, the parties may not agree otherwise.

**109.06 Partial Payments and Retention:** of the Standard Specifications is modified to add:

**(C) Payroll Submittals:**

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 a 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 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 sanctions. Such \$500.00 retentions will not relieve the contractor of its responsibility to provide each required payroll, complete and correct, as specified above.

These sanctions shall be in addition to all other retention or liquidated damages provided for elsewhere in the contract.

**(109SUBPAY, 10/20/22)**

**SECTION 109 MEASUREMENT AND PAYMENT:**

**109.06(B)(5) Payment Reporting and Sanctions:** the eighth paragraph of the Standard Specifications is revised to read:

For each month that the contractor fails to submit timely and complete payment information the Department will retain \$5,000 as sanctions from the monies due to the contractor. After 90 consecutive days of non-reporting, the sanctions will increase to \$10,000 for each subsequent month which the contractor fails to report until the information is provided. These sanctions will be in addition to all other retention or liquidated damages provided for elsewhere in the contract.

**109.06(B)(8) Non-compliance:** of the Standard Specifications is revised to read:

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) Sanctions. These sanctions will be in addition to all other retention or liquidated damages provided for elsewhere in the contract:
  - (i) The Department will withhold two times the 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; and
  - (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 the remaining 25 percent of the monies withheld as sanctions.
- (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 sanctions described in paragraph (a) above;
  - (ii) Terminate the contract for default in accordance with Subsection 108.10 of the specifications; and/or

- (iii) Disqualify the contractor from future bidding, temporarily or permanently, depending on the number and severity of violations.

In determining whether the sanctions will be assessed, the extent of the sanctions, or additional remedies assessed, the State Construction 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 Engineer, escalate the decision to the State Engineer. If the contractor does not escalate the decision of the State Construction 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 specifications.

**(109FUEL, 02/10/12)**

**SECTION 109 MEASUREMENT AND PAYMENT:** of the Standard Specifications is modified to add:

**109.12 Fuel Cost Adjustment:**

**(A) General:**

The Department will adjust monthly progress payments up or down as appropriate for cost fluctuations in diesel fuel as determined in accordance with these special provisions.

A fuel cost adjustment will be made when fluctuations in the price of diesel fuel, in excess of 15 percent, occur throughout this contract. The Department will not provide such adjustments for fluctuations in the price of diesel fuel of 15 percent or less.

No adjustments will be made for fluctuations in the price of fuels other than diesel.

**(B) Measurement:**

The base index price of fuel will be determined by the Department from the selling prices of diesel fuel published by OPIS (Oil Price Information Service). The base index price to be used will be the price for Diesel fuel No. 2, Ultra Low Sulfur, PAD 5, City of Phoenix Rack. The reported average value for the Phoenix area will be used.

The base index price for each month will be the arithmetic average of the selling price for diesel fuel, as specified above, shown in the last four reports received prior to the last Wednesday of the month.

This price will be effective as of the last Wednesday of each month, and will be posted on the Department's website, at <http://www.azdot.gov/Highways/cns/bitmat.asp>, on or shortly after the last Wednesday of the month.

This price may also be obtained from Contracts and Specifications Services at (602) 712-7221.

This price will be deemed to be the "initial cost" (IC) for diesel fuel on projects for which bids are opened during the following month.

The current index price for diesel fuel in subsequent months will be the base index price, determined as specified above, for the current month. For example; an adjustment for diesel fuel used in May, if applicable, will be based on the "current price" (CP) for May as posted on the last Wednesday of May. The amount of adjustment per gallon will be the net difference between the "initial cost," adjusted by 15 percent, and the current index price. The monthly adjustment will be determined by the Engineer and included in the payment estimate as a fuel adjustment. For fluctuations in excess of 15 percent, fuel cost adjustments will only be made for current price index increases greater than 1.15 times the "initial cost" or for decreases less than 0.85 times the "initial cost." No calculation will be made for fluctuations in the current index price of 15 percent or less when compared to the "initial cost."

The number of gallons of diesel fuel used per month will be considered to equal 1.5 percent of the dollar amount of work reported by the contractor for each month. Such dollar amount will not include incentives earned by the contractor for pavement smoothness, thickness, or strength for Portland cement concrete pavements; for pavement smoothness or quality lots for asphaltic concrete pavements; for any other revenue derived from quality incentives; or for revenue accrued in the previous month for bituminous material cost fluctuations or diesel fuel price adjustments.

A monthly adjustment, if applicable, will be made on this quantity, as shown below:

$$S = \frac{0.015(Q)}{IC} \times (CP - AC)$$

- Where; S = Monetary amount of the adjustment (plus or minus) in dollars  
Q = Dollar amount of work completed for the month  
CP = Current index price in dollars per gallon  
AC = Adjusted "initial cost" (1.15 or 0.85 times IC) in dollars per gallon  
IC = "Initial cost" as determined above, dollars per gallon

If adjustments are made in the contract quantities, the contractor shall accept any fuel adjustment as full compensation for increases or decreases in the price of fuel regardless of the amounts of overrun or underrun.

The value calculated above (plus or minus) will be adjusted to include sales tax and other taxes as applicable.

No additional compensation will be made for any additional charges, costs, expenses, etc., which the contractor may have incurred since the time of bidding and which may be the result of any fluctuation in the base index price of diesel fuel.

No adjustments will be made for work performed after Substantial Completion, as defined in Subsection 105.19, has been achieved.

**(C) Payment:**

Price adjustments will be shown on the monthly progress estimate, but will not be included in the total cost of work for determination of progress or for extension of contract time.

**(109BITUMADJ, 04/15/21)**

**SECTION 109 MEASUREMENT AND PAYMENT:** of the Standard Specifications is modified to add:

**109.16 Bituminous Price Adjustment:**

**(A) General:**

The term "bituminous material" as used herein shall include asphalt binder, asphalt rubber and emulsified asphalt.

The Department will adjust monthly progress payments as appropriate for market fluctuations in the price of bituminous material.

A price for bituminous material will be determined monthly by the Department based on the selling prices published by the Asphalt Weekly Monitor, a publication of Poten & Partners, Inc. The price will be the arithmetic average of the high and low selling prices for bituminous material shown in the previous four reports for the Arizona/Utah and Southern California regions.

This value will be effective as of the last Wednesday of each month, and will be posted on the ADOT Contracts and Specifications Group website, on or shortly after the last Wednesday of each month.

This price will be deemed the "initial cost" (IC) for bituminous material for projects on which bids are opened during the following month. This price will also be deemed the "current price" (CP) for bituminous material for the following month for projects in construction.

**(B) Measurement:**

For each item of bituminous material for which there is a specific pay item, and for the bituminous material used in Asphaltic Concrete (Miscellaneous Structural), an adjustment will be made for each month that a quantity of bituminous material was used on the project.

The IC for the month in which the project was bid will be compared with the CP for the appropriate current month. The CP will be as posted on the Department's website on the last Wednesday of each month, and will be used to adjust costs for bituminous material incorporated into the job during the following month (for example; bituminous material used in May will be adjusted, as specified herein, based on the CP for May as posted on the last Wednesday of April). Any difference in price between these two values will be applied to the quantity of eligible bituminous material incorporated into the work.

Determination of the eligible quantities of bituminous material for adjustment will be based on contractor-furnished invoices, except as described herein.

The tons of emulsified products to which the adjustment will be applicable will be the tons of the emulsified asphalt prior to dilution.

Adjustments in compensation for emulsified asphalts will be made at 60 percent of either the increase or decrease of IC. For emulsified asphalts containing polymer, adjustments in compensation will be made at 66 percent of either the increase or decrease.

The tons of Bituminous Material (Asphalt-Rubber) to which the adjustment is applicable will be 80 percent of the total quantity of the item used. The adjustment is not applicable to the 20 percent of the material which constitutes the crumb rubber additive.

The tons of bituminous material incorporated in Asphaltic Concrete (Miscellaneous Structural) or Asphaltic Concrete (Miscellaneous Structural-Special Mix) to which an adjustment will be applicable is as follows:

- (1) For mixes without reclaimed asphalt pavement (RAP), the adjustment will be equal to 5 percent of the quantity, measured in tons, of asphaltic concrete placed, regardless of the actual percentage of bituminous material incorporated into the mix.
- (2) For mixes with RAP, the adjustment will be equal to 4 percent of the quantity, measured in tons, of asphaltic concrete placed, regardless of the actual percentage of bituminous material incorporated into the mix.
- (3) If the quantity of asphaltic concrete is measured by volume, the supplemental agreement establishing the method of measurement will specify the manner in which the tons of bituminous material eligible for the adjustment is determined.

**(C) Payment:**

The tons of bituminous materials which are paid for on the basis of testing by nuclear asphalt content gauge, ignition furnace, or other approved methods to which the adjustment will be applicable, are the tons which have been incorporated into the mixture.

When RAP is used in asphaltic concrete, only the tons of virgin asphalt binder will be subject to a bituminous material price adjustment. RAP binder will not be subject to a price adjustment.

No compensation will be made for changes that may have occurred since the time of bidding and which may be the result of any increase in the IC of bituminous material.

Adjustment in unit prices of items governed by this provision will be made in the next regular monthly progress payment following actual use or application of the bituminous material.

**(201PAY, 07/15/21)**

**SECTION 201 CLEARING AND GRUBBING:**

**201-5 Basis of Payment:** of the Standard Specifications is modified to add:

When clearing and grubbing is not included as a contract pay item, full compensation for any clearing and grubbing necessary to perform the construction operations designated on the project plans or specified in the Special Provisions shall be considered as included in the price of contract item.

**SECTION 202 REMOVAL OF STRUCTURES AND OBSTRUCTIONS:** the first paragraph of the Standard Specifications is hereby deleted:

**SECTION 202 REMOVAL OF STRUCTURES AND OBSTRUCTIONS:**

**202-3.03(B) Bituminous Pavement:**

Upon removal, the removed asphaltic concrete not recommended by the Engineer for use on this project, shall become the property of the contractor.

**ITEM 2050004 GRADING ROADWAY FOR PAVEMENT (SHOULDERS):**

**Description:**

The work under this item shall consist of removing the existing asphaltic concrete pavement on the shoulders, and grading, shaping and compacting the subgrade prior to the installing new asphaltic concrete at the locations shown on the plans and as specified herein.

**Construction Requirements:**

Removal of existing asphaltic concrete from the shoulders and grading, shaping and compacting the exposed subgrade after removal shall be in accordance with the requirements of Subsection 205-3 of the specifications.

The removed asphaltic concrete shall be handled in accordance with the requirements of Subsection 202-3.03(B) of these Special Provisions.

**Method of Measurement:**

Measurement of grading roadway for pavement (shoulders) will be made by the square yard of the area prepared and subsequently covered with asphaltic concrete.

**Basis of Payment:**

The accepted quantities of grading roadway for pavement (shoulders), measured as provided above, will be paid for at the contract unit price per square yard for the work, complete in place.

**SECTION 402 PORTLAND CEMENT CONCRETE PAVEMENT REPAIRS:** of the Standard Specifications is revised to read:

**402-1 Description:**

The work under this section shall consist of furnishing all materials and equipment necessary to repair Portland cement concrete pavement in accordance with the details shown on the plans and the requirements of the specifications.

The type of Portland cement concrete pavement repair may consist of one or a combination of the following:

- (A) Partial Depth Repairs
- (B) Full Depth Slab Repairs
- (C) Diamond Grinding
- (D) Pavement Grooving
- (E) Joint and Crack Sealing
- (F) Edge Sealing

**402-2 Partial Depth Repairs:**

**402-2.01 Description:**

The work shall consist of removing loose material and temporary bituminous patch material from potholes, damaged joints, and spalled areas, thoroughly cleaning and drying the repair area, and placing new repair material in reasonably close conformity with the existing pavement cross section.

**402-2.02 Materials:**

The contractor shall select one or more of the following products, or approved equal, as approved by the Engineer.

1. FPT Fibrecrete with primer
2. Crafcotech Techcrete with primer
3. Roklin Flexset
4. D.S. Brown Delpatch
5. R.J. Watson Poly-Tron

#### **402-2.03 Construction Requirements:**

Partial depth repair areas will be designated by the Engineer. If diamond grinding or pavement grooving is included as part of the project, the partial depth repair shall be performed prior to the commencement of the diamond grinding or pavement grooving work. The extent of the repair area will be marked by the Engineer and will be evaluated on an individual basis. The Engineer will be the final authority if questions arise in regard to the need for repair or the extent of a required repair.

The contractor shall furnish the Engineer with a copy of the product's technical data sheets with printed instructions for mixing and application, and the expiration date of the manufacturer's shelf life warranty. Material that has exceeded the shelf life warranty shall not be used. In order to assure proper mixing and placement, a qualified manufacturer's representative for the approved product shall be present at the start of partial depth repair operations, and shall remain until the Engineer is satisfied that the contractor is conforming to the recommended procedures.

Partial depth repair material shall not be placed under adverse conditions as detailed in the manufacturer's installation instructions

Hand held pneumatic tools shall be used to remove deteriorated material until sound clean concrete is exposed. If the depth of the partial depth repair area exceeds one-third the thickness of the concrete pavement slab, the affected portion of the pavement slab shall be removed and replaced in accordance with the requirements of Subsection 402-3 of the specifications.

Before application of the repair material, the exposed surfaces of the concrete shall be free of loose particles, oil, dust, traces of asphaltic concrete, other contaminants, and shall be cleaned in accordance with the manufacturer's recommendations. If the surface of the repair area is wet, the contractor shall dry the wet area using an open flame blow torch. Repair material shall be confined to the limits of the repair area and shall not overlap onto the surrounding pavement.

Repairs on both sides across a longitudinal or transverse joint shall be sawcut on the existing joint to structurally separate the two sides. The Engineer may approve the use of flexible repair materials, with modulus of elasticity less than 10 ksi, on both sides of a joint without a sawcut.

The repair area shall be finished to the cross-section of the existing pavement and textured with placement of broadcast sand prior to setting of the repair material. The repair area surface shall be struck off flush with the existing pavement surface.

Partial depth repairs shall be verified before substantial completion for acceptance. Repairs that have failed as determined by the Engineer shall be removed at no additional cost to the department and replaced with partial depth repairs meeting the requirements of these specifications.

**402-2.04 Method of Measurement:**

Partial depth repairs will be measured by the square foot. Each repair will be measured to the nearest one tenth square foot. The total cumulative measurement of all repairs will be rounded to the nearest square foot.

**402-2.05 Basis of Payment:**

The accepted quantities of partial depth repairs, measured as provided above, will be paid for at the contract unit price per square foot, which price shall be full compensation for the work, complete in place, including removal and disposal of the old pavement.; and replacement of shoulder material which is removed or damaged during repair work.

**402-3 Full Depth Slab Repairs:**

**402-3.01 Description:**

The work shall consist of furnishing all materials and removing existing concrete pavement and constructing full depth repairs or full panel replacements of Portland cement concrete pavement at the locations shown on the plans or determined by the Engineer, as specified herein, and in reasonably close conformity with the existing pavement cross-sections.

**402-3.02 Materials:**

The contractor shall not place concrete material until the mix design has been approved.

Mix design for full depth repairs or full panel replacements shall conform to the following:

- Standard Strength concrete shall obtain a minimum compressive strength of 3500 psi in 7 days and shall have a minimum 28-day compressive strength of 4000 psi.

Materials for Portland cement concrete shall conform to the requirements of Section 1006 of the specifications. Concrete shall be Class S, with size 57 coarse aggregate as designated in AASHTO M 43.

Materials furnished for joint seal shall conform to the requirements of Subsection 1011-8 of the specifications.

Materials furnished for tie bars shall conform to the requirements of Section 1003 of the specifications.

Materials furnished for dowel bars shall conform to the requirements of AASHTO M 254 with Type B coating except that the core material shall conform to the requirements of ASTM A615, Grade 60.

Liquid membrane forming curing compound shall conform to the requirements of Subsection 1006-6.01(C) of the specifications.

#### **402-3.03 Construction Requirements:**

Areas to be replaced will be as shown on the plans and/or as designated by the Engineer. If diamond grinding or pavement grooving is included as part of the project, the full depth repair shall be performed prior to the diamond grinding or pavement grooving work.

Pavement slabs containing two or more cracks through the full depth of the slab shall be repaired as a full depth slab repair.

The repair area shall be rectangular in shape, shall extend to include the full width of the existing panel, and shall be a minimum of six feet in length. Repair limits shall be such that any remaining section of the panel has a minimum length of six feet. Transverse joints shall align with existing joints unless otherwise indicated herein. When a repair area extends to an existing transverse joint with dowel bars, the repair limits shall be extended into the adjacent panel to a point just beyond the existing dowel bars. If this results in a panel length greater than 15 feet, an intermediate transverse joint shall be created. Repair areas shall be saw cut through the full depth of the concrete repair area.

The PCCP panel shall be removed by utilizing a lift out method. Any damage to the existing PCCP that is to remain, due to contractor's operations, shall be repaired at no additional cost to the Department. After removal of the PCCP panel, the contractor shall remove and clean any loose material. The contractor shall also re-grade and re-compact the base material prior to the placement of Portland cement concrete. Any damage resulting from panel removal or grade preparation, as determined by the Engineer, will be repaired at the expense of the contractor.

During the PCCP removal, the contractor shall also remove the asphaltic concrete overlay over the the travel and passing lanes as shown on the plans and as directed by the Engineer.

All transverse joints shall be constructed with plain round dowel bars. Dowel bars shall be 18" in length and shall be placed at 1.0 foot intervals, mid-depth of the panel. Dowels shall be placed parallel to the longitudinal joint and the roadway profile. Dowel bars shall not be placed within 1.0 foot of either edge of the panel (i.e. longitudinal joint). The dowel bar diameter shall be based on the pavement thickness as shown in the following table.

Pavement Thickness (inches)	Dowell Diameter (inches)
8.0 or less	1.0
8.5 or greater	1.5

The panel thickness for full depth repairs shall match existing.

When a repair panel has a different thickness than the adjacent panel, the dowel bar diameter and placement depth shall be determined based on the thinner panel.

Dowel bar holes shall be drilled with a mechanically supported drill to maintain proper alignment. Hole diameter shall be 1/8 inch larger than the dowel bar. Compressed air shall be used to clean and dry hole prior to dowel placement. The grout or epoxy shall be placed in the back of the dowel hole using a flexible tube or long nozzle that deposits the material to the rear of the dowel hole. The dowel shall be inserted into the hole with a slight twisting motion so that the material in the back of the hole is forced up and around the dowel bar. An epoxy retention disk shall be used to prevent anchoring material from flowing out of the hole. The retention disk shall fit snugly over the dowel and against the face of the panel. The retention disk shall be as detailed on the Project Plans. Before concrete placement for the full depth repair, the 9-inch long free end of the dowel bar shall be uniformly coated with a thin film of heavy waterproof grease.

When the contiguous length of a repair is less than or equal to two full panels, or when a transverse joint does not align with the joints in an adjacent panel, a 1/8 inch thick bond breaker shall be placed along the length of the longitudinal joints to isolate the full depth repair. The fiberboard shall be configured to fit snugly against the adjacent slab, for the full depth and length of the longitudinal face of the repair.

Longitudinal tie bars shall be installed when the length of a repair exceeds two consecutive panels. Tie bars shall be installed in accordance with Section 401 of the Specifications, with the exception that they shall be No. 5 deformed bars.

The slab replacement shall be finished to the cross section of the existing pavement and textured with a stiff bristled brush to match the existing pavement. The replaced surface shall be flush with the existing pavement surface. Texturing will not be required if grinding or grooving shall be performed following the repair.

A new sealant reservoir shall be sawed or formed at the interface of the replacement and existing concrete, as well as any intermediate transverse joints. The full depth slab repair shall not be opened to traffic until all joints are sealed and the concrete has attained a compressive strength of at least 3000 pounds per square inch, unless otherwise approved by the Engineer.

**402-3.04 Method of Measurement:**

Full depth slab repairs will be measured by the square yard of pavement repaired. Each replacement will be measured to the nearest one tenth square foot. The total cumulative measurement of all pavement repaired will be rounded to the nearest square yard.

**402-3.05 Basis of Payment:**

The accepted quantities of full depth slab repairs, measured as provided above, will be paid for at the contract unit price per square yard, which price shall be full compensation for the work complete in place, including the saw cutting of joints and dowel and tie bars, dowel and tie bar installation, the removal and disposal of existing materials, the removal and disposal of the asphaltic concrete overlay over the existing PCCP, the excavation and subsequent backfilling or repairs to base materials incidental to the removals and regrading and recompacting of the base material.

**402-4 Diamond Grinding:**

**402-4.01 Description:**

The work under this item shall consist of diamond grinding the surface of existing concrete pavement to improve the ride characteristics, texture, and frictional properties of the roadway surface. Diamond grinding shall be performed at the locations shown on the plans and in accordance with the requirements of these specifications.

**402-4.02 Construction Requirements:**

**(A) General:**

Prior to diamond grinding, the contractor shall submit a plan on how to complete the diamond grinding work to the Engineer for review and approval. The plan shall include at a minimum a description of the diamond grinding method, a diamond grinding sequence plan, a list of required equipment types and quantities, truck ingress and egress, traffic control, concrete slurry collection and disposal, striping, and cleaning of the roadway before opening to traffic. Unless otherwise directed by the Engineer, or specified herein, the contractor shall design traffic control and provide ways to maintain it such that there shall be no stripe obliteration on the newly ground roadway surface.

The contractor shall determine the proper sequence of operations to comply with the requirements specified herein. If multiple passes of the diamond grinding equipment are required, the area will only be considered for payment once. A minimum of 95 percent of any 100- foot section of pavement surface shall be textured. Existing depressed pavement areas due to subsidence or other localized causes will be exempted from texture and smoothness requirements.

The contractor shall protect all bridge deck joints and any other roadway features that may be damaged by diamond grinding operations. If there are any existing damages to the joints, the contractor shall bring it to the Engineer's attention prior to the diamond grinding operation.

Prior to diamond grinding, all repairs shall be completed as shown on the plans and specified herein.

No equipment will be allowed within three feet of a traffic lane that is open to the public.

When applicable, prior to the commencement of the work, the diamond grinding of ramp tie-in locations, radiused geometry at interchanges, etc. may be adjusted for the purposes of finished configuration, measurement, and payment with the approval of the Engineer.

