

INVITATION FOR BID

SOLICITATION NUMBER: 6982AF22B000034
SOLICITATION TYPE: TOTAL SMALL BUSINESS SET-ASIDE
PROJECT NUMBER: AZ FTBR SALT 80(1)
PROJECT NAME: HORSE MESA BRIDGE

BID OPENING DATE:

See Page A-1, Item 13A

**This solicitation cites Standard Specifications for
Construction of Roads and Bridges on
Federal Highway Projects, FP-14 US Customary Units**

ISSUING OFFICE:



**U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
CENTRAL FEDERAL LANDS HIGHWAY DIVISION
12300 W. DAKOTA AVENUE, SUITE 360
LAKEWOOD, CO 80228
Web site: <https://highways.dot.gov/federal-lands>
E-mail: CFLContracts@dot.gov**

PROJECT

AZ FTBR SALT 80(1)

LOCATION

TONTO NATIONAL FOREST

COUNTY

MARICOPA

STATE

ARIZONA

LENGTH

SCHEDULE A: 0.057 MILES

TYPE OF IMPROVEMENT

CONSTRUCTION AND REHABILITATION
OF BRIDGE, REALIGN UNPAVED
ROADWAY, AGGREGATE

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SPECIAL CONTRACT REQUIREMENTS (SCRs)

The following Special Contract Requirements amend and supplement the Standard Specification for Construction of Roads and Bridges on Federal Highway Projects

Division 100	E-1
Division 150	E-18
Division 200	E-28
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Division 400	See FP-14
Division 500	E-31
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APPENDICES

Appendix A.....	Tonto National Forest Fire Plan
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PROJECT OVERVIEW

This project proposes to construct a new prefabricated bridge adjacent to the existing Horse Mesa bridge structure within the Tonto National Forest on Forest Route FR 80 (MP 3.90) over the Upper Car Wash area. The existing bridge is located under a rock outcropping that creates a vertical clearance issues and drainage concerns during rain events. The existing bridge will remain in place for use in emergency situations. The existing unpaved roadway will be realigned to provide connection with the new bridge.

NOTICE TO BIDDERS

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I. PRE-BID INFORMATION

ELECTRONIC BIDS WILL NOT BE ACCEPTED. Submit a printed copy of your bid to the address listed on the SF-1442 (Page A-1, Item 8). Submit the following documents with your Bid Package–

- SF-1442, Solicitation, Offer & Award, Pages A-1 and A-2
- Indication of interest in formal Partnering, Page A-5
- Bid Schedule Pages A-6 through A-10
- Completed an applicable Authority to Bind certificate, pages A-11 through A-15
- Buy American Act & Hazardous Materials, Pages A-16 through A-17
- Bid Guarantee (see FAR Clause 52.228-1), Pages B-1 and B-2. Bid bonds must be originals with original signatures and corporate seals. Photocopies and Faxed copies are NOT acceptable and will make your bid non-responsive.
 - Digital copies may be downloaded at <https://www.gsa.gov/forms-library/bid-bond>
- Completed the VETS-4212 declaration, Page A-ii; Bidders' Information, Pages B-3 through B-6.

Bidders should retain all other pages for their information. Bids should be submitted in a sealed envelope and include the Contractor's Name, Solicitation Number and the Project Number/Name.

It is the responsibility of the bidder to verify that this solicitation document, including the plans, are complete as listed in the table of contents and the index to sheets. Plan sheets can be found at <https://sam.gov> and viewed by individual sections, downloaded by individual sections, or the entire plan set downloaded in a zip file. Physical data relevant to this solicitation may also be viewed or downloaded at the above site.

This solicitation and subsequent contract are governed by the Federal Acquisition Regulations (FAR), agency supplemental regulations, and the Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects, FP-14.

The FP-14 was utilized for the design of this project. Paper copies of the FP-14 will not be provided to bidders or the awarded Prime Contractor. The FP-14 is available electronically at <https://flh.fhwa.dot.gov/resources/specs/> and a copy is uploaded with this solicitation. A single paper copy can be obtained from the Research & Technology Distribution Center (RTPDC) by email report.center@dot.gov.

Applicable FAR/TAR provisions and clauses in this IFB are incorporated by reference or full text. FAR provisions and clauses incorporated by reference can be accessed on the Internet at <https://www.acquisition.gov/content/regulations>.

NOTICE TO BIDDERS

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Notice of SAM Registration – you must be registered in the System for Award Management (SAM) prior to submission of a bid in response to this solicitation. Failure to register prior to submission of a bid may require award to the next successful registered offeror. See FAR Subpart 4.1102. Register online at www.sam.gov.

Representations and Certifications – This solicitation is issued under **NAICS 237310** – Highway, Street & Bridge Construction with a small business size standard of \$39.5 million. If your average annual gross receipts for the past 5 years are above \$39.5 million, you are a large business for this solicitation. If they are below \$39.5 million you are a small business. Before submitting bids, you must ensure you have completed your annual representations and certifications electronically at the SAM website at www.sam.gov. Include NAICS 237310 in your SAM profile.

Vets-4212 Reporting: - The Contractor must complete the report if required. See reporting requirements at: <https://www.dol.gov/agencies/vets/contractor/instructions-for-electronic-submission-vets-4212-reports>.

- My firm had a qualifying Federal Contract in 2021 and has complied with the reporting requirements. ☐
- My firm did not have a qualifying Federal Contract in 2021 and is therefore exempt from the reporting requirements ☐

Bid Guarantee – Follow the requirements of FAR Clause 52.228-1 *Bid Guarantee* and Subpart 102.03 of the FP-14. Bid bonds must be originals and have original signatures and corporate seals. Photocopied and faxed copies of bonds will be rejected and cause your bid to be non-responsive.

Accuracy and Completeness of Bid - The Contractor is fully responsible to verify that all data is correct when an offer is submitted. Failure to properly update your data may cause the offer to be rejected.

Request for Technical Information – Questions relative to the plans and SCRs for this solicitation will only be accepted in writing (see Item 9 on Page A-3).

**TECHNICAL QUESTIONS REGARDING THIS SOLICITATION WILL NOT BE
ACCEPTED AFTER 4 P.M. ON OCTOBER 4, 2022.**

Questions can be submitted to CFLContracts@dot.gov. Questions and answers will be posted at <https://sam.gov>

Modifications to Bids - Bids may be modified or withdrawn by regular mail, electronic commerce (email) or facsimile, if such notice is received **prior to the time specified for receipt of bids**. The Government will not be responsible for ANY failure attributable to the transmission or receipt of electronic commerce (email) or facsimile data.

NOTICE TO BIDDERS

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For all modifications, we **STRONGLY ENCOURAGE** you to resubmit the entire bid schedule with a unit price and amount for every bid item, and a Schedule Total. See FAR Provision 52.214-5, Submission of Bids. Modifications which make the bid ambiguous, indefinite, or uncertain as to any essential requirement of the contract will cause the bid to be rejected as nonresponsive.

FAX Number to submit modifications to bids for this project is (720) 963-3360

Email Address to submit modifications to bids for this project is cflcontracts@dot.gov

II. POST AWARD INFORMATION

CFLHD will no longer be providing paper copies of the conformed contract to the Awarded Prime Contractor.

Subcontracting - FAR Clause 52.219-8, *Utilization of Small Business Concerns* states that Prime Contractors afford small business concerns, veteran-owned small business concerns, service-disabled veteran-owned small business concerns, HUBZone small business concerns, small disadvantaged business concerns, and women-owned small business concerns the maximum practicable opportunity to participate in performing contracts let by any Federal agency.

Insurance requirements - See Subsection 107.05 of the FP-14.

EEBACS - Contractors shall use the Government's web-based system, *Engineer's Estimating, Bidding, Award, and Construction System (EEBACS)*, to prepare all "*Inspector's Daily Record of Construction Operations*" (*Contractors Daily Reports*) and measurement notes (pay notes).

The Contractor shall be required to attend a training session on the use of EEBACS. The training session will require up to 4 hours. No more than 3 Contractor staff may attend the training unless approved by the CO. The Contractor shall be responsible for training additional staff.

The Contractor shall be required to submit a user account form to gain access to the EEBACS system. See Subsection 108.01.

A user guide, "*EEBACS for Construction Contractors*", is available. An electronic version can be found at <https://highways.dot.gov/federal-lands/estimates/eebacs-guide>

SOLICITATION, OFFER AND AWARD (Construction, Alteration or Repair)	1. SOLICITATION NO. 6982AF22B000034	2. TYPE OF SOLICITATION <input checked="" type="checkbox"/> SEALED BID (IFB) <input type="checkbox"/> NEGOTIATED (RFP)	3. DATE ISSUED 09/07/2022	PAGE OF PAGES 1 of 2
IMPORTANT - THE "OFFER SECTION ON THE REVERSE MUST BE FULLY COMPLETED BY OFFEROR.				
4. CONTRACT NO.	5. REQUISITION/PURCHASE REQUEST NO. HFLCEO220348PR	6. PROJECT NO. AZ FTBR SALT 80(1)		
7. ISSUED BY: FEDERAL HIGHWAY ADMINISTRATION CENTRAL FEDERAL LANDS DIVISION 12300 WEST DAKOTA AVENUE, SUITE 167 LAKEWOOD, COLORADO 80228		CODE: 69050001	8. ADDRESS OFFER TO: Josephine Helms, Contract Specialist Federal Highway Administration Central Federal Lands Division Office 12300 W. Dakota Avenue Lakewood, CO 80228	
9. FOR INFORMATION CALL SEE PAGE A-3	A. NAME: SEE PAGE A-3	B. TELEPHONE NO. (Include area code) SEE PAGE A-3		
SOLICITATION				
<i>NOTE: In sealed bid solicitations "offer" and "offeror" mean "bid" and "bidder."</i>				
10. THE GOVERNMENT REQUIRES PERFORMANCE OF THE WORK DESCRIBED IN THESE DOCUMENTS:				
ROADWAY CONSTRUCTION PROJECT IN STRICT ACCORDANCE WITH:				
1. FEDERAL ACQUISITION AND TRANSPORTATION ACQUISITION REGULATIONS (FAR & TAR) 2. DEPARTMENT OF LABOR, CONSTRUCTION WAGE RATE REQUIREMENT RATES 3. SPECIAL CONTRACT REQUIREMENTS 4. PLANS 5. BID SCHEDULE 6. STANDARD SPECIFICATIONS FOR CONSTRUCTION OF ROADS AND BRIDGES ON FEDERAL HIGHWAY PROJECTS, FP-14, U.S. CUSTOMARY UNITS				
See Subsection 104.04 of the FP-14 for governing order of precedence				
11. The Contractor shall begin performance within <u>10</u> calendar days and complete it within <u> </u> calendar days after receiving <input type="checkbox"/> award <input checked="" type="checkbox"/> notice to proceed. The performance period is <input checked="" type="checkbox"/> mandatory <input type="checkbox"/> negotiable. *Refer to Subsection 108.01 as amended in the Special Contract Requirements.				
12A. THE CONTRACTOR MUST FURNISH ANY REQUIRED PERFORMANCE AND PAYMENT BONDS? (If "YES," indicate within how many calendar days after award in Item 12B.) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO				12B. CALENDAR DAYS 10
13. ADDITIONAL SOLICITATION REQUIREMENTS:				
A. Sealed offers in original and <u>0</u> copies to perform the work required are due at the place specified in Item 8. by <u>2:00 p.m.</u> (hour) local time on <u>10/11/2022</u> (date). If this is a sealed bid solicitation, offers will be publicly opened at that time. Sealed envelopes containing offers shall be marked to show the offeror's name and address, the solicitation number, and the date and time offers are due. B. An offer guarantee <input checked="" type="checkbox"/> is <input type="checkbox"/> is not required. C. All offers are subject to the (1) work requirements and (2) other provisions and clauses incorporated in the solicitation in full text or by reference. D. Offers providing less than <u>60</u> calendar days for Government acceptance after the date offers are due will not be considered and will be rejected.				

OFFEROR (Must be fully completed by offeror)										
14. NAME AND ADDRESS OF OFFEROR <i>(Include ZIP Code)</i>					15. TELEPHONE NO. <i>(Include area code)</i>					
DUNS NO.					16. REMITTANCE ADDRESS <i>(Include only if different than Item 14)</i>					
17. The offeror agrees to perform the work required at the prices specified below in strict accordance with the terms of this solicitation, if this offer is accepted by the Government in writing with <u>60</u> calendar days after the date offers are due. <i>(Insert any number equal to or greater than the minimum requirement stated in Item 13D. Failure to insert any number means the offeror accepts the minimum in Item 13D.)</i>										
AMOUNTS					SEE INDIVIDUAL BID SCHEDULE(S)					
18. The offeror agrees to furnish any required performance and payment bonds.										
19. ACKNOWLEDGMENT OF AMENDMENTS <i>(The offeror acknowledges receipt of amendments to the solicitation - give number and date of each)</i>										
AMENDMENT NO.										
DATE										
20A. NAME AND TITLE OF PERSON AUTHORIZED TO SIGN OFFER <i>(Type or print)</i>					20B. SIGNATURE				20C. OFFER DATE	
AWARD (To be completed by Government)										
21. ITEMS ACCEPTED:										
22. AMOUNT					23. ACCOUNTING AND APPROPRIATION DATA					
24. SUBMIT INVOICES TO ADDRESS SHOWN IN BLOCK 27 <i>(4 copies unless otherwise specified)</i>					25. OTHER THAN FULL AND OPEN COMPETITION PURSUANT TO <input type="checkbox"/> 10 U.S.C. 2304(c)() <input type="checkbox"/> 41 U.S.C. 3304(a)()					
26. ADMINISTERED BY CODE: _____					27. PAYMENT WILL BE MADE BY FEDERAL HIGHWAY ADMINISTRATION CENTRAL FEDERAL LANDS HIGHWAY DIVISION 12300 W. DAKOTA AVENUE, SUITE 167 LAKEWOOD, COLORADO 80228					
<u>CONTRACTING OFFICER WILL COMPLETE ITEM 28 OR 29 AS APPLICABLE</u>										
<input type="checkbox"/> 28. NEGOTIATED AGREEMENT <i>(Contractor is required to sign this document and return _____ copies to issuing office.)</i> Contractor agrees to furnish and deliver all items or perform all work requirements identified on this form and any continuation sheets for the consideration stated in this contract. The rights and obligations of the parties to this contract shall be governed by (a) this contract award, (b) the solicitation, and (c) the clauses, representations, certifications, and specifications incorporated by reference in or attached to this contract.					<input type="checkbox"/> 29. AWARD <i>(Contractor is not required to sign this document.)</i> Your offer on this solicitation is hereby accepted as to the items listed. This award consummates the contract, which consists of (a) the Government solicitation and your offer, and (b) this contract award. No further contractual document is necessary.					
30A. NAME AND TITLE OF CONTRACTOR OR PERSON AUTHORIZED TO SIGN <i>(Type or print)</i>					31A. NAME OF CONTRACTING OFFICER <i>(Type or print)</i>					
30B. SIGNATURE					30C. DATE		31B. UNITED STATES OF AMERICA BY			31C. AWARD DATE

- Item 8:** **LOCATION OF PUBLIC BID OPENING:** Offers must be received by designated date and time as stated in Item 13A.
- Item 9:** **FOR GENERAL INFORMATION:** E-mail us at CFLContracts@dot.gov.
- FOR TECHNICAL INFORMATION (plans and specifications):** Questions must be submitted in writing by e-mail at CFLContracts@dot.gov .
- Item 11:** **COMPLETION DATE:** Work shall be completed on or before the date specified in *Subsection 108.01 of the SCRs*.
- Item 12A:** **PERFORMANCE AND PAYMENT BONDS:** See FAR *Clause 52.228-15 Performance and Payment Bonds-Construction* (Clauses begin on Page C-1) and Subsection 102.06 of the FP-14.
- Item 13B:** **BID BOND AMOUNT:** See FAR Provision *52.228-1 Bid Guarantee* (Provisions begin on Page B-1) and *Subsection 102.03 Bid Guarantee* of the FP-14. All bid guarantees must have original signatures with original corporate seals.
- Item 19:** **ACKNOWLEDGMENT OF AMENDMENTS: FAILURE TO ACKNOWLEDGE AMENDMENTS, IN ITEM 19 OF THE SF-1442, BY THE DESIGNATED DATE AND HOUR SPECIFIED IN THE SOLICITATION MAY RESULT IN REJECTION OF YOUR BID.** If amendments are issued, they will be posted to <https://sam.gov>.
- Item 24:** **SUBMITTING INVOICES:** See *Subsection 109.08 Progress Payments* of the FP-14.
- ESTIMATED**
PRICE: The price range of the project work is between \$700,000 and \$2,000,000.

Bid Schedule Instructions

BIDDERS, PLEASE NOTE: This Bid Proposal is comprised of one schedule. Before preparing the bid, carefully read the Solicitation Provisions and the following:

- Insert a numeric unit bid price for each pay item for which a quantity appears in the bid schedule. Unit bid prices should be quoted no more precisely than the nearest cent (2 decimal places). Unit bid prices quoted more precisely will be rounded up to the nearest cent by the Government
- Multiply the unit price by the quantity for each pay item and show the amount bid. When the words “Lump Sum” appear as a unit bid price, insert an amount for each lump sum pay item.
- Total all amounts bid for each pay item and show the Construction Cost Total on the space provided on the last page of each schedule or option.
- Also show the Construction Cost Total for each schedule/option as well as the combined Total of each Schedule and the Option in the spaces provided on the Bid Summary page.

Basis for Award

To be eligible for award of contract, the offeror shall submit prices for each item in Bid Schedule A. Accordingly, contract award will be made to the lowest responsible bidder conforming to the solicitation, provided funds are available.

Partnering

A Partnership recognizes the Government, and the Contractor are both responsible and can affect the successful completion of this project. Partnering is a vehicle to ensure the partnership has structure and quality. It recognizes the strengths of each party and uses those strengths to identify and achieve shared goals. One of the primary objectives of Partnering is to facilitate the resolution of disputes in a timely, professional, and non-adversarial manner with the outcome focused on achieving those shared goals.

CFLHD supports the concepts and tenets of Partnering and as such is encouraging the Contractors and its subcontractors to establish a Partnering relationship on this project.

A formal Partnering meeting can help facilitate this relationship by helping do document the parties' common purpose and goals and ensuring alignment. The goals are mutually agreed upon and address effective and efficient performance within the scope of the contract.

Participation in a formal Partnering meeting is voluntary. Costs of implementing and maintaining the partnership would be agreed to by both parties as described in *Subsection 103.05 Partnering* of the FP-14. Costs of partnering would be in addition to the contract award amount.

Please indicate your desire to participate in a formal partnering meeting on this project.

☐ We would like to participate in a formal partnering meeting.

☐ We do not want to participate in a formal partnering meeting.

Bidder/Offeror please note: Before preparing the bid, carefully read the Solicitation Provisions.

Insert a unit bid price, in figures, for each pay item for which a quantity appears in the bid schedule. Multiply the unit price by the quantity for each pay item and show the amount bid. Should any mathematical check made by the Government show a mistake in the amount bid, the corrected unit price extension shall govern.

When the word "LPSM" (Lump Sum) appears as a unit bid price, insert an amount for each lump sum pay item.

When a sum based on a fixed rate appears for any pay item in the amount bid column, include the Government inserted amount bid for the item in the total bid amount.

Total all of the amounts bid for each pay item and show the total bid amount.

