

CITY OF PHOENIX, ARIZONA
OFFICE OF THE CITY ENGINEER
DESIGN AND CONSTRUCTION PROCUREMENT



PROJECT SPECIFICATIONS AND CONTRACT DOCUMENTS

WATER MAIN REPLACEMENT AREA BOUNDED BY:
MOUNTAIN VIEW ROAD TO PEORIA AVENUE AND
19TH AVENUE TO 15TH AVENUE

WS85509031 (WIFA)

PROCUREPHX PRODUCT CATEGORY CODE 91200000
RFx 6000001683

AGREEMENT _____



TABLE OF CONTENTS

CITY OF PHOENIX PROJECT TITLE: WATER MAIN REPLACEMENT AREA BOUNDED BY: MOUNTAIN VIEW
ROAD TO PEORIA AVENUE AND 19TH AVENUE TO 15TH AVENUE

CITY OF PHOENIX PROJECT NO.: WS85509031 (WIFA)

SECTION I – Informative

	<u>Page</u>
(1) Call for Bids	C.F.B. - 1 to 2
(2) Information for Bidders	I.F.B. - 1 to 19
(3) Supplementary Conditions	S.C. - 1 to 21
(4) Special Provisions	S.P. - 1 to 29
(5) Water Infrastructure Finance Authority of Arizona (WIFA) Requirements	WIFA – 1 to 23
(6) Title 29, Part 3 of The Code of Federal Regulations	C.F.R. – 1 to 7
(7) Title 29, Part 5 of the Code of Federal Regulations	C.F.R. – 1 to 42
(8) General Wage Decision	G.W.D. – 1 to 10
(9) Storm Water Pollution Prevention Plan	S.W.P.P.P - 1 to 12

SECTION II - Submittals

(1) Bid Proposal	P. - 1 to 3
(2) Proposal Submittal	P.S. – 1
(3) Surety Bond	S.B. – 1
(4) Certification with Regard to Equal Opportunity Clause	E.O.C. - 1
(5) List of Major Subcontractors and Suppliers	L.O.S. – 1
(6) List of All Subcontractors and Suppliers	L.O.S. – 2
(7) Bidder's Disclosure Statement	B.D.S. – 1 to 4
(8) Affidavit of Identity	A.O.I. – 1
(9) Buy America Certification	B.A.C.-1
(10) No Collusion Affidavit	N.C.A. -1

SECTION III – Technical Specifications and Drawings

	<u>Pages/Sheets</u>
(1) Geotechnical Report	Pages 73
(2) Pothole Results	Pages 7
(3) MCESD Approval to Construct	Page 1
(4) Plan Sheets	Pages 83



CALL FOR BIDS

**CITY OF PHOENIX
WATER MAIN REPLACEMENT AREA BOUNDED BY:
MOUNTAIN VIEW ROAD TO PEORIA AVENUE
AND 19TH AVENUE TO 15TH AVENUE
DESIGN-BID-BUILD**

WS85509031 (WIFA)

**PROCUREPHX PRODUCT CATEGORY CODE 91200000
RFx 6000001683**

**BIDS WILL BE DUE: TUESDAY, MARCH 11, 2025, AT 2:00 P.M.
SUBMITTED INTO THE DESIGN AND CONSTRUCTION PROCUREMENT BID BOX
LOCATED ON THE 1ST FLOOR LOBBY OF THE PHOENIX CITY HALL BUILDING,
200 W. WASHINGTON STREET, PHOENIX, ARIZONA, 85003**

**BIDS WILL BE READ: TUESDAY, MARCH 11, 2025, AT 2:00 P.M.
ON 5TH FLOOR, ROOM 5 WEST
PHOENIX CITY HALL
200 W. WASHINGTON STREET
PHOENIX, AZ 85003-1611**

***All times are local Phoenix time**

SCOPE OF WORK

The City of Phoenix is seeking a qualified contractor to provide construction services for the project listed below.

Construction services will include, but not limited to, water main installation of approximately 29,000 LF of Main (500 LF of 4" Main, 20,700 LF of 6" Main, 2,600 LF of 8" Main, 5,200 LF of 12" Main), 45 fire hydrants, 20 Cut and Plugs & 520 Services.

This is a federal-aid project. The prevailing basic hourly wage rates and fringe benefit payments, as determined by the Secretary of Labor pursuant to the provisions of the Davis-Bacon Act, shall be the minimum wages paid to the described classes of laborers and mechanics employed or working on the site to perform the contract.

This project will utilize federal funds and is subject to the requirements of 49 Code of Federal Regulations Part 26 and the U.S. Department of Transportation DBE Program.

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

PRE-BID MEETING

A pre-bid meeting will be held on Thursday, February 13, 2025, at 1:00 p.m., at 200 W. Washington Street, City Hall Conference Room 8 East and via Teams. At this meeting, staff will discuss the scope of work, general contract issues and respond to questions from the attendees. As City staff will not be available to respond to individual inquiries regarding the project scope outside of this pre-bid meeting, it is strongly recommended that interested firms send a representative to the pre-bid meeting.

Pre-Bid Teams Meeting Information:

Join the meeting now

Meeting ID: 259 775 102 899

Passcode: SK9TB9FQ

REQUEST FOR BID PACKET

On Thursday, February 6, 2025, the bid packet may be downloaded from the City of Phoenix's eProcurement site at:

<https://eprocurement.phoenix.gov/irj/portal>

(OR)

the City of Phoenix's "Solicitations" web page as. The web address is:

<https://solicitations.phoenix.gov>

Firms receiving a copy of the bid packet through any other means are strongly encouraged to download the bid packet from the City webpage.

Firms must be registered in eProcurement <https://www.phoenix.gov/finance/vendorsreg> as a vendor.

GENERAL INFORMATION

The City reserves the right to award the contract to the lowest responsible responsive bidder or all bids will be rejected, as soon as practicable after the date of opening bids.

The City of Phoenix will provide reasonable accommodations for alternate formats of the bid packet by calling Heather Roye at (602) 261-8894 or calling TTY 711. Requests will only be honored if made within the first week of the advertising period. Please allow a minimum of seven calendar days for production.

Questions pertaining to process or contract issues should be directed to Heather Roye at (602) 261-8894 or heather.roye@phoenix.gov.

Jeffrey Barton
City Manager

Eric J. Froberg, PE
City Engineer

Published: Arizona Business Gazette
Date: February 6, 2025
Date: February 13, 2025
District: 3

INFORMATION FOR BIDDERS

1. **102 BIDDING REQUIREMENTS AND CONDITIONS**, Add the following to **MAG and COP Supplement to MAG Section 102 BIDDING REQUIREMENTS AND CONDITIONS**:

INFORMATION FOR BIDDERS

A. **QUESTIONS ON PLANS AND SPECIFICATIONS**

Neither the Engineer nor the City of Phoenix shall be held responsible for any oral instructions. Any changes to the plans and specifications will be in the form of an addendum. All Addenda will be posted online within the project folder at the following website:

<https://solicitations.phoenix.gov>

OR

<https://eprocurement.phoenix.gov/irj/portal>

For additional information prior to submitting your bid, contact:

Plans, Technical/Special Provisions, Proposal or Specifications:

NAME: Heather Roye, Design and Construction Procurement

ADDRESS: 200 W. Washington Street, 8th Floor, Phoenix, AZ 85003-1611

PHONE: (602) 261-8894 E-MAIL: heather.roye@phoenix.gov

All questions regarding the plans and specifications must be received (in writing) at a minimum seven calendar days prior to bid opening. Questions received after that time may not be given any consideration.

B. **REQUEST FOR SUBSTITUTIONS**

Paragraph A, B, and C of MAG Section 106.4 are deleted and the following paragraphs substituted:

1. The Engineer will consider written request(s), by a prime bidder only, for substitution(s) which is/are considered equivalent to the item(s) specified in the Contract documents. The written request will be considered only if it is received at least twelve calendar days prior to the established bid date. Notification of acceptable substitutions will be made by addendum issued no fewer than seven calendar days prior to the established bid date. (A.R.S. 34-104)
2. The prime bidder, at his own expense, shall furnish the necessary data of substitution and validate that the physical, chemical, and operational qualities of each substitute item is such that this item will fulfill the originally specified required function.
3. The substitution, if approved, will be authorized by a written addendum to the Contract documents and will be made available to all bidders. The bid date and the scheduled completion time will not be affected by any circumstances developing from this substitution.
4. The request will be submitted to Design and Construction Procurement, Attention Heather Roye, 8th Floor, Phoenix City Hall, 200 W. Washington Street, Phoenix, Arizona 85003-1611 or via email to heather.roye@phoenix.gov.

C. **BID BOND**

I.F.B.-1

Bidders must submit a properly completed proposal guarantee in the form of certified check, cashier's check, or surety bond on the form provided, for an amount not less than ten percent of the total amount bid included in the proposal as a guarantee that the contractor will enter into a contract to perform the proposal in accordance with the plans and specifications. Surety bonds submitted for this project shall be provided by a company which has been rated "A- or better for the prior four quarters" by the A.M. Best Company. ***A bid will be deemed non-responsive if not accompanied by this guarantee.***

The surety bond shall be executed solely by a surety company or companies holding a certificate of authority to transact surety business in the State of Arizona, issued by the Director of the Department of Insurance pursuant to Title 20, Chapter 2, Article 1. The surety bond shall not be executed by an individual surety or sureties even if the requirements of Section 7-101 are satisfied. The certified check, cashier's check, or surety bond will be returned to the contractors whose proposals are not accepted, and to the successful contractor upon the execution of a satisfactory bond and contract.

When providing a Surety Bond, ***failure to provide an "A- or better for the prior four quarters" bond will result in bid rejection.***

D. **LIST OF MAJOR SUBCONTRACTORS AND SUPPLIERS & LIST OF ALL SUBCONTRACTORS AND SUPPLIERS**

A bid will be deemed non-responsive if not accompanied by a properly completed and signed L.O.S.-1 "List of Major Subcontractors and Suppliers" form.

To assist in eliminating the practice of bid shopping on City construction projects, the Bidder shall list all Major Subcontractors and Suppliers to whom the Bidder intends to contract with that are equal to or greater than 5% of the base bid. The list of Major Subcontractors and Suppliers will be provided on the L.O.S.-1 "List of Major Subcontractors" form. Failure to properly complete and sign this form will result in bid rejection. This form is due with the bid.

If substantial evidence exists that bid shopping occurred on this project, the Bidder will be ineligible to bid on City or City-affiliated construction projects for a period of one year.

The list of All Subcontractors and Suppliers shall be provided on the L.O.S.-2 "List of All Subcontractors and Suppliers" form. This form is due three calendar days after bid opening by 5:00 p.m. All bidders will be required to submit the L.O.S.-1 form. The three lowest bidders will be required to submit the L.O.S.-2 form. If the L.O.S.-2 form is not submitted by the post-bid deadline, the Bidder will still be required to submit the document prior to award. If the Bidder fails to submit the required L.O.S.-2 form by the post-bid deadline, the Bidder's bid bond may be placed in jeopardy because the City may make a claim against the Bidder's bid bond for the cost difference between the lowest responsive and responsible Bidder's bid and the next lowest bid (and any additional costs involved in awarding the contract to the next lowest responsive and responsible bidder).

E. **BID SUBMITTAL**

The properly completed bid documents along with the ten percent bid guarantee shall be submitted in a sealed envelope. The outside of the envelope shall be marked as follows:

Bid of (Firm's Name, Address and Phone Number)

For: WMR ABB: Mountain View Rd to Peoria Ave and 19th Ave to 15th Ave DBB

City of Phoenix Project Number: WS85509031

Sealed bids will be submitted to the bid box located on the first floor of the Phoenix City Hall Building, 200 W. Washington Street, Phoenix, Arizona, 85003, prior to the time and date specified for bid opening.

F. **BID WITHDRAWALS**

MAG Section 102-10, Withdrawal or Revision of Proposal, is hereby deleted and the following paragraph is submitted:

“No bidder may withdraw or revise a proposal after it has been deposited with the City except as provided in Phoenix City Code Chapter 2, Section 190.2. Proposals, read or unread, will not be returned to the bidders until after determination of award has been made.

G. **ADDENDA**

Acknowledge all addenda; a bid will be deemed non-responsive if all issued addenda for this project are not acknowledged in writing on Page P. -1.

The City of Phoenix shall not be responsible for any oral responses or instructions made by any employees or officers of the City of Phoenix regarding bidding instructions, plans, drawings, specifications or contract documents. A verbal reply to an inquiry does not constitute a modification of the Invitation for Bid. Any changes to the plans, drawings and specifications will be in the form of an addendum.

It shall be the responsibility of the prospective bidder to determine, prior to the submittal of its bid, if any addenda to the project have been issued by Design and Construction Procurement. All addenda issued shall be acknowledged by the bidder on Page P-1. All addenda (if any) will be available online within each project’s folder at the following website:

<https://solicitations.phoenix.gov>

The contractors and/or consultants are responsible for ensuring they have all addenda and/or notifications for all projects they are submitting on. Prospective bidders are strongly encouraged to check the Design and Construction Procurement website to ascertain if any addenda have been issued for the project.

H. **BID SUBMITTAL CHECKLIST**

All firms must be registered in the City’s Vendor Management System prior to submitting a bid. For new firms – the City will send an email to your firm with a vendor number within two days of submitting the request. The vendor number needs to be included on the cover of the bid proposal package/envelope. Information on how to register with the City is available at:

<https://www.phoenix.gov/finance/vendorsreg>

BID SUBMITTAL CHECKLIST

This checklist is provided to remind bidders of several of the required elements of the bid packages. It is not intended to be a comprehensive list of all of the contract documents. Bidders are encouraged to review all of the Bid Instructions to determine compliance therein.

- Acknowledge all addenda? (Page P.-1)
- Completed all of the Bid Proposal forms? (Pages P-1 to P-3 and P.S.-1)
- Included your Bid Bond (rated A- or better for the prior four quarters) or Guarantee Cashier’s Check? (Page S.B.-1)

- Completed Certification with Regard to Equal Opportunity Clause for Contractor and Subcontractors (E.O.C.-1)
- Completed List of Major Subcontractors and Suppliers form? (Page L.O.S.-1)
- Complete Form EO1 Statement of Outreach Commitment
- Buy American Certificate (B.A.C.-1)
- No Collusion Affidavit (N.C.A.-1)

PLEASE DO NOT SUBMIT THE ENTIRE SPECIFICATION BOOK WHEN SUBMITTING YOUR BID. INCLUDE ONLY THE REQUIRED BIDDING DOCUMENTS.

POST-BID SUBMITTAL CHECKLIST

The three lowest bidders must submit completed contracts documents listed below, no later than three calendar days after bid opening by 5:00 p.m. The documents must be submitted to Design and Construction Procurement, 8th Floor, or can be sent by email to heather.roye@phoenix.gov (preferred).

- Complete Form EO2 Disadvantage Business Outreach Efforts
- Complete Form EO3 Disadvantage Business Utilization Commitment
- Completed List of All Subcontractors and Suppliers form (L.O.S.-2)
- Bidders Disclosure Statement (Pages B.D.S.-1 to 4)
- Submit Affidavit of Identity (if you are a sole proprietor) (Page A.O.I.-1)

PRIOR TO CONTRACT EXECUTION

- Contractor must provide proof of license required to perform the work.
- Verification of Experience Modification Rate (EMR) – the awarded company will be required to provide an EMR verification letter from the insurance company prior to contract execution.

***ALL DOCUMENTS NOTED AS REQUIRED IN SUBCONTRACTS MUST BE INCLUDED IN EVERY SUBCONTRACT THAT IS UPLOADED INTO THE B2G SYSTEM.**

I. PERMITS

CITY RESPONSIBILITY – The City will be responsible for City of Phoenix review and permit(s) fees for building and demolition permits. The City will also pay review fees for grading and drainage, water, sewer, and landscaping. The City will also pay for utility design fees for permanent services.

CONTRACTOR RESPONSIBILITY – The Contractor will be responsible for all other permits and review fees not specifically listed above. The Contractor is responsible for the cost of water meters, water and sewer taps, fire lines and taps, and all water bills on the project meters until the project is accepted. Arrangements for construction water are the Contractor's responsibility.

The Contractor may elect to use a City fire hydrant for its source of construction water only if an existing water service connection is unavailable or inadequate. The Contractor will be required to comply with Phoenix City Code Section 37-13A.

The Contractor is specifically reminded of the need to obtain the necessary environmental permits or file the necessary environmental notices. Copies of these permits and notices must be provided to the City's Project Manager prior to starting the permitted activity. In the case of Fire Department permits, a copy of the application for permit will also be provided to the Project Manager. This provision does not constitute an assumption by the City of an obligation of any kind for violation of said permit or notice requirements.

J. **WAGE DETERMINATION**

In the event that the wage determination decision of the Secretary of Labor is required for a project (attached hereto on pages G.W.D.-1 to 10 and made a part hereof) and has been superseded by any subsequent wage determination decision(s) published up to and including 10 days prior to bid opening, the most recent applicable wage decision shall be incorporated by reference, and the successful bidder agrees to be bound by it, regardless of what is contained in the specifications. State or local wage rates will not apply if the state or local wage rate exceeds the corresponding Federal Wage Determination rate.

K. **WORKFORCE REPORTING REQUIREMENTS**

The contractor shall submit payrolls electronically through the internet to the City of Phoenix web-based certified payroll tracking system. The City of Phoenix uses the "LCP Tracker" website to track the certified payroll information. Additional information regarding the use of this system is available at <https://lcptracker.net>. This requirement shall also apply to every lower-tier subcontractor that is required to provide weekly certified payroll reports.

L. **PAYMENT WITHHOLDING**

Payrolls, including subcontractor's payrolls, must be submitted weekly no later than seven days after each pay period ending date. Payments may be withheld in part or in full until payrolls are received and reviewed to assure compliance with the Federal Labor Standards.

Failure to clarify, when requested, discrepancies between hourly wages paid individual workers and the minimum hourly wages required by the Federal Wage Decisions contained in the contract documents may affect the complete or timely release of payments.

M. **LABOR COMPLIANCE PRECONSTRUCTION CONFERENCE**

On all federally assisted projects, a Labor Compliance Conference must be held after project award and prior to the established Notice to Proceed. This meeting is separate from and in addition to the pre-construction conference.

The successful bidder shall schedule the conference by calling the Labor Compliance Office, (602) 261-8287. Minimum attendance shall be a corporate officer, who is authorized to execute and sign documents for the firm and the payroll representative of the prime, sub and lower-tier Contractors.

N. **BUSINESS AND OPERATION LICENSES, PERMITS AND CERTIFICATIONS REQUIRED**

It is the responsibility of the bidder to determine whether it has the appropriate contracting licenses to perform the work. The City will make the award, if any, to the lowest responsive, responsible bidder who has the proper licenses. For all projects except Federal-aid funded projects, the bidder must have the proper licenses at the time the bid is submitted to the City.

On Federal-aid funded projects, the bidder is not required to have the licenses at the time of bidding, but it must procure the licenses before award can be made, and no later than 60 days after the date bids are opened. Licensing information is available from the Arizona Registrar of Contractors.

Prior to award of the contract, the successful bidder must provide Design and Construction Procurement its Contractor's License Classification and number, its City of Phoenix Privilege License number and Federal Tax Identification number.

Bidder shall submit the Bidder's Disclosure Statement as set forth in Pages B.D.S. - 1 to B.D.S. - 4 within five calendar days of bid opening by 5:00 p.m. Bidder will be deemed non-responsive and the bid rejected if Bidder fails to submit a substantially completed Bidder's Disclosure Statement as specified above.

O. TAX LIABILITIES; DISCLOSURE OF CONVICTIONS AND BREACH(ES) OF CONTRACT

On or before the award of the contract for this project, the successful bidder shall: (i) file all applicable tax returns and shall make payment for all applicable State of Arizona and Maricopa County Transaction Taxes (ARS Sec. 41-1305) and City of Phoenix Privilege License Taxes (Phoenix City Code Sec.14-415); (ii) disclose any civil fines, penalties or any criminal convictions, other than for traffic related offenses, for violation of federal, state, county or city laws, rules or regulations including, but not limited to, environmental, OSHA, or labor compliance laws (collectively "Laws") by Bidder, Bidder's directors, managing members, responsible corporate officers or party who will be responsible for overseeing and administering this project (collectively "Bidder"); and (iii) disclose any material breach(s) of an agreement with the City of Phoenix, any termination for cause or any litigation involving the City of Phoenix occurring within the past three calendar years. Unless provided otherwise in this solicitation, the successful bidder shall be deemed non-responsible and the bid rejected for any of the following: (i) Bidder's civil or criminal conviction, other than for traffic related offenses, for a violation of Laws within the past three calendar years; (ii) liability or culpability resulting in payment of fines or penalties in the cumulative total amount of \$100,000 or greater for a violation of "Laws" within the past three calendar years; (iii) material breach of a City of Phoenix agreement, termination for cause or litigation with the City of Phoenix within the past three calendar years; and (iv) Bidder's failure to disclose the information as required by this provision. Further, after award of contract, in addition to any other remedy, Bidder's failure to remit proper taxes to the City of Phoenix may result in the City withholding payment pursuant to Phoenix City Charter Chapter XVIII, Section 14 until all delinquent taxes, interest, and penalties have been paid.

State and Local Transaction Privilege Taxes:

In accordance with applicable state and local law, transaction privilege taxes may be applicable to this transaction. The state and local transaction privilege (sales) tax burden is on the person who is conducting business in Arizona and the City of Phoenix. The legal liability to remit the tax is on the person conducting business in Arizona. Any failure by the Contractor to collect applicable taxes from the City will not relieve the Contractor from its obligation to remit taxes.

It is the responsibility of the prospective bidder to determine any applicable taxes. The City will review the price or offer submitted and will not deduct, add or alter pricing based on taxes.

If you have questions regarding tax liability, seek advice from a tax professional prior to submitting bid. Once your bid is submitted, the Offer is valid for the time specified in this Solicitation, regardless of mistake or omission of tax liability.

If the City finds over payment of a project due to tax consideration that was not due, the Contractor will be liable to the City for that amount, and by contracting with the City agrees to remit any overpayments back to the City for miscalculations on taxes included in a bid price.

For purposes of A.R.S. 42-5075(P), this contract is subject to A.R.S. Title 34.

Tax Indemnification:

Contractor will, and require the same of all subcontractors, pay all federal, state and local taxes applicable to its operation and any persons employed by the Contractor. Contractor will, and require the same of all subcontractors, hold the City harmless from any responsibility for taxes, damages and interest, if applicable, contributions required under federal, and/or state and local laws and regulations and any other costs including transaction privilege taxes, unemployment compensation insurance, Social Security and Worker's Compensation.

Tax Responsibility Qualification:

Contractor may be required to establish, to the satisfaction of City, that any and all fees and taxes due to the City or the State of Arizona for any License or Transaction Privilege taxes, Use Taxes or similar excise taxes, are currently paid (except for matters under legal protest).

Contractor agrees to a waiver of the confidentiality provisions contained in the City Finance Code and any similar confidentiality provisions contained in Arizona statutes relative to State Transaction Privilege Taxes or Use Taxes.

Contractor agrees to provide written authorization to the City Finance Department and to the Arizona State Department of Revenue to release tax information relative to Arizona Transaction Privilege Taxes or Arizona Use Taxes in order to assist the Department in evaluating Contractor's qualifications for and compliance with contract for duration of the term of contract.

P. STANDARD SPECIFICATIONS AND DETAILS

Except as otherwise required in these specifications, bid preparation and construction of this project shall be in accordance with all applicable Maricopa Association of Governments' (MAG) Uniform Standard Specifications and Uniform Standard Details, latest edition, the City of Phoenix Supplements to the MAG Uniform Standard Specifications and Details, latest edition.

Q. PRECEDENCE OF CONTRACT DOCUMENTS

In case of a discrepancy or conflict, the precedence of contract documents is as follows:

1. Change Orders or Supplemental Agreements
2. Addenda
3. Contract Specifications/Special Provisions/Technical Provisions
4. The Plans
5. COP Supplement to MAG Standard Specifications and Details, latest edition
6. MAG Standard Specifications and Details, latest edition

The precedence of any Addenda falls within the category of which it represents.

R. CONFIDENTIALITY OF PLANS & SPECIFICATIONS

Any plans generated for this project must include the following statement in the Title Block on every page: "Per City of Phoenix City Code Chapter 2, Section 2-28, these plans are for official use only and may not be shared with others except as required to fulfill the obligations of Contractor's contract with the City of Phoenix."

S. **AUDIT AND RECORDS**

Records of the Contractor's direct personnel payroll, bond expenses, and reimbursable expenses pertaining to this Project, and records of accounts between the City and Contractor shall be kept on the basis of generally accepted accounting principles and must be made available to the City and its auditors for up to five years following Final Acceptance of the Project.

The City, its authorized representative, and/or any federal agency, reserves the right to audit the Contractor's records to verify the accuracy and appropriateness of all cost and pricing data, including data used to negotiate the Contract and any change orders.

The City reserves the right to decrease Contract price and/or payments made on this Contract and/or request reimbursement from the Contractor following final contract payment on this Contract if, upon audit of the Contractor's records, the audit discloses the Contractor has provided false, misleading, or inaccurate cost and pricing data.

The Contractor shall include a similar provision in all of its Agreements with subcontractors and suppliers providing services or supplying materials under the Contract Documents to ensure that the City, its authorized representative, and/or the appropriate federal agency has access to the Subcontractor's and Supplier's records to verify the accuracy of all cost and pricing data.

The City reserves the right to decrease the Contract price and/or payments made on this Contract and/or request reimbursement from the Contractor following final contract payment on this Contract if the above provision is not included in the Subcontractor's and Supplier's contracts, and one or more Subcontractors or Suppliers refuse to allow the City to audit their records to verify the accuracy and appropriateness of cost and pricing data.

If, following an audit of this Contract, the audit discloses the Contractor has provided false, misleading or inaccurate cost and pricing data, and the cost discrepancies exceed 1% of the total Contract billings, the Contractor shall be liable for reimbursement of the reasonable, actual cost of the audit.

T. **IMMIGRATION REFORM AND CONTROL ACT**

Compliance with Federal Laws Required. Contractor understands and acknowledges the applicability of the Immigration Reform and Control Act of 1986 and the Drug Free Workplace Act to it. Contractor agrees to comply with these Federal Laws in performing under this Agreement and to permit City inspection of its personnel records to verify such compliance.

U. **LEGAL WORKER REQUIREMENTS**

The City of Phoenix is prohibited by A.R.S. § 41-4401 from awarding a contract to any contractor who fails, or whose subcontractors fail, to comply with A.R.S. § 23-214(A). Therefore, Contractor agrees that:

1. Contractor and each subcontractor it uses warrants their compliance with all federal immigration laws and regulations that relate to their employees and their compliance with § 23-214, subsection A.
2. A breach of a warranty under paragraph 1 shall be deemed a material breach of the contract that is subject to penalties up to and including termination of the contract.
3. The City of Phoenix retains the legal right to inspect the papers of any Contractor

or subcontractor employee who works on the contract to ensure that the Contractor or subcontractor is complying with the warranty under paragraph 1.

V. **CONTRACTOR AND SUBCONTRACTOR WORKER BACKGROUND SCREENING**

Contractor agrees that all Contractor's and subcontractors' workers (collectively "Contract Worker(s)") pursuant to this Agreement will be subject to background and security checks and screening (collectively "Background Screening") at Contractor's sole cost and expense, unless otherwise provided for in the scope of work. Contractor's background screening will comply with all applicable laws, rules and regulations. Contractor further agrees that the background screening is necessary to preserve and protect the public health, safety and welfare. The City requires a completed Contract Worker Badge/Key/Intrusion Detection Responsibilities Agreement for each Contract Worker who requires a badge or key.

Background Screening Risk Level: The City has established two levels of risk: Standard and Maximum risk. The current risk level and background screening required is **MAXIMUM LEVEL**. If the scope of work changes, the City may amend the level of risk, which could require the Contractor to incur additional contract costs to obtain background screens or badges.

Terms of This Section Applicable to all Contractor's Contracts and Subcontracts: Contractor will include Contract Worker background screening in all contracts and subcontracts for services furnished under this agreement.

Materiality of Background Screening Requirements; Indemnity: The background screening requirements are material to City's entry into this agreement and any breach of these provisions will be deemed a material breach of this contract. In addition to the indemnity provisions set forth in this agreement, Contractor will defend, indemnify and hold harmless the City for all claims arising out of this background screening section including, but not limited to, the disqualifications of a Contract Worker by Contractor. The background screening requirements are the minimum requirements for the Agreement. The City in no way warrants that these minimum requirements are sufficient to protect Contractor from any liabilities that may arise out of the Contractor's services under this Agreement or Contractor's failure to comply with this section. Therefore, Contractor and its Contract Workers will take any reasonable, prudent and necessary measures to preserve and protect public health, safety and welfare when providing services under this Agreement.

Continuing Duty; Audit: Contractor's obligations and requirements will continue throughout the entire term of this Agreement. Contractor will maintain all records and documents related to all background screenings and the City reserves the right to audit Contractor's records.

Contractor's Default; Liquidated Damages; Reservation of Remedies for Material Breach: If Contractor is required to access any City facilities without an escort, City badging is required. Contractor's default under this section will include, but is not limited to, the following:

- Contract Worker gains access to a City facility(s) without the proper badge or key;
- Contract Worker uses a badge or key of another to gain access to a City facility;
- Contract Worker commences services under this agreement without the proper badge, key or background screening;
- Contract Worker or Contractor submits false information or negligently submits wrong information to the City to obtain a badge, key or applicable background screening; or
- Contractor fails to collect and timely return Contract Worker's badge or key upon termination of Contract Worker's employment, reassignment of Contract Worker to

another City facility or upon the expiration, cancellation or termination of this Agreement.

- Contractor acknowledges and agrees that the access control, badge and key requirements in this section are necessary to preserve and protect the public health, safety and welfare. Accordingly, Contractor agrees to properly cure any default under this section within three business days (excluding weekends and City holidays) from the date notice of default is sent by the City. The parties agree that Contractor's failure to properly cure any default under this section will constitute a breach of this section. In addition to any other remedy available to the City at law or in equity, the Contractor will be liable for and pay to the City the sum of \$1,000.00 for each breach by Contractor in this section. The parties further agree that the sum fixed above is reasonable and approximates the actual or anticipated loss to the City at the time and making of this agreement if Contractor breaches this section. Further, the parties expressly acknowledge and agree to the fixed sum set forth above because of the difficulty of proving the City's actual damages if Contractor breaches this section. The parties further agree that three breaches by Contractor in this section arising out of any default within a consecutive period of three months or three breaches by Contractor in this section arising out of the same default within a period of 12 consecutive months will constitute a material breach of this agreement by Contractor and the City expressly reserves all of its rights, remedies and interests under this agreement, at law and in equity including, but not limited to, termination of this agreement.

Employee Identification and Access: Contract Workers are forbidden access to designated restricted areas. Access to each building will be as directed by the authorized Phoenix authorized representative. Contract Workers are not authorized access other than during scheduled hours. Access to the building will be directed by the City's authorized representative.

Only authorized Contract Workers are allowed on the premises of the City facilities/buildings. Contract Workers are not to be accompanied in the work area by acquaintances, family members, assistants or any other person unless said person is an authorized Contract Worker.

Unless otherwise provided for in the scope of work:

- Contract Workers must **always** have city issued badges and some form of verifiable company identification (badge, uniform, employee id).
- Contractor will supply a list of the names and titles of all employees requiring access to the buildings. It is the Contractor's responsibility to provide updates and changes of personnel as necessary.

Key Access Procedures: If the Contractor Worker's services require keyed access to enter a City facility(ies), a separate key issue/return form must be completed and submitted by the Contractor for each key issued. Contractor must submit the completed key issue/return form to the appropriate badging office.

Stolen or Lost Badges or Keys: Contractor must immediately report lost or stolen badges or keys to the City's appropriate badging office. If the badge/key was stolen, Contract Worker's must report the theft to their local police department. Prior to issuance of a new badge or key, a new badge application or key issue form must be completed, submittal of a police department report for stolen badges, and applicable payment of the fee(s) listed herein.

Return of Badge or Key: All badges and keys are the property of the City and must be returned to the City at the badging office within one business day (excluding weekends and City holidays) of when the Contract Worker's access to a City facility is no longer required to

furnish the services under this agreement. Contractor will collect a Contract Worker's badge and key(s) upon the termination of the Contract Worker's employment; when the Contractor Worker's services are no longer required at a City facility(s); or upon termination, cancellation or expiration of this agreement.

Badge and Key Fees: The following constitute the badge and key fees under this agreement. The City reserves the right to amend these fees upon a 30-day prior written to Contractor.

Replacement Badge Fee:	\$55.00 per badge
Lost/Stolen Badge Fee:	\$55.00 per badge
Replacement Key Fee:	\$55.00 per key
Replacement Locks:	\$55.00 per lock

BACKGROUND SCREENING – MAXIMUM RISK:

The current risk level and background screening required is **MAXIMUM RISK**.

A maximum risk background screening will be performed every five years when the Contract Worker's work assignment will:

- work directly with vulnerable adults or children, (under age 18); or
- any responsibility for the receipt of payment of City funds or control of inventories, assets, or records that are at risk of misappropriation; or
- unescorted access to:
 - City data centers, money rooms, high-value equipment rooms; or
 - unescorted access to private residences; or
 - access to critical infrastructure sites/facilities; or
- direct or remote access to Criminal Justice Information Systems (CJIS) infrastructure.

Requirements: The background screening for maximum risk level will include a background check for real identity/legal name and will include felony and misdemeanor records from any county in the United States, the State of Arizona, plus any other jurisdiction where the Contractor worker has lived at any time in the preceding seven years from the Contract Worker's proposed date of hire. In addition, Maximum screening levels may require additional checks as included herein, depending on the scope of work, and may be amended if the scope of work changes.
may be amended if the scope of work changes.
if the scope of work changes.

Contractor Certification; City Approval of Maximum Risk Background Screening: Unless otherwise provided for in the Scope of Work, Contractor will be responsible for:

- determining whether Contract Worker(s) are disqualified from performing work for the City for maximum risk level background checks; and,
- submitting pass/fail results to the City for approval; and,
- reviewing the results of the background check every three to five years, dependent on scope; and,
- to engage in whatever due diligence is necessary to make the decision on whether to disqualify a Contract Worker; and,
- Submitting the list of qualified Contract Workers to the contracting department; and,
- If, upon review of the background information, the City will advise the Contractor if it believes a Contract Worker should be disqualified. The Contractor will evaluate the Contract Worker and if the Contractor believes that there are extenuating circumstances that suggest that the person should not be disqualified, the Contractor will discuss those circumstances with the contracting department. The contracting department decision on disqualification of a Contract Worker is final.

- For sole proprietors, the Contractor must comply with the background check for himself and any business partners, or members or employees who will assist on the contract and for whom the requirements of the Agreement apply.
- By executing this agreement, Contractor certifies and warrants that Contractor has read the background screening requirements and criteria in this section, and that all background screening information furnished to the City is accurate and current.
- The City final documented decision will be an “approve” or “deny” for identified Contract Workers.
- The City will not keep records related to background checks once they are confirmed. Information to verify the results will be returned to the Contractor, or any contracted agency that assists with review, after the City’s completed review.
- By executing this agreement, Contractor further certifies and warrants that Contractor has satisfied all such background screening requirements for the maximum risk background screening, and verified legal worker status, as required.
- Contract Workers will not apply for the appropriate City of Phoenix identification and access badge or keys until Contractor has received the City’s written acceptance of Contract Worker’s maximum risk background screening. The City may, in its sole discretion, accept or reject any or all the Contract Workers proposed by Contractor for performing work under this Agreement. A Contract Worker rejected for work at a maximum risk level under this agreement will not be proposed to perform work under other city contracts or engagements without city’s prior written approval.
- any or all the Contract Workers proposed by Contractor for performing work under this Agreement. A Contract Worker rejected for work at a maximum risk level under this agreement will not be proposed to perform work under other city contracts or engagements without city’s prior written approval.
- ontracts or engagements without city’s prior written approval.

The background checks will be conducted prior to any employee entering to work and will be based upon information provided to the Police Department including, but not limited to: name, address, date and place of birth, social security number, INS number if applicable, and a copy of a valid photo identification. The information will be provided to the Water Services Department at least five business days (excluding weekends and holidays) in advance of the need for access. The form will be provided by Water Services Department. A designated Water Services Department representative will conduct the security check.

The City may, at any time, in its sole discretion, refuse to allow an employee access to an area for any of the following reasons, but not limited to:

- Conviction of a felony.
- Conviction of a misdemeanor (not including traffic or parking violation).
- Any outstanding warrants (including traffic and parking violations).
- A person currently on parole or probation.
- A person currently involved in an investigation.

CONFIDENTIALITY AND DATA SECURITY: All data, regardless of form, including originals, images and reproductions, prepared by, obtained by, or transmitted to Contractor in connection with this Agreement is confidential, proprietary information owned by the City, unless otherwise agreed upon within this Agreement. Except as specifically provided in this Agreement, the Contractor shall not disclose data generated in the performance of the service to any third person without the prior written consent of the City Manager or his/her designee.

Contractor agrees to abide by all current applicable legal and industry data security and privacy requirements and to notify the City immediately if the scope of work changes or personal identifying information or information subject to Payment Card Industry Standards becomes part of the Agreement.

Contractor agrees to comply with all City information security and technology policies, standards, and procedures when accessing City networks and computerized systems whether onsite or remotely.

A violation of this Section may result in immediate termination of this Agreement without notice. The obligations of Contractor under this Section shall survive the termination of this Agreement.

SECURITY INQUIRIES: Contractor acknowledges that all of the employees that it provides pursuant to this Contract shall, at Contractor's expense, be subject to background and security checks and screening at the request of the City. Contractor shall perform all such security inquiries and shall make the results available to the City for all employees considered for performing work (including supervision and oversight) under this Contract. City may make further security inquiries. Whether or not further security inquiries are made by the City, City may, at its sole, absolute and unfettered discretion, accept or reject any or all the employees proposed by the Contractor for performing work under this Contract. Employees rejected by the City for performing services under this Contract may still be engaged by Contractor for other work not involving the City. An employee rejected for work under this Contract shall not be proposed to perform work under other City contracts or engagements without the City's prior approval.

The City, in its sole discretion, reserves the right, but not the obligation to:

- require an employee/prospective employee of the Contractor to provide fingerprints and execute such other documentation as may be necessary to obtain criminal justice information pursuant to A.R.S. 41-1750 (G) (4);
- act on newly acquired information whether or not such information should have been previously discovered;
- unilaterally change its standards and criteria relative to the acceptability of Contractor's employees and/or prospective employees; and
- object, at any time and for any reason, to an employee of Contractor performing work (including supervision and oversight) under this Agreement. Contractor will bear the costs of all inquiries requested by the City.

W. LAWFUL PRESENCE REQUIREMENT

Pursuant to A.R.S. §§ 1-501 and 1-502, the City of Phoenix is prohibited from awarding a contract to any natural person who cannot establish that such person is lawfully present in the United States. To establish lawful presence, a person must produce qualifying identification and sign a City-provided affidavit affirming that the identification provided is genuine. This requirement will be imposed at the time of contract award. This requirement does not apply to business organizations such as corporations, partnerships or limited liability companies.

X. LEADERSHIP IN ENERGY AND ENVIRONMENTAL DESIGN (LEED)

If practical, the contractor shall provide an easily accessible area to serve the construction site that is dedicated to the separation, collection and storage of materials for recycling including (at a minimum) paper, glass, plastics, metals, and designate an area specifically for construction and demolition waste recycling. The contractor must provide documentation that the materials have been taken to a Maricopa County approved recycling facility.

Y. CITY OF PHOENIX EQUAL EMPLOYMENT OPPORTUNITY REQUIREMENT

1. In order to do business with the City, Contractor must comply with Phoenix City Code,

1969, Chapter 18, Article V, as amended, Equal Employment Opportunity Requirements. Contractor will direct any questions in regard to these requirements to the Equal Opportunity Department, (602) 262-6790.

2. Any Contractor in performing under this contract shall not discriminate against any worker, employee or applicant, or any member of the public, because of race, color, religion, sex, national origin, age, or disability nor otherwise commit an unfair employment practice. The Contractor shall ensure that applicants are employed, and employees are dealt with during employment without regard to their race, color, religion, sex, national origin, age, or disability and will adhere to a policy to pay equal compensation to men and women who perform jobs that require substantially equal skill, effort, and responsibility, and that are performed within the same establishment under similar working conditions. Such action shall include but not be limited to the following: Employment, promotion, demotion or transfer, recruitment or recruitment advertising, layoff or termination; rates of pay or other forms of compensation; and selection for training; including apprenticeship. The Contractor further agrees that this clause will be incorporated in all subcontracts with all labor organizations furnishing skilled, unskilled and union labor, or who may perform any such labor or services in connection with this contract.

If the Contractor employs more than thirty-five employees, the following language shall apply as the last paragraph to the clause above:

The Contractor further agrees not to discriminate against any worker, employee or applicant, or any member of the public, because of sexual orientation or gender identity or expression and shall ensure that applicants are employed, and employees are dealt with during employment without regard to their sexual orientation or gender identity or expression.

3. *Documentation.* Contractor may be required to provide additional documentation to the Equal Opportunity Department affirming that a nondiscriminatory policy is being utilized.
4. *Monitoring.* The Equal Opportunity Department shall monitor the employment policies and practices of suppliers and lessees subject to this article as deemed necessary. The Equal Opportunity Department is authorized to conduct on-site compliance reviews of selected firms, which may include an audit of personnel and payroll records, if necessary.

Z. **PROTEST PROCEDURES**

Any bidder who has any objections to the awarding of a contract to any bidder by the City of Phoenix, pursuant to competitive bidding procedures, shall comply with Phoenix City Code Chapter 2, Section 188.”

AA. **DATA CONFIDENTIALITY**

As used in the Contract, “data” means all information, whether written or verbal, including plans, photographs, studies, investigations, audits, analyses, samples, reports, calculations, internal memos, meeting minutes, data field notes, work product, proposals, correspondence and any other similar documents or information prepared by, obtained by, or transmitted to the Contractor or its subcontractors in the performance of this Contract.

The parties agree that all data, regardless of form, including originals, images, and reproductions, prepared by, obtained by, or transmitted to the Contractor or its subcontractors in connection with the Contractor’s or its subcontractor’s performance of this Contract is confidential and proprietary information belonging to the City.

Except as specifically provided in this Contract, the Contractor or its subcontractors shall not divulge data to any third party without prior written consent of the City. The Contractor or its subcontractors shall not use the data for any purposes except to perform the services required

under this Contract. These prohibitions shall not apply to the following data provided the Contractor or its subcontractors have first given the required notice to the City:

1. Data which was known to the Contractor or its subcontractors prior to its performance under this Contract unless such data was acquired in connection with work performed for the City;
2. Data which was acquired by the Contractor or its subcontractors in its performance under this Contract and which was disclosed to the Contractor or its subcontractors by a third party, who to the best of the Contractor's or its subcontractor's knowledge and belief, had the legal right to make such disclosure and the Contractor or its subcontractors are not otherwise required to hold such data in confidence; or
3. Data which is required to be disclosed by virtue of law, regulation, or court order, to which the Contractor or its subcontractors are subject.

In the event the Contractor or its subcontractors are required or requested to disclose data to a third party, or any other information to which the Contractor or its subcontractors became privy as a result of any other contract with the City, the Contractor shall first notify the City as set forth in this section of the request or demand for the data. The Contractor or its subcontractors shall give the City sufficient facts so that the City can be given an opportunity to first give its consent or take such action that the City may deem appropriate to protect such data or other information from disclosure.

The Contractor, unless prohibited by law, within ten calendar days after completion of services for a third party on real or personal property owned or leased by the City, the Contractor or its subcontractors shall promptly deliver, as set forth in this section, a copy of all data to the City. All data shall continue to be subject to the confidentiality agreements of this Contract.

The Contractor or its subcontractors assume all liability for maintaining the confidentiality of the data in its possession and agrees to compensate the City if any of the provisions of this section are violated by the Contractor, its employees, agents or subcontractors. Solely for the purposes of seeking injunctive relief, it is agreed that a breach of this section shall be deemed to cause irreparable harm that justifies injunctive relief in court. Contractor agrees that the requirements of this Section shall be incorporated into all subcontracts entered into by Contractor. A violation of this Section may result in immediate termination of this Contract without notice.

Personal Identifying Information-Data Security

Personal identifying information, financial account information, or restricted City information, whether electronic format or hard copy, must be secured and protected at all times. At a minimum, Contractor must encrypt and/or password protects electronic files. This includes data saved to laptop computers, computerized devices or removable storage devices.

When personal identifying information, financial account information, or restricted City information, regardless of its format, is no longer necessary, the information must be redacted or destroyed through appropriate and secure methods that ensure the information cannot be viewed, accessed, or reconstructed.

In the event that data collected or obtained by Contractor or its subcontractors in connection with this Contract is believed to have been compromised, Contractor or its subcontractors shall immediately notify the Project Manager and City Engineer. Contractor agrees to reimburse the City for any costs incurred by the City to investigate potential breaches of this data and, where applicable, the cost of notifying individuals who may be impacted by the breach.