**(B) Equipment:**

Diamond grinding shall be done with diamond blades, mounted on a self-propelled machine that has been designed for diamond grinding and texturing of pavements. The grinding equipment shall weigh a minimum of 35,000 pounds including the grinding head, and be of a size that will grind a strip at least 3-feet wide. The effective wheel base of the machine shall be no less than 12 feet. The effective wheel base is defined as the distance from the front wheel assembly transverse pivot point to the transverse pivot point of the profile/depth control/ ground drive wheels. The equipment shall have a positive means of vacuuming the grinding residue from the pavement surface, thereby leaving the surface in a clean, near-dry condition. Diamond grinding equipment that causes raveling, aggregate fractures, spalls, or disturbances of the transverse and/or longitudinal joints shall not be used.

All diamond grinding machines used in the cross-section of a lane shall have the same wheel base and diamond grinding head configuration. To provide the proper surface finish and to achieve the designated texture on the pavement section, the contractor shall select the number of blades per foot ranging from 55 to 60 for the diamond grinding process. A 1 to 2 inch overlap of diamond grinding passes shall be allowed.

**(C) Procedure:**

The contractor shall diamond grind the roadway sections shown on the plans.

Pavement surfaces shall be ground longitudinally beginning and ending at lines perpendicular to the roadway centerline. All diamond grinding shall be done in a direction parallel to the pavement lane lines. Diamond grinding shall continue for the full lane width until the pavement surface on both sides of all transverse joints and all cracks are in the same plane. Longitudinal ridges in adjacent passes of the diamond grinding equipment shall not exceed 1/8 inch in depth. The diamond grinding shall produce a neat, uniform finished surface. Joints and crack faults shall be ground so that there is no more than a 1/16-inch differential between adjacent sides of the joints and cracks. Transitions between ground and unground areas of concrete at the boundaries shall be smoothly feathered in. The joints between lanes and project limits shall be feathered in such a way to not create a drop off between the adjacent pavement surface and new diamond ground surfaces. The contractor shall maintain the existing cross slope and provide for positive drainage. The finished cross slope shall mirror the pre-grind cross slope and shall have no depressions or misalignment of slope greater than 1/4-inch per 10 feet when measured with a 10-foot straightedge. Shoulder or ramp lane diamond grinding shall transition from the mainline to provide positive drainage leaving no more than a 3/16-inch ridge and a smooth riding

surface. If requested by the contractor and approved by the Engineer, smaller equipment may be used for diamond grinding shoulder transitions.

Transitions from PCCP to asphaltic concrete shall be located as shown on the plans.

The contractor shall diamond grind a test section of pavement, where designated by the Engineer, to determine that the equipment proposed for use on the project will provide the specified surface texture.

The diamond grinding process shall produce a pavement surface that is true in grade and uniform in appearance with longitudinal line-type texture. The line-type texture shall contain corrugations parallel to the pavement lane lines and present a narrow ridge corduroy type appearance. The peaks of the ridges shall be 1/8-inch +/- 1/16-inch higher than the bottom of the grooves with evenly spaced ridges.

Diamond grinding shall result in at least 95% of any selected 2-foot by 100-foot longitudinal area meeting the specified surface texture.

The contractor shall be responsible for collection and disposal of all diamond grinding slurry. All slurry shall be vacuumed into a storage tank or truck and disposed of properly. The slurry from diamond grinding operations shall not be permitted to flow across lanes occupied by traffic, onto roadway shoulders or areas containing vegetation, or to flow into gutters or other drainage facilities. The slurry shall be removed prior to opening the ground pavement section to traffic.

#### **(D) Surfacing and Quality Testing Requirements:**

After the diamond grinding and joint and crack sealing have been completed and the roadway is ready for testing, the contractor shall submit a written notice to the Engineer indicating that the work has been completed and the roadway is ready for testing.

The final ground concrete pavement surface shall be evaluated for smoothness by testing with an inertial profiler. The roadway smoothness shall be tested in accordance with the requirements of Arizona Test Method 829. The contractor shall sweep and clean the roadway prior to testing.

Traffic control costs during the smoothness testing period will be reimbursed under the provisions of Section 701 of the specifications. Any additional traffic control costs incurred, due to corrective action work and subsequent pavement smoothness measurements shall be borne solely by the contractor.

Testing shall be performed within 2 weeks of the completion of diamond grinding. The Engineer will notify the contractor of the test results no later than 10 days after the testing has been performed.

Testing will be performed on mainline traffic lanes, and will include the full length of the diamond grinding segments under the contract. Unless otherwise specified in the contract documents, testing of distress lanes, shoulders, ramps, tapers, cross roads, and frontage roads will not be performed.

**(1) Incentive/Disincentive:**

A pay adjustment incentive/disincentive will be applied based on an Actual Smoothness Value (AS) for the mainline lanes and freeway to freeway ramps shown on the plans. IRI values will be measured in accordance with Arizona Test Method 829 and reported every 0.1 mile. The incentive/disincentive pay will be adjusted for every 0.1 mile and shall be determined in accordance with the following table:

<b>PCCP Smoothness Pay Adjustment</b>	
<b>AS Inches/mile</b>	<b>Pay Adjustment \$/0.1 mile</b>
<40	$(45 - AS) \times 45$
$\geq 40$ and $\leq 50$	0
>50 and <85	$(45 - AS) \times 45$
$\geq 85$	Correction Required (1)
(1) Any 0.1 lane-mile increment having an AS value equal to or greater than 85 shall be repaired by the contractor at no additional expense to the Department.	

The total adjustment in payment to the contractor shall be the summation of the individual adjustments for the respective 0.1 lane-mile increments, except the maximum total incentive allowed shall be \$9,000 per tested lane-mile.

If repairs are required, the contractor shall prepare a written proposal detailing corrective actions and submit the proposal to the Engineer within 10 working days after the contractor's receipt of test results. Within three working days, the Engineer will review the submitted proposal and either accept it, or reject it and ask for a new proposal. If rejected, the contractor shall, within 10 working days, prepare and submit a new proposal for corrective action, based on discussions with the Engineer. The Engineer will review, and either accept or reject, the new proposal within three working days of receipt.

Upon completion of any necessary repairs, the 0.1 lane-mile increments containing repaired areas will be re-tested in accordance with the provisions of Arizona Test Method 829. Resultant values from re-testing will be used in determining the adjustment in payment to the contractor

**402-4.03 Method of Measurement**

Measurement for diamond grinding for payment will not be required unless adjustments are made in accordance with subsection 402-4.02(A) of this specification. When adjustments

are required, diamond grinding will be measured by the square yard of ground pavement section. The ground section will be measured to the nearest 0.1 square yard. The total cumulative ground area measured will be rounded up to the nearest square yard.

#### **402-4.04 Basis of Payment**

The accepted quantities of pavement diamond grinding, as shown in the bidding schedule and any adjustments as specified in subsection 402-4.02(A) of this specification, will be paid for at the contract unit price per square yard, which price shall be full compensation for the work, complete in place, as specified herein.

No measurement or payment will be made for feathering, the cost being considered as included in the contract item.

No measurement or payment will be made for water used during the diamond grinding process or the disposal of the diamond grinding slurry, the cost being considered as included in the contract item.

#### **402-5 Pavement Grooving:**

##### **402-5.01 Description:**

The work consists of furnishing all materials and grooving the surface of existing Portland Cement Concrete Pavement at the locations shown on the project plans and in accordance with the requirements of these specifications.

##### **402-5.02 Blank**

##### **402-5.03 Construction Requirements:**

###### **(A) General:**

The pavement surface shall be grooved longitudinally.

The methods used and tolerances employed shall provide a surface which will provide good wet or dry driving characteristics.

Longitudinally grooved areas shall begin and end at lines normal to the pavement center line and shall be centered within the lane width.

No equipment shall be allowed within three feet of a traffic lane open to the public. Maintenance and Protection of Traffic shall be in accordance with Section 701 of the specifications.

Removal of all slurry or residue resulting from the grooving operation shall be continuous. Residue from grooving operations shall not be permitted to flow across shoulders or lanes occupied by public traffic or to flow into gutters or other drainage facilities. Dried residue, resulting from grooving operations, shall be removed from pavement surfaces with a pick up or power broom before such residue is blown by the action of traffic or wind.

The noise level created by machinery shall not exceed 86 dbA at a distance of 50 feet normal to the direction of traffic.

**(B) Equipment and Procedures:**

Longitudinal grooving shall be performed using multiple diamond blades mounted on a self-propelled machine designed for diamond grooving concrete pavement and bridge decks. The grooving equipment shall have a depth control device enabling adjustment of the cutting head height to maintain the specified groove depth. The grooving equipment shall have the capability to maintain alignment to the center of the roadway. The equipment will be capable of installing grooves to the dimensions and spacing requirements specified herein.

At the beginning of each work shift, all grooving equipment shall be equipped with a full complement of grooving blades that are capable of cutting grooves of the specified width, depth and spacing.

If during the course of work, a single grooving blade on an individual grooving equipment becomes incapable of cutting a groove, work will be permitted to continue for the remainder of the work shift and the contractor will not be required to otherwise cut the groove omitted because of the failed blade. Should two or more grooving blades on an individual grooving equipment become incapable of cutting grooves, the contractor shall cease operations.

The grooved area of any selected two-foot by 100-foot longitudinal area of pavement specified to be grooved shall not be less than ninety percent of that area. Un-grooved pavement within the selected area shall be limited to that which occurs as a result of pavement irregularities.

**(C) Tolerance:**

Longitudinal grooving shall begin six inches from the outside edge of pavement or reflective marker and run in a continuous pattern across the lane surface to within six inches of the longitudinal joint. The groove pattern shall be 1/8 inch in width by 3/16 inch in depth with a center to center spacing of 3/4 inch. The groove spacing tolerance shall be plus or minus 1/8 inch. The width of the groove shall have a tolerance of plus or minus 1/64 inches. The depth of the groove shall have a tolerance of plus or minus 1/16 inch.

On curves and/or super elevations, the width of the groove may exceed the above dimensions if approved.

If the pavement profile is very uneven, the Engineer may permit a variation in maximum groove depth in areas adjacent to rutted pavement and/or faulted joints.

Grooving shall be terminated at least one foot from all devices in place in the pavement, such as manholes, inlet casting, valve boxes, etc.

**402-5.04 Method of Measurement:**

Pavement grooving will be measured and accepted by the square yard of grooved pavement. The quantity of grooved pavement will be determined by multiplying the width times the length of the grooved area. No deduction will be made for grooving omitted at joints, manholes, inlets or other similar installations in the pavement surface.

**402-5.05 Basis of Payment:**

The accepted quantities of pavement grooving, measured as provided above, will be paid for at the contract unit price per square yard, which price shall be full compensation for the work, complete in place, as specified herein.

**402-6 Joint and Crack Sealing:**

**402-6.01 Description:**

The work shall consist of furnishing all materials and sealing longitudinal and transverse weakened-plane and sealing random cracks in existing Portland Cement Concrete Pavement, as specified herein.

**402-6.02 Materials:**

Joint and crack sealant material shall conform to the requirements of ASTM D6690 Type IV.

**402-6.03 Construction Requirements:**

**(A) General:**

Joint to be sealed will be identified by the Engineer. Joint sealing shall be accomplished by first removing old sealant and joint inserts, then refacing and cleaning the joints and installation of new hot-applied sealant.

Cracks will be identified by the Engineer. Crack sealing shall be accomplished by first cleaning the crack followed by installation of new hot-applied sealant.

**(B) Joint Preparation Prior to Sealing:**

Before sealing, all non-compressible debris shall be removed from the joints to the full depth of the sawed joints. Old sealant shall be removed by using a nominal 1/8 inch wide diamond blade. The joints shall be sawed to the depth of the original sawing. An air compressor utilizing an oil separator shall be used to remove old sealant and any non-compressible materials. Air compressors shall be capable of furnishing a sufficient amount of compressed air to clean the joints properly.

**(C) Crack Cleaning Prior to Sealing:**

Cracks shall be thoroughly cleaned of loose debris with an air compressor utilizing an oil separator. Air compressors shall be capable of furnishing a sufficient amount of compressed air to clean the crack properly. Areas requiring crack sealing will be determined by the Engineer.

**(D) Installation of Sealant:**

Sealant compound shall not be placed unless the joint or crack is dry, clean and free of dust. Heating and application of the sealant shall follow the installation instructions from the sealant manufacturer. The joints shall be sealed so that upon completion of the work, the surface of the sealant material will be  $1/4 \pm 1/8$  inch below the adjacent pavement surface.

**402-6.05 Method of Measurement:**

Joint and crack sealing will be measured by the linear foot.

**402-6.06 Basis of Payment:**

The accepted quantities of joint and crack sealing, measured as provided above, will be paid for at the contract unit price per linear foot, which price shall be full compensation for the work, complete in place.

**402-7 Edge Sealing:**

**402-7.01 Description:**

The work shall consist of furnishing all materials and sealing the joints between the Portland Cement Concrete Pavement and the asphaltic concrete distress lane. This work shall be done after the completion of all specified pavement grinding and after all specified rehabilitation of the distress lane or outside shoulder. The work shall be accomplished in accordance with the details shown on the project plans and as specified herein.

**402-7.02 Material Requirements:**

The edge sealant shall be a hot-applied joint filler conforming to the requirements of ASTM D5078.

**402-7.03 Construction Requirements:**

**(A) General:**

Edge sealing shall be accomplished by cleaning the edges and installation of new sealant.

The edge sealant shall not be placed under adverse conditions, which may include but are not limited to rain, snow, freezing weather, and high winds. Edge sealant material shall not be placed when the ambient temperature falls below 40 degrees F. At any time, the Engineer may require that the work cease or that the work day be reduced if weather conditions, either existing or expected, are anticipated to have an adverse effect upon the sealing material.

The edge sealant shall not be placed in cracks which are wet.

**(B) Joint Preparation:**

Immediately prior to application of the edge sealant material, the contractor shall ensure that the edges are thoroughly cleaned through the full depth of the edge. Loose particles, grass, grass roots, weeds, dust and other deleterious substances shall be removed by means of high velocity compressed air, vacuuming, or other methods approved by the Engineer. Compressed air equipment shall have traps or devices to prevent moisture and oil from contaminating the edge surfaces.

Immediately following the cleaning of edges and before the application of sealant, if required, a backer rod composed of an inert, compressible material shall be inserted along the lower portion of the joint groove at a uniform depth as shown on the project plans.

**(C) Equipment Requirements:**

The sealant material shall be mixed in a kettle or a melter constructed as a double boiler. The kettle or melter shall have a continuous sealant agitation and mixing system to provide uniform viscosity and be capable of maintaining the manufacturers recommended application temperature.

**(D) Application of Edge Sealant:**

The edge sealant shall be installed at the manufacturer's recommended application temperature.

The edge sealant shall be flush or recessed with the surrounding pavement, as approved by the Engineer.

**402-7.04 Method of Measurement:**

Edge sealing will be measured by the linear foot.

**402-7.05 Basis of Payment:**

The accepted quantities of edge sealing, measured as provided above, will be paid for at the contract unit price per linear foot, which price shall be full compensation for the work, complete in place.

**(404BITUM, 08/18/22)**

**SECTION 404 BITUMINOUS TREATMENTS:**

**404-1 Description:** of the Standard Specifications is revised to read:

The work under this section shall consist of furnishing all materials and constructing or applying bituminous treatments at the locations designated on the plans and in accordance with the requirements of the specifications and in conformity to the lines shown on the project plans or established by the Engineer.

The bituminous treatments include one or a combination of prime coat, tack coat, and fog coat. The bituminous treatments also include emulsified asphalt chip seal and hot applied chip seal both either with or without fog coat.

When a “hot applied” chip seal is called for on the plans and specifications, it refers to a chip seal using a performance grade asphalt cement or a crumb rubber asphalt as the bituminous material.

**404-2.02 Aggregate Materials:**

**(A) General:** the second and third paragraphs of the Standard Specifications are revised to read:

With the exception of precoated cover material, aggregate material shall be sampled for gradation acceptance from the final stockpile prior to being incorporated into the work. The aggregate for the precoated material shall be sampled prior to precoating.

**(B) Blotter Material:** of the Standard Specifications is revised to read:

Blotter material shall be natural or manufactured sand, volcanic cinders, or other approved material and shall be free of deleterious materials or foreign substances.

The gradation shall meet the following requirements when tested in accordance with the requirements of Arizona Test Method 201:

Sieve Size	Percent Passing
3/8 inch	100
No. 4	80 - 100
No. 16	45 - 80
No. 200	0 - 5.0

**(C) Cover Material:** of the Standard Specifications is revised to read:

Aggregate for cover material shall be clean gravel or crushed rock, shall be free of clay, and shall not contain calcium carbonate, caliche, synthetic materials, organic matter, or foreign substances. Cover material shall not be obtained from sweepings of previously applied cover material.

The gradation shall meet the following requirements when tested in accordance with the requirements of Arizona Test Method 201.

Sieve Size	Percent Passing	
	Class 1	Class 2
3/4 inch	100	
1/2 inch	97 – 100	100
3/8 inch	70 – 100	97 – 100
1/4 inch	0 – 10	70 – 100
No. 8	0 – 5	0 – 5
No. 200	0 - 2.0	0 - 2.0

Cover material shall meet the following requirements:

<b>Aggregate Characteristics</b>	<b>Test Method</b>	<b>Requirement</b>
Abrasion	AASHTO T 96	100 Rev., Max 9% 500 Rev., Max 40%
Carbonates	Arizona Test Method 238	Maximum 20%
Fractured Coarse Aggregate Particles	Arizona Test Method 212	Minimum 75% one fractured face, determined on plus No. 8 material
Flakiness Index	Arizona Test Method 233	Maximum 20%
Bulk Oven Dry Specific Gravity	Arizona Test Method 210	2.350 – 2.850
Water Absorption	Arizona Test Method 210	0.0 – 2.5%

**(D) Precoated Cover Material:** of the Standard Specifications is revised to read:

For hot applied chip seals, the cover material shall be precoated with any grade of PG asphalt cement which meets the requirements of Section 1005 of the specifications. The precoating shall be accomplished by mixing at a central plant until the aggregate is evenly coated. The cover material shall have a minimum temperature of 250 degrees F at the time of precoating with asphalt cement. The cover material shall be precoated with approximately 0.40 to 0.60 percent asphalt cement, by weight of the aggregate. The final percentage of asphalt cement used for precoating will be as directed by the Engineer. Precoated cover material shall be dust free upon completion of coating and shall remain dust free prior to being incorporated into the work.

The aggregate for precoated cover material shall meet the requirements in Subsection 404-2.02(C) of the specifications prior to precoating with bituminous material.

No precoated cover material shall be stockpiled following precoating with asphalt cement for more than five calendar days prior to placement, unless otherwise approved by the Engineer.

**404-2.03 Bituminous Treatment Material Types and Application Rates:** of the Standard Specifications is modified to add:

The type of bituminous material for tack coat and approximate application rate shall be as specified in Subsection 404-4.02 of the specifications.

The bituminous material application rates provided in this Subsection are approximate, and are to be used for bidding purposes, and shall be modified as required herein. Final application rates for all materials shall be those required to ensure the most favorable outcome, as approved by the Engineer.

**404-3 Construction Requirements:**

**404-3.01 Seasonal and Weather Limitations:** of the Standard Specifications is revised to read:

**(A) General:**

At any time, the Engineer may require that the work cease or that the work day be reduced in the event that weather conditions, either existing or expected, are anticipated to have an adverse effect upon the bituminous treatment.

Placement shall cease for the remainder of the day if sustained wind velocities in excess of 15 MPH occur at the project site.

**(B) Prime Coat:**

Bituminous material used for prime coats shall be applied to an existing aggregate surface only when the ambient temperature in the shade is at least 70 degrees F and when the existing aggregate surface is slightly damp.

**(C) Fog Coat:**

Bituminous material used for fog coats shall be applied to an existing pavement surface only when the surface is dry, the pavement surface temperature is at least 60 degrees F but does not exceed 175 degrees F, and the ambient temperature at the beginning of the application is at least 50 degrees F and rising but does not exceed 110 degrees F. The application of bituminous material shall be stopped when the ambient temperature is 55 degrees F or less and falling.

**(D) Chip Seal:**

The contractor's bid submittal and initial construction schedule shall adhere to the beginning and ending dates shown in Subsection 404-4.04(A) of the specifications. Bituminous material used for chip seal coats shall only be placed when the existing pavement surface is dry, the surface temperature is at least 85 degrees F, and the ambient temperature at the beginning of the application of bituminous material is at least 65 degrees F and rising. The application of bituminous material shall be stopped when the ambient temperature is 70 degrees F or less and falling.

No placement of bituminous material for chip seals shall occur if ambient temperatures are forecasted to be at or below 40 degrees F at any time during the day or night after placement.

For hot applied chip seals, no placement shall occur if ambient temperatures exceed, or are forecasted to exceed, 110 degrees F the day before, the day of, or the two days after placement.

**404-3.02 Equipment:**

- (A) **Distributor Truck:** the first sentence of the first paragraph of the Standard Specifications is revised to read:

Distributor trucks shall be so designed, equipped, maintained and operated that bituminous material at the specified temperature may be applied uniformly on variable widths of surface at readily determined and controlled rates from 0.03 to 1.00 gallons per square yard, with uniform pressure, and with an allowable transverse variation from any specified rate not to exceed 10 percent or 0.02 gallons per square yard, whichever is less.

- (A) **Distributor Truck:** the first sentence of the fourth paragraph of the Standard Specifications is revised to read:

Distributor truck spray bars shall be equipped with the appropriate size nozzles adjusted to the proper angle with the associated adjustment wrench to achieve maximum overlap of spray and an even application.

- (B) **Power Brooms:** of the Standard Specifications is revised to read:

Power brooms shall be of the rotary or pickup type, capable of completely removing excess blotter material, and cleaning without gouging or tearing the surface.

- (D) **Aggregate Spreaders:** of the Standard Specifications is revised to read:

The application of blotter material shall be accomplished by means of a sand slinger or other equipment approved by the Engineer.

The application of cover material shall be accomplished by means of a calibrated spreader. The spreader shall be a self-propelled, computerized rate-controlled unit capable of an application width of 14 feet or greater. The spreader shall be in good mechanical condition, capable of applying the correct aggregate application rate uniformly across the spread width.

Chip spreader boxes shall be calibrated to ensure consistent discharge across all of the chutes except where the discharge is intentionally adjusted to compensate for site conditions and construction operations.

**404-3.03 Traffic Control:** of the Standard Specifications is hereby deleted.

**404-3.04 Preparation of the Surface:** of the Standard Specifications is revised to read:

The surface to be treated shall be thoroughly cleaned prior to applying bituminous material. Man holes, utility covers, and catch basins shall be protected prior to and during application of bituminous material. Self-propelled rotary power brooms, pickup brooms, and hand brooms shall be used immediately in advance of applying the bituminous material.