Contract Quantity Pay Items

20801-0000 STRUCTURE EXCAVATION

20803-0000 STRUCTURAL BACKFILL

55201-0200 STRUCTURAL CONCRETE, CLASS A (AE)

55401-1000 REINFORCING STEEL

Item No.	Pay Item No.	Description	Quantity	Unit	Unit Price	Amount
A0001	15101-0000	MOBILIZATION				
			ALL	LPSM	\$__LPSM__	\$_____
A0021	15214-1000	SURVEY AND STAKING, BRIDGE				
			ALL	LPSM	\$__LPSM__	\$_____
A0041	15215-1000	SURVEY AND STAKING, APPROACH ROAD				
			2	EACH	\$_____	\$_____
A0061	15225-0000	SLOPE, REFERENCE, AND CLEARING AND GRUBBING CONTROL				
			0.037	MILE	\$_____	\$_____
A0081	15236-2000	SURVEY CONTROL, GRADE FINISHING				
			0.037	MILE	\$_____	\$_____
A0101	15301-0000	CONTRACTOR QUALITY CONTROL				
			ALL	LPSM	\$__LPSM__	\$_____
A0121	15401-0000	CONTRACTOR TESTING				
			ALL	LPSM	\$__LPSM__	\$_____
A0141	15501-0000	CONSTRUCTION SCHEDULE				
			ALL	LPSM	\$__LPSM__	\$_____
A0161	15701-0000	SOIL EROSION CONTROL				
			ALL	LPSM	\$__LPSM__	\$_____
A0181	15802-0000	WATERING FOR DUST CONTROL				
			ALL	LPSM	\$__LPSM__	\$_____
A0201	20101-0000	CLEARING AND GRUBBING				
			0.35	ACRE	\$_____	\$_____
A0221	20301-2300	REMOVAL OF SIGN/MARKER				
			3	EACH	\$_____	\$_____

Bid Schedule

Schedule:A

Schedule Type:Base

Project No:AZ FTBR SALT 80(1)

Project Name:Horse Mesa Bridge

A0241	20302-0500	REMOVAL OF CURB, CONCRETE	165	LNFT	\$ _____	\$ _____
A0261	20302-1200	REMOVAL OF GUARDRAIL	10.0	LNFT	\$ _____	\$ _____
A0281	20401-0000	ROADWAY EXCAVATION	370	CUYD	\$ _____	\$ _____
A0301	20801-0000	STRUCTURE EXCAVATION	130	CUYD	\$ _____	\$ _____
A0321	20803-0000	STRUCTURAL BACKFILL	45	CUYD	\$ _____	\$ _____
A0341	25801-0000	REINFORCED CONCRETE RETAINING WALL	410	SQFT	\$ _____	\$ _____
A0361	30202-2100	ROADWAY AGGREGATE, METHOD 2, SURFACE COURSE	242	TON	\$ _____	\$ _____
A0381	55201-0200	STRUCTURAL CONCRETE, CLASS A (AE)	28	CUYD	\$ _____	\$ _____
A0401	55401-1000	REINFORCING STEEL	3,600	LB	\$ _____	\$ _____
A0421	55504-0000	PRE-FABRICATED STEEL BRIDGE (16'x98')	ALL	LPSM	\$ __LPSM__	\$ _____
A0441	60101-0000	CONCRETE	10	CUYD	\$ _____	\$ _____
A0461	62201-0200	DUMP TRUCK, 8 CUBIC YARD MINIMUM CAPACITY	20	HOUR	\$ _____	\$ _____
A0481	62201-0550	BACKHOE LOADER, 6 CUBIC FOOT MINIMUM RATED CAPACITY BUCKET, 24-INCH WIDTH	20	HOUR	\$ _____	\$ _____

Bid Schedule

Schedule:A

Schedule Type:Base

Project No:AZ FTBR SALT 80(1)

Project Name:Horse Mesa Bridge

A0501	62201-0950	WHEEL LOADER, 3 CUBIC YARD MINIMUM RATED CAPACITY	20	HOUR	\$ _____	\$ _____
A0521	62201-2750	MOTOR GRADER	20	HOUR	\$ _____	\$ _____
A0541	62201-3350	HYDRAULIC EXCAVATOR, 1 CUBIC YARD MINIMUM CAPACITY	20	HOUR	\$ _____	\$ _____
A0561	62301-0000	GENERAL LABOR	40	HOUR	\$ _____	\$ _____
A0581	62302-1000	SPECIAL LABOR, HIRED TECHNICAL SERVICES	40	HOUR	\$ _____	\$ _____
A0601	62302-1100	SPECIAL LABOR, HIRED SURVEY SERVICES	40	HOUR	\$ _____	\$ _____
A0621	62303-1000	SPECIAL LABOR, HIRED TECHNICAL SERVICES (BIOLOGIST)	ALL	LPSM	\$ __LPSM__	\$ _____
A0641	62511-2000	SEEDING, HYDRAULIC METHOD	855	SQYD	\$ _____	\$ _____
A0661	62516-2000	MULCHING, HYDRAULIC METHOD	855	SQYD	\$ _____	\$ _____
A0681	63308-3000	OBJECT MARKER, TYPE 3	4	EACH	\$ _____	\$ _____
A0701	63309-0000	DELINEATOR	1	EACH	\$ _____	\$ _____
A0721	63316-1000	REMOVE AND RESET SIGN	1	EACH	\$ _____	\$ _____
A0741	63501-0000	TEMPORARY TRAFFIC CONTROL	ALL	LPSM	\$ __LPSM__	\$ _____

Bid Schedule

Schedule:A

Schedule Type:Base

Project No:AZ FTBR SALT 80(1)

Project Name:Horse Mesa Bridge

Submitted by:_____

Schedule Total:_____

INSTRUCTIONS: When the offeror/principal is a corporation, include this certification with your offer/bid.

Corporate Certificate

I, _____(name), certify that I am the
_____(title), of the corporation named as the
Offeror/Principal herein;

that _____ (name), who signed this

offer and/or bid bond on behalf of _____ (company name) is

_____ (title) of this corporation;

that the offer was duly signed for and on behalf of said corporation by authority and scope of its governing body, and within the scope of its corporate powers.

_____(signature) Affix Corporate Seal

_____(title)

INSTRUCTIONS: When the offeror/principal is a limited liability corporation, include this certification with your offer/bid.

Limited Liability Certificate

I, _____ (name), certify that I am the

_____ (title), of the limited liability company

named as the Offeror/Principal herein;

that _____ (name), who signed this

offer and/or bid bond on behalf of _____ (company name) is

_____ (title) of this company;

that the offer was duly signed for and on behalf of said company by authority and scope of its

governing body, and within the scope of its powers.

_____ (signature)

_____ (title)

Affix Company Seal
(as applicable)

INSTRUCTIONS: When the offeror/principal is a partnership, include this certification with your offer/bid.

Authority to Bind Partnership

This certifies that the names and signatures of all partners are listed below, and that the person signing the proposal has the authority to actually bind the partnership pursuant to its partnership agreement. Each of the partners individually has full authority to enter into and execute contractual instruments on behalf of said partnership, except as follows:

(State "None" or describe limitations, if any)

This authority shall remain in full force and effect until such time as the revocation of authority by any cause whatsoever has been furnished in writing to and acknowledge by the Contracting Officer.

(Include names and signatures of all partners)

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INSTRUCTIONS: When the offeror/principal is a joint venture, include this certification with your offer/bid.

Authority to Bind Joint Venture

This certifies that the person signing the proposal has the authority to actually bind the joint venture pursuant to its joint venture agreement, and that each of the named persons listed below individually has full authority to enter into and execute contractual instruments on behalf of said joint venture, except as follows:

(State "None" or describe limitations, if any)

This authority shall remain in full force and effect until such time as the revocation of authority by any cause whatsoever has been furnished in writing to and acknowledge by the Contracting Officer.

(Include names and signatures of all applicable individuals)

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INSTRUCTIONS: When the offeror/principal is a sole proprietorship, include this certification with your offer/bid.

Sole Proprietorship Requirement

An Offeror/Principal that is a sole proprietorship must submit an offer/bid and a bond signed by the sole proprietor, or by one duly authorized to sign for the sole proprietor. If the signature is by someone other than the sole proprietor, a copy of the power of attorney authorizing the individual to sign must be provided with the offer/bid.

BUY AMERICAN ACT- CONSTRUCTION MATERIALS

It is understood and agreed that the materials and components listed in Subparts 25.1 and 25.2 of the FAR are a part of this contract and are deemed to be Domestic Construction Material for the purposes of this contract.

NOTE TO CONTRACTOR:

The following information and any applicable supporting data is required for evaluation of requests under FAR Clause 52.225-9 Paragraph (c) & (d) and FAR Provision 52.225-10 Paragraph (b).

Material and/or Component

Construction Material Description	Unit of Measure	Quantity	*Cost Delivered to Job Site
Foreign Construction Material			
Comparable Domestic Material			

Material and/or Component

Construction Material Description	Unit of Measure	Quantity	*Cost Delivered to Job Site
Foreign Construction Material			
Comparable Domestic Material			

[Include all delivery costs to the construction site and any applicable duty (whether or not a duty-free entry certificate is issued).]
[Please include name, address, telephone number and contact for suppliers surveyed. Attach copy of response; if oral, attach summary. Include all applicable supporting information.]*

HAZARDOUS MATERIALS

As required by FAR Clause 52.223-3, Hazardous Materials Identification and Safety Data - Alternate I, the apparent low bidder must submit prior to award a Material Safety Data Sheet (MSDS) for all hazardous materials that the bidder identifies in paragraph (b) of the FAR clause and defined under the latest version of Federal Standard No. 313.

Hazardous Material	Identification Number

USE OF RECOVERED MATERIALS ON FEDERAL LANDS HIGHWAY PROJECTS

Section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA) of 1976, as amended (42 U.S.C. 6901 et seq.), requires Federal, State, and local procuring agencies using appropriated Federal funds to purchase items composed of the highest percentage of recovered materials practical. Use of recovered materials is strongly encouraged on Federal Lands Highway Projects. Highway construction items covered by the Environmental Protection Agency's *Comprehensive Guidelines for Procurement of Products Containing Recovered Materials* include fly ash, ground granulated blast furnace slag, traffic barricades, traffic cones, hydraulic mulch and compost for mulch.

Use of fly ash and ground granulated blast furnace slag and construction materials containing fly ash and ground granulated blast furnace slag on Federal Lands Highway Projects:

- It is the policy of the United States Government that fly ash and ground granulated blast furnace slag and materials containing fly ash and ground granulated blast furnace slag shall have maximum practicable opportunity for incorporation into its construction projects.
- The Contractor agrees to investigate the use of fly ash and ground granulated blast furnace slag and materials containing fly ash and ground granulated blast furnace slag to the fullest extent consistent with the efficient performance of this contract. Both the contractor and the subcontractors are urged to seek out suppliers of fly ash and ground granulated blast furnace slag, cement and concrete containing fly ash and ground granulated blast furnace slag and to solicit bids for these materials.
- Names of firms that supply fly ash and ground granulated blast furnace slag and materials containing fly ash and ground granulated blast furnace slag are available from the American Coal Ash Association and the National Slag Association.

B-1

BID BOND <i>(See instructions on reverse)</i>	DATE BOND EXECUTED <i>(Must not be later than bid opening date)</i>	OMB Control Number: 9000-0045 Expiration Date: 8/31/2022
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Paperwork Reduction Act Statement - This information collection meets the requirements of 44 USC § 3507, as amended by section 2 of the Paperwork Reduction Act of 1995. You do not need to answer these questions unless we display a valid Office of Management and Budget (OMB) control number. The OMB control number for this collection is 9000-0045. We estimate that it will take 1 hour to read the instructions, gather the facts, and answer the questions. Send only comments relating to our time estimate, including suggestions for reducing this burden, or any other aspects of this collection of information to: General Services Administration, Regulatory Secretariat Division (M1V1CB), 1800 F Street, NW, Washington, DC 20405.

PRINCIPAL *(Legal name and business address)*

TYPE OF ORGANIZATION ("X" one)

☐ INDIVIDUAL ☐ PARTNERSHIP ☐ JOINT VENTURE
☐ CORPORATION ☐ OTHER *(Specify)*

STATE OF INCORPORATION

SURETY(IES) *(Name and business address)*

PENAL SUM OF BOND					BID IDENTIFICATION	
PERCENT OF BID PRICE 20%	AMOUNT NOT TO EXCEED				BID DATE FOR <i>(Construction, Supplies or Services)</i>	INVITATION NUMBER Insert solicitation number on cover page
	MILLION(S)	THOUSAND(S)	HUNDRED(S)	CENTS		
3	000	000	00			Construction

OBLIGATION:

We, the Principal and Surety(ies) are firmly bound to the United States of America (hereinafter called the Government) in the above penal sum. For payment of the penal sum, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally. However, where the Sureties are corporations acting as co-sureties, we, the Sureties, bind ourselves in such sum "jointly and severally" as well as "severally" only for the purpose of allowing a joint action or actions against any or all of us. For all other purposes, each Surety binds itself, jointly and severally with the Principal, for the payment of the sum shown opposite the name of the Surety. If no limit of liability is indicated, the limit of liability is the full amount of the penal sum.

CONDITIONS:

The Principal has submitted the bid identified above.

THEREFORE:

The above obligation is void if the Principal - (a) upon acceptance by the Government of the bid identified above, within the period specified therein for acceptance (sixty (60) days if no period is specified), executes the further contractual documents and gives the bond(s) required by the terms of the bid as accepted within the time specified (ten (10) days if no period is specified) after receipt of the forms by the principal; or (b) in the event of failure to execute such further contractual documents and give such bonds, pays the Government for any cost of procuring the work which exceeds the amount of the bid.

Each Surety executing this instrument agrees that its obligation is not impaired by any extension(s) of the time for acceptance of the bid that the Principal may grant to the Government. Notice to the surety(ies) of extension(s) is waived. However, waiver of the notice applies only to extensions aggregating not more than sixty (60) calendar days in addition to the period originally allowed for acceptance of the bid.

WITNESS:

The Principal and Surety(ies) executed this bid bond and affixed their seals on the above date.

PRINCIPAL

SIGNATURE(S)	1.	2.	3.	Corporate Seal
	(Seal)	(Seal)	(Seal)	
NAME(S) & TITLE(S) <i>(Typed)</i>	1.	2.	3.	

INDIVIDUAL SURETY(IES)

SIGNATURE(S)	1.	2.	3.	
	(Seal)	(Seal)	(Seal)	
NAME(S) <i>(Typed)</i>	1.	2.	3.	

CORPORATE SURETY(IES)

SURETY A	NAME & ADDRESS		STATE OF INCORPORATION	LIABILITY LIMIT (\$)	Corporate Seal
	SIGNATURE(S)	1.	2.	3.	
	NAME(S) & TITLE(S) <i>(Typed)</i>	1.	2.	3.	

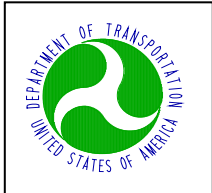
SURETY B	NAME & ADDRESS		STATE OF INCORPORATION	LIABILITY LIMIT (\$)	Corporate Seal
	SIGNATURE(S)	1.	2.		
	NAME(S) & TITLE(S) (Typed)	1.	2.		
SURETY C	NAME & ADDRESS		STATE OF INCORPORATION	LIABILITY LIMIT (\$)	Corporate Seal
	SIGNATURE(S)	1.	2.		
	NAME(S) & TITLE(S) (Typed)	1.	2.		
SURETY D	NAME & ADDRESS		STATE OF INCORPORATION	LIABILITY LIMIT (\$)	Corporate Seal
	SIGNATURE(S)	1.	2.		
	NAME(S) & TITLE(S) (Typed)	1.	2.		
SURETY E	NAME & ADDRESS		STATE OF INCORPORATION	LIABILITY LIMIT (\$)	Corporate Seal
	SIGNATURE(S)	1.	2.		
	NAME(S) & TITLE(S) (Typed)	1.	2.		
SURETY F	NAME & ADDRESS		STATE OF INCORPORATION	LIABILITY LIMIT (\$)	Corporate Seal
	SIGNATURE(S)	1.	2.		
	NAME(S) & TITLE(S) (Typed)	1.	2.		
SURETY G	NAME & ADDRESS		STATE OF INCORPORATION	LIABILITY LIMIT (\$)	Corporate Seal
	SIGNATURE(S)	1.	2.		
	NAME(S) & TITLE(S) (Typed)	1.	2.		

INSTRUCTIONS

1. This form is authorized for use when a bid guaranty is required. Any deviation from this form will require the written approval of the Administrator of General Services.
2. Insert the full legal name and business address of the Principal in the space designated "Principal" on the face of the form. An authorized person shall sign the bond. Any person signing in a representative capacity (e.g., an attorney-in-fact) must furnish evidence of authority if that representative is not a member of the firm, partnership, or joint venture, or an officer of the corporation involved.
3. The bond may express penal sum as a percentage of the bid price. In these cases, the bond may state a maximum dollar limitation (e.g., 20% of the bid price but the amount not to exceed _____dollars).
4. (a) Corporations executing the bond as sureties must appear on the Department of the Treasury's list of approved sureties and must act within the limitations listed therein. The value put into the LIABILITY LIMIT block is the penal sum (i.e., the face value) of the bond, unless a co-surety arrangement is proposed.

(b) When multiple corporate sureties are involved, their names and addresses shall appear in the spaces (Surety A, Surety B, etc.) headed "CORPORATE SURETY(IES)." In the space designated "SURETY(IES)" on the face of the form, insert only the letter identifier corresponding to each of the sureties. Moreover, when co-surety arrangements exist, the parties may allocate their respective limitations of liability under the bond, provided that the sum total of their liability equals 100% of the bond penal sum.

(c) When individual sureties are involved, a completed Affidavit of Individual Surety (Standard Form 28) for each individual surety, shall accompany the bond. The Government may require the surety to furnish additional substantiating information concerning its financial capability.
5. Corporations executing the bond shall affix their corporate seals. Individuals shall execute the bond opposite the word "Corporate Seal"; and shall affix an adhesive seal if executed in Maine, New Hampshire, or any other jurisdiction requiring adhesive seals.
6. Type the name and title of each person signing this bond in the space provided.
7. In its application to negotiated contracts, the terms "bid" and "bidder" shall include "proposal" and "offeror."



FEDERAL HIGHWAY ADMINISTRATION
CENTRAL FEDERAL LANDS HIGHWAY DIVISION

BIDDER'S INFORMATION

INSTRUCTIONS: Answer all questions on this form inserting "none" or "not applicable" where appropriate. If more space is required attach additional sheets. Return the signed, dated and completed form with the bid to the address shown in the invitation for bids on or before the time set for bid opening. The prospective bidder shall provide any additional information requested by the Government during evaluation of the bids.

If the prospective bidder is a joint venture or general partnership, a separate Bidder's Qualifications form shall be provided individually for each joint venture participant or partner.

1. Name and address of business:

Name

DUNS Number (See FAR Provision 52.204-6) *

Street

Home Office Congressional District (Insert District #) *

City

State

Zip Code

* Necessary for Government reporting purposes only

To obtain a Dun & Street number, call

800-333-0505.

County

Telephone Number (Include Area Code)

Fax Number (Include Area Code)

E-mail address

2. a. Type of organization (check appropriate box):

☐ Individual

☐ Non-profit organization

☐ Corporation

☐ Partnership

☐ Joint Venture

☐ Incorporated in: _____

If a Foreign entity:

☐ Individual

☐ Non-profit organization

☐ Corporation

☐ Partnership

☐ Joint Venture

☐ Registered in: _____

b. Size and type of Business Concern (check appropriate boxes):

☐ Large Business Concern

☐ Small Disadvantaged Business Concern

☐ Emerging Small Business

☐ Small Business Concern

☐ Women-Owned Small Business

☐ SBA 8(a) Certified

☐ HUB Zone Business Concern

☐ Veteran Owned Business Concern

☐ Service-Disabled Veteran-Owned Business Concern

3. If a joint venture or general partnership:

- a. Provide the name under which the project will be bid, the home office address, and name of the principal who will represent the company with regard to this project if different from "1." above.

Principal _____

Business Name _____

Street _____

City _____ State _____ Zip Code _____

- b. Provide the name and home office addresses of each of the joint venture partners; indicate which partner is the sponsoring partner. Attach a separate sheet for additional partners.

Sponsoring Partner _____

Other Partner _____

Street _____

Street _____

City _____ State _____ Zip Code _____

City _____ State _____ Zip Code _____

4. Date organization established: _____

5. Name of succeeded business, if any: _____

6. How many years have you been in business as:

a. General contractor ____ years.

b. Subcontractor ____ years.

7. a. Furnish the following information concerning the owner, partners, officers and directors:

Name	Title	Percent of Business Owned	Years of Business Experience	
			Contracting	Other

- b. Attach resumes of these key personnel as well as the on-site project manager(s) and superintendent(s), and specifically identify the following:

- Present position, responsibility, and length of employment.
- Amount and type of construction experience.
- Amount and type of highway construction experience, including position, responsibility, and a brief project description of each period of employment.
- Formal education and training, professional or technical registrations or licenses.