Contractor agrees that the requirements of this Section shall be incorporated into all subcontracts entered into by Contractor. It is further agreed that a violation of this Section shall be deemed to cause irreparable harm that justifies injunctive relief in court. A violation of this Section may result in immediate termination of this Contract without notice.

The obligations of Contractor or its subcontractors under this Section shall survive the termination of this Contract.

BB. PROJECT MANAGEMENT INFORMATION SYSTEM (UNIFIER)

The Street Transportation Department's Design and Construction Management (DCM) Project Manager may determine that use of UNIFIER will be required during this contract. The following information provides a guideline for utilization. Any questions related to the requirements of UNIFIER should be directed to the DCM Project Manager.

1. The contractor will be required to maintain all project records in electronic format. The City provides an Application Service Provider (ASP) web-based project management database which the contractor will be required to utilize in the fulfillment of the contract requirements. Although this electronic platform does not fulfill this requirement in its entirety, the contractor will be required to utilize this platform as the basis for this work.
2. The contractor can expect to use this ASP to process all primary level tri-partite contract documents related to the design or construction phase of the Project including but not limited to: requests for interpretation/information, potential Change Orders, construction meeting minutes, Submittals, Design Professional's supplemental instructions, and Payment Requests.
3. The contractor will be required to process information into electronic digital form. In order to fulfill this requirement, the contractor shall provide all necessary equipment to perform the functions necessary to generate, convert, store, maintain, connect to web-based ASP and transfer electronic data.
4. The contractor shall provide a computerized networked office platform with broadband internet connectivity. Wired or wireless is acceptable. This platform shall function well in a web-based environment utilizing an internet browser compatible with the City UNIFIER ASP system.

UNIFIER training will be provided through the City of Phoenix. Contact information will be provided to the firms under contract, to establish the set up with a log-in and password.

CC. CONTRACTOR AND SUBCONTRACTOR RECORDS

The contractor, subcontractors and all suppliers shall keep and maintain all books, papers, records, files, accounts, reports, bid documents with backup data, including electronic data, and all other material relating to the contract and project for five years following completion and acceptance of the work.

All the above material shall be made available to the City for auditing, inspection and copying and shall be produced, upon request.

The contractor shall insert the above requirement in each subcontract, purchase order and lease agreement and shall also include in all subcontracts a clause requiring subcontractors to include the above requirement in any lower-tier subcontract, purchase order or lease agreement.

DD. FEDERAL IMMIGRATION AND NATIONALITY ACT

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

By submission of a bid, the contractor warrants that the contractor and all proposed subcontractors are and shall remain in compliance with all federal, state and local immigration laws and regulations relating to the immigration status of their employees who perform services on the contract. The Agency may, at its sole discretion, require evidence of compliance from the contractor or subcontractor. Should the Agency request evidence of compliance, the contractor or subcontractor shall have ten working days from receipt of the request to supply adequate information. The City will accept, as evidence of compliance, a showing by the contractor or subcontractor that it has followed the employment verification provisions of the Federal Immigration and Nationality Act as set forth in Sections 274A and 274B of that Act, including implementation of regulations and agreements between the Department of Homeland Security and the Social Security Administration's verification service.

Failure to comply with the immigration laws or to submit proof of compliance constitutes a material breach of contract. The City will reduce the contractor's compensation by \$10,000 for the initial Instance of non-compliance by the contractor or a subcontractor. Should the same contractor or subcontractor commit subsequent violations within a two-year time-period from the initial violation, the contractor's compensation will be reduced by \$50,000 for each violation. The third instance by the same contractor or subcontractor within a two-year period may result, in addition to the \$50,000 reduction in compensation, in removal of the offending contractor or subcontractor, suspension of work in whole or in part or, in the case of a third violation by the contractor, termination of the contract for default. In addition, the City may debar a contractor or subcontractor who has committed three violations within a two-year period for up to one year. For purposes of this paragraph, a violation by a subcontractor does not count as a violation by the contractor.

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

EE. **PROJECT STAFFING**

Key Personnel: Before starting work, Contractor must submit detailed résumés of key personnel involved in that work for City's approval (which City will not unreasonably withhold). If Contractor later desires to change key personnel involved in that work, Contractor must submit detailed résumés of the new personnel for City's approval (which City will not unreasonably withhold).

Qualified Staff: Contractor must maintain an adequate and competent staff of qualified persons—as City may determine in its sole discretion—during performance of this Master Agreement. If City in its sole discretion determines that any of Contractor's staff is objectionable, Contractor must take prompt corrective action or replace that staff with new personnel, subject to City's approval.

Third-Party Employment Brokers: Contractor and Subcontractors will not utilize a third-party labor broker for any construction worker under this Agreement. The Contractor and Subcontractors must be the employers of record for its construction staff under this Agreement.

FF. **NO ISRAEL BOYCOTT**

If this Contract is valued at \$100,000 or more and requires Contractor (a company engaging in for-profit activity and having ten or more full-time employees) to acquire or dispose of services, supplies, information technology, or construction, then Contractor must certify and agree that it does not and will not boycott goods or services from Israel, pursuant to Title 35, Chapter 2, Article 9 of the Arizona Revised Statutes. Provided that these statutory requirements are applicable, Contractor by entering this Contract now certifies that it is not currently engaged in, and agrees for the duration of the Contract to not engage in, a boycott of goods or services from Israel.

GG. **NO FORCED LABOR OF ETHNIC UYGHURS**

If this Contract requires Contractor (a company engaging in for-profit activity and having ten or more full-time employees) to acquire or dispose of services, supplies, information technology, goods, or construction, then pursuant to Title 35, Chapter 2, Article 10 of the Arizona Revised Statutes Contractor must certify and agree that it and any contractors, subcontractors, or suppliers it utilizes do not and will not use the forced labor of ethnic Uyghurs in the People's Republic of China or any goods or services produced by such forced labor. Provided these statutory requirements are applicable, Contractor, by entering this Contract, now certifies it is not currently engaged in, and agrees for the duration of the Contract to not engage in, (a) the use of forced labor of ethnic Uyghurs in the People's Republic of China; (b) the use of any goods or services produced by the forced labor of ethnic Uyghurs in the People's Republic of China; or (c) the use of any contractors, subcontractors, or suppliers that use the forced labor or any goods or services produced by the forced labor of ethnic Uyghurs in the People's Republic of China.

HH. **COMPLIANCE WITH LAWS**

Contractor must comply with all existing and subsequently enacted federal, state and local laws, ordinances and codes, all applicable ADA requirements, regulations that are, or become applicable to this Agreement, and be in general conformance with PROWAG guidance. If a subsequently enacted law imposes substantial additional costs on Contractor, a request for an amendment may be submitted pursuant to this Agreement. Contractor is also required to certify its compliance with all applicable laws and Contractor must pass along these requirements to its Subcontractors. If any of Contractor's certifications is found to be false, the City may terminate this Agreement or impose other remedies due to the false certification.

II. **HEAT MITIGATION**

Per Phoenix City Code G-7241, effective April 25, 2024, any Contractor whose employees and contract workers perform work in an outdoor environment under this contract must keep on file a written heat safety plan. The City may request a copy of this plan and documentation of all heat safety and mitigation efforts currently implemented to prevent heat-related illnesses and injuries in the workplace. The plan must also be posted where it is accessible to employees. At a minimum, the heat safety and mitigation plan and documentation required under this Provision shall include each of the following as it relates to heat safety and mitigation:

1. Availability of sanitized cool drink water free of charge at locations that are accessible to all employees and contract workers.
2. Ability to take regular and necessary breaks as needed and additional breaks for hydration.
3. Access to shaded areas and/or air conditioning.
4. Access to air conditioning in vehicles with enclosed cabs. All such vehicles must contain functioning air conditioning by no later than May 1, 2025.

5. Effective acclimatization practices to promote the physiological adaptations of employees or contract workers newly assigned or reassigned to work in an outside environment.
6. Conduct training and make it available and understandable to all employees and contract workers on heat illness and injury that focuses on the environmental and personal risk factors, prevention, how to recognize and report signs and symptoms of heat illness and injury, how to administer appropriate first aid measures and how to report heat illness and injury to emergency medical personnel.

The Contractor further agrees that this clause will be incorporated in all subcontracts with subconsultants, sublicensees or sublessees who may perform labor or services in connection with this contract. Additionally, the Contractor agrees to require all subcontractors, sublicensees or sublessees to include this clause in all contracts with any third party who is contracted to perform labor or services in connection with this contract. It is the obligation of the Contractor to ensure compliance by its subcontractors.

SUPPLEMENTARY CONDITIONS

1. **103 AWARD AND EXECUTION OF CONTRACT**, Add the following to **Subsection 103.3 AWARD OF CONTRACT**:

Contract award will be made to a responsive and responsible bidder based on the low total base bid or on the low combination of the total base bid and any selected alternate(s), whichever is in the best interest of the City. If unit pricing is required in the proposal, the extensions and additions will be verified to assure correctness. Award will be based on the revised total if any errors are found. The City expressly reserves the right to cancel this agreement without recourse or prejudice to Contractor until all parties have executed the agreement in full.

Any bidder that currently contracts with the City must be in good standing for its proposal to be considered responsive. For the purpose of this Invitation to Bid, good standing means compliance with all contractual provisions, including payment of financial obligations.

2. **103 AWARD AND EXECUTION OF CONTRACT**, Add the following to **Subsection 103.5, REQUIREMENT OF CONTRACT BONDS**:

1. PERFORMANCE BOND AND LABOR AND MATERIAL BOND

Prior to the execution of a contract, the successful bidder must provide a performance bond and a labor and material bond, each in an amount equal to the full amount of the contract. Each such bond shall be executed by a surety company or companies holding a certificate of authority to transact surety business in the State of Arizona issued by the Director of the Department of Insurance. A copy of the Certificate of Authority shall accompany the bonds. The Certificate shall have been issued or updated within two years prior to the execution of the Contract. The bonds shall be made payable and acceptable to the City of Phoenix. The bonds shall be written or countersigned by an authorized representative of the surety who is either a resident of the State of Arizona or whose principal office is maintained in this state, as required by law, and the bonds shall have attached thereto a certified copy of Power of Attorney of the signing official. If one Power of Attorney is submitted, it shall be for twice the total contract amount. If two Powers of Attorney are submitted, each shall be for the total contract amount. Personal or individual bonds are not acceptable. Failure to comply with these provisions will be cause for rejection of the bidder's proposal.

2. BONDING COMPANIES

All bonds submitted for this project shall be provided by a company which has been rated "A- or better for the prior four quarters" by the A. M. Best Company. **Failure to provide an "A- or better for the prior four quarters" bond will result in bid rejection.**

3. **103 AWARD AND EXECUTION OF CONTRACT**, Delete **Subsection 103.6, CONTRACTOR'S INSURANCE** in its entirety and substitute the following:

103.6.1 General:

Contractor and subcontractors must procure insurance against claims that may arise from or relate to performance of the work hereunder by Contractor and its agents, representatives, employees and subconsultants. Contractor and subcontractors must maintain that insurance until all their obligations have been discharged, including any warranty periods under this Contract.

The City in no way warrants that the limits stated in this section are sufficient to protect the Contractor from liabilities that might arise out of the performance of the work under this Contract

by the Contractor, its agents, representatives, employees, or subcontractors and Contractor may purchase additional insurance as they determine necessary.

1. SCOPE AND LIMITS OF INSURANCE

Contractor must provide coverage with limits of liability not less than those stated below. An excess liability policy or umbrella liability policy may be used to meet the liability limits provided that (1) the coverage is written on a "following form" basis, and (2) all terms under each line of coverage below are met:

1. **Commercial General Liability – Occurrence Form**

Policy must include bodily injury, property damage, broad form contractual liability and XCU coverage.

General Aggregate	\$2,000,000
Products – Completed Operations Aggregate	\$1,000,000
Personal and Advertising Injury	\$1,000,000
Each Occurrence	\$1,000,000

a. The policy must name the City of Phoenix as an additional insured with respect to liability for bodily injury, property damage and personal and advertising injury with respect to premises, ongoing operations, products and completed operations, and liability assumed under an insured contract arising out of the activities performed by, or on behalf of the Contractor, related to this Contract.

b. Coverage must include XCU coverage.

c. There shall be no endorsement or modification which limits the scope of coverage or the policy limits available to the City of Phoenix as an additional insured.

d. City of Phoenix is an additional insured to the full limits of liability purchased by the Contractor.

e. The Contractor's insurance coverage must be primary and non-contributory with respect to any insurance or self-insurance carried by the City.

f. Contractor's policies must be endorsed to provide an extension of the completed operations coverage for a period of nine years.

2. **Automobile Liability**

Bodily injury and property damage for any owned, hired, and non-owned vehicles used in the performance of this Contract.

Combined Single Limit (CSL)	\$1,000,000
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a. The policy must be endorsed to include The City of Phoenix as an additional insured with respect to liability arising out of the activities performed by, or on behalf of the Contractor, related to this contract.

b. City of Phoenix is an additional insured to the full limits of liability purchased by the Contractor.

c. The Contractor's insurance coverage must be primary and non-contributory with respect to any insurance or self-insurance carried by the City.

3. **Worker's Compensation and Employers' Liability**

Workers' Compensation	Statutory
Employers' Liability	
Each Accident	\$100,000
Disease – Each Employee	\$100,000
Disease – Policy Limit	\$500,000

a. Policy must contain a waiver of subrogation against the City of Phoenix.

b. This requirement does not apply when a Contractor or subcontractor is exempt under A.R.S. §23-902(E), **AND** when such Contractor or subcontractor executed the appropriate sole proprietor waiver form.

2. NOTICE OF CANCELTION

For each insurance policy required by the insurance provisions of this Contract, the Contractor must provide to the City, within five business days of receipt, a notice if a policy is suspended, voided or cancelled for any reason. Such notice must be mailed, emailed or hand delivered to Design and Construction Procurement, 200 W. Washington Street, 5th Floor, by certified mail, return receipt requested.

3. ACCEPTABILITY OF INSURERS

Insurance is to be placed with insurers duly licensed or authorized to do business in the state of Arizona and with an "A.M. Best" rating of not less than B+ VI. The City in no way warrants that the required minimum insurer rating is sufficient to protect the Contractor from potential insurer insolvency.

4. VERIFICATION OF COVERAGE

Contractor must furnish the City with certificates of insurance (ACORD form or equivalent approved by the City) as required by this Contract. The certificates for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf.

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

All certificates required by this Contract must be sent directly to Design and Construction Procurement via email at str.title34.procure@phoenix.gov. **The City project number, contract number and project description must be noted on the certificate of insurance.** The City reserves the right to require complete copies of all insurance policies required by this Contract, at any time. **DO NOT SEND CERTIFICATES OF INSURANCE TO THE CITY'S RISK MANAGEMENT DIVISION.**

5. SUBCONTRACTORS

Contractor's certificates shall include all subcontractors as additional insureds under its policies **OR** Contractor shall be responsible for ensuring and verifying that all subcontractors have valid and collectable insurance. At any time throughout the life of the contract, the City of Phoenix reserves the right to require proof from the Contractor that its subcontractors have insurance coverage. All subcontractors providing services included under this Contract's Scope of Services are subject to the insurance coverages identified above and

must include the City of Phoenix as an additional insured. In certain circumstances, the Contractor may, on behalf of its subcontractors, waive a specific type of coverage or limit of liability where appropriate to the type of work being performed under the subcontract. Contractor assumes liability for all subcontractors with respect to this Contract.

6. APPROVAL

Any modification or variation from the insurance coverages and conditions in this Contract must be documented by an executed contract amendment.

103.6.2 Defense and Indemnification

To the maximum extent allowed by law, including Title 34 A.R.S., Contractor (“Indemnitor”) agrees to defend, indemnify, and hold harmless the City of Phoenix and its officers, officials (elected or appointed), agents and employees (and any jurisdiction or agency issuing permits for any work included in the project, and its officers, agents and employees) (“Indemnitee”) from any and all claims, actions, liabilities, damages, losses or expenses, (including but not limited to court costs, attorney fees, expert fees, and costs of claim processing, investigation and litigation) of any nature or kind whatsoever (“Losses”) caused or alleged to be caused, in whole or in part, by the wrongful, negligent or willful acts, or errors or omissions of Indemnitor or any of its owners, officers, directors, members, managers, agents, employees, or subcontractors (Indemnitor’s Agents”) arising out of or in connection with this Contract. This defense and indemnity obligation includes holding Indemnitee harmless for any Losses or other amount arising out of or recovered under any state’s workers’ compensation law or arising out of the failure of Indemnitor or Indemnitor’s Agents to conform to any federal, state or local law, statute, ordinance, rule, regulation, or court decree. Indemnitor’s duty to defend Indemnitee accrues immediately at the time a claim is threatened or a claim is made against Indemnitee, whichever is first. Indemnitor’s duty to defend exists regardless of whether Indemnitor is ultimately found liable. Indemnitor must indemnify Indemnitee from and against any and all Losses, except where it is proven that those Losses are solely as a result of Indemnitee’s own negligent or willful acts or omissions. Indemnitor is responsible for primary loss investigation, defense and judgment costs where this indemnification applies. In consideration of the City’s award of this Contract, Indemnitor agrees to waive all rights of subrogation against Indemnitee for losses arising from or related to any work performed by Indemnitor or Indemnitor’s Agents for the City of Phoenix under this Contract. The obligations of Indemnitor under this provision survive the termination or expiration of this Contract.

4. **104 SCOPE OF WORK,** Add the following to **Subsection 104.1.2 MAINTENANCE OF TRAFFIC:**

ADA AND ANSI ACCESS OF PREMISES DURING CONSTRUCTION

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

5. **104 SCOPE OF WORK,** Add the following to **Subsection 104.1.4 CLEANUP AND DUST CONTROL:**

The Contractor shall use a power pick-up broom as part of the dust control effort. No separate measurement or payment will be made for cleanup or dust control, or for providing a power pick-up broom on the job.

6. **105 CONTROL OF WORK,** Add the following to **Subsection 105.1, AUTHORITY OF THE ENGINEER:**

1. CONTRACT ADMINISTRATION

The definition of "Engineer" shall read as follows:

"Engineer": All references to "Engineer" in these contract bid documents, including the MAG Specifications, shall mean City Engineer.

2. PRECONSTRUCTION CONFERENCE

After completion of the contract documents, to include bonds, insurance and signatures and prior to the commencement of any work on the project, the Water Services Department will schedule a Pre-Construction Conference. This will be held at 200 West Washington Street, Phoenix, Arizona.

Construction administration will be provided Sunrise Engineering, LLC.

The purpose of this conference is to establish a working relationship between the Contractor, utility firms and various City agencies. The agenda will include critical elements of the work schedule, submittal schedule, cost breakdown of major lump sum items, payment application and processing, coordination with the involved utility firms, emergency telephone numbers for all representatives involved in the course of construction and establishment of the notice to proceed date. The Contractor shall also provide copies of all purchase orders and/or contracts with DBE subcontractors and suppliers used to meet the subcontract goal programmed for this project.

Minimum attendance by the Contractor shall be a responsible company/corporate official, who is authorized to execute and sign documents on behalf of the firm, the job superintendent and the Contractor's safety officer.

3. AUTHORIZATION OF THE ENGINEER

The City may, at its discretion and without cause, order the Contractor in writing to stop and suspend work. Immediately after receiving such notice, the Contractor shall discontinue advancing the work specified under this Agreement.

Such suspension shall not exceed one hundred and eighty (180) consecutive days during the duration of the project.

The Contractor may seek an adjustment of the contract price and time, if the cost or time to perform the work has been adversely impacted by any suspension or stoppage of work by the City.

7. **105 CONTROL OF WORK,** Add the following to **Subsection 105.2 PLANS AND SHOP DRAWINGS:**

The Contractor shall submit as many of the required shop drawings and product data submittals at the Pre-Construction meeting as practical and possible. All shop drawings and product data submittals shall be submitted sufficiently in advance to allow adequate time for City review(s) and approval. The Contractor shall submit early enough to allow enough time for reviews based on the assumption that a submittal may be marked "Revise and Resubmit" or "Rejected", requiring the Contractor to modify the submittal and resubmit for additional review(s) until acceptance.

A separate transmittal shall be used for each specific item type, class of material or equipment for which a submittal is required. Multiple items under one transmittal will only be allowed when the items taken together constitute a complete manufacturer's package, or are so functionally related that the entire package should be reviewed as a whole. The contractor shall submit six (6) hard

copies of each shop drawing for review. **Email or FAX submittals will not be accepted.**

The Contractor shall allow up to four (4) weeks for City review for each submittal. Some submittals may be simple and straightforward and may not require the full four (4) weeks, but other more complex submittals may take the full four (4) weeks.

8. **105 CONTROL OF WORK**, Add the following to **Subsection 105.7 COOPERATION BETWEEN CONTRACTORS**

Other Contractors are not known or expected to be working in or near the area of this contract. Should there be other Contractors and/or work in the area, the Contractor shall conduct his work as specified in MAG Section 105.7.

9. **105 CONTROL OF WORK**, Delete **Subsection 105.8 CONSTRUCTION STAKES, LINES AND GRADES**; and add the following:

Description

The work under this section shall consist of furnishing all materials, personnel, and equipment necessary to perform all surveying, staking and verification of the accuracy of all points which have been provided by the Engineer in the project plans.

Included in this work will be all calculations required for the satisfactory completion of the project in conformance with the plans and specifications. The work will be done under the direction of a registered professional surveyor employed by the Contractor.

Measurements of all removals and pay quantity items will be the responsibility of the Engineer.

When utility adjustments are a part of the contract, the Contractor will perform and be responsible for locating, tying and untying all manholes and valves that are discovered during the course of the contract. The Contractor will set all survey points, stakes and references necessary for carrying out all such adjustments.

During installation and/or relocation of new water lines, valves, water meters and service connections, fire hydrants, sewer lines, sewer taps, clean outs, manholes, and other similar assets, the Contractor will record the final as-built location and provide additional information related to cost, manufacturer, and model numbers in a form provided by the Engineer.

The Contractor will furnish all traffic control, including flagging for survey and staking operations. Traffic control will be in accordance with the requirements of the City of Phoenix Barricade Manual.

The Contractor will keep field notes in bound field books. These books will be available for inspection by City personnel at all times and will become the property of the City of Phoenix upon completion of the project.

Construction Staking Requirements

Staking will be performed in accordance with the City of Phoenix's Survey Section Standard Requirements for Staking, As-Built and Quantity Calculations, plus any special addenda provided by the Engineer. The Contractor will provide to the Engineer in writing, for the Engineer's approval, any special procedures that will be used for construction survey staking completion.

The project plans will include all the required benchmark and horizontal datum information to establish survey control on the project site and to complete the proper layout of the work. The project plans will identify a minimum of two City of Phoenix published Benchmarks, and identify

additional temporary benchmarks at other convenient locations when applicable. After the Contractor has verified the accuracy of the control points established by the City, the Contractor will set all stakes necessary for construction in accordance with the City of Phoenix Survey Section Standard Requirements.

If errors are discovered during the verification process and the control points do not agree with the horizontal or vertical information shown in the plans, the Contractor shall promptly notify the Engineer in writing, and explain the problem in detail. The Engineer will advise the Contractor of any corrective actions which may be necessary.

The Contractor will exercise care in the preservation of stakes, references, benchmarks and will reset them when they are damaged, lost, displaced, or removed.

Any discrepancies in grade, alignment, locations, or dimensions detected by the Contractor will be brought to the attention of the Engineer by letter. No changes in the project plans will be allowed without the approval of the Engineer.

The Engineer reserves the right to make inspections and random checks of any portion of the staking and layout procedure. If, in the Engineer's opinion, the work is not being performed in the manner that will assure proper control and accuracy, the Engineer will order any or all the staking and layout work redone at no additional cost.

If any portion of the Contractor's staking and layout work is ordered redone, resulting in additional rechecking by the Engineer, the City will be reimbursed for all costs for such additional checking. The amount of such costs will be deducted from the Contractor's progress payment.

Inspection of the Contractor's layout by the Engineer and the acceptance of all or any part of it will not relieve the Contractor of their responsibility to secure the proper dimensions, grades, and elevations for the work.

Record Drawings and As-builts

The Contractor shall maintain a record drawing (redlines) set of plans at the job site. These shall be kept legible and current and shall show all changes or work added in a contrasting, reproducible color. Two weeks prior to issuance of substantial completion, the Contractor shall submit, prior to final inspection, corrected redline drawings with all appropriate field changes clearly marked and labeled on the signed and approved plan sets. The Engineer shall be the sole judge as to the acceptability of the record drawing plans, before the information is incorporated into the final and accepted as-built set to be stored with the Central Records office.

Prior to final acceptance, the Contractor will provide a complete as-built set, sealed by a Registered Professional, showing all field modifications and final elevation, stations and offset of the completed improvements. For construction related to sewer, and water facilities, and other utilities, as-built information may be requested at the Engineer prior to completion of as-builts at no additional cost. The as-built plans shall be prepared in accordance with the requirements of this section and other applicable special provisions for this project. Additional As-built requirement can be found on the Streets Transportation Department Website, under the Community Reference Materials.

licable special provisions for this project. Additional As-built requirement can be found on the Streets Transportation Department Website, under the Community Reference Materials.

Measurement

Construction surveying and layout will be measured as a single complete unit of work. The cost of providing Record Drawings and As-builts will be included in this cost.

A contingency item, Two-person survey party will be measured by the hour to the nearest half (1/2) hour. This item will only be measured for payment when the Engineer requires extra work beyond what is required to layout the construction of the approved plans. The Engineer will require field notes and invoice to validate the additional time.

Payment

Payment for construction surveying and layout will be by the lump sum and will be made as follows:

The item of two-person survey party is a contingent item and is established for the purpose of compensating the Contractor for additional staking and layout required as a result of extra work ordered by the Engineer. Payment will be made at the predetermined unit price shown on the bidding schedule for the survey party or parties used. The Engineer will be the sole judge as to whether the additional work will be performed by the Contractor. The amount per hour for a two-person survey party includes the cost of all work necessary to complete the extra work.

No payment will be made for the resetting of stakes, references, benchmarks and other survey control.

10. **105 CONTROL OF WORK**, Add the following to **Subsection 105.15 ACCEPTANCE, paragraph (B) Final Acceptance:**

1. **SUBSTANTIAL COMPLETION**

The work may be judged substantially complete when all construction, including all applicable ADA requirements, has been completed with the possible exception of final inspection punch list work. The purpose of granting or acknowledging substantial completion is to stop contract time. This is particularly important to the Contractor if contract time is exhausted or nearly so and/or punch list work is anticipated to extend beyond the allotted time. Granting of substantial completion will eliminate the possibility of incurring liquidated damages or additional liquidated damages beyond the substantial completion date, whichever case may apply.

In the event that the Engineer grants substantial completion, the Contractor shall have thirty (30) days thereafter to complete punch list work, unless additional time is granted--in writing--by the Engineer. In no case shall a Contractor be granted more than thirty (30) days to complete punch list work, unless there are extenuating circumstances such as delay in shipment of a specialized piece of equipment, labor strike, or other circumstances beyond the Contractor's control which would necessitate a further time extension.

2. **PENALTY FOR FAILURE TO COMPLETE PUNCH LIST WORK WITHIN SPECIFIED TIME**

In the event the Contractor fails to complete the punch list work within thirty (30) days following the contract completion date, or in the case of specialized situations within the additional time allotted by the Engineer, the Contractor may be declared in default, and the Engineer may order the work completed by others.

In the event of default, as described herein, the Engineer shall withhold from the Contractor's final payment, an amount equal to at least twice the estimated cost of the remaining work. In addition, the Engineer shall withhold the retention deducted from contract progress payments until all punch list work has been satisfactorily completed, whereupon twice the amount of the actual cost of completing the work shall be deducted from the Contractor's final payment and the remaining funds, if any, including the contract retention,

shall be released in accordance with the conditions set forth in contract retention.

3. **CONTRACT RETENTION**

This project shall not be considered complete until all work has been completed, including punch list work. Under no circumstances shall a Contractor receive any portion of the legally retained progress payments until the City has granted a final acceptance and/or acknowledged substantial completion. The following conditions shall apply to each case:

1. Substantial Completion: The Engineer may reduce outstanding contract retention to not less than one (1) percent of the total contract amount, upon granting substantial completion, if the value of the punch list work is estimated to be less than one (1) percent of the total contract.
2. Project Acceptance: Project acceptance implies that all punch list work is done and the improvements have been accepted by the City. Under these conditions, the retention will be fully released to the Contractor subject only to the signing of the standard claims affidavit and hold harmless clause required for all contracts.
3. Final Release of Contract Retention and/or Release of More Than Ninety (90) Percent of the Contract Funds: Prior to final payment and release of monies retained and/or in the case of substantial completion where the Contractor has requested a reduction in contract retention, the Contractor will be required to sign a claims affidavit agreeing to hold the City harmless from any and all claims arising out of the contract.

11. **106 CONTROL OF MATERIALS**: Add the following new paragraphs:

106.17 Construction Materials:

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

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

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

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

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

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

immediately preceding manufacturing stage for the construction material.

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

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

12. **107 LEGAL REGULATIONS AND RESPONSIBILITY TO PUBLIC**, Add the following to **Subsection 107.1, LAWS TO BE OBSERVED, paragraph (C)**:

While every effort has been made to Blue Stake all known utilities, and to research and show on the plans all existing underground utilities based on the best available information, it shall be the Contractor's responsibility to locate and pothole all existing utilities sufficiently in advance of anticipated new underground construction to identify any potential conflicts and allow reasonable time for the Engineer to determine solutions. Any claims for additional compensation or work required due to the Contractor's non-compliance with this provision shall not be considered for payment by the City.

13. **107 LEGAL REGULATIONS AND RESPONSIBILITY TO PUBLIC**, Add the following new paragraphs to **Subsection 107.1, LAWS TO BE OBSERVED**:

(A) FAIR TREATMENT OF WORKERS

The Contractor shall keep fully informed of all Federal and State laws, County and City ordinances, regulations, codes and all orders and decrees of bodies or tribunals having any jurisdiction or authority, which in any way affect the conduct of the work. He shall at all times observe and comply with all such laws, ordinances, regulations, codes, orders and decrees; this includes, but is not limited to laws and regulations ensuring fair and equal treatment for all employees and against unfair employment practices, including OSHA and the Fair Labor Standards Act (FLSA). The Contractor shall protect and indemnify the Contracting Agency and its representatives against any claim or liability arising from or based on the violation of such, whether by himself or his employees.

14. **107 LEGAL REGULATIONS AND RESPONSIBILITY TO PUBLIC**, Add the following to **Subsection 107.2, PERMITS**:

1. HAUL PERMIT

On any project, when the quantity of fill or excavation to be hauled exceeds 10,000 C.Y. or when the duration of the haul is for more than twenty (20) working days, the Contractor shall:

- A. Obtain approval of the proposed haul route, number of trucks, etc., by the Street Transportation Department, and then;
- B. Submit the proposed haul route plan to the Planning and Development Department and pay the appropriate plan-review fee (contact Planning and Development Department at 602-534-5933 for current plan review fee, the cost of which shall be considered incidental to the project), and after their approval;
- C. Obtain the written haul permit from the Planning and Development Department.

NOTE: Obtaining the haul permit and the approval by Street Transportation does not release the Contractor from strict compliance with MAG Subsection 108.5, Limitation of Operations.

2. **STORM WATER POLLUTION PREVENTION PLAN AND AZPDES PERMIT**

Any project that disturbs 1 acre or more of the ground surface requires the Contractor to obtain an AZPDES permit and prepare a SWPPP. This project does require an AZPDES permit and SWPPP.

3. **DUST PERMIT**

Any project that disturbs more than 1/10 acre of soil requires an earthmoving permit from Maricopa County. Information and forms can be found at:

www.maricopa.gov/aq/divisions/permit_engineering/applications/Default.aspx

To facilitate and encourage strict compliance with the Maricopa County Air Pollution Control Regulations pertaining to fugitive dust control, the Contractor shall submit the following documentation to the Engineer at the Pre-Construction meeting prior to conducting any earth moving or dust generating activities under the Contract.

- a. Copy of a valid Maricopa County Earth Moving (Dust Control) Permit applicable to the work or services under the Contract.
- b. Copy of the Dust Control Plan applicable to the work or services under the Contract.
- c. Documentation that all of the Contractor's on-site project managers have received the Comprehensive or Basic dust control training as required by Maricopa County Rule 310 based on project disturbed acres.

For construction sites where 5-acres or more are disturbed, the Contractor shall designate and identify to the City an individual who has completed the dust control training as required for the site Dust Control Coordinator. The Dust Control Coordinator shall be present on-site all times that earth moving or dust generating activities are occurring and until all ground surfaces at the site have been stabilized.

For construction sites less than 1-acre, the Contractor shall designate an individual who has completed Basic Training to be on site at all times that earth moving or dust generating activities are occurring.

The Contractor shall notify the Engineer within twenty-four (24) hours of any inspection, Notice of Violation, or other contact by the Maricopa County Air Quality Department with it or any of its subcontractors regarding the work or services under the Contract. A copy of any written communications, notices or citations issued to Contractor or any of its subcontractors regarding the work or services under the Contract shall likewise be transmitted to the Engineer within twenty-four (24) hours.

The Contractor shall prevent any dust nuisance due to construction operations in accordance with MAG Specifications, Section 104.1.3, Cleanup and Dust Control. The Contractor shall use a power pick-up broom as part of the dust control effort. No separate measurement or payment will be made for cleanup or dust control, or for providing a power pick-up broom on the job.

The Contractor agrees to indemnify and reimburse the City for any fine, penalty, fee or

monetary sanction imposed on the City by Maricopa County arising out of, or caused by the performance of work or services under the Contract. The Contractor shall remit payment of the reimbursable sum to the City within thirty (30) days of being presented with a demand for payment from the City.

4. TEMPORARY RESTRICTION AND CLOSURE SYSTEM (TRACS) PERMIT

The Contractor shall obtain a TRACS permit for any construction that restricts access (partial or complete closures) on Major/Collector public streets, or complete closures on Local streets, sidewalks, bike lanes and alleys. The Contractor shall obtain this permit in accordance with the City of Phoenix Traffic Barricade Manual, latest edition. The Contractor shall follow all requirements of the TRACS permit during construction. The Contractor shall obtain this permit before the Notice to Proceed date. Any construction delays caused by non-compliance with the TRACS permit or the City of Phoenix Traffic Barricade Manual requirements shall be the responsibility of the Contractor.

5. DEMINIMUS DISCHARGE PERMIT

As required, if the Contractor anticipates the discharge of any amount of water from the City water or wastewater system during construction, the Contractor shall be responsible for obtaining a DeMinimus Permit from the Arizona Department of Environmental Quality (ADEQ) for any discharge that will reach "waters of the U.S.", either directly or indirectly, and complying with all requirements of that permit. This includes all compliance reporting required by the permit. No separate payment will be made for obtaining or complying with this permit.

- 15. 107 LEGAL REGULATIONS AND RESPONSIBILITY TO PUBLIC, Revise the title of Subsection 107.4 ARCHAEOLOGICAL REPORTS to 107.4 ARCHAEOLOGICAL MONITORING AND DISCOVERIES, and add the following:**

Archaeological monitoring may be required within the limits of the project during construction. The Contractor must coordinate all ground disturbing work with the archaeologist(s) and provide a current work schedule to facilitate the archaeologist's investigation and monitoring of all ground disturbing work within the area(s) of interest. When archaeological materials are discovered, the Contractor must stop work immediately within a 10-meter zone of the discovery, secure the area, and immediately notify the on-site archaeologist(s) who must then contact the City Archaeology Office (602-495-0901) or the Street Transportation Environmental Section at 602-534-3747, who will coordinate with the City Archaeology Office. The Contractor must not recommence work in the area of discovery until directed in writing by the City Archaeology Office.

If suspected archaeological materials are discovered during construction without an archaeologist present, the Contractor must stop work immediately within a 10-meter zone of the discovery, secure the area, and immediately notify the City Archaeology Office (602-495-0901). The Contractor must not recommence work in the area of discovery until directed in writing by the City Archaeology Office.

In 1990, the Arizona legislature amended two state laws (Arizona Antiquities Act & State Historic Preservation Act) that protect human burials and associated artifacts on both private and state land. As specified in these laws and rephrased below:

l) A person shall not knowingly excavate in or upon any historic or prehistoric archaeological site, except when acting as a duly authorized agent of an institution or corporation organized for scientific, research or land use planning purposes. [Arizona Revised Statute §41-841(A) - Archaeological Discoveries] Any person, institution or corporation violating any provision of this article is guilty of a class 2 misdemeanor. [A.R.S. §41-846 - Violation]

2) A person who knowingly excavates in violation of A.R.S. §41-841 is guilty of a class 5 felony pursuant to Arizona Criminal Code- Title 13. A second or subsequent violation under this subsection is a class 3 felony. [A.R.S. 17 .OJ - Excavating Certain Sites].

A class 5 felony carries potential penalties of up to two years in prison. If a City of Phoenix (City) project may impact historic or pre-historic archaeological resources, the guidelines described above must be adhered to. Therefore, no subsurface disturbance activities related to this without having an archaeological consultant on-site prior to and during this project's ground disturbance activities.

The City of Phoenix Office of the City Engineer is requesting that the Project Archaeological Requirements Acknowledgment Form is completed for all City sponsored or managed projects involving ground subsurface disturbance activities in areas that may include archaeological resources, as determined by the City of Phoenix Archaeology Office (CAO). If archaeological monitoring is required on a project, a City Archaeological Monitoring Acknowledgment form will be provided for your review and signature. The guidelines and the provisions in the Terms and Conditions of the Archaeological Monitoring Form must be followed as prescribed on the form and referenced above in this section. Penalties for non-compliance are detailed on the Archaeological Monitoring Form. Failure to comply with the requirements of this acknowledgment form and the City contract may constitute a breach of contract

16. **107 LEGAL REGULATIONS AND RESPONSIBILITY TO PUBLIC**, Add the following to **Subsection 107.7 BARRICADES AND WARNING SIGNS:**

(Note to PM'S: ADD the highlighted paragraph if project is funded under the Bipartisan Infrastructure Law (BIL), also known as the Infrastructure Investment and Jobs Act. Funding under the BIL will run until 2026 however, projects may carry on beyond this date.

BUILDING A BETTER AMERICA SIGNAGE

Contractor shall furnish Building A Better American signs for display at project sites for projects funded under the Bipartisan Infrastructure Law, also known as the Infrastructure Investment and Jobs Act.

There is one approved mark associated with the Building a Better America logo. To preserve the integrity of the Building a Better America logo mark, mark sure to apply them correctly. Altering, distorting, or recreating the 'marks' in any way weakens the power of the image and what it represents.

The colors, graphics, and fonts used should conform to graphic standards.

See logo guidelines for the Building a Better America signs at the link below:

<https://www.phoenix.gov/find-it/Pages/results.aspx?k=signage>

17. **107 LEGAL REGULATIONS AND RESPONSIBILITY TO PUBLIC**, Modify **Subsection 107.8, USE OF EXPLOSIVES** as follows:

Replace the words "Uniform Fire Code" with "Phoenix Fire Code".

18. **107 LEGAL REGULATIONS AND RESPONSIBILITY TO PUBLIC**, Add the following to **Subsection 107.8, USE OF EXPLOSIVES:**

(Note to PM's: A variant of this special provision may be useful to you on certain projects. Use as applicable.)

While geotechnical information indicates some areas of hard rock, **NO BLASTING** will be allowed on this project due to the close proximity of critical PCCP transmission water mains, as well as many businesses and residences in the area.

19. **107 LEGAL REGULATIONS AND RESPONSIBILITY TO PUBLIC**, Add the following to **Subsection 107.11, CONTRACTOR'S RESPONSIBILITY FOR UTILITY PROPERTY AND SERVICES**:

1. **UNDERGROUND FACILITIES**

The Contractor will make whatever investigation it deems necessary to verify the location of underground utility facilities. If such facilities are not in the location shown in the drawings, then (regardless of whether this is discovered prior to or during construction) the contractor's remedies, if any, pursuant to Art. 6.3, Chapter 2, Title 40, A.R.S. (A.R.S. 40-360.21 through 40-360.32, "Underground Facilities"), shall be the contractor's sole remedy for extra work, delays and disruption of the job, or any other claim based on the location of utility facilities. Locations of utility facilities shown on drawings furnished by the City are to be regarded as preliminary information only, subject to further investigation by the contractor. The City does not warrant the accuracy of these locations, and the contractor, by entering into this contract, expressly waives and disclaims any claim or action against the City under any theory for damages resulting from location of utility facilities.

The Contractor shall be responsible for obtaining all Blue Stake utility location information, and for performing all requirements as prescribed in A.R.S. 40-360.21 through .29, for all underground facilities, including those that have been installed on the current project, until the project is accepted by the City.

At least two (2) working days prior to commencing any excavation, the Contractor shall call the BLUE STAKE CENTER, between the hours of 7:00 a.m. and 4:30 p.m., Monday through Friday for information relative to the location of buried utilities. The number to be called is as follows:

Maricopa County (602) 263-1100

2. **UTILITY-RELATED CONSTRUCTION DELAY DAMAGES CLAIM PROCEDURES**

The following procedure is intended to provide a fair and impartial process for the settlement of construction delay claims associated with unknown or improperly located utility facilities.

The Contractor shall immediately notify, in writing, the Project Engineer of any potential utility-related delay claim.

The Contractor shall immediately notify the appropriate liaison of the affected utility verbally, followed by a written notification.

The Contractor shall coordinate an investigation of the situation with the affected utility and the City's Utility Coordinator. After resolution, the Contractor will provide written notification of the settlement of the claim to all affected parties. If the affected utility makes a decision to handle negotiations for a claim, their personnel will be responsible for monitoring the project and all negotiations with the Contractor regarding the claim.

The Contractor shall determine to document requirements of the affected utility for their acceptance of responsibility for the claims. The Contractor shall provide four (4) copies of the required documentation to the utility involved and two (2) copies of this documentation to the Project Engineer. The Contractor shall obtain written confirmation from the utility company involved of their documentation requirements.

20. **108 COMMENCEMENT, PROSECUTION AND PROGRESS** Add the following to **Subsection 108.2, SUBLETTING OF CONTRACT:**

(F) PROMPT PAYMENT

1. Contractor Payment to Subcontractor or Supplier

Contractor shall pay its subcontractors or suppliers within seven (7) calendar days of receipt of each progress payment from the City. The Contractor shall pay for the amount of work performed or materials supplied by each subcontractor or supplier as accepted and approved by the City with each progress payment. In addition, any reduction of retention by the City to the Contractor shall result in a corresponding reduction to subcontractors or suppliers who have performed satisfactory work. Contractor shall pay subcontractors or suppliers the reduced retention within fourteen (14) days of the payment of the reduction of the retention to the Contractor. No Contract between Contractor and its subcontractors and suppliers may materially alter the rights of any subcontractor or supplier to receive prompt payment and retention reduction as provided herein. If the Contractor fails to make payments in accordance with these provisions, the City may take any one or more of the following actions and Contractor agrees that the City may take such actions: (1) to hold the Contractor in default under this agreement; (2) withhold future payments including retention until proper payment has been made to subcontractors or suppliers in accordance with these provisions; (3) reject all future bids from the Contractor for a period not to exceed one year from substantial completion date of this project; or (4) terminate agreement.

2. Alternative Dispute Resolution Between Contractor and Subcontractor or Supplier

If Contractor's payment to a subcontractor or supplier is in dispute, Contractor and subcontractor or supplier agree to submit the dispute to any one of the following dispute resolution processes within fourteen (14) calendar days from the date that any party involved gives written notice to the other party(ies): (1) binding arbitration; (2) a form of alternative dispute resolution (ADR) agreeable to all parties; or (3) a City of Phoenix facilitated mediation. When disputed claim is resolved through ADR or otherwise, the Contractor and subcontractor or supplier agree to implement the resolution within seven (7) calendar days from the resolution date.

3. Inspection and Audit

Contractor, its subcontractors and suppliers shall comply with A.R.S. 35-214 and the City shall have all rights and remedies to inspect and audit the records and files of Contractor, subcontractor or supplier, as afforded the State of Arizona in accordance with the provisions of A.R.S. Section 35-214.

4. Non-Waiver

Should the City fail or delay in exercising or enforcing any right, power, privilege, or remedy under this Section, such failure or delay shall not be deemed a waiver, release, or modification of the requirements of this Section or of any of the terms or provisions thereof.

5. Inclusion of provisions in Subcontracts

Contractor shall include these prompt payment provisions in every subcontract, including procurement of materials and leases of equipment for this Agreement.

6. No Third Party Benefits or Rights

Nothing contained in this Agreement is intended to benefit or confer any rights on any

person or entity not a party to this Agreement, and no such person or entity, including but not limited to other Contractors, subcontractors or suppliers, may assert any claim, cause of action, or remedy against the City hereunder.

21. **108 COMMENCEMENT, PROSECUTION AND PROGRESS**, Add the following to **Subsection 108.4, CONTRACTOR'S CONSTRUCTION SCHEDULE**:

No later than one (1) week after the Pre-Construction meeting (or one week after the Notice to Proceed date is firmly established), the Contractor shall submit to the Engineer, two (2) copies of a detailed Critical Path Model (CPM) chart outlining the detailed progress of all major and critical elements of the project by weeks, from beginning of project to end. The chart shall begin at the established Notice to Proceed date and progress on a calendar basis, week by week, to the end of the project.