When a bituminous treatment is to be applied to an existing aggregate surface, the surface shall be uniformly smooth, firm and reasonably true to grades and cross sections as shown

on the project plans, and shall be so maintained throughout the placing of the bituminous treatment. In no event shall a bituminous treatment be placed on a soft, uneven base. All holes, depressions or irregularities shall be repaired. All loose and unsuitable material shall be removed and replaced by suitable material, which shall be compacted to produce a dense uniform surface conforming to the adjacent area.

When required, the existing aggregate surface on which the bituminous treatment is to be placed shall be lightly bladed, watered and compacted immediately prior to the application of bituminous material. In extremely dry areas, additional light applications of water may be required prior to the application of the bituminous material to facilitate penetration of the bituminous material.

**404-3.05 Application of Bituminous Material:** the first, second and third paragraphs of the Standard Specifications are revised to read:

The types, grades, and approximate rates of application of bituminous material shall be as specified in Subsections 404-2.03 of the specifications. The application rates for chip seal coats shall be determined by the contractor in accordance with the requirements herein, subject to approval by the Engineer.

The rates to be applied may vary substantially because of different surface conditions within the project limits. The actual bituminous material application rate shall not vary more than 10 percent from the application rate specified or approved by the Engineer.

The bituminous material shall be uniformly applied to the prepared surface at the rate specified or approved by the Engineer and in one application.

**404-3.05 Application of Bituminous Material:** the seventh, eighth and ninth paragraphs of the Standard Specifications are revised to read:

In the event that any spots are missed in the application, or any areas develop that do not have a uniform spread or penetration, such areas shall be remedied without delay.

Care shall be taken to prevent the spraying or splattering of bituminous material on adjacent pavements, structures, curb, guardrail, vegetation, or any other object outside of the area designated for spraying.

Removal and disposal of unused bituminous material shall be the contractor's responsibility and at no cost to the Department.

**404-3.06 Application of Blotter Material:** of the Standard Specifications is revised to read:

The approximate application rate of blotter material, when required as a part of a bituminous treatment, shall be as specified in Subsection 404-2.03 of the specifications; however, the Engineer will specify the exact rate to be applied based on the characteristics of the bituminous treated surface. The specified application rates are based on the wet weight of material.

Blotter material, at the time of spreading, shall be wet but free from running water. Blotter material shall be spread uniformly to the treated surface in one or more applications for a total application rate as specified. Blotter material shall be applied at a time acceptable to the Engineer and before opening to traffic.

Any oversized aggregate or foreign material picked up during stockpiling or loading operations shall be eliminated before entering the spreader. Supplemental spreading or smoothing shall be done by hand methods where necessary.

Prior to final acceptance and when ordered by the Engineer, the contractor shall remove and dispose of any excess blotter material. Removal and disposal of excess blotter material shall be the contractor's responsibility and at no cost to the Department.

**404-3.07**            **Joints:** of the Standard Specifications is revised to read:

**(A)            General:**

Transverse joints with the preceding work, at intersections, and at all existing pavements and structures shall be made by a method approved by the Engineer prior to the start of the work.

Longitudinal joints shall be overlapped between 2 to 6 inches.

Regardless of the width of the roadway to be sealed, the number of longitudinal joints shall be kept to a minimum. Longitudinal joints shall be located to the greatest degree obtainable to coincide with the painted lines between traffic lanes.

**(B)            Chip Seal:**

Unless otherwise directed by the Engineer, transverse joints with the preceding work shall be made by placing building paper over the end of the previous application, and the joining application shall start on the building paper. Once the application process has progressed beyond the paper, the paper shall be disposed of as directed by the Engineer. Transverse joints at other locations shall be made by a method approved by the Engineer prior to the start of the work.

Joints shall be cleaned as deemed necessary by the Engineer prior to the application of bituminous material in the adjacent strip.

**404-3**            **Construction Requirements:** of the Standard Specifications is modified to add:

**404-3.08**            **Opening to Traffic:**

In the construction or application of bituminous treatments, no traffic or equipment will be permitted on the treated roadway surface until it has been established to the satisfaction of the Engineer that the treated roadway surface will not be damaged or marred under the action of traffic. No traffic of any description shall be allowed on any bituminous treatment until approved by the Engineer.

**404-4 Prime Coat:** the title and text of the Standard Specifications is revised to read:

**404-4 Bituminous Surface Treatment:**

**404-4.01 Prime Coat:**

The type of bituminous material and the approximate application rate shall be as specified in Subsection 404-2.03 of the specifications. The Engineer may adjust the actual application rate based on specific trials and visual observations performed on test areas for different base conditions.

When it is deemed necessary, areas having excess bituminous material shall be blotted with material as directed by the Engineer.

When directed by the Engineer, the surface of the completed prime coat shall be rolled with a pneumatic-tired roller.

The integrity of the prime coat shall be maintained at all times until the next course is placed or until final acceptance. In the event traffic has caused holes or breaks in the surface, such holes or breaks shall be repaired by the contractor.

**404-4.02 Tack Coat:**

Tack coat shall be applied prior to placing a bituminous mixture on a primed surface, an existing bituminous surface, or an existing Portland cement concrete pavement surface. Tack coat shall also be applied between each layer of bituminous mixtures. A light coat of bituminous material shall also be applied to edges or vertical surfaces against which a bituminous mixture is to be placed.

The contractor shall choose the bituminous material to be used for tack coat. The Engineer must approve the contractor's choice of bituminous material prior to its use.

The rate of application for the specific usage will be specified by the Engineer. The following table shows approximate tack coat application rates:

Type of Bituminous Material	Approximate Tack Coat Application Rates: Gallons / Square Yard		Payment Factor
	Prior to Placing ACFC or AR-ACFC	All Other Tack Coats	
Emulsified Asphalt (Special Type) – See Note (1) Below.	Not Allowed	0.12	0.7
Emulsified Asphalt (Other than Special Type)	0.08	0.08	1.0
Asphalt Cement	0.06 to 0.08	0.06 to 0.08	1.0
Note: (1) Emulsified Asphalt (Special Type) shall consist of Type SS-1 or CSS-1			

emulsified asphalt diluted with water to provide an asphalt content of not less than 26 percent.

The Engineer may adjust the application rate.

If emulsified asphalt of any type is used, it shall have broken before the bituminous mixture is placed.

Tack coat shall be applied only as far in advance of the placement of the bituminous mixture as is necessary to obtain the proper condition of tackiness. All traffic on a tack coat surface shall be minimized to the greatest extent possible. In no event shall more tack coat be applied in one day than will be covered by the bituminous mixture during that same day.

**404-4.03 Fog Coat:**

The type of bituminous material and the approximate application rate shall be as specified in Subsection 404-2.03 of the specifications. The material shall be diluted with one part water to one part bituminous material. The specified application rate is based on the diluted material. The Engineer may adjust the actual application rate based on specific trials and visual observations performed on test areas for different pavement conditions.

When specified in Subsection 404-2.03 of the specifications, blotter material shall be applied following the application of bituminous material.

**404-4.04 Chip Seal Coat:**

**(A) General:**

The contractor shall prepare their bid submittal and initial construction schedule, submitted at the Preconstruction Conference as described in Subsection 108.03 of the specifications, based on the following beginning and ending dates for placement of the chip seal.

<b>Average Elevation of Project, Feet</b>	<b>Beginning and Ending Dates</b>
0 – 3499	March 15 – May 31
0 – 3499	September 1 – October 31
3500 – 4999	May 1 – September 30
5000 and over	June 1 – August 31

Any proposed placement deviating from the beginning and ending dates shall be detailed in the written schedule of construction submitted at the weekly meeting described in Subsection 108.04 of the specifications. No contract time extension will be granted for placement outside of the beginning and ending dates. Any placement deviating from the beginning and ending dates shall be at the sole risk of the contractor.

The type of bituminous material and the approximate application rate shall be as specified in Subsection 404-2.03 of the specifications. The type of cover material shall be as specified in Subsection 404-2.03 of the specifications.

The contractor shall determine the application rates and corresponding quantities of bituminous material and cover material for chip seal coat in accordance with Arizona Test Method 819. Application rates are subject to approval by the Engineer. Areas and locations anticipated to require adjustment to the rate(s) shall also be identified.

The application rates and performance of emulsified asphalt chip seals shall be evaluated using the Sweep Test in accordance with ASTM D7000.

The performance of hot applied chip seals shall be verified using the Vialit Retention Test in accordance with EN 1272-3, modified as necessary to account for the specific characteristics of the proposed chip seal.

The actual application rate shall be such that the aggregate is embedded approximately 70 percent (80 percent above 4,000 feet elevation) and excessive tracking of bituminous material does not occur under construction equipment or when opened to traffic.

The actual rate of cover material to be applied shall be such that no more than 5 percent of the chips applied are removed during sweeping and approximately 20 percent void space exists between the aggregate particles once realigned after opening to traffic.

The proposed application rate(s), locations requiring adjustment, and the associated basis for each adjustment, shall be submitted to the Engineer for approval no later than five days following completion of the Pre-Activity Walkthrough as described in Subsection 404-4.04(B) of the specifications and at least five days prior to placement of the test strip.

The basis for any anticipated adjustments shall include use of one or more of the following:

- (a) Sand Patch tests performed in accordance with *STP762 Pavement Surface Characteristics and Materials*; Haydon, C.E. (ASTM, 1982),
- (b) Appendix B of Chip Seal Guide for Application and Construction; Pavement Preservation Committee of the Arizona Chapter of The Associated General Contractors (AGC-Arizona Chapter, 2013),
- (c) Arizona Test Method 742 for mean macrotexture.

The approved application rate(s) and adjustments shall be clearly marked at the corresponding locations and remain visible to equipment operators prior to placement.

At least 10 days prior to chip seal placement, the contractor shall submit a minimum 75-pound sample of uncoated cover material to the Engineer for testing. In addition to the submitted cover material, the contractor shall also submit 3 full gallons of emulsion (5 to 8 gallons for hot applied) in 1-gallon cans in accordance with the requirements of Arizona Test Method 103. The contractor shall also submit 40 pounds of granulated rubber if included in the bituminous material.

#### **(B) Pre-Activity Walkthrough:**

Prior to placement, the contractor shall conduct a Pre-Activity Walkthrough with all parties expected to work on the chip seal.

Locations where adjustments in application rate may be appropriate shall be documented.

A location for a test strip, approximately 1,000 feet in length shall be identified. If additional test strip locations are desired due to varying surface conditions, these shall also be identified.

Other factors or site conditions such as turn or deceleration lanes, changes in surface characteristics, crack fill, and recent patchwork which may affect placement of the chip seal coat shall also be identified. A description of any affecting conditions and the corresponding locations and action to be taken to minimize their impact shall be documented.

In addition to the requirements herein, the items contained on the checklists provided in AGC-Arizona Chapter's Chip Seal Guide for Application and Construction shall be considered.

**(C) Chip Seal Test Strip:**

Prior to the start of placement, all equipment used in the placement of the chip seal coat shall be verified to be in satisfactory operating condition and in accordance with the requirements herein.

Cover material shall be verified to have appropriate moisture and be in a condition consistent with that in which it existed at the time initial acceptance samples were obtained. Bituminous material certifications shall be verified to indicate that the required type of material is on hand. The bituminous material shall be at the proper temperature prior to application.

The chip seal test strip shall be a minimum of 500 linear feet. The existing pavement surface to receive the test strip shall be verified to have been adequately swept and cleaned and meeting the requirements herein. Anticipated application rates shall have been marked and clearly visible to equipment operators.

During placement of the test strip, all equipment shall be observed to confirm proper operation. The application rate of both the bituminous material and cover material shall be measured and verified using a catch-and-weigh "tarp" method. The application rate of the bituminous material shall also be measured and verified by means of a volume per area calculation using the distributor trucks calibrated thermometer and volume measuring gauge or device.

Rolling shall immediately follow placement of the cover material and be verified to be in conformance with the requirements herein.

For emulsion chip seals, the contractor shall broom the surface to remove excess cover material only after the emulsion has fully broken and cured sufficiently for maximum chip retention.

Prior to any subsequent placement, the test strip shall be observed to have adequate embedment of the cover material without excessive void space between the chips, stacking of chips, or accumulation of chips on the shoulders. If the condition of the test strip is not acceptable, adjustments shall be made as appropriate, and an additional test strip shall be performed.

**(D) Application of Bituminous Material for Chip Seal:**

The following bituminous material application requirements for chip seal are in addition to the requirements specified in Subsection 404-3.05 of the specifications.

Bituminous material shall not be applied a distance ahead of the chip spreader that results in excessive lag of the rollers allowing hot applied bituminous material to cool or emulsified bituminous material to break prior to achieving adequate embedment of the cover material.

When inclement weather is expected, only the amount of hot applied bituminous material which can receive adequately embedded cover material, or only the amount of emulsified asphalt that can receive adequately embedded cover material and has sufficiently broken, shall be placed prior to the start of inclement weather.

**(E) Application of Cover Material:**

Cover material shall be immediately and uniformly spread over the freshly applied bituminous material such that aggregate particles are securely adhered and will not roll, tumble, or be picked up during the rolling process. Any oversize aggregate or foreign material picked up during stockpiling or loading operations shall be eliminated before entering the aggregate spreader hopper. Supplemental spreading and smoothing shall be done by hand methods where necessary.

When emulsified asphalt is used, the cover material shall be at a saturated surface-dry condition at the time of spreading.

For hot applied chip seals, and when project conditions require, precoated cover material shall be at a sufficient temperature to facilitate adequate embedment.

**(F) Rolling Cover Material:**

Following the spreading of cover material, the surface shall be promptly rolled with self-propelled pneumatic-tired rollers. A minimum of three rollers shall be provided; however, a sufficient number of rollers shall be provided to cover the entire width of the material spread in one pass of the compactors and rolling shall continue until a minimum of three passes has been completed.

For chip seals with a hot applied bituminous material the first roller pass shall occur as soon as possible but no longer than 2 minutes after applying the aggregate. The third pass shall be completed quickly enough to embed the aggregate before the binder cools, and no longer than 15 minutes after the binder is applied.

**(G) Removal of Loose Cover Material:**

The cover material shall be removed by means of a power broom which shall be in good condition and of a design suitable for the work. The action of the broom shall be such that particles which are stuck to the bituminous material will not be dislodged.

For chip seals with an emulsified bituminous material, initial removal of all loose cover material shall not commence prior to two hours after placement or at such time that the Engineer has determined that the emulsion has sufficiently cured.

For chip seals with a hot applied bituminous material, the removal of loose cover material shall commence approximately 30 minutes after the final rolling is completed.

Initial removal of loose cover material shall occur prior to opening to traffic. All loose cover material shall be removed from the paved surface by brooming within 24 hours after application.

After the traffic free period as specified in Subsection 404-4.04(H) of the specifications, but prior to final removal of loose cover material, all traffic permitted by the Engineer shall not exceed 25 miles per hour.

If the Engineer determines that conditions are not conducive to obtaining the best results, brooming shall be discontinued until the Engineer has considered all conditions and has determined the best time for the removal of the cover material.

**(H) Minimum Traffic-Free Period:**

The minimum traffic-free period for a newly applied emulsion chip seal coat shall be three hours. The contractor's hauling equipment may use the new seal coat surface during the traffic free period at a speed not to exceed 15 miles per hour but shall not make sharp turns of brake abruptly.

**(I) Fog Coat on New Chip Seals:**

When specified in Subsection 404-2.03 of the specifications, a fog coat shall be placed on the new chip seal following the curing period. The type of bituminous material and the approximate application rate shall be as specified in Subsection 404-2.03 of the specifications. The material shall be diluted with one part water to one part bituminous material. The specified application rate is based on the diluted material. The Engineer may adjust the actual application rate based on specific trials and visual observations performed on test areas for different pavement conditions.

When specified in Subsection 404-2.03 of the specifications, blotter material shall be applied following the application of bituminous material.

**(J) Contractor Quality Control:**

The contractor shall be responsible for the chip seal design, performing quality control testing on materials, and designating an individual charged with constant observation and monitoring.

Need for an adjustment to application rates or a correction to process or equipment shall be communicated immediately to the necessary personnel.

The initial condition of equipment, materials, and the project and pavement surface conditions shall be documented. The performance and results of the test strip shall be

documented. Observations of monitoring activities and quantification of application rates during the test strip and production shall be documented no less frequently than every other placement run.

The cause for any adjustments, including quantifying tests performed, the adjustments made, and the result of such adjustments with regard to acceptability and performance of the chip seal coat shall be documented.

**404-5 Tack Coat:** of the Standard Specifications is hereby deleted.

**404-6 Fog Coat:** of the Standard Specifications is hereby deleted.

**404-7 Chip Seal Coat:** of the Standard Specifications is hereby deleted.

**404-8 Method of Measurement:** the fourth paragraph of the Standard Specifications is revised to read:

The contractor shall be responsible to determine the amount of cover material that will be required to complete the work from the source(s) from which the cover material is obtained.

**404-8 Method of Measurement:** the sixth paragraph of the Standard Specifications is revised to read:

Measurement for payment will be made only for the quantity of bituminous material and for the quantity of aggregate material used in accordance with the requirements of the specifications.

**404-9 Basis of Payment:** of the Standard Specifications is revised to read:

The accepted quantities of the work under this section, complete in place, measured as provided above, will be paid for at the contract unit price as designated in the bidding schedule, except the contract unit price for the quantities of bituminous material will be adjusted on the basis of the test results in accordance with the requirements of Section 1005 of the specifications.

No measurement or direct payment will be made for precoating the cover material, material for precoating, rolling and removal of loose cover material, and removal of loose blotter material.

The contract unit price for each item of bituminous material except tack coat will be considered to include all costs for furnishing, hauling, handling, spreading, and mixing of the material as required.

The unit price for bituminous tack coat is deemed to be the cost to furnish, transport, and store asphalt cement or emulsified asphalt at the project location. Payment for bituminous tack coat will be made at the unit price multiplied by the respective payment factor listed under Subsection 404-4.02 of the specifications, and adjusted to the nearest dollar.

Unless otherwise specified, the accepted quantity of bituminous tack coat, measured as provided above, will be paid at the contract unit price per ton adjusted as provided above

which price shall be full compensation for furnishing, transporting, and storing the exact type, grade or designation of bituminous tack coat specified by the Engineer.

Unless otherwise specified, the accepted quantity of time to apply bituminous tack coat, measured as provided above, will be paid for at the contract unit price per hour which payment shall be full compensation for applying bituminous tack coat.

The bidding schedule quantity for tack coat is based on an estimated application rate of 0.06 gallons per square yard for each application shown on the project plans.

The unit price of bituminous material will be adjusted in accordance with the requirements of Subsection 109.16 of the specifications based on the "initial cost" of bituminous material between the date of bid opening and the date that the material is used on the project.

No measurement or direct payment will be made for furnishing, applying and removing blotter material, furnished in conjunction with the application of a prime coat.

No measurement or direct payment will be made for the maintenance or repair of a prime coat surface.

**(409AGGR, 07/18/24)**

**SECTION 409 ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL):** the title of the Standard Specifications is revised to read:

**SECTION 409 ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL-SPECIAL MIX):**

**409-1 Description:** the first paragraph of the Standard Specifications is revised to read:

The work under this section shall consist of constructing Asphaltic Concrete (Miscellaneous Structural-Special Mix), hereinafter asphaltic concrete, by furnishing all materials, mixing at a plant, hauling and placing a mixture of aggregate materials, reclaimed asphalt pavement (RAP) if used, mineral admixture, and bituminous material (asphalt cement) to form a pavement course or to be used for other specified purposes, in accordance with the details shown on the project plans and the requirements of the specifications, and as directed by the Engineer.

**409-2 Materials:** of the Standard Specifications is modified to add:

The bidding schedule quantity of asphaltic concrete is based on an estimated unit weight of 152 pounds per cubic foot.

**409-2.01 Mineral Aggregate:** of the Standard Specifications is revised to read:

Mineral aggregate shall conform to the following requirements when tested in accordance with the applicable test methods.

<b>Mineral Aggregate Characteristics</b>	<b>Test Method</b>	<b>Requirement</b>
Combined Bulk Oven Dry Specific Gravity	Arizona Test Method 251	2.350 - 2.850
Combined Water Absorption	Arizona Test Method 251	0 - 2.5%
Abrasion	AASHTO T 96	100 Rev., Max 9% 500 Rev., Max 40%
Sand Equivalent	AASHTO T 176 (After thoroughly sieving the sample, no additional cleaning of the fines from the plus No. 4 material is required.)	Minimum 55
Fractured Coarse Aggregate Particles	Arizona Test Method 212	Minimum 85% with at least two fractured faces and minimum 92% with at least one fractured face (plus No. 4 material)
Uncompacted Void Content	Arizona Test Method 247	Minimum 45.0%
Carbonates (1)	Arizona Test Method 238	Maximum 20%
<p>(1): Testing for carbonates only applies if either of the following conditions exist:</p> <ul style="list-style-type: none"> <li>(a) The asphaltic concrete is the designed final pavement surface normally used by traffic.</li> <li>(b) The asphaltic concrete, temporary or otherwise, will be subject to traffic for more than 60 days.</li> </ul>		

The gradation will be determined in accordance with Arizona Test Method 201, and shall conform to the requirements given below.

<b>Mix Design Grading Limits</b>		
<b>Sieve Size</b>	<b>Percent Passing</b>	
	<b>Without Admix.</b>	<b>With Admix.</b>
1 Inch	100	100
3/4 Inch	90 – 100	90 - 100
3/8 Inch	62 – 77	62 - 77
No. 8	37 – 46	38 -47
No. 40	10 – 18	11 - 19
No. 200	1.5 - 4.5	2.5 – 6.0

Fine mineral aggregate shall be obtained from crushed gravel or crushed rock. All uncrushed material passing the No. 4 sieve shall be removed prior to the crushing, screening, and washing operations necessary to produce the specified gradation. The contractor shall notify the Engineer a minimum of 48 hours in advance of crushing the material to be used as mineral aggregate, so all crushing operations can be inspected. Existing stockpile material which has not been inspected during crushing will not be permitted for use unless the contractor is able to document to the Engineer's satisfaction that the mineral aggregate has been crushed. Any material inspected by the Department as crushed material for the project shall be separated from the contractor's other stockpiles and reserved for use throughout the project duration.

The contractor may blend uncrushed fine aggregate up to a maximum of 15 percent of the total aggregate, provided that the composite of uncrushed fine aggregate and crushed fine aggregate meets the requirement for uncompacted void content. The uncrushed fine aggregate shall be 100 percent passing the 1/4 inch and not contain more than 4.0 percent passing the No. 200 sieve. Should the contractor modify the method of producing either the uncrushed or crushed fine aggregate, the Engineer shall be immediately notified and the materials sampled and tested for determination of uncompacted void content.