8. a. Contracts in force. (Attach additional sheets if necessary)

Project Name and Contract Numbers	Owner's Name, Address, and Contact Name, Email and Telephone #	Scope of Work Performed	Contract Amount	Estimated Completion Date	Name of Surety

b. Are there any unresolved claims or lawsuits associated with these projects? If so, state the amount in dispute, parties involved, nature and circumstances of the dispute, and status of the matter on a separate sheet.

9. a. List up to five of the largest jobs you have completed in the last five years which are similar in project work scope to this project. (Attach additional sheets if necessary)

Project Name and Contract Numbers	Owner's Name, Address, Contact Name, Email and Telephone #	Scope of Work Performed	Original and Final Contract Amounts	Original and Final Completion Dates	Names of On-site Project Manager and Superintendent	Name of Surety

b. Are there any unresolved claims or lawsuits associated with these projects? If so, state the amount in dispute, parties involved, nature and circumstances of the dispute, and status of the matter on a separate sheet

Solicitation Provisions

52.203-11 Certification and Disclosure Regarding Payments to Influence Certain Federal Transactions. (SEP 2007)

52.203-18, Prohibition on Contracting with Entities that Require Certain Internal Confidentiality Agreements-Representation. (JAN 2017)

52.204-7 System for Award Management. (OCT 2018)

52.204-8 Annual Representations and Certifications. (MAY 2022)

52.204-16 Commercial and Government Entity Code Reporting (AUG 2020)

52.204-17 Ownership or Control of Offeror (AUG 2020)

52.204-20 Predecessor or Offeror (AUG 2020)

52.204-22 Alternative Line Item Proposal (JAN 2017)

52.204-24 Representation Regarding Certain Telecommunications and Video Surveillance Services or Equipment (NOV 2021)

52.204-26 Covered Telecommunications Equipment or Services-Representation. (OCT 2020)

52.209-5 Certification Regarding Responsibility Matters. (AUG 2020)

52.209-7 Information Regarding Responsibility Matters (OCT 2018)

52.209-11 Representation by Corporations Regarding Delinquent Tax Liability or a Felony Conviction under any Federal Law (FEB 2016)

52.209-13 Violation of Arms Control Treaties or Agreements – Certification (NOV 2021)

52.214-3 Amendments to Invitations for Bids. (DEC 2016)

52.214-4 False Statements in Bids. (APR 1984)

52.214-5 Submission of Bids. (DEC 2016)

52.214-6 Explanation to Prospective Bidders. (APR 1984)

52.214-7 Late Submissions, Modifications, and Withdrawals of Bids. (NOV 1999)

52.214-18 Preparation of Bids - Construction. (APR 1984)

52.214-19 Contract Award - Sealed Bidding - Construction. (AUG 1996)**52.214-31 Facsimile Bids (DEC 1989)****52.214-34 Submission of Offers in the English Language. (APR 1991)****52.214-35 Submission of Offers in U.S. Currency. (APR 1991)****52.215-5 Facsimile Proposals. (OCT 1997)****52.216-1 Type of Contract. (APR 1984)**

The Government contemplates award of a **FIRM FIXED PRICE** contract resulting from this solicitation.

(End of provision)

52.222-5 Construction Wage Rate Requirements Secondary Site of the Work. (MAY 2014)**52.222-23 Notice of Requirement for Affirmative Action to Ensure Equal Employment Opportunity for Construction. (FEB 1999)**

(a) The offeror's attention is called to the Equal Opportunity clause and the Affirmative Action Compliance Requirements for Construction clause of this solicitation.

(b) The goals for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

Goals for Minority Participation for Each Trade	Goals for Female Participation for Each Trade
<i>15.8% - Maricopa County, Arizona</i>	<i>6.9%</i>

These goals are applicable to all the Contractor's construction work performed in the covered area. If the Contractor performs construction work in a geographical area located outside of the covered area, the Contractor shall apply the goals established for the geographical area where the work is actually performed. Goals are published periodically in the *Federal Register* in notice form, and these notices may be obtained from any Office of Federal Contract Compliance Programs office.

(c) The Contractor's compliance with Executive Order 11246, as amended, and the regulations in 41 CFR 60-4 shall be based on (1) its implementation of the Equal Opportunity clause, (2) specific affirmative action obligations required by the clause entitled Affirmative Action Compliance Requirements for Construction, and (3) 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. 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, Executive Order 11246, as amended, and the regulations in 41 CFR 60-4. Compliance with the goals will be measured against the total work hours performed.

(d) The Contractor shall provide written notification to the Deputy Assistant Secretary for Federal Contract Compliance, U.S. Department of Labor, within 10 working days following award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the -

(1) Name, address, and telephone number of the subcontractor; (2)

Employer's identification number of the subcontractor;

(3) Estimated dollar amount of the subcontract;

(4) Estimated starting and completion dates of the subcontract; and

(5) Geographical area in which the subcontract is to be performed.

(e) As used in this Notice, and in any contract resulting from this solicitation, the covered area is Maricopa County, Arizona.

(End of provision)

52.222-38 Compliance with Veterans' Employment Reporting Requirements. (FEB 2016)

52.223-22 Public Disclosure of Greenhouse Gas Emissions and Reduction Goals—Representation (DEC 2016)

52.225-10 Notice of Buy American Requirement—Construction Materials (MAY 2014)

52.225-20 Prohibition on Conducting Restricted Business Operations in Sudan--Certification. (AUG 2009)

52.228-1 Bid Guarantee. (SEP 1996)

(a) Failure to furnish a bid guarantee in the proper form and amount, by the time set for opening of bids, may be cause for rejection of the bid.

(b) The bidder shall furnish a bid guarantee in the form of a firm commitment, *e.g.*, bid bond supported by good and sufficient surety or sureties acceptable to the Government, postal money order, certified check, cashier's check, irrevocable letter of credit, or, under Treasury Department regulations, certain bonds or notes of the United

States. The Contracting Officer will return bid guarantees, other than bid bonds -

- (1) To unsuccessful bidders as soon as practicable after the opening of bids; and
 - (2) To the successful bidder upon execution of contractual documents and bonds (including any necessary coinsurance or reinsurance agreements), as required by the bid as accepted.
- (c) The amount of the bid guarantee shall be **twenty (20%) percent** of the bid price or **\$3,000,000.00**, whichever is less.
- (d) If the successful bidder, upon acceptance of its bid by the Government within the period specified for acceptance, fails to execute all contractual documents or furnish executed bond(s) within 10 days after receipt of the forms by the bidder, the Contracting Officer may terminate the contract for default.
- (e) In the event the contract is terminated for default, the bidder is liable for any cost of acquiring the work that exceeds the amount of its bid, and the bid guarantee is available to offset the difference.

52.233-2 Service of Protest. (SEP 2006)

- (a) Protests, as defined in section 33.101 of the Federal Acquisition Regulation, that are filed directly with an agency, and copies of any protests that are filed with the Government Accountability Office (GAO), shall be served on the Contracting Officer (addressed as follows) by obtaining written and dated acknowledgment of receipt from:

***Mr. Joseph Wilson
Contracting Officer
Federal Highway Administration
12300 West Dakota Avenue, Suite 360
Lakewood, Colorado 80228***

- (b) The copy of any protest shall be received in the office designated above within one day of filing a protest with the GAO.

(End of provision)

52.236-27 Site Visit (Construction). (FEB 1995)

- (a) The clauses at 52.236-2, Differing Site Conditions, and 52.236-3, Site Investigations and Conditions Affecting the Work, will be included in any contract awarded as a result of this solicitation. Accordingly, offerors or quoters are urged and expected to inspect the site where the work will be performed.

(b) Site visits may be arranged during normal duty hours by contacting the point of contact (POC) listed below: No organized site visit will be held.

Contact POC below to schedule a site visit:
Shane Harrison
O&M Manager
SRP | Hydro Generation | EVS113
P.O. Box 52025, Phoenix, AZ 85072-2025
P: (602) 236-5680

(End of provision)

52.252-1 Solicitation Provisions Incorporated by Reference. (FEB 1998)

This solicitation incorporates one or more solicitation provisions by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. The offeror is cautioned that the listed provisions may include blocks that must be completed by the offeror and submitted with its quotation or offer. In lieu of submitting the full text of those provisions, the offeror may identify the provision by paragraph identifier and provide the appropriate information with its quotation or offer. Also, the full text of a solicitation provision may be accessed electronically at this/these address(es): <http://www.acquisition.gov/far>

(End of provision)

52.252-3 Alterations in Solicitation. (APR 1984) Portions

of this solicitation are altered as follows: **NONE**

(End of provision)

Contract Clauses

52.202-1 Definitions. (JUN 2020)

52.203-3 Gratuities. (APR 1984)

52.203-5 Covenant Against Contingent Fees. (MAY 2014)

52.203-6, Restrictions on Subcontractor Sales to the Government (JUN 2020)

52.203-7 Anti-Kickback Procedures. (JUN 2020)

52.203-8 Cancellation, Rescission, and Recovery of Funds for Illegal or Improper Activity. (MAY 2014)

52.203-10 Price or Fee Adjustment for Illegal or Improper Activity. (MAY 2014)

52.203-12 Limitation on Payments to Influence Certain Federal Transactions. (JUN 2020)

52.203-13 Contractor Code of Business Ethics and Conduct (NOV 2021)

52.203-14 Display of Hotline Poster(s) (NOV 2021)

(a) *Definition.*

United States, as used in this clause, means the 50 States, the District of Columbia, and outlying areas.

(b) *Display of fraud hotline poster(s).* Except as provided in paragraph (c)—

(1) During contract performance in the United States, the Contractor shall prominently display in common work areas within business segments performing work under this contract and at contract work sites-

(i) Any agency fraud hotline poster or Department of Homeland Security (DHS) fraud hotline poster identified in paragraph (b)(3) of this clause; and

(ii) Any DHS fraud hotline poster subsequently identified by the Contracting Officer.

(2) Additionally, if the Contractor maintains a company website as a method of providing information to employees, the Contractor shall display an electronic version of the poster(s) at the website.

(3) Any required posters may be obtained as follows:

General Fraud	https://www.oig.dot.gov/sites/default/files/files/OIG-generic-2.pdf
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(c) If the Contractor has implemented a business ethics and conduct awareness program, including a reporting mechanism, such as a hotline poster, then the Contractor need not display any agency fraud hotline posters as required in paragraph (b) of this clause, other than any required DHS posters.

(d) *Subcontracts*. The Contractor shall include the substance of this clause, including this paragraph (d), in all subcontracts that exceed the threshold specified in Federal Acquisition Regulation [3.1004](#)(b)(1) on the date of subcontract award, except when the subcontract—

- (1) Is for the acquisition of a commercial product or commercial service; or
- (2) Is performed entirely outside the United States.

(End of clause)

52.203-17 Contractor Employee Whistleblower Rights and Requirements to Inform Employees of Whistleblower Rights (JUN 2020)

52.203-19 Prohibition on Requiring Certain Internal Confidentiality Agreements or Statements (JAN 2017)

52.204-1 Approval of Contract (DEC 1989)

This contract is subject to the written approval of the *Acquisitions Branch Chief* and shall not be binding until so approved.

(End of Clause)

52.204-4 Printed or Copied Double-Sided on Postconsumer Fiber Content Paper. (MAY 2011)

52.204-9 Personal Identity Verification of Contractor Personnel. (JAN 2011)

52.204-10 Reporting Executive Compensation and First-Tier Subcontract Awards. (JUN 2020)

52.204-13 System for Award Management Maintenance. (OCT 2018)

52.204-14 Service Contract Reporting Requirements (OCT 2016)

52.204-18 Commercial and Government Entity Code Maintenance (JUN 2020)

52.204-19 Incorporation by Reference of Representations and Certifications. (DEC 2014)

52.204-23 Prohibition on Contracting for Hardware, Software, and Services Developed or Provided by Kaspersky Lab and Other Covered Entities (NOV 2021)

52.204-25 Prohibition on Contracting for Certain Telecommunications and Video Surveillance Services or Equipment (NOV 2021)

52.209-6 Protecting the Government's Interest When Subcontracting with Contractors Debarred, Suspended, or Proposed for Debarment. (NOV 2021)

52.209-10 Prohibition on Contracting With Inverted Domestic Corporations (NOV 2015)

52.211-10 Commencement, Prosecution, and Completion of Work. (APR 1984) Alternate I (APR 1984)

The Contractor shall be required to (a) commence work under this contract within ten (10) calendar days after the date the Contractor receives the notice to proceed, (b) prosecute the work diligently, and (c) complete the entire work ready for use not later than {Refer to Subsection 108.01 of the SCRs}. The time stated for completion shall include final cleanup of the premises.

The completion date is based on the assumption that the successful offeror will receive the notice to proceed by 12/30/2022. The completion date will be extended by the number of calendar days after the above date that the Contractor receives the notice to proceed, except to the extent that the delay in issuance of the notice to proceed results from the failure of the Contractor to execute the contract and give the required performance and payment bonds within the time specified in the offer.

(End of clause)

52.211-12 Liquidated Damages - Construction. (SEP 2000)

(a) If the Contractor fails to complete the work within the time specified in the contract, the Contractor shall pay liquidated damages to the Government in the amount of (see FP-14 section 108) for each calendar day of delay until the work is completed or accepted.

(b) If the Government terminates the Contractor's right to proceed, liquidated damages will continue to accrue until the work is completed. These liquidated damages are in addition to excess costs of repurchase under the Termination clause.

(End of clause)

52.211-13 Time Extensions. (SEP 2000)

52.211-18 Variation in Estimated Quantity. (APR 1984)

- 52.219-6 Notice of Total Small Business Set-Aside (NOV 2020)**
- 52.219-8 Utilization of Small Business Concerns (OCT 2018)**
- 52.219-14 Limitations on Subcontracting (SEP 2021)**
- 52.219-28 Post-Award Small Business Program Rerepresentation. (SEP 2021)**
- 52.222-1 Notice to the Government of Labor Disputes. (FEB 1997)**
- 52.222-3 Convict Labor. (JUN 2003)**
- 52.222-4 Contract Work Hours and Safety Standards Act - Overtime Compensation. (MAY 2018)**
- 52.222-6 Construction Wage Rate Requirements. (AUG 2018)**
- 52.222-7 Withholding of Funds. (MAY 2014)**
- 52.222-8 Payrolls and Basic Records. (JUL 2021)**
- 52.222-9 Apprentices and Trainees. (JUL 2005)**
- 52.222-10 Compliance with Copeland Act Requirements. (FEB 1988)**
- 52.222-11 Subcontracts (Labor Standards). (MAY 2014)**
- 52.222-12 Contract Termination - Debarment. (MAY 2014)**
- 52.222-13 Compliance with Construction Wage Rate Requirements and Related Regulations. (MAY 2014)**
- 52.222-14 Disputes Concerning Labor Standards. (FEB 1988)**
- 52.222-15 Certification of Eligibility. (MAY 2014)**
- 52.222-21 Prohibition of Segregated Facilities. (APR 2015)**
- 52.222-26 Equal Opportunity. (SEP 2016)**
- 52.222-27 Affirmative Action Compliance Requirements for Construction. (APR 2015)**
- 52.222-35 Equal Opportunity for Veterans. (JUN 2020)**
- 52.222-36 Affirmative Action for Workers with Disabilities. (JUN 2020)**
- 52.222-37 Employment Reports on Veterans (JUN 2020)**

52.222-40 Notification of Employee Rights Under the National Labor Relations Act (DEC 2010)

52.222-50 Combating Trafficking in Persons (NOV 2021)

52.222-54 Employment Eligibility Verification (NOV 2021)

52.222-55 Minimum Wages Under Executive Order 13658 (JAN 2022)

52.222-62 Paid Sick Leave Under Executive Order 13706 (JAN 2022)

52.223-2 Affirmative Procurement of Biobased Products Under Service and Construction Contracts (SEP 2013)

52.223-3 Hazardous Material Identification and Material Safety Data. (FEB 2021)

52.223-5 Pollution Prevention and Right-to-Know Information. (MAY 2011)

52.223-6 Drug-Free Workplace. (MAY 2001)

52.223-17 Affirmative Procurement of EPA-Designated Items in Service and Construction Contracts (AUG 2018)

52.223-18 Encouraging Contractor Policies to Ban Text Messaging While Driving. (JUN 2020)

52.223-21 Foams (JUN 2016)

52.224-1 Privacy Act Notification. (APR 1984)

52.224-2 Privacy Act. (APR 1984)

52.225-9 Buy American-Construction Materials (NOV 2021)

(a) *Definitions.* As used in this clause—

Commercially available off-the-shelf (COTS) item—

(1) Means any item of supply (including construction material) that is—

(i) A commercial product (as defined in paragraph (1) of the definition of “commercial product” at Federal Acquisition Regulation (FAR) [2.101](#));

(ii) Sold in substantial quantities in the commercial marketplace; and

(iii) Offered to the Government, under a contract or subcontract at any tier, without modification, in the same form in which it is sold in the commercial marketplace; and

(2) Does not include bulk cargo, as defined in 46 U.S.C. 40102(4), such as agricultural products and petroleum products.

"Construction material" means an article, material, or supply brought to the construction site by the Contractor or a subcontractor for incorporation into the building or work. The term also includes an item brought to the site preassembled from articles, materials, or supplies. However, emergency life safety systems, such as emergency lighting, fire alarm, and audio evacuation systems, that are discrete systems incorporated into a public building or work and that are produced as complete systems, are evaluated as a single and distinct construction material regardless of when or how the individual parts or components of those systems are delivered to the construction site. Materials purchased directly by the Government are supplies, not construction material.

Cost of components means—

(1) For components purchased by the Contractor, the acquisition cost, including transportation costs to the place of incorporation into the construction material (whether or not such costs are paid to a domestic firm), and any applicable duty (whether or not a duty-free entry certificate is issued); or

(2) For components manufactured by the Contractor, all costs associated with the manufacture of the component, including transportation costs as described in paragraph (1) of this definition, plus allocable overhead costs, but excluding profit. Cost of components does not include any costs associated with the manufacture of the construction material.

Domestic construction material means—

(1) For construction material that does not consist wholly or predominantly of iron or steel or a combination of both-

(i) An unmanufactured construction material mined or produced in the United States; or

(ii) A construction material manufactured in the United States, if-

(A) The cost of its components mined, produced, or manufactured in the United States exceeds 55 percent of the cost of all its components. Components of foreign origin of the same class or kind for which nonavailability determinations have been made are treated as domestic. Components of unknown origin are treated as foreign; or

(B) The construction material is a COTS item; or

(2) For construction material that consists wholly or predominantly of iron or steel or a combination of both, a construction material manufactured in the United States if the cost of foreign iron and steel constitutes less than 5 percent of the cost of all components used in such construction material. The cost of foreign iron and steel includes but is not limited to the cost of foreign iron or steel mill products (such as bar, billet, slab, wire, plate, or sheet), castings, or forgings utilized in the manufacture of the construction material and a good faith estimate of the cost of all foreign iron or steel components excluding COTS fasteners. Iron or steel components of unknown origin are treated as foreign. If the construction material contains multiple components, the cost of all the materials used in such construction material is calculated in accordance with the definition of "cost of components".

Fastener means a hardware device that mechanically joins or affixes two or more objects together. Examples of fasteners are nuts, bolts, pins, rivets, nails, clips, and screws.

Foreign construction material means a construction material other than a domestic construction material.

Foreign iron and steel means iron or steel products not produced in the United States. Produced in the United States means that all manufacturing processes of the iron or steel must take place in the United States, from the initial melting stage through the application of coatings, except metallurgical processes involving refinement of steel additives. The origin of the elements of the iron or steel is not relevant to the determination of whether it is domestic or foreign.

Predominantly of iron or steel or a combination of both means that the cost of the iron and steel content exceeds 50 percent of the total cost of all its components. The cost of iron and steel is the cost of the iron or steel mill products (such as bar, billet, slab, wire, plate, or sheet), castings, or forgings utilized in the manufacture of the product and a good faith estimate of the cost of iron or steel components excluding COTS fasteners.

Steel means an alloy that includes at least 50 percent iron, between 0.02 and 2 percent carbon, and may include other elements.