The Contractor shall submit updated CPM charts as required by the Engineer. This shall typically be on a monthly basis. The required submittals of updated CPM charts may be less frequent than monthly, if approved by the Engineer.

Neither the City nor the Engineer shall accept liability or responsibility for the reasonable or workable nature of the CPM schedules prepared and submitted by the Contractor—that responsibility shall remain with the Contractor.

22. **108 COMMENCEMENT, PROSECUTION AND PROGRESS**, Add the following to **Subsection 108.5, LIMITATION OF OPERATIONS**:

1. **WORK HOURS**

Regular working hours shall be defined as one 8-1/2 hour shift per day, Monday through Friday, exclusive of City holidays.

Work in excess of regular working hours shall be defined as overtime. For overtime which becomes necessary, the Contractor shall make a written request to the Engineer at least eight (8) calendar days before the desired overtime. The request shall include the duration, dates, times, reason for overtime, and a statement of the consequences if overtime is not approved.

The Contractor shall not schedule any overtime work which requires inspection, survey, or material testing without written permission from the Engineer two (2) working days before the proposed overtime work. The Engineer reserves the right to deny the requested overtime. If an overtime request is denied, the Engineer may extend the contract time at no additional cost to the City, including extended overhead costs.

Unscheduled Overtime

Overtime that is not requested and approved in accordance with the above procedure shall be defined as unscheduled overtime. All costs (including appropriate overhead) shall be paid by the Contractor by deduction from the contract.

Emergency Overtime

An emergency is defined as work required for a situation that is not within the Contractor's control.

With the Engineer's approval, the Contractor will be permitted to work overtime without being responsible for paying the City's costs.

2. **NIGHT WORK**

Any proposed night work will be done in accordance with all City of Phoenix Ordinances. Night work will only be allowed upon submittal and approval of After-Hours Work in the Right-of-Way application. The Contractor will submit a comprehensive plan at the Preconstruction Conference that details the steps and methods of noise reduction during night working hours. This plan will address, but not be limited to the following: back-up alarms, equipment noise, scheduling of excessively noisy construction phases, and material delivery times. Spotters, in lieu of back-up alarms, may be required at night.

There will be no separate measurement or payment for work related to this item, the cost being considered incidental to the cost of contract items.

23. **108 COMMENCEMENT, PROSECUTION AND PROGRESS**, Add the following to **Subsection 108.10, FORFEITURE AND DEFAULT OF CONTRACT**:

City's Right to Perform and Terminate for Convenience

If the City provides the Contractor with a written order to provide adequate maintenance of traffic, adequate cleanup, adequate dust control or to correct deficiencies or damage resulting from abnormal weather conditions, and the Contractor fails to comply in a time frame specified, the City may have work accomplished by other sources at the Contractor's expense.

If Contractor persistently fails to (i) provide a sufficient number of skilled workers, (ii) supply the materials required by the Contract Documents, (iii) comply with applicable Legal Requirements, (iv) timely pay, without cause, Sub-consultants and/or Subcontractors, (v) prosecute the Contract Services with promptness and diligence to ensure that the Contract Services are completed by the Contract Time, as such times may be adjusted, or (vi) perform material obligations under the Contract Documents, then the City, in addition to any other rights and remedies provided in the Contract Documents or by law, shall have the rights set forth below.

Upon the occurrence of an event set forth above, City may provide written notice to Contractor that it intends to terminate the Agreement unless the problem cited is cured, or commenced to be cured, within seven (7) days of Contractor's receipt of such notice.

If Contractor fails to cure, or reasonably commence to cure, such problem, then City may give a second written notice to Contractor of its intent to terminate within an additional seven (7) day period.

If Contractor, within such second seven (7) day period, fails to cure, or reasonably commence to cure, such problem, then the City may declare the Agreement terminated for default by providing written notice to Contractor of such declaration.

Upon declaring the Agreement terminated pursuant to the above, City may enter upon the premises and take possession, for the purpose of completing the Work, of all materials, equipment, scaffolds, tools, appliances and other items thereon, which have been purchased or provided for the performance of the Work, all of which Contractor hereby transfers, assigns and sets over to City for such purpose, and to employ any person or persons to complete the Work and provide all of the required labor, services, materials, equipment and other items.

In the event of such termination, Contractor shall not be entitled to receive any further payments under the Contract Documents until the Work shall be finally completed in accordance with the Contract Documents. At such time, the Contractor will only be entitled to be paid for Work performed and accepted by the City prior to its default.

If City's cost and expense of completing the Work exceeds the unpaid balance of the Contract

Price, then Contractor shall be obligated to pay the difference to City. Such costs and expense shall include not only the cost of completing the Work, but also losses, damages, costs and expense, including attorneys' fees and expenses, incurred by the City in connection with the procurement and defense of claims arising from Contractor's default.

If the City is found to have improperly terminated the Agreement for cause or default, the termination shall be converted to a termination for convenience in accordance with the provisions of this Agreement.

24. **108 COMMENCEMENT, PROSECUTION AND PROGRESS**, Add the following to **Subsection 108.11, TERMINATION OF CONTRACT**:

TERMINATION FOR CONVENIENCE

The Owner for its own convenience has the right for any reason and at any time to terminate the contract and require the Contractor to cease work hereunder. Such termination shall be effective at the time and in the manner specified in the notification to the Contractor of the termination. Such termination shall be without prejudice to any claims which the Owner may have against the Contractor. In the event of a termination for convenience, the Contractor shall be paid only the direct value of its completed work and materials supplied as of the date of termination, and Contractor shall not be entitled to anticipated profit or anticipated overhead or any other claimed damages from the Owner, Architect or the Engineer. If the City is found to have improperly terminated the Agreement for cause or default, the termination shall be converted to a termination for convenience in accordance with the provisions of this Agreement.

CANCELLATION OF CONTRACT FOR CONFLICT OF INTEREST

All parties hereto acknowledge that this agreement is subject to cancellation by the City of Phoenix pursuant to the provisions of Section 38-511, Arizona Revised Statutes.

25. **109 MEASUREMENTS AND PAYMENTS**, Add the following to **Subsection 109.4.3, DUE TO EXTRA WORK**:

ALLOWANCE FOR EXTRA WORK

Contract allowance items are provided for the purpose of encumbering funds to cover the costs of possible change order work. The amount of the allowance item is determined by the Engineer and is not subject to individual bid pricing. All bidders shall incorporate the amount pre-entered in the bid proposal and shall reflect the same in the total amount bid for this project.

This allowance item provides an estimated funding to cover unforeseen changes that may be encountered and corresponding extra work needed to complete the contract per plan. Unforeseen extra work, if any, shall be as approved by the Engineer; for example, extension of unit bid prices, negotiated price or time and material, in accordance with MAG Specification Section 109.4 and 109.5.

It shall be understood that this allowance item is an estimate only and is based on change order history of similar projects. It shall not be utilized without an approved contract change order. It is further understood that authorized extra work, if any, may be less than the allowance item.

26. **109 MEASUREMENTS AND PAYMENTS**, Add the following to **Subsection 109.4 COMPENSATION FOR ALTERATION OF WORK**:

109.4.7 CHANGE ORDERS

Owner reserves the right to decrease adjustments made in any change order if, upon audit of Contractor's records, the audit discloses contractor provided false or inaccurate cost and pricing

data in negotiating the change order. In enforcing this provision, the parties shall follow the procedure provided in the Federal Acquisition Regulation (FAR) clause 52.214-27, found in 48 CFR Part 52.

27. **109 MEASUREMENTS AND PAYMENTS Subsection 109.7, PAYMENT FOR BOND ISSUE AND BUDGET PROJECTS**, Delete the first three paragraphs in their entirety and replace with the following **Subsection 109.7, PAYMENT FOR BOND ISSUE AND BUDGET PROJECTS**:

1. PARTIAL PAYMENTS

The contracting agency will make a partial payment to the Contractor on the basis of an approved estimate prepared by the Engineer or the Contractor for work completed and accepted through the preceding month. The notice to proceed date, which is designated for the specific project involved, will be used as the closing date of each partial pay period. Payment will be made no later than fourteen (14) days after the work is certified and approved. City shall review payment requests and make recommendation of approval or denial within seven (7) calendar days.

2. PAYMENT RETENTION

At the start of construction, ten percent of all pay requests shall be retained by the City to guarantee complete performance of the contract. When the work is fifty percent complete, this amount may be reduced to five percent providing that construction progress and quality of work is acceptable to the City. Any funds which are withheld from the contractor will be paid no later than sixty days after completion of the contract and settlement of all claims.

In lieu of retention, the contractor may provide as a substitute, an assignment of money market accounts, demand deposit accounts, or time certificates of deposit (CDs) from a bank licensed by Arizona, securities guaranteed by the United States, securities of the United States, the State of Arizona, Arizona counties, Arizona municipalities, Arizona school districts, or shares of savings and loan institutions authorized to transact business in Arizona. These securities are referred to as "Qualified Securities."

Qualified Securities deposited in lieu of retention must be deposited into a separate account with a bank having a branch located in the City of Phoenix and be assigned exclusively for the benefit of the City of Phoenix pursuant to the City's form of escrow and/or deposit agreement

Escrow Agreement and Deposit Agreement forms may be obtained from the Contract Specialist assigned to the project.

28. **109 MEASUREMENTS AND PAYMENTS**, Add the following to **Subsection 109.4 COMPENSATION FOR ALTERATION OF WORK**:

109.4.7 CHANGE ORDERS

Owner reserves the right to decrease adjustments made in any change order if, upon audit of Contractor's records, the audit discloses contractor provided false or inaccurate cost and pricing data in negotiating the change order. In enforcing this provision, the parties shall follow the procedure provided in the Federal Acquisition Regulation (FAR) clause 52.214-27, found in 48 CFR Part 52.

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1. PARTIAL PAYMENTS

The contracting agency will make a partial payment to the Contractor on the basis of an approved estimate prepared by the Engineer or the Contractor for work completed and accepted through the preceding month. The notice to proceed date, which is designated for the specific project involved, will be used as the closing date of each partial pay period. Payment will be made no later than fourteen (14) days after the work is certified and approved. City shall review payment requests and make recommendation of approval or denial within seven (7) calendar days.

2. PAYMENT RETENTION

At the start of construction, ten percent of all pay requests shall be retained by the City to guarantee complete performance of the contract. When the work is fifty percent complete, this amount may be reduced to five percent providing that construction progress and quality of work is acceptable to the City. Any funds which are withheld from the contractor will be paid no later than sixty days after completion of the contract and settlement of all claims.

In lieu of retention, the contractor may provide as a substitute, an assignment of money market accounts, demand deposit accounts, or time certificates of deposit (CDs) from a bank licensed by Arizona, securities guaranteed by the United States, securities of the United States, the State of Arizona, Arizona counties, Arizona municipalities, Arizona school districts, or shares of savings and loan institutions authorized to transact business in Arizona. These securities are referred to as "Qualified Securities."

Qualified Securities deposited in lieu of retention must be deposited into a separate account with a bank having a branch located in the City of Phoenix and be assigned exclusively for the benefit of the City of Phoenix pursuant to the City's form of escrow and/or deposit agreement

Escrow Agreement and Deposit Agreement forms may be obtained from the Contract Specialist assigned to the project.

30. **109 MEASUREMENTS AND PAYMENTS, Delete Table 109-1 in Subsection 109.9, DOLLAR VALUE OF MAJOR ITEM,** and substitute the following:

<u>CONTRACT AMOUNT</u>	<u>MAJOR ITEM IS DEFINED AS ANY ITEM EQUAL TO OR GREATER THAN THE FOLLOWING</u>
Up to \$1 million	\$15,000 or 3%, whichever is greater
\$1 million to \$3 million	3% of the original contract amount to a maximum of \$75,000.00
\$3 million to \$5 million	2.5% of the original contract amount to a maximum of \$90,000.00
Over \$5 million	1.5% of the original contract amount to a maximum of \$125,000.00

CONTINGENCY ITEMS

Contingency items which fall under the definition of a major item are subject to negotiation if decreased by more than twenty (20) percent.

Contingency items shall not increase more than twenty (20) percent without being subject to renegotiation, regardless of the percentage of that item relative to the total contract amount.

31. **110 NOTIFICATION OF CHANGED CONDITIONS AND DISPUTE RESOLUTION**, Add the following to **Subsection 110.1 GENERAL**:
SOILS INFORMATION

The material boring logs shown on the plans or included in these specifications are included for the Contractor's convenience only. It is not intended to imply that the character of materials shown in the logs is representative throughout the project. **The soil borings are indicative of the soil characteristics only at the location and to the depth of each of the borings.**

Even if not specifically shown in the geotechnical information provided, the Contractor may encounter large cobbles, boulders, caliche, conglomerate, hard rock, perched groundwater, historic or prehistoric cultural resources, or other differing site conditions on this project. **No additional compensation will be made for any differing site condition that may be encountered.**

SPECIAL PROVISIONS

1. Add the following new Section, **232 STORM WATER POLLUTION PREVENTION – BEST MANAGEMENT PRACTICES**:

Description

Implementation of "Best Management Practices" (B.M.P.'s) to reduce stormwater pollution shall be undertaken by the Contractor on a multi-tiered, most cost-effective approach. The Contractor shall utilize the lowest-cost acceptable B.M.P. available to address each type of potential stormwater pollution situation encountered on the project. Should this prove ineffective in resolving the stormwater pollution problem, additional, higher-cost B.M.P.'s may need to be employed, upon approval by the City.

Construction Requirements

Typical multi-tiered B.M.P. approaches to construction operations may include:

A. ROADWAY SUBGRADE EXCAVATION:

1. Tier I - The excavated area will create, in effect, a temporary retention area. This may provide adequate control of storm runoff to prevent sediment from leaving the site. Pumping or other methods utilized to drain the excavation shall employ filter fabric or other filtering method to remove sediment before leaving the site or entering the storm drain system.
2. Tier II - Catch basin inlet protection (utilizing filter fabric, gravel, etc.) may be necessary should Tier I controls prove inadequate. Care shall be exercised to ensure that Tier II B.M.P.'s do not result in blockage of drainage and resultant flooding of adjacent properties.

B. OPEN PIPELINE TRENCHES:

1. Tier I - The open trench itself will act as a temporary retention area. The Contractor shall provide a low-cost, readily-installed/removed temporary device on the open end of the pipe to prevent sediment-laden stormwater from entering the pipe. This may consist of a temporary "plug" incorporating filter fabric, a temporary weir, or other device capable of removing sediment before allowing stormwater to enter the pipe. Care must be taken to prevent damming of floodwaters in the excavation that could result in "floating" the pipe.
2. Tier II - If Tier I protection does not prove satisfactory, the Contractor may need to install straw bales, sandbag berms, or temporary diversion dikes around the perimeter of the open excavation to prevent sediment-laden stormwater from entering the open excavation. Due to installation/removal time, such devices need only be installed during periods of likely precipitation and runoff. Earthen dikes are the preferred alternate, due to ease of installation and removal. Care must be taken to assure that runoff is not blocked to the extent that flooding of adjacent properties will result.

C. BACKFILLED PIPELINE TRENCHES:

1. Tier I - As with roadway subgrade excavations, pipeline trenches which have been backfilled but not yet paved will be several inches lower than adjacent pavement areas, and will

therefore act as temporary retention areas.

2. Tier II - If the "retention" provided by the backfilled area does not prevent sediment-laden runoff from leaving the excavated area, perimeter controls such as silt fence, straw bales, sandbag berms, or gravel filter berms may need to be installed around the downstream edge(s) of the backfilled area. As with open trenches, the selection of the appropriate measure, extent of its application, and time period during which it is needed will be dependent upon cost, site conditions, ease of installation/removal, and likelihood of precipitation/runoff. Again, care must be taken to ensure that diversion of stormwater onto adjacent properties does not result from these installations.

Another stormwater control method, which the Contractor may need to consider, is limiting the amount of area disrupted and therefore subject to sediment-laden stormwater runoff at any one time. Should such project phasing prove necessary due to the failure of other B.M.P.'s, the Contractor shall revise his construction activities accordingly, at no additional cost to the City.

Standards for installation of the above B.M.P.'s are provided in the Flood Control District of Maricopa County's "Drainage Design Manual for Maricopa County, Arizona, Volume III, Erosion Control". Installation and operation of B.M.P.'s shall be in accordance with that manual.

There shall be no separate measurement or payment for preparing or developing Storm Water Pollution Prevention Plans, or for preparing NOI's or NOT's or obtaining an AZPDES Permit, all these costs being considered incidental to the cost of the project.

Use of individual BMP items shall conform to the Contractor's approved Storm Water Pollution Prevention Plan (SWPPP).

Measurement and Payment

This project includes a pay item "ALLOWANCE FOR STORMWATER POLLUTION PREVENTION BEST MANAGEMENT PRACTICE (BMP'S)". The amount of this allowance is determined by the Engineer and is not subject to individual bid pricing. All bidders shall incorporate the amount pre-entered in the bid proposal and shall reflect the same in the total amount bid for this project.

Payment for various types of necessary BMP's shall be made from this allowance based on approved invoiced cost of the materials only, plus taxes, and a maximum 15 percent markup for overhead and profit. There will be no separate measurement or payment for the preparation or development of the Storm Water Pollution Prevention Plan; labor or equipment necessary to install, maintain or remove the BMP materials; moving existing BMP materials from one location to another on the same project; or constructing BMP swales or berms, all of these costs being considered incidental to the cost of the project.

2. **301 SUBGRADE PREPARATION:** Add the following to **Subsection 301.1, DESCRIPTION:**

The work under Subgrade Preparation consists of all excavating and grading work necessary to bring the existing surface to the section specified on the plans prior to the covering of the prepared subgrade with pavement base materials.

3. **301 SUBGRADE PREPARATION,** Delete **Subsections 301.7, MEASUREMENT, and 301.8, PAYMENT,** and substitute the following:

301.7 MEASUREMENT:

Measurement for subgrade preparation shall be made by the square yard of the roadway areas excavated and graded and subsequently covered with pavement base materials. Payment for necessary grading for items outside of the lip of gutter shall be included in the cost of those items.

301.8 PAYMENT

There will be no separate measurement or payment for work related to this item, the cost being considered incidental to the price bid for Type D pavement replacement per square yard.

4. **321 PLACEMENT AND CONSTRUCTION OF ASPHALT CONCRETE PAVEMENT**, Add the following to **Subsection 321.1 DESCRIPTION:**

Residential Street: 4 inches Type C-3/4 on 100% compacted native subgrade.

Collector Street: 6 inches Type C-3/4 on 100% compacted native subgrade.

Major Arterial Street: 8 inches Type C-3/4 on 100% compacted native subgrade.

5. **321 PLACEMENT AND CONSTRUCTION OF ASPHALT CONCRETE PAVEMENT**, Refer to 2015 City of Phoenix Supplements for the following item **Subsection 321.10 ACCEPTANCE:**

6. **336 PAVEMENT MATCHING AND SURFACING REPLACEMENT**, Add the following to **Section 336 PAVEMENT MATCHING AND SURFACING REPLACEMENT:**

PERMANENT PAVEMENT REPLACEMENT (ASPHALT CONCRETE)

Description

Unless otherwise specified on the plans, pavement replacement sections shall be as follows:

Residential Street: 4 inches Type C-3/4 on 100% compacted native subgrade.

Collector Street: 6 inches Type C-3/4 on 100% compacted native subgrade.

Major Arterial Street: 8 inches Type C-3/4 on 100% compacted native subgrade.

Measurement and Payment

Measurement and payment for permanent pavement replacement will be by the square yard, complete in place, including all necessary subgrade preparation and tack coat. In computing the pay quantity for trench patch pavement replacement, the field measurement along the centerline of the trench and the trench pay width as listed in MAG 336 will be used. When the longitudinal trench is only partially in the pavement, adjustments in the pay width will be made by the Engineer.

There will be no separate measurement or payment for trench backfill. The cost of the backfill is considered included in the cost of the pipe.

7. **340 CONCRETE CURB, GUTTER, SIDEWALK RAMPS, DRIVEWAY AND ALLEY ENTRANCE**, Add the following to **Subsection 340.2.1 Detectable Warnings; Subsection 340.3.1 Detectable Warnings; Subsection 340.5 MEASUREMENT; and Subsection 340.6 PAYMENT:**

Add the following to **MAG Subsection 340.2.1 Detectable Warnings:**

Detectable warning material will meet the latest ADA requirements. Approved detectable warning material manufacturers include the following:

- a. Strongo, TekWay Dome-Tiles
- b. Tuftile, Cast Iron ADA Detectible Warning Plates
- c. Neenah Foundry, Cast Iron Detectable Warning Plate

Alternate materials may be submitted subject to review and approval prior to use. All detectable warnings will be of the same type and color within the project limits, unless otherwise specified.

Add the following to **MAG Subsection 340.2.1.1 Color and Contrast:**

Unless shown otherwise on the plans, the color of the detectable warning tiles to be used shall be terracotta color on grey concrete and yellow color on colored concrete sidewalk ramps – color to be approved by the Engineer.

Add the following to **MAG Subsection 340.3.6 Detectable Warnings:**

Detectable warning plates will be installed per manufacturer's recommended specifications. The layout of plates will be determined by the Contractor, and if necessary, pre-cut as needed prior to beginning the installation process to meet ADA placement requirements. Plates will not be cut to less than half their size. Plates will be cut as recommended by the manufacturer.

Add the following to **Subsection 340. 5 MEASUREMENT and 340.6 PAYMENT:**

Sidewalk Ramps, Measurement and Payment

Sidewalk ramps will be constructed in accordance with Phoenix Standard Details or special details called out on the plans.

There will be no separate measurement or payment for sidewalk ramps. The cost of all concrete removal and replaced is considered incidental and to be included in the cost of the pipe.

Concrete Driveway and Sidewalk, Measurement and Payment

This work will consist of constructing concrete driveway and sidewalk to match existing at locations shown on the plans or requested by the Engineer. The concrete thickness will conform to the applicable driveway or sidewalk detail.

There will be no separate measurement or payment for driveways and sidewalks. The cost of all concrete removal and replaced is considered included in the cost of the pipe.

Curb and Gutter, Measurement and Payment

There will be no separate measurement or payment for curb and gutter. The cost of all concrete removal and

replaced is considered included in the cost of the pipe.

8. **345 ADJUSTING FRAMES, COVERS, VALVE BOXES, AND WATER METER BOXES**, Revise **Subsection 345.1 DESCRIPTION**, **Subsection 345.5 MEASUREMENT**, and **Subsection 345.6 PAYMENT** as follows:

Delete **Subsection 345.1 DESCRIPTION** in its entirety, and substitute the following:

Adjustment of manhole frames, covers, clean outs, valve boxes, survey monument boxes (and water meter boxes if located in the pavement) to finish grade shall be done AFTER placement of the final surface course pavement.

Any missing manhole frames or covers and water valve or survey monument box hardware (such as lids, for example) shall be reported in writing to the Engineer during the initial lowering process to allow arrangements to be made to obtain replacement hardware. Missing hardware that is properly reported to the Engineer will be supplied to the Contractor by the City of Phoenix or the appropriate private utility company.

Replacement of any missing hardware that was not reported to the Engineer initially as specified, that comes up missing later when these facilities are brought back up to finish grade, shall be the full responsibility of the Contractor, at no additional cost to the City.

In addition, all manhole frames and covers, water valve and survey monument boxes or other related hardware removed by the Contractor during the lowering process shall be maintained in a secure area, and the Contractor shall bear full responsibility for this hardware material. Any hardware lost by the Contractor shall be replaced in-kind, at no additional cost to the City.

All areas of existing pavement removed for adjustments that will be subjected to traffic prior to placement of final concrete collar rings shall be temporarily filled with hot-mix Type D-1/2 asphalt and roller-compacted flush with the adjacent pavement. There shall be no separate measurement or payment for this temporary hot-mix asphalt or placement or subsequent removal, the cost being considered incidental to the cost of the adjustment.

After removal of asphalt pavement in the area of adjustment, and prior to placement of the final concrete collar ring around the frame or valve box (as shown on City of Phoenix Detail P-1391 and MAG Detail 422), the asphalt pavement in proximity of the adjustment shall be rolled with a self-propelled, steel wheel roller.

The concrete collar ring around the frame or valve box shall be circular, and shall be a minimum of eight (8) inches thick, placed flush with the adjacent new pavement surface. At a minimum, concrete shall be MAG Class 'AA' on all paved streets. All concrete shall be obtained from plants approved by the Engineer.

A single No. 4 rebar hoop shall be placed in each adjustment collar. The hoop diameter shall be such that its placement is centered between the edge of the manhole frame or valve box, and the outside edge of the concrete collar. The depth of the hoop shall be such that it is centered in the thickness of the collar. Each concrete ring shall be scored radially at quarter-circle points. Score lines shall be 1/4-inch wide by 1/2-inch deep. The concrete collar surface shall be rough broom-finished. All pavement removed for adjustments shall be replaced with concrete.

Traffic shall not be allowed on the collars until the concrete has reached a minimum compressive strength of 2500 psi on residential streets, and 3000 psi on collector and major streets. On major streets, the Contractor shall use "high-early" cement in the concrete mix, approved by the Engineer, to minimize delay in re-opening the street to traffic.

Prior to commencing work on the adjustments, the Contractor shall submit a written adjustment plan and schedule to the Engineer for approval. At the request of the City, the contractor will provide access to all services under construction at no additional cost.

Sewer manhole frames and covers shall be matched, kept together, and replaced to their original locations. The Contractor shall remove existing asphalt, chip seal, or other materials from all sewer manhole covers and water valve box lids to be adjusted on this project. The Contractor's method for removal shall be approved by the Engineer prior to actual work. Cover cleaning shall be completed prior to adjustment of frames. Also, all water valve risers shall be thoroughly cleaned to fully expose the valve operating nut.

QUARTER SECTION MAPS FOR WATER AND SEWER LINES

The Contractor may obtain up to three sets of waterline and sewerline quarter section maps for the streets included in this project after the contract is awarded and issued. To order the maps, the Contractor shall bring an official contract specification book and a list of desired quarter section maps to the Technical Support Services counter on the 8th Floor of City Hall, 200 W. Washington Street. Up to three sets of maps will be provided at no cost to the Contractor. If more than three sets are requested, the Contractor shall purchase the additional sets.

WATER VALVE AS-BUILTS

Upon completion of water valve box adjustments, the Contractor shall provide one complete accurate and clearly legible set of as-built waterline Quarter Section maps to the Engineer. The Contractor shall mark and color code all water valves on the maps as follows:

Blue- All valves shown on the Q.S. map found and adjusted.

Yellow- All valves shown on the Q.S. map but not found in the field.

Red- Any valve not shown on the Q.S. maps but discovered and adjusted. (Draw valve symbol on map at appropriate location and provide offset and location dimensions for valves in this category.)

Delete **MAG Subsections 345.5 MEASUREMENT and 345.6 PAYMENT** and substitute the following:

345.6 PAYMENT

There will be no separate measurement or payment for adjusting NEW manhole frame & covers, valve boxes, sewer clean-out frame & covers or water meter boxes constructed with the project. Payment for adjusting these new facilities is considered included in the price bid for the appropriate new item.

9. Add the following new **Section 346 ADJUSTING NON-CITY UTILITIES** as follows:

346.1 DESCRIPTION

The utility companies may utilize the Contractor to adjust their frames, covers, and valve boxes for this project.

The Contractor shall coordinate with the Engineer and the representatives of the various utilities regarding the adjustment and the inspection requirements of their facilities. The Contractor shall be responsible for obtaining and adhering to the specifications and any other special requirements from the utility companies.

346.2 MEASUREMENT AND PAYMENT

There will be no separate measurement or payment for work related to this item, from the City of Phoenix.

The individual utility companies may negotiate with the Contractor's for a bid price for their portion of adjustments. If the utility company rejects the Contractor's price, the utility company will adjust their own facilities and the item quantity will be adjusted accordingly.

10. **City of Phoenix Supplement to MAG Standard Specification 401 TRAFFIC CONTROL, Modify MAG and COP Supplements to MAG Section 401 as follows:**

401.1 DESCRIPTION:

Contractor shall comply with the City of Phoenix Traffic Barricade Manual (TBM) latest edition and addendums thereof.

Contractor shall coordinate with the following prior to starting work:

- Public Transit
- Local Businesses
- Residents
- City of Phoenix Right-of-Way Inspections
- Streets Public Information Officer
- Community and Economic Development Department
- Right-of-Way Management

11. **401 TRAFFIC CONTROL**, Add the following to **Subsection 401.4 TRAFFIC CONTROL MEASURES:**
SEQUENCE OF CONSTRUCTION

The sequence of construction shall conform to the requirements of the Special Traffic Regulations.

The project shall follow a phasing plan approved by the Engineer. All lanes shall be maintained on a paved surface at all times during construction. This may be accomplished by using existing, new, or temporary asphalt pavement. Trenches shall be completely backfilled and either paved with temporary asphalt pavement, or covered with metal plating as necessary to comply with this requirement and the "Special Traffic Regulations".

Night work will **not** be allowed on this project, unless required by the City of Phoenix. If the City of Phoenix requires work to be done at night, it will be done at no additional cost to the City.

The right to direct the sequence of construction is a function vested solely with the Engineer. Prior to commencement of the work, the Contractor shall prepare and submit to the Engineer, a written phasing plan and work schedule for the project. This plan and work schedule shall be submitted to the Engineer at the Preconstruction Conference for review.

When approved, the phasing plan and work schedule shall not be changed without the written consent of the Engineer. Orderly procedure of all work to be performed under this contract shall be the full responsibility of the Contractor. The work schedule shall include the hours per day and the days per week that the Contractor plans to work on the project site.

12. **401 TRAFFIC CONTROL**, add the following to **Subsection 401.5 GENERAL TRAFFIC REGULATION:**

TRAFFIC REGULATIONS

A. The following shall be considered Arterial streets:

19TH AVENUE

The following shall be considered Collector streets:

**PEORIA AVENUE
15TH AVENUE
MOUNTAIN VIEW ROAD**

- B. All traffic and/or traffic control devices on this project shall be provided, maintained and/or controlled as specified in the City of Phoenix Traffic Barricade Manual, latest edition and addendums thereof.
- C. Permission to restrict City streets, sidewalks and alleys (street closure permits) shall be requested as specified in the City of Phoenix Traffic Barricade Manual, latest edition and addendums thereof.
- D. Unless otherwise provided for in the following "Special Traffic Regulations", all traffic on this project shall be regulated as specified in the City of Phoenix Traffic Barricade Manual, latest edition and addendums thereof.
- E. No deviation to the "Special Traffic Regulations will be allowed or implemented unless submitted to the Engineer for review and approval two (2) weeks prior to proposed work.
- F. Only City of Phoenix certified contractors can set, move, or remove temporary traffic control devices (signs, barricades, etc.). This annual certification can be scheduled by calling 602-262-6235.
- G. Civil Sanctions for temporary traffic control violations apply as follows:

Civil Sanction Per Day	Violation Description
\$1,500	Creating an eminent risk of death or injury to the public within the public right-of-way
\$1,000	Restricting the right-of-way without proper certification or a right-of-way temporary use permit
\$1,000	Restricting traffic during peak traffic hours as described in the <u>Traffic Barricade Manual</u> without authorization
\$1,000	Failing to correct or cure a violation, as listed in this schedule, within the time period stated on the warning notice
\$1,000	Restricting traffic at signalized intersections without any work occurring
	Closing a sidewalk improperly or closing a sidewalk without proper certification or

\$500	closing a sidewalk without a right-of-way temporary use permit
\$500	Violating the restriction limits, times and locations, of the right-of-way temporary use permit
\$500	Missing or improper use of advance warning signs
\$500	Missing or improper use of barricades and channelizing devices
\$250	Leaving advanced warning signs facing traffic after restriction has been removed – per one traffic direction
\$250	Leaving traffic control devices in the right-of-way twenty-four hours after right-of-way temporary use permit expires, unless a request for a permit extension is received by the City prior to the expiration of such permit
\$250	Use of “unacceptable” quality traffic control devices as described in the Traffic Barricade Manual
\$250	Rendering a bus stop inaccessible without relocating it or making other accommodations

H. Parking Meter Fees: To take a parking meter out of service requires a \$35 application fee and \$10 per meter per day.

13. **401 TRAFFIC CONTROL**, Add the following to **Subsection 401.5 GENERAL TRAFFIC REGULATION**:

SPECIAL TRAFFIC REGULATIONS

The Contractor shall be responsible to submit traffic control plans for approval a minimum of 72 hours prior to the date of restriction.

Any Restrictions and/or Closures will only be approved based on scope of work.

Traffic restrictions are not permitted on Arterial/Collector streets during peak traffic hours (6:00 a.m. to 8:30 a.m. and 4:00 p.m. to 6:30 p.m. weekdays). Outside of these hours the following applies:

Arterial Streets

Minimum number of travel lanes to be open to through traffic:

- a. If more than four lanes exist:.....Two will be open each way;
- b. If four or less lanes exist:One will be open each way
- c. On one-way streets:.....Two lanes open

At signalized intersections, a minimum of four lanes (two each way) plus left-turn lanes will be maintained open from 8:30 a.m. to 4:00 p.m., and from 6:30 p.m. to 6:00 a.m., Monday through Fridays including weekends unless otherwise noted within the approved TRACS permit issued to the contractor.

Collector Streets

A minimum of two travel lanes (one each way) will be open to through traffic.

At signalized intersections, a minimum of two lanes (one each way) plus left-turn lanes will be maintained open from 8:30 a.m. to 4:00 p.m., and from 6:30 p.m. to 6:00 a.m., Monday through Fridays including weekends unless otherwise noted within the approved TRACS permit issued to the contractor.

Pre-construction Field Meeting

Prior to requesting a TRACS Permits, the Contractor must coordinate in advance with the construction inspector to schedule a pre-construction field visit. The following personnel shall attend the meeting: Contractor, contracted barricade company, construction inspector and right-of-way inspector.

Nighttime Regulations

To minimize disruption to traffic, crews may be requested to work at night during off-peak hours. In this case, an after-hours permit will be required to authorize work in residential areas. Permits may be granted for up to 30 days for hours including nights, weekends, and holidays and are issued under Phoenix City Code 23-14 for building and roadway construction by the Planning and Development and Street Transportation departments, respectively. The purpose of the permits is to authorize work yet minimize loud and disturbing noises in residential areas due to construction or maintenance activities.

Variable Message Boards

Variable Message Boards (VMB) shall be provided on this project, 24 hours per day, from up to 10 days prior to any roadway closures and from at least 5 days prior to; maintaining a single thru lane at a signalized intersection, restricting left turn movement or 24-hour lane restrictions. The VMB shall remain in place until all roadway traffic restrictions are removed or approval from the area Right-of-Way Inspector.

Special Sign Requirements

The Contractor shall provide, install and maintain advance notification, public informational and directional access signs (for businesses, churches, hospitals, schools, etc.) that may be required by the Engineer. These signs may include, but are not limited to, portable changeable message signs, radar/speed sensing trailers, and other applicable Intelligent Transportation System type devices. The cost shall be included in the bid item for Traffic Control Devices.

No Parking Signs

When used, temporary NO PARKING signs must be placed 72 hours in advance for notification.

Signs should be spaced 80 feet apart for collector and arterial streets. On local Streets, a minimum of one (1) sign must be placed in front of each affected resident not to exceed 80 feet.

Signs must be clearly marked with "Date" to "Date" and the time period of the no parking.

NO PARKING Signs must be new and not reused, dates and times must be legible.

Contractor must provide Parking enforcement a picture of the placement of the no parking sign with a date and time stamp on the picture.



1.500" Radius, 0.375" Border, 0.375" Indent, Red on White;
 "TEMPORARY" B; "NO" B; "PARKING" B;
 "DATE TO DATE" B; "TIMES(S)" B;

Police Officer Requirements

Off-duty police officers are required for construction projects as defined in the most recent edition of the City of Phoenix Traffic Barricade Manual and TRACS permit. The Contractor must competitively procure off-duty police with vendors who are Authorized Traffic Coordinators with the City of Phoenix Police Department or Phoenix Police Department off-duty detail.

The following requirements must be included in the procurement:

1. Hourly fees charged
2. Administrative fees (administrative fees to be charged as a part of the hourly rate, not billed separately)
 - a. Pay applications requesting reimbursement for Off Duty Police hours worked will be accompanied with itemized documentation indicating officer name, date worked, hours worked, time of day worked and location.
 - b. For audit purposes, contractor's files will contain documentation from the successful off duty vendor that the above items are accounted for in the vendor's price proposal.

The Contractor shall provide one off-duty police officer, as defined in the City of Phoenix Traffic Barricade

Manual, at signalized intersections affected from 6:00 a.m. to 6:30 p.m. weekdays, and during working hours nights and weekends when traffic is restricted (as described in the Traffic Barricade Manual).

When construction activities do not restrict traffic through the intersections, police officer hours may be reduced or suspended at the direction of the ROW Inspector.

Signalized Intersection Requirements

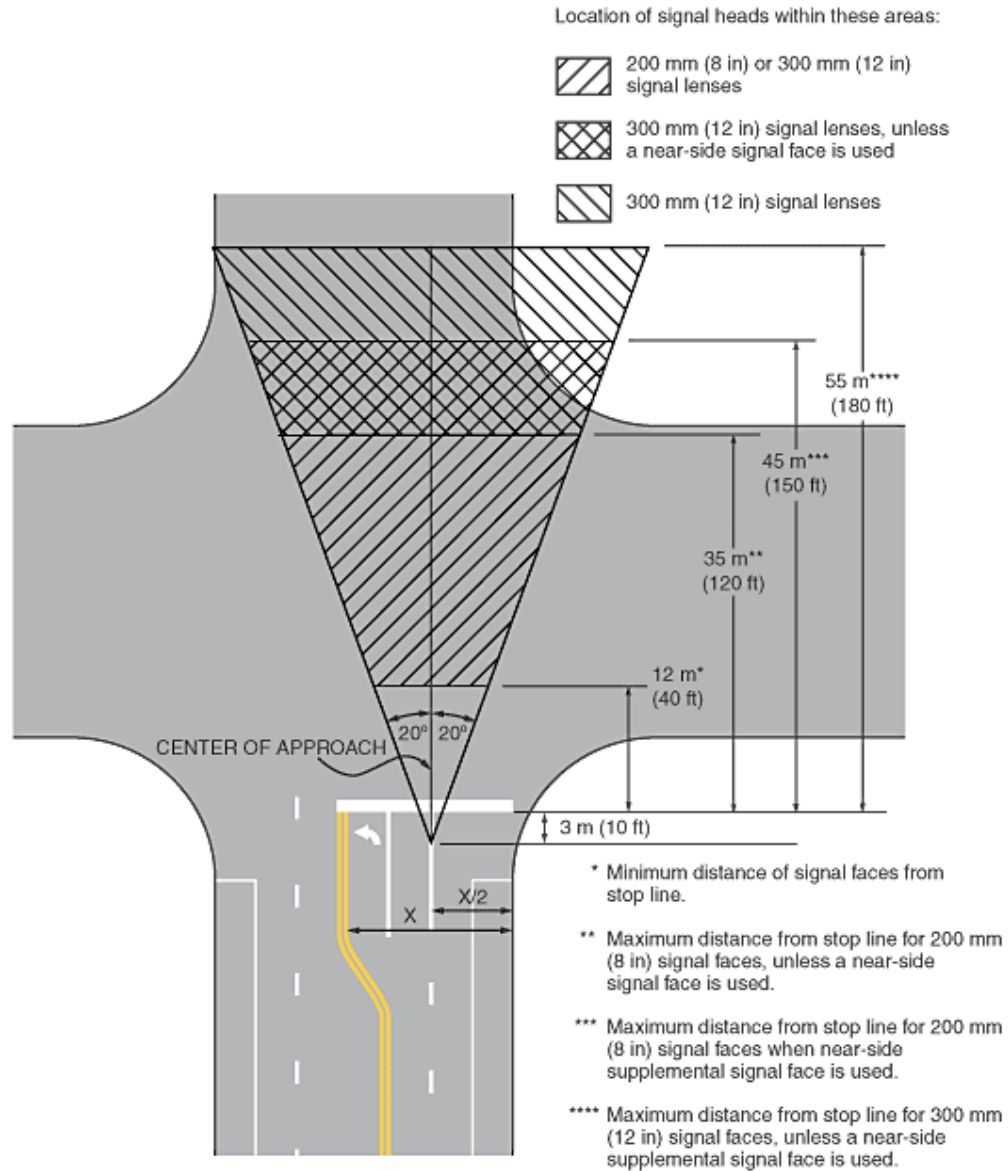
When left turns are prohibited at signalized intersections with left-turn arrow indications or when working in vicinity of a signalized intersection, the contractor will coordinate with the project inspector five days in advance and provide a written schedule indicating days, times and specific locations where left turns will be prohibited or where signals will be interrupted. The project inspector will notify the City Traffic Signal Shop (phxtmc@phoenix.gov) at least 72 hours in advance to make arrangements for arrow indications to be turned off or to coordinated signals being affected by the construction.

The contractor shall maintain the project inspector informed of any schedule changes or when work will be completed. When the work has been completed the inspector will immediately notify Traffic Signal Shop (phxtmc@phoenix.gov) so they can reactivate the left-turn arrow.

Traffic Signal Head Visibility Requirements

The contractor shall maintain a "40-degree Cone-of-Vision" at all intersections, for full view of the intended traffic. If during construction, traffic will be positioned in such a manner that the driver cannot see a minimum of two (2) traffic signal head indications within 20-degrees either side of straight ahead (40-degree Cone-of-Vision), immediately contact the Signal Engineer at 602-262-4693 prior to the start of any work.

Figure 4D-2. Horizontal Location of Signal Faces



Note: This figure illustrates the horizontal location of signal faces.

Local Access Requirements

The Contractor shall maintain local access to all side streets, access roads driveways, alleys, and parking lots at all times and shall notify residents 72 hours in advance of any restrictions which will affect their access. The Contractor shall restore the access as soon as possible. If the primary access cannot be restored in a timely manner, the Contractor shall provide an alternative which shall be pre-determined with the residents prior to imposing any restrictions. Any local street restrictions imposed shall be such that local area traffic circulation is maintained.

Business Access Requirements

Access shall be maintained to adjacent businesses at all times during their hours of operation. Access may be maintained by such measures as constructing driveways in half sections, or by providing bridging over new concrete. Properties with multiple driveway access will not have more than one driveway access restricted at any given time. While the one driveway is restricted, access to the other adjacent driveways will be maintained and unrestricted. Access to adjacent driveways shall be provided during all non-working hours. Any business restrictions shall be coordinated with the affected business in writing at least fourteen (14) days prior to imposing restrictions.

Pedestrian Access Requirements

The Contractor shall ensure that all sidewalks on this project remain in compliance with all the issues outlined by the American Disabilities Act of 1990. All pedestrian-walking areas, whether paved or unpaved, shall be maintained open and safely or a suitable pedestrian detour route will be provided. Such measures as backfilling or ramping at a 12:1 slope to existing sidewalks, or providing alternate sidewalk areas adjacent to existing sidewalks may be used. Right-of-Way inspector may also request an ADA/Pedestrian plan for any proposed sidewalk restrictions or closures. In high pedestrian use areas, the Engineer may request temporary hard-surface walkways, and/or covered pedestrian walkways to be installed at no additional cost to the City.

Frontage Road Access Requirements

Local access shall be maintained at all times on frontage roads. Frontage roads shall not be used for through traffic, equipment parking, material storage, or spoil stockpile area. Frontage road closures shall follow the same special provisions as described in "Local Access Requirements".

School Access Requirements

The Contractor shall provide clean and safe school zones, crosswalks, and walkways for students attending nearby schools during all hours of school use.

This may require backfilling trenches, temporary pavement, shoring, plating, or pedestrian bridges with handrails across open trenches.

In addition to school zones and crosswalks, the Contractor shall maintain accessibility to all school bus routes during all hours of school use. The Contractor shall notify the school Principal(s) and the school Transportation Director at least fourteen (14) days prior to any restrictions, and shall restore access as soon as possible.

Church Access Requirements

The Contractor shall maintain a high level of access to churches during all hours of church use. The Contractor shall coordinate any access restrictions with the clergy at least fourteen (14) days prior to any restrictions, and shall restore access as soon as possible.

Hospital Access Requirements

The Contractor shall maintain the Emergency entrance to nearby Hospitals by way of a paved lane for emergency vehicles at all times for the duration of the project. The Contractor shall coordinate any access restrictions with the hospital administrator at least fourteen (14) days prior to any restrictions, and shall restore access as soon as possible.

Fire Station Access Requirements

The Contractor shall maintain emergency vehicle access to and from the fire station at all times. The Contractor shall coordinate with the Fire Station Commander at least seven days prior to any restrictions and shall restore access as soon as possible.

Police Station Access Requirements

The Contractor shall maintain emergency vehicle access to and from nearby police stations at all times. The Contractor shall coordinate with the Police Station Commander at least seven days prior to any restrictions and shall restore access as soon as possible.

City Park Access Requirements

The Contractor shall maintain access to nearby parks during park hours. Any restrictions shall be coordinated with the appropriate Parks District Supervisor at least seven days in advance, and full access shall be restored as soon as possible.