**409-2.02 Bituminous Material:** the first paragraph of the Standard Specifications is revised to read:

Asphalt cement shall be a performance grade (PG) asphalt binder, conforming to the requirements of Section 1005 of the specifications. The type of asphalt binder shall be PG 70-28PM.

**409-2.03 Mineral Admixture:** the second paragraph of the Standard Specifications is revised to read:

The mineral admixture content shall be 2.0 percent, by weight, of the mineral aggregate. However, a minimum of 1.0 percent mineral admixture may be used if the contractor submits test information showing a lowered percentage of mineral admixture produces mix design results for Index of Retained Strength of at least 60 percent (70 percent if the average elevation of the project is above 3,500 feet) and a Minimum Wet Strength of 150 psi when tested in accordance with Arizona Test Method 802.

**409-2.04 Mix Design:** the third, fourth, and fifth paragraphs of the Standard Specifications are revised to read:

The mix design shall be prepared by or under the direct supervision of a professional engineer experienced in the development of mix designs and mix design testing. Reclaimed asphalt pavement (RAP) may be used in the mixture if properly designed per Arizona Test Method 833; however, RAP will not be allowed in the mixture when asphalt cement type PG 76-22 TR+ or PG 70-22 TR+ is specified in Subsection 409-2.02 of the specifications. Limits for the usage of RAP shall be in accordance with ADOT Materials Practice and Procedure Directive No. 20, "Guidance on the Use of Reclaimed Asphalt Pavement (RAP) in Asphaltic Concrete". The mix design engineer shall meet the requirements given in ADOT Materials Practice and Procedure Directive No. 4, "Asphaltic

Concrete Mix Design Proposals and Submittals”. The mix design shall be provided in a format that clearly indicates all the mix design requirements and shall be sealed, signed, and dated by the mix design engineer.

The mix design shall be prepared by a mix design laboratory that has met the requirements of ADOT Materials Practice and Procedure Directive No. 19, “ADOT System for the Evaluation of Testing Laboratories”.

If approved by the Engineer, as an alternative to meeting the mix design requirements specified herein, a mix design meeting the requirements of the specifications for a Section 416 Asphaltic Concrete (End Product) (3/4 inch Special Mix), Section 417 Asphaltic Concrete (SHRP) (End Product (1/2 inch Mix), or Section 417 Asphaltic Concrete (SHRP) (End Product) (3/4 inch Mix) may be substituted for use. The type of asphalt binder used in the alternative mix design must be the same as that specified in Subsection 409-2.02 of the specifications. The alternative mix design may include reclaimed asphalt pavement (RAP) if properly designed per Arizona Test Method 833. If a mix design meeting the requirements of Section 417 is used, the number of gyrations for N-design used in the alternative mix design must be at least that which would be specified at the location where the Asphaltic Concrete (Miscellaneous Structural-Special Mix) is to be placed. The lift thickness for the alternative mix design shall conform to the following table.

<b>Alternative Mix Design</b>	<b>Minimum Lift Thickness</b>
Section 416 (3/4 inch Special Mix)	2 inches
Section 417 (1/2 inch mix)	2 inches
Section 417 (3/4 inch mix)	2-1/2 inches

**409-2.04**      **Mix Design:** the last three paragraphs of the Standard Specifications are revised to read:

A copy of the mix design and representative samples of the mineral aggregate, mineral admixture, and asphalt cement used in the mix design shall be submitted to the Engineer for calibration of the ignition furnace, and for the determination of sand equivalent, fractured coarse aggregate particles, and uncompacted void content. The Engineer shall witness the sampling of the mineral aggregate. The mix design and samples shall be submitted to the Engineer at least five working days prior to the start of asphaltic concrete production.

The sand equivalent, fractured coarse aggregate particles, and uncompacted void content shall meet the requirements specified in Subsection 409-2.01 of the specifications. Additional testing of the uncrushed and crushed fine aggregate for uncompacted void content will be required if the method of producing either fine aggregate is modified.

If the mineral aggregate fails to meet the requirements specified herein, asphaltic concrete production shall not commence, and the contractor shall either submit a revised mix design which is representative of the materials produced or correct the deficiencies in the aggregate stockpiles.

The mix design shall meet the following criteria when tested in accordance with the requirements of the following test methods:

Criteria	Requirement	Arizona Test Method
1. Voids in Mineral Aggregate: %, Range	15.0 – 18.0	(See Note )
2. Effective Voids: %, Range	5.3 – 5.7	(See Note )
3. Absorbed Asphalt: %, Range	0 – 1.0	(See Note )
Note: For mixes without RAP, Arizona Test Method 815. For mixes with RAP, Arizona Test Method 833.		

The contractor may make self-directed target changes to the approved mix design within the limits shown below. Requests for self-directed target value changes shall be made in writing and acknowledged by the Engineer prior to start of production. Self-directed target changes shall meet contract requirements for mix design criteria and grading limits.

MEASURED CHARACTERISTICS	ALLOWABLE SELF-DIRECTED TARGET VALUE CHANGES
Gradation (sieve size): 3/8 inch No. 8 No. 40 No. 200	±4% from mix design target value ±4% from mix design target value ±2% from mix design target value ±0.5% from mix design target value
Asphalt Cement Content	+0.2% from mix design target value
Effective Voids	None

The contractor may propose target value changes to the approved mix design for the Engineer’s approval. The Engineer will determine if the proposed target value change will result in mix production that meets the contract requirements for mix design criteria and grading limits. For acceptance purposes, target value changes will not be retroactive.

In no case shall the approval of mix design changes relieve the contractor of the responsibility for the results obtained by the use of such approved changes.

**409-2.05          Sampling and Testing:** of the Standard Specifications is revised to read:

Sampling and testing the materials and mixture for quality control purposes shall be the contractor's responsibility. The contractor shall perform sufficient testing to assure that mineral aggregate and asphaltic concrete are produced which meet all specified requirements.

For acceptance purposes, samples of the asphaltic concrete shall be taken by the contractor, under the observation of the Engineer, at random locations designated by the Engineer. A minimum of one sample shall be taken for each 500 tons of asphaltic concrete. Samples shall be taken in accordance with the requirements of Section 2 or Section 3 of Arizona Test Method 104. The Engineer will immediately take custody of the samples. The material will be tested by the Engineer for the following properties:

Test Property	Test Method
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Asphalt Cement Content	Arizona Test Method 427 (428 for RAP mixes) (See Note)
Gradation	
Marshall Density	Arizona Test Method 410
Maximum Theoretical Density	Arizona Test Method 417
Effective Voids	Arizona Test Method 424
Note: A new calibration of the ignition furnace shall be performed for each mix design, and at any other time the Engineer directs.	

**409-3.01 General:** the fourth paragraph of the Standard Specifications is hereby deleted:

**409-3.01 General:** the ninth paragraph of the Standard Specifications is revised to read:

All wheels and tires of compactors shall be wetted with water, or if necessary soapy water, or a release agent in order to prevent the sticking of asphaltic concrete. All other equipment surfaces shall be treated when necessary with a release agent. Only release agents evaluated through AASHTO Product Evaluation & Audit Solutions (formerly NTPEP) are acceptable for use. The results from AASHTO Product Evaluation & Audit Solutions (formerly NTPEP) testing, when tested in accordance with AASHTO T 383, shall conform to the requirements shown in the table below.

**409-3.01 General:** the second row of the “Release Agent Test – Requirement” table of the Standard Specifications is hereby deleted:

**409-3.03 Acceptance:** of the Standard Specifications is revised to read:

Asphaltic concrete will be accepted complete in place unless the result of any test varies from the contractor’s mix design target value (TV) as follows:

Test Property	Allowable Variation from Target Value	
Gradation (Sieve sizes)		
3/8 inch	TV –10.0	TV + 10.0
No. 8	TV – 8.0	TV + 8.0
No. 40	TV – 6.0	TV + 6.0
No. 200	TV – 2.5	TV + 2.5
Asphalt Cement Content	TV – 0.60	TV + 0.70
Effective Voids	TV –2.5	TV + 2.0

Within 15 days after receiving notice of any failing test result(s), the contractor may submit a written proposal to accept the material represented by the failing test result(s), in place, at a reduction in cost. If the failing test result(s) are only on asphalt cement content and/or effective voids, the reduction in cost will be \$5.00 per ton. If the failing test result(s) are only on gradation, the reduction in cost will be \$3.00 per ton. If the failing test result(s) are on

asphalt cement content and/or effective voids, and also on gradation, the reduction in cost will be \$5.00 per ton. The proposal shall contain an engineering analysis of the anticipated performance of the asphaltic concrete if left in place. The engineering analysis shall also detail any proposed corrective action, and the anticipated effect of such corrective action on the performance. The engineering analysis shall be performed by an independent professional engineer, who is not an employee of the contractor or materials supplier, experienced in asphaltic concrete testing and the development of asphaltic concrete mix designs.

Within three working days, the Engineer will determine whether or not to accept the contractor's proposal. If the proposal is accepted, the asphaltic concrete shall remain in place, at a reduction in cost per ton, as described above, and any necessary corrective action shall be performed at no additional cost to the Department. If the proposal is not accepted, the asphaltic concrete shall be removed at no additional cost to the Department and replaced with asphaltic concrete meeting the requirements of these specifications.

The contractor may request that a sample with a failing test result(s) on gradation and/or asphalt cement content be allowed to remain in place without the completion of an engineering analysis if the application of a self-directed target value change as outlined in section 409-2.04 would have brought the failing test result(s) to within the specified tolerances. This proposal must be made to the Engineer in writing with justification. Once accepted, the material will be allowed to remain in place at the maximum negative pay factor(s). Maximum negative are defined as a minus \$3.00 per ton for mixture properties lots in reject for gradation only, minus \$5.00 per ton for mixture properties lots in reject for asphalt cement content and/or effective voids only, and minus \$5.00 per ton for mixture properties lots in reject for asphalt cement content and/or effective voids and also gradation.

If the asphaltic concrete, represented by failing test results, is used as temporary pavement which will be removed prior to, or after, the completion of construction, the Engineer reserves the right to waive the engineering analysis and accept the material in place, at a cost reduction described above, provided the temporary pavement maintains the functionality of the intended use for the duration of the project.

**(701FLGSV, 03/20/25)**

## **SECTION 701 MAINTENANCE AND PROTECTION OF TRAFFIC:**

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

Flagging services shall consist of 1) Department of Public Safety (DPS) officers with agency vehicles, 2) local enforcement officers with agency vehicles, 3) local enforcement officers without agency vehicles, and 4) civilian flaggers. Local enforcement officers and DPS officers include those who meet the requirements of a Peace Officer under ARS Title 38, generally including anyone certified by the Arizona Peace Officer and Training Board. If available, DPS officers shall be used on Interstate Highways and Urban Freeways. Local enforcement officers will include uniformed officers from local police, tribal police, sheriff departments, or any other agencies that meet the requirements of a Peace Officer under ARS Title 38, generally including anyone certified by the Arizona Peace Officer and Training Board. An agency vehicle is defined as an agency-issued vehicle that meets the

requirements of ARS Title 28. If local enforcement officers do not have access to an agency vehicle, a personal vehicle may be used, but it shall have a make and model similar in appearance of an agency vehicle, and shall be equipped with front and rear-facing red and blue lights. The personal vehicle, when applicable, shall be presented to the Engineer for acceptability prior to its use on the project by local enforcement officers. Approval of the personal vehicle will be at the sole discretion of the Engineer.

The contractor shall be responsible to procure DPS officers, local enforcement officers, and civilian flaggers. The Engineer will determine the types and the number of hours of flaggers as needed based on the project needs. Quantities shown on the traffic control plans and/or bidding schedule are approximate only and prepared for bidding purposes. When procuring DPS officers and local enforcement officers, the contractor shall contact the relevant agency at least two days, excluding weekends and holidays, 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.

Local enforcement and DPS officers shall not work more than 12 consecutive hour work shift without the permission of the State Construction Engineer 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 will be acceptable. Certification through other programs offering flagger training may be allowed upon by the State Construction Engineer's approval. Flagger certification must be current and updated at least once every four years.

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

The accepted quantities of pilot vehicles, measured as provided above, will be paid for at the unit bid price for pilot vehicles with driver, which price shall be full compensation for the work, complete in place including, but not limited to, furnishing and maintaining the vehicle and furnishing the driver. Any hour worked after the eight hour regular time will be considered straight-time and will not be paid as overtime pay.

The accepted quantities of flagging services provided by the local enforcement officers (with agency vehicle), DPS officers, and civilian flaggers, 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, including the agency vehicle. Any hour worked after the eight hour regular time will be considered straight-time and will not be paid as overtime pay.

The accepted quantities of flagging services provided by the local enforcement officers without an agency vehicle, 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. Any hour worked after the eight hour regular time will be considered straight-time and will not be paid as overtime pay. No measurement or payment will be paid for the vehicle, regardless of the type of vehicle is an agency vehicle or not, the cost being considered as included in the price of the contract item.

In addition, the Department has estimated an additional two hours of travel time per officer per day in the quantities shown in the bid schedule. However, if more than two hours of travel time per day is required, such additional hours will be compensated in accordance with the requirements of Subsection 104.02 of the specifications if approved by the State Construction Engineer. Travel time is considered to be supplementary to the hours worked by the officer during a work shift.

**(701EATERM, 08/19/21)**

**ITEM 7010025 - TEMPORARY IMPACT ATTENUATION DEVICE (IN-LINE ENERGY ABSORBING TERMINAL):**

**ITEM 7010026 - TEMPORARY IMPACT ATTENUATION DEVICE (IN-LINE ENERGY ABSORBING TERMINAL) (IN USE):**

**Description:**

The work under these items shall consist of furnishing, installing, maintaining, and removing in-line energy absorbing terminals in conformance with the details shown on the project plans, and in accordance with the special provisions.

**Materials:**

In-line energy absorbing terminals shall meet the evaluation criteria for Test Level 3 per MASH (AASHTO Manual for Assessing Safety Hardware) for a speed of 62 miles per hour.

The delineation for the terminals shall conform to the requirements of the Standard Drawing M-34 or in accordance with the manufacturer's recommendations. The retroreflective sheeting type shall conform to the requirements of Section 1007 of the specifications.

The contractor shall provide, at the preconstruction conference, a certificate of compliance, conforming to the requirements of Subsection 106.05 of the specifications. The contractor shall include the project number on the submittal. The contractor shall submit the certification at least two weeks prior to the intended use of the terminal.

In regions that are subject to cold weather conditions, if the water filled In-line energy absorbing terminals elements that are prone to freezing are used, appropriate antifreeze agents shall be used in accordance with the manufacturer's recommendations. The antifreeze materials must be approved by the ADOT Environmental Planning and may require a leak containment as part of the system. If required by the ADOT Environmental Planning, system components containing chemicals must be labeled per OSHA requirements.

### **Construction Requirements:**

The contractor shall install the in-line energy absorbing terminal at the locations shown on the project plans, in accordance with the manufacturer's instructions and to the satisfaction of the Engineer.

Any traffic control device which will require in-line energy absorbing terminal shall be installed by the contractor only after the Engineer's approval of the terminal's use.

At the preconstruction conference meeting, the contractor shall provide in writing, a plan to repair and/or replace any damaged unit during the construction for the Engineer's approval.

Any unit which has been excessively damaged prior to installation, as determined by the Engineer, shall not be used.

Any unit damaged during or after the installation by the contractor's operations shall be repaired or replaced with an undamaged unit by the close of that work shift, at no additional cost to the Department. Any unit damaged by the travelling public, the contractor shall replace the unit within 36 hours of identifying the damage.

### **Method of Measurement:**

Temporary Impact Attenuation Device (In-Line Energy Absorbing Terminal) will be measured by the unit for each in-line energy absorbing terminal furnished and installed.

Temporary Impact Attenuation Device (In-Line Energy Absorbing Terminal) (In Use) will be measured by the each-day for each 24-hour day that an in-line energy absorbing terminal is in place and functional for the "in use" condition as specified in Subsection 701-4.01 (B) of the specifications.

### **Basis of Payment:**

The accepted quantities of Temporary Impact Attenuation Device (In-line Energy Absorbing Terminal), measured as provided above, will be paid for at the contract unit price per each, which price shall be full compensation for the work including delineation, maintenance and removal of the terminal, complete in place.

Fifty percent of the contract unit price for the in-line energy absorbing terminal will be paid upon satisfactory installation and fifty percent of the contract unit price will be paid upon final removal of the installed terminal.

Measurement and payment for an in-line energy absorbing terminal which is damaged by the traveling public will be made in accordance with the requirements of Subsection 109.04 of the specifications.

The accepted quantities of Temporary Impact Attenuation Device (In-line Energy Absorbing Terminal) (In Use), measured as provided above, will be paid for at the contract unit price per

each-day, which price shall be full compensation for work, as specified herein and as shown on the project plans, complete in place.

(708 PTVCT, 07/17/25)

**SECTION 708 WATERBORNE PAVEMENT MARKINGS:**

**708-2.01(D) Quantitative Requirements of Mixed Paints:** the viscosity row of the Table 708-1 of the Standard Specifications is revised to read:

Table 708-1		
	White	Yellow
Viscosity: Krebs Units at 77 ± 1° F, ASTM D562	70 - 95	70 - 95

(709PGMNT, 08/18/22)

**SECTION 709 DUAL COMPONENT PAVEMENT MARKINGS:**

**709-2.02(A) Composition:** of the Standard Specifications is revised to read:

The epoxy resin material shall be within the following compositional requirements:

Component	Percent by Weight	
	White	Yellow
White Pigment (Titanium Dioxide)	18 - 25	10 - 17
Organic Yellow Pigment	---	7 - 10
Epoxy Resin	75 - 82	73 - 83

The white pigmented pavement marking material shall be tested in accordance with ASTM D3723 and shall conform to the requirements specified in ASTM D476 (Type II).

**709-2.02(K) Color:** of the Standard Specifications is revised to read:

The colors of the applied markings shall comply with the requirements specified in ASTM D6628 and shall conform to the following:

The white color shall match Federal Test Standard Number 595B, color chip no. 37875; and

The yellow color shall match Federal Test Standard Number 595B, color chip no. 33583.

**709-2.02(L) Yellowness Index:** of the Standard Specifications is revised to read:

The initial yellowness index value of the white material shall be tested in accordance with ASTM E313. The sample shall be cured for 72 hours at room temperature ( $75 \pm 2$  degrees F) prior to testing. The initial yellowness index shall not exceed a value of 8.

The yellowness index value of the white material shall be tested in accordance with ASTM E313 and ASTM G154. The sample shall be cured for 72 hours at room temperature ( $75 \pm 2$  degrees F) and then exposed in the QUV chamber for 72 hours and 500 hours respectively. The yellowness index values shall not exceed the values shown in the table below.

Exposure Time (hours)	Yellowness Index
72	15
500	27

**ITEM 8050003 — SEEDING (CLASS II):**

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

Areas to be seeded are those disturbed or unvegetated areas listed herein, shown on the plans, called for in the contractor's erosion/sediment control plan, Nonpoint Source (NPS) pollution control plan, Stormwater Quality Protection Plan (SQPP), Stormwater Runoff Pollution Control Plan, Decentralized Stormwater Management Plan, Stormwater Runoff Mitigation Plan, Stormwater Management Plan (SWMP), Biotechnical Erosion Control Plan, Post-Construction Stormwater Management Plan (PCSMP), Integrated Vegetation Management Plan (IVMP), Functional Landscape Ecological Restoration Plan, Assisted Migration Plan (AMP), or designated by the Engineer. All construction support activities disturbed unpaved temporary construction access, unpaved on-site staging, unpaved on-site material storage, and unpaved on-site stockpiling areas shall ultimately be seeded unless otherwise stabilized by equivalent permanent stabilization measures. If not seeded, the equivalent permanent stabilization measures shall be evaluated by a Construction Professional Landscape Architect (PLA) and approved by the Engineer. Unless otherwise prohibited by environmental permit, 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 channel(s). The seeding area below the OHWM shall also exclude the area directly under bridge(s).

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 construction shall be completed before Substantial Completion. The 45-calendar-day seeding maintenance period, including any re-seeding work if required after Initial Seeding Construction Acceptance, shall be completed before project Final Acceptance.

Seeding used as part of a SWPPP shall be completed before Substantial Completion, or sooner as required in the SWPPP. The 45-calendar-day seeding maintenance period, including any re-seeding work if required after Initial Seeding Construction Acceptance, shall be completed before project Final Acceptance.

No time extension will be granted for seeding not completed as specified herein.

Seeding areas below the OHWM shall be exempted from the 45-calendar-day maintenance period requirement.

An on-site pre-activity seeding construction meeting shall be coordinated by Construction PLA. The necessity of half-acre (0.5 acre) sample demonstrative area of Class II Seeding shall be verified for the seeded areas greater than five (> 5) acres excluding shoulder build-up areas (edge of pavement build-up areas). The contractor shall guarantee in writing to furnish all suitable equipment for soil tillage, seeding, and mulching during pre-activity seeding construction meeting as evaluated by a Construction PLA, as well as approved by the Engineer.

**2.0 Materials:**

**2.01 General:**

The contractor shall avoid persistent herbicide residues contamination in the soil. Soil sterilant herbicides, especially bare-ground herbicides with long-lasting Soil Persistence, shall be prohibited to use for all unpaved project areas that will be seeded. Pre-emergence herbicides shall be prohibited from unpaved project areas that will eventually be seeded.

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 tests 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 the 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/or collectors, on their letterhead, that the source(s) for the contract-specified seed has been secured. A minimum of three (3) separate confirmation letters from seed suppliers, providers, and/or collectors shall be presented through the Engineer for a Construction PLA's evaluation within the context of reliable sources. 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 scientific genus, species, subspecies/varieties or strains of seed, the percentage of germination, purity, weed content, and testing information. Unless otherwise approved by Roadside Development Section through the Engineer, the date of analysis for Tetrazolium Test (TZ) shall not be more than 15 months prior to the delivery date from a seed provider/supplier. 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 Roadside Development through the Engineer, weed content of the contract-specified seed mix shall not exceed 0.5 percent ( $\leq 0.5\%$ ).

In addition to Federal Seed Act Regulations, unless otherwise approved by Roadside Development through the Engineer, the contamination of seed lots from the following noxious / invasive plant species shall not be permitted.