"United States" means the 50 States, the District of Columbia, and outlying areas.

(b) Domestic preference.

(1) This clause implements [41 U.S.C. chapter 83](#), Buy American, by providing a preference for domestic construction material. In accordance with [41 U.S.C. 1907](#), the domestic content test of the Buy American statute is waived for construction material that is a COTS item, except that for construction material that consists wholly or predominantly of iron or steel or a combination of both, the domestic content test is applied only to the iron and steel content of the construction materials, excluding COTS fasteners. (See FAR [12.505\(a\)\(2\)](#)). The Contractor shall use only domestic construction material in performing this contract, except as provided in paragraphs (b)(2) and (b)(3) of this clause.

(2) This requirement does not apply to information technology that is a commercial product or to the construction materials or components listed by the Government as follows:

None

(3) The Contracting Officer may add other foreign construction material to the list in paragraph (b)(2) of this clause if the Government determines that-

(i) The cost of domestic construction material would be unreasonable. The cost of a particular domestic construction material subject to the requirements of the Buy American statute is unreasonable when the cost of such material exceeds the cost of foreign material by more than 20 percent;

(ii) The application of the restriction of the Buy American statute to a particular construction material would be impracticable or inconsistent with the public interest; or

(iii) The construction material is not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities of a satisfactory quality.

(c) Request for determination of inapplicability of the Buy American statute.

(1)

(i) Any Contractor request to use foreign construction material in accordance with paragraph (b)(3) of this clause shall include adequate information for Government evaluation of the request, including-

(A) A description of the foreign and domestic construction materials;

(B) Unit of measure;

(C) Quantity;

(D) Price;

(E) Time of delivery or availability;

(F) Location of the construction project;

(G) Name and address of the proposed supplier; and

(H) A detailed justification of the reason for use of foreign construction materials cited in accordance with paragraph (b)(3) of this clause.

(ii) A request based on unreasonable cost shall include a reasonable survey of the market and a completed price comparison table in the format in paragraph (d) of this clause.

(iii) The price of construction material shall include all delivery costs to the construction site and any applicable duty (whether or not a duty-free certificate may be issued).

(iv) Any Contractor request for a determination submitted after contract award shall explain why the Contractor could not reasonably foresee the need for such determination and could not have requested the determination before contract award. If the Contractor does not submit a satisfactory explanation, the Contracting Officer need not make a determination.

(2) If the Government determines after contract award that an exception to the Buy American statute applies and the Contracting Officer and the Contractor negotiate adequate consideration, the Contracting Officer will modify the contract to allow use of the foreign construction material. However, when the basis for the exception is the unreasonable price of a domestic construction material, adequate consideration is not less than the differential established in paragraph (b)(3)(i) of this clause.

(3) Unless the Government determines that an exception to the Buy American statute applies, use of foreign construction material is noncompliant with the Buy American statute.

(d) *Data*. To permit evaluation of requests under paragraph (c) of this clause based on unreasonable cost, the Contractor shall include the following information and any applicable supporting data based on the survey of suppliers:

Foreign and Domestic Construction Materials Price Comparison

Construction material description	Unit of measure	Quantity	Price (dollars) *
<i>Item 1</i>			
Foreign construction material			
Domestic construction material			
<i>Item 2</i>			
Foreign construction material			
Domestic construction material			

[List name, address, telephone number, and contact for suppliers surveyed. Attach copy of response; if oral, attach summary.]

[Include other applicable supporting information.]

*[*Include all delivery costs to the construction site and any applicable duty (whether or not a duty-free entry certificate is issued).]*

(End of Clause)

52.227-1 Authorization and Consent. (JUN 2020)

52.227-2 Notice and Assistance Regarding Patent and Copyright Infringement. (JUN 2020)

52.227-4 Patent Indemnity--Construction Contracts. (DEC 2007)

52.228-2 Additional Bond Security. (OCT 1997)

52.228-5 Insurance - Work on a Government Installation. (JAN 1997)

52.228-11 Pledges of Assets. (FEB 2021)

52.228-12 Prospective Subcontractor Requests for Bonds. (MAY 2014)

52.228-14 Irrevocable Letter of Credit (Nov 2014)

52.228-15 Performance and Payment Bonds - Construction. (JUN 2020)

52.229-3 Federal, State, and Local Taxes. (FEB 2013)

52.232-5 Payments under Fixed-Price Construction Contracts. (MAY 2014)

52.232-17 Interest. (MAY 2014)

52.232-23 Assignment of Claims. (MAY 2014)

52.232-27 Prompt Payment For Construction Contracts. (JAN 2017)

52.232-33 Payment by Electronic Funds Transfer – System for Award Management (OCT 2018)

52.232-39 Unenforceability of Unauthorized Obligations (JUN 2013)

52.232-40 Providing Accelerated Payments to Small Business Subcontractors (NOV 2021)

52.233-1 Disputes. (MAY 2014) - Alternate I (DEC 1991)

52.233-3 Protest after Award. (AUG 1996)

52.233-4 Applicable Law for Breach of Contract Claim. (OCT 2004)

52.236-2 Differing Site Conditions. (APR 1984)

52.236-3 Site Investigation and Conditions Affecting the Work. (APR 1984)

52.236-4 Physical Data. (APR 1984)

Data and information furnished or referred to below is for the Contractor's information. The Government shall not be responsible for any interpretation of or conclusion drawn from the data or information by the Contractor.

(a) The indications of physical conditions on the drawings and in the specifications are the result of site investigations by:

- 1) GEOTECHNICAL INVESTIGATION REPORT, July 18, 2022**
- 2) SURFACING MATERIALS FINAL RECOMMENDATIONS, JULY 20, 2022**

(b) Weather conditions **Contact National Weather Service.**

(c) Transportation facilities – N/A

(d) XML files for Design Model as requested

(End of clause)

52.236-5 Material and Workmanship. (APR 1984)

52.236-6 Superintendence by the Contractor. (APR 1984)

52.236-7 Permits and Responsibilities. (NOV 1991)

52.236-8 Other Contracts. (APR 1984)

52.236-9 Protection of Existing Vegetation, Structures, Equipment, Utilities, and Improvements. (APR 1984)

52.236-10 Operations and Storage Areas. (APR 1984)

52.236-11 Use and Possession Prior to Completion. (APR 1984)

52.236-12 Cleaning Up. (APR 1984)

52.236-13 Accident Prevention. (NOV 1991)

52.236-15 Schedules for Construction Contracts. (APR 1984)

52.236-17 Layout of Work. (APR 1984)

52.236-21 Specifications and Drawings for Construction. (FEB 1997)

52.236-26 Preconstruction Conference. (FEB 1995)

52.242-13 Bankruptcy. (JUL 1995)

52.242-14 Suspension of Work. (APR 1984)

52.243-4 Changes. (JUN 2007)

52.243-6 Change Order Accounting. (APR 1984)

52.244-6 Subcontracts for Commercial Items (JAN 2022)

52.245-1 Government Property (SEP 2021) - Alternate I (APR 2012)

52.245-9 Use and Charges. (APR 2012)

52.246-12 Inspection of Construction. (AUG 1996)

52.247-64 Preference for Privately Owned U.S.-Flag Commercial Vessels (NOV 2021)

52.248-3 Value Engineering - Construction. (OCT 2020)

52.249-2 Termination for Convenience of the Government (Fixed-Price). (APR 2012) - Alternate I (SEP 1996)

52.249-10 Default (Fixed-Price Construction). (APR 1984)

52.252-2 Clauses Incorporated by Reference. (FEB 1998)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this/these address(es): <http://www.acquisition.gov/far>

(End of clause)

52.252-4 Alterations in Contract. (APR 1984)

Portions of this contract are altered as follows: **NONE**

(End of clause)

52.253-1 Computer Generated Forms. (JAN 1991)

1252.223-71 Accident and Fire Reporting. (APR 2005)

(a) The Contractor shall report to the Contracting Officer any accident or fire occurring at the site of the work which causes:

(1) A fatality or as much as one lost workday on the part of any employee of the

Contractor or subcontractor at any tier;

- (2) Damage of \$1,000 or more to Government-owned or leased property, either real or personal;
- (3) Damage of \$1,000 or more to Contractor or subcontractor owned or leased motor vehicles or mobile equipment; or
- (4) Damage for which a contract time extension may be requested.

(b) Accident and fire reports required by paragraph (a) above shall be accomplished by the following means:

(1) Accidents or fires resulting in a death, hospitalization of five or more persons, or destruction of Government-owned or leased property (either real or personal), the total value of which is estimated at \$100,000 or more, shall be reported immediately by telephone to the Contracting Officer or his/her authorized representative and shall be confirmed by telegram or facsimile transmission within 24 hours to the Contracting Officer. Such telegram or facsimile transmission shall state all known facts as to extent of injury and damage and as to cause of the accident or fire.

(2) Other accident and fire reports required by paragraph (a) above may be reported by the Contractor using a state, private insurance carrier, or Contractor accident report form which provides for the statement of:

- (i) The extent of injury; and
- (ii) The damage and cause of the accident or fire.

Such report shall be mailed or otherwise delivered to the Contracting Officer within 48 hours of the occurrence of the accident or fire.

(c) The Contractor shall assure compliance by subcontractors at all tiers with the requirements of this clause.

(End of clause)

1252.223-73 Seat Belt Use Policies and Programs. (APR 2005)

In accordance with Executive Order 13043, Increasing Seat Belt Use in the United States, dated April 16, 1997, the contractor is encouraged to adopt and enforce on-the-job seat belt use policies and programs for its employees when operating company-owned, rented, or personally-owned vehicles. The National Highway Traffic Safety Administration (NHTSA) is responsible for providing leadership and guidance in support of this Presidential initiative. For information on how to implement such a program or for statistics on the potential benefits and cost-savings to your company or organization, please visit the *Buckle Up America* section of NHTSA's

website at www.nhtsa.dot.gov. Additional resources are available from the Network of Employers for Traffic Safety (NETS), a public-private partnership headquartered in the Washington, D.C. metropolitan area, and dedicated to improving the traffic safety practices of employers and employees.

NETS is prepared to help with technical assistance, a simple, user friendly program kit, and an award for achieving the President's goal of 90 percent seat belt use. NETS can be contacted at 1-888-221-0045 or visit its website at www.trafficsafety.org.

(End of clause)

1252.228-73 Notification of Miller Act Payment Bond Protection. (APR 2005)

This notice clause shall be inserted by first tier subcontractors in all their subcontracts and shall contain information pertaining to the surety that provided the payment bond under the prime contract.

(a) The prime contract is subject to the Miller Act, (40 U.S.C. 3131 et al), under which the prime contractor has obtained a payment bond. This payment bond may provide certain unpaid employees, suppliers, and subcontractors a right to sue the bonding surety under the Miller Act for amounts owed for work performed and materials delivery under the prime contract.

(b) Persons believing that they have legal remedies under the Miller Act should consult their legal advisor regarding the proper steps to take to obtain these remedies. This notice clause does not provide any party any rights against the Federal Government, or create any relationship, contractual or otherwise, between the Federal Government and any private party.

(c) The surety which has provided the payment bond under the prime contract is:

**On File with FHWA - Construction
12300 West Dakota Avenue, Suite 210
Lakewood, Colorado 80228**

(End of clause)

1252.242-72 Dissemination of Contract Information. (OCT 1994)

The Contractor shall not publish, permit to be published, or distribute for public consumption, any information, oral or written, concerning the results or conclusions made pursuant to the performance of this contract, without the prior written consent of the Contracting Officer. Two copies of any material proposed to be published or distributed shall be submitted to the Contracting Officer.

(End of clause)

1252.242-73 Contracting Officer's Technical Representative. (OCT 1994)

(a) The Contracting Officer may designate Government personnel to act as the Contracting Officer's Technical Representative (COTR) to perform functions under the contract such as review and/or inspection and acceptance of supplies, services, including construction, and other functions of a technical nature. The Contracting Officer will provide a written notice of such designation to the Contractor within five working days after contract award or for construction, not less than five working days prior to giving the contractor the notice to proceed. The designation letter will set forth the authorities and limitations of the COTR under the contract.

(b) The Contracting Officer cannot authorize the COTR or any other representative to sign documents (i.e., contracts, contract modifications, etc.) that require the signature of the Contracting Officer.

(End of clause)

POST-AWARD EVALUATION OF CONTRACTOR PERFORMANCE**Contractor Performance Evaluations**

- a. Interim and final evaluations of contractor performance will be prepared on this contract in accordance with FAR 42.1502 and TAM 1242.1502. The final performance evaluations will be prepared at the time of completion of work.
- b. The Contractor can elect to review the evaluation and submit additional information or provide a rebuttal statement. The contractor will be permitted 60 calendar days to respond from the date of receipt of the evaluation. Contractor response is voluntary. If the contractor does not respond within 60 days, the Government will presume that the Contractor has no comment. Any disagreement between the parties regarding an evaluation will be referred to an individual at a level above the Contracting Officer, whose decision is final.
- c. Copies of the evaluations, Contractor responses, and review comments, if any, will be retained as part of the contract file, and may be used to support future award decisions.

The Federal Highway Administration utilizes the Contractor Performance Assessment Reporting System (CPARS) to record and maintain past performance information. CPARS hosts a suite of web-enabled applications that are used to document contractor performance information that is required by Federal Regulations. The CPARS module assesses performance on contracts for Systems, Services, Information Technology, and Operations Support; Architect-Engineer contracts; and Construction contracts. Reference material can be accessed in CPARS.

The registration process requires the Contractor to identify an individual that will serve as a primary contact. This individual will be authorized access to the evaluation for

review and comment. In addition, the Contractor is encouraged to identify a secondary contact in the event the primary contact is unavailable to process the evaluation within the required 60 day time period. After the FHWA Focal Point registers the contract in CPARS, the contractor representative will receive a system generated email notifying him/her that the contract is registered. A system generated email will also provide the Contractor with a User ID if the person does not already have a CPARS User ID.

After a performance evaluation has been prepared and is ready for comment, the Contractor representative will receive a system generated email notification that the performance evaluation is electronically available for review and comment. The Contractor representative will receive an automated email whenever an assessment is completed and can subsequently retrieve the completed assessment from CPARS.

Contractors may access evaluations in CPARS for review and comment.

(End of Clause)

"General Decision Number: AZ20220008 08/19/2022

Superseded General Decision Number: AZ20210008

State: Arizona

Construction Type: Highway

Counties: Coconino, Maricopa, Mohave, Pima, Pinal, Yavapai and Yuma Counties 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)(2)-(60).

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:	<ul style="list-style-type: none"> . Executive Order 14026 generally applies to the contract. . The contractor must pay all covered workers at least \$15.00 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 2022.
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:	<ul style="list-style-type: none"> . Executive Order 13658 generally applies to the contract. . The contractor must pay all covered workers at least \$11.25 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2022.

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 <https://www.dol.gov/agencies/whd/government-contracts>.

1	02/25/2022
2	07/22/2022
3	07/29/2022
4	08/19/2022

* CARP0408-005 07/01/2022

	Rates	Fringes
CARPENTER (Including Cement Form Work).....	\$ 32.90	13.62

ENGI0428-001 06/01/2022

	Rates	Fringes
POWER EQUIPMENT OPERATOR		
Group 1.....	\$ 30.14	12.57
Group 2.....	\$ 33.41	12.57
Group 3.....	\$ 34.49	12.57
Group 4.....	\$ 35.52	12.57

POWER EQUIPMENT OPERATORS CLASSIFICATIONS:

GROUP 1: A-frame boom truck, air compressor, Belcrete, boring bridge and texture, brakeman, concrete mixer (skip type), conductor, conveyor, cross timing and pipe float, curing machine, dinky (under 20 tons), elevator hoist (Husky and similar), firemen, forklift, generator (all), handler, highline cableway signalman, hydrographic mulcher, joint inserter, jumbo finishing machine, Kolman belt loader, machine conveyor, multiple power concrete saw, pavement breaker, power grizzly, pressure grout machine, pump, self-propelled chip spreading machine, slurry seal machine (Moto paver driver), small self-propelled compactor (with blade-backfill, ditch operation), straw blower, tractor (wheel type), tripper, tugger (single drum), welding machine, winch truck

GROUP 2:

ALL COUNTIES INCLUDING MARICOPA: Aggregate Plant, Asphalt plant Mixer, Bee Gee, Boring Machine, Concrete Pump, Concrete Mechanical Tamping-Spreading Finishing Machine, Concrete Batch Plant, Concrete Mixer (paving & mobile), Elevating Grader (except as otherwise classified), Field Equipment Serviceman, Locomotive Engineer (including Dinky 20 tons & over), Moto-Paver, Oiler-Driver, Operating Engineer Rigger, Power Jumbo Form Setter, Road Oil Mixing Machine, Self-Propelled Compactor (with blade-grade operation), Slip Form (power driven lifting device for concrete forms), Soil Cement Road Mixing Machine, Pipe-Wrapping & Cleaning Machine (stationary or traveling), Surface Heater & Planer, Trenching Machine, Tugger (2 or more drums).

MARICOPA COUNTY ONLY: Backhoe < 1 cu yd, Motor Grader (rough), Scraper (pneumatic tired), Roller (all types asphalt), Screed, Skip Loader (all types 3<6 cu yd), Tractor (dozer, pusher-all).

GROUP 3:

ALL COUNTIES INCLUDING MARICOPA: Auto Grade Machine, Barge, Boring Machine (including Mole, Badger & similar type directional/horizontal), Crane (crawler & pneumatic 15>100 tons), Crawler type Tractor with boom attachment & slope

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bar, Derrick, Gradall, Heavy Duty Mechanic-Welder, Helicopter Hoist or Pilot, Highline Cableway, Mechanical Hoist, Mucking Machine, Overhead Crane, Pile Driver Engineer (portable, stationary or skid), Power Driven Ditch Lining or Ditch Trimming Machine, Remote Control Earth Moving Machine, Slip Form Paving Machine (including Gunnert, Zimmerman & similar types), Tower Crane or similar type.

MARICOPA COUNTY ONLY: Backhoe<10 cu yd, Clamshell < 10 cu yd, Concrete Pump (truck mounted with boom only), Dragline <10 cu yd, Grade Checker, Motor Grader (finish-any type power blade), Shovel < 10 cu yd.

GROUP 4: Backhoe 10 cu yd and over, Clamshell 10 cu yd and over, Crane (pneumatic or crawler 100 tons & over), Dragline 10 cu yd and over, Shovel 10 cu yd and over.

All Operators, Oilers, and Motor Crane Drivers on equipment with Booms, except concrete pumping truck booms, including Jibs, shall receive \$0.01 per hour per foot over 80 ft in addition to regular rate of pay

Premium pay for performing hazardous waste removal \$0.50 per hour over base rate.

IRON0075-004 04/01/2021

COCONINO, MARICOPA, MOHAVE, YAVAPAI & YUMA COUNTIES

	Rates	Fringes
Ironworker, Rebar.....	\$ 28.80	19.35

Zone 1: 0 to 50 miles from City Hall in Phoenix or Tucson

Zone 2: 050 to 100 miles - Add \$4.00

Zone 3: 100 to 150 miles - Add \$5.00

Zone 4: 150 miles & over - Add \$6.50

LAB01184-008 06/01/2021

	Rates	Fringes
Laborers:		
Group 1.....	\$ 21.93	6.27
Group 2.....	\$ 23.57	6.27
Group 3.....	\$ 24.43	6.27
Group 4.....	\$ 25.40	6.27
Group 5.....	\$ 26.50	6.27

LABORERS CLASSIFICATIONS:

GROUP 1: All Counties: Chipper, Rip Rap Stoneman. Pinal County Only: General/Cleanup Laborer. Maricopa County Only: Flagger.

GROUP 2: Asphalt Laborer (Shoveling-excluding Asphalt Raker or Ironer), Bander, Cement Mason Tender, Concrete Mucker, Cutting Torch Operator, Fine Grader, Guinea Chaser, Power Type Concrete Buggy

GROUP 3: Chain Saw, Concrete Small Tools, Concrete Vibrating Machine, Cribber & Shorer (except tunnel), Hydraulic Jacks

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and similar tools, Operator and Tender of Pneumatic and Electric Tools (not herein separately classified), Pipe Caulker and Back-Up Man-Pipeline, Pipe Wrapper, Pneumatic Gopher, Pre-Cast Manhole Erector, Rigger and Signal Man-Pipeline

GROUP 4: Air and Water Washout Nozzleman; Bio-Filter, Pressman, Installer, Operator; Scaffold Laborer; Chuck Tender; Concrete Cutting Torch; Gunite; Hand-Guided Trencher; Jackhammer and/or Pavement Breaker; Scaler (using boson's chair or safety belt); Tamper (mechanical all types).