Recreational Trail Crossing

The Contractor shall maintain the trail crossings safely open at all times, and shall maintain all special trail signs required.

Canal Access Road Requirements

Canal access and maintenance roads shall remain open at all times.

Any work that may affect this project shall be coordinated with the appropriate Agency contact at least 14 working days in advance.

Coordination With Other Agency Projects

The Contractor will coordinate and schedule work to minimize disruption or conflicts with the any other Agency projects in the project area:

Any work that may affect this project will be coordinated with the appropriate Agency contact at least 14 days in advance.

Sanitation Pick-up

The Contractor shall provide sanitation pick-up for affected residents by relocating trash containers, or by providing alternative measures acceptable to the Sanitation Division of the City Public Works Department (602-256-3310).

Special Events

Should there be special events scheduled to take place during the construction of this project, it is the responsibility of the Contractor to coordinate their Construction schedule around the special event. No compensation for delays associated with special events will be considered.

Bus Stops

The Contractor shall maintain all existing bus stop locations on this project in a safe manner, or provide alternate bus stop locations and related directional signage as required by the Inspector. Relocation of bus stops shall be coordinated through the area. Relocation of bus stops shall be coordinated through the City of Phoenix Public Transit Department, contact 602-534-6284 or 602-262-4087.

Flagging of Traffic

No flagging of traffic will be permitted during the peak traffic hours of 6:00 a.m. to 8:30 a.m. and 4:00 p.m. to 6:30 p.m. weekdays. If construction requires, intermittent flagging will be allowed from 8:30 a.m. to 4:00 p.m., if approved by City project inspector, to facilitate access for heavy construction equipment.

Traffic Control Plans

The Contractor shall submit a traffic control plan for approval, showing placement of all traffic control devices, including all conflicting signs to be covered/removed or relocated, or other features that may conflict with the placement of temporary signage. This plan shall be professionally drawn on a reproducible medium, and shall be submitted to the Engineer two (2) weeks prior the contract start time or at the Pre-Construction conference, whichever occurs first.

Holiday Season Requirements

Restrictions near retail shopping areas on Major or Collector streets during the Holiday Season from November 23rd to January 1st will not be approved without pre-approval from the RMP Inspector. Contractor shall plan and coordinate their work schedule around this holiday season requirement.

Temporary Traffic Control Zone and Safety

At the Pre-Construction conference, the Contractor will designate an employee, other than the Project Superintendent, who is knowledgeable in the principles and methods of proper traffic control and safety. This employee will be available on the project site during all periods of construction to coordinate and maintain safe, acceptable and effective temporary barricading whenever construction affects traffic. This person will be authorized to receive and fulfill instructions from the Engineer and will supervise and direct traffic control. Instructions and information given by the Engineer to this person will be considered as having been given to the Contractor.

Failure to maintain temporary traffic control devices in accordance with the City of Phoenix Traffic Barricade Manual, latest edition, the approved Traffic Control Plan, and directives by the Engineer will result in suspension of work and/or civil sanctions until deficiencies are corrected to the satisfaction of the Engineer.

Safety Fencing Requirement for Trenches and Excavations

The Contractor will provide safety construction fencing around all open trenches and excavations during all non-working hours.

The Contractor will provide for the safety and welfare of the general public by adequately fencing all excavations and trenches that are permitted by the Engineer to remain open when construction is not in progress.

Fencing will be securely anchored to approved steel posts located six feet on centers, having a minimum height of six feet, and will consist of wire mesh fabric of sufficient weight and rigidity to adequately span a maximum supporting post separation of six (6) feet.

The fencing, when installed about the periphery of excavations and trenches, will form an effective barrier against intrusion by the general public into areas of construction. Fencing will not create sight distance restrictions or visual obstructions. At all times when construction is not in progress, the Contractor will be responsible for maintaining the fencing in good repair, and upon notification by the Engineer, will take immediate action to rectify any deficiency. Prior to the start of any excavating or trenching required for the execution of the proposed work, the Contractor will submit to the Engineer for approval, detailed plans showing types of materials and methods of fabrication for the protective fencing.

There will be no separate measurement or payment for furnishing, installing, or maintaining protective fencing. The cost will be considered incidental to the cost of the pipe and/or structures.

Traffic Control For Signing And Striping By City Forces

The City of Phoenix Traffic Services Division (TSD) will complete the signing and striping work for the project. When the Contractor is ready for final signing and striping, the contractor shall notify the Engineer and make a request for the City Forces to complete the work. TSD will not schedule the signing and striping until they inspect the Site and see that the final pavement treatment is applied. It may take up to 16 weeks to complete the final signing and striping. During that time, the Contractor shall keep all traffic control devices in place, according to the approved traffic control plan, until their removal is approved by the Engineer. The Engineer may request a new traffic control plan or changes to the traffic control during this period. The Contractor shall make requested changes at no additional cost. No separate measurement or payment will be made for the extended duration of traffic control devices between the time that the Contractor makes the request until the time of completion of the work by City Forces. The work shall be included in the bid item "TRAFFIC CONTROL DEVICES".

14. **401 TRAFFIC CONTROL**, Add the following to **Subsection 401.10 PAYMENT**:

ALLOWANCE FOR UNIFORMED, OFF-DUTY LAW ENFORCEMENT OFFICER

This project includes a lump sum "ALLOWANCE FOR UNIFORMED, OFF-DUTY LAW ENFORCEMENT OFFICER. The amount of this allowance is determined by the Engineer, and is not subject to individual bid pricing. All bidders shall incorporate the amount pre-entered in the bid proposal and shall reflect the same in the total amount bid for this project.

Payment for uniformed, off-duty law enforcement officers shall be made from this allowance based on approved invoiced cost plus taxes, and a maximum 10 percent markup for overhead and profit.

TRAFFIC CONTROL

Payment for traffic control will be on a lump sum basis for Traffic Control Devices.

15. Add the following new **Section 402 ADDITIONAL CONSTRUCTION REQUIREMENTS** as follows:

402.1 FIELD DOCUMENTATION

The Contractor shall document existing conditions within the project area prior to construction. Documentation shall be video tape. The video tape shall not be made from a moving vehicle. One copy of the video tape shall be furnished to the City prior to the start of construction. The cost of the video taping shall be considered

incidental to the cost of the project. No separate measurement or payment shall be made for this item.

402.2 CONTRACTOR COMMUNICATION INFORMATION

The Contractor shall provide a pager and mobile phone to his on-site Project Superintendent to ensure that the Engineer can reach the Contractor's Superintendent. This pager and mobile phone must be accessible by local land-line telephone service. The Superintendent's pager and mobile phone shall remain in service for the duration of the project, and these phone numbers shall be included on the Contractor's list of emergency phone numbers submitted at the pre-construction conference.

402.3 TRENCH PLATING

In paved areas where vehicles will be driving over trench plating, the plates shall be set to match flush with existing pavement on all sides. Setting plates on top of the pavement surface and installing temporary asphalt ramps around them will not be allowed.

402.4 TRENCHING IN RIGHT OF WAY

The Contractor shall not be allowed to stockpile trench material or store any equipment other than the mainline track hoe within the right-of-way. The Contractor shall secure temporary 6' chain link fence around the track hoe during non-working hours.

402.5 MAXIMUM OPEN TRENCH

No more than 330 linear feet of open trench shall be allowed. Trenches across driveways shall be plated to maintain access. The cost of these plates shall be considered incidental to the project.

402.9 PUBLIC INFORMATION SERVICES

The City of Phoenix shall provide a public information specialist for the community relations program on this project.

The Contractor shall cooperate with the City's public information specialist firm in the preparation of newsletters/door hangers, advanced notification for service disruptions, answering questions from the public, etc. The Contractor shall also provide schedule update information to the specialist.

The Contractor shall provide representatives as needed for all meetings with the public throughout the contract period.

The City will pay public information service costs associated with approved contract time extensions; however, if the Engineer determines that delays were caused by the Contractor, the additional costs for public information services shall be deducted from the Contractor's final pay request.

402.11 CONSTRUCTION REQUIREMENTS FOR BUS STOP FURNITURE AND SHELTERS

Description

The Contractor shall be responsible for removing, temporarily storing during construction, and re-installing all existing bus shelters, bus benches, trash receptacles, etc at bus stops and bus bays affected by construction activities within the project area. The Contractor shall take care in removing these items, loading and unloading them, and protecting them in a safe and secure storage area during construction; and for carefully

bringing the items back and re-installing these items after the new project bus stop facilities are completed. Any pre-existing damages on the existing equipment shall be carefully documented and recorded by the Contractor and brought to the attention of the Engineer, in writing, to avoid liability for any pre-existing damages. Any damages caused by the Contractor shall be repaired or replaced at the Contractor's expense prior to project acceptance.

Replace note 4 on COP STD details P1260, P1261, and P1262 with, "Electrical conduits and junction boxes shall be required".

There shall be no separate measurement or payment for this work, the cost being considered incidental to the project.

402.12 POLLUTION AWARENESS MARKERS

Pollution Awareness Markers (PAM's) shall be installed by the Contractor for all new catch basins and for each existing catch basin within the project limits that does not have a PAM. The PAM's will be supplied to the Contractor by the City. PAM's shall be installed at the location identified by the Engineer. For existing catch basins, flat PAM's will be supplied, and the contractor shall clean the surface with a wire brush, apply appropriate adhesive to the back of the marker, and apply the marker to the clean surface. For new catch basins, PAM's with feet will be supplied, and the Contractor shall install them as the catch basin is cast.

16. **601 TRENCH EXCAVATION, BACKFILLING AND COMPACTION**, Add the following to **Subsection 601.2.6 Grading and Stockpiling** after the first paragraph:

During excavation, material suitable for backfilling shall be piled in an orderly manner, a sufficient distance back from the edges of trenches, to avoid overloading and to prevent slides or cave-ins. Material unsuitable for backfilling, or excess material, shall be hauled from the job site and disposed of by the Contractor.

17. **601 TRENCH EXCAVATION, BACKFILLING AND COMPACTION**, Add the following to **Subsection 601.2.7 Shoring and Sheeting**:

The Contractor shall do such trench bracing, sheathing or shoring necessary to perform and protect the excavation as required for safety and conformance to governing laws. The bracing, sheathing or shoring shall not be removed in one operation, but shall be done in successive stages as determined by the Engineer to prevent overloading of the pipe during backfilling operations. The cost of the bracing, sheathing or shoring and the removal of same shall be included in the unit price for the pipe.

18. **601 TRENCH EXCAVATION, BACKFILLING AND COMPACTION**, Add the following to **Subsection 601.2.8 Open Trench**:

Except where otherwise noted in the special provisions, or approved in writing by the Engineer, the maximum length of open trench, where the construction is in any stage of completion (excavation, pipe laying or backfilling), shall not exceed 1,320 feet in the aggregate at any one location.

Any excavated area shall be considered open trench until all ABC for pavement replacement has been placed and compacted. With the approval of the Engineer, pipe laying may be carried on at more than one separate location, the restrictions on open trench applying to each location. Trenches across streets shall be completely backfilled as soon as possible after pipe laying.

Substantial steel plates with adequate trench bracing shall be used to bridge across trenches at street crossings where trench backfill and temporary patches have not been completed during regular work hours.

Safe and convenient passage for pedestrians shall be provided. The Engineer may designate a passage to be provided at any point he deems necessary.

19. **601 TRENCH EXCAVATION, BACKFILLING AND COMPACTION**, Add the following new **Subsection 601.2.9 Pavement and Concrete Cutting and Removal:**

601.2.9 Pavement and Concrete Cutting and Removal: Where trenches lie within the Portland cement concrete section of streets, alleys, driveways or sidewalks, etc., such concrete shall be sawcut to neat, vertical, true lines in such a manner that the adjoining surface will not be damaged. The minimum depth of cut shall be 1 ½ inches or ¼ of the thickness, whichever is greater.

Asphalt pavement shall be clean-cut with approved equipment and by approved methods in accordance with the requirements of Section 336.

No ripping or rooting will be permitted outside limits of cuts. Surfacing materials removed shall be hauled from the job site immediately, and will not be permitted in the backfill.

20. **601 TRENCH EXCAVATION, BACKFILLING AND COMPACTION**, Add the following to **Subsection 601.3.4 Backfill:**

BACKFILL TYPE REQUIREMENTS FOR PIPE TRENCHES

Type "B" backfill, as shown on City of Phoenix Detail P1200, shall be used for all mainline pipe installations across major, collector, locals or other signalized intersections. At a minimum, the extent of the Type "B" backfill shall be from curb-return-to-curb-return through the intersection, unless noted otherwise on the plans or in the special provisions. Type "B" backfill shall also be used for all lateral pipe connections in ALL streets. Type "A-Modified" backfill (suitable native material as specified in City of Phoenix Supplement to MAG Specification Section 601.3.2, except that no piece larger than 3 inches will be allowed), as shown on City of Phoenix Detail P1200, may be used at all other locations, from the top of bedding to the specified pavement subgrade level, unless noted otherwise on the plans or in the special provisions. There is no separate measurement or payment for pipe backfill. The cost is considered included in the bid price for furnishing and installing the pipe.

The pavement replacement section shall be as specified on the plans or in the special provisions, and shall be paid for by the square yard or by the ton, whichever is indicated in the special provisions and on the bid proposal.

21. **601 TRENCH EXCAVATION, BACKFILLING AND COMPACTION**, Add the following new **Subsection 601.4.5 Cutting Newly Placed Pavement for Pipe Installation:**

601.4.5 Cutting Newly Placed Pavement for Pipe Installation: In the event temporary or base course pavement must be cut in order to install pipe, the cost of sawcutting, removing and replacing the asphalt shall be considered incidental to the cost of the pipe.

22. **601 TRENCH EXCAVATION, BACKFILLING AND COMPACTION**, Add the following new **Subsection 601.6 PROTECTION OF EXISTING UTILITIES:**

601.6.1 Utilities: Unless otherwise shown on the plans or stated in the specifications, all utilities, underground or overhead, shall be maintained in continuous service throughout the entire contract period. The Contractor shall be responsible and liable for any damages to or interruption of service caused by the construction.

If the Contractor desires to simplify his operation by temporarily or permanently relocating or shutting down any utility or appurtenance, he shall make the necessary arrangements and agreements with the owner and shall be completely responsible for all costs concerned with the relocation or shutdown and reconstruction. All property shall be reconstructed in its original or new location as soon as possible and to a condition at least as good as its previous condition. This cycle of relocation or shutdown and reconstruction shall be subject to inspection and approval by both the Engineer and the owner of the utility.

The Contractor shall be entirely responsible for safeguarding and maintaining all conflicting utilities that are shown on the plans (Sections 107 and 105 apply). This includes overhead wires and cables and their supporting poles whether they are inside or outside of the open trench. If, in the course of work, a conflicting utility line that was not shown on the plans is discovered, the Contracting Agency will either negotiate with the owner for relocation, relocate the utility, change the alignment and grade of the trench or as a last resort, declare the conflict as "extra work" to be accomplished by the Contractor in accordance with Section 104.

601.6.2 Irrigation Ditches, Pipes and Structures: The Contractor shall contact the owners of all irrigation facilities, and make arrangements for necessary construction clearances and/or dry-up periods.

All irrigation ditches, dikes, headgates, pipe, valves, checks, etc., damaged or removed by the Contractor, shall be restored to their original condition or better, by the Contractor at no additional cost to the Contracting Agency.

601.6.3 Building, Foundations and Structures: Where trenches are located adjacent to building, foundations and structures, the Contractor shall take all necessary precaution against damage to them. The Contractor shall be liable for any damage caused by the construction.

Except where authorized in the special provisions or in writing by the Engineer, water settling of backfill material in trenches adjacent to structures will not be permitted.

There will be no separate measurement or payment for this work. The Contractor will include all associated costs in the unit bid price for the pipe installation.

601.6.4 Permanent Pipe Support Options and Encasements: Where 18-inch or larger mainline pipes (or other pipes as directed by the Engineer) cross under existing sanitary sewer lines (vitrified clay pipe 12-inches or smaller), the Contractor shall permanently support the sanitary sewer line per MAG Detail 403-1, 403-2 or 403-3. If the ductile iron pipe replacement option is used (403-3), and the required crossing length is more than one joint of pipe, concrete pipe supports as detailed in MAG Details 403-1 or 403-2 shall be used in addition to the ductile iron pipe. For a single joint of standard 20-foot-long ductile iron pipe replacement, the maximum trench width allowed at the point of the sewer line crossing shall be 9-feet, unless otherwise directed by the Engineer. Mechanical or restrained joints shall be required on all multiple-joint ductile iron pipe crossings.

Where waterlines, reclaimed waterlines or sanitary sewer lines (new or existing) cross over or under each other, pipeline encasements shall be provided as necessary in accordance with MAG Detail 404.

When the ductile iron pipe replacement option is used for the sewer lines, the new pipe shall be properly blocked at each end with one or more bricks resting on undisturbed or 95% compacted soil haunches outside the trench walls to prevent differential settlement.

The interior of all ductile iron pipe used for sewer lines shall be coated per the specification, "LINING FOR DUCTILE IRON PIPE USED FOR SEWER LINES" in these Special Provisions.

Upon completion of a sanitary sewer line support or encasement, including backfilling and compacting, but prior to permanent pavement replacement, the Contractor shall request, through the Engineer, a televising of the line by the City Water Services Department to ensure proper line and grade of the sanitary sewer pipe. If the pipe is out of alignment, it shall be the Contractor's responsibility to remedy the situation at no cost to the City.

If the sanitary sewer line is less than 8-inches in diameter, the Contractor shall provide the necessary equipment and televise the line to determine proper pipe alignment. The Engineer shall be present during the televising, and a video tape of the televising shall be made for the City Water Services Department for confirmation that the pipe is properly aligned. The cost of televising the line and preparing the video tape shall be included in the bid price paid for the pipe support or encasement.

Permanent pipe supports shall be paid for at the unit price bid for each unit installed regardless of type. Encasements shall be paid for at the unit price bid per linear foot installed regardless of type. The unit price bid for either item of work shall be compensation in full for providing complete and satisfactory permanent pipe supports or encasements, including ductile iron pipe and fittings, concrete, reinforcing steel, forming, vibrating, any required earthwork, televising and videotaping, and any other incidental items necessary.

601.6.5 Electronic, Telephonic, Telegraphic, Electrical, Oil and Gas Lines: During trenching operations, underground facilities such as electronic, telephonic, telegraphic, electrical, oil and gas lines shall be supported and protected by the Contractor. Support for plastic pipes shall be continuous along the bottom of the pipe. Support for metal pipe and electrical conduit may be continuous or nylon webbing may be used for suspension at no greater than ten-foot intervals.

The Contractor shall avoid damaging any pipes, conduits or duct bank facilities during excavation, foundation and bedding placement, and trench backfilling and compaction.

601.6.6 Measurement and Payment:

There will be no measurement or payment for this work. The Contractor will include all associated costs in the unit bid price for the pipe installation.

23. **601 TRENCH EXCAVATION, BACKFILLING AND COMPACTION**, Add the following new **Subsection 601.7 CONTRACTOR CERTIFICATION OF INSTALLATION PROCEDURES:**

601.7 CONTRACTOR CERTIFICATION OF INSTALLATION PROCEDURES

When requested in the Special Provisions or by the Engineer prior to installation, the Contractor shall furnish to the Contracting Agency an affidavit (certification) from the pipe manufacturer (or his designee) stating that the Contractor is familiar with the manufacturer's suggested installation methods and procedures and the installation complies with those procedures and is consistent with MAG requirements.

Also, when required in the Special Provisions or requested by the Engineer, the pipe manufacturer or his designee will review the Contractor's methods and procedures for pipe installation in the field. The Contractor will make any adjustments in the installation as recommended by the manufacturer or his representative. If necessary, the Contractor may be required to reinstall or provide corrections to pipe installed prior to the field review at no cost to the Agency. Once the manufacturer or his representative has reviewed the Contractor's installation methods and the Contractor has adjusted his installation methods as recommended by the same, the manufacturer or his representative shall furnish to the Contracting Agency an affidavit (certification) that the Contractor's installation methods and procedures, at the time of the review, complied with the

manufacturer's installation practices. The affidavit must provide the name of the manufacturer's representative witnessing the pipe installation.

24. **610 WATERLINE CONSTRUCTION**, Add the following to **Subsection 610.4 CONSTRUCTION METHODS**:

WATER MAIN REALIGNMENT (CONTINGENT ITEM)

In the event of unavoidable conflict between proposed construction and an unknown and unmarked utility, the Contractor shall vertically and/or horizontally realign the proposed water main in accordance with COP Detail P1370 and Section 610. No concrete thrust blocks will be allowed. All pipe shall be ductile iron with restrained joints.

The proposed water main realignment shall include, but not be limited to, excavation, backfill, compaction, pipe, fittings (four, 45-degree bend), offsets, couplings, sleeves, joint restraint and hardware. The realigned water main shall be visually inspected for leaks under line pressure prior to backfilling.

Materials for water main realignment shall be ductile iron in accordance with COP Supplement to MAG Subsection 750.2 DUCTILE IRON WATER PIPE.

Measurement and Payment

Measurement will be made per each realignment constructed for the various water main sizes encountered.

Payment for realignment of water mains will be made at the unit price bid per each under proposal items "WATERLINE REALIGNMENT, 6" AND 8", CONTINGENT ITEM"; and "WATERLINE REALIGNMENT, 10" AND 12", CONTINGENT ITEM".

25. **610 WATER LINE CONSTRUCTION**, Add the following to **Subsection 610.7 VALVES**:

LOCATING, CLEANING AND INSTALLING WATER VALVE BOX DEBRIS CAP WITH LOCATOR COIL

The Contractor shall furnish and install a debris cap with a locator coil in all new water valve boxes installed; in all existing water valve boxes adjusted to grade; and in all other existing water valve boxes within the project limit right-of-way, even if not called out for adjustment to grade. The debris cap shall be in accordance with City of Phoenix Supplement to MAG Detail P-1165 and shall include a locator coil.

Prior to installation of the debris cap, valve risers shall be thoroughly cleaned, fully exposing the operating nut. In addition, the Contractor shall attempt to locate all unexposed water valves within the project limits, as indicated by City of Phoenix Water Services Department water valve Quarter-Section maps. In attempting to locate unexposed valve boxes, the Contractor shall excavate a minimum depth of eighteen (18) inches from the surface. Unexposed valve boxes found shall be brought up to finish grade; cleaned to fully expose the operating nut; and a debris cap with locator coil shall be installed.

Measurement for debris caps furnished and installed in water valve boxes (adjusted to grade or not) shall be per each unit, including locating and cleaning. The Contractor shall obtain the appropriate Water Services Department water valve Quarter-Section maps at Phoenix City Hall, 200 W. Washington Street, 8th Floor, at no additional cost to the City, and shall make a diligent effort to locate all existing unexposed water valves shown on these maps. The Contractor shall clearly mark all unexposed water valve boxes actually located on record plans and copies of the water valve Quarter-Section maps showing specific found location information, and these plans shall be provided to the Engineer. The cost for the Contractor to extend any risers on found unexposed valve boxes to bring them up to finish grade shall also be considered incidental.

Payment for this work in paved areas shall be made under the bid item, "DEBRIS CAP, INCLUDING LOCATOR COIL, FURNISH AND INSTALL."

Payment for this work in unpaved areas shall be made under the bid item, "DEBRIS CAP, INCLUDING LOCATOR COIL, NON-PAVED AREAS, FURNISH AND INSTALL." There will be no separate measurement or payment for any labor, materials or equipment used in attempting to locate valves shown on the Quarter-Section maps that are not actually found. Valve locating attempts that do not produce any resulting "finds" shall be considered incidental.

26. **610 WATER LINE CONSTRUCTION**, Add the following new **Subsections 610.9.1 Fire Hydrant Relocation; 610.9.2 New Fire Hydrant Installation; and 610.9.3 Fire Hydrant: Remove, Salvage and Deliver to City of Phoenix:**

610.9.2 New Fire Hydrant Installation:

New fire hydrant installations shall be paid for at the unit price bid per each under the bid item, "FIRE HYDRANT, FURNISH AND INSTALL". The unit price bid shall be full compensation for installing the new fire hydrants at the locations shown on the plans and in accordance with construction standards. All pipes (including all necessary fittings) and valves necessary to accomplish the installation shall be measured and paid for separately under their respective bid line items.

Prior to removing any existing fire hydrant from service and prior to activating the new fire hydrant, the Contractor shall notify the Engineer.

610.9.3 Fire Hydrant - Remove, Salvage and Deliver to City of Phoenix:

All existing fire hydrants to be abandoned shall be removed. The void created shall be backfilled with ABC and compacted. The surface shall be replaced to match the existing surrounding surface— asphalt, concrete, gravel, etc.

Fire hydrants served from a water main staying in service will require either a tapping sleeve and valve "cut-out" or tee "cut-out" and a new piece of pipe "cut-in" in accordance with City of Phoenix Standard Detail P1344.

Fire hydrants served from a water main not staying in service will require the fire hydrant water main lateral to be cut and plugged near the fire hydrant in accordance with City of Phoenix Standard Detail P1343.

It shall be the Contractor's responsibility to either return the old fire hydrants to Water Distribution Division Yard, or dispose of them, whichever is directed by the Engineer.

Measurement and payment for this work shall be under the bid item "FIRE HYDRANT, SALVAGE AND DELIVER TO THE CITY OF PHOENIX", and shall include, but not limited to all labor, materials and equipment necessary to remove the fire hydrant, backfill, compact and return or dispose of the fire hydrant. Pavement or concrete replacement, if any, shall be paid for under separate respective bid items. Waterline cut-outs (P1344) and cut and plugs (P1343) shall be paid under separate bid items for that work. Fire hydrant valve box and cover removal shall be paid under separate bid item for that work.

27. **610 WATER LINE CONSTRUCTION**, Add the following to **Subsection 610.10 CONNECTION TO EXISTING MAINS:**

WATER MAIN SHUTDOWN

For shutdowns that are necessary to accomplish the work, the Contractor through the City Inspector will make written request to Water Distribution and Water Engineering staff at least three (3) calendar weeks before the shutdown. Requests will specify location, size of line, duration, date, and time for each shutdown. Within two (2) weeks, Water Distribution will schedule a test shutdown and give written notification to the Contractor of the impacted properties. The contractor shall use the list of impacted properties to coordinate and provide a minimum of one (1) week notification to the impacted customer. The Contractor may need to adjust the shutdown schedule as needed based on the impacted facilities or the limits of the shutdown at no additional cost. The City does not guarantee a totally dry line. The Contractor will be prepared to de-water as necessary to accomplish the work.

The Contractor will be responsible for maintaining accessibility to the valve operating nuts for all valves within the project boundaries. Failure to maintain accessibility to valves will be cause for canceling shutdown, and the Contractor will be required to request a revised schedule.

The Water Services Department is indemnified for any and all resultant costs incurred by the Contractor such as, but not limited to traffic control, delays, loss of incentives, standby and penalties if the Contractor did not properly request a shutdown; failure to maintain accessibility to valves; or if the Contractor's scheduled work did not progress to the anticipated shutdown schedule.

28. **610 WATER LINE CONSTRUCTION**, Add the following to **Subsection 610.11(D) METER SERVICE CONNECTIONS**:

HORIZONTAL BORING FOR METER SERVICE CONNECTIONS

For meter service pipes 1-inch or larger in diameter, the maximum bore hole size permissible shall be twice the internal diameter of the service line being installed. For meter service pipes smaller than 1-inch in diameter, the maximum borehole size shall be two (2) inches in diameter.

29. **631 WATER TAPS AND METER SERVICE CONNECTIONS**, Add the following **Subsection 631.3 Excavation and Backfill**:

Bedding and backfill shall be full depth ABC for water services installed under pavement using open trench method. The cost of the ABC material, labor and compaction shall be included in the cost of the water service work.

30. **631 WATER TAPS AND METER SERVICE CONNECTIONS**, Add the following new **Subsection 631.9 REPLACEMENT, EXTENSION AND RELOCATION OF EXISTING WATER SERVICES AND METERS** as follows:

631.9 REPLACEMENT, EXTENSION AND RELOCATION OF EXISTING WATER SERVICES AND METERS

1. Extension or Replacement of Existing Water Service Lines

The Contractor will replace or/and extend existing water service lines at the stations listed in these specifications or on the plans in accordance with Detail P-1342. The Engineer will determine when the existing lines are unsatisfactory and must be replaced. Generally, existing copper in good condition with sufficient cover will be extended. Water service lines other than copper will be replaced.

For existing copper services, compression couplings can be utilized only under landscape or sidewalk. Couplings cannot be located under pavement except for 1 ½-inch or 2-inch services that may require couplings under pavement, these exceptions will need to be approved in writing by Water Services Department (WSD). The Contractor will through the City Inspector to obtain WSD approval.

The water service will include, but is not limited to, locating the present tap, trenching, bedding, backfilling, disconnecting the existing service pipe from the corporation stop, furnishing and installing new service pipe, new appurtenant fittings, new tapping fittings when needed, new curb stop and new meter coupling, and re-connection to the meter. The existing tapping saddle and corporation stop will remain, but the Contractor will not use any other salvaged service connection components. If the saddle is a single strap, the saddle will be replaced with a double strap saddle. In the event there is no tapping saddle, the Contractor will install one. The cost of the saddle and reinstallation of the corporation stop will be considered incidental to the water service replacement.

Unless approved in writing in advance by the Water Department, the contractor will coordinate for Water Department crews to complete the tapping of active mains when a new tap to the public water main is required.

Inserts or adapters required to connect to the corporation stop are available at the Water Services Department yard at no cost to the Contractor. The Contractor must obtain a written order (Field Directive) from the Engineer before picking up said items.

Bedding and backfill will be full depth aggregate base course. Payment for furnishing and compacting the aggregate base course will be included in the bid item for replacing or extending existing water services.

The Contractor will schedule his work so that no open trenches are left overnight. This may require backfilling the trench or provide temporary plates at no additional cost.

Materials for water service connections will conform to MAG Section 754 and City of Phoenix Supplement 610.4.4 and 610.4.5. Joints in the copper tubing will be made by the use of approved fittings, properly soldered or by means of approved compression fittings such as flared joints or pack joints.

Measurement and Payment

Measurement for extending and/or replacing water services will be made to the nearest linear foot from the point of connection to the existing line or corporation stop, whichever is applicable, to the curb stop.

Payment for extending and/or replacing water services will be made at the unit price bid per linear foot under the proposal items "3/4" OR 1" WATER METER SERVICE CONNECT PIPE AND FITTINGS, MAIN TO METER, FURNISH AND INSTALL" and "1-1/2" OR 2" WATER METER SERVICE CONNECT PIPE AND FITTINGS, MAIN TO METER, FURNISH AND INSTALL".

Measurement and payment for new water service connection will be made at the unit price per each under the proposal item "WATER SERVICE CONNECTION (NEW MAIN TO METER)". The cost of all fittings and pipes to connect the water service line is included in the bid item price.

2. New Water Meter Box and Cover at Existing Location

"NEW WATER METER BOX AND COVER, FURNISH AND INSTALL AT EXISTING LOCATION" consists of furnishing and installing a new meter box and cover at the existing meter location. The Contractor will replace all disturbed landscaping and irrigation improvements in kind. All areas behind the curb or edge of pavement

shall be hand dug or excavated using a walk-along trencher unless otherwise agreed upon by the City and Property Owner. All trenches will be backfilled or barricaded at the end of each day.

New meter boxes and covers shall be set to match the surrounding grades. Existing meter boxes to be removed shall be removed in their entirety and disposed of in a landfill. Before removing the existing meter boxes, the Contractor shall coordinate with the City Inspector to determine if any of the existing boxes will be reused or salvaged to a location defined by the City.

New water meter boxes and covers will be accordance with MAG Details 315 and 320. Water Meter Cover shall be stamped as PHOENIX WATER. ¾-inch and 1-inch meters will utilize a type 2 box and cover; 1 ½-inch and 2-inch meters will utilize a type 2 box and cover. Where required, traffic rated box and cover shall be provided per MAG Detail 319.

Measurement and Payment

Measurement for a new water meter box at the existing meter location will be made per each water meter box regardless of size up to and including 2-inch services. Payment for new water meter box at existing meter location will be made at the unit price bid per each under the proposal item "NEW WATER METER BOX AND COVER, FURNISH AND INSTALL AT EXISTING LOCATION" which will include all sizes encountered on the project up to and including 2-inch. This bid item shall include the removal and disposal of existing water meter box and cover, the furnish and installation of the new water meter box and cover and the restoration of the existing surface.

3. Water Meter Relocation and Coordination with City's Contracted Plumber

"NEW WATER METER BOX AND COVER, FURNISH AND INSTALL AT NEW LOCATION" consists of furnishing and installing a new meter box and cover at a new meter location on the customer's property. The Contractor will replace all disturbed landscaping and irrigation improvements in kind. All areas behind the curb or edge of pavement shall be hand dug or excavated using a walk-along trencher unless otherwise agreed upon by the City and Property Owner. All trenches will be backfilled or barricaded at the end of each day.

New meter boxes and covers shall be set to match the surrounding grades. Existing meter boxes to be removed shall be removed in their entirety and disposed of in a landfill. Before removing the existing meter boxes, the Contractor shall coordinate with the City Inspector to determine if any of the existing boxes will be reused or salvaged to a location defined by the City.

New water meter boxes and covers will be accordance with MAG Details 315 and 320. Water Meter Cover shall be stamped as PHOENIX WATER. ¾-inch and 1-inch meters will utilize a type 2 box and cover; 1 ½-inch and 2-inch meters will utilize a type 2 box and cover. Where required, traffic rated box and cover shall be provided per MAG Detail 319.

The work beyond the water meter on the customer side is considered privately owned. All work within the private side reconnection, including the relocation of the water meter, shall be done by the City's Contracted Plumber. The Contractor shall not perform any work on the customer side of the meter. Additionally, the Contractor should coordinate with both the City and customer prior to the removal of the existing meter box and installation of the new proposed meter box.

Contractor shall be required to coordinate with City's contracted plumber. The work to relocate the existing water meter to the new water meter box location shall be coordinated and performed by the City's Contracted Plumber.

All materials and fittings will conform to the requirements of Section 610 and 754. No salvaged service connection components will be used.

Measurement and Payment

Measurement for a new water meter box at the new meter location will be made per each water meter box regardless of size up to and including 2-inch services. Payment for new water meter box at existing meter location will be made at the unit price bid per each under the proposal item "NEW WATER METER BOX AND COVER, FURNISH AND INSTALL AT NEW LOCATION" which will include all sizes encountered on the project up to and including 2-inch. This bid item shall include the removal and disposal of existing water meter box and cover, the furnish and installation of the new water meter box and cover and the restoration of the existing surface. It does not include relocating the existing water meter and making the connection to the private side.

31. Add the following new **Section 635 ABANDONMENT AND REMOVAL OF EXISTING WATER FACILITIES** as follows:

635 ABANDONMENT AND REMOVAL OF EXISTING WATER FACILITIES

635.1 ABANDONMENT OF EXISTING WATERLINE

Existing waterlines shown on the plans to be abandoned shall be done after all water services have been disconnected. The Water Services Department will locate and mark the specific locations where the water lines are to be abandoned. The Contractor shall expose the existing water main to be abandoned and cut and plug as required on the plans.

For connections where an existing tee, cross or tapping sleeve and valve, or corporation stop exists at the main, the Contractor shall remove the tee, cross or tapping sleeve and valve or corporation stop and replace the water main in accordance with City of Phoenix Standard Detail P1344. Payment for this work will be made at the unit price bid for "WATERLINE CUT AND PLUG PER DETAIL P-1344, UP TO & INCL. 12", and shall include all labor and material necessary to locate; remove crosses, tees, or tapping sleeves and valves or corporation stops; replace section of mainline pipe; backfill and compact.

For locations where a "Cut and Plug" is called for on the plans, the Contractor shall provide a cut and plug on the existing pipe in accordance with City of Phoenix Standard Detail P1343. Measurement and payment for this work will be made at the unit price bid per each for the bid item "WATERLINE CUT AND PLUG PER DETAIL P-1343, UP TO & INCL. 12", and shall include all labor and material necessary to complete this item in place.

Concrete and asphalt concrete pavement removal and replacement for curbs, sidewalks, driveways, etc. necessary to complete this work shall be considered incidental to the abandonment work and shall be included in the cost for each abandonment. Pavement replacement, if any, shall be paid for under a separate bid item for that work.

635.2 REMOVAL OF EXISTING WATER VALVE BOX AND COVER

All existing valve box frames and covers (and at least the top 12" of any valve vaults) on abandoned waterlines shall be removed. The void created shall be backfilled with ABC and compacted. The surface shall be replaced to match the existing surrounding surface— asphalt, concrete, gravel, etc.

Measurement and payment for this work shall be per each under the bid item, "REMOVE EXISTING VALVE BOX AND COVER, RESTORE SURFACE.", and shall include all materials and equipment necessary to

remove the valve box frame, cover, and top 12" of any valve vault, backfill and compact. Pavement replacement, if any, shall be paid for under a separate bid item for that work.

32. 702 BASE MATERIALS Add the following to MAG Section 702 BASE MATERIALS:

All Select Material specified on the plans and Standard Details shall be Type "A" in accordance with Table 702-1.

ASSET MANAGEMENT

Each new valve, hydrant, water pipe, etcetera, will be entered into the Asset Management spreadsheet. Global Positioning System (GPS) equipment will be utilized and capable of 12-inch accuracy. The following minimum standards must be met to record the asset information.

GLOBAL POSITIONING SYSTEM (GPS) RECORDING

A. The following GPS coordinate systems will be utilized:

1. Coordinate System: US State Plane 1983
2. Zone: Arizona Central 0202 (Grid)
3. Datum: NAD 1983 (2011)
4. Elevation: NGVD 29
5. Altitude Units: feet
6. Coordinate Unit: International feet
7. Coordinate order: North/East
8. Projection: Transverse Mercator

B. GPS coordinates are required for all newly installed assets.

1. Horizontal Location (Northing/Easting);
2. Vertical Location (Elevation);
3. Station Materials;
4. Installing Contractor;
5. Date of Installation
6. Continuity Testing Company;
7. Continuity Test Results;
8. Date of Continuity Testing.

ASSET RECORDING

A. The Contractor will provide the GPS coordinates for all newly installed assets, including the following:

1. Water Pipe & Fittings
2. Fire Hydrants
3. Water Valves and Vaults

**WATER INFRASTRUCTURE FINANCE AUTHORITY OF ARIZONA
REQUIREMENTS
(ATTACHED)**

**Water Infrastructure Finance Authority of Arizona
Clean Water Revolving Fund
Drinking Water Revolving Fund**

CONTRACT PACKET for Governmental Borrowers

This packet lists required contract conditions that apply to all Clean Water and Drinking Water Revolving Fund projects and contains forms that must be used in the procurement process. Please review this packet prior to bidding.

PLEASE NOTE

- **This packet, in its entirety, must be physically included in all bidding, solicitation and contract documents.**
- Use of American Iron and Steel (AIS) applies to this project.:
 - AIS includes the following products made primarily of iron or steel: lined or unlined pipes and fittings, manhole covers and other municipal castings, hydrants, tanks, flanges, pipe clamps and restraints, valves, structural steel, reinforced precast concrete, and construction materials.
- Federal Davis-Bacon prevailing wages apply to this project.
 - Payment of the wages, fringe benefits and overtime rates is required.
 - The appropriate Federal (Davis-Bacon) Prevailing Wage Decision must be physically incorporated into the bidding and contract documents.
 - The construction category of Heavy (excluding dam construction) should typically be applied to all projects funded by WIFA. If you believe that a different category of wages, such as Building, should be applied to your project or portions of your project, please contact WIFA in advance.
 - Weekly certified payroll submittal is required under the Federal Davis-Bacon laws.
- Compliance with the Civil Rights Act and Equal Employment Opportunity is required.
- Promotion of Small, Minority and Women-owned Businesses and participation in EPA's Disadvantaged Business Enterprise (DBE) Program is required.
- Prohibition on Certain Telecommunication and Video Surveillance Services or Equipment.

Water Infrastructure Finance Authority of Arizona
Clean Water Revolving Fund
Drinking Water Revolving Fund

Required Contract Conditions

This project is being financed in whole or in part by the Water Infrastructure Finance Authority of Arizona through the Clean Water or Drinking Water Revolving Fund. The loan recipient is required to comply with the following federal and state laws, rules and regulations and must ensure that their contractor(s) also comply(ies) with these regulations, laws and rules.

1. (i) Title VI of the Civil Rights Act of 1964 (Pub. L. 88-352, 42 U.S.C. Sec. 2000d), (ii) the Rehabilitation Act of 1973 (Pub. L. 93-1123, 87 Stat. 355, 29 U.S.C. Sec. 794), (iii) the Age Discrimination Act of 1975 (Pub. L. 94-135 Sec. 303, 89 Stat. 713, 728, 42 U.S.C. Sec. 6102), (iv) Section 13 of the Federal Water Pollution Control Act (Pub. L. 92-500, 33 U.S.C. Sec. 1251), and subsequent regulations, ensures access to facilities or programs regardless of race, color, national origin, sex, age or handicap.
2. Equal Employment Opportunity (Executive Order 11246, as amended by Executive Orders 11375 and 12086 and subsequent regulations). Prohibits employment discrimination on the basis of race, color, religion, sex or national origin. Inclusion of the seven clauses in Section 202 of Executive Order 11246 as amended by Executive Orders 11375 and 12086 are required in all project related contracts and subcontracts over \$10,000.
3. (i) Promoting the use of Small, Minority, and Women-owned Businesses (Executive Orders 11625, 12138 and 12432), (ii) Small Businesses Reauthorization & Amendment Act of 1988 (Section 129 of Pub. L. 100-590), (iii) Department of Veterans Affairs and Housing and Urban Development, and Independent Agencies Appropriations Act, 1993 (Pub. L. 102-389, 42 U.S.C. Sec. 437d), and (iv) Title X of the Clean Air Acts Amendments of 1990 (Pub. L. 101-549, 42 U.S.C. Sec. 7601 note) (“EPA’s 10% statute”). Encourages recipients to award construction, supply and professional service contracts to minority and women’s business enterprises (MBE/WBE) and small businesses and requires recipients to utilize affirmative steps in procurement.
4. Participation by Disadvantaged Business Enterprises in Procurement under Environmental Protection Agency (EPA) Financial Assistance Agreements (40 C.F.R. Part 33).
5. Debarment and Suspension (Executive Order 12549). Prohibits entering into contracts or sub-contracts with individuals or businesses who are debarred or suspended. Borrowers are required to check the status of all contractors (construction and professional services) and must require contractors to check the status of subcontractors for contracts expected to be equal to or over \$25,000 via this Internet address: <https://www.sam.gov/SAM/>.

6. E-Verify (A.R.S. § 41-4401). A governmental entity shall not award a contract to any contractor or subcontractor that fails to comply with A.R.S. § 23-214(A). Every government entity shall (i) ensure that every government entity contractor and subcontractor complies with the federal immigration laws and regulations that relate to their employees and A.R.S. § 23-214(A); (ii) require that every government entity contract include the required provisions listed under A.R.S. § 41-4401(A); and (iii) establish procedures to conduct random verification of the employment records of government entity contractors and subcontractors.

**Water Infrastructure Finance Authority of Arizona
Clean Water Revolving Fund
Drinking Water Revolving Fund**

Use of American Iron and Steel

Public Law 113-76, enacted January 17, 2014

SEC. 436. (a)(1) None of the funds made available by a State water pollution control revolving fund as authorized by title VI of the Federal Water Pollution Control Act (33 U.S.C. 1381 et seq.) or made available by a drinking water treatment revolving loan fund as authorized by section 1452 of the Safe Drinking Water Act (42 U.S.C. 300j-12) shall be used for a project for the construction, alteration, maintenance, or repair of a public water system or treatment works unless all of the iron and steel products used in the project are produced in the United States.

(2) In this section, the term “iron and steel products” means the following products made primarily of iron or steel: lined or unlined pipes and fittings, manhole covers and other municipal castings, hydrants, tanks, flanges, pipe clamps and restraints, valves, structural steel, reinforced precast concrete, and construction materials.

(b) Subsection (a) shall not apply in any case or category of cases in which the Administrator of the Environmental Protection Agency (in this section referred to as the “Administrator”) finds that—

- (1) applying subsection (a) would be inconsistent with the public interest;
- (2) iron and steel products are not produced in the United States in sufficient and reasonably available quantities and of a satisfactory quality; or
- (3) inclusion of iron and steel products produced in the United States will increase the cost of the overall project by more than 25 percent.

(c) If the Administrator receives a request for a waiver under this section, the Administrator shall make available to the public on an informal basis a copy of the request and information available to the Administrator concerning the request, and shall allow for informal public input on the request for at least 15 days prior to making a finding based on the request. The Administrator shall make the request and accompanying information available by electronic means, including on the official public Internet Web site of the Environmental Protection Agency.

(d) This section shall be applied in a manner consistent with United States obligations under international agreements.

(e) The Administrator may retain up to 0.25 percent of the funds appropriated in this Act for the Clean and Drinking Water State Revolving Funds (CWSRF and DWSRF) for carrying out the provisions described in subsection (a)(1) for management and oversight of the requirements of this section.