<b>NOXIOUS / INVASIVE WEEDS WATCH LIST FOR THE CONTAMINATED SEED LOTS</b>	
<b>SCIENTIFIC NAME</b>	<b>COMMON NAME</b>
<i>Amaranthus retroflexus</i>	Redroot Amaranth / Redroot Pigweed / Red-Rooted Pigweed / Rough Pigweed
<i>Bassia scoparia</i> ( <b>syn.</b> <i>Kochia scoparia</i> )	Kochia / Fireweed
<i>Bothriochloa bladhii</i> ( <b>syn.</b> <i>Andropogon bladhii</i> / <i>Andropogon caucasicus</i> / <i>Andropogon intermedius</i> / <i>Bothriochloa caucasica</i> / <i>Bothriochloa intermedia</i> )	Caucasian Bluestem
<i>Bothriochloa ischaemum</i>	Yellow Bluestem
<i>Brassica tournefortii</i>	Sahara Mustard / Mediterranean Mustard / Mediterranean Turnip / Prickly Turnip
<i>Bromus tectorum</i>	Cheatgrass / Downy Brome / Broncoglass / Downy Chess / Soft Chess / Drooping Brome
<i>Cynodon dactylon</i> ( <b>syn.</b> <i>Capriola dactylon</i> )	Bermudagrass / Devilgrass
<i>Centaurea melitensis</i>	Malta Star-thistle / Napa Star Thistle / Tocalote
<i>Cenchrus spinifex</i> ( <b>syn.</b> <i>Cenchrus incertus</i> / <i>Cenchrus pauciflorus</i> / <i>Cenchrus parviceps</i> )	Field Sandbur / Coastal Sandbur / Common Sandbur
<i>Chorispora tenella</i>	Crossflower / Purple Mustard / Blue Mustard / Musk Mustard / Beanpodded Mustard / Tenella Mustard
<i>Cuscuta</i> spp.	Dodder / Angel Hair / Devil's Hair / Devil's Ringlet / Goldthread / Hairweed / Lady's Laces / Strangleweed / Witch's Hair / Amarbel
<i>Eragrostis lehmanniana</i>	Lehmann Lovegrass
<i>Euphorbia esula</i>	Leafy Spurge / Green Spurge / Wolf's Milk
<i>Euphorbia prostrata</i> ( <b>syn.</b> <i>Chamaesyce prostrata</i> / <i>Euphorbia chamaesyce</i> )	Prostrate Spurge / Prostrate Sandmat / Ground Spurge / Blue Weed
<i>Onopordum acanthium</i>	Scotch Thistle / Cotton Thistle
<i>Pennisetum ciliare</i> ( <b>syn.</b> <i>Cenchrus ciliaris</i> )	Buffelgrass / African Foxtail Grass
<i>Physalis</i> spp.	Ground Cherry / Jerusalem Cherry / Strawberry Tomato
<i>Salsola kali</i> subsp. <i>tragus</i> ( <b>syn.</b> <i>Salsola iberica</i> )	Russian Thistle / Tumbleweed
<i>Setaria faberi</i>	Japanese Bristlegrass / Giant Foxtail
<i>Setaria pumila</i> ( <b>syn.</b> <i>Chaetochloa glauca</i> / <i>Chaetochloa lutescens</i> / <i>Panicum glaucum</i> )	Yellow Foxtail / Pigeon Grass / Yellow Bristlegrass

<b>NOXIOUS / INVASIVE WEEDS WATCH LIST FOR THE CONTAMINATED SEED LOTS</b>	
<b>SCIENTIFIC NAME</b>	<b>COMMON NAME</b>
<i>/ Setaria glauca</i> )	
<i>Setaria viridis</i>	Green Bristlegrass / Pigeon Grass / Wild Millet / Green Foxtail
<i>Solanum physalifolium</i> ( <b>syn.</b> <i>Solanum physalifolium</i> / <i>Solanum sarachoides</i> / <i>Solanum villosum</i> )	Hoe Nightshade / Argentine Nightshade / Green Nightshade / Hairy Nightshade

The contractor shall provide all seed tag labels to the Engineer. No payment will be made for seeds until tag labels and Certificates of Analysis from all seeds 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.

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

<b>TABLE 1</b>			
<b>DIVERSIFIED SEED MIX—for All Unpaved Disturbed Areas, Unvegetated Areas, Receiving Pervious Areas (RPA), Decentralized Stormwater Management Areas, and/or Designated Areas</b>			
<b>Botanical Name</b>	<b>Common Name</b>	<b>PLS Rate (Pounds Per Acre)</b>	<b>Per Pound Value for Substitution (see text)</b>
<i>Astragalus canadensis</i>	Canadian Milkvetch	1	\$80
<i>Artemisia frigida</i>	Fringed Sagebrush	0.1	\$100

Achillea lanulosa	Western Yarrow	1	\$40
Asclepias speciosa	Showy Milkweed	2	\$150
Asclepias tuberosa	Butterfly Milkweed	1	\$300
Bouteloua curtipendula cv. Vaughn *	Sideoats Grama	2	\$15
Bouteloua gracilis cv. Bad River	Blue Grama	1	\$23
Balsamorhiza sagittata	Arrowleaf Balsamroot	2	\$70
Cleome serrulata	Rocky Mountain Beeplant	3	\$30
Dalea purpurea	Violet Prairie Clover	3	\$45
Festuca arizonica	Arizona Fescue	0.5	\$16
Gaillardia aristata	Blanket Flower	3	\$20
Gaillardia pulchella	Firewheel	0.5	\$20
Hedysarum boreale	Boreal Sweet-Vetch	3	\$100
Koeleria macrantha	Prairie Junegrass	0.5	\$40
Lupinus bicolor	Miniature Lupine	2	\$60
Lupinus perennis	Sundial Lupine	5	\$60
Linum lewisii	Blue Flax	2	\$10
Oryzopsis hymenoides (syn. Achnatherum hymenoides)	Indian Ricegrass	2	\$10
Poa fendleriana	Muttongrass	0.5	\$60
Pascopyrum smithii	Western Wheatgrass	3	\$17
Penstemon strictus	Rocky Mountain Penstemon	2	\$70
Ratibida columnaris	Yellow Prairie Coneflower	0.5	\$20
Ratibida columnaris forma pulcherrima	Red Mexican Hat	0.5	\$20
Sporobolus cryptandrus	Sand Dropseed	0.1	\$10
Sitanion hystrix (syn. Elymus elymoides)	Squirrel-tail Grass	2	\$45
Schizachyrium scoparium	Little Bluestem	1	\$15
<b>Estimated Per Acre Subtotal Value for Seeds Only</b>			<b>\$ 2,353.00</b>

\* Niner may be furnished if Vaughn is determined by 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 a 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. No payment will be made for areas seeded until the entire approved seed mix (including all authorized seed substitutions/adjustments) is executed.

**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:

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 Weed Free Straw Mulch:**

**(A) General:**

Straw mulch including barley straw 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. Additionally, a bill of sale for straw material shall be presented for a Construction PLA's evaluation within context from reliable sources through the Engineer.

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) Weed Free Straw Mulch for Hydraulic Application:**

Hydraulically applied straw mulch shall be wheat, barley, or rice straw processed into various particle sizes, mixed with water and tacking material, and applied as a non-clogging slurry using a hydroseeder. A minimum of 70 percent (70%) of wheat, barley, or rice straw in the mix shall be not less than 1/2 inch ± 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 (20%) 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 (15%) nor more than 30 percent (30%) of the hydraulically applied straw mulch. The date of installation of hydraulically applied straw mulch cover shall be less than twelve (12) months from the date of production. The date of production of hydraulically applied straw mulch material shall be presented for a Construction PLA's verification through the Engineer. All hydraulically applied straw mulch material shall also meet the requirements of Subsection 805-2.05 (A) stated above.

**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 monoammonium 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 (80%) of the nitrogen defined as slow release, and contain five percent (5%) Iron, ten percent (10%) 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 (80%) and 96 percent (96%) sulfur, shall be applied at the rate specified in Section 3.02. Chemical fertilizer and sulfur shall not be applied to 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. All non-potable water shall be tested for its suitability for seeding/planting with the water quality-related concerns of salinity, pathogens and contaminants. The water quality testing result shall be presented for a Construction PLA's evaluation through the Engineer. An Arizona Guide to Water Quality and Uses (web link: <https://extension.arizona.edu/sites/extension.arizona.edu/files/pubs/az1610.pdf> ) Figure 8, Water Quality and Uses Triangle shall be considered as reference for testing result evaluation and approval.

Water Quality Standards for seeding on construction projects that reach or exceed one-contiguous-acre (≥ 1 contiguous acre) permit threshold soil/ground disturbance defined under current Arizona Pollutant Discharge Elimination System (AZPDES) Construction

General Permit (CGP) and/or National Pollutant Discharge Elimination System (NPDES) CGP:

(A) On Arizona Non-Native Americans Land (**Non-Tribal**), water quality for seeding construction within 0.25-mile buffer zones of Impaired and/or Outstanding Arizona Waters (OAWs) shall meet the standards of current AZPDES CGP, as well as requirements of these Special Provisions.

The web link of ADEQ's eMaps within the State of Arizona:

<https://www.azdeq.gov/emaps>

(B) Water quality for seeding construction within Arizona Native Americans Land (**Tribal**) shall meet the standards of EPA-established or approved Total Maximum Daily Loads (TMDLs) under current NPDES CGP, as well as requirements of these Special Provisions.

The web link of EPA-established or approved TMDLs within the State of Arizona:

<https://www.epa.gov/npdes/epas-stormwater-discharge-mapping-tools>

The source of water shall be approved by a Construction PLA through 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 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:

Cation Exchange Capacity (CEC)	Greater than 45 meq/100 g
Carbon : Nitrogen Ratio (C : N)	Less than 20 : 1
pH (of extract)	5.0 – 8.5
Organic Matter Content	Greater than 30%
Total Nitrogen (not added)	Greater than 1%
Micronutrients (added)	S, Ca, Mg, Na, Fe, Al, Mn, Cu,

	Zn, B
Maturity Index	Greater than 50% on Maturity Index at a 10 : 1 ratio
Stability Indicator, CO <sub>2</sub> Evolution: Biologically Available C (BAC)	Less than 4mg CO <sub>2</sub> -C/g OM/day is desirable. From 4 through 8mg CO <sub>2</sub> -C/g OM/day is acceptable. Greater than 8mg CO <sub>2</sub> -C/g OM/day is <u>not</u> acceptable.
The CEC lab testing method shall refer to EPA9081 at the web link: <a href="http://epa.gov/osw/hazard/testmethods/sw846/pdfs/9081.pdf">http://epa.gov/osw/hazard/testmethods/sw846/pdfs/9081.pdf</a>	

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. Bulk compost may be substituted with hydraulically applied compost for small sized projects that cover less than five (< 5) acres of Class II Seeding as evaluated by a Construction PLA, as well as approved by the Engineer.

The volume of bulk compost shall be measured and documented for Construction PLA's verification and approval through the Engineer.

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 5 cubic yards (or 135 cubic feet) per acre to mini-benched slopes or on other approved areas for incorporation into the soil seedbed. For seeding areas 3:1 and flatter where bulk compost cannot be employed, hydraulically applied compost shall be utilized at the rate of 5 cubic yards (or 135 cubic feet) per acre as per the approval of the Engineer. Hydraulically applied compost may also be combined with seed, soil amendments and fertilizer in the same slurry prior to the final mulch cover with the approval of the Engineer.

The volume of hydraulically applied compost shall be measured and documented for Construction PLA's verification and approval through the Engineer.

Hydraulically applied compost shall meet the requirements of Table 4 below:

<b>TABLE 4</b>	
Cation Exchange Capacity (CEC)	Greater than 40 meq/100 g *
Carbon : Nitrogen Ratio (C : N)	Less than 20 : 1
pH (of extract)	5.0 – 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 <sub>2</sub> Evolution:	Less than 4mg CO <sub>2</sub> -C/g OM/day

Biologically Available C (BAC)	is desirable. From 4 through 8mg CO <sub>2</sub> -C/g OM/day is acceptable. Greater than 8mg CO <sub>2</sub> -C/g OM/day is <u>not</u> acceptable.
Moisture Content by Weight	From 15% through 25%
The CEC lab testing method shall refer to EPA9081 at the web link: <a href="http://epa.gov/osw/hazard/testmethods/sw846/pdfs/9081.pdf">http://epa.gov/osw/hazard/testmethods/sw846/pdfs/9081.pdf</a>	

\* 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 to the seeding area below the OHWM. The choice between bulk compost and hydraulically applied compost shall be evaluated, as well as coordinated by a Construction PLA according to specific project conditions with the approval of the Engineer.

**2.09 Soil Conditioners:**

Soil conditioners, when required, will be as shown in the Special Provisions.

**3.0 Construction Requirements:**

**3.01 General:**

**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 stated above, the Engineer and contractor in coordination with Construction PLA shall determine a half-acre (0.5 acre) sample demonstrative 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 demonstrative area, as determined during on-site pre-activity seeding construction meeting. Both straw mulches shall be representative of the materials proposed for use on the project. If the seeding and mulching procedures, as well as outcomes, are acceptable by Construction PLA, the contractor shall begin seeding operations as specified herein. Photographic Documentation of half-acre (0.5 acre) sample demonstrative seeded/mulched area shall be recorded and submitted to a Construction PLA, as comparative standard representation (mandatory visual reference) for Seeding Acceptance under Subsection 3.07 stated below.

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.

It is the contractor's responsibility to furnish all suitable equipment for soil tillage, seeding, and mulching at no additional cost to the Department.

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 (soil-water and soil-temperature regimes) for tillage and placement of materials. Seeding operations shall not be performed below 35 degrees Fahrenheit (°F). Seeding operations shall not be performed when wind exceeds ten (10) miles per hour or, in the opinion of the Engineer, conditions would prevent uniform application of materials or would carry seeding materials into areas not designated for seeding. If wind exceeds ten (10) miles per hour, the seeding operation shall be evaluated by a Construction PLA and approved by the Engineer. If approved, the contractor shall perform seeding operation close to the ground surface with a hydro-seeding hose and hand-held hose-end sprayer nozzle or other equivalently effective seeding methods to guarantee all seeding materials are applied on the target area without being blown away by wind. The contractor is responsible for protecting ambient air and water quality during the seeding operation.

The contractor shall not expose an area greater than 750,000 square feet ( $\leq 17.22$  acre) 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. It is the contractor's responsibility to furnish all suitable equipment for soil tillage at no additional cost to the Department.

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 in accordance with assessment/measurement from a Construction PLA, as well as acceptance by the Engineer.

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 to reduce stormwater runoff velocity and volume. All seeding areas suitable for tillage shall be pre-tilled to promote on-site stormwater infiltration and alleviate stormwater surface runoffs, as a part of stormwater peak flow and Volume Reduction Approaches (VRAs). All seeding areas suitable for tillage shall be adequately pre-tilled to minimize pollutant loads anticipated in nonpoint source stormwater runoffs. All project areas 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 so as to detain rainwater/moisture close to its source. On fill slopes, the operations shall be conducted in such a manner as to form minor ridges thereon to assist in retarding runoff associated erosion/pollution and favor germination of the seed through detaining rainwater/moisture close to its source.

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.

Track-walking or imprinting of rocky new fill slopes through mechanical methods in lieu of tillage may be allowable if accepted by a Construction PLA, through the Engineer. All final impression marks generated by track-walking or imprinting shall be horizontal and parallel to the contours of slope areas involved in order to create a roughened surface condition and reduce stormwater runoff velocity, enhance erosion/sediment control, as well as energy/velocity dissipation.

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 the 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. Invasive and non-native weed species shall be eradicated according to the MISCELLANEOUS WORK (CONTROL OF NOXIOUS PLANTS) of these Special Provisions whenever applicable.

All disturbed soil areas covered with existing chipped wood materials and/or native plant residues, which will not interfere with the tillage operation, shall be tilled for incorporation into the soil along with chemical fertilizer, as well as soil amendments (sulfur and compost) prior to final tillage 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 (disked) 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. Bulk 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 evaluated by a Construction PLA and determined by the Engineer, compost shall be applied hydraulically at the rate specified in Section 2.08 above. Hydraulically applied compost shall not be combined with final mulch cover in the same slurry. However, seed, sulfur and fertilizer may be utilized together with hydraulically applied compost in the same slurry with the approval of the Engineer. Final mulch cover shall be installed on top of all seeded areas as a separate construction sub-phase.

Slopes 3:1 and flatter shall have fertilizer, sulfur, and compost tilled/disked 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.

Tillage shall not be applied for the seeding area below the OHWM.

For mini-benched slopes, fertilizer, compost, and sulfur shall be applied at the specified rates with no tillage or incorporation.

Seeding shall not initiate until all tillage areas and/or mini-benched slopes are accomplished as approved by a Construction PLA through the Engineer.

### **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.

Regardless of the seeding method(s), the contractor is responsible to guarantee intimate seed-soil contact. Seed application on top of straw mulch cover or hydraulically applied straw mulch cover shall be rejected. To guarantee intimate seed-soil contact, seed application on top of existing exposed chipped wood materials and/or plant residues ground cover shall be rejected.

Final straw mulch cover or hydraulically applied straw mulch cover shall be applied on all seeded areas, as specified in Sections 3.04 and/or 3.05, within 24 hours of seed application. The seeding application shall be accomplished prior to installation of straw mulch cover or hydraulically applied straw mulch cover. Combining the seed application process with the mulching process will not be acceptable. By implementing Low Impact Development (LID) source-control measure, the contractor shall install a final straw mulch cover or hydraulically applied final straw mulch cover to minimize raindrop splash erosion and wind erosion/dust, as close as possible at the source of disturbance to protect all seeded areas. Thermally-refined wood fiber shall not be utilized solely as final mulch cover to protect all seeded areas. Seeds shall be neither exposed nor visible after the installation of straw mulch cover or hydraulically applied straw mulch cover.

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 seeds. 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 have 100 percent (100%) coverage from all directions as evaluated by a Construction PLA, as well as approved by the Engineer. 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 as Final Mulch Cover on Top of Seeded Areas:**

**(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 drifting 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 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 as Final Mulch Cover on Top of Seeded Areas:**

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 Table 5 below.

<b>TABLE 5</b>			
<b>Slope (H:V)</b>	<b>Hydraulically Applied Straw Mulch (pounds per acre – dry weight)</b>	<b>Tacking Agent (pounds pure mucilage per acre – dry weight)</b>	<b>Thermally-Refined Wood Fiber (pounds per acre – dry weight)</b>
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. To guarantee intimate seed-soil contact, seed shall not be mixed into any slurry with hydraulically applied straw mulch as final mulch cover.

### **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-calendar-day seeding maintenance period will begin upon Initial Seeding Construction Acceptance of an area by a Construction PLA through the Engineer.

The contractor shall maintain and stabilize each area or sub-area, including edge of pavement build-up area(s), for a minimum period of 45 calendar days, after Initial Seeding Construction Acceptance, as evaluated by a Construction PLA, as well as approved by the Engineer. Any areas damaged from erosion, or those that have less than 90 percent (< 90%) of the remaining final mulch cover, shall be re-seeded, re-mulched, and re-tacked at no additional cost to the Department. The Construction PLA shall assess the seeded area in comparison to the pre-established half-acre (0.5 acre) sample demonstrative area for Class II Seeding to determine the necessity of re-seeding, re-mulching, and re-tacking.

A new 45-calendar-day maintenance period for an area is not required after re-seeding work, however the initial or original period remains in effect.

### **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:**

During pre-activity construction meeting, the contractor in conjunction with Engineer shall verify and be in agreement with the quantity of seeding areas as evaluated by a Construction PLA. The quantity of areas to be seeded shall be in compliance with environmental requirements.

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 through evaluation by a Construction PLA and acceptance by the Engineer in the presence of contractor, the contractor will be paid 70 percent (70%) 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, as well as all equipment and labor required to complete the work as specified herein.

Upon completion of the 45-calendar-day seeding maintenance stage, and acceptance by a Construction PLA through the Engineer, the contractor will be paid the remaining 30 percent (30%) 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 any of 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).

No measurement or payment will be made for traffic control for work during the 45-calendar-day seeding maintenance period.

An adjustment to the contract will be made if a contractor-requested seed substitution is approved as specified in Subsection 2.02(B) above.

**(923OJTNGL, 09/17/20)**

**SECTION 923 BLANK:** the title and text of the Standard Specifications is revised to read:

**SECTION 923 ON-THE-JOB TRAINING WITHOUT GOALS:**

**923-1 Description:**

The contractor may provide On-The-Job training (OJT) aimed at moving minorities, women, and disadvantaged trainees into journeymen in various types of construction trades or job classifications in accordance with 23 CFR Part 230, Part 230.111 and Part 230, Appendix B.

It is the intention of these Special Provisions that training be provided in the construction classifications/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 of a significant part of the overall training.

**923-1.01            General:**

Training and upgrading of minorities and women toward journeyman status is the primary objective of these Special Provisions. Accordingly, the contractor shall make every effort to enroll minority, women, and disadvantaged trainees (e.g., by conducting systematic and direct recruitment through public and private sources likely to yield minority and women 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 these Special Provisions. 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.

Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training. Trainees shall be distributed among the work classifications on the basis of the contractor's needs and the availability of journeymen in the various classifications within a reasonable area of recruitment. The ratio of apprentices and OJT Trainees to journeymen shall not be greater than permitted by the terms of the approved training program being utilized.

No employee shall be employed as a trainee in a classification in which they have successfully completed a training course leading to journeyman status, or in which they have been employed as a journeyman. The contractor shall satisfy this requirement by including appropriate questions in the employment application or by other suitable means. The contractor shall maintain documentation that shows the employee's work and training history.

**923-1.02            Definitions:**

**Banking-Carryover Hours:**

OJT hours completed by a trainee are eligible to be credited to a future project. Banked-Carryover hours will only be credited when the same trainee that completed the excess hours is used on the future project.

**Business Engagement and Compliance Office (BECO):**

BECO is responsible for oversight of the OJT program, which targets under-represented segments of the U.S. workforce, including minorities, women and disadvantaged individuals. BECO assesses OJT hour goals on contracts and monitors them to ensure that trainees receive the required number of training hours.

**Classification/Craft:**

Type of occupational category, trade, or job being done by a trainee on a federal-aid funded highway construction project.

**Disadvantaged Persons:**

A person who meets one of the following:

- (1) 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;
- (2) 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;
- (3) Is a foster child on behalf of whom State or local government payments are made;
- (4) Does not have a high school diploma or GED; or
- (5) Is from a family whose total annual household income is below the federal poverty limits.

**Journeyman:**

A person who is capable of performing all the duties within a given job classification or craft.