GROUP 5: AC Dumpman, Asbestos Abatement, Asphalt Raker II, Drill Doctor/Air Tool Repairman, Hazardous Waste Removal, Lead Abatement, Lead Pipeman, Process Piping Installer, Scaler (Driller), Pest Technician/Weed Control, Scissor Lift, Hydro Mobile Scaffold Builder.

PAIN0086-001 04/01/2017

	Rates	Fringes
PAINTER		
PAINTER (Yavapai County only), SAND BLASTER/WATER BLASTER (all Counties).....	\$ 19.58	6.40

ZONE PAY: More than 100 miles from Old Phoenix Courthouse
\$3.50 additional per hour.

* SUAZ2009-001 04/20/2009

	Rates	Fringes
CEMENT MASON.....	\$ 19.28	3.99
ELECTRICIAN.....	\$ 22.84	6.48
IRONWORKER (Rebar)		
Pima County.....	\$ 23.17	14.83
Pinal County.....	\$ 20.27	8.35
LABORER		
Asphalt Raker.....	\$ 15.49	3.49
Compaction Tool Operator....	\$ 14.59 **	2.91
Concrete Worker.....	\$ 13.55 **	3.20
Concrete/Asphalt Saw.....	\$ 13.95 **	2.58
Driller-Core, diamond, wagon, air track.....	\$ 16.94	3.12
Dumpman Spotter.....	\$ 14.99 **	3.16
Fence Builder.....	\$ 13.28 **	2.99
Flagger		
Coconino, Mohave, Pima, Pinal, Yavapai & Yuma.....	\$ 12.35 **	1.59
Formsetter.....	\$ 16.09	3.97
General/Cleanup Laborer		
Coconino, Maricopa, Mohave, Pima, Yavapai & Yuma.....	\$ 14.54 **	3.49
Grade Setter (Pipeline).....	\$ 17.83	5.45
Guard Rail Installer.....	\$ 13.28 **	2.99
Landscape Laborer.....	\$ 11.39 **	

Landscape Sprinkler		
Installer.....	\$ 15.27	
Pipelayer.....	\$ 14.81 **	2.96
Powderman, Hydrasonic.....	\$ 16.39	2.58
OPERATOR: Power Equipment		
Asphalt Laydown Machine.....	\$ 21.19	6.05
Backhoe < 1 cu yd		
Coconino, Mohave, Pima,		
Pinal, Yavapai & Yuma.....	\$ 17.37	3.85
Backhoe < 10 cu yd		
Coconino, Mohave, Pima,		
Pinal, Yavapai & Yuma.....	\$ 18.72	3.59
Clamshell < 10 cu yd		
Coconino, Mohave, Pima,		
Pinal, Yavapai & Yuma.....	\$ 18.72	3.59
Concrete Pump (Truck		
Mounted with boom only)		
Coconino, Mohave, Pima,		
Pinal, Yavapai & Yuma.....	\$ 19.92	7.10
Crane (under 15 tons).....	\$ 21.35	7.36
Dragline (up to 10 cu yd)		
Coconino, Mohave, Pima,		
Pinal, Yavapai & Yuma.....	\$ 18.72	3.59
Drilling Machine		
(including Water Wells).....	\$ 20.58	5.65
Grade Checker		
Coconino, Mohave, Pima,		
Pinal, Yavapai & Yuma.....	\$ 16.04	3.68
Hydrographic Seeder.....	\$ 15.88	7.67
Mass Excavator.....	\$ 20.97	4.28
Milling Machine/Rotomill....	\$ 21.42	7.45
Motor Grader (Finish-any		
type power blade)		
Coconino, Mohave, Pima,		
Pinal, Yavapai & Yuma.....	\$ 21.92	4.66
Motor Grader (Rough)		
Coconino, Mohave, Pima,		
Pinal, Yavapai & Yuma.....	\$ 20.07	4.13
Oiler.....	\$ 18.15	8.24
Power Sweeper.....	\$ 16.76	4.44
Roller (all types Asphalt)		
Coconino, Mohave, Pima,		
Pinal, Yavapai & Yuma.....	\$ 18.27	3.99
Roller (excluding asphalt)..	\$ 15.65	3.32
Scraper (pneumatic tired)		
Coconino, Mohave, Pima,		
Pinal, Yavapai & Yuma.....	\$ 17.69	3.45
Screed		
Coconino, Mohave, Pima,		
Pinal, Yavapai & Yuma.....	\$ 17.54	3.72
Shovel < 10 cu yd		
Coconino, Mohave, Pima,		
Pinal, Yavapai & Yuma.....	\$ 18.72	3.59
Skip Loader (all types <3		
cu yd).....	\$ 18.28	5.30
Skip Loader (all types 3 <		
6 cu yd)		
Coconino, Mohave, Pima,		
Pinal, Yavapai & Yuma.....	\$ 18.64	4.86
Skip Loader (all types 6 <		
10 cu yd).....	\$ 20.15	4.52
Tractor (dozer, pusher -		
all)		
Coconino, Mohave, Pima,		

Pinal, Yavapai & Yuma.....\$ 17.26	2.65
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PAINTER

Coconino, Maricopa, Mohave, Pima, Pinal & Yuma..\$ 15.57	3.92
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TRUCK DRIVER

2 or 3 Axle Dump or Flatrack.....\$ 16.27	3.30
5 Axle Dump or Flatrack.....\$ 13.97 **	2.89
6 Axle Dump or Flatrack (< 16 cu yd).....\$ 17.79	6.42
Belly Dump.....\$ 14.67 **	
Oil Tanker Bootman.....\$ 22.03	
Self-Propelled Street Sweeper.....\$ 13.11 **	5.48
Water Truck 2500 < 3900 gallons.....\$ 18.14	4.55
Water Truck 3900 gallons and over.....\$ 15.92	3.33
Water Truck under 2500 gallons.....\$ 15.94	4.16

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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** Workers in this classification may be entitled to a higher minimum wage under Executive Order 14026 (\$15.00) or 13658 (\$11.25). Please see the Note at the top of the wage determination for more information.

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) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage

determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour National Office because National Office has responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION"

SPECIAL CONTRACT REQUIREMENTS

The following Special Contract Requirements amend and supplement the *Standard Specifications for Construction of Roads and Bridges, on Federal Highway Projects (FP-14)*, U.S. Department of Transportation, Federal Highway Administration.

Section 101. – TERMS, FORMAT, AND DEFINITIONS**101.03 Abbreviations.****(a) Acronyms. Add the following:**

EEBACS — Engineer's Estimating, Bidding, Award, and Construction System
GSA – General Services Administration

(b) US Customary abbreviations and symbols. Delete the text and substitute the following:

°F	— degrees Fahrenheit	temperature
A	— ampere	electric current
ac.	— acre	area
BTU	— British Thermal Unit	energy
cu. in. or in³	— cubic inches	volume
cu. ft., cf, ft³ or CUFT	— cubic feet	volume
cu. yd., cy, yd³ or CUYD	— cubic yards	volume
D	— day	time
deg. or °	— degree	plane angle
Fc	— foot-candles	luminous intensity
fl. oz.	— fluid ounces	volume
ft. or '	— foot or feet	length
gal. or GAL	— gallon	volume
H	— Henry	inductance
hr. or HR	— hour	time
Hz	— hertz (s ⁻¹)	frequency
in. or "	— inch or inches	length
K	— kelvin	temperature
lb or LB, lbs	— pound, pounds	mass
Lbf	— pound-force	force
lnft or LNFT	— linear foot	length
mi.	— miles	length
min. or m	— minute	time
min. or '	— minute	plane angle
oz.	— ounces	mass

Psi	— pounds/square inch	pressure
Q	— cubic feet/second	flow rate
sec. or s	— second	time
sec. or "	— second	plane angle
sq. in. or in²	— square inches	area
sq. ft., sf, ft² or SQFT	— square feet	area
sq. yd., sy, yd² or SQYD	— square yards	area
T	— short ton (2000 lbs)	mass
V	— volt (W/A)	electric potential
W	— watt (J/s)	power
yd or YD	— yard or yards	length
Ω	— ohm V/A	electric resistance

(c) **Metric unit abbreviations and symbols.** Delete the text and substitute the following:

A	— ampere	electric current
Cd	— candella	luminous intensity
°C	— degree Celsius	temperature
D	— day	time
deg. or °	— degree	plane angle
g or gram	— gram	mass
H	— Henry	inductance
Ha	— hectare	area
hr. or HR	— hour	time
Hz	— hertz (s ⁻¹)	frequency
J	— Joule (N·m)	energy
K	— kelvin	temperature
Kg	— kilogram	mass
L	— liter	volume
Lx	— lux	illuminance
M	— meter	length
mm	— millimeter	length
m²	— meter squared	area
m³	— cubic meter	volume
min. or m	— minute	time
min. or '	— minute	plane angle
N	— Newton (kg·m/s ²)	force
Pa	— Pascal (N/m ²)	pressure
sec. or s	— second	time
sec. or "	— second	plane angle
T	— metric ton	Mass
V	— volt (W/A)	electric potential
W	— watt (J/s)	Power
Ω	— ohm V/A	electric resistance

101.04 Definitions.

Add the following:

EEBACS — Engineer’s Estimating, Bidding, Award, and Construction System. A web-based system used by the Government, Construction Contractors, and Subcontractors on this Government contract to prepare “*Inspector’s Daily Record of Construction Operations*” (*Contractors Daily Reports*) and measurement notes (pay notes and field measurement documentation).

Subcontractor Delete the text and substitute the following:

Subcontractor – An individual or legal entity with which the Contractor sublets part of the work. This includes subcontractors and material suppliers at any tier.

Section 105. — CONTROL OF MATERIAL**105.01 Source of Supply and Quality Requirements.** Add the following:

Materials containing petroleum-based solvents such as cutback asphalts and traffic paints may be restricted from use by local laws or ordinances in certain geographic areas. Upon presenting proof of such restrictions, alternate materials considered acceptable to the CO may be substituted for the materials specified in the contract.

105.04 Storing and Handling Material. Add the following after the third sentence of the second paragraph:

For Contractor-located, non-commercial staging, storing, and material handling areas, secure environmental clearances according to Subsection 107.10.

Add the following:

The Contractor may use the two pullouts adjacent to the alignment and the pullout located 3.5 miles from the project towards the intersection between FR 80 and AZ 88 shown on the site map for a staging area, storage of materials, and stockpiles.

Use all products according to the manufacturer’s recommendations for handling, storage, and disposal. Follow the requirements of FAR Clause 52.236-10 Operations and Storage Areas and FAR Clause 52.236-12 Cleaning Up. Maintain the staging and storage areas in a clean, neat, and orderly condition satisfactory to the CO.

Store construction materials within the limits indicated on the contract drawings. Properly store materials according to the applicable permit and the requirements in Section 107, 157, 203, 204, 624, and 625. Check the storage areas weekly and according to the applicable permit.

Store construction, building and waste materials, and containers in designated areas indoors or protect with a suitable covering.

Submit a site map showing the material storage and stockpile locations at least 14 calendar days prior to the start of construction activities.

Keep the manufacturer's MSDS, an inventory of the material, and emergency numbers near the storage area. Take appropriate measures to ensure that incompatible chemicals are not stored next to each other.

Section 106. — ACCEPTANCE OF WORK

106.01 Conformity with Contract Requirements. Delete (a) and (b) and substitute the following:

(a) Disputing Government test results. If the accuracy of Government test results is disputed, promptly inform the CO. If the dispute is unresolved after reasonable steps are taken to resolve the dispute, further evaluation may be obtained by written request. Include a narrative describing the dispute and a proposed resolution protocol that addresses the following:

- (1) Sampling method
- (2) Number of samples
- (3) Sample transport
- (4) Test procedures
- (5) Testing laboratories
- (6) Reporting
- (7) Estimated time and costs
- (8) Validation process

(b) Alternatives to removing and replacing non-conforming work. As an alternative to removal and replacement, the Contractor may submit a written request to:

- (1) Have the work accepted at a reduced price; or
- (2) Be given permission to perform corrective measures to bring the work into conformity.

The request must contain supporting rationale and documentation. Include references or data justifying the proposal based on an evaluation of test results, effect on service life, value of material or work, quality, aesthetics, and other tangible engineering basis. The CO will determine disposition of the nonconforming work.

Add the following after (b):

The number of significant figures used in the calculations will be according to ASTM E 29, absolute method.

Where sample/testing procedures make reference to AASHTO, ASTM, or other standards (designated as FLH T), the procedure as modified in the Materials Manual shall govern. Where the specifications make reference to AASHTO Test T11, "Procedure B - Washing Using a Wetting Agent" shall be the procedure followed.

Where the specifications make reference to AASHTO Test T310, "Direct Transmission Method of In-Place Nuclear Density and Moisture Content" shall be the procedure followed.

106.02 Visual Inspection. Delete the Subsection and substitute the following:

106.02 Visual Inspection. Acceptance is based on visual inspection of the work for compliance with the contract requirements. In the absence of specific contract requirements or tolerances, use prevailing industry standards.

106.03 Certification. Add the following after the second paragraph:

See Table 106-3 for schedule for full or partial acceptance by material certification. Submit certification and sample of material for testing as required.

Delete the third paragraph and substitute the following:

Check certifications before incorporating the material into the work to ensure that the requirements of the contract have been met. Mark the certifications with the following information:

- Project number and name;
- Pay item number and description;
- Contractor signed certification stating "to the best of our knowledge the materials certified by the attached certification represent the materials incorporated into the work of this contract"; and
- Date.

Table 106-3 Schedule For Full or Partial Acceptance by Materials Certification. Add Table 106-3 following Table 106-2.

Table 106-3
Schedule For Full or Partial Acceptance by Materials Certification

Section	Description	Material	Material Property Or Specification	Frequency	
				Certification	Sample
302	Minor Crushed Aggregate	Crushed Aggregate	Source, Quality and Gradation	1 per source	1 per source
312	Dust Palliative	Calcium Chloride Magnesium Chloride, Lignosulfonate,	As specified	1 per shipment	First shipment

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Section	Description	Material	Material Property Or Specification	Frequency	
				Certification	Sample
403	Asphalt Concrete	Aggregate Asphalt Mix	Source quality, Gradation, Stability, and Grade	1 per mix	1 per source
634 and 635	Permanent Pavement Markings, Temporary Traffic Control	634.02 as applicable, 635 as applicable	As specified	1 per source	-----
701	Hydraulic Cement	Portland Cement, Blended Hydraulic Cement, Masonry and Mortar Cement	AASHTO M 85, M 240, ASTM C 91 and ASTM C1392 as applicable	1 per shipment	1 per 100 tons
702.01	Asphalt Material	Asphalt Cement	AASHTO M 226 or M 320, as applicable	1 per shipment	1 per shipment
702.02	Asphalt Material	Emulsified Asphalt	AASHTO M 140 or M 208 as applicable	1 per shipment	1 per shipment
702.03	Asphalt Material	Asphalt Materials used for Dampproofing and Waterproofing Concrete and Masonry Surfaces	As specified for each type of asphalt material	1 per shipment	-----
702.05	Antistrip	As specified	As applicable	1 per shipment	-----
706	Concrete and Plastic Pipe	As specified	As applicable	1 per shipment	-----
707	Metal Pipe	As specified	As applicable	1 per shipment	-----
708	Plastic Pipe	As specified	As applicable	1 per shipment	-----
709	Reinforcing and Prestressing Steel	As specified	As applicable	1 per shipment	For 709.01 submit 3, 1-yard (1-meter) bars of each size and grade of bar furnished. 709.02 submit 1 6-foot (2-meter) length for each size furnished
710	Fence and Guardrail	As specified	As applicable	1 per shipment	-----
711	Concrete Curing Material and Admixtures	As specified	As applicable	1 per material source per material type	-----
712	Joint Material (all)	As specified	As applicable	1 per shipment	-----

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Section	Description	Material	Material Property Or Specification	Frequency	
				Certification	Sample
713	Roadside Improvement Materials (all)	As specified	As applicable	1 per shipment	-----
714	Geosynthetic Material (all)	As specified	As applicable	1 per shipment	1 per project per type
715	Piling	As specified	As applicable	1 per shipment	-----
716	Material for Timber Structures	Timber and Hardware	As applicable	1 per shipment	-----
717	Structural Metal	As specified	As applicable	1 per shipment	717.01(e) minimum 6 per shipment for each size used. 717.10 1 per project
718	Traffic Signing and Marking Material (all)	As specified	As applicable	1 per shipment	-----
719	Paint	As specified	As applicable	1 per batch\lot	1 sample for quantities > 25 gallons (100L)
720	Structural Wall and Stabilized Embankment Material (all)	As specified	As applicable	1 per shipment per material type	-----
721	Electrical and Illumination Material (all)	As specified	As applicable	1 per shipment per material type	-----
722	Anchor Material	As specified	As applicable	1 per shipment per material type	-----
725	Miscellaneous materials	As specified	As applicable	1 per shipment per material type	-----

Section 107. - LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC

107.02 Protection and Restoration of Property and Landscape.

Add the following at the end of this subsection:

The locations of the utilities shown in the plans have been certified to a Quality Level C, according to the CFLHD Utility Data Quality Certification requirements:

<http://flh.fhwa.dot.gov/resources/row/cfl/documents/UtilityDataQualityLevelCertification.doc>

Table 107-1
Status of Utilities

	Company	Utility Type	Contact Name	Phone Number	Status 1, 2, 3, or 4
1	Salt River Project	OH Power	Shane Harrison	602-236-5680	4
2					
3					
4					
5					
6					

Status 1: The utilities are in conflict with the project and require relocation by others during construction.

Status 2: The utilities are in conflict with the project and require relocation by the Contractor during construction.

Status 3: The utilities are in conflict with the project and require relocation by others before construction.

Status 4: The utilities are located within the project rights of way but require no relocation.

107.05 Responsibility for Damage Claims. Delete the first sentence of the third paragraph and substitute the following:

Before work begins, submit “*certificates of insurance*” certifying that the policies will not be changed or canceled until 30 days written notice has been given to the Government.

107.10 Environmental Protection.

(a) Federal Water Pollution Control Act (Clean Water Act) 33 USC § 1251 et seq. Add the following:

(4) Do not ford running streams with construction equipment. Obtain approval from the CO to use temporary bridges or other structures whenever crossings are necessary.

(5) Immediately clear ephemeral drainages, intermittent and perennial streams, lakes and reservoirs of all work items, debris or other obstructions placed by or resulting from construction operations.

(6) Locate machinery servicing and refueling areas away from streambeds and washes to reduce the possibility and minimize the impacts of accidental spills or discharges.

(b) Oil and hazardous substances. Add the following to the end of the third paragraph:

Sand or soils are not approved absorbent materials.

Add the following to the end of the fourth paragraph:

Report the spill to the appropriate federal, state, and local authorities as required by the SPCC plan or hazardous spill plan.

(c) Dirt, plant, and foreign material. Add the following:

All vehicles and equipment entering the project area must be clean of noxious weeds and free from oil leaks and are subject to inspection. Wash all construction equipment to thoroughly remove all dirt, plant, and other foreign material prior to entering the project. Particular attention must be shown to the under carriage and any surface where soil containing exotic seeds may exist. Allow the CO to inspect each piece of equipment before entering the project. Provide the cleaning and inspection records to the CO. Equipment found operating on the project that has not been inspected or has oil leaks will be shut down and subject to citation.

(d) Clearances for Contractor-selected, noncommercial areas. Add the following to the end of the first paragraph:

Use rock, sand, gravel, earth, subsoil, or other natural materials from a Contractor-selected non-commercial materials source that has been certified free of noxious weeds. Materials imported into the project limits which do not include a noxious weed free certification may be rejected and ordered by the CO to be removed from the project limits. The CO has the discretion of requesting inspection of certified materials by a third party and rejecting the use of the source if noxious weeds or seeds thereof are found to be present.