(f) This section does not apply with respect to a project if a State agency approves the engineering plans and specifications for the project, in that agency’s capacity to approve such plans and specifications prior to a project requesting bids, prior to the date of the enactment of this Act.

Highlights from EPA Guidance on Use of American Iron and Steel

Complete document available at http://water.epa.gov/grants_funding/aisrequirement.cfm

What is considered American Iron and Steel?

What is an iron or steel product?

For purposes of the CWSRF and DWSRF projects that must comply with the AIS requirement, an iron or steel product is one of the following made primarily of iron or steel that is permanently incorporated into the public water system or treatment works: lined or unlined pipes and fittings, manhole covers and other municipal castings, hydrants, tanks, flanges, pipe clamps and restraints, valves, structural steel, reinforced precast concrete, and construction materials.

What is a ‘construction material’ for purposes of the AIS requirement?

Construction materials are those articles, materials, or supplies made primarily of iron and steel, that are permanently incorporated into the project, not including mechanical and/or electrical components, equipment and systems. Some of these products may overlap with what is also considered “structural steel”. This includes, but is not limited to, the following products: wire rod, bar, angles, concrete reinforcing bar, wire, wire cloth, wire rope and cables, tubing, framing, joists, trusses, fasteners (i.e., nuts and bolts), welding rods, decking, grating, railings, stairs, access ramps, fire escapes, ladders, wall panels, dome structures, roofing, ductwork, surface drains, cable hanging systems, manhole steps, fencing and fence tubing, guardrails, doors, and stationary screens.

What is NOT considered American Iron and Steel?

What is NOT considered a ‘construction material’ for purposes of the AIS requirement?

Mechanical and electrical components, equipment and systems are NOT considered construction materials. Mechanical equipment is typically that which has motorized parts and/or is powered by a motor. Electrical equipment is typically any machine powered by electricity and includes components that are part of the electrical distribution system. The following examples (including their appurtenances necessary for their intended use and operation) are NOT considered construction materials: pumps, motors, gear reducers, drives (including variable frequency drives (VFDs)), electric/pneumatic/manual accessories used to operate valves (such as electric valve actuators), mixers, gates, motorized screens (such as traveling screens), blowers/aeration equipment, compressors, meters, sensors, controls and switches, supervisory control and data acquisition (SCADA), membrane bioreactor systems, membrane filtration systems, filters, clarifiers and clarifier mechanisms, rakes, grinders, disinfection systems, presses (including belt presses), conveyors, cranes, HVAC (excluding ductwork), water heaters, heat exchangers, generators, cabinetry and housings (such as electrical boxes/enclosures), lighting fixtures, electrical conduit, emergency life systems, metal office furniture, shelving, laboratory equipment, analytical instrumentation, and dewatering equipment.

Water Infrastructure Finance Authority of Arizona
Clean Water Revolving Fund
Drinking Water Revolving Fund

Use of American Iron and Steel - De Minimis Waiver

Every water infrastructure project involves the use of thousands of miscellaneous, generally low-cost components that are essential for, but incidental to, the construction and are incorporated into the physical structure of the project. For many of these incidental components, the country of manufacture and the availability of alternatives is not always readily or reasonably identifiable prior to procurement in the normal course of business; for other incidental components, the county of manufacture may be known but the miscellaneous character in conjunction with the low cost, individually and (in total) as typically procured in bulk, mark them as properly incidental.

Examples of incidental components could include small washers, screws, fasteners (i.e., nuts and bolts), miscellaneous wire, corner bead, ancillary tube, etc.

Example of items that are clearly not incidental include significant process fittings (i.e., tees, elbows, flanges, and brackets), distribution system fittings and valves, force main valves, pipes for sewer collection and/or water distribution, treatment and storage tanks, large structural support structures, etc.

EPA has established a public interest waiver for de minimis incidental components. This action permits the use of products when they occur in de minimis incidental components of such projects.

- Funds used for such de minimis incidental components cumulatively may comprise no more than a total of 5% of the total cost of the materials used in and incorporated into a project.
- The cost of an individual item may not exceed 1% of the total cost of the materials used in and incorporated into a project.

Assistance recipients who wish to use this waiver should in consultation with their contractors determine the items to be covered by this waiver and must retain relevant documentation (i.e., invoices) as to those items in their project files.

**Water Infrastructure Finance Authority of Arizona
Clean Water Revolving Fund
Drinking Water Revolving Fund**

Davis-Bacon Contract Conditions (Federal Prevailing Wages)

PLEASE NOTE: Federal Davis-Bacon prevailing wages apply to this project. Payment of the wages, fringe benefits and overtime rates is required.

The “subrecipient” referred to throughout the Davis-Bacon contract conditions is the WIFA Borrower.

“WIFA” is the Water Infrastructure Finance Authority of Arizona, State Capitalization Grant recipient, recipient, or the Authority.

Wage Rate Requirements (Also referred to as Attachment 6)

Preamble

With respect to the Clean Water and Drinking Water State Revolving Funds, EPA provides capitalization grants to each State which in turn provides subgrants or loans to eligible entities within the State. Although EPA and the State remain responsible for ensuring subrecipients' compliance with the wage rate requirements set forth herein, those subrecipients shall have the primary responsibility to maintain payroll records as described in Section 3(3)(ii)(A) below and for compliance as described in Section 5.

Requirements for Subrecipients That Are Governmental Entities:

The following terms and conditions specify how recipients will assist EPA in meeting its Davis-Bacon (DB) responsibilities with respect to State recipients and subrecipients that are governmental entities. If a subrecipient has questions regarding when DB applies, obtaining the correct DB wage determinations, DB provisions, or compliance monitoring, it may contact the State recipient. If a State recipient needs guidance, the recipient will contact EPA. The recipient or subrecipient may also obtain additional guidance from DOL's web site at <https://www.dol.gov/agencies/whd/government-contracts/construction>.

1. Applicability of the Davis-Bacon prevailing wage requirements.

Davis-Bacon prevailing wage requirements apply to the construction, alteration, and repair of treatment works carried out in whole or in part with assistance made available by a Clean Water Revolving Fund and to any construction project carried out in whole or in part by assistance made available by a Drinking Water Revolving Fund. If a subrecipient encounters a unique situation at a site that presents uncertainties regarding DB applicability, the subrecipient must discuss the situation with the State recipient before authorizing work on that site.

2. Obtaining Wage Determinations.

(a) Subrecipients shall obtain the wage determination for the locality in which a covered activity subject to DB will take place prior to issuing requests for bids, proposals, quotes or other methods for soliciting contracts (solicitation) for activities subject to DB. These wage determinations shall be incorporated into solicitations and any subsequent contracts. Prime contracts must contain a provision requiring that subcontractors follow the wage determination incorporated into the prime contract.

- (i) While the solicitation remains open, the subrecipient shall monitor <https://beta.sam.gov/> weekly to ensure that the wage determination contained in the solicitation remains current. The subrecipient shall amend the solicitation if DOL issues a modification more than 10 days prior to the closing date (i.e. bid opening) for the solicitation. If DOL modifies or supersedes the applicable wage determination 10 days or less prior to the closing date, the subrecipient may request a finding from the State recipient that there is not a reasonable time to notify interested contractors of the modification of the wage determination. The State recipient will provide a report of its findings to the subrecipient.

- (ii) If the subrecipient does not award the contract within 90 days of the closure of the solicitation, any modifications or supersedes DOL makes to the wage

determination contained in the solicitation shall be effective unless the State recipient, at the request of the subrecipient, obtains an extension of the 90 day period from DOL pursuant to 29 CFR 1.6(c)(3)(iv). The subrecipient shall monitor <https://beta.sam.gov/> on a weekly basis if it does not award the contract within 90 days of closure of the solicitation to ensure that wage determinations contained in the solicitation remain current.

(b) If the subrecipient carries out activity subject to DB by issuing a task order, work assignment or similar instrument to an existing contractor (ordering instrument) rather than by publishing a solicitation, the subrecipient shall insert the appropriate DOL wage determination from <https://beta.sam.gov/> into the ordering instrument. Typically, the appropriate wage determination would be the one in effect on the date the task order, work assignment or similar instrument is awarded.

(c) Subrecipients shall review all subcontracts subject to DB entered into by prime contractors to verify that the prime contractor has required its subcontractors to include the applicable wage determinations.

(d) As provided in 29 CFR 1.6(f), DOL may issue a revised wage determination applicable to a subrecipient's contract after the award of a contract or the issuance of an ordering instrument if DOL determines that the subrecipient has failed to incorporate a wage determination or has used a wage determination that clearly does not apply to the contract or ordering instrument. If this occurs, the subrecipient shall either terminate the contract or ordering instrument and issue a revised solicitation or ordering instrument or incorporate DOL's wage determination retroactive to the beginning of the contract or ordering instrument by change order. The subrecipient's contractor must be compensated for any increases in wages resulting from the use of DOL's revised wage determination.

3. Contract and Subcontract provisions.

The recipient shall insure that the subrecipient(s) shall insert in full in any contract in excess of \$2,000 which is entered into for the actual construction, alteration and/or repair, including painting and decorating, of a treatment work under the CWSRF or a construction project under the DWSRF financed in whole or in part from Federal funds or in accordance with guarantees of a Federal agency or financed from funds obtained by pledge of any contract of a Federal agency to make a loan, grant or annual contribution (except where a different meaning is expressly indicated), and which is subject to the labor standards provisions of any of the acts listed in 29 CFR § 5.1, the following clauses:

(1) Minimum wages.

(i) All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (a)(1)(iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR § 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: provided that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph (a)(1)(ii) of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

Subrecipients may obtain wage determinations from the U.S. Department of Labor's web site, <https://beta.sam.gov/>.

(ii)(A) The subrecipient(s), on behalf of EPA, shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The State award official shall approve a request for an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

- (1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
- (2) The classification is utilized in the area by the construction industry; and
- (3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(B) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the subrecipient(s) agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), documentation of the action taken and the request, including the local wage determination shall be sent by the subrecipient(s) to the State award official. The State award official will transmit the request, to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210 and to the EPA DB Regional Coordinator concurrently. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification request within 30 days of receipt and so advise the State award official or will notify the State award official within the 30-day period that additional time is necessary.

(C) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the subrecipient(s) do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the award official shall refer the request and the local wage determination, including the views of

all interested parties and the recommendation of the State award official, to the Administrator for determination. The request shall be sent to the EPA DB Regional Coordinator concurrently. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt of the request and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(D) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs (a)(1)(ii)(B) or (C) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, provided that the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

(2) Withholding. The subrecipient(s), shall upon written request of the EPA Award Official or an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the recipient may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

(3) Payrolls and basic records.

(i) Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the

contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(ii)(A) The contractor shall submit weekly, for each week in which any contract work is performed, a copy of all payrolls to the subrecipient, that is, the entity that receives the subgrant or loan from the State capitalization grant recipient. Such documentation shall be available on request of the State recipient or EPA. As to each payroll copy received, the subrecipient shall provide written confirmation in a form satisfactory to the State indicating whether or not the project is in compliance with the requirements of 29 CFR 5.5(a)(1) based on the most recent payroll copies for the specified week. The payrolls shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on the weekly payrolls. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at www.dol.gov/whd/forms/wh347instr.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the subrecipient(s) for transmission to the State or EPA if requested by EPA, the State, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the subrecipient(s).

(B) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) That the payroll for the payroll period contains the information required to be provided under § 5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under § 5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(C) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph (a)(3)(ii)(B) of this section.

(D) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

(iii) The contractor or subcontractor shall make the records required under paragraph (a)(3)(i) of this section available for inspection, copying, or transcription by authorized representatives of the State, EPA or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the Federal agency or State may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

(4) Apprentices and trainees -

(i) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the Apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency

recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

(5) Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

(6) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses contained in 29 CFR 5.5(a)(1) through (10) and such other clauses as the EPA determines may be appropriate, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

(7) Contract termination; debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

(8) Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

(9) Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and subrecipient(s), the State recipient, EPA, the U.S. Department of Labor, or the employees or their representatives.

(10) Certification of eligibility.

(i) By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

4. Contract Provision for Contracts in Excess of \$100,000.

(a) Contract Work Hours and Safety Standards Act. The subrecipient shall insert the following clauses set forth in paragraphs (a)(1), (2), (3), and (4) of this section in full in any contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by Item 3 above or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

(1) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of 40 hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of 40 hours in such workweek.

(2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (a)(1) of this section the contractor and any subcontractor responsible therefore shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (a)(1) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of 40 hours without payment of the overtime wages required by the clause set forth in paragraph (a)(1) of this section.

(3) Withholding for unpaid wages and liquidated damages. The subrecipient, upon written request of the EPA Award Official or an authorized representative of the Department of Labor, shall withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (b)(2) of this section.

(4) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (a)(1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (a)(1) through (4) of this section.

(b) In addition to the clauses contained in Item 3 above, in any contract subject only to the Contract Work Hours and Safety Standards Act and not to any of the other statutes cited in 29 CFR 5.1, the subrecipient shall insert a clause requiring that the contractor or subcontractor shall maintain payrolls and basic payroll records during the course of the work and shall preserve them for a period of three years from the completion of the contract for all laborers and mechanics, including guards and watchmen, working on the contract. Such records shall contain the name and address of each such employee, social security number, correct classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. Further, the subrecipient shall insert in any such contract a clause providing that the records to be maintained under this paragraph shall be made available by the contractor or subcontractor for inspection, copying, or transcription by authorized representatives of the recipient and the Department of Labor, and the contractor or subcontractor will permit such representatives to interview employees during working hours on the job.

5. Compliance Verification

(a) The subrecipient shall periodically interview a sufficient number of employees entitled to DB prevailing wages (covered employees) to verify that contractors or subcontractors are paying the appropriate wage rates. As provided in 29 CFR 5.6(a)(6), all interviews must be conducted in confidence. The subrecipient must use WIFA's interview form, Department of Labor's Standard Form 1445, or equivalent documentation to memorialize the interviews. WIFA's interview form and instructions are included with this packet.

(b) The subrecipient shall establish and follow an interview schedule based on its assessment of the risks of noncompliance with DB posed by contractors or subcontractors and the duration of the contract or subcontract. Subrecipients must conduct more frequent interviews if the initial interviews or other information indicated that there is a risk that the contractor or subcontractor is not complying with DB. Subrecipients shall immediately conduct interviews in response to an alleged violation of the prevailing wage requirements. All interviews shall be conducted in confidence.

(c) The subrecipient shall periodically conduct spot checks of a representative sample of weekly payroll data to verify that contractors or subcontractors are paying the appropriate

wage rates. The subrecipient shall establish and follow a spot check schedule based on its assessment of the risks of noncompliance with DB posed by contractors or subcontractors and the duration of the contract or subcontract. At a minimum, if practicable, the subrecipient should spot check payroll data within two weeks of each contractor or subcontractor's submission of its initial payroll data and two weeks prior to the completion date the contract or subcontract. Subrecipients must conduct more frequent spot checks if the initial spot check or other information indicates that there is a risk that the contractor or subcontractor is not complying with DB. In addition, during the examinations the subrecipient shall verify evidence of fringe benefit plans and payments thereunder by contractors and subcontractors who claim credit for fringe benefit contributions.

(d) The subrecipient shall periodically review contractors and subcontractors use of apprentices and trainees to verify registration and certification with respect to apprenticeship and training programs approved by either the U.S Department of Labor or a state, as appropriate, and that contractors and subcontractors are not using disproportionate numbers of laborers, trainees and apprentices. These reviews shall be conducted in accordance with the schedules for spot checks and interviews described in Item 5(b) and (c) above.

(e) Subrecipients must immediately report potential violations of the DB prevailing wage requirements to the EPA DB contact listed below and to the appropriate DOL Wage and Hour District Office listed at www.dol.gov/whd.

Joe Ochab, EPA Region 9, 75 Hawthorne St. (P-22), San Francisco, CA 94105

**Clean Water Revolving Fund
Drinking Water Revolving Fund**

Equal Employment

Inclusion of these seven clauses (excerpt from Executive Order No. 11246, Section 202 as amended by Executive Order 11375 and 12086) is required in all CWRF and DWRF project related contracts and subcontracts over \$10,000:

During the performance of this contract, the contractor agrees as follows:

(1) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this nondiscrimination clause.

(2) The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.

(3) The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency contracting officer, advising the labor union or worker's representative of the contractor's commitments under Section 202 of Executive Order No. 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(4) The contractor will comply with all provisions of Executive Order No. 11246 of Sept. 24, 1965, and all of the rules, regulations, and relevant orders of the Secretary of Labor.

(5) The contractor will furnish all information and reports required by Executive Order No. 11246 of Sept. 24, 1965, and by the rules, regulations and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(6) In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of such rules, regulations, or orders, this contract may be cancelled, terminated or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in

Executive Order No. 11246 of Sept. 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order No. 11246 of Sept. 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(7) The contractor will include the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order No. 11246 of Sept. 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as may be directed by the Secretary of Labor as a means of enforcing such provisions including sanctions for noncompliance: provided, however, that in the event the contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

**Water Infrastructure Finance Authority of Arizona
Clean Water Revolving Fund
Drinking Water Revolving Fund**

Disadvantaged Business Enterprises (DBE)

Good Faith Efforts

Borrowers and their prime contractors must follow, document, and maintain documentation of their good faith efforts as listed below to ensure that Certified Disadvantaged Business Enterprises* (DBEs) have the opportunity to participate in the project by increasing DBE awareness of procurement efforts and outreach.

1. Ensure DBEs are made aware of contracting opportunities to the fullest extent practicable through outreach and recruitment activities; including placing DBEs on solicitation lists and soliciting them whenever they are potential sources.
2. Make information on forthcoming opportunities available to DBEs and arrange time frames for contracts and establish delivery schedules, where the requirements permit, in a way that encourages and facilitates participation by DBEs in the competitive process. This includes, whenever possible, posting solicitation for bids or proposals for a minimum of 30 calendar days before the bid or proposal closing date.
3. Consider in the contracting process whether firms competing for large contracts could be subcontracted with DBEs. This will include dividing total requirements when economically feasible into smaller tasks or quantities to permit maximum participation by DBEs in the competitive process.
4. Encourage contracting with a consortium of DBEs when a contract is too large for one of these firms to handle individually.
5. Use the services and assistance of the Small Business Administration and the Minority Business Development Agency of the U. S. Department of Commerce.
6. If the prime contractor awards subcontracts, require the prime contractor to take the steps in numbers 1 through 5 above.

Required Contract Conditions

These conditions must be included in all procurement contracts entered into by the Borrower for all DWRF and CWRP projects:

1. The prime contractor must pay its subcontractor for satisfactory performance no more than 30 days from the prime contractor's receipt of payment from the owner.
2. The prime contractor must notify the owner in writing prior to the termination of any Disadvantaged Business Enterprise subcontractor for convenience by the prime contractor.
3. If a Disadvantaged Business Enterprise contractor fails to complete work under the subcontract for any reason, the prime contractor must employ the six good faith efforts if soliciting a replacement contractor.
4. The prime contractor must continue to employ the six good faith efforts even if the prime contractor has achieved its fair share objectives.

5. The prime contractor must provide EPA Form 6100-2 DBE Program Subcontractor Participation Form** to all of its Disadvantaged Business Enterprise subcontractors. Disadvantaged Business Enterprise subcontractors may send completed Form 6100-2 directly to the Region 9 DBE Coordinator listed below:

Joe Ochab, EPA Region 9, 75 Hawthorne St. (P-22), San Francisco, CA 94105

6. The prime contractor must have its Disadvantaged Business Enterprise subcontractors complete EPA Form 6100-3 - DBE Program Subcontractor Performance Form**. The prime contractor must include all completed forms as part of the prime contractor's bid or proposal package to the Borrower.
7. The prime contractor must complete and submit EPA Form 6100-4 DBE Program Subcontractor Utilization Form** as part of the prime contractor's bid or proposal package to the Borrower.
8. A Borrower must ensure that each procurement contract it awards contains the following terms and conditions:

The contractor shall not discriminate on the basis of race, color, national origin or sex in the performance of this contract. The contractor shall carry out applicable requirements of 40 CFR Part 33 in the award and administration of contracts awarded under EPA financial assistance agreements. Failure by the contractor to carry out these requirements is a material breach of this contract which may result in the termination of this contract or other legally available remedies.

** A DBE is a Disadvantaged, Minority, or Woman Business Enterprise that has been certified by an entity from which EPA accepts certifications as described in 40 CFR 33.204-33.205 or certified by EPA. EPA accepts certifications from entities that meet or exceed EPA certification standards as described in 40 CFR 33.202.*

*** More information about DBE requirements can be found at <https://www.epa.gov/grants/frequently-asked-questions-disadvantaged-business-enterprises>*

**Water Infrastructure Finance Authority of Arizona
Clean Water Revolving Fund
Drinking Water Revolving Fund**

Prohibition on Certain Telecommunication and Video Surveillance Equipment

Public Law 115-232, enacted August 13, 2020

WIFA borrowers must comply with regulations at 2 CFR 200.216, *Prohibition on certain telecommunication and video surveillance services or equipment*, implementing section 889 of Public Law 115-232. The regulation prohibits the use of Federal funds to procure (enter into, extend, or renew contracts) or obtain equipment, systems, or services that use “covered telecommunications equipment or services” identified in the regulation as a substantial or essential component of any system, or as critical technology as part of any system. Prohibitions extend to the use of Federal funds by recipients and subrecipients to enter into a contract with an entity that “uses any equipment, system, or service that uses covered telecommunications equipment or services” as a substantial or essential component of any system, or as critical technology as part of any system. Certain equipment, systems, or services, including equipment, systems, or services produced or provided by entities subject to the prohibition are recorded in the System for Award Management exclusion list (<https://sam.gov/SAM/>).

As described in section 889 of Public Law 115-232, covered telecommunications equipment or services includes:

- **Telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities).**
- For the purpose of public safety, security of government facilities, physical security surveillance of critical infrastructure, and other security purposes, **video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities).**
- Telecommunications or video surveillance services provided by such entities or using such equipment.
- Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of the National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.

There is no exhaustive list of components and services that fall under the prohibition. Borrowers and contractors should be particularly mindful of project components with internet or cellular connections. For example, automatic meter reading (AMR) technology and advanced metering infrastructure (AMI), instrumentation control systems (e.g. process control systems, distributed control systems and programmable logic controls), and security cameras and other electronic security measures. Items included in the prohibition are not eligible costs, and WIFA cannot reimburse borrowers for these costs.

ATTACHMENTS

Davis-Bacon Forms

WH-1321 - Davis-Bacon poster

WH-347 - Payroll and certification form

SF1444 - Wage Determination Request form

Employee Interview form

American Iron and Steel

Sample Step Certification Letter (Processed/

Manufactured) Sample Step Certification Letter (Shipped/
Provided)

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Title 29 – Labor

Subtitle A – Office of the Secretary of Labor

Part 3 Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States

- § 3.1 Purpose and scope.
- § 3.2 Definitions.
- § 3.3 Certified payrolls.
- § 3.4 Submission of certified payroll and the preservation and inspection of weekly payroll records.
- § 3.5 Payroll deductions permissible without application to or approval of the Secretary of Labor.
- § 3.6 Payroll deductions permissible with the approval of the Secretary of Labor.
- § 3.7 Applications for the approval of the Secretary of Labor.
- § 3.8 Action by the Secretary of Labor upon applications.
- § 3.9 Prohibited payroll deductions.
- § 3.10 Methods of payment of wages.
- § 3.11 Regulations part of contract.

PART 3—CONTRACTORS AND SUBCONTRACTORS ON PUBLIC BUILDING OR PUBLIC WORK FINANCED IN WHOLE OR IN PART BY LOANS OR GRANTS FROM THE UNITED STATES

Authority: R.S. 161, sec. 2, 48 Stat. 848; Reorg. Plan No. 14 of 1950, 64 Stat. 1267; 5 U.S.C. 301; 40 U.S.C. 3145; Secretary's Order 01-2014 (Dec. 19, 2014), 79 FR 77527 (Dec. 24, 2014).

Source: 29 FR 97, Jan. 4, 1964, unless otherwise noted.

§ 3.1 Purpose and scope.

This part prescribes “anti-kickback” regulations under section 2 of the Act of June 13, 1934, as amended (40 U.S.C. 3145), popularly known as the Copeland Act. This part applies to any contract which is subject to Federal wage standards and which is for the construction, prosecution, completion, or repair of public buildings, public works or buildings or works financed in whole or in part by loans or grants from the United States. The part is intended to aid in the enforcement of the minimum wage provisions of the Davis-Bacon Act and the various statutes dealing with federally assisted construction that contain similar minimum wage provisions, including those provisions which are not subject to Reorganization Plan No. 14 of 1950 (e.g., the College Housing Act of 1950, the Federal Water Pollution Control Act, and the Housing Act of 1959), and in the enforcement of the overtime provisions of the Contract Work Hours and Safety Standards Act whenever they are applicable to construction work. The part details the obligation of contractors and subcontractors relative to the weekly submission of statements regarding the

wages paid on work covered thereby; sets forth the circumstances and procedures governing the making of payroll deductions from the wages of those employed on such work; and delineates the methods of payment permissible on such work.

[88 FR 57728, Aug. 23, 2023]

§ 3.2 Definitions.

As used in the regulations in this part:

Affiliated person. The term “affiliated person” includes a spouse, child, parent, or other close relative of the contractor or subcontractor; a partner or officer of the contractor or subcontractor; a corporation closely connected with the contractor or subcontractor as parent, subsidiary, or otherwise, and an officer or agent of such corporation.

Agency. The term “agency” means any Federal, State, or local government agency or instrumentality, or other similar entity, that enters into a contract or provides assistance through loan, grant, loan guarantee or insurance, or otherwise, for a project subject to the Davis-Bacon labor standards, as defined in § 5.2 of this subtitle.

(1) **Federal agency.** The term “Federal agency” means an agency or instrumentality of the United States or the District of Columbia, as defined in this section, that enters into a contract or provides assistance through loan, grant, loan guarantee or insurance, or otherwise, to a project subject to the Davis-Bacon labor standards.

(2) [Reserved]

Building or work. The term “building or work” generally includes construction activity of all types, as distinguished from manufacturing, furnishing of materials, or servicing and maintenance work. The term includes, without limitation, buildings, structures, and improvements of all types, such as bridges, dams, solar panels, wind turbines, broadband installation, installation of electric car chargers, plants, highways, parkways, streets, subways, tunnels, sewers, mains, powerlines, pumping stations, heavy generators, railways, airports, terminals, docks, piers, wharves, ways, lighthouses, buoys, jetties, breakwaters, levees, and canals; dredging, shoring, rehabilitation and reactivation of plants, scaffolding, drilling, blasting, excavating, clearing, and landscaping. The term “building or work” also includes a portion of a building or work, or the installation (where appropriate) of equipment or components into a building or work.

(1) **Building or work financed in whole or in part by loans or grants from the United States.** The term “building or work financed in whole or in part by loans or grants from the United States” includes any building or work for which construction, prosecution, completion, or repair, as defined in this section, payment or part payment is made directly or indirectly from funds provided by loans or grants by a Federal agency. The term includes any building or work for which the Federal assistance granted is in the form of loan guarantees or insurance.

(2) [Reserved]

Construction, prosecution, completion, or repair. The term “construction, prosecution, completion, or repair” mean all types of work done on a particular building or work at the site thereof as specified in § 5.2 of this subtitle, including, without limitation, altering, remodeling, painting and decorating, installation on the site

of the work of items fabricated offsite, covered transportation as reflected in § 5.2, demolition and/or removal as reflected in § 5.2, and the manufacturing or furnishing of materials, articles, supplies, or equipment on the site of the building or work, performed by laborers and mechanics at the site.

Employed (and wages). Every person paid by a contractor or subcontractor in any manner for their labor in the construction, prosecution, completion, or repair of a public building or public work or building or work financed in whole or in part by assistance from the United States through loan, grant, loan guarantee or insurance, or otherwise, is "employed" and receiving "wages", regardless of any contractual relationship alleged to exist between the contractor and such person.

Public building (or public work). The term "public building (or public work)" includes a building or work the construction, prosecution, completion, or repair of which, as defined in this section, is carried on directly by authority of or with funds of a Federal agency to serve the general public regardless of whether title thereof is in a Federal agency. The construction, prosecution, completion, or repair of a portion of a building or work, or the installation (where appropriate) of equipment or components into a building or work, may still be considered a public building or work, even where the entire building or work is not owned, leased by, or to be used by the Federal agency, as long as the construction, prosecution, completion, or repair of that portion of the building or work, or the installation (where appropriate) of equipment or components into that building or work, is carried on by authority of or with funds of a Federal agency to serve the interest of the general public.

United States or the District of Columbia. The term "United States or the District of Columbia" means the United States, the District of Columbia, and all executive departments, independent establishments, administrative agencies, and instrumentalities of the United States and of the District of Columbia, and any corporation for which all or substantially all of the stock of which is beneficially owned by the United States, by the District of Columbia, or any of the foregoing departments, establishments, agencies, and instrumentalities.

[88 FR 57729, Aug. 23, 2023]

§ 3.3 Certified payrolls.

- (a) [Reserved]
- (b) Each contractor or subcontractor engaged in the construction, prosecution, completion, or repair of any public building or public work, or building or work financed in whole or in part by loans or grants from the United States, each week must provide a copy of its weekly payroll for all laborers and mechanics engaged on work covered by this part and part 5 of this chapter during the preceding weekly payroll period, accompanied by a statement of compliance certifying the accuracy of the weekly payroll information. This statement must be executed by the contractor or subcontractor or by an authorized officer or employee of the contractor or subcontractor who supervises the payment of wages, and must be on the back of Form WH-347, "Payroll (For Contractors Optional Use)" or on any form with identical wording. Copies of WH-347 may be obtained from the contracting or sponsoring agency or from the Wage and Hour Division website at <https://www.dol.gov/agencies/whd/government-contracts/construction/forms> or its successor site. The signature by the contractor, subcontractor, or the authorized officer or employee must be an original handwritten signature or a legally valid electronic signature.
- (c) The requirements of this section do not apply to any contract of \$2,000 or less.

- (d) Upon a written finding by the head of a Federal agency, the Secretary of Labor may provide reasonable limitations, variations, tolerances, and exemptions from the requirements of this section subject to such conditions as the Secretary of Labor may specify.

[88 FR 57729, Aug. 23, 2023]

§ 3.4 Submission of certified payroll and the preservation and inspection of weekly payroll records.

- (a) **Certified payroll.** Each certified payroll required under § 3.3 must be delivered by the contractor or subcontractor, within 7 days after the regular payment date of the payroll period, to a representative at the site of the building or work of the agency contracting for or financing the work, or, if there is no representative of the agency at the site of the building or work, the statement must be delivered by mail or by any other means normally assuring delivery by the contractor or subcontractor, within that 7 day time period, to the agency contracting for or financing the building or work. After the certified payrolls have been reviewed in accordance with the contracting or sponsoring agency's procedures, such certified payrolls must be preserved by the agency for a period of 3 years after all the work on the prime contract is completed and must be produced for inspection, copying, and transcription by the Department of Labor upon request. The certified payrolls must also be transmitted together with a report of any violation, in accordance with applicable procedures prescribed by the United States Department of Labor.
- (b) **Recordkeeping.** Each contractor or subcontractor must preserve the regular payroll records for a period of 3 years after all the work on the prime contract is completed. The regular payroll records must set out accurately and completely the name; Social Security number; last known address, telephone number, and email address of each laborer and mechanic; each worker's correct classification(s) of work actually performed; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof); daily and weekly number of hours actually worked in total and on each covered contract; deductions made; and actual wages paid. The contractor or subcontractor must make such regular payroll records, as well as copies of the certified payrolls provided to the contracting or sponsoring agency, available at all times for inspection, copying, and transcription by the contracting officer or their authorized representative, and by authorized representatives of the Department of Labor.

[88 FR 57730, Aug. 23, 2023]

§ 3.5 Payroll deductions permissible without application to or approval of the Secretary of Labor.

Deductions made under the circumstances or in the situations described in the paragraphs of this section may be made without application to and approval of the Secretary of Labor:

- (a) Any deduction made in compliance with the requirements of Federal, State, or local law, such as Federal or State withholding income taxes and Federal social security taxes.
- (b) Any deduction of sums previously paid to the laborer or mechanic as a bona fide prepayment of wages when such prepayment is made without discount or interest. A bona fide prepayment of wages is considered to have been made only when cash or its equivalent has been advanced to the person employed in such manner as to give him complete freedom of disposition of the advanced funds.

- (c) Any deduction of amounts required by court process to be paid to another, unless the deduction is in favor of the contractor, subcontractor, or any affiliated person, or when collusion or collaboration exists.
- (d) Any deduction constituting a contribution on behalf of the laborer or mechanic employed to funds established by the contractor or representatives of the laborers or mechanics, or both, for the purpose of providing either from principal or income, or both, medical or hospital care, pensions or annuities on retirement, death benefits, compensation for injuries, illness, accidents, sickness, or disability, or for insurance to provide any of the foregoing, or unemployment benefits, vacation pay, savings accounts, or similar payments for the benefit of the laborers or mechanics, their families and dependents: *Provided, however,* That the following standards are met:
 - (1) The deduction is not otherwise prohibited by law;
 - (2) It is either:
 - (i) Voluntarily consented to by the laborer or mechanic in writing and in advance of the period in which the work is to be done and such consent is not a condition either for the obtaining of or for the continuation of employment; or
 - (ii) Provided for in a bona fide collective bargaining agreement between the contractor or subcontractor and representatives of its laborers or mechanics;
 - (3) No profit or other benefit is otherwise obtained, directly or indirectly, by the contractor or subcontractor or any affiliated person in the form of commission, dividend, or otherwise; and
 - (4) The deductions must serve the convenience and interest of the laborer or mechanic.
- (e) Any deduction requested by the laborer or mechanic to enable him or her to repay loans to or to purchase shares in credit unions organized and operated in accordance with Federal and State credit union statutes.
- (f) Any deduction voluntarily authorized by the laborer or mechanic for the making of contributions to governmental or quasi-governmental agencies, such as the American Red Cross.
- (g) Any deduction voluntarily authorized by the laborer or mechanic for the making of contributions to charitable organizations as defined by 26 U.S.C. 501(c)(3).
- (h) Any deductions to pay regular union initiation fees and membership dues, not including fines or special assessments: *Provided, however,* That a collective bargaining agreement between the contractor or subcontractor and representatives of its laborers or mechanics provides for such deductions and the deductions are not otherwise prohibited by law.
- (i) Any deduction not more than for the "reasonable cost" of board, lodging, or other facilities meeting the requirements of section 3(m) of the Fair Labor Standards Act of 1938, as amended, and 29 CFR part 531. When such a deduction is made the additional records required under 29 CFR 516.25(a) must be kept.
- (j) Any deduction for the cost of safety equipment of nominal value purchased by the laborer or mechanic as their own property for their personal protection in their work, such as safety shoes, safety glasses, safety gloves, and hard hats, if such equipment is not required by law to be furnished by the contractor, if such deduction does not violate the Fair Labor Standards Act or any other law, if the cost on which the deduction is based does not exceed the actual cost to the contractor where the equipment is purchased from the contractor and does not include any direct or indirect monetary return to the contractor where the equipment is purchased from a third person, and if the deduction is either:

- (1) Voluntarily consented to by the laborer or mechanic in writing and in advance of the period in which the work is to be done and such consent is not a condition either for the obtaining of employment or its continuance; or
- (2) Provided for in a bona fide collective bargaining agreement between the contractor or subcontractor and representatives of its laborers and mechanics.

[88 FR 57730, Aug. 23, 2023]

§ 3.6 Payroll deductions permissible with the approval of the Secretary of Labor.

Any contractor or subcontractor may apply to the Secretary of Labor for permission to make any deduction not permitted under § 3.5. The Secretary may grant permission whenever he finds that:

- (a) The contractor, subcontractor, or any affiliated person does not make a profit or benefit directly or indirectly from the deduction either in the form of a commission, dividend, or otherwise;
- (b) The deduction is not otherwise prohibited by law;
- (c) The deduction is either
 - (1) voluntarily consented to by the employee in writing and in advance of the period in which the work is to be done and such consent is not a condition either for the obtaining of employment or its continuance, or
 - (2) provided for in a bona fide collective bargaining agreement between the contractor or subcontractor and representatives of its employees; and
- (d) The deduction serves the convenience and interest of the employee.

§ 3.7 Applications for the approval of the Secretary of Labor.

Any application for the making of payroll deductions under § 3.6 must comply with the requirements prescribed in the following paragraphs of this section:

- (a) The application must be in writing and addressed to the Secretary of Labor. The application must be submitted by email to dbadeductions@dol.gov, by mail to the United States Department of Labor, Wage and Hour Division, Director, Division of Government Contracts Enforcement, 200 Constitution Ave., NW, Room S-3502, Washington, DC 20210, or by any other means normally assuring delivery.
- (b) The application need not identify the contract or contracts under which the work in question is to be performed. Permission will be given for deductions on all current and future contracts of the applicant for a period of 1 year. A renewal of permission to make such payroll deduction will be granted upon the submission of an application which makes reference to the original application, recites the date of the Secretary of Labor's approval of such deductions, states affirmatively that there is continued compliance with the standards set forth in the provisions of § 3.6, and specifies any conditions which have changed in regard to the payroll deductions.
- (c) The application must state affirmatively that there is compliance with the standards set forth in the provisions of § 3.6. The affirmation must be accompanied by a full statement of the facts indicating such compliance.

- (d) The application must include a description of the proposed deduction, the purpose of the deduction, and the classes of laborers or mechanics from whose wages the proposed deduction would be made.
- (e) The application must state the name and business of any third person to whom any funds obtained from the proposed deductions are to be transmitted and the affiliation of such person, if any, with the applicant.

[88 FR 57731, Aug. 23, 2023]

§ 3.8 Action by the Secretary of Labor upon applications.

The Secretary of Labor will decide whether or not the requested deduction is permissible under provisions of § 3.6; and will notify the applicant in writing of the decision.

[88 FR 57731, Aug. 23, 2023]

§ 3.9 Prohibited payroll deductions.

Deductions not elsewhere provided for by this part and which are not found to be permissible under § 3.6 are prohibited.

§ 3.10 Methods of payment of wages.

The payment of wages shall be by cash, negotiable instruments payable on demand, or the additional forms of compensation for which deductions are permissible under this part. No other methods of payment shall be recognized on work subject to the Copeland Act.

§ 3.11 Regulations part of contract.

All contracts made with respect to the construction, prosecution, completion, or repair of any public building or public work or building or work financed in whole or in part by loans or grants from the United States covered by the regulations in this part must expressly bind the contractor or subcontractor to comply with such of the regulations in this part as may be applicable. In this regard, see § 5.5(a) of this subtitle. However, these requirements will be considered to be effective by operation of law, whether or not they are incorporated into such contracts, as set forth in § 5.5(e) of this subtitle.

[88 FR 57731, Aug. 23, 2023]

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Title 29 – Labor

Subtitle A – Office of the Secretary of Labor

Part 5 Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction (Also Labor Standards Provisions Applicable to Nonconstruction Contracts Subject to the Contract Work Hours and Safety Standards Act)

Subpart A Davis-Bacon and Related Acts Provisions and Procedures

§ 5.1 Purpose and scope.

§ 5.2 Definitions.

§§ 5.3-5.4 [Reserved]

§ 5.5 Contract provisions and related matters.

§ 5.6 Enforcement.

§ 5.7 Reports to the Secretary of Labor.

§ 5.8 Liquidated damages under the Contract Work Hours and Safety Standards Act.

§ 5.9 Suspension of funds.

§ 5.10 Restitution, criminal action.

§ 5.11 Disputes concerning payment of wages.

§ 5.12 Debarment proceedings.

§ 5.13 Rulings and interpretations.

§ 5.14 Variations, tolerances, and exemptions from parts 1 and 3 of this subtitle and this part.

§ 5.15 Limitations, variations, tolerances, and exemptions under the Contract Work Hours and Safety Standards Act.

§ 5.16 [Reserved]

§ 5.17 [Reserved]

§ 5.18 Remedies for retaliation.

Subpart B Interpretation of the Fringe Benefits Provisions of the Davis-Bacon Act

§ 5.20 Scope and significance of this subpart.

§ 5.21 [Reserved]

§ 5.22 Effect of the Davis-Bacon fringe benefits provisions.

§ 5.23 The statutory provisions.

§ 5.24 The basic hourly rate of pay.

§ 5.25 Rate of contribution or cost for fringe benefits.

§ 5.26 “* * * contribution irrevocably made * * * to a trustee or to a third person”.

§ 5.27 “* * * fund, plan, or program”.

§ 5.28 Unfunded plans.

§ 5.29 Specific fringe benefits.

§ 5.30 Types of wage determinations.

§ 5.31 Meeting wage determination obligations.

§ 5.32 Overtime payments.

§ 5.33 Administrative expenses of a contractor or subcontractor.

Subpart C Severability

§ 5.40 Severability.

PART 5—LABOR STANDARDS PROVISIONS APPLICABLE TO CONTRACTS COVERING FEDERALLY FINANCED AND ASSISTED CONSTRUCTION (ALSO LABOR STANDARDS PROVISIONS APPLICABLE TO NONCONSTRUCTION CONTRACTS SUBJECT TO THE CONTRACT WORK HOURS AND SAFETY STANDARDS ACT)

Authority: 5 U.S.C. 301; Reorganization Plan No. 14 of 1950, 5 U.S.C. appendix; 28 U.S.C. 2461 note; 40 U.S.C. 3141 et seq.; 40 U.S.C. 3145; 40 U.S.C. 3148; 40 U.S.C. 3701 et seq.; Secretary's Order No. 01-2014, 79 FR 77527; and the laws referenced by § 5.1(a).

Source: 48 FR 19541, Apr. 29, 1983, unless otherwise noted.

Subpart A—Davis-Bacon and Related Acts Provisions and Procedures

Source: 48 FR 19540, Apr. 29, 1983, unless otherwise noted.

Editorial Note: Nomenclature changes to subpart A of part 5 appear at 61 FR 19984, May 3, 1996.

§ 5.1 Purpose and scope.

(a) The regulations contained in this part are promulgated under the authority conferred upon the Secretary of Labor by Reorganization Plan No. 14 of 1950 (64 Stat. 1267, as amended, 5 U.S.C. appendix) and the Copeland Act (48 Stat. 948; 18 U.S.C. 874; 40 U.S.C. 3145) in order to coordinate the administration and enforcement of labor standards provisions contained in the Davis-Bacon Act (46 Stat. 1494, as amended; 40 U.S.C. 3141 et seq.) and its related statutes (“Related Acts”).

(1) A listing of laws requiring Davis-Bacon labor standards provisions can be found at www.dol.gov/agencies/whd/government-contracts or its successor website.

(2) [Reserved]

(b) Part 1 of this subtitle contains the Department's procedural rules governing requests for wage determinations and the issuance and use of such wage determinations under the Davis-Bacon Act and its Related Acts.

[88 FR 57731, Aug. 23, 2023]

§ 5.2 Definitions.

Administrator. The term “Administrator” means the Administrator of the Wage and Hour Division, U.S. Department of Labor, or authorized representative.

Agency. The term “agency” means any Federal, State, or local government agency or instrumentality, or other similar entity, that enters into a contract or provides assistance through loan, grant, loan guarantee or insurance, or otherwise, to a project subject to the Davis-Bacon labor standards, as defined in this section.

(1) **Federal agency.** The term “Federal agency” means an agency or instrumentality of the United States or the District of Columbia, as defined in this section, that enters into a contract or provides assistance through loan, grant, loan guarantee or insurance, or otherwise, to a project subject to the Davis-Bacon labor standards.

(2) [Reserved]

Agency Head. The term “Agency Head” means the principal official of an agency and includes those persons duly authorized to act on behalf of the Agency Head.

Apprentice and helper. The terms “apprentice” and “helper” are defined as follows:

(1) “Apprentice” means:

(i) A person employed and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship, or with a State Apprenticeship Agency recognized by the Office of Apprenticeship; or

(ii) A person in the first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice;

(2) These provisions do not apply to apprentices and trainees employed on projects subject to 23 U.S.C. 113 who are enrolled in programs which have been certified by the Secretary of Transportation in accordance with 23 U.S.C. 113(c).

(3) A distinct classification of helper will be issued in wage determinations applicable to work performed on construction projects covered by the labor standards provisions of the Davis-Bacon and Related Acts only where:

(i) The duties of the helper are clearly defined and distinct from those of any other classification on the wage determination;

(ii) The use of such helpers is an established prevailing practice in the area; and

(iii) The helper is not employed as a trainee in an informal training program. A “helper” classification will be added to wage determinations pursuant to § 5.5(a)(1)(iii)(A) only where, in addition, the work to be performed by the helper is not performed by a classification in the wage determination.

Building or work. The term “building or work” generally includes construction activities of all types, as distinguished from manufacturing, furnishing of materials, or servicing and maintenance work. The term includes, without limitation, buildings, structures, and improvements of all types, such as bridges, dams, solar panels, wind turbines, broadband installation, installation of electric car chargers, plants, highways,

parkways, streets, subways, tunnels, sewers, mains, power lines, pumping stations, heavy generators, railways, airports, terminals, docks, piers, wharves, ways, lighthouses, buoys, jetties, breakwaters, levees, canals, dredging, shoring, rehabilitation and reactivation of plants, scaffolding, drilling, blasting, excavating, clearing, and landscaping. The term "building or work" also includes a portion of a building or work, or the installation (where appropriate) of equipment or components into a building or work.