**OJT Trainee:**

A person who is:

- (1) A minority, woman, or disadvantaged individual enrolled in an approved training program; or
- (2) Any other individual enrolled in an approved training program, whose training hours are, approved by the Department, and can be credited as OJT hours.

**923-1.03 Computation of Time:**

In computing any period of time described in this OJT special provision, 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 Department's offices are open.

#### **923-1.04 OJT Training Programs:**

The minimum length and type of training for each classification will be established in the training program selected by the contractor and approved by the Department and FHWA. The Department and FHWA will approve a program if it is reasonably calculated to meet equal employment opportunity obligations and qualifies the average trainee for journeyman status in the classification concerned by the end of the training period as defined in the training program.

The Department recognizes the following OJT Training programs:

- (A) OJT Programs approved by FHWA or the Department of Labor (DOL) prior to the start of the trainee commencing work.
- (B) Registered union or other approved apprenticeship programs registered with the Bureau of Apprenticeship, U.S. DOL, Employment and Training Administration, Bureau of Apprenticeship and Training or the Arizona Apprenticeship Office, Arizona Department of Economic Security programs recognized by the Bureau.

Approval of a training program other than those specified above to be used for the contract must be approved by the Department or FHWA prior to the trainee commencing work on the classification covered by the program. Contractors intending to submit a training program for approval prior to the start of a contract must submit the program as soon as possible after notification of contract award as approval of a training program may take up to four weeks. Several FHWA approved training program templates for specified classifications are available on the BECO website.

The contractor shall furnish each trainee with a copy of the Training Program the trainee is enrolled in, and other documentation related to the training program. The contractor shall provide training that develops the skills outlined in the training program. Multiple OJT training programs can be used on the project.

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.

The trainee will be paid the appropriate trainee Davis-Bacon wage rates for training classifications/crafts on federally-funded projects. The contractor shall compensate trainees not less than the rate outlined in the approved training program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination.

The contractor shall provide for the maintenance of records and furnish/submit required information and reports documenting its performance under these Special Provisions. Such records shall be available at reasonable times and places for inspection or review by the Department and FHWA.

#### **923-1.05 OJT Liaison:**

The contractor shall designate an OJT Liaison who shall be responsible for monitoring and administering the contractor's OJT Program and monitoring the trainees' progress. The OJT Liaison may have other responsibilities for the contractor. 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.

**923-2 Online Resources:**

OJT System Website:  
<https://adot.dbesystem.com>

BECO Website:  
<https://azdot.gov/business/business-engagement-and-compliance>

**923-3 Requirements:**

**923-3.01 Documentation:**

Documentation related to OJT training can be found on the Department's BECO website. The contractor shall complete and submit the following information to the Department:

**(A) OJT Enrollment and Progression:**

**(1) OJT Enrollment:**

OJT Enrollment information shall be submitted through the Department's online OJT System by the contractor at least 5 days prior to a trainee's start date. OJT Enrollment information shall be completed and includes the trainee's name and address, employment status, gender and ethnicity, training program (s), and classification/craft.

BECO will review the OJT Enrollment information within 5 days, and if approved, hours will be retroactively credited to the date the OJT Enrollment information is received by BECO.

To receive OJT credit, apprentice's current apprentice certificate or proof of registration from a union or approved apprenticeship program shall be uploaded into LCPtracker by the contractor within 5 days of the apprentice's start date, in addition to completing the OJT enrollment information in the online OJT System.

If the Arizona Apprenticeship Office 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. The contractor shall not receive training credit or reimbursement until the certificate is uploaded.

**(2) Progression of Training and Change of Status:**

Progression of Training-Level Up and Change of Status shall be submitted through the Department's online OJT System each time a trainee advances, progresses to another

training level or milestone in his/her training program, or has a change of job classification. Hours will be retroactively credited to the date the information is received.

Hours that exceed the maximum indicated in the program for a certain level will not be credited. Once a level is completed, the trainee should be moved to the next level towards journeymen status.

### **923-3.02 Training Program Completion:**

Once the trainee completes the required number of levels and hours of training for the same classification or craft, or completes an approved training program, the trainee is considered to have completed the training program it is enrolled under. The contractor shall not receive OJT credit for hours exceeding the maximum number of training hours required for completion of the selected training program.

Once a trainee completes a specific training level for a classification or craft, the contractor shall not be permitted to submit that trainee for enrollment or reimbursement at that same level within the same classification or craft, however the same trainee can be enrolled in a different classification or craft.

The contractor shall provide documentation showing the type and length of training satisfactorily completed to each trainee and the Department upon successful completion of a training program.

For an apprenticeship program, the Apprenticeship office will issue a certificate of completion in said craft, a DOL certificate, and a journeyman's card.

### **923-3.03 Banking-Carryover Hours:**

At the completion of the project, the contractor may submit a Banking-Carryover Hours request in the Department's online OJT System, to carryover training hours for a specific trainee on the project to be used on a future project. Banked hours that are carried over to a project may lower the required number of training hours the contractor is required to complete on that project. The trainee shall be placed on a subsequent project with the intent that the trainee is progressing towards completion of a training program. Banked hours cannot be transferred to other trainees. No additional payment will be paid for banked hours carried over to other projects.

### **923-3.04 OJT Project Completion and Banked Hours Request:**

OJT Completion and Banked Hours documentation shall be submitted within 60 days of completion of training. Any hours to be banked shall be shown on the documentation.

### **923-4 Method of Measurement:**

OJT training hours will be measured by the hour to the nearest half hour.

Measurement of hours will be made as the OJT trainee completes hours on the project. Hours are considered complete if the trainee performs hours on the project, is OJT enrolled, and provides required training by the program.

No measurement for payment will be made for trainee hours in which OJT enrollment information has not been received and approved by the Department.

**923-5 Basis of Payment:**

The accepted quantities of hours, measured as provided above, will be paid for at a unit price of \$3 per hour for training provided to trainee/apprentice in accordance with an approved training program.

Payment for offsite training may only be made when the contractor does one or more of the following and the trainees are concurrently employed on a federal-aid project;

- (A) Contributes to the cost of the training,
- (B) Provides the instruction to the trainee
- (C) Pays the trainee's wages during the offsite training period.

**923-6 Monitoring:**

**(A) Monthly Reporting:**

Contractors shall report monthly hours for each trainee in the online OJT System by the 15<sup>th</sup> of the month following the month of training hours completed.

**(B) Site Visits:**

The Department may conduct periodic monitoring site visits to the worksite to review OJT Program compliance, during working hours on the project. The Department will notify the OJT liaison at least 24 hours prior to a site visit if the OJT Liaison is required to be at the site visit. 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 reasonably available to meet with Department staff as well as be available to respond to periodic emails and phone calls from the Department to check on the progress of OJT Trainees. The Department will make efforts to ensure minimal disruption to the work and coordinate site visit times with other Department divisions, as applicable (for example, Davis-Bacon interviews).

**(925SRVY, 08/16/19)**

**SECTION 925 CONSTRUCTION SURVEYING AND LAYOUT:**

**925-5 Basis of Payment:** the fourth paragraph of the Standard Specifications is 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 items listed in the table below.

ITEM	PREDETERMINED RATE
9250101-ONE-PERSON SURVEY PARTY	\$110 per hour
9250102-TWO-PERSON SURVEY PARTY	\$150 per hour
9250103-THREE-PERSON SURVEY PARTY	\$190 per hour
9250106-SURVEY MANAGER	\$175 per hour
9250105-OFFICE SURVEY TECHNICIAN	\$85 per hour

**(1001MATL, 06/17/21)**

**SECTION 1001 MATERIAL SOURCES:** of the Standard Specifications is revised to read:

**1001-1 Description:**

The work under this section shall consist of the procuring of borrow, topsoil, subbase and base materials, mineral aggregates for concrete structures, surfacing, and landscape plating, from sources either designated on the project plans or in the Special Provisions or from other sources.

**1001-2 General:**

The contractor shall determine for itself the type of equipment and work required to produce a material meeting the requirements of the specifications.

Sites from which material has been removed shall, upon completion of the work, be left in a neat and presentable condition. Where practicable, borrow pits, gravel pits, and quarry sites shall be located so that they will not be visible from the highway.

The contractor shall provide an environmental analysis, as specified in Subsection 104.12 of the specifications, for any source proposed for use regardless of whether a previously approved environmental analysis exists for the site.

In accordance with Subsection 104.12 of the specifications, the contractor may utilize an existing environmental analysis approved after January 1, 1999, provided that the analysis is updated as necessary to be in compliance with current regulations and with the contractor's planned activities.

It shall be the responsibility of the contractor to conduct any necessary investigations, explorations, and research, on-site and otherwise, before and after submitting the bid proposal, to satisfy itself that the specified quantity and/or quality of material exists in any proposed material source.

The contractor shall not produce material for the project, mobilize crushing equipment or clear a worksite prior to approval of the environmental analysis.

The contractor shall comply with the requirements of the landowner or agency having jurisdiction over the land.

The Department makes no representation regarding quality or quantity of materials in any source.

#### **1001-2.01 Information Available:**

The Department maintains a listing of materials sources for which a completed environmental analysis is available and the landowner has allowed the source to be placed on the list. Further information on material sources is available at <https://azdot.gov/business/environmental-planning/material-source-guidance>.

#### **1001-2.02 Material Sources in Floodplains:**

Any development of a material source that is determined to be in a flood plain must meet the requirements of the appropriate local, state, and federal agencies, including as applicable, the U.S. Army Corps of Engineers, Section 404 of the Clean Water Act, ADEQ or Tribal 401 Water Quality Certification, and the National or Arizona Pollutant Discharge Elimination System (NPDES/AZPDES).

If the contractor wishes to procure a material source within a floodplain, the contractor or material supplier shall submit a Floodplain Use Permit application to the appropriate floodplain management agency. The contractor shall submit to the Department documentation that the Floodplain Use Permit for the material source was approved and signed by the appropriate agency's Floodplain Administrator. The contractor or material supplier shall comply with all the requirements of the Floodplain Use Permit, including renewal of the Permit as needed or required.

The Department will require an engineering report if the material source is situated in the 100 year floodplain of any stream or watercourse, and located within one mile upstream and two miles downstream of any highway structure or surfaced roadway crossing. The engineering report shall be prepared by a professional engineer with expertise in hydrology, hydraulics, river mechanics, and fluvial geomorphology. The engineering report shall address the effects of the potential for structural damages following a 100 year flood event.

All other permits required to obtain a material source shall be furnished to the Department upon request.

Surplus material from agency administered flood control management projects may be used as borrow material only if the contractor submits written evidence to the Engineer that the flood control agency project was fully designed and funded.

Material sources in floodplains located on Native American Tribal Lands will be considered for use on an individual analysis. The analysis shall include a review of applicable land use plans, floodplain management plans, environmental plans, applicable laws and regulations pertaining to Native American Tribal Lands, and an engineering analysis of the effects on any highway facility or structure. The contractor shall obtain from the Bureau of Indian Affairs (BIA) and the Native American Tribal Council all permits, licenses, and approvals for the Department to review.

**1001-2.03 Protection and Restoration:**

The contractor shall comply with the requirements of Subsections 107.11 and 107.12 of the specifications for protecting and restoring the material source. The contractor shall assume full responsibility to protect and rehabilitate the material source to the satisfaction of the Department and in compliance with the requirements of the Federal Land Management Agency (FLMA) having jurisdiction or by the owner of the material source.-

**1001-3 Proposed Source:**

**1001-3.01 Approval Requirements:**

**(A) General:**

The contractor shall notify the Engineer prior to or at the preconstruction conference as to the source that it proposes to use.

The contractor acknowledges that all the conditions set forth in this subsection shall be met prior to the source being approved for use.

Other than sampling and testing, the requirements of this subsection shall be completed prior to initiation of any activities that disturb the existing conditions at the proposed source.

Regulatory changes, specification changes, or other reasons may preclude the approval of a materials source. The contractor acknowledges that the Department may refuse to approve a material source even if the Department had approved the source for other projects.

**(B) Specific Conditions for Approval:**

The use of a source will require written approval by the Engineer. No approval will be given until the contractor has complied with the following conditions:

- (1) The contractor has submitted an environmental analysis, as specified in Subsection 104.12 of the specifications, of the source proposed for use and the Department has reviewed the analysis and satisfied itself that the use of such

source will not have an adverse social, economic or environmental impact. The requirements of Subsection 1001-3.01 of the specifications shall be completed prior to initiation of any activities that disturb the existing conditions at the proposed source.

- (2) The contractor has furnished the Engineer with evidence that he has secured the rights to the source, including ingress and egress.

**(C) Historical and Cultural Resources:**

The archaeological survey report of the proposed material source shall be prepared by the contractor's archaeological consultant and shall conform to the requirements of Subsection 104.12 of the specifications.

In the event that prehistoric or historic structures and prehistoric or historic artifacts are encountered during any activity related to the construction of the material source, the contractor shall immediately cease operations within a 50 foot radius of the discovery location and notify the Engineer. In the event that an unmarked human burial and/or funerary remains are encountered during any activity related to the construction of the material source, the contractor shall immediately cease operations within a 100 foot radius of the discovery location and notify the Engineer. The Engineer will contact the Environmental Planning – Historic Preservation Team so that appropriate notification of the discovery is made per state and federal regulations.

After notifying the Engineer, the contractor shall, within good faith, secure the area and take all reasonable measures to protect the historical and cultural resources. No activity shall resume unless authorized by the Engineer. The Engineer will not authorize resumption of any activity until receiving confirmation from the Environmental Planning – Historic Preservation Team that the contractor may commence work.

If the Department determines that the proposed use will have major adverse impact on cultural or historic resources, the Department will not allow the use of the source.

**(D) Permit from Navajo Nation:**

For projects located on the Navajo Reservation, the Navajo Nation has adopted a permitting system for any sources, regardless of whether on or off the Navajo reservation, which are to supply material for projects located within its boundaries. No material source will be approved until the contractor submits a copy of the permit from the Navajo Nation allowing materials from the proposed source to be used on the project. For information concerning the permit, the contractor shall contact the Navajo Nation Historic Preservation Office.

**(E) Bureau of Land Management Material Sources:**

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 request or pursue any “free-use permit” under Title 23 Code of Federal Regulations or any other arrangement with BLM on this project.

**1001-4 Special Access within Right Of Way:**

The contractor may submit a request to the District Engineer to approve special access to a controlled access highway if special access is not shown on the project plans.

The request by the contractor shall be accompanied by an environmental analysis and by documents which specify the point(s) of access, the acquisition of right of way, the manner in which access will be attained, the traffic control plan, and crossovers, along with all other appropriate data which will allow the District Engineer to evaluate its request. If the request is approved, a supplemental agreement shall be entered into.

All costs associated with the special access requested by the contractor shall be borne by the contractor, including, but not limited to, cattle guards, fences, gates and restoration work.

When access is not being utilized, gates shall be closed and locked. Upon completion of all operations, the area within the right of way that has been disturbed shall be restored to the condition existing prior to the contractor's operations.

The decision by the District Engineer to deny a request by the contractor will be considered to be final.

**1001-5 Fences and Cattle Guards:**

Where the haul roads to material sources cross existing fence lines in areas where there is livestock of any kind, temporary cattle guards shall be installed by the contractor at each crossing.

The livestock operator or owner shall be contacted prior to the beginning of any operations and effective measures shall be taken and means provided by the contractor to prevent livestock from straying.

In operations where conditions will exist that are dangerous to livestock of any kind, temporary cattle guards and fence shall be installed around the pit area by the contractor to protect livestock.

Temporary cattle guards and fence installed by the contractor shall be removed and existing fence disturbed shall be replaced or reconstructed and all fence shall be left in as good condition as it was prior to the beginning of work.

**(1005PG, 12/21/23)**

**SECTION 1005 BITUMINOUS MATERIALS:**

**1005-3 Bituminous Material Requirements:**

**1005-3.01 Asphalt Cement:** of the Standard Specifications is revised to read:

Asphalt cement shall be a performance grade (PG) asphalt binder conforming to the requirements of AASHTO M 320. Air blown/oxidized asphalt, Polyphosphoric acid (PPA) modification and re-refined/recycled engine oil bottom (REOB) will not be accepted. The pressure aging temperature for all binders, including Terminal Blend rubberized binder and Polymer modified asphalt binder shall be as specified below:

<b>PG Asphalt Binder</b>	<b>Pressure Aging Temperature</b>
PG 70-XX and above	110 °C
PG 64-XX and below	100 °C

If Terminal Blend rubberized binder (XX-XXTR+) is used, it shall conform to the requirements of Table 1005-1 and 1005-1a.

If Polymer modified asphalt binder (XX-XXPM) is used, it shall conform to the requirements of Table 1005-1 and 1005-1b.

If, during asphaltic concrete production, it is determined by testing that asphalt cement fails to meet the requirements for the specified grade, the asphaltic concrete represented by the corresponding test results shall be evaluated for acceptance. Should the asphaltic concrete be allowed to remain in place, the contract unit price for asphalt cement will be adjusted by the percentage shown in Table 1005-1. Should the asphalt cement be in reject status, the contractor may, within 15 days of receiving notice of the reject status, supply an engineering analysis of the expected performance of the asphaltic concrete in which the asphalt cement is incorporated. The engineering analysis shall detail any proposed corrective action and the anticipated effect of such corrective action on the performance. Within three working days, the Engineer will determine whether or not to accept the contractor's proposal. If the proposal is rejected, the asphaltic concrete shall be removed and replaced with asphaltic concrete meeting the requirements of the specifications at no additional expense to the Department. If the contractor's proposal is accepted, the asphaltic concrete shall remain in place at the applicable percent of contract unit price allowed, and any necessary corrective action shall be performed at no additional cost to the Department.

**1005-3.03 Emulsified Asphalt:** the fourth paragraph of the Standard Specifications is revised to read:

Emulsified asphalts shall be homogeneous. If emulsified asphalt has separated, it shall be thoroughly mixed to insure homogeneity. If emulsified asphalt has separated due to freezing, it shall not be used. Emulsified asphalt shall not be used after 30 days from production.

**1005-3.04 Emulsified Asphalt (Special Type):** of the Standard Specifications is revised to read:

Emulsified asphalt (special type) shall consist of Type SS-1 or CSS-1 diluted with water to provide an asphalt content not less than 26 percent. The water used shall be potable. Potable water obtained from public utility distribution lines will be acceptable. The water used shall be free of injurious amounts of oil, acid, alkali, clay, vegetable matter, silt, or other harmful matter. The material shall not be diluted in the field.

**1005-3.07 Other Requirements:** the tables 1005-1a and 1005-1b of the Standard Specifications are revised to read:

<b>TABLE 1005-1a</b>				
<b>Terminal Blend rubberized binder (XX-XXTR+)</b>				
<b>Test Property</b>	<b>Test Method</b>	<b>Requirement</b>	<b>Test Result</b>	<b>Percent of Contract Unit Price Allowed</b>
Solubility, %, minimum	ASTM D7553 or ASTM 2042	98	-----	-----
Elastic Recovery, @ 10 °C, %, minimum	AASHTO T 301	75	75 70 - 74 < 70	100 80 65 (1)
(1) Reject Status: The pay adjustment applies if allowed to remain in place.				
<b>Notes:</b>				
In case of dispute, ASTM D2042 shall be used to determine the Solubility.				
The asphalt binder shall contain a minimum of 8 percent crumb rubber and a minimum of 3 percent SBS (styrene-butadiene-styrene) polymer.				
The crumb rubber shall be derived from processing whole scrap tires or shredded tire materials. The tires from which the crumb rubber is produced shall be taken from automobiles, trucks, or other equipment owned and operated in the United States. The processing shall not produce, as a waste product, casings or other round tire material that can retain moisture when stored or disposed of above ground.				
Modified binders shall be blended at the source of supply and delivered as a homogenous mixture to the job site.				

Modified Binders stored at the asphalt concrete mixing plant for more than two weeks or beyond the supplier recommended shelf life, whichever is less, shall be sampled and tested.

<b>TABLE 1005-1b Polymer Modified Asphalt Binder (XX-XXPM)</b>				
<b>Test Property</b>	<b>Test Method</b>	<b>Requirement</b>	<b>Test Result</b>	<b>Percent of Contract Unit Price Allowed</b>
Solubility, %, minimum	ASTM D7553 or ASTM D2042	98	-----	-----
Elastic Recovery @ 10°C, %, minimum	AASHTO T 301	75	≥ 75 70 - 74 < 70	100 80 65 (1)
(1) Reject Status: The pay adjustment applies if allowed to remain in place.				
<b>Notes:</b>				
In case of dispute, ASTM D2042 shall be used to determine the Solubility.				
Asphalt binder shall contain a minimum of 3 percent SBS (styrene-butadiene-styrene) polymer.				
Modified binders shall be blended at the source of supply and delivered as a homogenous mixture to the job site.				
Modified Binders stored at the asphalt concrete mixing plant for more than two weeks or beyond the supplier recommended shelf life, whichever is less, shall be sampled and tested.				

**1005-3.07 Other Requirements:** the table 1005-1c of the Standard Specifications is hereby deleted.

**1005-3.07 Other Requirements:** the table 1005-3 of the Standard Specifications is revised to read:

<b>TABLE 1005-3 EMULSIFIED ASPHALTS</b>							
<b>Tests On Emulsion</b>	<b>Test Method</b>	<b>Requirement</b>					
		<b>RS-1</b>	<b>CRS-1</b>	<b>RS-2</b>	<b>CRS-2</b>	<b>SS-1</b>	<b>CSS-1</b>
Viscosity: Saybolt Furol, seconds, range 77 °F 122 °F	AASHTO T 59	20-100	20-100	50-400	50-400	20-100	20-100
Settlement: 5 days, %,	AASHTO T 59	5	5	5	5	5	5

maximum							
Sieve: Retained on No. 20, %, maximum	AASHTO T 59 (1)	0.10	0.10	0.10		0.10	0.10
Particle Charge	AASHTO T 59		Pos.		Pos.		Pos. (2)
Demulsibility: 35 mL, 0.02 N calcium chloride %, minimum	AASHTO T 59	60		60			
Classification: Uncoated particles, %, minimum	Arizona Test Method 502				55		
Residue: (3)							
Residue, %, minimum (4)		55	60	63	65	57	57

Notes:

(1) Distilled water shall be used. Two percent sodium oleate solution will not be accepted.

(2) If the Particle Charge Test result is inconclusive, material having a maximum PH value of 6.7 will be acceptable.