Add the following:

(5) Any required Certifications.

Add the following:

(e) Project-specific commitments.

(1) Stop work and notify the CO if an active bird nest is found within the construction limits. Resume work only after approval of the CO.

(2) Clear vegetation according to the following:

(a) If vegetation clearing occurs from February 1 to August 31 provide a qualified biologist according to Section 623, to conduct a pre-construction survey for nesting birds.

(3) Provide a qualified biologist to conduct the following tasks:

- (a) Conduct surveys in the construction limits for active bird nests within 10 days prior to vegetation removal (i.e. trimming, clearing or grubbing) from February 1 to August 31.
- (b) If vegetation removal will occur in phases along the project route, conduct nest survey in phases so that no more than 10 calendar days lapses between survey and vegetation removal at any one location.
- (c) Provide results of nest survey and avoidance strategies applied, if any, to the CO in a written format within seven days of completing a survey.
- (d) If an active nest is identified notify the CO.
- (e) Determine appropriate avoidance strategy in coordination with CO such as establishing a no-work zone around the nest and delaying vegetation removal or delaying the use of heavy equipment near the nest.
- (f) Monitor the active nest until young have fledged or the nest is no longer active. Notify the CO of any changes in nest status.

(4) If cultural resources, including human remains or burials, are encountered during land-disturbing activities, work will cease immediately at the location, and personnel from Reclamation's Cultural Resources Branch shall be contacted at (623) 773-6262 or via email at jaxsom@usbr.gov.

107.11 Protection of Forests, Parks, and Public Lands. Add the following:

The fire prevention plan involving emergency curtailment of operations is included in the Appendix A and is in effect on this project. The CO will order the suspension of operations when conditions are unsafe as determined by the CO and the land management agency.

Section 108. — PROSECUTION AND PROGRESS

108.01 Commencement, Prosecution, and Completion of Work. Add the following:

Limit operations according to Subsection 107.10(e) and Section 156.

Limit operations as follows:

- (a)** Coordinate with CO to avoid conflicts with nearby construction activities that are not part of this project. Salt River Project (SRP) has ongoing maintenance efforts on FS 80.

Perform no work except to maintain traffic control devices, erosion control devices, the roadway driving surface, and to control dust during the listed Federal holidays and surrounding days as shown in Table 108-2.

Table 108-2
Federal Holidays and Surrounding Days

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Federal Holiday	Time	Remarks
Memorial Day	12:00 Noon Friday to 6:00 am Tuesday	-
Independence Day	12:00 Noon July 3 to 6:00 am July 5	If July 4 falls on a weekend, Friday, or Monday, do not work the weekend.
Labor Day	12:00 Noon Friday to 6:00 am Tuesday	-
Thanksgiving	12:00 Noon Wednesday to 6:00 am Monday	-
Christmas / New Year's	12:00 Noon December 23 to 6:00 am January 2	If December 23 or January 1 falls on a Monday, do not work the adjacent weekend and do not work on December 23. If January 1 falls on a Friday, do not work the weekend.

Schedule at least 2 non-work days out of every 14 calendar days. The selected non-work days do not need to be consecutive, but they must be scheduled. Notify the CO at least 2 weeks before changing the scheduled days off.

The CO may grant written approval for exemptions to scheduled days off for specific project operations and for periods of limited duration.

Add the following:

The CO will issue a Notice to Proceed before commencement of any work. The contract completion date is August 1, 2023.

Do not perform any on-site, ground disturbing activities prior to April 13th, 2023.

Add the following:

Use the Government's web-based system, *Engineer's Estimating, Bidding, Award, and Construction System (EEBACS)*, to prepare all "*Inspector's Daily Record of Construction Operations*" (*Contractors Daily Reports*) and measurement notes (pay notes and field measurement documentation).

Attend a training session on the use of EEBACS. The training session will require up to 4 hours. No more than 3 Contractor staff may attend the training unless approved by the CO. The Contractor shall be responsible for training additional staff.

Complete and electronically submit "*EEBACS User Account Form*" (Form EEBACS-001) for each individual requiring EEBACS access. Submit forms to the CO at the preconstruction conference or at least 10 days prior to the start of any contract work or EEBACS training. As

needed, request additional system access using Form EEBACS-001 and allow 7 days for system access.

Maintain active EEBACS accounts for all contractor staff who use EEBACS and ensure that the CO is notified within 24 hours after an account holder is reassigned or no longer employed by the Contractor. Within 24 hours after an account holder is reassigned or no longer employed by the Contractor, submit an EEBACS-001 form requesting that the account be disabled.

The electronic version of EEBACS-001 is available at:

<https://highways.dot.gov/federal-lands/estimates/forms>

108.02 Subcontracting. Delete the third paragraph and substitute the following:

Within 14 days of subcontract award, submit a completed SF 1413 and 1413S. Complete Part I for each Subcontractor, and include Part II when the Subcontractor performs on-site work. Complete other forms that may be required by the Government to show the work subcontracted and the total dollar amount of the subcontract. Submit the above required information for each Subcontractor at lower tiers.

108.04 Failure to Complete Work on Time.

Delete Table 108-1 and substitute the following:

Table 108-1
Charge for Liquidated Damages for Each Day
Work Is Not Substantially Completed

Original Contract Price		Daily Charge
From More Than —	To and Including —	
\$ 0	\$ 1,000,000	\$ 1,600
\$ 1,000,000	\$ 2,000,000	\$ 2,400
\$ 2,000,000	\$ 5,000,000	\$ 4,100
\$ 5,000,000	\$ 10,000,000	\$ 5,600
\$ 10,000,000	and more	\$ 6,500

Add the following:

108.06 Weather Delays.

(a) Definitions.

(1) Reasonably Predictable Weather Days. Estimated weather day(s) where critical activities cannot be performed in any specific month, within contract weather or temperature limitations, or due to weather related soil conditions. Calculate Reasonably Predictable Weather Days according to Subsection 108.06 (b).

(2) Weather Day. Workday(s) where work cannot be performed within contract weather or temperature limitations or due to weather related soil conditions, and where work on critical activities cannot be performed for more than 50 percent of the workday.

(3) Drying Day. Work day(s) immediately following a weather day, as defined by Subsection 108.06 (a)(2) above, where work can't be performed on scheduled critical activities within contract weather or temperature limitations, or due to weather related soil conditions, for more than 50 percent of the workday. Do not consider drying days when critical activities can be performed immediately after weather days. Do not consider drying days if they fall on scheduled non-work days within the contract or the construction schedule.

(4) Work Day. A day described under Subsections 155.05 (a)(2)(e) or 155.05 (b)(4)(e) in the Contractor's Baseline Construction Schedule, are not excluded from work by the contract, or are not considered as a non-work day in the construction schedule.

(5) Unusually Severe Weather Day. The number of approved scheduled work days affected by weather that are greater than the calculated Reasonably Predictable Weather Days for the month in question. An Unusually Severe Weather Day will not be considered if it is a scheduled non-work day in the contract or the construction schedule.

(b) Reasonably Predictable Weather Days. Determine Reasonably Predictable Weather Days for this contract by completing Table 108-3. Calculate data for Table 108-3 as follows:

(1) Using the last 10 years of historical weather data from the nearest NOAA weather data collection station, or other approved weather station, compute the average number of weather days defined by Subsection 108.06 (a)(2) for each month. Include estimated drying days defined by Subsection 108.06 (a)(3). Calculate the standard deviation from the average for each month. Determine the Reasonably Predictable Weather Day(s) total for each month by adding the estimated average weather and drying days from above, plus one standard deviation.

(2) Submit a completed Table 108-3 with the initial construction schedule. Include NOAA or other approved weather data, the average number of weather days, the estimated number of drying days, and the standard deviation, calculations for each month with Table 108-3. Allow 14 days for approval or rejection of Table 108-3. If rejected, submit a revision within 7 days after the date of rejection. Time for review and approval starts again after the revised Table 108-3 has been resubmitted. Weather related Time Impact Analyses will not be accepted without an approved Table 108-3. If the normally scheduled work days are changed within the current construction

schedule, provide the CO with a revised Table 108-3 which if approved will become the Reasonably Predictable Weather Days for each month of the remainder of the contract.

Table 108-3
Reasonably Predictable Weather Days

Project Name		
Project Number		
Contractor		
Month	Year	Reasonably Predictable Weather or Weather Related Soil Conditions (Monthly Total Days)
January or other month		
Date Submitted:		
Signature of Authority:		

(c) Unusually Severe Weather. Under FAR Clause 52.249-10, Default (Fixed-Price Construction), the Contractor can request time for a delay due to Unusually Severe Weather.

Determine the number of weather days conforming to Subsection 108.06 (a)(2) and Drying Days conforming to Subsection 108.06 (a)(3). Deduct any days meeting the following conditions:

- (1)** Workdays when only non-critical activities are shown for that day on the construction schedule, or only non-critical work is performed on that day.
- (2)** Drying days when only non-critical activities are shown for that day on the construction schedule, or only non-critical work as performed on that day.
- (3)** Weather or drying days where critical work was not performed more than 50 percent of the day, or could have been performed more than 50 percent of the day but was not.
- (4)** Scheduled or contract non-work days not accounted for under 108.06 (a) or (b).

Unusually severe weather has occurred during any month in question when the net number of actual workdays lost for critical work activities, due to contract weather or temperature limitations, or weather related soil conditions, is greater than the Reasonably Predictable Weather Day total from Table 108-3 submitted with the initial construction schedule.

(d) Time Adjustments for Weather Delays. No time adjustments will be made if the net number of weather days is less than the Reasonably Predictable Weather Day total for any month shown in Table 108-3. An excusable time extension may be granted if the net number of weather days is more than the Reasonably Predictable Weather Day total for any month shown in Table 108-3. Submit a weather or soil time impact analysis supporting any alleged delays due to unusually severe weather or soil conditions. Submit a weather-related soil or weather time impact analysis within the month that the weather days occur. If a period of weather days or soil conditions is split between months, submit a weather or soil time impact analysis for each month of occurrence.

(e) Delays Due to Other Weather Conditions. Delays due to other unusually severe weather conditions (extreme cold or heat, high winds, etc.) or soil conditions must be supported with a weather time impact analysis using historical weather data or construction site weather related soil conditions based on appropriate proctor test results and existing moisture contents.

Section 109. — MEASUREMENT AND PAYMENT

109.01 Measurement of Work. Add the following after the sixth paragraph:

Prepare, sign, and submit electronic measurement notes (pay notes and supporting field documentation) using EEBACS. Measurement notes will be reviewed by the CO. Unacceptable measurement notes will be electronically rejected and returned. Correct rejected measurement notes and resubmit electronically.

109.02 Measurement Terms and Definitions.

(c) Cubic yard (Cubic meter).

(1) Cubic yard (Cubic meter) in-place. Delete this subsection and substitute the following:

Measure the solid volumes by a method approved by the CO, or by a surface to surface method approved by the CO.

(o) Square foot and Square yard (Square meter). Add the following: Do not measure overlaps.

109.08 Progress Payments.

(a) General. Delete the last sentence and substitute the following:

The CO may withhold partial progress payment according to Subsection 109.08 (g) for failure to make satisfactory progress until a construction schedule or schedule update is approved by the CO.

(b) Closing date and invoice submittal date. Delete the text and substitute the following:

Submit invoices to the designated billing office by the 7th day after the closing date. Invoices received by the designated billing office after the 16th day following the closing date will not be accepted for payment processing that month. Include late, unprocessed invoice submittals in the following months invoice.

(d) Government's receiving report. Delete the first sentence and substitute the following:

The Government's receiving report will be developed using the measurements and quantities from Pay Notes received by the CO in EEBACS and determined acceptable.

(e) Processing progress payment requests.

(1) Proper invoices. Delete the title and text and substitute the following:

(1) Invoices received by the 7th day following the closing date.

(a) Proper invoices. If the invoice meets the requirements of Subsection 109.08(c), and the quantities and unit prices shown on the Contractor's invoice agree with the corresponding quantities and unit prices shown on the Government's receiving report, the invoice will be paid.

(b) Defective invoices. If the invoice does not meet the requirements of Subsection 109.08(c), or if any of the quantities or unit prices shown on the Contractor's invoice exceed the corresponding quantities and unit prices shown on the Government's receiving report, the invoice will be deemed defective and the Contractor so notified according to FAR Clause 52.232-27(a)(2). Defective invoices will not be corrected by the Government and will be returned to the Contractor within 7 days after the Government's designated billing office receives the invoice.

Revise and resubmit returned invoices by the 18th day following the closing date. The CO will evaluate the revised invoice. If the invoice still does not meet the requirements of Subsection 109.08(c), the Contractor will be so notified according to FAR Clause 52.232-27(a)(2), and no progress payment will be made that month. Correct the deficiencies and resubmit the invoice the following month.

If the revised invoice meets the requirements of Subsection 109.08(c), but still had quantities or unit prices exceeding the corresponding quantities and unit prices shown on the Government's receiving report, the Government's data for that item or work will be used. The Contractor's invoice, as revised by the Government's receiving report, will be forwarded for processing by the 23rd day following the closing date. The Contractor will be notified by the 23rd day following the closing date of the reasons for any changes to the invoice.

(2) Defective invoices. Delete the title and text and substitute the following:

(2) Invoices received between the 8th and 16th day following the closing date.

(a) Proper invoices. If the invoice meets the requirements of Subsection 109.08(c), and the quantities and unit prices shown on the Contractor's invoice agree with the corresponding quantities and unit prices shown on the CO's receiving report, the invoice will be deemed proper and forwarded for processing within 7 days of receipt.

(b) Defective invoices. If the invoice does not meet the requirements of Subsection 109.08(c), the invoice will be deemed defective, the Contractor so notified according to FAR Clause 52.232-27(a)(2), and no progress payment will be made that month. Correct the deficiencies and resubmit the invoice the following month.

If the invoice meets the requirements of Subsection 109.08(c), but has quantities or unit prices exceeding the corresponding quantities and unit prices shown on the Government's receiving report, the Government's data for that item of work will be used. The Contractor's invoice, as revised by the Government's receiving report, will be forwarded for processing within 7 days of the Government's receipt of the invoice. The Contractor will be notified of the reasons for any changes to the invoice.

(f) Partial payments. Delete the subsection and substitute the following:

(f) Partial payments. Progress payments may include partial payment for material to be incorporated in the work according to FAR Clause 52.232-5(b)(2), provided the material meets the requirements of the contract and is delivered on, or in the vicinity of, the project site or stored in acceptable storage places.

Partial payments for stockpiled manufactured material (aggregates) will be based on Contractor process control test results. If test results show the material to be out-of-specification, or in "reject" where statistical evaluation procedures are used, no payment for stockpiled materials will be made.

Partial payment for material does not constitute acceptance of such material for use in completing items of work. Partial payments will not be made for living or perishable material until incorporated into the project.

Individual and cumulative partial payments for preparatory work and material will not exceed the lesser of:

- (1)** 80 percent of the contract bid price for the item; or
- (2)** 100 percent of amount supported by copies of invoices submitted.

The quantity paid will not exceed the corresponding quantity estimated in the contract. The CO may adjust partial payments as necessary to protect the Government.

Section 152. — CONSTRUCTION SURVEY AND STAKING**Construction Requirements****152.04 General.** Add the following to the second paragraph:

The Government will establish basic survey control points for vertical and horizontal control of the project.

The Government will furnish the following:

- (1) 3D coordinates and offset distance from centerline for subgrade and surface course finishing stakes at 20-foot (6-meter) intervals and miscellaneous intermediate stations.
- (2) Slope stake data containing centerline grade and slope staking information at 20-foot (6-meter) station intervals and miscellaneous intermediate stations.
- (3) Computer listings containing: horizontal alignment, vertical alignment, earthwork quantities, and staking details showing superelevation template data and slope information.

Perform additional conversions and calculations as necessary for convenient use of Government-furnished data. The Contractor is responsible for the accuracy of all information converted from the Government-furnished data. Provide immediate notification of apparent errors in the furnished data.

Delete the last sentence of the fourth paragraph from the bottom of the subsection and substitute the following:

Reestablish missing control points and stakes before slope staking begins.

152.05 Survey and Staking Requirements.**(b) Centerline establishment.** Add the following:

Reestablishment of centerline may be ordered by the CO and paid for under Section 623 for purposes other than to control the work.

(d) Slope and references stakes.**(2) Conventional survey methods.** Add the following:

When the centerline curve radius is less than or equal to 250 feet (75 meters), use a maximum longitudinal spacing between stakes of 25 feet (8 meters). When the centerline

is on a tangent or the curve radius is greater than 250 feet (75 meters), use a maximum longitudinal spacing between stakes of 50 feet (15 meters).

(f) Grade-finishing stakes. Delete (1) AMG method.

(i) Retaining walls and reinforced soil slopes. Delete the Subsection and substitute the following:

(i) Retaining walls. Survey and record profile measurements along the face of the proposed wall at 5 feet (1.5 meters), 10 feet (3 meters), and in front of the wall face. Take cross-sections every 10 feet (3 meters) along the length of the wall and at major breaks in terrain within the limits designated by the CO. Measure and record points every 10 feet (3 meters) and at major breaks in terrain for each cross-section. Set additional references and control points to perform the work.

(m) Approach Roads. Add the following:

Layout approach roads as shown in the plans. Establish site limits. Provide the CO a proposed layout of grade finishing stakes for review and approval.

Measurement

152.07 Add the following:

Measure Reinforced Concrete Retaining Wall survey and staking as Slope, Reference, And Clearing And Grubbing Control.

152.07 Delete the third paragraph and substitute the following:

Do not measure miscellaneous survey and staking.

152.07 Add the following to the fourth paragraph:

Reestablishing missing control points and stakes will be measured under Special labor, Hired survey services when it is paid by the hour.

Section 153. — CONTRACTOR QUALITY CONTROL

Description

153.01 Add the following:

This work also consists of using EEBACS to prepare electronic “*Inspector’s Daily Record of Construction Operations*” (*Contractors Daily Reports*) and measurement notes (pay notes), including entering labor, equipment, subcontractors, and inspection records into the system.

Construction Requirements

153.02 Qualifications.

(a) Quality Control Manager (QCM). Delete the first sentence and substitute for the following:

Provide a QCM according to (2) below.

(a)(2) Part-time, on-site QCM. Delete the paragraph and substitute the following:

Furnish a QCM who has at least two years of experience in highway construction, inspection, quality control, material testing, and (NICET) Level III certification, or equivalent, in highway construction or highway material.

153.03 Quality Control Plan (QCP).

(b) Quality control procedures

(2) Add the following: List the material to be tested by pay item, tests to be conducted, the location of sampling, and the frequency of testing.

Add the following:

(d) Subcontractors and suppliers. Include the work of all subcontractors. If a subcontractor is to perform work under this Section, explain how the subcontractor’s inspection plan will interface with the Prime Contractor first tier subcontractors and lower tier subcontractors and organizations, and the CO. Include the work of major suppliers and suppliers of structural and geotechnical services and materials.

Add the following:

Modifications or additions may be required to any part of the plan that is not adequately covered. Acceptance of the quality control plan will be based on the inclusion of the required information. Acceptance does not imply any warranty by the Government that the plan will result in consistent contract compliance. It remains the responsibility of the Contractor to demonstrate such compliance.

153.04 Prosecution of Work. Delete this Subsection and substitute the following:

Address each of the subjects shown for each phase of construction:

(a) Preparatory phase.

(1) In a preparatory phase meeting, review the contract requirements for the work; the

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process for constructing the work; and the plan for inspecting, testing, measuring, and reporting the work. Include the project superintendent, the quality control manager (QCM), the foreman for the work to be performed, and the CO in the meeting. Schedule and conduct a preparatory meeting for each type of work to be performed at least one week prior to beginning the work.

- (2) Review and coordinate certifications, submittals, plans, drawings, and permits.
- (3) Verify the capabilities of equipment, material, and personnel. Provide training as necessary.
- (4) Establish a detailed testing schedule based on the production schedule.
- (5) Ensure preparatory testing and inspection is accomplished.
- (6) Review accuracy of the surveying and staking.

(b) Start-up phase.