Construction, prosecution, completion, or repair. The term "construction, prosecution, completion, or repair" means the following:

- (1) These terms include all types of work done—
 - (i) On a particular building or work at the site of the work, as defined in this section, by laborers and mechanics employed by a contractor or subcontractor, or
 - (ii) In the construction or development of a project under a development statute.
- (2) These terms include, without limitation (except as specified in this definition):
 - (i) Altering, remodeling, installation (where appropriate) on the site of the work of items fabricated offsite;
 - (ii) Painting and decorating;
 - (iii) Manufacturing or furnishing of materials, articles, supplies or equipment, but only if such work is done by laborers or mechanics
 - (A) Employed by a contractor or subcontractor, as defined in this section, on the site of the work, as defined in this section, or
 - (B) In the construction or development of a project under a development statute;
 - (iv) "Covered transportation," defined as any of the following activities:
 - (A) Transportation that takes place entirely within a location meeting the definition of "site of the work" in this section;
 - (B) Transportation of one or more "significant portion(s)" of the building or work between a "secondary construction site" as defined in this section and a "primary construction site" as defined in this section;
 - (C) Transportation between an "adjacent or virtually adjacent dedicated support site" as defined in this section and a "primary construction site" or "secondary construction site" as defined in this section;
 - (D) "Onsite activities essential or incidental to offsite transportation," defined as activities conducted by a truck driver or truck driver's assistant on the site of the work that are essential or incidental to the transportation of materials or supplies to or from the site of the work, such as loading, unloading, or waiting for materials to be loaded or unloaded, but only where the driver or driver's assistant's time spent on the site of the work is not *de minimis*; and
 - (E) Any transportation and related activities, whether on or off the site of the work, by laborers and mechanics employed in the construction or development of the project under a development statute.
 - (v) Demolition and/or removal, under any of the following circumstances:

- (A) Where the demolition and/or removal activities themselves constitute construction, alteration, and/or repair of an existing building or work. Examples of such activities include the removal of asbestos, paint, components, systems, or parts from a facility that will not be demolished; as well as contracts for hazardous waste removal, land recycling, or reclamation that involve substantial earth moving, removal of contaminated soil, re-contouring surfaces, and/or habitat restoration.
 - (B) Where subsequent construction covered in whole or in part by the labor standards in this part is contemplated at the site of the demolition or removal, either as part of the same contract or as part of a future contract. In determining whether covered construction is contemplated within the meaning of this provision, relevant factors include, but are not limited to, the existence of engineering or architectural plans or surveys of the site; the allocation of, or an application for, Federal funds; contract negotiations or bid solicitations; the stated intent of the relevant government officials; and the disposition of the site after demolition.
 - (C) Where otherwise required by statute.
- (3) Except for transportation that constitutes "covered transportation" as defined in this section, construction, prosecution, completion, or repair does not include the transportation of materials or supplies to or from the site of the work.

Contract. The term "contract" means any prime contract which is subject wholly or in part to the labor standards provisions of any of the laws referenced by § 5.1 and any subcontract of any tier thereunder, let under the prime contract. With the exception of work performed under a development statute, the terms contract and subcontract do not include agreements with employers that meet the definition of a material supplier under this section.

Contracting officer. The term "contracting officer" means the individual, a duly appointed successor, or authorized representative who is designated and authorized to enter into contracts on behalf of an agency, sponsor, owner, applicant, or other similar entity.

Contractor. The term "contractor" means any individual or other legal entity that enters into or is awarded a contract that is subject wholly or in part to the labor standards provisions of any of the laws referenced by § 5.1, including any prime contract or subcontract of any tier under a covered prime contract. In addition, the term contractor includes any surety that is completing performance for a defaulted contractor pursuant to a performance bond. The U.S. Government, its agencies, and instrumentalities are not contractors, subcontractors, employers or joint employers for purposes of the labor standards provisions of any of the laws referenced by § 5.1. A State or local government is not regarded as a contractor or subcontractor under statutes providing loans, grants, or other Federal assistance in situations where construction is performed by its own employees. However, under development statutes or other statutes requiring payment of prevailing wages to all laborers and mechanics employed on the assisted project, such as the U.S. Housing Act of 1937, State and local recipients of Federal-aid must pay these workers according to Davis-Bacon labor standards. The term "contractor" does not include an entity that is a material supplier, except if the entity is performing work under a development statute.

Davis-Bacon labor standards. The term "Davis-Bacon labor standards" as used in this part means the requirements of the Davis-Bacon Act, the Contract Work Hours and Safety Standards Act (other than those relating to safety and health), the Copeland Act, and the prevailing wage provisions of the other statutes referenced in § 5.1, and the regulations in this part and in parts 1 and 3 of this subtitle.

Development statute. The term “development statute” includes the United States Housing Act of 1937; the Housing Act of 1949; and the Native American Housing Assistance and Self-Determination Act of 1996, and any other Davis-Bacon Related Act that requires payment of prevailing wages under the Davis-Bacon labor standards to all laborers and mechanics employed in the development of a project and for which the Administrator determines that the statute's language and/or legislative history reflected clear congressional intent to apply a coverage standard different from the Davis-Bacon Act itself.

Employed. Every person performing the duties of a laborer or mechanic in the construction, prosecution, completion, or repair of a public building or public work, or building or work financed in whole or in part by assistance from the United States through loan, grant, loan guarantee or insurance, or otherwise, is “employed” regardless of any contractual relationship alleged to exist between the contractor and such person.

Laborer or mechanic. The term “laborer or mechanic” includes at least those workers whose duties are manual or physical in nature (including those workers who use tools or who are performing the work of a trade), as distinguished from mental or managerial. The term “laborer” or “mechanic” includes apprentices, helpers, and, in the case of contracts subject to the Contract Work Hours and Safety Standards Act, watchpersons or guards. The term does not apply to workers whose duties are primarily administrative, executive, or clerical, rather than manual. Persons employed in a bona fide executive, administrative, or professional capacity as defined in 29 CFR part 541 are not deemed to be laborers or mechanics. Forepersons who devote more than 20 percent of their time during a workweek to mechanic or laborer duties, and who do not meet the criteria of part 541, are laborers and mechanics for the time so spent.

Material supplier. The term “material supplier” is defined as follows:

- (1) A material supplier is an entity meeting all of the following criteria:
 - (i) Its only obligations for work on the contract or project are the delivery of materials, articles, supplies, or equipment, which may include pickup of the same in addition to, but not exclusive of, delivery, and which may also include activities incidental to such delivery and pickup, such as loading, unloading, or waiting for materials to be loaded or unloaded; and
 - (ii) Its facility or facilities that manufactures the materials, articles, supplies, or equipment used for the contract or project:
 - (A) Is not located on, or does not itself constitute, the project or contract's primary construction site or secondary construction site as defined in this section; and
 - (B) Either was established before opening of bids on the contract or project, or is not dedicated exclusively, or nearly so, to the performance of the contract or project.
- (2) If an entity, in addition to being engaged in the activities specified in paragraph (1)(i) of this definition, also engages in other construction, prosecution, completion, or repair work at the site of the work, it is not a material supplier.

Prime contractor. The term “prime contractor” means any person or entity that enters into a contract with an agency. For the purposes of the labor standards provisions of any of the laws referenced by § 5.1, the term prime contractor also includes the controlling shareholders or members of any entity holding a prime contract, the joint venturers or partners in any joint venture or partnership holding a prime contract, and any contractor (e.g., a general contractor) that has been delegated the responsibility for overseeing all

or substantially all of the construction anticipated by the prime contract. For the purposes of the provisions in §§ 5.5 and 5.9, any such related entities holding different prime contracts are considered to be the same prime contractor.

Public building or public work. The term "public building or public work" includes a building or work, the construction, prosecution, completion, or repair of which, as defined in this section, is carried on directly by authority of or with funds of a Federal agency to serve the interest of the general public regardless of whether title thereof is in a Federal agency. The construction, prosecution, completion, or repair of a portion of a building or work, or the installation (where appropriate) of equipment or components into a building or work, may still be considered a public building or work, even where the entire building or work is not owned, leased by, or to be used by a Federal agency, as long as the construction, prosecution, completion, or repair of that portion of the building or work, or the installation (where appropriate) of equipment or components into that building or work, is carried on by authority of or with funds of a Federal agency to serve the interest of the general public.

Secretary. The term "Secretary" includes the Secretary of Labor, and their authorized representative.

Site of the work. The term "site of the work" is defined as follows:

(1) "Site of the work" includes all of the following:

- (i) The primary construction site(s), defined as the physical place or places where the building or work called for in the contract will remain.
- (ii) Any secondary construction site(s), defined as any other site(s) where a significant portion of the building or work is constructed, *provided* that such construction is for specific use in that building or work and does not simply reflect the manufacture or construction of a product made available to the general public, and *provided further* that the site is either established specifically for the performance of the contract or project, or is dedicated exclusively, or nearly so, to the performance of the contract or project for a specific period of time. A "significant portion" of a building or work means one or more entire portion(s) or module(s) of the building or work, such as a completed room or structure, with minimal construction work remaining other than the installation and/or final assembly of the portions or modules at the place where the building or work will remain. A "significant portion" does not include materials or prefabricated component parts such as prefabricated housing components. A "specific period of time" means a period of weeks, months, or more, and does not include circumstances where a site at which multiple projects are in progress is shifted exclusively or nearly so to a single project for a few hours or days in order to meet a deadline.
- (iii) Any adjacent or virtually adjacent dedicated support sites, defined as:
 - (A) Job headquarters, tool yards, batch plants, borrow pits, and similar facilities of a contractor or subcontractor that are dedicated exclusively, or nearly so, to performance of the contract or project, *and* adjacent or virtually adjacent to either a primary construction site or a secondary construction site, and
 - (B) Locations adjacent or virtually adjacent to a primary construction site at which workers perform activities associated with directing vehicular or pedestrian traffic around or away from the primary construction site.

- (2) With the exception of locations that are on, or that themselves constitute, primary or secondary construction sites as defined in paragraphs (1)(i) and (ii) of this definition, site of the work does not include:
- (i) Permanent home offices, branch plant establishments, fabrication plants, tool yards, etc., of a contractor or subcontractor whose location and continuance in operation are determined wholly without regard to a particular Federal or federally assisted contract or project; or
 - (ii) Fabrication plants, batch plants, borrow pits, job headquarters, tool yards, etc., of a material supplier, which are established by a material supplier for the project before opening of bids and not on the primary construction site or a secondary construction site, even where the operations for a period of time may be dedicated exclusively, or nearly so, to the performance of a contract.

Subcontractor. The term "subcontractor" means any contractor that agrees to perform or be responsible for the performance of any part of a contract that is subject wholly or in part to the labor standards provisions of any of the laws referenced in § 5.1. The term subcontractor includes subcontractors of any tier.

United States or the District of Columbia. The term "United States or the District of Columbia" means the United States, the District of Columbia, and all executive departments, independent establishments, administrative agencies, and instrumentalities of the United States and of the District of Columbia, including non-appropriated fund instrumentalities and any corporation for which all or substantially all of its stock is beneficially owned by the United States or by the foregoing departments, establishments, agencies, or instrumentalities.

Wages. The term "wages" means the basic hourly rate of pay; any contribution irrevocably made by a contractor or subcontractor to a trustee or to a third person pursuant to a bona fide fringe benefit fund, plan, or program; and the rate of costs to the contractor or subcontractor which may be reasonably anticipated in providing bona fide fringe benefits to laborers and mechanics pursuant to an enforceable commitment to carry out a financially responsible plan or program, which was communicated in writing to the laborers and mechanics affected. The fringe benefits enumerated in the Davis-Bacon Act include medical or hospital care, pensions on retirement or death, compensation for injuries or illness resulting from occupational activity, or insurance to provide any of the foregoing; unemployment benefits; life insurance, disability insurance, sickness insurance, or accident insurance; vacation or holiday pay; defraying costs of apprenticeship or other similar programs; or other bona fide fringe benefits. Fringe benefits do not include benefits required by other Federal, State, or local law.

Wage determination. The term "wage determination" includes the original decision and any subsequent decisions revising, modifying, superseding, correcting, or otherwise changing the provisions of the original decision. The application of the wage determination must be in accordance with the provisions of § 1.6 of this subtitle.

[88 FR 57731, Aug. 23, 2023]

§§ 5.3-5.4 [Reserved]

§ 5.5 Contract provisions and related matters.

- (a) **Required contract clauses.** The Agency head will cause or require the contracting officer to require the contracting officer to insert in full, or (for contracts covered by the Federal Acquisition Regulation (48 CFR chapter 1)) by reference, in any contract in excess of \$2,000 which is entered into for the actual

construction, alteration and/or repair, including painting and decorating, of a public building or public work, or building or work financed in whole or in part from Federal funds or in accordance with guarantees of a Federal agency or financed from funds obtained by pledge of any contract of a Federal agency to make a loan, grant or annual contribution (except where a different meaning is expressly indicated), and which is subject to the labor standards provisions of any of the laws referenced by § 5.1, the following clauses (or any modifications thereof to meet the particular needs of the agency, *Provided*, That such modifications are first approved by the Department of Labor):

(1) **Minimum wages** –

(i) **Wage rates and fringe benefits.** All laborers and mechanics employed or working upon the site of the work (or otherwise working in construction or development of the project under a development statute), will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of basic hourly wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. As provided in paragraphs (d) and (e) of this section, the appropriate wage determinations are effective by operation of law even if they have not been attached to the contract. Contributions made or costs reasonably anticipated for bona fide fringe benefits under the Davis-Bacon Act (40 U.S.C. 3141(2)(B)) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (a)(1)(v) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics must be paid the appropriate wage rate and fringe benefits on the wage determination for the classification(s) of work actually performed, without regard to skill, except as provided in paragraph (a)(4) of this section. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: *Provided*, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classifications and wage rates conformed under paragraph (a)(1)(iii) of this section) and the Davis-Bacon poster (WH-1321) must be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

(ii) **Frequently recurring classifications.**

(A) In addition to wage and fringe benefit rates that have been determined to be prevailing under the procedures set forth in 29 CFR part 1, a wage determination may contain, pursuant to § 1.3(f), wage and fringe benefit rates for classifications of laborers and mechanics for which conformance requests are regularly submitted pursuant to paragraph (a)(1)(iii) of this section, provided that:

- (1) The work performed by the classification is not performed by a classification in the wage determination for which a prevailing wage rate has been determined;
- (2) The classification is used in the area by the construction industry; and

- (3) The wage rate for the classification bears a reasonable relationship to the prevailing wage rates contained in the wage determination.
 - (B) The Administrator will establish wage rates for such classifications in accordance with paragraph (a)(1)(iii)(A)(3) of this section. Work performed in such a classification must be paid at no less than the wage and fringe benefit rate listed on the wage determination for such classification.
- (iii) **Conformance.**
- (A) The contracting officer must require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract be classified in conformance with the wage determination. Conformance of an additional classification and wage rate and fringe benefits is appropriate only when the following criteria have been met:
 - (1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
 - (2) The classification is used in the area by the construction industry; and
 - (3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
 - (B) The conformance process may not be used to split, subdivide, or otherwise avoid application of classifications listed in the wage determination.
 - (C) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken will be sent by the contracting officer by email to DBAconformance@dol.gov. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
 - (D) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer will, by email to DBAconformance@dol.gov, refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
 - (E) The contracting officer must promptly notify the contractor of the action taken by the Wage and Hour Division under paragraphs (a)(1)(iii)(C) and (D) of this section. The contractor must furnish a written copy of such determination to each affected worker or it must be posted as a part of the wage determination. The wage rate (including fringe

benefits where appropriate) determined pursuant to paragraph (a)(1)(iii)(C) or (D) of this section must be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

- (iv) **Fringe benefits not expressed as an hourly rate.** Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor may either pay the benefit as stated in the wage determination or may pay another bona fide fringe benefit or an hourly cash equivalent thereof.
 - (v) **Unfunded plans.** If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, *Provided*, That the Secretary of Labor has found, upon the written request of the contractor, in accordance with the criteria set forth in § 5.28, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.
 - (vi) **Interest.** In the event of a failure to pay all or part of the wages required by the contract, the contractor will be required to pay interest on any underpayment of wages.
- (2) **Withholding** –
- (i) **Withholding requirements.** The [write in name of Federal agency or the recipient of Federal assistance] may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for the full amount of wages and monetary relief, including interest, required by the clauses set forth in paragraph (a) of this section for violations of this contract, or to satisfy any such liabilities required by any other Federal contract, or federally assisted contract subject to Davis-Bacon labor standards, that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to Davis-Bacon labor standards requirements and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld. In the event of a contractor's failure to pay any laborer or mechanic, including any apprentice or helper working on the site of the work (or otherwise working in construction or development of the project under a development statute) all or part of the wages required by the contract, or upon the contractor's failure to submit the required records as discussed in paragraph (a)(3)(iv) of this section, the [Agency] may on its own initiative and after written notice to the contractor, sponsor, applicant, owner, or other entity, as the case may be, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.
 - (ii) **Priority to withheld funds.** The Department has priority to funds withheld or to be withheld in accordance with paragraph (a)(2)(i) or (b)(3)(i) of this section, or both, over claims to those funds by:
 - (A) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;

- (B) A contracting agency for its reprourement costs;
- (C) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;
- (D) A contractor's assignee(s);
- (E) A contractor's successor(s); or
- (F) A claim asserted under the Prompt Payment Act, 31 U.S.C. 3901-3907.

(3) **Records and certified payrolls** –

(i) **Basic record requirements** –

- (A) **Length of record retention.** All regular payrolls and other basic records must be maintained by the contractor and any subcontractor during the course of the work and preserved for all laborers and mechanics working at the site of the work (or otherwise working in construction or development of the project under a development statute) for a period of at least 3 years after all the work on the prime contract is completed.
- (B) **Information required.** Such records must contain the name; Social Security number; last known address, telephone number, and email address of each such worker; each worker's correct classification(s) of work actually performed; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in 40 U.S.C. 3141(2)(B) of the Davis-Bacon Act); daily and weekly number of hours actually worked in total and on each covered contract; deductions made; and actual wages paid.
- (C) **Additional records relating to fringe benefits.** Whenever the Secretary of Labor has found under paragraph (a)(1)(v) of this section that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in 40 U.S.C. 3141(2)(B) of the Davis-Bacon Act, the contractor must maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits.
- (D) **Additional records relating to apprenticeship.** Contractors with apprentices working under approved programs must maintain written evidence of the registration of apprenticeship programs, the registration of the apprentices, and the ratios and wage rates prescribed in the applicable programs.

(ii) **Certified payroll requirements** –

- (A) **Frequency and method of submission.** The contractor or subcontractor must submit weekly, for each week in which any DBA- or Related Acts-covered work is performed, certified payrolls to the [write in name of appropriate Federal agency] if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the certified payrolls to the applicant, sponsor, owner, or other entity, as the case may be, that maintains such records, for transmission to the [write in name of agency]. The prime contractor is responsible for the submission of all certified payrolls by all subcontractors.

A contracting agency or prime contractor may permit or require contractors to submit certified payrolls through an electronic system, as long as the electronic system requires a legally valid electronic signature; the system allows the contractor, the contracting agency, and the Department of Labor to access the certified payrolls upon request for at least 3 years after the work on the prime contract has been completed; and the contracting agency or prime contractor permits other methods of submission in situations where the contractor is unable or limited in its ability to use or access the electronic system.

- (B) **Information required.** The certified payrolls submitted must set out accurately and completely all of the information required to be maintained under paragraph (a)(3)(i)(B) of this section, except that full Social Security numbers and last known addresses, telephone numbers, and email addresses must not be included on weekly transmittals. Instead, the certified payrolls need only include an individually identifying number for each worker (e.g., the last four digits of the worker's Social Security number). The required weekly certified payroll information may be submitted using Optional Form WH-347 or in any other format desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division website at <https://www.dol.gov/sites/dolgov/files/WHD/legacy/files/wh347/.pdf> or its successor website. It is not a violation of this section for a prime contractor to require a subcontractor to provide full Social Security numbers and last known addresses, telephone numbers, and email addresses to the prime contractor for its own records, without weekly submission by the subcontractor to the sponsoring government agency (or the applicant, sponsor, owner, or other entity, as the case may be, that maintains such records).
- (C) **Statement of Compliance.** Each certified payroll submitted must be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor, or the contractor's or subcontractor's agent who pays or supervises the payment of the persons working on the contract, and must certify the following:
- (1) That the certified payroll for the payroll period contains the information required to be provided under paragraph (a)(3)(ii) of this section, the appropriate information and basic records are being maintained under paragraph (a)(3)(i) of this section, and such information and records are correct and complete;
 - (2) That each laborer or mechanic (including each helper and apprentice) working on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR part 3; and
 - (3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification(s) of work actually performed, as specified in the applicable wage determination incorporated into the contract.
- (D) **Use of Optional Form WH-347.** The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 will satisfy the requirement for submission of the "Statement of Compliance" required by paragraph (a)(3)(ii)(C) of this section.

- (E) **Signature.** The signature by the contractor, subcontractor, or the contractor's or subcontractor's agent must be an original handwritten signature or a legally valid electronic signature.
 - (F) **Falsification.** The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under 18 U.S.C. 1001 and 31 U.S.C. 3729.
 - (G) **Length of certified payroll retention.** The contractor or subcontractor must preserve all certified payrolls during the course of the work and for a period of 3 years after all the work on the prime contract is completed.
- (iii) **Contracts, subcontracts, and related documents.** The contractor or subcontractor must maintain this contract or subcontract and related documents including, without limitation, bids, proposals, amendments, modifications, and extensions. The contractor or subcontractor must preserve these contracts, subcontracts, and related documents during the course of the work and for a period of 3 years after all the work on the prime contract is completed.
- (iv) **Required disclosures and access –**
- (A) **Required record disclosures and access to workers.** The contractor or subcontractor must make the records required under paragraphs (a)(3)(i) through (iii) of this section, and any other documents that the [write the name of the agency] or the Department of Labor deems necessary to determine compliance with the labor standards provisions of any of the applicable statutes referenced by § 5.1, available for inspection, copying, or transcription by authorized representatives of the [write the name of the agency] or the Department of Labor, and must permit such representatives to interview workers during working hours on the job.
 - (B) **Sanctions for non-compliance with records and worker access requirements.** If the contractor or subcontractor fails to submit the required records or to make them available, or refuses to permit worker interviews during working hours on the job, the Federal agency may, after written notice to the contractor, sponsor, applicant, owner, or other entity, as the case may be, that maintains such records or that employs such workers, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available, or to permit worker interviews during working hours on the job, may be grounds for debarment action pursuant to § 5.12. In addition, any contractor or other person that fails to submit the required records or make those records available to WHD within the time WHD requests that the records be produced will be precluded from introducing as evidence in an administrative proceeding under 29 CFR part 6 any of the required records that were not provided or made available to WHD. WHD will take into consideration a reasonable request from the contractor or person for an extension of the time for submission of records. WHD will determine the reasonableness of the request and may consider, among other things, the location of the records and the volume of production.
 - (C) **Required information disclosures.** Contractors and subcontractors must maintain the full Social Security number and last known address, telephone number, and email address of each covered worker, and must provide them upon request to the [write in name of appropriate Federal agency] if the agency is a party to the contract, or to the Wage and Hour Division of the Department of Labor. If the Federal agency is not such a party to the

contract, the contractor, subcontractor, or both, must, upon request, provide the full Social Security number and last known address, telephone number, and email address of each covered worker to the applicant, sponsor, owner, or other entity, as the case may be, that maintains such records, for transmission to the [write in name of agency], the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or other compliance action.

(4) **Apprentices and equal employment opportunity** –

(i) **Apprentices** –

- (A) **Rate of pay.** Apprentices will be permitted to work at less than the predetermined rate for the work they perform when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship (OA), or with a State Apprenticeship Agency recognized by the OA. A person who is not individually registered in the program, but who has been certified by the OA or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice, will be permitted to work at less than the predetermined rate for the work they perform in the first 90 days of probationary employment as an apprentice in such a program. In the event the OA or a State Apprenticeship Agency recognized by the OA withdraws approval of an apprenticeship program, the contractor will no longer be permitted to use apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.
- (B) **Fringe benefits.** Apprentices must be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringe benefits must be paid in accordance with that determination.
- (C) **Apprenticeship ratio.** The allowable ratio of apprentices to journeymen on the job site in any craft classification must not be greater than the ratio permitted to the contractor as to the entire work force under the registered program or the ratio applicable to the locality of the project pursuant to paragraph (a)(4)(i)(D) of this section. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in paragraph (a)(4)(i)(A) of this section, must be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under this section must be paid not less than the applicable wage rate on the wage determination for the work actually performed.
- (D) **Reciprocity of ratios and wage rates.** Where a contractor is performing construction on a project in a locality other than the locality in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyworker's hourly rate) applicable within the locality in which the construction is being performed must be observed. If there is no applicable ratio or wage rate for the locality of the project, the ratio and wage rate specified in the contractor's registered program must be observed.

- (ii) **Equal employment opportunity.** The use of apprentices and journeyworkers under this part must be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.
- (5) **Compliance with Copeland Act requirements.** The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.
- (6) **Subcontracts.** The contractor or subcontractor must insert in any subcontracts the clauses contained in paragraphs (a)(1) through (11) of this section, along with the applicable wage determination(s) and such other clauses or contract modifications as the [write in the name of the Federal agency] may by appropriate instructions require, and a clause requiring the subcontractors to include these clauses and wage determination(s) in any lower tier subcontracts. The prime contractor is responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this section. In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and may be subject to debarment, as appropriate.
- (7) **Contract termination: debarment.** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.
- (8) **Compliance with Davis-Bacon and Related Act requirements.** All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.
- (9) **Disputes concerning labor standards.** Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.
- (10) **Certification of eligibility.**
 - (i) By entering into this contract, the contractor certifies that neither it nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of 40 U.S.C. 3144(b) or § 5.12(a).
 - (ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of 40 U.S.C. 3144(b) or § 5.12(a).
 - (iii) The penalty for making false statements is prescribed in the U.S. Code, Title 18 Crimes and Criminal Procedure, 18 U.S.C. 1001.
- (11) **Anti-retaliation.** It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:
 - (i) Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the DBA, Related Acts, this part, or 29 CFR part 1 or 3;

- (ii) Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under the DBA, Related Acts, this part, or 29 CFR part 1 or 3;
 - (iii) Cooperating in any investigation or other compliance action, or testifying in any proceeding under the DBA, Related Acts, this part, or 29 CFR part 1 or 3; or
 - (iv) Informing any other person about their rights under the DBA, Related Acts, this part, or 29 CFR part 1 or 3.
- (b) **Contract Work Hours and Safety Standards Act (CWHSSA).** The Agency Head must cause or require the contracting officer to insert the following clauses set forth in paragraphs (b)(1) through (5) of this section in full, or (for contracts covered by the Federal Acquisition Regulation) by reference, in any contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses must be inserted in addition to the clauses required by paragraph (a) of this section or 29 CFR 4.6. As used in this paragraph (b), the terms "laborers and mechanics" include watchpersons and guards.
- (1) **Overtime requirements.** No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
 - (2) **Violation; liability for unpaid wages; liquidated damages.** In the event of any violation of the clause set forth in paragraph (b)(1) of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages and interest from the date of the underpayment. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchpersons and guards, employed in violation of the clause set forth in paragraph (b)(1) of this section, in the sum of \$32 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (b)(1).
 - (3) **Withholding for unpaid wages and liquidated damages –**
 - (i) **Withholding process.** The [write in the name of the Federal agency or the recipient of Federal assistance] may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for any unpaid wages; monetary relief, including interest; and liquidated damages required by the clauses set forth in this paragraph (b) on this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract subject to the Contract Work Hours and Safety Standards Act that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to the Contract Work Hours

and Safety Standards Act and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld.

(ii) **Priority to withheld funds.** The Department has priority to funds withheld or to be withheld in accordance with paragraph (a)(2)(i) or (b)(3)(i) of this section, or both, over claims to those funds by:

- (A) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;
- (B) A contracting agency for its reprocurement costs;
- (C) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;
- (D) A contractor's assignee(s);
- (E) A contractor's successor(s); or
- (F) A claim asserted under the Prompt Payment Act, 31 U.S.C. 3901-3907.

(4) **Subcontracts.** The contractor or subcontractor must insert in any subcontracts the clauses set forth in paragraphs (b)(1) through (5) of this section and a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor is responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (b)(1) through (5). In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and associated liquidated damages and may be subject to debarment, as appropriate.

(5) **Anti-retaliation.** It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

- (i) Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the Contract Work Hours and Safety Standards Act (CWHSSA) or its implementing regulations in this part;
- (ii) Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under CWHSSA or this part;
- (iii) Cooperating in any investigation or other compliance action, or testifying in any proceeding under CWHSSA or this part; or
- (iv) Informing any other person about their rights under CWHSSA or this part.

(c) **CWHSSA required records clause.** In addition to the clauses contained in paragraph (b) of this section, in any contract subject only to the Contract Work Hours and Safety Standards Act and not to any of the other laws referenced by § 5.1, the Agency Head must cause or require the contracting officer to insert a clause requiring that the contractor or subcontractor must maintain regular payrolls and other basic records during the course of the work and must preserve them for a period of 3 years after all the work on the

prime contract is completed for all laborers and mechanics, including guards and watchpersons, working on the contract. Such records must contain the name; last known address, telephone number, and email address; and social security number of each such worker; each worker's correct classification(s) of work actually performed; hourly rates of wages paid; daily and weekly number of hours actually worked; deductions made; and actual wages paid. Further, the Agency Head must cause or require the contracting officer to insert in any such contract a clause providing that the records to be maintained under this paragraph must be made available by the contractor or subcontractor for inspection, copying, or transcription by authorized representatives of the (write the name of agency) and the Department of Labor, and the contractor or subcontractor will permit such representatives to interview workers during working hours on the job.

- (d) ***Incorporation of contract clauses and wage determinations by reference.*** Although agencies are required to insert the contract clauses set forth in this section, along with appropriate wage determinations, in full into covered contracts, and contractors and subcontractors are required to insert them in any lower-tier subcontracts, the incorporation by reference of the required contract clauses and appropriate wage determinations will be given the same force and effect as if they were inserted in full text.
- (e) ***Incorporation by operation of law.*** The contract clauses set forth in this section (or their equivalent under the Federal Acquisition Regulation), along with the correct wage determinations, will be considered to be a part of every prime contract required by the applicable statutes referenced by § 5.1 to include such clauses, and will be effective by operation of law, whether or not they are included or incorporated by reference into such contract, unless the Administrator grants a variance, tolerance, or exemption from the application of this paragraph. Where the clauses and applicable wage determinations are effective by operation of law under this paragraph, the prime contractor must be compensated for any resulting increase in wages in accordance with applicable law.

(The information collection, recordkeeping, and reporting requirements contained in the following paragraphs of this section were approved by the Office of Management and Budget:

Paragraph	OMB Control No.
(a)(1)(ii)(B)	1235-0023
(a)(1)(ii)(C)	1235-0023
(a)(1)(iv)	1235-0023
(a)(3)(i)	1235-0023
(a)(3)(ii)(A)	1235-0023
(c)	1235-0008
	1235-0023

[48 FR 19540, Apr. 29, 1983, as amended at 51 FR 12265, Apr. 9, 1986; 55 FR 50150, Dec. 4, 1990; 57 FR 28776, June 26, 1992; 58 FR 58955, Nov. 5, 1993; 61 FR 40716, Aug. 5, 1996; 65 FR 69693, Nov. 20, 2000; 73 FR 77511, Dec. 19, 2008; 81 FR 43450, July 1, 2016; 82 FR 2225, 2226, Jan. 9, 2017; 83 FR 12, Jan 2, 2018; 84 FR 218, Jan. 23, 2019; 87 FR 2334, Jan. 14, 2022; 88 FR 2215, Jan. 13, 2023; 88 FR 57734, Aug. 23, 2023; 89 FR 1815, Jan. 11, 2024]

§ 5.6 Enforcement.

(a) *Agency responsibilities.*

(1)

- (i) The Federal agency has the initial responsibility to ascertain whether the clauses required by § 5.5 and the appropriate wage determination(s) have been incorporated into the contracts subject to the labor standards provisions of the laws referenced by § 5.1. Additionally, a Federal agency that provides Federal financial assistance that is subject to the labor standards provisions of the Act must promulgate the necessary regulations or procedures to require the recipient or sub-recipient of the Federal assistance to insert in its contracts the provisions of § 5.5. No payment, advance, grant, loan, or guarantee of funds will be approved by the Federal agency unless it ensures that the clauses required by § 5.5 and the appropriate wage determination(s) are incorporated into such contracts. Furthermore, no payment, advance, grant, loan, or guarantee of funds will be approved by the Federal agency after the beginning of construction unless there is on file with the Federal agency a certification by the contractor that the contractor and its subcontractors have complied with the provisions of § 5.5 or unless there is on file with the Federal agency a certification by the contractor that there is a substantial dispute with respect to the required provisions.
- (ii) If a contract subject to the labor standards provisions of the applicable statutes referenced by § 5.1 is entered into without the incorporation of the clauses required by § 5.5, the agency must, upon the request of the Administrator or upon its own initiative, either terminate and resolicit the contract with the required contract clauses, or incorporate the required clauses into the contract (or ensure they are so incorporated) through supplemental agreement, change order, or any and all authority that may be needed. Where an agency has not entered directly into such a contract but instead has provided Federal financial assistance, the agency must ensure that the recipient or sub-recipient of the Federal assistance similarly incorporates the clauses required into its contracts. The method of incorporation of the correct wage determination, and adjustment in contract price, where appropriate, should be in accordance with applicable law. Additionally, the following requirements apply:
- (A) Unless the Administrator directs otherwise, the incorporation of the clauses required by § 5.5 must be retroactive to the date of contract award or start of construction if there is no award.
- (B) If this incorporation occurs as the result of a request from the Administrator, the incorporation must take place within 30 days of the date of that request, unless the agency has obtained an extension from the Administrator.
- (C) The contractor must be compensated for any increases in wages resulting from incorporation of a missing contract clause.
- (D) If the recipient refuses to incorporate the clauses as required, the agency must make no further payment, advance, grant, loan, or guarantee of funds in connection with the contract until the recipient incorporates the required clauses into its contract, and must promptly refer the dispute to the Administrator for further proceedings under § 5.13.

- (E) Before terminating a contract pursuant to this section, the agency must withhold or cross-withhold sufficient funds to remedy any back wage liability resulting from the failure to incorporate the correct wage determination or otherwise identify and obligate sufficient funds through a termination settlement agreement, bond, or other satisfactory mechanism.
- (F) Notwithstanding the requirement to incorporate the contract clauses and correct wage determination within 30 days, the contract clauses and correct wage determination will be effective by operation of law, retroactive to the beginning of construction, in accordance with § 5.5(e).

(2)

- (i) Certified payrolls submitted pursuant to § 5.5(a)(3)(ii) must be preserved by the Federal agency for a period of 3 years after all the work on the prime contract is completed, and must be produced at the request of the Department of Labor at any time during the 3-year period, regardless of whether the Department of Labor has initiated an investigation or other compliance action.
- (ii) In situations where the Federal agency does not itself maintain certified payrolls required to be submitted pursuant to § 5.5(a)(3)(ii), upon the request of the Department of Labor the Federal agency must ensure that such certified payrolls are provided to the Department of Labor. Such certified payrolls may be provided by the applicant, sponsor, owner, or other entity, as the case may be, directly to the Department of Labor, or to the Federal agency which, in turn, must provide those records to the Department of Labor.

- (3) The Federal agency will cause such investigations to be made as may be necessary to assure compliance with the labor standards clauses required by § 5.5 and the applicable statutes referenced in § 5.1. Investigations will be made of all contracts with such frequency as may be necessary to assure compliance. Such investigations will include interviews with workers, which must be taken in confidence, and examinations of certified payrolls, regular payrolls, and other basic records required to be maintained under § 5.5(a)(3). In making such examinations, particular care must be taken to determine the correctness of classification(s) of work actually performed, and to determine whether there is a disproportionate amount of work by laborers and of apprentices registered in approved programs. Such investigations must also include evidence of fringe benefit plans and payments thereunder. Federal agencies must give priority to complaints of alleged violations.

- (4) In accordance with normal operating procedures, the contracting agency may be furnished various investigatory material from the investigation files of the Department of Labor. None of the material, other than computations of back wages, liquidated damages, and monetary relief for violations of § 5.5(a)(11) or (b)(5), and the summary of back wages due, may be disclosed in any manner to anyone other than Federal officials charged with administering the contract or program providing Federal assistance to the contract, without requesting the permission and views of the Department of Labor.

(b) Department of Labor investigations and other compliance actions.

- (1) The Administrator will investigate and conduct other compliance actions as deemed necessary in order to obtain compliance with the labor standards provisions of the applicable statutes referenced by § 5.1, or to affirm or reject the recommendations by the Agency Head with respect to labor standards matters arising under the statutes referenced by § 5.1.

- (2) Federal agencies, contractors, subcontractors, sponsors, applicants, owners, or other entities, as the case may be, must cooperate with any authorized representative of the Department of Labor in the inspection of records, in interviews with workers, and in all other aspects of the investigations or other compliance actions.
 - (3) The findings of such an investigation or other compliance action, including amounts found due, may not be altered or reduced without the approval of the Department of Labor.
 - (4) Where the underpayments disclosed by such an investigation or other compliance action total \$1,000 or more, where there is reason to believe that the contractor or subcontractor has disregarded its obligations to workers or subcontractors, or where liquidated damages may be assessed under CWHSSA, the Department of Labor will furnish the Federal agency an enforcement report detailing the labor standards violations disclosed by the investigation or other compliance action and any action taken by the contractor or subcontractor to correct the violations, including any payment of back wages or any other relief provided workers or remedial actions taken for violations of § 5.5(a)(11) or (b)(5). In other circumstances, the Department of Labor will furnish the Federal agency a notification summarizing the findings of the investigation or other compliance action.
- (c) **Confidentiality requirements.** It is the policy of the Department of Labor to protect from disclosure the identity of its confidential sources and to prevent an unwarranted invasion of personal privacy. Accordingly, the identity of a worker or other informant who makes a written or oral statement as a complaint or in the course of an investigation or other compliance action, as well as portions of the statement which would tend to reveal the identity of the informant, will not be disclosed in any manner to anyone other than Federal officials without the prior consent of the informant. Disclosure of such statements is also governed by the provisions of the "Freedom of Information Act" (5 U.S.C. 552, see part 70 of this subtitle) and the "Privacy Act of 1974" (5 U.S.C. 552a, see part 71 of this subtitle).

[88 FR 57739, Aug. 23, 2023]

§ 5.7 Reports to the Secretary of Labor.

- (a) **Enforcement reports.**
- (1) Where underpayments by a contractor or subcontractor total less than \$1,000, where there is no reason to believe that the contractor or subcontractor has disregarded its obligations to workers or subcontractors, and where restitution has been effected and future compliance assured, the Federal agency need not submit its investigative findings and recommendations to the Administrator, unless the investigation or other compliance action was made at the request of the Department of Labor. In the latter case, the Federal agency will submit a factual summary report detailing any violations including any data on the amount of restitution paid, the number of workers who received restitution, liquidated damages assessed under the Contract Work Hours and Safety Standards Act, corrective measures taken (such as "letters of notice" or remedial action taken for violations of § 5.5(a)(11) or (b)(5)), and any information that may be necessary to review any recommendations for an appropriate adjustment in liquidated damages under § 5.8.
 - (2) Where underpayments by a contractor or subcontractor total \$1,000 or more, or where there is reason to believe that the contractor or subcontractor has disregarded its obligations to workers or subcontractors, the Federal agency will furnish within 60 days after completion of its investigation, a detailed enforcement report to the Administrator.

- (b) **Semi-annual enforcement reports.** To assist the Secretary in fulfilling the responsibilities under Reorganization Plan No. 14 of 1950, Federal agencies shall furnish to the Administrator by April 30 and October 31 of each calendar year semi-annual reports on compliance with and enforcement of the labor standards provisions of the Davis-Bacon Act and its related acts covering the periods of October 1 through March 31 and April 1 through September 30, respectively. Such reports shall be prepared in the manner prescribed in memoranda issued to Federal agencies by the Administrator. This report has been cleared in accordance with FPMR 101-11.11 and assigned interagency report control number 1482-DOL-SA.
- (c) **Additional information.** Upon request, the Agency Head shall transmit to the Administrator such information available to the Agency with respect to contractors and subcontractors, their contracts, and the nature of the contract work as the Administrator may find necessary for the performance of his or her duties with respect to the labor standards provisions referred to in this part.
- (d) **Contract termination.** Where a contract is terminated by reason of violations of the labor standards provisions of the statutes listed in § 5.1, a report shall be submitted promptly to the Administrator and to the Comptroller General (if the contract is subject to the Davis-Bacon Act), giving the name and address of the contractor or subcontractor whose right to proceed has been terminated, and the name and address of the contractor or subcontractor, if any, who is to complete the work, the amount and number of the contract, and the description of the work to be performed.

[48 FR 19540, Apr. 29, 1983, as amended at 88 FR 57734, Aug. 23, 2023]

§ 5.8 Liquidated damages under the Contract Work Hours and Safety Standards Act.

- (a) The Contract Work Hours and Safety Standards Act requires that laborers or mechanics shall be paid wages at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in any workweek. In the event of violation of this provision, the contractor and any subcontractor shall be liable for the unpaid wages and in addition for liquidated damages, computed with respect to each laborer or mechanic employed in violation of the Act in the amount of \$32 for each calendar day in the workweek on which such individual was required or permitted to work in excess of forty hours without payment of required overtime wages. Any contractor or subcontractor aggrieved by the withholding of liquidated damages shall have the right to appeal to the head of the agency of the United States (or the territory of District of Columbia, as appropriate) for which the contract work was performed or for which financial assistance was provided.
- (b) **Findings and recommendations of the Agency Head.** The Agency Head has the authority to review the administrative determination of liquidated damages and to issue a final order affirming the determination. It is not necessary to seek the concurrence of the Administrator but the Administrator shall be advised of the action taken. Whenever the Agency Head finds that a sum of liquidated damages administratively determined to be due is incorrect or that the contractor or subcontractor violated inadvertently the provisions of the Act notwithstanding the exercise of due care upon the part of the contractor or subcontractor involved, and the amount of the liquidated damages computed for the contract is in excess of \$500, the Agency Head may make recommendations to the Secretary that an appropriate adjustment in liquidated damages be made or that the contractor or subcontractor be relieved of liability for such liquidated damages. Such findings with respect to liquidated damages shall include findings with respect to any wage underpayments for which the liquidated damages are determined.

- (c) The recommendations of the Agency Head for adjustment or relief from liquidated damages under paragraph (a) of this section shall be reviewed by the Administrator or an authorized representative who shall issue an order concurring in the recommendations, partially concurring in the recommendations, or rejecting the recommendations, and the reasons therefor. The order shall be the final decision of the Department of Labor, unless a petition for review is filed pursuant to part 7 of this title, and the Administrative Review Board in its discretion reviews such decision and order; or, with respect to contracts subject to the Service Contract Act, unless petition for review is filed pursuant to part 8 of this title, and the Administrative Review Board in its discretion reviews such decision and order.
- (d) Whenever the Agency Head finds that a sum of liquidated damages administratively determined to be due under section 104(a) of the Contract Work Hours and Safety Standards Act for a contract is \$500 or less and the Agency Head finds that the sum of liquidated damages is incorrect or that the contractor or subcontractor violated inadvertently the provisions of the Contract Work Hours and Safety Standards Act notwithstanding the exercise of due care upon the part of the contractor or subcontractor involved, an appropriate adjustment may be made in such liquidated damages or the contractor or subcontractor may be relieved of liability for such liquidated damages without submitting recommendations to this effect or a report to the Department of Labor. This delegation of authority is made under section 105 of the Contract Work Hours and Safety Standards Act and has been found to be necessary and proper in the public interest to prevent undue hardship and to avoid serious impairment of the conduct of Government business.

[48 FR 19541, Apr. 29, 1983, as amended at 51 FR 12265, Apr. 9, 1986; 51 FR 13496, Apr. 21, 1986; 81 FR 43450, July 1, 2016; 83 FR 12, Jan. 2, 2018; 84 FR 218, Jan. 23, 2019; 87 FR 2334, Jan. 14, 2022; 88 FR 2215, Jan. 13, 2023; 89 FR 1815, Jan. 11, 2024]

§ 5.9 Suspension of funds.