(3) Residue will be obtained in accordance with the requirements of Arizona Test Method 504 and shall conform to all the requirements of AASHTO M 320 for PG 64-16, except that for CRS-2 the dynamic shear ( $G^*/\sin \delta$ ) on the original residue shall be a minimum of 1.00 kPa and a maximum of 1.50 kPa.

(4) Residue by evaporation may be determined in accordance with the requirements of Arizona Test Method 512; however, in case of dispute, AASHTO T 59 will be used.

**1005-3.07 Other Requirements:** the note (2) of Table 1005-3a of the Standard Specifications is revised to read:

(2) Testing shall be performed on residue by distillation. Testing on residue by oven evaporation will not be accepted.

**1005-3.07 Other Requirements:** the table 1005-5 of the Standard Specifications is revised to read:

TABLE 1005-5		
EMULSIFIED RECYCLING AGENTS		
Tests on Emulsified	Test	Requirement

<b>Recycling Agent</b>	<b>Method</b>	<b>ERA-1</b>	<b>ERA-5</b>	<b>ERA-25</b>	<b>ERA-75</b>
Viscosity: Saybolt Furol, 77 °F, seconds range	AASHTO T 59	15 - 40	15 - 100	15 - 100	15 - 100
Miscibility	AASHTO T 59	Passes	Passes	Passes	Passes
Sieve Test: %, maximum	AASHTO T 59 (1)	0.10	0.10	0.10	0.10
Particle Charge	AASHTO T 59	Positive	Positive	Positive	Positive
Residue: (2) Residue, %, minimum	(3)	60	60	60	60
Notes:					
<p>(1) Distilled water shall be used. Two percent sodium oleate solution will not be accepted.</p> <p>(2) Residue will be obtained in accordance with the requirements of Arizona Test Method 504 and shall conform to the requirements specified in Table 1005-4.</p> <p>(3) Residue by evaporation may be determined in accordance with the requirements of Arizona Test Method 512; however, in case of dispute, AASHTO T 59 will be used.</p>					

**1005-3.07 Other Requirements:** the Paving Asphalt row of the table 1005-6 of the Standard Specifications is modified to add:

<b>TABLE 1005-6 OTHER REQUIREMENTS</b>			
<b>Grade of Asphalt Specification Designation</b>	<b>Range of Temperatures for Application by Spraying, °F (Not applicable for Plant Mixing)</b>	<b>Range of Aggregate Temperatures for Plant Mixing, °F</b>	<b>Basis of Conversion, Average Gallons Per Ton at 60 °F</b>
Paving Asphalt	275 - 400	-----	
PG 76-22 PM			231
PG 70-22 PM			232
PG 64-28 PM			233

**(1006PCC, 09/21/23)**

**SECTION 1006 PORTLAND CEMENT CONCRETE:**

**1006-2.01(A) General:** of the Standard Specifications is revised to read:

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, Portland-pozzolan cement or Portland-limestone cement) and supplementary cementitious materials (fly ash, natural pozzolan, or silica fume).

**1006-2.01(B) Hydraulic Cement:** the first paragraph of the Standard Specifications is revised to read:

Hydraulic cement shall consist of Portland cement, Portland-pozzolan cement or Portland-limestone cement.

**1006-2.01(B) Hydraulic Cement:** of the Standard Specifications is modified to add:

Portland-limestone cement shall conform to the requirements of ASTM C595 for blended hydraulic cement with moderate sulfate resistance, Type IL (MS).

**1006-2.01(C)(2) Flyash and Natural Pozzolan:** of the Standard Specifications is revised to read:

Fly ash and natural pozzolan shall conform to the requirements of ASTM C618 for Class C, F, or N.

**TABLE 1006-5 Design Criteria:** the column heading of the third column of the Standard Specifications is revised to read:

		<b>Cementitious Material Content: Lbs. per Cu Yd. Minimum - Maximum</b>		
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**1006-3.02(C) Mix Design Submittal Requirements:** the items (16) and (18) of the Standard Specifications are revised to read:

- (16) Volume of each material measured to the nearest hundredth of a cubic foot;
- (18) Total volume measured to the nearest hundredth of a cubic foot;

**1006-7.02(A) General:** the fifth paragraph of the Standard Specifications is revised to read:

Concrete shall be sampled in accordance with ASTM C172 for acceptance testing of temperature, slump, unit weight and yield (when required) and air content (when required) as well as for fabrication of test cylinders for compressive strength determination at 28 days except that the concrete shall be sampled once during discharge at the middle portion of the batch. ASTM C172 includes sampling from stationary, paving and truck mixers, and from agitating and non-agitating equipment used to transport central-mixed concrete and from continuous mixing equipment as described in Specification ASTM C685/C685M. Sampling shall be at the point of discharge from truck mixers. Sufficient care shall be taken to obtain a representative sample by diverting the entire stream of the concrete to prevent segregation. Samples shall be of sufficient size to perform all the required tests and fabricate the necessary test cylinders but in no case less than 1 cubic foot.

**1006-7.02(B) 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, or Class B concrete, a strength test will consist of the average strength of two test cylinders. However, if the compressive strengths of the two test cylinders differ by more than 10 percent from the average of the two, the strength test result shall be the cylinder with the highest compressive strength.

For Class S concrete with a compressive strength requirement equal to or greater than 4000 psi, or Class P concrete, the compressive strength of each sample shall be determined by averaging the results of the three test cylinders. However, if the compressive strength of any one of the three test cylinders differs by more than 10 percent from the average of the three, its result shall be discarded and the compressive strength shall be the average of the remaining two cylinders. Should the individual compressive strength of any two of the three remaining cylinders differ by more than 10 percent from the average of the three, the results will be discarded and the compressive strength shall be the strength of the remaining cylinder.

**1006-7.03(A)(3) Consistency:** the third paragraph of the Standard Specifications is revised to read:

When the concrete is pumped, samples for consistency will be taken as the concrete leaves the mixer.

**TABLE 1006-10 Air Entrainment Requirements:** the table of the Standard Specifications is revised to read:

<b>TABLE 1006-10 Air Entrainment Requirements</b>		
Elevation	Air Entrainment Required	Required Air Content by Volume (%)

3000 feet or above	Yes	4 to 7
Below 3000 feet	Contractor's Option	≤ 7

**(1011APEAS, 07/18/24)**

**SECTION 1011 JOINT MATERIALS:**

**1011-8.03 Field Performance:** of the Standard Specifications is revised to read:

The manufacturer of the joint sealant shall demonstrate satisfactory field performance in Arizona, or by AASHTO Product Evaluation & Audit Solutions (formerly NTPEP) field evaluation, of less than 1 percent total failure (either within the material or the adhesive bond to the joint face) after one year of service, before the material shall be used.

**REQUIRED CONTRACT PROVISIONS  
FEDERAL-AID CONSTRUCTION CONTRACTS**

- I. General
- II. Nondiscrimination
- III. Non-segregated 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. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion
- XI. Certification Regarding Use of Contract Funds for Lobbying
- XII. Use of United States-Flag Vessels:

**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, United States Code, as required in 23 CFR 633.102(b) (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). 23 CFR 633.102(e).

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. 23 CFR 633.102(e).

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) in accordance with 23 CFR 633.102. 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 solicitation-for-bids or request-for-proposals 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). 23 CFR 633.102(b).

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. 23 CFR 633.102(d).

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. 23 U.S.C. 114(b). The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors. 23 U.S.C. 101(a).

**II. NONDISCRIMINATION** (23 CFR 230.107(a); 23 CFR Part 230, Subpart A, Appendix A; EO 11246)

The provisions of this section related to 23 CFR Part 230, Subpart A, Appendix A 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 Part 60, 29 CFR Parts 1625-1627, 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), 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 Part 60, and 29 CFR Parts 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), and Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), 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 Part 230, Subpart A, 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 (see 28 CFR Part 35, 29 CFR Part 1630, 29 CFR Parts 1625-1627, 41 CFR Part 60 and 49 CFR Part 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 Part 35 and 29 CFR Part 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. 23 CFR 230.409 (g)(4) & (5).

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, sexual orientation, gender identity, 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 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 or other knowledgeable company official.

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, sexual orientation, gender identity, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to ensure 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. 23 CFR 230.409. 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, sexual orientation, gender identity, 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, sexual orientation, gender identity, 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 thereunder. 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, sexual orientation, gender identity, 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, 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. Assurances Required:**

a. The requirements of 49 CFR Part 26 and the State DOT's FHWA-approved Disadvantaged Business Enterprise (DBE) program are incorporated by reference.

b. 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 DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate, which may include, but is 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.

c. The Title VI and nondiscrimination provisions of U.S. DOT Order 1050.2A at Appendixes A and E are incorporated by reference. 49 CFR Part 21.

**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 more than \$10,000. 41 CFR 60-1.5.

As prescribed by 41 CFR 60-1.8, 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, sexual orientation, gender identity, 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), in accordance with 29 CFR 5.5. The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. 23 U.S.C. 113. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. 23 U.S.C. 101. Where applicable law requires that projects be treated as a project on a Federal-aid highway, the provisions of this subpart will apply regardless of the location of the project. Examples include: Surface Transportation Block Grant Program projects funded under 23 U.S.C. 133 [excluding recreational trails projects], the Nationally Significant Freight and Highway

Projects funded under 23 U.S.C. 117, and National Highway Freight Program projects funded under 23 U.S.C. 167.

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 (29 CFR 5.5)

a. *Wage rates and fringe benefits.* All laborers and mechanics employed or working upon the site of the work (or otherwise working in construction or development of the project under a development statute), 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 basic hourly 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. As provided in paragraphs (d) and (e) of 29 CFR 5.5, the appropriate wage determinations are effective by operation of law even if they have not been attached to the contract. Contributions made or costs reasonably anticipated for bona fide fringe benefits under the Davis-Bacon Act ([40 U.S.C. 3141\(2\)\(B\)](#)) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.e. 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 must be paid the appropriate wage rate and fringe benefits on the wage determination for the classification(s) of work actually performed, without regard to skill, except as provided in paragraph 4. of this section. 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 classifications and wage rates conformed under paragraph 1.c. of this section) and the Davis-Bacon poster (WH-1321) must 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. *Frequently recurring classifications.* (1) In addition to wage and fringe benefit rates that have been determined to be prevailing under the procedures set forth in [29 CFR part 1](#), a wage determination may contain, pursuant to § 1.3(f), wage and fringe benefit rates for classifications of laborers and mechanics for which conformance requests are regularly submitted pursuant to paragraph 1.c. of this section, provided that:

(i) The work performed by the classification is not performed by a classification in the wage determination for which a prevailing wage rate has been determined;

(ii) The classification is used in the area by the construction industry; and

(iii) The wage rate for the classification bears a reasonable relationship to the prevailing wage rates contained in the wage determination.

(2) The Administrator will establish wage rates for such classifications in accordance with paragraph 1.c.(1)(iii) of this section. Work performed in such a classification must be paid at no less than the wage and fringe benefit rate listed on the wage determination for such classification.

c. *Conformance.* (1) The contracting officer must 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 be classified in conformance with the wage determination. Conformance of an additional classification and wage rate and fringe benefits is appropriate 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 used 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) The conformance process may not be used to split, subdivide, or otherwise avoid application of classifications listed in the wage determination.

(3) 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 will be sent by the contracting officer by email to [DBAconformance@dol.gov](mailto:DBAconformance@dol.gov). 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.

(4) 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 will, by email to [DBAconformance@dol.gov](mailto:DBAconformance@dol.gov), refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(5) The contracting officer must promptly notify the contractor of the action taken by the Wage and Hour Division

under paragraphs 1.c.(3) and (4) of this section. The contractor must furnish a written copy of such determination to each affected worker or it must be posted as a part of the wage determination. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 1.c.(3) or (4) of this section must 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.

d. *Fringe benefits not expressed as an hourly rate.* 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 may either pay the benefit as stated in the wage determination or may pay another bona fide fringe benefit or an hourly cash equivalent thereof.

e. *Unfunded plans.* 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, in accordance with the criteria set forth in § 5.28, 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.

f. *Interest.* In the event of a failure to pay all or part of the wages required by the contract, the contractor will be required to pay interest on any underpayment of wages.

## 2. Withholding (29 CFR 5.5)

a. *Withholding requirements.* The contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for the full amount of wages and monetary relief, including interest, required by the clauses set forth in this section for violations of this contract, or to satisfy any such liabilities required by any other Federal contract, or federally assisted contract subject to Davis-Bacon labor standards, that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to Davis-Bacon labor standards requirements and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld. In the event of a contractor's failure to pay any laborer or mechanic, including any apprentice or helper working on the site of the work all or part of the wages required by the contract, or upon the contractor's failure to submit the required records as discussed in paragraph 3.d. of this section, the contracting agency may on its own initiative and 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.

b. *Priority to withheld funds.* The Department has priority to funds withheld or to be withheld in accordance with paragraph

2.a. of this section or Section V, paragraph 3.a., or both, over claims to those funds by:

- (1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;
- (2) A contracting agency for its procurement costs;
- (3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;
- (4) A contractor's assignee(s);
- (5) A contractor's successor(s); or
- (6) A claim asserted under the Prompt Payment Act, [31 U.S.C. 3901–3907](#).

### 3. Records and certified payrolls (29 CFR 5.5)

a. *Basic record requirements (1) Length of record retention.* All regular payrolls and other basic records must be maintained by the contractor and any subcontractor during the course of the work and preserved for all laborers and mechanics working at the site of the work (or otherwise working in construction or development of the project under a development statute) for a period of at least 3 years after all the work on the prime contract is completed.

(2) *Information required.* Such records must contain the name; Social Security number; last known address, telephone number, and email address of each such worker; each worker's correct classification(s) of work actually performed; 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 [40 U.S.C. 3141\(2\)\(B\)](#) of the Davis-Bacon Act); daily and weekly number of hours actually worked in total and on each covered contract; deductions made; and actual wages paid.

(3) *Additional records relating to fringe benefits.* Whenever the Secretary of Labor has found under paragraph 1.e. of this section 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 [40 U.S.C. 3141\(2\)\(B\)](#) of the Davis-Bacon Act, the contractor must 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.

(4) *Additional records relating to apprenticeship.* Contractors with apprentices working under approved programs must maintain written evidence of the registration of apprenticeship programs, the registration of the apprentices, and the ratios and wage rates prescribed in the applicable programs.

b. *Certified payroll requirements (1) Frequency and method of submission.* The contractor or subcontractor must submit weekly, for each week in which any DBA- or Related Acts-covered work is performed, certified payrolls to the contracting

agency. The prime contractor is responsible for the submission of all certified payrolls by all subcontractors. A contracting agency or prime contractor may permit or require contractors to submit certified payrolls through an electronic system, as long as the electronic system requires a legally valid electronic signature; the system allows the contractor, the contracting agency, and the Department of Labor to access the certified payrolls upon request for at least 3 years after the work on the prime contract has been completed; and the contracting agency or prime contractor permits other methods of submission in situations where the contractor is unable or limited in its ability to use or access the electronic system.

(2) *Information required.* The certified payrolls submitted must set out accurately and completely all of the information required to be maintained under paragraph 3.a.(2) of this section, except that full Social Security numbers and last known addresses, telephone numbers, and email addresses must not be included on weekly transmittals. Instead, the certified payrolls need only include an individually identifying number for each worker ( e.g., the last four digits of the worker's Social Security number). The required weekly certified payroll information may be submitted using Optional Form WH-347 or in any other format desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division website at <https://www.dol.gov/sites/dolgov/files/WHD/legacy/files/wh347.pdf> or its successor website. It is not a violation of this section for a prime contractor to require a subcontractor to provide full Social Security numbers and last known addresses, telephone numbers, and email addresses to the prime contractor for its own records, without weekly submission by the subcontractor to the contracting agency.

(3) *Statement of Compliance.* Each certified payroll submitted must be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor, or the contractor's or subcontractor's agent who pays or supervises the payment of the persons working on the contract, and must certify the following:

(i) That the certified payroll for the payroll period contains the information required to be provided under paragraph 3.b. of this section, the appropriate information and basic records are being maintained under paragraph 3.a. of this section, and such information and records are correct and complete;

(ii) That each laborer or mechanic (including each helper and apprentice) working 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 [29 CFR part 3](#); and

(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(s) of work actually performed, as specified in the applicable wage determination incorporated into the contract.

(4) *Use of Optional Form WH-347.* The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 will satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(3) of this section.

(5) *Signature*. The signature by the contractor, subcontractor, or the contractor's or subcontractor's agent must be an original handwritten signature or a legally valid electronic signature.

(6) *Falsification*. The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under [18 U.S.C. 1001](#) and [31 U.S.C. 3729](#).

(7) *Length of certified payroll retention*. The contractor or subcontractor must preserve all certified payrolls during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

c. *Contracts, subcontracts, and related documents*. The contractor or subcontractor must maintain this contract or subcontract and related documents including, without limitation, bids, proposals, amendments, modifications, and extensions. The contractor or subcontractor must preserve these contracts, subcontracts, and related documents during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

d. *Required disclosures and access* (1) *Required record disclosures and access to workers*. The contractor or subcontractor must make the records required under paragraphs 3.a. through 3.c. of this section, and any other documents that the contracting agency, the State DOT, the FHWA, or the Department of Labor deems necessary to determine compliance with the labor standards provisions of any of the applicable statutes referenced by § 5.1, available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and must permit such representatives to interview workers during working hours on the job.

(2) *Sanctions for non-compliance with records and worker access requirements*. If the contractor or subcontractor fails to submit the required records or to make them available, or refuses to permit worker interviews during working hours on the job, the Federal agency may, after written notice to the contractor, sponsor, applicant, owner, or other entity, as the case may be, that maintains such records or that employs such workers, 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, or to permit worker interviews during working hours on the job, may be grounds for debarment action pursuant to § 5.12. In addition, any contractor or other person that fails to submit the required records or make those records available to WHD within the time WHD requests that the records be produced will be precluded from introducing as evidence in an administrative proceeding under [29 CFR part 6](#) any of the required records that were not provided or made available to WHD. WHD will take into consideration a reasonable request from the contractor or person for an extension of the time for submission of records. WHD will determine the reasonableness of the request and may consider, among other things, the location of the records and the volume of production.

(3) *Required information disclosures*. Contractors and subcontractors must maintain the full Social Security number and last known address, telephone number, and email address

of each covered worker, and must provide them upon request to the contracting agency, the State DOT, the FHWA, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or other compliance action.

#### **4. Apprentices and equal employment opportunity (29 CFR 5.5)**

a. *Apprentices* (1) *Rate of pay*. Apprentices will be permitted to work at less than the predetermined rate for the work they perform 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 (OA), or with a State Apprenticeship Agency recognized by the OA. A person who is not individually registered in the program, but who has been certified by the OA or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice, will be permitted to work at less than the predetermined rate for the work they perform in the first 90 days of probationary employment as an apprentice in such a program. In the event the OA or a State Apprenticeship Agency recognized by the OA withdraws approval of an apprenticeship program, the contractor will no longer be permitted to use apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(2) *Fringe benefits*. Apprentices must 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, fringe benefits must be paid in accordance with that determination.

(3) *Apprenticeship ratio*. The allowable ratio of apprentices to journeyworkers on the job site in any craft classification must not be greater than the ratio permitted to the contractor as to the entire work force under the registered program or the ratio applicable to the locality of the project pursuant to paragraph 4.a.(4) of this section. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in paragraph 4.a.(1) of this section, must 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 this section must be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(4) *Reciprocity of ratios and wage rates*. Where a contractor is performing construction on a project in a locality other than the locality in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyworker's hourly rate) applicable within the locality in which the construction is being performed must be observed. If there is no applicable ratio or wage rate for the locality of the project, the ratio and wage rate specified in the contractor's registered program must be observed.

b. *Equal employment opportunity*. The use of apprentices and journeyworkers under this part must be in conformity with

the equal employment opportunity requirements of Executive Order 11246, as amended, and [29 CFR part 30](#).

c. 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. 23 CFR 230.111(e)(2). 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 journeyworkers 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 as provided in 29 CFR 5.5.

**6. Subcontracts.** The contractor or subcontractor must insert FHWA-1273 in any subcontracts, along with the applicable wage determination(s) and such other clauses or contract modifications as the contracting agency may by appropriate instructions require, and a clause requiring the subcontractors to include these clauses and wage determination(s) in any lower tier subcontracts. The prime contractor is responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this section. In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and may be subject to debarment, as appropriate. 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 as provided in 29 CFR 5.5.

**9. Disputes concerning labor standards.** As provided in 29 CFR 5.5, 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 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 [40 U.S.C. 3144\(b\)](#) or § 5.12(a).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of [40 U.S.C. 3144\(b\)](#) or § 5.12(a).

c. The penalty for making false statements is prescribed in the U.S. Code, Title 18 Crimes and Criminal Procedure, [18 U.S.C. 1001](#).

**11. Anti-retaliation.** It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#);

b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#);

c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#); or

d. Informing any other person about their rights under the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#).

## V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

Pursuant to 29 CFR 5.5(b), 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 watchpersons 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. 29 CFR 5.5.

**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 and interest from the date of the underpayment. 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 watchpersons and guards, employed in violation of the clause set forth in paragraph 1. of this section, in the sum currently provided in 29 CFR 5.5(b)(2)\* 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.

\* \$31 as of January 15, 2023 (See 88 FR 88 FR 2210) as may be adjusted annually by the Department of Labor, pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990.

### 3. Withholding for unpaid wages and liquidated damages

a. *Withholding process.* The FHWA or the contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for any unpaid wages; monetary relief, including interest; and liquidated damages required by the clauses set forth in this section on this contract, 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 that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to the Contract Work Hours and Safety Standards Act and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld.

b. *Priority to withheld funds.* The Department has priority to funds withheld or to be withheld in accordance with Section IV paragraph 2.a. or paragraph 3.a. of this section, or both, over claims to those funds by:

- (1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;
- (2) A contracting agency for its procurement costs;
- (3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;
- (4) A contractor's assignee(s);
- (5) A contractor's successor(s); or
- (6) A claim asserted under the Prompt Payment Act, [31 U.S.C. 3901](#)–3907.

**4. Subcontracts.** The contractor or subcontractor must insert in any subcontracts the clauses set forth in paragraphs 1. through 5. of this section and a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor is responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs 1. through 5. In the

event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and associated liquidated damages and may be subject to debarment, as appropriate.

**5. Anti-retaliation.** It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the Contract Work Hours and Safety Standards Act (CWHSSA) or its implementing regulations in this part;

b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under CWHSSA or this part;

c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under CWHSSA or this part; or

d. Informing any other person about their rights under CWHSSA or this part.

### VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System pursuant to 23 CFR 635.116.

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" in paragraph 1 of Section VI 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: (based on longstanding interpretation)

- (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. 23 CFR 635.102.

2. Pursuant to 23 CFR 635.116(a), 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. Pursuant to 23 CFR 635.116(c), 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. (based on long-standing interpretation of 23 CFR 635.116).

5. The 30-percent self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements. 23 CFR 635.116(d).

## **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 Part 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. 23 CFR 635.108.

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 Part 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). 29 CFR 1926.10.

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 Part 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 11, 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 (42 U.S.C. 7606; 2 CFR 200.88; EO 11738)**

This provision is applicable to all Federal-aid construction contracts in excess of \$150,000 and to all related subcontracts. 48 CFR 2.101; 2 CFR 200.327.

By submission of this bid/proposal or the execution of this contract or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, subcontractor, supplier, or vendor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal Highway Administration and the Regional Office of the Environmental Protection Agency. 2 CFR Part 200, Appendix II.

The contractor agrees to include or cause to be included the requirements of this Section in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements. 2 CFR 200.327.

**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. 2 CFR 180.220 and 1200.220.

**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. 2 CFR 180.320.
- 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. 2 CFR 180.325.
- 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. 2 CFR 180.345 and 180.350.

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, Subpart I, 180.900-180.1020, and 1200. "First Tier Covered Transactions" refers to any covered transaction between a recipient or subrecipient 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 recipient or subrecipient 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. 2 CFR 180.330.

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. 2 CFR 180.220 and 180.300.

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. 2 CFR 180.300; 180.320, and 180.325. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. 2 CFR 180.335. 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 System for Award Management website (<https://www.sam.gov/>). 2 CFR 180.300, 180.320, and 180.325.

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 CFR 180.325.

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**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 CFR 180.335;.

(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, 2 CFR 180.800;

(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, 2 CFR 180.700 and 180.800; 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. 2 CFR 180.335(d).

(5) Are not a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(6) Are not a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability (USDOT Order 4200.6 implementing appropriations act requirements).

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal. 2 CFR 180.335 and 180.340.

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**3. 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). 2 CFR 180.220 and 1200.220.

a. By signing and submitting this proposal, the prospective lower tier participant 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. 2 CFR 180.365.

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, Subpart I, 180.900 – 180.1020, 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 recipient or subrecipient 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 recipient or subrecipient 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).

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. 2 CFR 1200.220 and 1200.332.

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. 2 CFR 180.220 and 1200.220.

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 System for Award Management website (<https://www.sam.gov/>), which is compiled by the General Services Administration. 2 CFR 180.300, 180.320, 180.330, and 180.335.

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. 2 CFR 180.325.

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#### **4. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:**

a. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals:

(1) is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.355;

(2) is a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(3) is a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability. (USDOT Order 4200.6 implementing appropriations act requirements)

b. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal.

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#### **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 Part 20, App. A.

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-LLL, "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.

#### **XII. USE OF UNITED STATES-FLAG VESSELS:**

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, or any other covered transaction. 46 CFR Part 381.

This requirement applies to material or equipment that is acquired for a specific Federal-aid highway project. 46 CFR 381.7. It is not applicable to goods or materials that come into inventories independent of an FHWA funded-contract.

When oceanic shipments (or shipments across the Great Lakes) are necessary for materials or equipment acquired for a specific Federal-aid construction project, the bidder, proposer, contractor, subcontractor, or vendor 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. 46 CFR 381.7.

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 paragraph (b)(1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Office of Cargo and Commercial Sealift (MAR-620), Maritime Administration, Washington, DC 20590. (MARAD requires copies of the ocean carrier's (master) bills of lading, certified onboard, dated, with rates and charges. These bills of lading may contain business sensitive information and therefore may be submitted directly to MARAD by the Ocean Transportation Intermediary on behalf of the contractor). 46 CFR 381.7.

**ATTACHMENT A - EMPLOYMENT AND MATERIALS  
PREFERENCE FOR APPALACHIAN DEVELOPMENT  
HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS  
ROAD CONTRACTS (23 CFR 633, Subpart B, Appendix B)**

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

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: AZ20250044 06/06/2025

Superseded General Decision Number: AZ20240044

State: Arizona

Construction Type: Highway

County: Coconino County in Arizona.

HIGHWAY CONSTRUCTION PROJECTS

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(1).

<p> If the contract is entered  into on or after January 30,  2022, or the contract is  renewed or extended (e.g., an  option is exercised) on or  after January 30, 2022:          </p>	<p>◆ Executive Order 14026   generally applies to the   contract. ◆ The contractor must pay   all covered workers at   least \$17.75 per hour (or   the applicable wage rate   listed on this wage   determination, if it is   higher) for all hours   spent performing on the   contract in 2025.</p>
<p> If the contract was awarded on  or between January 1, 2015 and  January 29, 2022, and the  contract is not renewed or  extended on or after January  30, 2022:          </p>	<p>◆ Executive Order 13658   generally applies to the   contract. ◆ The contractor must pay all   covered workers at least   \$13.30 per hour (or the   applicable wage rate listed   on this wage determination,   if it is higher) for all   hours performing on that   contract in 2025.</p>

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at <http://www.dol.gov/whd/govcontracts>.

Modification Number	Publication Date
0	01/03/2025
1	02/07/2025
2	05/30/2025
3	06/06/2025

CARP1912-003 07/01/2024

	Rates	Fringes
Carpenter, Excludes Formwork Concrete.....	\$ 35.89	14.98

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ENGI0012-046 12/01/2024

	Rates	Fringes
POWER EQUIPMENT OPERATOR: Bulldozer.....	\$ 35.56	18.12

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ENGI0012-051 12/01/2024

	Rates	Fringes
POWER EQUIPMENT OPERATOR: Paver/Spreader/Finish equipment (asphalt, aggregate, & concrete).....	\$ 35.56	18.12

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ENGI0012-052 12/01/2024

	Rates	Fringes
POWER EQUIPMENT OPERATOR: Scraper.....	\$ 35.56	18.12

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ENGI0012-053 12/01/2024

	Rates	Fringes
POWER EQUIPMENT OPERATOR:		
Tractor.....	\$ 35.56	18.12

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ENGI0012-057 12/01/2024

	Rates	Fringes
POWER EQUIPMENT OPERATOR:		
Drill Rig/Auger.....	\$ 36.64	18.12

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ENGI0012-064 12/01/2024

	Rates	Fringes
POWER EQUIPMENT OPERATOR:		
Bobcat/Skid Steer/Skid Loader.....	\$ 32.29	18.12

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ENGI0012-066 12/01/2024

	Rates	Fringes
POWER EQUIPMENT OPERATOR:		
Backhoe/Backhoe & Loader Combo/Track Backhoe.....	\$ 35.56	18.12

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ENGI0012-067 12/01/2024

	Rates	Fringes
POWER EQUIPMENT OPERATOR:		
Compactor/Roller.....	\$ 35.56	18.12

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ENGI0012-069 12/01/2024

	Rates	Fringes
POWER EQUIPMENT OPERATOR:		
Loader/Front End Loader.....	\$ 35.56	18.12

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ENGI0012-070 12/01/2024

	Rates	Fringes
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TRUCK DRIVER

Off Road Truck.....\$ 35.56 18.12

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ENGI0012-071 12/01/2024

Rates Fringes

POWER EQUIPMENT OPERATOR:

Crane/Derrick.....\$ 36.64 18.12

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ENGI0012-072 12/01/2024

Rates Fringes

Power Equipment Operator:

Excavator/Trackhoe

1/2 cubic yard or smaller...\$ 35.56 18.12

Greater than 1/2 cubic yard.\$ 36.64 18.12

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ENGI0012-074 12/01/2024

Rates Fringes

POWER EQUIPMENT OPERATOR:

Motor Grader/Blade.....\$ 36.64 18.12

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ENGI0012-075 12/01/2024

Rates Fringes

POWER EQUIPMENT OPERATOR:

Mechanic.....\$ 37.67 18.12

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\* LABO1184-016 06/01/2025

Rates Fringes

Power Equipment Operator:

Horizontal Directional

Drill.....\$ 31.98 9.26

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\* LABO1184-017 06/01/2025

Rates Fringes

Laborer: Fence Erector.....\$ 27.41 9.26

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\* LABO1184-021 06/01/2025

	Rates	Fringes
Traffic Control.....	\$ 27.41	9.26

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\* LABO1184-025 06/01/2025

	Rates	Fringes
Laborer: Asphalt, Includes Raker, Shoveler, Spreader and Distributor.....	\$ 29.91	9.26

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\* LABO1184-027 06/01/2025

	Rates	Fringes
Laborer: Grade Setter.....	\$ 29.91	9.26

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\* LABO1184-032 06/01/2025

	Rates	Fringes
Laborer: Pipelayer.....	\$ 30.88	9.26

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\* LABO1184-033 06/01/2025

	Rates	Fringes
Power Equipment Operator: Trencher.....	\$ 30.88	9.26

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LABO1184-037 06/01/2024

	Rates	Fringes
Carpenter: Formwork Concrete.....	\$ 31.98	9.26

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\* LABO1184-039 06/01/2025

	Rates	Fringes
Laborer: General.....	\$ 27.41	9.26

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\* LABO1184-044 06/01/2025

	Rates	Fringes
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Power Equipment Operator:  
Forklift.....\$ 30.88 9.26

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\* LABO1184-047 06/01/2025

	Rates	Fringes
Truck Driver: Concrete.....	\$ 30.88	9.26

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\* LABO1184-048 06/01/2025

	Rates	Fringes
Truck Driver: Dump.....	\$ 30.88	9.26

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\* LABO1184-049 06/01/2025

	Rates	Fringes
Truck Driver: Water.....	\$ 30.88	9.26

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\* UAVG-AZ-0006 01/01/2025

	Rates	Fringes
Laborer: Mason Tender.....	\$ 27.79	8.87

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SUAZ2023-021 11/19/2024

	Rates	Fringes
Cement Mason/Concrete finisher...	\$ 30.09	0.00
Electrician.....	\$ 29.00	7.58
Ironworker.....	\$ 33.15	18.57
Laborer: Concrete Saw (Hand Held/Walk Behind).....	\$ 25.22	5.08
Laborer: Landscape Laborer.....	\$ 18.03	0.00
Painter: Pavement Marking.....	\$ 24.60	6.34

Painter: Sign and Display Erector.....	\$ 18.03	0.00
Power Equipment Operator: Boom/Crane Truck.....	\$ 43.11	10.87
Power Equipment Operator: Broom/Sweeper.....	\$ 26.47	7.26
Power Equipment Operator: Concrete Pump Truck.....	\$ 43.11	10.87
Power Equipment Operator: Concrete Screed.....	\$ 25.70	7.15
Power Equipment Operator: Field Equipment Serviceperson....	\$ 35.39	11.50
Power Equipment Operator: Grade Checker.....	\$ 29.74	13.07
Power Equipment Operator: Milling Machine.....	\$ 30.09	6.45
Power Equipment Operator: Oiler.....	\$ 31.56	10.69
Truck Driver: Oil Distributor....	\$ 29.75	8.04
Truck Driver: Sweeper.....	\$ 20.24	5.48

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WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other

health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at <https://www.dol.gov/agencies/whd/government-contracts>.

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) (iii)).

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The body of each wage determination lists the classifications and wage rates that have been found to be prevailing for the type(s) of construction and geographic area covered by the wage determination. The classifications are listed in alphabetical order under rate identifiers indicating whether the particular rate is a union rate (current union negotiated rate), a survey rate, a weighted union average rate, a state adopted rate, or a supplemental classification rate.

#### Union Rate Identifiers

A four-letter identifier beginning with characters other than "SU", "UAVG", ?SA?, or ?SC? denotes that a union rate was prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2024. PLUM is an identifier of the union whose collectively bargained rate 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. The date, 07/01/2024 in the example, is the effective date of the most current negotiated rate.

Union prevailing wage rates are updated to reflect all changes over time that are reported to WHD in the rates in the collective bargaining agreement (CBA) governing the classification.

#### Union Average Rate Identifiers

The UAVG identifier indicates that no single rate prevailed for

those classifications, but that 100% of the data reported for the classifications reflected union rates. EXAMPLE:

UAVG-OH-0010 01/01/2024. UAVG indicates that the rate is a weighted union average rate. OH indicates the State of Ohio. The next number, 0010 in the example, is an internal number used in producing the wage determination. The date, 01/01/2024 in the example, indicates the date the wage determination was updated to reflect the most current union average rate.

A UAVG rate will be updated once a year, usually in January, to reflect a weighted average of the current rates in the collective bargaining agreements on which the rate is based.

### Survey Rate Identifiers

The ""SU"" identifier indicates that either a single non-union rate prevailed (as defined in 29 CFR 1.2) for this classification in the survey or that the rate was derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As a weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SUFL2022-007 6/27/2024. SU indicates the rate is a single non-union prevailing rate or a weighted average of survey data for that classification. FL indicates the State of Florida. 2022 is the year of the 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. The date, 6/27/2024 in the example, indicates the survey completion date for the classifications and rates under that identifier.

?SU? wage rates typically remain in effect until a new survey is conducted. However, the Wage and Hour Division (WHD) has the discretion to update such rates under 29 CFR 1.6(c)(1).

### State Adopted Rate Identifiers

The ""SA"" identifier indicates that the classifications and prevailing wage rates set by a state (or local) government were adopted under 29 C.F.R 1.3(g)-(h). Example: SAME2023-007 01/03/2024. SA reflects that the rates are state adopted. ME refers to the State of Maine. 2023 is the year during which the state completed the survey on which the listed classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 01/03/2024 in the example, reflects the date on which the classifications and rates under the ?SA? identifier took effect under state law in the state from which the rates were

adopted.

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WAGE DETERMINATION APPEALS PROCESS

1) Has there been an initial decision in the matter? This can be:

- a) a survey underlying a wage determination
- b) an existing published wage determination
- c) an initial WHD letter setting forth a position on a wage determination matter
- d) an initial conformance (additional classification and rate) determination

On survey related matters, initial contact, including requests for summaries of surveys, should be directed to the WHD Branch of Wage Surveys. Requests can be submitted via email to [davisbaconinfo@dol.gov](mailto:davisbaconinfo@dol.gov) or by mail to:

Branch of Wage Surveys  
Wage and Hour Division  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

Regarding any other wage determination matter such as conformance decisions, requests for initial decisions should be directed to the WHD Branch of Construction Wage Determinations. Requests can be submitted via email to [BCWD-Office@dol.gov](mailto:BCWD-Office@dol.gov) or by mail 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 an initial decision has been issued, then any interested party (those affected by the action) that disagrees with the decision can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Requests for review and reconsideration can be submitted via email to [dba.reconsideration@dol.gov](mailto:dba.reconsideration@dol.gov) or by mail 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 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.

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END OF GENERAL DECISION"

ARIZONA DEPARTMENT OF TRANSPORTATION  
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION  
CONTRACTS AND SPECIFICATIONS GROUP

## BID SCHEDULE

**CONTRACT # 2025080**

TRACS No.	Project No.	Item	County	District	Gross Length	Net Length	Prepared By:
040 CN F085701C	040-A-(235)T	105472	COCONINO	NORTHCENT	0		Jakob Rassi

Highway Termini	Location	Work Description
• ASHFORK - FLAGSTAFF HIGHWAY (I-40)	• West of Williams ER	• System Preservation (Engineering)

**BID SCHEDULE**

040 CN F085701C

Item No.	Item Description	Unit	Quantity	Unit Price	Extended Amount
2020019	REMOVAL OF EMBANKMENT CURB	L.FT.	213		
2020071	REMOVE GUARD RAIL	L.FT.	82		
2050004	GRADING ROADWAY FOR PAVEMENT ( SHOULDERS )	SQ.YD.	663		
4020090	PORTLAND CEMENT CONCRETE PAVEMENT SLAB REPAIR	SQ.YD.	557		
4090006	ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL) (SPECIAL MIX)	TON	405		
7010025	TEMPORARY IMPACT ATTENUATION DEVICE (IN-LINE ENERGY ABSORBING TERM.)	EACH	2		
7010026	TEMPORARY IMPACT ATTENUATION DEVICE (IN-LINE ENERGY ABSORBING TERM.) (IN USE)	EACH-DAY	62		
7015010	TEMPORARY CONCRETE BARRIER (INSTALLATION AND REMOVAL)	L.FT.	1,050		
7016020	TEMPORARY CONCRETE BARRIER (IN USE)	L.FT.-DAY	32,550		
7016030	BARRICADE (TYPE 1, TYPE 2, VERT.PANEL, TUBULAR MARKER)	EACH-DAY	2,480		
7016031	BARRICADE (TYPE 3, HIGH LEVEL FLAG TREE)	EACH-DAY	124		
7016032	PORTABLE SIGN STAND (RIGID)	EACH-DAY	138		
7016033	PORTABLE SIGN STAND (SPRING TYPE)	EACH-DAY	138		

**BID SCHEDULE**

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Item No.	Item Description	Unit	Quantity	Unit Price	Extended Amount
7016035	WARNING LIGHT (TYPE A)	EACH-DAY	1,288		
7016037	WARNING LIGHT (TYPE C)	EACH-DAY	2,480		
7016039	EMBEDDED SIGN POST	EACH-DAY	1,846		
7016050	TRUCK-MOUNTED ATTENUATOR	EACH-DAY	5		
7016051	TEMPORARY SIGN (LESS THAN 10 S.F.)	EACH-DAY	70		
7016052	TEMPORARY SIGN (10 S.F. OR MORE)	EACH-DAY	1,298		
7016061	FLASHING ARROW PANEL	EACH-DAY	66		
7016067	CHANGEABLE MESSAGE BOARD (CONTRACTOR FURNISHED)	EACH-DAY	69		
7016081	FLAGGING SERVICES (DPS)	HOUR	48		
7050074	REMOVAL OF CURING COMPOUND (PCCP) (STRIPING)	L.FT.	1,200		
7080201	WATERBORNE-TYPE I PAVEMENT MARKING (PAINTED) (WHITE)	L.FT.	450		
7080202	WATERBORNE-TYPE I PAVEMENT MARKING (PAINTED) (YELLOW)	L.FT.	350		
7090001	DUAL COMPONENT PAVEMENT MARKING (WHITE EPOXY)	L.FT.	675		

# BID SCHEDULE

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Item No.	Item Description	Unit	Quantity	Unit Price	Extended Amount
7090002	DUAL COMPONENT PAVEMENT MARKING (YELLOW EPOXY)	L.FT.	525		
8050003	SEEDING (CLASS II)	ACRE	1		
8101021	EROSION CONTROL (WATTLES) (9")	L.FT.	700		
9010001	MOBILIZATION	L.SUM	1		
9050005	GUARD RAIL, W-BEAM, SINGLE FACE (MASH)	L.FT.	426		
9160001	EMBANKMENT CURB	L.FT.	213		
9250001	CONSTRUCTION SURVEYING AND LAYOUT	L.SUM	1		
9280036	GROUND-IN RUMBLE STRIP (8 INCH)	L.FT.	350		
9280037	GROUND-IN RUMBLE STRIP (12 INCH)	L.FT.	350		

**BID TOTAL :**

**PROPOSAL**

TO THE ARIZONA DEPARTMENT OF TRANSPORTATION:

Gentlemen:

The following Proposal is made for constructing project

040 CN 159 F085701C 040-C(235)T  
ASHFORK-FLAGSTAFF HIGHWAY (I-40)  
(WEST OF WILLIAMS (ER))

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.

The undersigned hereby agrees to provide an electronic Proposal Guaranty in the amount and character named in the Advertisement for Bids. The 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: \_\_\_\_\_

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If by a Firm or Partnership:

Firm or Partnership Mailing Name: \_\_\_\_\_

Firm or Partnership Address: \_\_\_\_\_

By (Signature): \_\_\_\_\_ Date: \_\_\_\_\_

Name and Address of Each Member: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

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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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ASHFORK-FLAGSTAFF HIGHWAY (I-40)  
(WEST OF WILLIAMS (ER))

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 it 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 it 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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(WEST OF WILLIAMS (ER))

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**

**Unless and until the District Court's injunction in Jordahl is stayed or lifted, the Anti-Israel Boycott Provision (A.R.S. § 35-393.01(A)) is unenforceable and the State will take no action to enforce it. This attachment (Participation in Boycott of Israel) is no longer a mandatory part of the offer. Offers will not be evaluated based on whether this certification has been completed.**

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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**  
**Forced Labor of Ethnic Uyghurs Ban Certification Form**

**Forced Labor of Ethnic Uyghurs Ban**

Please note that if any of the following apply to the Contractor, then the bidder shall select the "Exempt Contractor" option below:

- Contractor is a sole proprietorship;
- Contractor has fewer than ten (10) employees; OR
- Contractor is a non-profit organization.

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Pursuant to A.R.S. § 35-394, written certification is required to show that the company entering into a contract with a public entity does not use the forced labor, or use any contractors, subcontractors or suppliers that use the forced labor or any goods or services produced by the forced labor, of ethnic Uyghurs in the People's Republic of China.

Under A.R.S. §35-394:

1. "Company" means an organization, association, corporation, partnership, joint venture, limited partnership, limited liability partnership, limited liability company or other entity or business association, including a wholly owned subsidiary, majority-owned subsidiary, parent company or affiliate, that engages in for-profit activity and that has ten or more full-time employees.
2. "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.

In compliance with A.R.S. §§ 35-394 et seq., all bidders must select one of the following:

<input type="checkbox"/>	The bidder <b>does not</b> use, and agrees not to use during the term of the contract, any of the following: <ul style="list-style-type: none"><li>• Forced labor of ethnic Uyghurs in the People's Republic of China;</li><li>• Any goods or services produced by the forced labor of ethnic Uyghurs in the People's Republic of China; or</li><li>• Any Contractors, Subcontractors, or suppliers that use the forced labor or any goods or services produced by the forced labor of ethnic Uyghurs in the People's Republic of China.</li></ul>
<input type="checkbox"/>	The bidder <b>does</b> participate in use of Forced Uyghurs Labor as described in A.R.S. § 35-394.
<input type="checkbox"/>	<b>Exempt Contractor.</b> Select all statements that applies to this Contractor: <ul style="list-style-type: none"><li><input type="checkbox"/> Contractor is a sole proprietorship;</li><li><input type="checkbox"/> Contractor has fewer than ten (10) employees; and/or</li><li><input type="checkbox"/> Contractor is a non-profit organization.</li></ul>

\_\_\_\_\_  
Company Name

\_\_\_\_\_  
Signature of Person Authorized to Sign

\_\_\_\_\_  
Address

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
City State Zip

\_\_\_\_\_  
Title