- (1) In a start-up phase meeting, review the contract requirements and the processes for constructing the work with the personnel who will be performing the work. Invite the CO, project superintendent, QCM, testers, and inspectors of the work being performed, and the personnel directly supervising and performing the work. Review the planned testing, inspection, and reporting requirements with the quality control personnel responsible for the testing and inspection. Explain the reporting procedures to be used when defective work is identified. Conduct a start-up meeting for each type of work to be performed upon beginning the work.
- (2) Inspect, test, and report start-up work according to the QCP and ensure the work conforms to the contract.

(c) Production phase.

- (1) Inspect, test, and report according to the QCP and evaluate the acceptability of the work produced.
- (2) Identify and correct deficiencies.
- (3) Request Government inspection and acceptance.
- (4) Provide feedback on processes and deficiencies. Identify root causes of deficiencies and make timely and effective changes to work processes to prevent repeated deficiencies.

(d) Construction progress meeting.

- (1) Schedule and facilitate a weekly construction progress meeting. Invite the CO, project superintendent, QCM, and any other personnel directly supervising or managing the project. At a minimum, discuss the Working Schedule according to Subsection 155.06(f).

153.05 Sampling and Testing. Delete the text and substitute the following:

153.05 Sampling and Testing.

Perform sampling and testing required by the accepted QCP. As a minimum perform process control testing according to the Sampling, Testing and Acceptance Requirements tables at the end of each Section where applicable. Where no minimums are specified, submit proposed tests to be performed and the proposed sampling and testing frequencies.

(a) Sample splitting. Schedules and times or locations for obtaining on-site split samples for Government use will be provided by the CO using a procedure for random sampling. Sample any material that appears defective or inconsistent with similar material being produced, unless such material is voluntarily removed and replaced or otherwise corrected according to Subsection 106.01

(b) Testing. Furnish a laboratory equipped with all test equipment necessary to satisfy the requirements of the contract. Ensure test equipment has been checked, calibrated, standardized and/or otherwise verified in accordance with AASHTO and ASTM standards by an individual qualified to perform the work. Perform an equipment inspection after the laboratory has been moved to its permanent location on the project site, and anytime it is moved thereafter. Inspect equipment within 45 days of actual use for project testing, and at least once a year thereafter. Do not use equipment that has not been inspected or is found to be deficient. Mark deficient equipment and take it out-of-service until repaired or replaced and shown by subsequent inspection to perform as required. Maintain records documenting laboratory equipment inspections. Provide certification(s) stating the equipment conforms to testing requirements and provide evidence of current inspection. Keep laboratory facilities clean and maintain equipment in proper working condition. Allow the CO unrestricted access to the laboratory for inspection and review.

The CO may require a demonstration of proficiency in sampling and testing capabilities. One or more proficiency samples may be provided by the Government to verify basic qualifications. Provide the results of the proficiency samples to the CO within 48 hours of receipt of the material.

153.06 Certifications. Delete the text and substitute the following:

For materials or work accepted by certification according to Subsection 106.03, review all certifications to ensure compliance with the requirements of the contract prior to incorporating materials into the work and provide a signed copy of the reviewed certification(s) to the CO. According to FAR Subpart 46.407, materials or work without proper certification will be rejected in writing, and payment for such material or work will be withheld until proper certification has been provided to the CO.

153.07 Records and Control Charts. Delete the first sentence and substitute the following:

Maintain complete testing and inspection records by pay item number and make them accessible to the CO.

(a) Quality control and construction operations reports. Delete the text and substitute the following:

For each day of the contract, prepare an “*Inspector’s Daily Record of Construction Operations*” (*Contractors Daily Reports (CDR)*) using EEBACS. Enter initial data for Labor/Equipment and Subcontractors prior beginning any work. Maintain and update the Labor/Equipment and Subcontractors data to reflect ongoing changes as they occur. Report operations or items of work separately, with manpower and equipment assigned to each operation separately. Detail inspection results, including deficiencies observed and corrective actions taken. Complete a CDR for each contractor and subcontractor working that day.

When submitting test results on material being incorporated into the work, report test results within the reporting times indicated in the sampling and testing requirements at the end of each section or as specified in the contract.

Enter the following data into EEBACS:

(1) Subcontractors data.

(2) Labor/Equipment.

(a) All manpower and equipment, including contractor and subcontractors. Complete all data fields.

(b) Labor: Type/classification, move-in date, move-out date, hourly rate, the contractor or subcontractor, and name.

(c) Equipment: Type/classification, move-in date, move-out date, make, model, and year of equipment manufacture.

Certify all CDR’s using the following statement:

“I certify that the information contained in this record is accurate and that work documented herein complies with the contract. Exceptions to this certification are documented as a part of this record.”

Submit certified CDR’s that have been signed by a person who has both responsibility for the inspection system and signature authority.

Submit the record and certification within 24 hours of the work being performed. If the CDR is incomplete, in error, or otherwise misleading, the CDR will be rejected and returned within EEBACS with corrections noted. Correct rejected CDRs and resubmit the revised CDR within 24 hours. When chronic errors or omissions occur, correct the procedures by which the records are produced.

153.08 Acceptance. Add the following:

Performance of the work may be stopped according to Subsection 108.05, either in whole or in part, for failure to comply with the requirements of this Section. The Government may charge to the Contractor the cost of any additional inspections required when the work being inspected is found not to comply with contract requirements during the initial inspection. Work stop orders, due to recurring deficiencies of work required by this Section, will be rescinded after the Contractor demonstrates to the CO that changes were made to the quality control plan and system which resulted in the correction of those deficiencies. There will be no adjustment in the contract time, or payments to the Contractor for any impacts, delays or other costs due to any periods of work stoppage resulting from failure to comply with the requirements of this Section.

EEBACS electronic documentation will be evaluated under Subsection 106.02.

153.09 Measurement and Payment. Delete the text and substitute the following:

Measurement

153.09 Measure contractor quality control according to Subsection 109.02.

Do not measure EEBACS electronic documentation for payment.

Payment

153.10 The accepted quantities will be paid at the contract price per unit of measurement for the Section 153 pay item listed in the bid schedule. Payment will be full compensation for the work prescribed in this Section. See Subsection 109.05.

Progress payments for Contractor quality control will be paid as follows:

(1) 25 percent of the item amount, not to exceed 0.5 percent of the original contract amount, will be paid after the contractor quality control plan is accepted; all testing facilities are in place; qualified quality control supervisor, inspection, and sampling and testing personnel are in position to provide quality control activities; and the work being inspected or tested has started.

(2) 65 percent of the total lump sum will be prorated for payment based on the completed portion of the total work not including the original 25 percent completed under (1) above.

(3) Payment of the remaining 10 percent of the lump sum will be paid when all inspections, test results, submittals, and reports are complete and accepted.

Section 154. — CONTRACTOR SAMPLING AND TESTING

Construction Requirements

154.03 Sampling. Add the following:

Perform the initial curing of all concrete test cylinders. Provide for transporting the government verification cylinders to the FHWA-Central Federal Lands Highway's Laboratory unless other testing facilities are authorized by the CO.

Label each concrete mold with the name and number of the Project, the cylinder number, date molded, location of the sample, and the test age (i.e. – 7, 14, or 28 days). Label the mold after casting and the cylinder after stripping to ensure the sample can be identified throughout the entire curing process.

Provide the required cylinder molds.

154.04 Testing Add the following:

Where Process Control Sampling and Testing frequencies are identical to the Sampling, Testing, and Acceptance Tables at the end of each Section for all applicable work, the Process Control Samples may be used for acceptance.

Add the following subsections:

154.04B Field Laboratory (Contractor-Furnished). Furnish a laboratory equipped with all test equipment necessary to satisfy the requirements of the contract.

The sampling and testing services of a commercial laboratory meeting or exceeding the requirements described herein may be used if all contract sampling and testing requirements are satisfied by the use of the commercial facility.

Ensure test equipment has been checked, calibrated, standardized and/or otherwise verified in accordance with AASHTO and ASTM standards by an individual qualified to do this work. Ensure mobile laboratories receive an equipment inspection after the laboratory has been moved to its permanent location on the project site and anytime it is moved thereafter. Inspect equipment within 45 days of actual use in project testing and at least once a year thereafter. Do not use equipment that has not been inspected or is found to be deficient. Mark deficient equipment and it take out-of-service until it is repaired or replaced and shown by subsequent inspection to perform as required. Maintain records documenting these inspections in the laboratory. Provide certification(s) stating the equipment conforms to testing requirements and provide evidence of current inspection.

The CO may require the Contractor to perform testing to demonstrate acceptable equipment and an acceptable level of technician competence. The CO may also check equipment and inspection records to verify condition. Repair or replace equipment not meeting applicable requirements. Keep laboratory facilities clean and maintain equipment in proper working condition. Provide the CO unrestricted access to the laboratory for inspection and review.

Section 155. — SCHEDULES FOR CONSTRUCTION CONTRACTS**Construction Requirements****155.04 Preliminary Construction Schedule.**

Add the following:

- (j) A list of the permits required for the contract. See Section 107.

155.05 Initial and Baseline Construction Schedule.

Delete (a) (1) (c) and substitute the following:

(c) Show activities in the order the work will be performed, including submittals, submittal reviews, permit applications, permit reviews, fabrication, and delivery.

Delete the second sentence of (b) (2) (g) and substitute the following:

Non-construction activities include mobilization, drawing and sample submittals by pay item number, permit applications, and the fabrication and delivery of key material.

Add the following to the end of (b) (2) (g):

Refer to the permitting agencies to determine an appropriate duration for permit application review, permit approval, and distribution of permits.

(f) Submission and approval. Add the following to the end of the second paragraph:

No progress payments will be made until an initial construction schedule is approved by the CO.

155.06 Baseline Schedule Updates. Delete the second paragraph and substitute the following:

Unless previously approved by the CO, changes to the construction schedule for the work that is still to be completed, can only be changed with a Time Impact Analysis according to Subsection 108.03, and a Baseline Construction Schedule revision according to Subsection 155.07. Receipt of a baseline construction schedule update with negative float does not constitute agreement by the Government of the revised completion date.

Add the following:

(f) Working Schedule. At each construction progress meeting, provide the CO with a written summary detailing the work completed in the previous week and the proposed work activities for the following two weeks. Provide detail of proposed operations that will affect traffic flow, residents and businesses adjacent to the project. Provide the CO with a schedule

revision if the written summary significantly differs from the baseline construction schedule or the latest construction schedule revision.

155.07 Baseline Schedule Revision. Delete the first paragraph and substitute the following:

Submit a time impact analysis when requesting approval of a baseline schedule revision. Submitting a proposed baseline schedule revision is not considered a notification of delay or of other basis for change. Continue to submit monthly schedule updates according to Subsection 155.06 until a baseline construction schedule revision is approved.

Section 156. — PUBLIC TRAFFIC

Construction Requirements

156.04 Accommodating Traffic During Work. Delete the first paragraph and substitute the following:

Accommodate traffic according to the MUTCD, contract traffic control drawings, Section 635, and this Section. Submit a traffic control plan for approval according to Subsection 104.03. Submit a traffic control plan at least 30 days before intended use.

156.05 Maintaining Roadways During Work.

(a) Add the following:

Do not construct diversions outside of the clearing limits or use alternate route detours without the approval of the CO.

156.07 Limitations on Construction Operations.

(c) Delete the first sentence and substitute the following:

For alternate one-way traffic control, provide a minimum lane width of 10 feet (3 meters). For two-way traffic, provide a minimum roadway width of 22 feet (6.7 meters).

(i) Delete the text and substitute the following:

11:30 a.m. through 12:00 p.m.

During the above times, allow traffic to pass through the construction without delay.

Add the following:

(j) The road will be closed to public and maintenance traffic during construction from 6:30 a.m. to 11:30 a.m. and from 12:00 p.m. to 4:00 p.m. After 4:00 p.m. the road must be accessible to maintenance traffic, and contractor must follow the approved Traffic Control

Plan. Coordinate with CO for construction activities and closures outside of stipulated periods.

(k) Weekend work can be allowed if schedule follows the pre-determined closure times in section 156.07 j. Submit electronic request to perform weekend work to CO for approval at least 7 days in advance .

156.09 Traffic Control Supervisor. Delete the second sentence and substitute the following:

The superintendent may serve as the traffic control supervisor provided the requirements of Subsection 156.03 are met.

Section 157. — SOIL EROSION AND SEDIMENT CONTROL

Delete the following subsection and substitute the following:

157.04 General. Provide soil erosion and sediment control measures according to the contractor developed erosion and sediment control plan, contract permits, Section 107, and this Section. Contract permits amend the requirements of this Section. Do not modify the type, size, or location of controls or practices without approval. The erosion and sediment control plan shall reflect special concerns and measures to protect resources. An alternate erosion and sediment control or stormwater pollution prevention plan, with necessary permits, may be submitted for approval according to Subsection 104.03. Submit alternate erosion and sediment control proposals at least 30 days before their intended use. When soil erosion and sediment control measures are not functioning as intended, take corrective action to eliminate or minimize pollutants in stormwater discharges from the project. If wood chips are used, do not import without approval from the CO.

Section 203. — REMOVAL OF STRUCTURES AND OBSTRUCTIONS

Construction Requirements

203.04 Removing Material.

(c) **Concrete removal in repair areas.** Add the following to the second paragraph:

Use hand tools (hammers and chisels) to remove final particles of concrete or to achieve the required depth.

Delete the third paragraph and substitute the following:

Sandblast all exposed structural steel, reinforcing steel, and concrete surfaces that will be in contact with repair material. Remove all rust and foreign material. Clean the sound concrete surface by flushing with a high-pressure water jet or oil-free compressed air.

203.05 Disposing of Material.

(a) Remove from Project. Add the following:

Secure clearances according to Subsection 107.10.

(b) Burn. Delete the subsection.

(c) Bury. Delete the subsection.

Section 204. — EXCAVATION AND EMBANKMENT

204.14 Disposal of Unsuitable or Excess Material. Add the following:

Secure environmental clearances according to Subsection 107.10(d).

Transfer the excavation excess material to specified site 1.6 miles north of the Horse Mesa Bridge at the end of Horse Mesa Dam Ops road.

Measurement

204.16

(a) Roadway Excavation.

(1) Include the following volumes in roadway excavation:

(h) Delete the text and substitute the following:

Conserved material taken from stockpiles and used in Section 204 work except topsoil measured under Section 624. Only materials required to be conserved by the CO are eligible for measurement under this item.

Payment

204.17 Add the following:

Payment for Item 20401 is limited to ten percent of the plan quantity of excavation in the cut until the slope rounding in that cut is completed.

Section 258. – REINFORCED CONCRETE RETAINING WALLS**Measurement**

258.08 Delete the second paragraph and substitute the following:

For concrete retaining wall, determine the square foot area from the length of wall along the proposed centerline and the height of the wall, excluding footings.

Delete the third paragraph and substitute the following:

Do not measure the following for payment: structure excavation (walls), backfill material, wall backfill, foundation fill, structural backfill, structural concrete, reinforcing steel, epoxy coated reinforcing steel, joint material, and shoring and bracing.

Section 302. — MINOR CRUSHED AGGREGATE

302.06 Acceptance. Add the following to the second paragraph:

Sample material at the frequency shown in Table 302-1. Materials that do not meet the approved certification will be considered unacceptable.

Delete Table 302-1 and substitute the following:

**Table 302-1
Sampling, Testing, and Acceptance Requirements**

Material or Product (Subsection)	Type of Acceptance (Subsection)	Characteristic	Test Methods Specifications	Sampling Frequency	Point of Sampling	Split Sample	Reporting Time	Remarks
Production								
Crushed aggregate ⁽¹⁾	Measured and tested for conformance (106.04)	Moisture-Density	AASHTO T 180, Method D ⁽³⁾	1 per aggregate supplied	Production output or stockpile	Yes	Before using in work	—
		Gradation ⁽²⁾	AASHTO T11 and T27	1 per 500 tons (450 metric tons)	From the windrow or roadbed after processing.	Yes	Before placing next layer	
		Density	AASHTO T310 or other approved procedures	1 per 500 tons (450 metric tons)	In-place after compaction	No	Before placing next layer	For Method 2 compaction only

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Crushed aggregate	Process control (153.03)	Moisture content (in-place)	AASHTO T310 or other approved procedures	1 per 500 tons (450 metric tons)	In-place after compaction	No	Before placement of next layer or as requested	—
Finished Product								
Crushed aggregate	Measured and tested for conformance (106.04)	Surface tolerance & grade	Subsection 301.06	Determined by the CO	Surface of final course	No	Before placement of next layer or as requested	—

⁽¹⁾ Sampling and testing required for roadway aggregate.

⁽²⁾ Use only sieves indicated for the specified gradation.

⁽³⁾ Minimum of 5 points per proctor.

Section 552. — STRUCTURAL CONCRETE

Material

Construction Requirements

552.03 Composition (Concrete Mix Design). Delete the first two paragraphs and substitute the following:

Design and produce concrete mixtures that conform to Tables 552-1, 552-2, and 552-3 as required for the class specified.

Submit concrete mix designs on FHWA Form 1608, *552 Structural Concrete Mix Design Submittal* and determine the required average concrete compressive strength (f_{cr}) with $\bar{X} \geq f_{cr}$.

Delete the first sentence of the third paragraph and substitute the following:

Verify mixture design with trial mixes from proposed sources or with previous concrete production data for the mixture design submitted from proposed sources.

(w) Delete the paragraph and substitute the following:

Specified design strength (f'_c) and required average concrete compressive strength (f'_{cr}) for the concrete mixture at 28 days as determined by the process and associated calculations outlined on FHWA Form 1608, pages 4 and 5. Pending 28-day strength results, a mix design may be approved on the basis that 7-day compressive strength results meet or exceed 85 percent of the required average strength (f'_{cr}) at 28 days;

552.09 Quality Control of Mix. Add the following:

Prosecution of work: At least 2 weeks prior to the start of concrete placement operations, arrange a pre-concrete placing conference. Coordinate attendance with the CO and any applicable subcontractors. Be prepared to discuss and/or submit the following:

- (1) Proposed concrete placement schedule.
- (2) Review approved concrete mix design and determination of batch weights.
- (3) Discuss Section 153, Contractor Quality Control and the minimum frequency schedule for process control sampling and testing (to be performed by the Contractor).
- (4) Discuss batching, mixing, placing, and curing requirements.
- (5) Discuss Subsections 106.03, Certification, and 106.05, Statistical Evaluation of Material for Acceptance.

552.11 Handling and Placing Concrete.

(e) **Underwater placement.** Delete line (1) and substitute the following:

(1) **Tremies.** Use watertight tremies, with a diameter sufficient to ensure that aggregate-induced blockages will not occur. Use multiple tremies as required. Make tremies capable of being rapidly lowered to retard or stop the flow of concrete.

Seal the discharge end and fill the tremie tube with concrete at the start of concrete placement. Keep the tremie tube full of concrete to the bottom during placement. If water enters the tube, withdraw the tremie and reseal the discharge end. Maintain continuous concrete flow until the placement is completed.

Section 555. STEEL STRUCTURES

Description

555.01 Add the following:

This work consists of furnishing all engineering services, materials, equipment, and labor required to construct a fully engineered, simple span, portable, modular steel girder vehicular bridge with open steel grid bridge decking and steel bridge traffic railings for the construction of the Horse Mesa Bridge. It includes designing, fabricating, transporting, and erecting the superstructure including steel girders and diaphragms, open steel grid decking, steel bridge railings, elastomeric bearing pads, bearing plates, anchor bolts, and all associated hardware. Design and construct the bridge in accordance with these specifications and the plans.

Materials**555.02** Add the following:

Guardrail

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Construction Requirements**555.03 Drawings and Diagrams.** Add the following:

In addition to the requirements listed under design criteria, provide a list of all the components of the modular bridge hardware including series number and material specifications. Include in the general notes all relative design information such as bridge reactions due to dead load, live load, wind load, seismic load, braking load, temperature load, live load capacity, live load deflection criteria, and steel grades.

Also, include in the drawings the following information: plan layout including length, width, and orientation, typical section, lifting and transporting details, tolerances, special contract requirements and construction specifications. Provide details for all connections and other details relevant to the bridge construction.

Prepare and submit all working drawings, calculations, and supporting information for review and approval in accordance with the applicable requirements of subsection 104.03. Provide unique shop drawings for the bridge, prepared to illustrate the work to be done. The approved shop drawings for the bridge will be combined with the contract drawings to become the record set of plans for the bridge.