- (a) **Suspension and withholding.** In the event of failure or refusal of the contractor or any subcontractor to comply with the applicable statutes referenced by § 5.1 and the labor standards clauses contained in § 5.5, whether incorporated into the contract physically, by reference, or by operation of law, the Federal agency (and any other agency), may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, take such action as may be necessary to cause the suspension of the payment, advance, or guarantee of funds until such time as the violations are discontinued and/or until sufficient funds are withheld as may be considered necessary to compensate workers for the full amount of wages and monetary relief to which they are entitled, and to cover any liquidated damages and pre-judgment or post-judgment interest which may be due.
- (b) **Cross-withholding.** To satisfy a contractor's liability for back wages on a contract, in addition to the suspension and withholding of funds from the contract(s) under which the violation(s) occurred, the necessary funds also may be withheld under any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to Davis-Bacon labor standards and/or the Contract Work Hours and Safety Standards Act and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency.
- (c) **Cross-withholding from different legal entities.** Cross-withholding of funds may be requested from contracts held by other entities that may be considered to be the same prime contractor as that term is defined in § 5.2. Such cross-withholding is appropriate where the separate legal entities have independently consented to it by entering into contracts containing the withholding provisions at § 5.5(a)(2) and (b)(3). Cross-withholding from a contract held by a different legal entity is not appropriate unless the withholding provisions were incorporated in full or by reference in that different legal entity's

contract. Absent exceptional circumstances, cross-withholding is not permitted from a contract held by a different legal entity where the Davis-Bacon labor standards were incorporated only by operation of law into that contract.

[88 FR 57740, Aug. 23, 2023]

§ 5.10 Restitution, criminal action.

- (a) In cases other than those forwarded to the Attorney General of the United States under paragraph (b) of this section where violations of the labor standards clauses contained in § 5.5 and the applicable statutes referenced by § 5.1 result in underpayment of wages to workers or monetary damages caused by violations of § 5.5(a)(11) or (b)(5), the Federal agency or an authorized representative of the Department of Labor will request that restitution be made to such workers or on their behalf to plans, funds, or programs for any type of bona fide fringe benefits within the meaning of 40 U.S.C. 3141(2)(B), including interest from the date of the underpayment or loss. Interest on any back wages or monetary relief provided for in this part will be calculated using the percentage established for the underpayment of taxes under 26 U.S.C. 6621 and will be compounded daily.
- (b) In cases where the Agency Head or the Administrator finds substantial evidence that such violations are willful and in violation of a criminal statute, the matter will be forwarded to the Attorney General of the United States for prosecution if the facts warrant. In all such cases the Administrator will be informed simultaneously of the action taken.

[88 FR 57741, Aug. 23, 2023]

§ 5.11 Disputes concerning payment of wages.

- (a) This section sets forth the procedure for resolution of disputes of fact or law concerning payment of prevailing wage rates, overtime pay, proper classification, or monetary relief for violations of § 5.5(a)(11) or (b)(5). The procedures in this section may be initiated upon the Administrator's own motion, upon referral of the dispute by a Federal agency pursuant to § 5.5(a)(9), or upon request of the contractor or subcontractor.
- (b)
 - (1) In the event of a dispute described in paragraph (a) of this section in which it appears that relevant facts are at issue, the Administrator will notify the affected contractor and subcontractor, if any, by registered or certified mail to the last known address or by any other means normally assuring delivery, of the investigation findings. If the Administrator determines that there is reasonable cause to believe that either the contractor, the subcontractor, or both, should also be subject to debarment under the Davis-Bacon Act or any of the other applicable statutes referenced by § 5.1, the notification will so indicate.
 - (2) A contractor or subcontractor desiring a hearing concerning the Administrator's investigation findings must request such a hearing by letter or by any other means normally assuring delivery, sent within 30 days of the date of the Administrator's notification. The request must set forth those findings which are in dispute and the reasons therefor, including any affirmative defenses.

(3) Upon receipt of a timely request for a hearing, the Administrator will refer the case to the Chief Administrative Law Judge by Order of Reference, with an attached copy of the notification from the Administrator and the response of the contractor or subcontractor, for designation of an Administrative Law Judge to conduct such hearings as may be necessary to resolve the disputed matters. The hearings will be conducted in accordance with the procedures set forth in part 6 of this subtitle.

(c)

(1) In the event of a dispute described in paragraph (a) of this section in which it appears that there are no relevant facts at issue, and where there is not at that time reasonable cause to institute debarment proceedings under § 5.12, the Administrator will notify the contractor and subcontractor, if any, by registered or certified mail to the last known address or by any other means normally assuring delivery, of the investigation findings, and will issue a ruling on any issues of law known to be in dispute.

(2)

(i) If the contractor or subcontractor disagrees with the factual findings of the Administrator or believes that there are relevant facts in dispute, the contractor or subcontractor must advise the Administrator by letter or by any other means normally assuring delivery, sent within 30 days of the date of the Administrator's notification. In the response, the contractor or subcontractor must explain in detail the facts alleged to be in dispute and attach any supporting documentation.

(ii) Upon receipt of a response under paragraph (c)(2)(i) of this section alleging the existence of a factual dispute, the Administrator will examine the information submitted. If the Administrator determines that there is a relevant issue of fact, the Administrator will refer the case to the Chief Administrative Law Judge in accordance with paragraph (b)(3) of this section. If the Administrator determines that there is no relevant issue of fact, the Administrator will so rule and advise the contractor and subcontractor, if any, accordingly.

(3) If the contractor or subcontractor desires review of the ruling issued by the Administrator under paragraph (c)(1) or (2) of this section, the contractor or subcontractor must file a petition for review thereof with the Administrative Review Board within 30 days of the date of the ruling, with a copy thereof to the Administrator. The petition for review must be filed in accordance with part 7 of this subtitle.

(d) If a timely response to the Administrator's findings or ruling is not made or a timely petition for review is not filed, the Administrator's findings or ruling will be final, except that with respect to debarment under the Davis-Bacon Act, the Administrator will advise the Comptroller General of the Administrator's recommendation in accordance with § 5.12(a)(2). If a timely response or petition for review is filed, the findings or ruling of the Administrator will be inoperative unless and until the decision is upheld by the Administrative Law Judge or the Administrative Review Board.

[88 FR 57741, Aug. 23, 2023]

§ 5.12 Debarment proceedings.

(a) *Debarment standard and ineligible list.*

- (1) Whenever any contractor or subcontractor is found by the Secretary of Labor to have disregarded their obligations to workers or subcontractors under the Davis-Bacon Act, any of the other applicable statutes referenced by § 5.1, this part, or part 3 of this subtitle, such contractor or subcontractor and their responsible officers, if any, and any firm, corporation, partnership, or association in which such contractor, subcontractor, or responsible officer has an interest will be ineligible for a period of 3 years to be awarded any contract or subcontract of the United States or the District of Columbia and any contract or subcontract subject to the labor standards provisions of any of the statutes referenced by § 5.1.
- (2) In cases arising under contracts covered by the Davis-Bacon Act, the Administrator will transmit to the Comptroller General the name(s) of the contractors or subcontractors and their responsible officers, if any, and any firms, corporations, partnerships, or associations in which the contractors, subcontractors, or responsible officers are known to have an interest, who have been found to have disregarded their obligations to workers or subcontractors, and the recommendation of the Secretary of Labor or authorized representative regarding debarment. In cases arising under contracts covered by any of the applicable statutes referenced by § 5.1 other than the Davis-Bacon Act, the Administrator determines the name(s) of the contractors or subcontractors and their responsible officers, if any, and any firms, corporations, partnerships, or associations in which the contractors, subcontractors, or responsible officers are known to have an interest, to be debarred. The names of such ineligible persons or firms will be published on SAM or its successor website, and an ineligible person or firm will be ineligible for a period of 3 years from the date of publication of their name on the ineligible list, to be awarded any contract or subcontract of the United States or the District of Columbia and any contract or subcontract subject to the labor standards provisions of any of the statutes referenced by § 5.1.

(b) **Procedure.**

- (1) In addition to cases under which debarment action is initiated pursuant to § 5.11, whenever as a result of an investigation conducted by the Federal agency or the Department of Labor, and where the Administrator finds reasonable cause to believe that a contractor or subcontractor has committed violations which constitute a disregard of its obligations to workers or subcontractors under the Davis-Bacon Act, the labor standards provisions of any of the other applicable statutes referenced by § 5.1, this part, or part 3 of this subtitle, the Administrator will notify by registered or certified mail to the last known address or by any other means normally assuring delivery, the contractor or subcontractor and responsible officers, if any, and any firms, corporations, partnerships, or associations in which the contractors, subcontractors, or responsible officers are known to have an interest of the finding.
 - (i) The Administrator will afford such contractor, subcontractor, responsible officer, and any other parties notified an opportunity for a hearing as to whether debarment action should be taken under paragraph (a) of this section. The Administrator will furnish to those notified a summary of the investigative findings.
 - (ii) If the contractor, subcontractor, responsible officer, or any other parties notified wish to request a hearing as to whether debarment action should be taken, such a request must be made by letter or by any other means normally assuring delivery, sent within 30 days of the date of the notification from the Administrator, and must set forth any findings which are in dispute and the basis for such disputed findings, including any affirmative defenses to be raised.

(iii) Upon timely receipt of such request for a hearing, the Administrator will refer the case to the Chief Administrative Law Judge by Order of Reference, with an attached copy of the notification from the Administrator and the responses of the contractor, subcontractor, responsible officers, or any other parties notified, for designation of an Administrative Law Judge to conduct such hearings as may be necessary to determine the matters in dispute.

(iv) In considering debarment under any of the statutes referenced by § 5.1 other than the Davis-Bacon Act, the Administrative Law Judge will issue an order concerning whether the contractor, subcontractor, responsible officer, or any other party notified is to be debarred in accordance with paragraph (a) of this section. In considering debarment under the Davis-Bacon Act, the Administrative Law Judge will issue a recommendation as to whether the contractor, subcontractor, responsible officers, or any other party notified should be debarred under 40 U.S.C. 3144(b).

(2) Hearings under this section will be conducted in accordance with part 6 of this subtitle. If no hearing is requested within 30 days of the date of the notification from the Administrator, the Administrator's findings will be final, except with respect to recommendations regarding debarment under the Davis-Bacon Act, as set forth in paragraph (a)(2) of this section.

(c) **Interests of debarred parties.**

(1) A finding as to whether persons or firms whose names appear on the ineligible list have an interest under 40 U.S.C. 3144(b) or paragraph (a) of this section in any other firm, corporation, partnership, or association, may be made through investigation, hearing, or otherwise.

(2)

(i) The Administrator, on their own motion or after receipt of a request for a determination pursuant to paragraph (c)(3) of this section, may make a finding on the issue of interest.

(ii) If the Administrator determines that there may be an interest but finds that there is insufficient evidence to render a final ruling thereon, the Administrator may refer the issue to the Chief Administrative Law Judge in accordance with paragraph (c)(4) of this section.

(iii) If the Administrator finds that no interest exists, or that there is not sufficient information to warrant the initiation of an investigation, the requesting party, if any, will be so notified and no further action taken.

(iv)

(A) If the Administrator finds that an interest exists, the person or firm affected will be notified of the Administrator's finding (by certified mail to the last known address or by any other means normally assuring delivery), which will include the reasons therefore, and such person or firm will be afforded an opportunity to request that a hearing be held to decide the issue.

(B) Such person or firm will have 20 days from the date of the Administrator's ruling to request a hearing. A person or firm desiring a hearing must request it by letter or by any other means normally assuring delivery, sent within 20 days of the date of the Administrator's notification. A detailed statement of the reasons why the Administrator's ruling is in error, including facts alleged to be in dispute, if any, must be submitted with the request for a hearing.

- (C) If no hearing is requested within the time mentioned in paragraph (c)(2)(iv)(B) of this section, the Administrator's finding will be final and the Administrator will notify the Comptroller General in cases arising under the DBA. If a hearing is requested, the ruling of the Administrator will be inoperative unless and until the Administrative Law Judge or the Administrative Review Board issues an order that there is an interest.
- (3)
- (i) A request for a determination of interest may be made by any interested party, including contractors or prospective contractors and associations of contractors, representatives of workers, and interested agencies. Such a request must be submitted in writing to the Administrator, Wage and Hour Division, U.S. Department of Labor, 200 Constitution Avenue NW, Washington, DC 20210.
- (ii) The request must include a statement setting forth in detail why the petitioner believes that a person or firm whose name appears on the ineligible list has an interest in any firm, corporation, partnership, or association that is seeking or has been awarded a contract or subcontract of the United States or the District of Columbia, or a contract or subcontract that is subject to the labor standards provisions of any of the statutes referenced by § 5.1. No particular form is prescribed for the submission of a request under this section.
- (4) The Administrator, on their own motion under paragraph (c)(2)(ii) of this section or upon a request for hearing where the Administrator determines that relevant facts are in dispute, will by order refer the issue to the Chief Administrative Law Judge, for designation of an Administrative Law Judge who will conduct such hearings as may be necessary to render a decision solely on the issue of interest. Such proceedings must be conducted in accordance with the procedures set forth in part 6 of this subtitle.
- (5) If the person or firm affected requests a hearing and the Administrator determines that relevant facts are not in dispute, the Administrator will refer the issue and the record compiled thereon to the Administrative Review Board to render a decision solely on the issue of interest. Such proceeding must be conducted in accordance with the procedures set forth in part 7 of this subtitle.

[88 FR 57741, Aug. 23, 2023]

§ 5.13 Rulings and interpretations.

- (a) All questions relating to the application and interpretation of wage determinations (including the classifications therein) issued pursuant to part 1 of this subtitle, of the rules contained in this part and in parts 1 and 3 of this subtitle, and of the labor standards provisions of any of the laws referenced in § 5.1 must be referred to the Administrator for appropriate ruling or interpretation. These rulings and interpretations are authoritative and those under the Davis-Bacon Act may be relied upon as provided for in section 10 of the Portal-to-Portal Act of 1947 (29 U.S.C. 259). Requests for such rulings and interpretations should be submitted via email to dgceinquiries@dol.gov; by mail to Administrator, Wage and Hour Division, U.S. Department of Labor, 200 Constitution Ave., NW, Washington, DC 20210; or through other means directed by the Administrator.
- (b) If any such ruling or interpretation is made by an authorized representative of the Administrator of the Wage and Hour Division, any interested party may seek reconsideration of the ruling or interpretation by the Administrator of the Wage and Hour Division. The procedures and time limits set out in § 1.8 of this subtitle apply to any such request for reconsideration.

[88 FR 57743, Aug. 23, 2023]

§ 5.14 Variations, tolerances, and exemptions from parts 1 and 3 of this subtitle and this part.

The Secretary of Labor may make variations, tolerances, and exemptions from the regulatory requirements of this part and those of parts 1 and 3 of this subtitle whenever the Secretary finds that such action is necessary and proper in the public interest or to prevent injustice and undue hardship. Variations, tolerances, and exemptions may not be made from the statutory requirements of any of the statutes listed in § 5.1 unless the statute specifically provides such authority.

§ 5.15 Limitations, variations, tolerances, and exemptions under the Contract Work Hours and Safety Standards Act.

- (a) **General.** Upon his or her own initiative or upon the request of any Federal agency, the Secretary of Labor may provide under section 105 of the Contract Work Hours and Safety Standards Act reasonable limitations and allow variations, tolerances, and exemptions to and from any or all provisions of that Act whenever the Secretary finds such action to be necessary and proper in the public interest to prevent injustice, or undue hardship, or to avoid serious impairment of the conduct of Government business. Any request for such action by the Secretary shall be submitted in writing, and shall set forth the reasons for which the request is made.
- (b) **Exemptions.** Pursuant to section 105 of the Contract Work Hours and Safety Standards Act, the following classes of contracts are found exempt from all provisions of that Act in order to prevent injustice, undue hardship, or serious impairment of Government business:
 - (1) Contract work performed in a workplace within a foreign country or within territory under the jurisdiction of the United States other than the following: A State of the United States; the District of Columbia; Puerto Rico; the Virgin Islands; Outer Continental Shelf lands defined in the Outer Continental Shelf Lands Act (ch. 345, 67 Stat. 462); American Samoa; Guam; Wake Island; Eniwetok Atoll; Kwajalein Atoll; and Johnston Island.
 - (2) Agreements entered into by or on behalf of the Commodity Credit Corporation providing for the storing in or handling by commercial warehouses of wheat, corn, oats, barley, rye, grain sorghums, soybeans, flaxseed, rice, naval stores, tobacco, peanuts, dry beans, seeds, cotton, and wool.
 - (3) Sales of surplus power by the Tennessee Valley Authority to States, counties, municipalities, cooperative organization of citizens or farmers, corporations and other individuals pursuant to section 10 of the Tennessee Valley Authority Act of 1933 (16 U.S.C. 8311).
- (c) **Tolerances.**
 - (1) The "basic rate of pay" under section 102 of the Contract Work Hours and Safety Standards Act may be computed as an hourly equivalent to the rate on which time-and-one-half overtime compensation may be computed and paid under section 7 of the Fair Labor Standards Act of 1938, as amended (29 U.S.C. 207), as interpreted in part 778 of this title. This tolerance is found to be necessary and proper in the public interest in order to prevent undue hardship.
 - (2) Concerning the tolerance provided in paragraph (c)(1) of this section, the provisions of section 7(d)(2) of the Fair Labor Standards Act and § 778.7 of this title should be noted. Under these provisions, payments for occasional periods when no work is performed, due to vacations, and

similar causes are excludable from the "regular rate" under the Fair Labor Standards Act. Such payments, therefore, are also excludable from the "basic rate" under the Contract Work Hours and Safety Standards Act.

(3) See § 5.8(c) providing a tolerance subdelegating authority to the heads of agencies to make appropriate adjustments in the assessment of liquidated damages totaling \$500 or less under specified circumstances.

(4)

(i) Time spent in an organized program of related, supplemental instruction by laborers or mechanics employed under bona fide apprenticeship programs may be excluded from working time if the criteria prescribed in paragraphs (c)(4)(ii) and (iii) of this section are met.

(ii) The apprentice comes within the definition contained in § 5.2.

(iii) The time in question does not involve productive work or performance of the apprentice's regular duties.

(d) **Variations.**

(1) In the event of failure or refusal of the contractor or any subcontractor to comply with overtime pay requirements of the Contract Work Hours and Safety Standards Act, if the funds withheld by Federal agencies for the violations are not sufficient to pay fully the unpaid wages and any back pay or other monetary relief due laborers and mechanics, with interest, and the liquidated damages due the United States, the available funds will be used first to compensate the laborers and mechanics for the wages to which they are entitled (or an equitable portion thereof when the funds are not adequate for this purpose); and the balance, if any, will be used for the payment of liquidated damages.

(2) In the performance of any contract entered into pursuant to the provisions of 38 U.S.C. 620 to provide nursing home care of veterans, no contractor or subcontractor under such contract shall be deemed in violation of section 102 of the Contract Work Hours and Safety Standards Act by virtue of failure to pay the overtime wages required by such section for work in excess of 40 hours in the workweek to any individual employed by an establishment which is an institution primarily engaged in the care of the sick, the aged, or the mentally ill or defective who reside on the premises if, pursuant to an agreement or understanding arrived at between the employer and the employee before performance of the work, a work period of 14 consecutive days is accepted in lieu of the workweek of 7 consecutive days for the purpose of overtime compensation and if such individual receives compensation for employment in excess of 8 hours in any workday and in excess of 80 hours in such 14-day period at a rate not less than $1\frac{1}{2}$ times the regular rate at which the individual is employed, computed in accordance with the requirements of the Fair Labor Standards Act of 1938, as amended.

(3) Any contractor or subcontractor performing on a government contract the principal purpose of which is the furnishing of fire fighting or suppression and related services, shall not be deemed to be in violation of section 102 of the Contract Work Hour and Safety Standards Act for failing to pay the overtime compensation required by section 102 of the Act in accordance with the basic rate of pay as defined in paragraph (c)(1) of this section, to any pilot or copilot of a fixed-wing or rotary-wing aircraft employed on such contract if:

- (i) Pursuant to a written employment agreement between the contractor and the employee which is arrived at before performance of the work.
 - (A) The employee receives gross wages of not less than \$300 per week regardless of the total number of hours worked in any workweek, and
 - (B) Within any workweek the total wages which an employee receives are not less than the wages to which the employee would have been entitled in that workweek if the employee were paid the minimum hourly wage required under the contract pursuant to the provisions of the Service Contract Act of 1965 and any applicable wage determination issued thereunder for all hours worked, plus an additional premium payment of one-half times such minimum hourly wage for all hours worked in excess of 40 hours in the workweek;
- (ii) The contractor maintains accurate records of the total daily and weekly hours of work performed by such employee on the government contract. In the event these conditions for the exemption are not met, the requirements of section 102 of the Contract Work Hours and Safety Standards Act shall be applicable to the contract from the date the contractor or subcontractor fails to satisfy the conditions until completion of the contract.

(Reporting and recordkeeping requirements in paragraph (d)(2) have been approved by the Office of Management and Budget under control numbers 1235-0023 and 1235-0018. Reporting and recordkeeping requirements in paragraph (d)(3)(ii) have been approved by the Office of Management and Budget under control number 1235-0018)

[48 FR 19541, Apr. 29, 1983, as amended at 51 FR 12265, Apr. 9, 1986; 61 FR 40716, Aug. 5, 1996; 82 FR 2226, Jan. 9, 2017; 88 FR 57743, Aug. 23, 2023]

§ 5.16 [Reserved]

§ 5.17 [Reserved]

§ 5.18 Remedies for retaliation.

- (a) **Administrator request to remedy violation.** When the Administrator finds that any person has discriminated in any way against any worker or job applicant in violation of § 5.5(a)(11) or (b)(5), or caused any person to discriminate in any way against any worker or job applicant in violation of § 5.5(a)(11) or (b)(5), the Administrator will notify the person, any contractors for whom the person worked or on whose behalf the person acted, and any upper tier contractors, as well as the relevant contracting agency(ies) of the discrimination and request that the person and any contractors for whom the person worked or on whose behalf the person acted remedy the violation.
- (b) **Administrator directive to remedy violation and provide make-whole relief.** If the person and any contractors for whom the person worked or on whose behalf the person acted do not remedy the violation, the Administrator in the notification of violation findings issued under § 5.11 or § 5.12 will direct the person and any contractors for whom the person worked or on whose behalf the person acted to provide appropriate make-whole relief to affected worker(s) and job applicant(s) or take appropriate remedial action, or both, to correct the violation, and will specify the particular relief and remedial actions to be taken.

- (c) **Examples of available make-whole relief and remedial actions.** Such relief and remedial actions may include, but are not limited to, employment, reinstatement, front pay in lieu of reinstatement, and promotion, together with back pay and interest; compensatory damages; restoration of the terms, conditions, and privileges of the worker's employment or former employment; the expungement of warnings, reprimands, or derogatory references; the provision of a neutral employment reference; and the posting of a notice to workers that the contractor or subcontractor agrees to comply with the Davis-Bacon Act and Related Acts anti-retaliation requirements.

[88 FR 57743, Aug. 23, 2023]

Subpart B—Interpretation of the Fringe Benefits Provisions of the Davis-Bacon Act

Source: 29 FR 13465, Sept. 30, 1964, unless otherwise noted.

§ 5.20 Scope and significance of this subpart.

The 1964 amendments (Pub. L. 88-349) to the Davis-Bacon Act require, among other things, that the prevailing wage determined for Federal and federally assisted construction include the basic hourly rate of pay and the amount contributed by the contractor or subcontractor for certain fringe benefits (or the cost to them of such benefits). The purpose of this subpart is to explain the provisions of these amendments and make available in one place official interpretations of the fringe benefits provisions of the Davis-Bacon Act. These interpretations will guide the Department of Labor in carrying out its responsibilities under these provisions. These interpretations are intended also to provide guidance to contractors and their associations; laborers and mechanics and their organizations; and local, State, and Federal agencies. The interpretations contained in this subpart are authoritative and may be relied upon as provided for in section 10 of the Portal-to-Portal Act of 1947 (29 U.S.C. 259). The omission to discuss a particular problem in this subpart or in interpretations supplementing it should not be taken to indicate the adoption of any position by the Secretary of Labor with respect to such problem or to constitute an administrative interpretation, practice, or enforcement policy. Questions on matters not fully covered by this subpart may be referred to the Secretary for interpretation as provided in § 5.13.

[88 FR 57743, Aug. 23, 2023]

§ 5.21 [Reserved]

§ 5.22 Effect of the Davis-Bacon fringe benefits provisions.

The Davis-Bacon Act and the prevailing wage provisions of the statutes referenced in § 1.1 of this subtitle confer upon the Secretary of Labor the authority to predetermine, as minimum wages, those wage rates found to be prevailing for corresponding classes of laborers and mechanics employed on projects of a character similar to the contract work in the area in which the work is to be performed. See the definitions of the terms “prevailing wage” and “area” in § 1.2 of this subtitle. The fringe benefits amendments enlarge the scope of this authority by including certain bona fide fringe benefits within the meaning of the terms “wages”, “scale of wages”, “wage rates”, “minimum wages”, and “prevailing wages”, as used in the Davis-Bacon Act.

[88 FR 57744, Aug. 23, 2023]

§ 5.23 The statutory provisions.

Pursuant to the Davis-Bacon Act, as amended and codified at 40 U.S.C. 3141(2), the term “prevailing wages” and similar terms include the basic hourly rate of pay and, for the listed fringe benefits and other bona fide fringe benefits not required by other law, the contributions irrevocably made by a contractor or subcontractor to a trustee or third party pursuant to a bona fide fringe benefit fund, plan, or program, and the costs to the contractor or subcontractor that may be reasonably anticipated in providing bona fide fringe benefits pursuant to an enforceable commitment to carry out a financially responsible plan or program, which was communicated in writing to the affected laborers and mechanics. Section 5.29 discusses specific fringe benefits that may be considered to be bona fide.

[88 FR 57744, Aug. 23, 2023]

§ 5.24 The basic hourly rate of pay.

“The basic hourly rate of pay” is that part of a laborer's or mechanic's wages which the Secretary of Labor would have found and included in wage determinations prior to the 1964 amendments. The Secretary of Labor is required to continue to make a separate finding of this portion of the wage. In general, this portion of the wage is the cash payment made directly to the laborer or mechanic. It does not include fringe benefits.

§ 5.25 Rate of contribution or cost for fringe benefits.

- (a) Under the amendments, the Secretary is obligated to make a separate finding of the rate of contribution or cost of fringe benefits. Only the amount of contributions or costs for fringe benefits which meet the requirements of the act will be considered by the Secretary. These requirements are discussed in this subpart.
- (b) The rate of contribution or cost is ordinarily an hourly rate, and will be reflected in the wage determination as such. In some cases, however, the contribution or cost for certain fringe benefits may be expressed in a formula or method of payment other than an hourly rate. In such cases, the Secretary may in his discretion express in the wage determination the rate of contribution or cost used in the formula or method or may convert it to an hourly rate of pay whenever he finds that such action would facilitate the administration of the Act. See § 5.5(a)(1)(i) and (iii).
- (c) Except as provided in this section, contractors must “annualize” all contributions to fringe benefit plans (or the reasonably anticipated costs of an unfunded benefit plan) to determine the hourly equivalent for which they may take credit against their fringe benefit obligation. The “annualization” principle reflects that DBRA credit for contributions made to bona fide fringe benefit plans (or the reasonably anticipated costs of an unfunded benefit plan) is allowed based on the effective rate of contributions or costs incurred for total hours worked during the year (or a shorter time period) by a laborer or mechanic.
 - (1) **Method of computation.** To annualize the cost of providing a fringe benefit, a contractor must divide the total cost of the fringe benefit contribution (or the reasonably anticipated costs of an unfunded benefit plan) by the total number of hours worked on both private (non-DBRA) work and work covered by the Davis-Bacon Act and/or Davis-Bacon Related Acts (DBRA-covered work) during the time period to which the cost is attributable to determine the rate of contribution per hour. If the amount of contribution varies per worker, credit must be determined separately for the amount contributed on behalf of each worker.

- (2) **Exception requests.** Contractors, plans, and other interested parties may request an exception from the annualization requirement by submitting a request to the WHD Administrator. A request for an exception may be granted only if each of the requirements of paragraph (c)(3) of this section is satisfied. Contributions to defined contribution pension plans (DCPPs) are excepted from the annualization requirement, and exception requests therefore are not required in connection with DCPPs, provided that each of the requirements of paragraph (c)(3) is satisfied and the DCPP provides for immediate participation and essentially immediate vesting (*i.e.*, the benefit vests within the first 500 hours worked). Requests must be submitted in writing to the Division of Government Contracts Enforcement by email to DBAannualization@dol.gov or by mail to Director, Division of Government Contracts Enforcement, Wage and Hour Division, U.S. Department of Labor, 200 Constitution Ave. NW, Room S-3502, Washington, DC 20210.
- (3) **Exception requirements.** Contributions to a bona fide fringe benefit plan (or the reasonably anticipated costs of an unfunded benefit plan) are excepted from the annualization requirement if all of the following criteria are satisfied:
- (i) The benefit provided is not continuous in nature. A benefit is not continuous in nature when it is not available to a participant without penalty throughout the year or other time period to which the cost of the benefit is attributable; and
 - (ii) The benefit does not compensate both private work and DBRA-covered work. A benefit does not compensate both private and DBRA-covered work if any benefits attributable to periods of private work are wholly paid for by compensation for private work.

[29 FR 13465, Sept. 30, 1964, as amended at 88 FR 57744, Aug. 23, 2023]

§ 5.26 “* * * contribution irrevocably made * * * to a trustee or to a third person”.

- (a) **Requirements.** The following requirements apply to any fringe benefit contributions made to a trustee or to a third person pursuant to a fund, plan, or program:
- (1) Such contributions must be made irrevocably;
 - (2) The trustee or third person may not be affiliated with the contractor or subcontractor;
 - (3) A trustee must adhere to any fiduciary responsibilities applicable under law; and
 - (4) The trust or fund must not permit the contractor or subcontractor to recapture any of the contributions paid in or any way divert the funds to its own use or benefit.
- (b) **Excess payments.** Notwithstanding the above, a contractor or subcontractor may recover sums which it had paid to a trustee or third person in excess of the contributions actually called for by the plan, such as excess payments made in error or in order to cover the estimated cost of contributions at a time when the exact amount of the necessary contributions is not yet known. For example, a benefit plan may provide for definite insurance benefits for employees in the event of contingencies such as death, sickness, or accident, with the cost of such definite benefits borne by the contractor or subcontractor. In such a case, if the insurance company returns the amount that the contractor or subcontractor paid in excess of the amount required to provide the benefits, this will not be deemed a recapture or diversion by the employer of contributions made pursuant to the plan. (See Report of the Senate Committee on Labor and Public Welfare, S. Rep. No. 963, 88th Cong., 2d Sess., p. 5.)

[88 FR 57744, Aug. 23, 2023]

§ 5.27 “* * * fund, plan, or program”.

The contributions for fringe benefits must be made pursuant to a fund, plan or program (sec. 1(b)(2)(A) of the act). The phrase “fund, plan, or program” is merely intended to recognize the various types of arrangements commonly used to provide fringe benefits through employer contributions. The phrase is identical with language contained in section 3(1) of the Welfare and Pension Plans Disclosure Act. In interpreting this phrase, the Secretary will be guided by the experience of the Department in administering the latter statute. (See Report of Senate Committee on Labor and Public Welfare, S. Rep. No. 963, 88th Cong., 2d Sess., p. 5.)

§ 5.28 Unfunded plans.

- (a) The costs to a contractor or subcontractor which may be reasonably anticipated in providing benefits of the types described in the Act, pursuant to an enforceable commitment to carry out a financially responsible plan or program, are considered fringe benefits within the meaning of the Act (see 40 U.S.C. 3141(2)(B)(ii)). The legislative history suggests that these provisions were intended to permit the consideration of fringe benefits meeting these requirements, among others, and which are provided from the general assets of a contractor or subcontractor. (Report of the House Committee on Education and Labor, H. Rep. No. 308, 88th Cong., 1st Sess., p. 4; see also S. Rep. No. 963, p. 6.)
- (b) Such a benefit plan or program, commonly referred to as an unfunded plan, may not constitute a fringe benefit within the meaning of the Act unless:
 - (1) It could be reasonably anticipated to provide the benefits described in the Act;
 - (2) It represents a commitment that can be legally enforced;
 - (3) It is carried out under a financially responsible plan or program;
 - (4) The plan or program providing the benefits has been communicated in writing to the laborers and mechanics affected; and
 - (5) The contractor or subcontractor requests and receives approval of the plan or program from the Secretary, as described in paragraph (c) of this section.
- (c) To receive approval of an unfunded plan or program, a contractor or subcontractor must demonstrate in its request to the Secretary that the unfunded plan or program, and the benefits provided under such plan or program, are “bona fide,” meet the requirements set forth in paragraphs (b)(1) through (4) of this section, and are otherwise consistent with the Act. The request must include sufficient documentation to enable the Secretary to evaluate these criteria. Contractors and subcontractors may request approval of an unfunded plan or program by submitting a written request in one of the following manners:
 - (1) By mail to the United States Department of Labor, Wage and Hour Division, Director, Division of Government Contracts Enforcement, 200 Constitution Ave. NW, Room S-3502, Washington, DC 20210;
 - (2) By email to unfunded@dol.gov (or its successor email address); or
 - (3) By any other means directed by the Administrator.
- (d) Unfunded plans or programs may not be used as a means of avoiding the Act's requirements. The words “reasonably anticipated” require that any unfunded plan or program be able to withstand a test of actuarial soundness. Moreover, as in the case of other fringe benefits payable under the Act, an unfunded plan or program must be “bona fide” and not a mere simulation or sham for avoiding compliance with the Act. To prevent these provisions from being used to avoid compliance with the Act, the Secretary may

direct a contractor or subcontractor to set aside in an account assets which, under sound actuarial principles, will be sufficient to meet future obligations under the plan. Such an account must be preserved for the purpose intended. (S. Rep. No. 963, p. 6.)

[88 FR 57744, Aug. 23, 2023]

§ 5.29 Specific fringe benefits.

- (a) The act lists all types of fringe benefits which the Congress considered to be common in the construction industry as a whole. These include the following: Medical or hospital care, pensions on retirement or death, compensation for injuries or illness resulting from occupational activity, or insurance to provide any of the foregoing, unemployment benefits, life insurance, disability and sickness insurance, or accident insurance, vacation and holiday pay, defrayment of costs of apprenticeship or other similar programs, or other bona fide fringe benefits, but only where the contractor or subcontractor is not required by other Federal, State, or local law to provide any of such benefits.
- (b) The legislative history indicates that it was not the intent of the Congress to impose specific standards relating to administration of fringe benefits. It was assumed that the majority of fringe benefits arrangements of this nature will be those which are administered in accordance with requirements of section 302(c)(5) of the National Labor Relations Act, as amended (S. Rep. No. 963, p. 5).
- (c) The term "other bona fide fringe benefits" is the so-called "open end" provision. This was included so that new fringe benefits may be recognized by the Secretary as they become prevailing. It was pointed out that a particular fringe benefit need not be recognized beyond a particular area in order for the Secretary to find that it is prevailing in that area. (S. Rep. No. 963, p. 6).
- (d) The legislative reports indicate that, to insure against considering and giving credit to any and all fringe benefits, some of which might be illusory or not genuine, the qualification was included that such fringe benefits must be "bona fide" (H. Rep. No. 308, p. 4; S. Rep. No. 963, p. 6). No difficulty is anticipated in determining whether a particular fringe benefit is "bona fide" in the ordinary case where the benefits are those common in the construction industry and which are established under a usual fund, plan, or program. This would be typically the case of those fringe benefits listed in paragraph (a) of this section which are funded under a trust or insurance program. Contractors may take credit for contributions made under such conventional plans without requesting the approval of the Secretary of Labor under § 5.5(a)(1)(iv).
- (e) Where the plan is not of the conventional type described in paragraph (d) of this section, the Secretary must examine the facts and circumstances to determine whether fringe benefits under the plan are "bona fide" in accordance with requirements of the Act. This is particularly true with respect to unfunded plans discussed in § 5.28. Contractors or subcontractors seeking credit under the Act for costs incurred for such plans must request specific approval from the Secretary under § 5.5(a)(1)(iv).
- (f) The act excludes fringe benefits which a contractor or subcontractor is obligated to provide under other Federal, State, or local law. No credit may be taken under the act for the payments made for such benefits. For example, payment for workmen's compensation insurance under either a compulsory or elective State statute are not considered payments for fringe benefits under the Act. While each situation must be separately considered on its own merits, payments made for travel, subsistence or to industry promotion funds are not normally payments for fringe benefits under the Act. The omission in the Act of any express reference to these payments, which are common in the construction industry, suggests that these payments should not normally be regarded as bona fide fringe benefits under the Act.

- (g) For a contractor or subcontractor to take credit for the costs of an apprenticeship program, the following requirements must be met:
- (1) The program, in addition to meeting all other relevant requirements for fringe benefits in this subpart, must be registered with the Department of Labor's Employment and Training Administration, Office of Apprenticeship ("OA"), or with a State Apprenticeship Agency recognized by the OA.
 - (2) The contractor or subcontractor may only take credit for amounts reasonably related to the costs of the apprenticeship benefits actually provided to the contractor's employees, such as instruction, books, and tools or materials. It may not take credit for voluntary contributions beyond such costs. Amounts the employer is required to contribute by a collective bargaining agreement or by a bona fide apprenticeship plan will be presumed to be reasonably related to such costs in the absence of evidence to the contrary.
 - (3) Costs incurred for the apprenticeship for one classification of laborer or mechanic may not be used to offset costs incurred for another classification.
 - (4) In applying the annualization principle to compute the allowable fringe benefit credit pursuant to § 5.25, the total number of working hours of employees to which the cost of an apprenticeship program is attributable is limited to the total number of hours worked by laborers and mechanics in the apprentice's classification. For example, if a contractor enrolls an employee in an apprenticeship program for carpenters, the permissible hourly Davis-Bacon credit is determined by dividing the cost of the program by the total number of hours worked by the contractor's carpenters and carpenters' apprentices on covered and non-covered projects during the time period to which the cost is attributable, and such credit may only be applied against the contractor's prevailing wage obligations for all carpenters and carpenters' apprentices for each hour worked on the covered project.

[29 FR 13465, Sept. 30, 1964, as amended at 88 FR 57745, Aug. 23, 2023]

§ 5.30 Types of wage determinations.

- (a) When fringe benefits are prevailing for various classes of laborers and mechanics in the area of proposed construction, such benefits are includable in any Davis-Bacon wage determination. The examples contained in paragraph (c) of this section demonstrate how fringe benefits may be listed on wage determinations in such cases.
- (b) Wage determinations do not include fringe benefits for various classes of laborers and mechanics whenever such benefits do not prevail in the area of proposed construction. When this occurs, the wage determination will contain only the basic hourly rates of pay which are prevailing for the various classes of laborers and mechanics. An illustration of this situation is contained in paragraph (c) of this section.
- (c) The following illustrates examples of the situations discussed in paragraph (a) and (b) of this section:

Figure 1 to Paragraph (c)

CLASSIFICATION	RATE	FRINGES
Bricklayer	\$21.96	\$0.00
Electrician	\$47.65	3%+\$14.88
Elevator mechanic	\$48.60	\$35.825+a+b a. PAID HOLIDAYS: New Year's Day, Memorial Day, Independence Day, Labor Day, Veterans' Day, Thanksgiving Day, Christmas Day and the Friday after Thanksgiving. b. VACATIONS: Employer contributes 8% of basic hourly rate for 5 years or more of service; 6% of basic hourly rate for 6 months to 5 years of service as vacation pay credit.
Ironworker, structural	\$32.00	\$12.01
Laborer: common or general	\$21.93	\$6.27
Operator: bulldozer	\$18.11	\$0.00
Plumber (excludes HVAC duct, pipe and unit installation)	\$38.38	\$16.67

Note 1 to paragraph (c): This format is not necessarily in the exact form in which determinations will issue; it is for illustration only.

[88 FR 57745, Aug. 23, 2023]

§ 5.31 Meeting wage determination obligations.

- (a) A contractor or subcontractor performing work subject to a Davis-Bacon wage determination may discharge their minimum wage obligations for the payment of both straight time wages and fringe benefits by paying in cash, making payments or incurring costs for “bona fide” fringe benefits of the types listed in the applicable wage determination or otherwise found prevailing by the Secretary of Labor, or by a combination thereof.
- (b) A contractor or subcontractor may discharge their obligations for the payment of the basic hourly rates and the fringe benefits where both are contained in a wage determination applicable to their laborers or mechanics in the following ways:
 - (1) By paying not less than the basic hourly rate to the laborers or mechanics and by making contributions for “bona fide” fringe benefits in a total amount not less than the total of the fringe benefits required by the wage determination. For example, the obligations for “Laborer: common or general” in § 5.30, figure 1 to paragraph (c), will be met by the payment of a straight time hourly rate of not less than \$21.93 and by contributions of not less than a total of \$6.27 an hour for “bona fide” fringe benefits; or
 - (2) By paying in cash directly to laborers or mechanics for the basic hourly rate and by making an additional cash payment in lieu of the required benefits. For example, where an employer does not make payments or incur costs for fringe benefits, they would meet their obligations for “Laborer: common or general” in § 5.30, figure 1 to paragraph (c), by paying directly to the laborers a straight time hourly rate of not less than \$28.60 (\$21.93 basic hourly rate plus \$6.27 for fringe benefits); or
 - (3) As stated in paragraph (a) of this section, the contractor or subcontractor may discharge their minimum wage obligations for the payment of straight time wages and fringe benefits by a combination of the methods illustrated in paragraphs (b)(1) and (2) of this section. Thus, for example, their obligations for “Laborer: common or general” may be met by an hourly rate, partly in cash and partly in payments or costs for fringe benefits which total not less than \$28.60 (\$21.93 basic hourly rate plus \$6.27 for fringe benefits).

[88 FR 57746, Aug. 23, 2023]

§ 5.32 Overtime payments.

- (a) The act excludes amounts paid by a contractor or subcontractor for fringe benefits in the computation of overtime under the Fair Labor Standards Act, the Contract Work Hours and Safety Standards Act, and the Walsh-Healey Public Contracts Act whenever the overtime provisions of any of these statutes apply concurrently with the Davis-Bacon Act or its related prevailing wage statutes. It is clear from the legislative history that in no event can the regular or basic rate upon which premium pay for overtime is calculated under the aforementioned Federal statutes be less than the amount determined by the Secretary of Labor as the basic hourly rate (i.e. cash rate) under section 1(b)(1) of the Davis-Bacon Act. (See S. Rep. No. 963, p. 7.) Contributions by employees are not excluded from the regular or basic rate upon which overtime is computed under these statutes; that is, an employee's regular or basic straight-time rate is computed on his earnings before any deductions are made for the employee's contributions to

fringe benefits. The contractor's contributions or costs for fringe benefits may be excluded in computing such rate so long as the exclusions do not reduce the regular or basic rate below the basic hourly rate contained in the wage determination.

(b) The legislative report notes that the phrase "contributions irrevocably made by a contractor or subcontractor to a trustee or to a third person pursuant to a fund, plan, or program" was added to the bill in Committee. This language in essence conforms to the overtime provisions of section 7(d)(4) of the Fair Labor Standards Act, as amended. The intent of the committee was to prevent any avoidance of overtime requirements under existing law. See H. Rep. No. 308, p. 5.

(c)

(1) The act permits a contractor or subcontractor to pay a cash equivalent of any fringe benefits found prevailing by the Secretary of Labor. Such a cash equivalent would also be excludable in computing the regular or basic rate under the Federal overtime laws mentioned in paragraph (a). For example, the W construction contractor pays his laborers or mechanics \$3.50 in cash under a wage determination of the Secretary of Labor which requires a basic hourly rate of \$3 and a fringe benefit contribution of 50 cents. The contractor pays the 50 cents in cash because he made no payments and incurred no costs for fringe benefits. Overtime compensation in this case would be computed on a regular or basic rate of \$3.00 an hour. However, in some cases a question of fact may be presented in ascertaining whether or not a cash payment made to laborers or mechanics is actually in lieu of a fringe benefit or is simply part of their straight time cash wage. In the latter situation, the cash payment is not excludable in computing overtime compensation. Consider the examples set forth in paragraphs (c)(2) and (3) of this section.

(2) The X construction contractor has for some time been paying \$3.25 an hour to a mechanic as his basic cash wage plus 50 cents an hour as a contribution to a welfare and pension plan. The Secretary of Labor determines that a basic hourly rate of \$3 an hour and a fringe benefit contribution of 50 cents are prevailing. The basic hourly rate or regular rate for overtime purposes would be \$3.25, the rate actually paid as a basic cash wage for the employee of X, rather than the \$3 rate determined as prevailing by the Secretary of Labor.

(3) Under the same prevailing wage determination, discussed in paragraph (c)(2) of this section, the Y construction contractor who has been paying \$3 an hour as his basic cash wage on which he has been computing overtime compensation reduces the cash wage to \$2.75 an hour but computes his costs of benefits under section 1(b)(2)(B) as \$1 an hour. In this example the regular or basic hourly rate would continue to be \$3 an hour. See S. Rep. No. 963, p. 7.

§ 5.33 Administrative expenses of a contractor or subcontractor.