555.03A General. Add the following subsection:

The bridge consists of a modular design which employs steel rolled beams (four minimum) and open steel grid bridge decking and includes steel bridge railings. Create a final configuration which is consistent with that shown on contract plans. Design and fabricate the bridge such that the components may be assembled in the field with a minimum of specialized tools or skills. Perform welding and weld qualification tests according to the provisions of AASHTO/AWS D1.5M/D1.5 Bridge Welding Code. The bridge shall meet the following requirements:

- (a) Use high—strength, low alloy, steel conforming to AASHTO M270, Grade 50 (ASTM A709, Grade 50) for all major structural steel components (girders, diaphragms, splice plates, bridge railing posts, bearing plates, etc.). Use bolts, nuts, and washers for structural steel connections conforming to ASTM F3125, Grade A325, Type 3. All structural steel components of the bridge including girder,

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diaphragms, splices and connection bolts shall be galvanized after fabrication according to AASHTO M111 or AASHTO M232, as applicable. Minimum thickness of structural steel is 3/16".

- (b) Provide galvanized open steel grid bridge decking conforming to ASTM A709, Grade 50, or ASTM A572, Grade 50. Provide positive connections between steel girders and steel bridge decking.
- (c) Provide anchor bolts conforming to ASTM F1554, Grade 55 or 105. Galvanize anchor bolts after fabrication.
- (d) Provide steel reinforced elastomeric bearings conforming to AASHTO M251, 60 Durometer hardness, elastomer grade 2 or higher. The bearings at each abutment shall be designed as expansion bearings, so that thermal deformations are divided equally to each abutment. Design bearings per AASHTO LRFD method A.
- (e) Provide galvanized steel thrie-beam guardrail components conforming to AASHTO M180, Type I, Class B.

Design criteria is as follows:

- (a) Provide a fully engineered modular steel girder bridge designed in accordance with these specifications. Prior to fabrication, submit for approval complete structural calculations, showing the governing capacity and demand values for all members and connections, and detailed shop drawings bearing the seal of a registered Professional Engineer. Design in accordance with current edition of the *AASHTO LRFD Bridge Design Specifications*.
- (b) Provide a modular bridge with a clear deck surface width as shown on the contract plans. Steel girder and diaphragm sections may be fabricated into two or more longitudinal sections, joined together with positive connections, to form the full width of the bridge. Girder sections may be field spliced to form the full length of the bridge, with full consideration of transportation and site constraints and erection equipment limitations.
- (c) Provide a length of 98 feet measured as shown on the plans.
- (d) Limit superstructure depth, measured from top of finished profile grade to bottom of girder, to 3 feet 7 inches, maximum. Coordinate final dimensions including bearing and anchor bolt locations with modular bridge manufacturer before construction of concrete abutments.
- (e) Camber the modular bridge steel girders to offset dead load deflections.
- (f) Design the bridges for dead and live loads indicated on the plans.

- (g) Design traffic bridge railing for the design forces specified in Table A13.2-1 for a minimum railing test level of TL-2.
- (h) Design anchor bolts for seismic forces for the seismic zone indicated on the plans.
- (i) Structural calculations for the bridge shall include load ratings per current AASHTO Manual for Bridge Evaluation. Provide Inventory and Operating Rating Factors for the steel girders by LRFR method, for the HL93 design vehicle and the AASHTO Legal Loads Type 3, Type 3S2, Type 3-3, and the AASHTO Notional Rating Load (NRL).

555.05 Inspection. Add the following after the last paragraph:

All primary longitudinal superstructure components and connections subject to tensile stress due to Strength Load Combination I require mandatory Charpy V-notch testing. Identify these members and connections in the shop drawing submittal. Charpy V-notch requirements for these members, shall be in accordance with AASHTO M270 for Temperature Zone 2. Test in conformance with AASHTO T243, Frequency H.

555.07 Fabrication. Delete the text of the first sentence of the first paragraph and substitute the following:

Fabricate the structural steel in a fabricating plant that is certified as IBR (Certified Bridge Fabricator – Intermediate), under the AISC *Quality Certification Program*.

555.18 Erection. Add the following:

Prepare the construction site and erect the bridge in accordance with the manufacturer's recommendations.

Provide steel erector certified according to category CSE (Certified Steel Erector) under the AISC *Quality Certification Program*.

555.19 Acceptance. Add the following:

Elastomeric bearings will be evaluated under Subsection 106.03. Furnish production certifications for elastomeric bearings.

Material for guardrail will be evaluated under Subsections 106.02 and 106.03.

Measurement

555.20. Delete the second paragraph and substitute the following:

Measure the modular bridge by the lump sum. This includes all work and expenses involved in designing, fabricating, transporting, constructing, furnishing, and erecting the modular bridge including structural steel girders and diaphragms, structural steel splice plates, open grid steel bridge decking, steel bridge railing, elastomeric bearings, bearing plates, anchor bolts, and all associated hardware.

Section 564. — BEARING DEVICES

Construction Requirements

564.04 Elastomeric Bearings. Add after the first paragraph:

Use material that meets the flash tolerance, finish, and appearance requirements of the *Rubber Handbook* as published by the Rubber Manufacturer's Association Incorporated, RMA F3 and T.063 for molded bearings and RMA F2 for extruded bearings.

Section 601. — MINOR CONCRETE STRUCTURES

601.07 Acceptance. Add the following:

The concrete mixture's density, air content, slump, temperature, and compressive strength will be evaluated under Subsections 106.02 and 106.04.

Table 601-2
Sampling, Testing, and Acceptance Requirements

Material or Product (Subsection)	Type of Acceptance (Subsection)	Characteristic	Test Methods Specifications	Sampling Frequency	Point of Sampling	Split Sample	Reporting Time	Remarks
Source								
Aggregate (703.01 & 703.02)	Measured and tested for conformance (106.04 & 105)	Quality	Subsection 703.01 & 703.02	1 per material type	Source of material	Yes	Before producing	—
Mix Design								
Concrete Composition (601.03)	"	All	Subsection 601.03	1 per mix design	"	If requested	"	—
Production								
Concrete ⁽¹⁾	Measured and tested for conformance (106.04)	Density	AASHTO T 121	1 set per 30 yd ³ (25 m ³), but not less than 1 per day	Discharge stream at point of placing	No	Upon completing tests	—
		Air content	AASHTO T 152 or AASHTO T 196	"	"	No	"	—
		Slump	AASHTO T 119	"	"	No	"	—
		Temperature	ASTM C1064	"	"	No	"	—
		Compressive strength ⁽²⁾⁽³⁾ (28-day)	AASHTO T 23 & T 22	1 set per 30 yd ³ (25 m ³), but not less than 1 per day	Discharge stream at point of placing	No	28 days	Deliver cylinders to the CO or designated laboratory for scheduled testing

(1) Sample according to AASHTO R 60, except composite samples are not required.

(2) Cast at least four compressive strength test cylinders for 6- by 12-inch (150- by 300-millimeter) specimens or six compressive strength cylinders for 4- by 8-inch (100- by 200-millimeter) and carefully transport the cylinders to the job site curing facility.

(3) A single compressive strength test result is the average result from two 6- by 12-inch (150- by 300-millimeter) or three 4- by 8-inch (100- by 200-millimeter) cylinders cast from the same load.

(4) If the point of placement is different from the point of discharge, correlate the discharge tests with the placement tests to document the changes.

Section 623. — GENERAL LABOR

Delete the text of this Section and substitute the following:

Description

623.01 This work consists of furnishing workers and hand tools for construction work, survey crews, and furnishing qualified personnel to perform technical work ordered by the CO and not otherwise provided for under the contract.

Construction Requirements

623.02 Workers and Equipment. Furnish competent workers and appropriate hand tools for the work. Provide a crew of sufficient size and qualifications necessary to accomplish the required surveying services within acceptable tolerances.

Obtain approval of the length of a workday and workweek before beginning the work. Keep daily records of the number of hours worked. Submit the records along with certified copies of the payroll.

623.03 Surveying Services. Furnish personnel, equipment, and material that conform to the requirements of Subsection 152.01. Survey according to Section 152.

Survey and establish controls within the tolerances shown in Table 152-1, or within other tolerances as established by the CO.

Prepare field notes in an approved format. Furnish calculations. All field notes, supporting documentation, and calculations become the property of the Government upon completion of the work.

623.04 Technical Services. Furnish qualified engineering personnel experienced in highway construction and design, capable of performing in a timely and accurate manner. Provide personnel with a minimum of NICET Level II certification in highway design and construction, or State (SHA) or industry certification-related design and construction equivalent to their intended responsibilities. Personnel with 2 years or more of recent job experience in the type of highway design and construction provided for under the contract may be used in lieu of certifications. Provide the names and relevant experience of all personnel. Furnish supporting tools and equipment (e.g., calculator, computer, and software, and appropriate and commonly-used drafting tools for the assigned task).

All calculations, notes, and supporting documentation become the property of the government upon completion of the work.

623.04A Biological Services. Provide a qualified biologist(s) to perform surveys described in Subsection 107.10. Provide documentation to the CO that the qualified biologist has a bachelor's

degree in a relevant field and at least two full years of documented experience leading similar bird surveys. Provide qualifications to the CO for review and approval at least 14 days prior to survey initiation

623.05 Acceptance. General labor work will be evaluated under Subsection 106.02.

Additional surveying services will be evaluated under Section 152.

Hired technical services will be evaluated under Subsections 106.02 and 106.04

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Measurement

623.06 Measure the Section 623 items listed in the bid schedule according to Subsection 109.02 and the following as applicable.

Round portions of an hour up to the nearest half hour. Measure time in excess of 40 hours per week at the same rate as the first 40 hours.

Measure surveying service by the crew hour regardless of crew size. Do not measure time spent in making preparations, performing calculations, plotting cross-sections, processing computer or other data, and other efforts necessary to successfully accomplish the ordered survey services.

Do not measure time for worker's transportation to and from the project site.

Measure office technical services by the hour, as ordered by the CO, for performing calculations, plotting cross-sections, and processing computer or other data.

Payment

623.07 The accepted quantities will be paid at the contract price per unit of measurement for the Section 623 pay item listed in the bid schedule. Payment will be full compensation for the work prescribed in this section. See Subsection 109.05.

Section 625. — TURF ESTABLISHMENT

Measurement

625.11 Delete the second sentence and substitute the following:

When measuring turf establishment and supplemental applications by the acre (hectare) or square yard (square meter), measure on the ground surface.

Section 635. — TEMPORARY TRAFFIC CONTROL**Description**

635.01 Delete the second paragraph and substitute the following:

Arrow board, portable changeable message sign, barricade, and warning light types are designated in the MUTCD.

Material

635.02 Delete the Subsection and substitute the following:

635.02 Conform to the MUTCD and the following Sections and Subsections:

Concrete barrier (temporary)	618
Delineator and object marker retroreflectors	718.08
Guardrail (temporary)	617
Retroreflective sheeting	718.01
Sign panels	718.03
Sign posts	718.04
Sign hardware	718.06
Temporary plastic fence	710.11
Temporary pavement markings	718.16

Construction Requirements

635.07 Construction Signs. Delete the first paragraph and substitute the following:

Fabricate and install sign panels according to Subsection 633.05. Use Type III, IV, VIII, IX, or XI prismatic retroreflective sheeting. Use fluorescent sheeting for orange signs. For roll-up signs, use fluorescent Type VI retroreflective sheeting.

Add the following:

Provide the same type of sheeting on all post-mounted construction signs that pertain to the project.

Use crashworthy posts within the traversable area adjacent to traffic.

635.09 Flaggers. Add the following:

Perform the work described under MUTCD Part 6. Use fluorescent retroreflective sheeting on the “SLOW” side of the flagger paddle.

Payment**635.25** Add the following:

Progress payments for temporary traffic control lump sum will be paid as follows:

- (a) 25% of the pay item amount will be paid when initial construction signs are in place and needed devices onsite for use.
- (b) An additional 65% of pay item amount will be prorated based on total work complete.
- (c) The remaining portion of the pay item amount will be paid when the construction signs and devices are no longer needed and have been removed from the project.

Section 703. — AGGREGATE**703.01** Add the following:**703.01 Fine Aggregate for Concrete.**

- (c) Sand equivalent value, AASHTO T 176, 75 min.
Alternate Method No. 2

703.06 Crushed Aggregate. Add the following to the end of the paragraph:

When aggregate is used as a surface course, furnish an aggregate with a Plasticity index (AASHTO T 90) conforming to Table 703-3a.

Table 703-3a
Surface Course Gradation and Plasticity Index

Sieve Size	Percent by Mass Passing Designated Sieve (AASHTO T 27 and T 11)
$\frac{3}{4}$ inch (19 mm)	100
No. 4 (4.75 mm)	41-71
No. 40 (425 μ m)	12-28
No. 200 (75 μ m)	5-20
Plasticity Index (PI)	0-12

Section 704. – SOIL**704.04 Structural Backfill.** Delete line (c) and add the following:

- (c) Plastic index, AASHTO R 58 and T 90 6 max.

(d) Liquid limit, AASHTO R 58 and T 89

30 max.

704.07 Select Borrow. Delete line (b) and add the following:

(b) Liquid limit, AASHTO R 58 and T 89

30 max.

(c) Plastic index, AASHTO R 58 and T 90

6 max.

704.08 Select Granular Backfill.

(a) **Quality requirements.** Delete lines (2) and (4) and substitute the following:

(2) Peak shear maximum angle of internal friction 34° min.
on the portion passing the No. 4 sieve, AASHTO T 236

(4) Plastic index, AASHTO R 58 and T 90 6 max.

(a) **Quality requirements.** Add line (6):

(6) Liquid limit, AASHTO R 58 and T 89 30 max.

(b) **Electrochemical requirements for MSE walls with metallic reinforcements.** Delete the Note and substitute the following:

Note: Tests for sulfate and chloride content are not required when the pH is between 6.0 and 8.0 and resistivity is greater than 5000 ohm centimeters.

Section 710. — FENCE AND GUARDRAIL

710.06 Rail Elements.

(a) **Metal beam rail.** Delete the first sentence and substitute the following:

Furnish guardrail posts conforming to the Task Force 13 *Guide to Standardized Roadside Safety Hardware*.

Section 713. — ROADSIDE IMPROVEMENT MATERIAL

713.04 Seed. Add the following:

Use the seed mix provided by The Bureau of Reclamation (BOR) and/or Salt River Project (SRP). CO will coordinate with the partners the delivery of the seeds and application rates.

713.16 Silt Fence. Delete Subsection (a) and substitute the following:

(a) **Geotextile.** Conform to Table 8 of AASHTO M 288.

Section 718. — TRAFFIC SIGNING AND MARKING MATERIAL

718.01 Retroreflective Sheeting. Add the following:

Furnish fluorescent type sheeting for all signs and all devices specifying an orange or a yellow background.

Section 725. — MISCELLANEOUS MATERIAL

725.04 Pozzolans. Delete line (a) and substitute the following:

(a) **Fly ash.** Conform to AASHTO M 295
Class C or Class F.

4.5 percent max

When used to mitigate alkali-silica reactivity,
also available alkalies as equivalent Na_2O

Appendix A

Tonto National Forest Fire Plan

Fire Plan, Tonto National Forest

During periods of contract performance, fire prevention requirements shall be implemented by the Contractor.

(a) Execution of Fire Plan:

- (1) Forest Service personnel involved will, in all cases, be coordinated through the CO, except in cases of emergency or Forest Closure.
- (2) The Contractor shall designate a fire plan representative who shall be responsible for preparing a written fire plan, and for executing and carrying out the fire requirements.
- (3) The Contractor shall include the fire requirements in all subcontracts.
- (4) The Contractor shall ensure that all contract employees are informed of the existence and conditions of the fire requirements.

(b) Compliance Inspection:

- (1) Inspection by the Forest Service, with the CO, will be made to ensure compliance with the fire requirements.
- (2) Should any deficiencies appear during the inspection, the Contractor will be informed and the deficiencies shall be corrected within 24 hours. Activities with the potential to start fires shall be halted until the deficiencies are corrected and the corrections approved by the CO.
- (3) The Contractor's fire plan representative shall make daily inspections to ensure that the terms of the fire requirements are met at all times.

The Contractor shall take independent action on the suppression of all fires in the work area or vicinity. Vicinity is defined as a ¼ mile extension from the operations area boundary.

(c) Personnel

The Contractor shall designate at least one representative to train and supervise each work crew in fire prevention, detection and suppression.

To prevent, detect and suppress fires, the Contractor shall provide a trained fire guard for activities involving internal combustion engines. The fire guard shall perform guard duties during operating hours. The fire guard may perform contract work in conjunction with fire guard duties.

Each fire guard shall report all fires and take suppression action on any fire that starts in the project area. Each fire guard shall be equipped with a vehicle which contains, as a minimum, a 300 gallon water unit (maximum 1000 gallons) with a pump capable of sustaining a minimum pressure of 100 psi and a flow of 15 gallons per minute, 200 feet of 1-inch hose with hose reel, one nozzle capable of both a straight or fog-pattern, one shovel, one pulaski and a 10-pound fire extinguisher (ABC triple class). The fire guard vehicles shall be

available, filled with water and stationed within a reasonable distance (1/2 mile), of all sites with active construction that includes burning, blasting, earthwork, structure work or other operations with fire starting potential.

(d) Tool Cache

During contract performance, the Contractor shall furnish and maintain, at no additional, one fire tool cache each site with active construction as long as it is within one-half (1/2) of a mile of the location where the Contractor is currently performing work. At least 4 tool caches will likely be required.

The fire tool caches are to be maintained with tools in good condition in the following quantities for each five people in the Contractor's work force. The equipment is for the sole purpose of fire fighting.

- 5 long handle shovels (Round point size No. 1)
- 3 pulaskis with sheaths
- 5 one-gallon canteens
- 2 five-gallon backpack pumps (filled)
- 5 McLeod tools

The fire tool cache shall be replenished by the Contractor after each incidence of fire use.

(e) Vehicles

Fuel trucks, service trucks and the work camp shall be equipped with a shovel, pulaski and a UL Listed Class ABC pressurized chemical fire extinguisher of not less than 105-pounds capacity by weight.

Serviceable baffled mufflers with standard exhaust tailpipes are considered adequate on trucks, pickups and sedans.

Equipment service areas and gas and oil storage areas shall be cleared of brush, litter, debris, and grass for a radius of at least 50 feet.

All crawler tractors and rubber-tired equipment suitable for fire suppression work on the jobsite shall be prepared for nighttime use by mounting of brackets for portable, self-contained, battery operated lights, provided by the Contractor.

(f) Smoking

Violations of the smoking regulations (36 CFR 261.52 (a) (c) (d)) and fire requirements will result in criminal action against the violator. The Contractor shall advise all employees of this regulation.

Violations or deficiencies of fire requirements shall result in immediate suspension of operations until the deficiency or violation is corrected. Repetitive violations will be grounds for default termination.

(g) Chain Saws

Power saws with warm or hot spark arresters/mufflers (running or not) shall not be placed or rested on sawdust piles, litter duff, stumps or spots that are easily ignited. Each power saw shall be accompanied by one round-pointed shovel in good condition and fuel safety can. One chemical pressurized fire extinguisher (eight ounces or larger) shall be kept with the power saw operator at all times while working on the project. The shovel shall be kept with the fuel supply.

(h) Welding

An area no less than 20 feet diameter shall be cleared of all flammable material before welding operations are started. Written permission must be obtained from the Forest Service during Fire Staffing Level 3, 4, or 5. The area in the immediate vicinity of the operation shall be wetted down before and after operations. The area adjacent to the welding operations shall be thoroughly checked for fires for one hour after welding.

(i) Blasting

Use of caps and safety fuse detonators for blasting is not permitted, unless approved by the Payson Ranger District Forest Service Fire Management Officer, during periods when Fire Staffing Level 4 or 5 is in effect. A fire guard shall be required in accordance with the enclosed emergency fire precaution schedule. This individual, when required, shall remain on duty for at least one hour after blasting is finished. Minimum equipment shall consist of a round-pointed, size 0 or larger shovel and a 3- to 5-gallon backpack pump filled with water. Blasting hours are restricted under Fire Manning Class 4 and blasting is prohibited under Fire Manning Class 5.