(a) **Creditable costs.** The costs incurred by a contractor's insurance carrier, third-party trust fund, or other third-party administrator that are directly related to the administration and delivery of bona fide fringe benefits to the contractor's laborers and mechanics can be credited towards the contractor's obligations under a Davis-Bacon wage determination. Thus, for example, a contractor may take credit for the premiums it pays to an insurance carrier or the contributions it makes to a third-party trust fund that both administers and delivers bona fide fringe benefits under a plan, where the insurance carrier or third-party trust fund uses those monies to pay for bona fide fringe benefits and for the administration and delivery of such benefits, including evaluating benefit claims, deciding whether they should be paid, approving referrals to specialists, and other reasonable costs of administering the plan. Similarly, a contractor may also take credit for monies paid to a third-party administrator to perform tasks that are directly related to the administration and delivery of bona fide fringe benefits, including under an unfunded plan.

- (b) **Noncreditable costs.** A contractor's own administrative expenses incurred in connection with the provision of fringe benefits are considered business expenses of the firm and are therefore not creditable towards the contractor's prevailing wage obligations, including when the contractor pays a third party to perform such tasks in whole or in part. For example, a contractor may not take credit for the costs of office employees who perform tasks such as filling out medical insurance claim forms for submission to an insurance carrier, paying and tracking invoices from insurance carriers or plan administrators, updating the contractor's personnel records when workers are hired or separate from employment, sending lists of new hires and separations to insurance carriers or plan administrators, or sending out tax documents to the contractor's workers, nor can the contractor take credit for the cost of paying a third-party entity to perform these tasks. Additionally, recordkeeping costs associated with ensuring the contractor's compliance with the Davis-Bacon fringe benefit requirements, such as the cost of tracking the amount of a contractor's fringe benefit contributions or making sure contributions cover the fringe benefit amount claimed, are considered a contractor's own administrative expenses and are not considered directly related to the administration and delivery of bona fide fringe benefits. Thus, such costs are not creditable whether the contractor performs those tasks itself or whether it pays a third party a fee to perform those tasks.
- (c) **Questions regarding administrative expenses.** Any questions regarding whether a particular cost or expense is creditable towards a contractor's prevailing wage obligations should be referred to the Administrator for resolution prior to any such credit being claimed.

[88 FR 57747, Aug. 23, 2023]

Subpart C—Severability

Source: 88 FR 57747, Aug. 23, 2023, unless otherwise noted.

§ 5.40 Severability.

The provisions of this part are separate and severable and operate independently from one another. If any provision of this part is held to be invalid or unenforceable by its terms, or as applied to any person or circumstance, or stayed pending further agency action, the provision is to be construed so as to continue to give the maximum effect to the provision permitted by law, unless such holding is one of utter invalidity or unenforceability, in which event the provision is severable from this part and will not affect the remaining provisions.

"General Decision Number: AZ20250057 01/03/2025

Superseded General Decision Number: AZ20240057

State: Arizona

Construction Type: Heavy

County: Maricopa County in Arizona.

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(1).

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: 	· Executive Order 14026 generally applies to the contract. · The contractor must pay all covered workers at least \$17.75 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2025.
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: 	· Executive Order 13658 generally applies to the contract. · The contractor must pay all covered workers at least \$13.30 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours performing on that contract in 2025.

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.

ENGI0012-043	12/01/2024	
	Rates	Fringes
POWER EQUIPMENT OPERATOR:		
Mechanic.....	\$ 37.67	18.12

ENGI0012-044	12/01/2024	
	Rates	Fringes
POWER EQUIPMENT OPERATOR:		
Bobcat/Skid Steer/Skid Loader.....	\$ 32.29	18.12

ENGI0012-045	12/01/2024	
	Rates	Fringes
POWER EQUIPMENT OPERATOR:		
Backhoe/Backhoe & Loader Combo/Track Backhoe.....	\$ 35.56	18.12

ENGI0012-046	12/01/2024	
	Rates	Fringes
POWER EQUIPMENT OPERATOR:		
Bulldozer.....	\$ 35.56	18.12

ENGI0012-048	12/01/2024	
	Rates	Fringes
POWER EQUIPMENT OPERATOR:		
Drill Rig/Auger.....	\$ 35.56	18.12

ENGI0012-050	12/01/2024	
	Rates	Fringes
POWER EQUIPMENT OPERATOR:		
Motor Grader/Blade.....	\$ 35.56	18.12

ENGI0012-054	12/01/2024	
	Rates	Fringes
POWER EQUIPMENT OPERATOR:		
Trencher.....	\$ 35.56	18.12

ENGI0012-055 12/01/2024

	Rates	Fringes
TRUCK DRIVER		
Hydrovac.....	\$ 35.56	18.12

ENGI0012-056 12/01/2024

	Rates	Fringes
TRUCK DRIVER		
Off Road Truck.....	\$ 35.56	18.12

ENGI0012-058 12/01/2024

	Rates	Fringes
POWER EQUIPMENT OPERATOR:		
Excavator/Trackhoe.....	\$ 36.64	18.12

ENGI0012-059 12/01/2024

	Rates	Fringes
POWER EQUIPMENT OPERATOR:		
Grade Checker.....	\$ 36.64	18.12

ENGI0012-077 12/01/2024

	Rates	Fringes
Power Equipment Operator:		
Loader/Front End Loader		
All types rated capacity 3		
cubic yds or less.....	\$ 32.29	18.12
All types rated capacity		
over 3, less than 6 cubic		
yds.....	\$ 35.56	18.12

LABO1184-012 06/01/2024

	Rates	Fringes
Laborer: General.....	\$ 26.15	8.37

LABO1184-013 06/01/2024

	Rates	Fringes
Laborer: Jackhammer.....	\$ 27.79	8.37

LABO1184-014 06/01/2024

	Rates	Fringes
Laborer: Pipelayer.....	\$ 28.65	8.37

LABO1184-015 06/01/2024

	Rates	Fringes
Power Equipment Operator: Forklift.....	\$ 29.62	8.37

LABO1184-016 06/01/2024

	Rates	Fringes
Power Equipment Operator: Horizontal Directional Drill.....	\$ 30.72	8.37

LABO1184-023 06/01/2024

	Rates	Fringes
Laborer: Utility/Potholing.....	\$ 27.79	8.37

LABO1184-024 06/01/2024

	Rates	Fringes
Laborer: Asphalt, Includes Raker, Shoveler, Spreader and Distributor.....	\$ 28.65	8.37

LABO1184-028 06/01/2024

	Rates	Fringes
LABORER: Grade Setter.....	\$ 28.65	8.37

LABO1184-031 06/01/2024

	Rates	Fringes
Laborer: Mason Tender.....	\$ 29.62	8.37

LABO1184-034 06/01/2024

	Rates	Fringes
Truck Driver: Concrete.....	\$ 29.62	8.37

LABO1184-035 06/01/2024

	Rates	Fringes
Truck Driver:		
Dump.....	\$ 29.62	8.37

LABO1184-036 06/01/2024

	Rates	Fringes
Truck Driver:		
Water.....	\$ 29.62	8.37

LABO1184-040 06/01/2024

	Rates	Fringes
Laborer: Fence Erector.....	\$ 26.15	8.37

LABO1184-042 06/01/2024

	Rates	Fringes
Traffic Control.....	\$ 26.15	8.37

LABO1184-050 06/01/2024

	Rates	Fringes
Carpenter: Formwork Concrete.....	\$ 30.72	8.37

PLUM0469-011 07/01/2024

	Rates	Fringes
Pipefitter-Steamfitter.....	\$ 54.15	19.80

SUAZ2023-007 11/19/2024

	Rates	Fringes
Power Equipment Operator:		
Compactor/Roller.....	\$ 32.21	0.00

Power Equipment Operator:		
Scraper.....	\$ 31.56	0.00

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

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at <https://www.dol.gov/agencies/whd/government-contracts>.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (iii)).

The body of each wage determination lists the classifications and wage rates that have been found to be prevailing for the type(s) of construction and geographic area covered by the wage determination. The classifications are listed in alphabetical order under rate identifiers indicating whether the particular rate is a union rate (current union negotiated rate), a survey rate, a weighted union average rate, a state adopted rate, or a supplemental classification rate.

Union Rate Identifiers

A four-letter identifier beginning with characters other than ""SU"", ""UAVG"", ?SA?, or ?SC? denotes that a union rate was prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2024. PLUM is an identifier of the union whose collectively bargained rate prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2024 in the example, is the effective date of the most current negotiated rate.

Union prevailing wage rates are updated to reflect all changes over time that are reported to WHD in the rates in the collective bargaining agreement (CBA) governing the

classification.

Union Average Rate Identifiers

The UAVG identifier indicates that no single rate prevailed for those classifications, but that 100% of the data reported for the classifications reflected union rates. EXAMPLE: UAVG-OH-0010 01/01/2024. UAVG indicates that the rate is a weighted union average rate. OH indicates the State of Ohio. The next number, 0010 in the example, is an internal number used in producing the wage determination. The date, 01/01/2024 in the example, indicates the date the wage determination was updated to reflect the most current union average rate.

A UAVG rate will be updated once a year, usually in January, to reflect a weighted average of the current rates in the collective bargaining agreements on which the rate is based.

Survey Rate Identifiers

The ""SU"" identifier indicates that either a single non-union rate prevailed (as defined in 29 CFR 1.2) for this classification in the survey or that the rate was derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As a weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SUFL2022-007 6/27/2024. SU indicates the rate is a single non-union prevailing rate or a weighted average of survey data for that classification. FL indicates the State of Florida. 2022 is the year of the survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 6/27/2024 in the example, indicates the survey completion date for the classifications and rates under that identifier.

?SU? wage rates typically remain in effect until a new survey is conducted. However, the Wage and Hour Division (WHD) has the discretion to update such rates under 29 CFR 1.6(c)(1).

State Adopted Rate Identifiers

The ""SA"" identifier indicates that the classifications and prevailing wage rates set by a state (or local) government were adopted under 29 C.F.R 1.3(g)-(h). Example: SAME2023-007 01/03/2024. SA reflects that the rates are state adopted. ME refers to the State of Maine. 2023 is the year during which the state completed the survey on which the listed classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 01/03/2024 in the example, reflects the date on which the classifications and rates under the ?SA? identifier took effect under state law in the state from which the rates were adopted.

WAGE DETERMINATION APPEALS PROCESS

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

- a) a survey underlying a wage determination
- b) an existing published wage determination
- c) an initial WHD letter setting forth a position on a wage determination matter
- d) an initial conformance (additional classification and rate) determination

On survey related matters, initial contact, including requests for summaries of surveys, should be directed to the WHD Branch of Wage Surveys. Requests can be submitted via email to davisbaconinfo@dol.gov or by mail to:

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

Regarding any other wage determination matter such as conformance decisions, requests for initial decisions should be directed to the WHD Branch of Construction Wage Determinations. Requests can be submitted via email to BCWD-Office@dol.gov or by mail to:

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

2) If an initial decision has been issued, then any interested party (those affected by the action) that disagrees with the decision can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Requests for review and reconsideration can be submitted via email to dba.reconsideration@dol.gov or by mail to:

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

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

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

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

=====

END OF GENERAL DECISION"

CONSTRUCTION STORM WATER POLLUTION PREVENTION PLAN

Add the following new Section, **233 STORM WATER POLLUTION PREVENTION PLAN SUBMITTAL PROCESS**

233.1 DESCRIPTION

The Contractor shall use the Arizona Department of Environmental Quality (ADEQ) Smart NOI program for all submittals located at this web address:

<https://az.gov/app/smartnoi/>

The location of this process may change and it is the responsibility of the Contractor to verify the correct web address. All fees are the responsibility of the Contractor. The Contractor shall apply for a "Stormwater Construction General Permit" with the project type "MUNICIPAL/PUBLIC".

Before any construction on site begins, the Contractor shall submit the Notice of Intent (NOI) and the SWPPP through the Smart NOI program as the sole permittee. The Contractor shall not commence any construction activities until the ADEQ send a written Notice Of Intent assigning an AZCON number.

As required by ADEQ the Contractor shall submit a Notice of Termination (NOT) through the Smart NOI program. The Contractor shall receive final payment only after receiving a written Notice of Termination Acknowledgement from ADEQ.

Projects Impacting Impaired Waters

Projects that will have any construction taking place within ¼ mile of the Salt River between 23rd Avenue and the confluence of the Gila River will impact "Impaired Waters". These projects will require the Contractor to design, implement, and evaluate a Monitoring Plan for stormwater runoff from their construction activities. The Monitoring Plan must be site specific and will be submitted to ADEQ as an appendix to the SWPPP. ADEQ is the final authority in the approval of the monitoring plan. A copy of the SWPPP and the Monitoring Plan shall be kept on-site at all times. Additional copies of the Monitoring Plan should be made available to all personnel who anticipate participating in stormwater monitoring activities. The Contractor shall have a copy of the monitoring plan, approved SWPPP, NOI, and ADEQ Authorization to Discharge posted at the jobsite prior to ground disturbance.

Subcontractors

All subcontractors shall comply with all AZPDES requirements under the supervision of the General Contractor, and shall submit a completed, signed subcontractor certification form, thereby designating themselves as co-permittees.

233.2 SAMPLE SWPPP STRUCTURE

The following is a sample outline of the City requirement for a SWPPP submittal modeled after the ADEQ Construction General Permit Checklist. It shall be the Contractor's responsibility to meet all the ADEQ requirements for a SWPPP and retain a qualified consultant to complete the SWPPP, if necessary, at no additional cost to the City.

1 **SITE DESCRIPTION**

1.1 Project Name: **CONTRACTOR SHALL FILL IN PROJECT NAME**
 Project No(s): **CONTRACTOR SHALL FILL IN PROJECT NUMBER**

1.2 Project Location: **CONTRACTOR SHALL FILL IN FOR PROJECT SITE LOCATION**

1.3 Owner's Name:
 City of Phoenix, Water Services Department

1.4 Owner's Address:
 200 West Washington Street, 8th Floor, Phoenix, Arizona 85003

1.5 Project Description: **CONTRACTOR SHALL FILL IN PROJECT DESCRIPTION**

- 1.6 Runoff Coefficient and Soils Information:
- A. Overall runoff coefficient of upstream drainage area shall be unchanged by project.
 - B. Surface Soils Information: **(EXAMPLE ONLY, CONTRACTOR SHALL FILL IN FOR PROJECT SITE LOCATION)**

<u>SOIL UNIT</u>	<u>SOIL TYPE (USDA TEXTURE)</u>	<u>PERMEABILITY (IN./HR.)</u>
<u>Laveen</u>	<u>Loam</u>	<u>0.6-2.0</u>
<u>Mohall</u>	<u>Clay Loam</u>	<u>0.2-0.6</u>
<u>Tucson</u>	<u>Clay Loam</u>	<u>0.2-0.6</u>
<u>Vecont</u>	<u>Clay</u>	<u>0.06-0.2</u>

1.7 Name of Receiving Water:
EXAMPLE: SALT RIVER, CONTRACTOR SHALL FILL FOR PROJECT SITE LOCATION

2 CONTROLS

2.1 Erosion and Sediment Controls

2.1.a Stabilization Practices:

Stabilization practices on this site include:

- Permanent planting.
- Save selected existing trees.
- Decomposed granite
- **CONTRACTOR SHALL ADD OR REMOVE STABILIZATION PRACTICES AS NECESSARY**

2.1.b Structural Practices:

May include:

- Temporary retention areas (subgrade excavation areas).
- Temporary catch basin inlet protection.
- Silt fence.
- Gravel filter berm.
- Temporary diversion dike.
- Straw bale barriers.
- Sandbag berm
- **CONTRACTOR SHALL ADD OR REMOVE STABILIZATION PRACTICES AS NECESSARY**

2.1.c Narrative: Sequence of major activities.

CONTRACTOR SHALL COMPLETE NARRATIVE

2.1.d Storm Water Management: **(CONTRACTOR SHALL EDIT AS NECESSARY)**

Storm water drainage on will be provided by curb and gutter, catch basin inlets, and storm drains. No appreciable changes in runoff coefficients or in finished roadway grades will take place as a result of this project; therefore, no significant alterations of storm water drainage patterns or runoff quantities are expected.

During construction, storm water runoff will be managed by the following means, as conditions require:

- Temporary retention will be provided during roadway construction in areas excavated for subgrade.
- Silt fence, straw bales, sandbag berms, temporary diversion dikes, gravel filter berms or other BMP's as necessary to eliminate erosion may be used to prevent storm runoff from entering open storm drain pipes in excavated trenches. Temporary catch basin inlet protection may also be provided to remove sediment from drainage water before it enters the drainage system. Straw bale protection at outfall pipe locations may be employed during construction.

3 OTHER CONTROLS

3.1 Waste Disposal:

Waste Materials:

All waste materials including trash and construction debris from the site will be either disposed to a designated area immediately or collected and stored in securely-lidded metal dumpsters. The dumpsters will meet all local and State solid waste management regulations. The dumpsters will be emptied a minimum of once per week, or more often if necessary, and the trash will be hauled to an acceptable dump site. Lids will be closed at all times after work hours and during rain events. No construction waste materials will be buried on site. All personnel will be instructed regarding the correct procedures for waste disposal. Notices stating these practices will be posted on site, and the site superintendent who manages the day-to-day site operations, will be responsible for seeing that these procedures are followed.

ENTER PHONE NUMBER AND NAME OF SITE SUPERINTENDENT

Concrete washout will only be allowed in designated areas. The hardened waste will be disposed of weekly and before final inspection of the project.

Hazardous Waste:

All hazardous waste materials will be disposed of in the manner specified by local or State regulations or by the manufacturer. Site personnel will be instructed in these practices, and the site superintendent who manages day-to-day site operations, will be responsible for seeing that these practices are followed.

Sanitary Waste:

All sanitary sewage generated on-site will be collected from the portable units a minimum of twice per week or as required by local regulations. Units will have a berm placed around them to ensure no spillage can occur.

3.2 Off-Site Vehicle Tracking:

Traffic will be maintained on paved roadway throughout construction in order to reduce vehicle tracking of sediments. The paved street beyond the start and end of the project will be swept as often as necessary to remove any excess mud, dirt, or rock that may be tracked from the site by construction vehicles, but not less than once per week. Dump trucks hauling material to or from the construction site will be covered with tarpaulin before leaving the site.

4 DEMONSTRATION OF COMPLIANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS

The following Federal, State, and City regulations are followed in the preparation of this storm water pollution prevention plan:

- Section 402(p) of the Clean Water Act.
- Amended Section 405 of the Water Quality Act.
- "ADEQ Arizona Pollutant Discharge Elimination System General Permit for Discharge from Construction Activities to Waters of the United States, Permit AZG-2008-001."
- Flood Control District of Maricopa County "Drainage Design Manual for Maricopa County, Arizona, Volume III, Erosion Control."
- City of Phoenix Code 32C, "Storm Water Quality Protection."
- City of Phoenix "Grading and Drainage Ordinance for Purpose of Fulfilling NPDES Requirements."

5 MAINTENANCE/INSPECTION PROCEDURES

5.1 Erosion and Sediment Control Practices:

The following is a list of erosion and sediment controls to be used during the construction period:

5.1.a Stabilization practices for this site include:

- Permanent planting.
- Save selected existing trees.
- Decomposed granite.
- **CONTRACTOR TO ADD/DELETE AS NECESSARY**

5.1.b Structural practices for this site will include:

- Silt fence/straw bale barriers.
- Temporary diversion dike/gravel filter berm.
- Sandbag berm.
- Storm drain, curb and gutter, catch basins.

- Temporary catch basin inlet protection.
- Temporary retention in subgrade excavation areas.
- **CONTRACTOR TO ADD/DELETE AS NECESSARY**

5.2 Erosion and Sediment Control Maintenance and Inspection Practice:

Following is a list of the inspection and maintenance practices that will be used to maintain erosion and sediment control:

- All control measures will be inspected at least once every 7 days and within 24 hours after each rain event of 0.1 inch or greater.
- All measures will be maintained in good working order; if repair is necessary, it will be initiated within 24 hours of report. All changes will be completed within 14 days after an observation.
- Built-up sediment will be removed from silt fence when it has reduced the design capacity by 50%.
- Erosion control fabric and erosion control dikes will be inspected and any breaches promptly repaired.
- Permanent planting will be inspected for washout and healthy growth per specification requirements.
- A Compliance Evaluation Report will be made at each inspection to ensure all BMP's are functioning correctly.
- The site superintendent will be responsible for inspection, maintenance, and repair activities, and filling out the Compliance Evaluation Report.
- Personnel selected for inspection and maintenance responsibility will receive training from the site superintendent. They will be trained in all the inspection and maintenance practices necessary for keeping the erosion and sediment controls used on-site in good working order.
- Only one side of roadways will be excavated for subgrade preparation at a time. This area will serve as temporary retention while traffic is maintained on the paved other half of the road. This will serve to control storm water and minimize tracking of sediments.

6 INVENTORY FOR POLLUTION PREVENTION PLAN (CONTRACTOR TO EDIT AS NECESSARY)

The materials or substances listed below are expected to be present on-site during construction:

- | | |
|----------------------------|------------------------------|
| • Concrete | • Wood |
| • Asphaltic Concrete | • Paints |
| • Fertilizers | • Herbicide/Pesticide |
| • Petroleum-Based Products | • Soil Treatment Products |
| • Cleaning Solvents/Agents | • Other Building Materials |
| • Sealants | • Water Used in Dust Control |

6.1 Spill Prevention

The following are the material management practices that will be used to reduce the risk of spills or other accidental exposure of materials and substances to storm water runoff:

6.1.a Good Housekeeping:

The following good housekeeping practices will be followed on-site during the construction period:

- An effort will be made to store only enough product required to do the immediate job.
- All materials stored on-site will be stored in a neat, orderly manner in their appropriate containers and, if possible, under proper cover and palletized.

- Liquid products will be placed on secondary containment pallets.
- Fuel tanks will be double walled.
- Drip pans will be used under all spigots unless on secondary containment.
- Products will be kept in their original containers with the original manufacturers' label.
- Substances will not be mixed with one another unless recommended by the manufacturer.
- Whenever possible, all of a product will be used up before disposing of the container.
- Manufacturers' recommendations for proper use and disposal will be followed.
- The site superintendent will inspect daily to ensure proper use and disposal of materials.
- Concrete washout will only be allowed in designated areas. The hardened waste will be disposed of weekly and before final inspection of the project.

6.1.b Hazardous Products:

These practices are used to reduce the risks associated with hazardous materials:

- Products will be kept in original containers unless they are not resealable.
- Original labels and material safety data sheets will be retained.
- If surplus product must be disposed of, manufacturers', or local and State recommended methods for proper disposal will be followed.
- Products will be monitored, an inventory shall be conducted regularly, and documentation of all use and disposal shall be maintained.

6.2 Product Specific Practices:

The following product specific practices will be followed on-site:

6.2.a Petroleum Products:

All on-site vehicles will be monitored for leaks and receive regular preventative maintenance to reduce any chance of leakage. Petroleum products will be stored in tightly-sealed containers which are clearly labeled. Any petroleum substances used on-site will be applied according to the manufacturer's recommendations. Spills and leaks from vehicles will be stopped immediately. Any leaking vehicle will have a drip pan placed under the leak until the unit is repaired. Secondary containment will be provided for all petroleum products stored onsite.

6.2.b Fertilizers, Herbicide, Pesticide, Soil Treatment:

All materials used will be applied only in the minimum amounts recommended by the manufacturer or as per specification. Once applied, materials will be worked into the soil to limit exposure to storm water.

On-site storage will be covered and palletized to limit contact with storm water. The contents of any partially-used bags or containers will be transferred to a sealable plastic bin to avoid spills.

6.2.c Paints:

All containers will be tightly sealed and stored when not required for use. Excess paint will not be discharged to the storm drain system or on the ground, but will be properly disposed of according to manufacturers' instructions or State and local regulations.

6.2.d Concrete Trucks:

Concrete trucks will not be allowed to wash out or discharge surplus concrete or dump wash water other than in a designated wash-out area. The hardened waste will be disposed of weekly and

before final inspection of the project.

6.3 Spill Prevention Practices:

In addition to the good housekeeping and material management practices discussed in the previous sections of this plan, the following practices will be followed for spill prevention and cleanup:

- Manufacturers' recommended methods for spill cleanup will be clearly posted and site personnel will be made aware of the procedures and the location of the information and cleanup supplies.
- Materials and equipment necessary for spill cleanup will be kept in the material storage area on-site. Equipment and materials will include, but not be limited to, brooms, dust pans, mops, rags, gloves, goggles, kitty litter, sand, sawdust, and plastic and metal trash containers specifically designed for this purpose.
- All spills will be cleaned up immediately after discovery using dry cleanup methods.
- The spill area will be kept well-ventilated and personnel will wear appropriate protective clothing to prevent injury from contact with a hazardous substance.
- Spills of toxic or hazardous material will be reported to the appropriate State or local government agency, regardless of the size—ADEQ Hotline: (602) 771-4505; City of Phoenix Hazardous Spills Emergency: 911; City of Phoenix Hazardous Spills Safety Section: (602) 262-7555.
- The spill prevention plan will be adjusted to include measures to prevent this type of spill from recurring and procedures to clean up the spill if there is another one. A description of the spill, what caused it, and the cleanup measures will also be included.
- The site superintendent shall be responsible for the day-to-day site operations, will be the spill prevention and cleanup coordinator. He will designate other site personnel who will receive spill prevention and cleanup training.

6.4 Documentation:

Documentation of all inspections, failed BMP's, corrective action and training shall be maintained onsite with the SWPPP at all times during the project, and shall be maintained for not less than three (3) years after the project is complete.

OTHER REQUIRED CERTIFICATIONS

The Contractor shall complete and submit the following certification forms to the City before construction begins:

- Permittee Certification
- Contractor Certification
- Subcontractor Certification (for all Subcontractors as necessary)
- Operator's Compliance Evaluation Report

PERMITTEE'S CERTIFICATION

As Contractor of the **WMR ABB: Mountain View Road to Peoria Avenue and 19th Avenue to 15th Avenue (WIFA)** project, I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Company

Name: _____

Title: _____

Signature: _____

Date: _____

CONTRACTOR CERTIFICATION

I certify under penalty of law that I understand the terms and condition of the General Arizona Pollutant Discharge Elimination System (AZPDES) Permit that authorizes the storm water discharges associated with industrial activities from the construction site identified as part of this certification. Further, by my signature, I understand that I am becoming a co-permittee, along with the subcontractors signing such certifications, to the general (AZPDES) Permit for the storm water discharges associated with construction activities of the **WMR ABB: Mountain View Road to Peoria Avenue and 19th Avenue to 15th Avenue (WIFA)** project. As a co-permittee, I understand that I, and my company, are legally required under the Clean Water Act, to ensure compliance with the terms and conditions of the storm water pollution prevention plan developed under the AZPDES Permit and the terms of the AZPDES Permit.

General Contractor and Responsibility

Name: _____

Title: _____

Signature: _____

SUBCONTRACTOR'S CERTIFICATION

I certify under penalty of law that I understand the terms and conditions of the General Arizona Pollutant Discharge Elimination System (AZPDES) Permit that authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification. Further, by my signature, I understand that I am becoming a co-permittee, along with the owner(s) and other contractors and subcontractors signing such certifications, to the general AZPDES permit for the storm water discharges associated with construction activities of the **WMR ABB: Mountain View Road to Peoria Avenue and 19th Avenue to 15th Avenue (WIFA)** project. As a co-permittee, I understand that I, and my company, are legally required under the Clean Water Act, to ensure compliance with the terms and conditions of the storm water pollution prevention plan developed under the AZPDES permit and the terms of the AZPDES permit.

Authorized Representative of Subcontractor: _____

Signature: _____ Date: _____

For (Subcontractor Name): _____

Construction Activities: _____

Verification of Completion and Acceptance of Subcontractor's Work

All work to be performed by _____ (Subcontractor) as part of the _____ (Project) has been completed and accepted. Execution of this form absolves said subcontractor from liability for AZPDES violations which may occur subsequent to this date as a result of activities of the general contractor or other subcontractors.

Authorized Representative of Subcontractor: _____

Signature: _____ Date: _____

For (Subcontractor Name): _____

Verified by (General Contractor): _____

Authorized Representative of General Contractor: _____

Signature: _____ Date: _____

AZG-2008-001 General Permit for Construction Activities

Operator's Compliance Evaluation Report

This project requires inspection of storm water pollution controls (BMPs) on a choice of frequency described in the General Permit, Part IV. H. Attach sheets if more space is needed.

Project: _____ Date: _____

Name & Title of Inspector: _____

Qualifications of Inspector: Attached; or Shown in Sec. _____ of the SWPPP.

Periodic Inspection; or Rain Event inspection

Relevant weather information: _____

1. Location(s) of discharge from the site: None; or Description: _____

2. Location(s) of and identification of BMPs that need to be maintained; failed to operate or proved to be inadequate:
 None; or Description: _____

3. Location(s) where additional BMPs are needed: None; or Description: _____

4. Corrective actions required, including changes and target dates: None; or Description: _____

5. Identify all sources of non-storm water and the associated pollution control measures: None; or
Description: _____

6. Identify material storage areas and evidence of, or potential for pollutant discharge from these areas: None; or
 Description: _____

7. Identify any other apparent incidents of non-compliance: None; or Description: _____

8. If no incidents of non-compliance are identified in items 1 through 7 above, the inspector certifies that the construction project is being operated in compliance with the SWPPP and the General Permit.

I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Certifying Signature: _____ Date: _____

Printed Name: _____

PROPOSAL SUBMITTAL
BID PROPOSAL
CITY OF PHOENIX, ARIZONA
OFFICE OF THE CITY ENGINEER
WATER MAIN REPLACEMENT AREA BOUNDED BY: MOUNTAIN VIEW ROAD
TO PEORIA AVENUE AND 19TH AVENUE TO 15TH AVENUE
WS85509031 (WIFA)
BOND ISSUE OR BUDGET PROJECT

PROPOSAL to the City Engineer of the City of Phoenix.

In compliance with the Advertisement for Bids, by the City Engineer, the undersigned bidder:

(Print or Type Contractor Name and Vendor Number)

Having examined the contract documents, site of work and being familiar with the conditions to be met, hereby submits the following proposal for furnishing the material, equipment, labor and everything necessary for the completion of the work listed and agrees to execute the contract documents and furnish the required bonds and certificates of insurance for the completion of said work, at the locations and for the prices set forth on the inside pages of this form.

Understands that construction of this project shall be in accordance with all applicable Maricopa Association of Governments' (MAG) Uniform Standard Specifications and Uniform Standard Details, latest edition, and the City of Phoenix Supplements to the MAG Uniform Standard Specifications and Details, latest edition, except as otherwise required by the project plans and specifications.

No proposal may be withdrawn for a period of 50 days after opening without consent of the Contracting Agency through the body or agent duly authorized to accept or reject the proposal except in the case of federally assisted projects.

Understands that his proposal shall be submitted with a proposal guarantee of cash, certified check, cashier's check or surety bond for an amount not less than ten (10) percent of the amount bid, as referenced in the Call for Bids.

Agrees that upon receipt of Notice of Award, from the City of Phoenix, he will execute the contract documents within 10 calendar days.

Work shall be completed within 450 calendar days, beginning with the day following the starting date specified in the Notice to Proceed. The time allowed for completion of the work includes lead time for obtaining the necessary materials and/or equipment and approvals.

The bidder shall acknowledge all addenda in writing. By writing the addendum number(s) below, the bidder agrees that this proposal is computed with consideration of the specification book(s) plus any addenda.

<u>ADDENDUM NO.</u>	<u>DATE</u>	<u>ADDENDUM NO.</u>	<u>DATE</u>

P.-1

P-1

Item No.	Description	Unit	Quantity	Unit Price	Total Cost
1 E6992000	ALLOWANCE FOR STORM WATER POLLUTION PREVENTION BEST MANAGEMENT PRACTICES (BMP'S)	Job	1	\$25,000.00	\$25,000.00
2 M1000000	MATERIALS TESTING & QUALITY CONTROL	Job	1		
3 M1002005	MOBILIZATION / DEMOBILIZATION	Job	1		
4 M1042005	ALLOWANCE FOR EXTRA WORK	Job	1	\$250,000.00	\$250,000.00
5 M1058000	CONSTRUCTION SURVEYING AND LAYOUT	Job	1		
6 M3362000	SLURRY SEAL COAT	Sq. Yd.	57,550		
7 M3362100	MICRO SEAL	Sq. Yd.	28,210		
8 M3369794	ASPHALT CONCRETE FOR PERMANENT PAVEMENT REPLACEMENT, 4" THICK PER SPECIAL PROVISIONS (RESIDENTIAL STREET)	Sq. Yd.	4,480		
9 M3369795	ASPHALT CONCRETE FOR PERMANENT PAVEMENT REPLACEMENT, 6" THICK PER SPECIAL PROVISIONS (COLLECTOR STREET)	Sq. Yd.	2,600		
10 M3369798	ASPHALT CONCRETE FOR PERMANENT PAVEMENT REPLACEMENT, 8" THICK PER SPECIAL PROVISIONS (ARTERIAL STREET)	Sq. Yd.	820		
11 M3370100	CRACK SEAL	Sq. Yd.	85,760		
12 M4012000	TRAFFIC CONTROL DEVICES	Job	1		
13 M4013000	ALLOWANCE FOR UNIFORMED, OFF-DUTY LAW ENFORCEMENT OFFICER	Job	1	\$50,000.00	\$50,000.00
14 M6000006	6"X2" TAPPED CAP WITH 2" I.P. CORP.	EA	5		
15 M6101801	NEW WATER METER BOX AND COVER FURNISH & INSTALL AT NEW LOCATION	EA	70		
16 M6101802	NEW WATER METER BOX AND COVER, FURNISH & INSTALL AT EXISTING LOCATION.	EA	448		
17 M6101805	WATER SERVICE CONNECTION (MAIN TO METER)	EA	518		
18 M6101810	3/4" OR 1" WATER METER SERVICE CONNECT PIPE AND FITTINGS, MAIN TO METER, FURNISH & INSTALL	L.F.	12,979		
12 M6101815	1-1/2" OR 2" WATER METER SERVICE CONNECT PIPE AND FITTINGS, MAIN TO METER, FURNISH & INSTALL	L.F.	156		
20 M6102006	6" DUCTILE IRON WATER PIPE AND FITTINGS, FURNISH & INSTALL	L.F.	10,582		
21 M6102008	8" DUCTILE IRON WATER PIPE AND FITTINGS, FURNISH & INSTALL	L.F.	2,759		
22 M6102012	12" DUCTILE IRON WATER PIPE AND FITTINGS, FURNISH & INSTALL	L.F.	3,180		
23 M6104004	4" DUCTILE IRON WATER PIPE AND FITTINGS, RESTRAINED, FURNISH & INSTALL	L.F.	27		
24 M6104006	6" DUCTILE IRON WATER PIPE AND FITTINGS, RESTRAINED, FURNISH & INSTALL	L.F.	9,661		
25 M6104008	8" DUCTILE IRON WATER PIPE AND FITTINGS, RESTRAINED, FURNISH & INSTALL	L.F.	1,119		
26 M6104012	12" DUCTILE IRON WATER PIPE AND FITTINGS, RESTRAINED, FURNISH & INSTALL	L.F.	2,383		
27 M6104301	WATERLINE CUT AND PLUG PER DET. P-1343, UP TO & INCL. 12"	EA	25		
28 M6104400	WATERLINE CUT AND PLUG PER DET. P-1344, UP TO & INCL. 12"	EA	4		
29 M6106002	REMOVE EXISTING VALVE BOX, AND COVER, RESTORE SURFACE	EA	142		
30 M6108006	FIRE HYDRANT FURNISH & INSTALL	EA	59		

31 M6108007	FIRE HYDRANT, SALVAGE & DELIVER TO THE CITY OF PHOENIX	EA	29		
32 M6153000	CONSTRUCT WATER OR SANITARY SEWER ENCASEMENT, MAG. STD. DET. 404	L.F.	1460		
33 M6303006	4" VALVE, BOX, AND COVER, FURNISH & INSTALL	EA	1		
34 M6303006	6" VALVE, BOX, AND COVER, FURNISH & INSTALL	EA	68		
35 M6303008	8" VALVE, BOX, AND COVER, FURNISH & INSTALL	EA	8		
36 M6303012	12" VALVE, BOX, AND COVER, FURNISH & INSTALL	EA	10		
37 M6303106	6" VALVE, FLG. X MJ. BOX AND COVER, FURNISH & INSTALL	EA	58		
38 M6304010	8" X 6" TAPPING SLEEVE AND VALVE, BOX, & COVER, FURNISH & INSTALL	EA	4		
39 M6304025	8" X 8" TAPPING SLEEVE AND VALVE, BOX, & COVER, FURNISH & INSTALL	EA	1		
40 M6304055	12"X6" TAPPING SLEEVE AND VALVE, BOX, & COVER, FURNISH & INSTALL	EA	5		
41 M6304060	12"X8" TAPPING SLEEVE AND VALVE, BOX, & COVER, FURNISH & INSTALL	EA	1		
42 M6304070	12"X12" TAPPING SLEEVE AND VALVE, BOX, & COVER, FURNISH & INSTALL	EA	2		
43 M6309065	DEBRIS CAP, INCLUDING LOCATOR COIL, FURNISH AND INSTALL	EA	157		
44 M6309066	DEBRIS CAP, INCLUDING LOCATOR COIL, NON-PAVED AREAS, FURNISH AND INSTALL	EA	1		
45 M6103706	WATERLINE REALIGNMENT, 6" AND 8" CONTINGENT ITEM	EA	10		
46 M6103710	WATERLINE REALIGNMENT, 10" AND 12" CONTINGENT ITEM	EA	5		
47 M6153000	CONSTRUCT WATER OR SANITARY SEWER ENCASEMENT, MAG. STD. DET. 404 CONTINGENT ITEM	L.F.	500		
48 M6101801	RELOCATE EXISTING METER TO NEW LOCATION (PER THE CONTINGENT ITEM	EA	20		
BASE BID (ITEMS 1 THROUGH 48 - INCLUSIVE			\$		
_____ & _____/100 DOLLARS					
WRITTEN WORDS					

Prepared By:

Signature

Name

Position/Title

Firm Name

PROPOSAL SUBMITTAL

**Project Title: WMR ABB: Mountain View Road to Peoria Avenue and
19th Avenue to 15th Avenue
Project No.: WS85509031 (WIFA)**

THIS PROPOSAL IS SUBMITTED BY _____

a corporation organized under the laws of the State of _____

a partnership consisting of _____

a joint venture consisting of _____

or individual trading as _____

of the City of _____

FIRM _____

ADDRESS _____

CITY _____ STATE _____ ZIP CODE _____

PHONE _____ VENDOR NUMBER _____

BY _____

Officer and Title (Signature)

Officer and Title (print or type)

Date

WITNESS: If Contractor is an individual (signature)

ATTEST: If Contractor is Corporation or Partnership
(signature and title)

SURETY BOND

City of Phoenix Project No.: WS85509031

That we, _____, as Principal, (hereinafter called the Principal) and the _____, a corporation duly organized under the laws of the State of _____, as Surety, (hereinafter called the Surety) are held and firmly bound unto the City of Phoenix as Obligee, in the sum of ten (10) percent of the total amount of the bid of Principal, submitted by him to the City of Phoenix for the work described below, for the payment of which sum, well and truly to be made, the said Principal and the said Surety, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents and in conformance with A.R.S. #34-201.

WHEREAS, the said Principal is herewith submitting its proposal for WMR ABB: Mountain View Road to Peoria Avenue and 19th Avenue to 15th Avenue (WIFA).

NOW, THEREFORE, if the City of Phoenix shall accept the proposal of the Principal and the Principal shall enter into a contract with the City of Phoenix in accordance with the terms of such proposal and give such Bonds and Certificates of Insurance as specified in the Standard Specifications with good and sufficient Surety for the faithful performance of such contract and for the prompt payment of labor and material furnished in the prosecution thereof, or in the event of the failure of the Principal to enter into such contract and give such Bonds and Certificates of Insurance, if the Principal shall pay to the City of Phoenix the difference not to exceed the penalty of the bond between the amount specified in the proposal and such larger amount for which the Obligee may in good faith contract with another party to perform the work covered by the proposal, then this obligation shall be null and void, otherwise to remain in full force and effect.

Signed and sealed this _____ day of _____ A.D., 2025

Principal

Title

Mailing Address

Surety

WITNESS:

A.M. BEST RATING:

**CERTIFICATION WITH REGARD TO THE PERFORMANCE OF
PREVIOUS CONTRACTS OR SUBCONTRACTS SUBJECT TO THE
EQUAL OPPORTUNITY CLAUSE AND THE FILING OF REQUIRED REPORTS
APRIL 1969**

The bidder _____, proposed subcontractor _____, hereby certifies that he has _____, has not _____, participated in a previous contract or subcontract subject to the equal opportunity clause, as required by Executive Orders 10925, 11114, or 11246, and that he has _____, has not _____, filed with the Joint Reporting committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements.

(Company)

By: _____

(Title)

Date: _____

Note: The above certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor (41 CFR 60-1.7b (1),) and must be submitted by bidders and proposed subcontractors only in connection with contracts and subcontracts which are subject to the equal opportunity clause. Contracts and subcontracts which are exempt from the equal opportunity clause are set forth in 41 CFR 60-1.5 (Generally only contracts or subcontracts of \$10,000 or under are exempt.)

Currently, Standard Form 100 (EEO-1) is the only report required by the Executive Orders or their implementing regulations.

Information concerning Standard Form 100 (EEO-1) is available from:

Joint Reporting Committee P.O.
Box 19100
Washington, D.C. 20036-9100

Proposed prime contractors and subcontractors who have participated in a previous contract or subcontract subject to the Executive Orders and have not filed the required reports should note that 41 CFR 60-1.7(b)(1) prevents the award of contracts and subcontracts unless such contractor submits a report covering the delinquent period or such other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U.S. Department of Labor.

R7/03

CITY OF PHOENIX
LIST OF MAJOR SUBCONTRACTORS AND SUPPLIERS

PROJECT NO.: WS85509031 (WIFA) PROJECT TITLE: WMR ABB: Mountain View Road to Peoria Avenue and 19th Avenue to 15th Avenue DBB

DESCRIPTION OF WORK OR MATERIALS (CONTRACTOR TO ENTER TRADE/SUPPLIER AREAS)	SELF-PERFORMED BY PRIME CONTRACTOR	SUBCONTRACTOR/SUPPLIER COMPANY NAME (IF NOT SELF-PERFORMED)	CONTACT PERSON	PHONE NUMBER	DOLLAR VALUE OF WORK OR MATERIALS IN BID
	<input type="checkbox"/> YES <input type="checkbox"/> NO				
	<input type="checkbox"/> YES <input type="checkbox"/> NO				
	<input type="checkbox"/> YES <input type="checkbox"/> NO				
	<input type="checkbox"/> YES <input type="checkbox"/> NO				
	<input type="checkbox"/> YES <input type="checkbox"/> NO				
	<input type="checkbox"/> YES <input type="checkbox"/> NO				

I hereby certify by signing below that the above listed companies will be utilized to perform work on this project for an **equal to or greater than 5% of the base bid**. These companies will not be removed or replaced without prior written approval by the City of Phoenix Project Manager. The City requires that ALL vendors providing work equal to or greater than 5% of the base bid are listed or you will be disqualified. If you are self-performing work, you must still list any suppliers for materials or list any subcontractors with whom you will directly contract.

COMPANY NAME _____ SIGNATURE _____

NAME & TITLE _____ PHONE NUMBER _____ DATE _____

EMAIL ADDRESS _____

CITY OF PHOENIX
LIST OF ALL SUBCONTRACTORS AND SUPPLIERS

PROJECT NO.: WS85509031 (WIFA) PROJECT TITLE: WMR ABB: Mountain View Road to Peoria Avenue and 19th Avenue to 15th Avenue DBB

DESCRIPTION OF WORK OR MATERIALS (CONTRACTOR TO ENTER TRADE/SUPPLIER AREAS)	SELF-PERFORMED BY PRIME CONTRACTOR	SUBCONTRACTOR/SUPPLIER COMPANY NAME (IF NOT SELF-PERFORMED)	CONTACT PERSON	PHONE NUMBER	DOLLAR VALUE OF WORK OR MATERIALS IN BID
	<input type="checkbox"/> YES <input type="checkbox"/> NO				
	<input type="checkbox"/> YES <input type="checkbox"/> NO				
	<input type="checkbox"/> YES <input type="checkbox"/> NO				
	<input type="checkbox"/> YES <input type="checkbox"/> NO				
	<input type="checkbox"/> YES <input type="checkbox"/> NO				
	<input type="checkbox"/> YES <input type="checkbox"/> NO				

I hereby certify by signing below that the above listed companies will be utilized to perform work on this project. These companies will not be removed or replaced on the project without prior written approval by the City of Phoenix Project Manager. The City requires that ALL vendors providing work are listed or you will be disqualified. If you are self-performing work, you must still list any suppliers for materials or list any subcontractors with whom you will directly contract.

COMPANY NAME _____ SIGNATURE _____
NAME & TITLE _____ PHONE NUMBER _____ DATE _____
EMAIL ADDRESS _____

BIDDER'S DISCLOSURE STATEMENT

Authorized Contact for this Disclosure Statement

Name: _____

Title: _____

E-mail: _____

Phone number: _____

List any EIN, DBA, trade name, or other identity used in the last five years, the state or country where filed, and the status (active or inactive): (if applicable): _____

Business Characteristics

Business entity type – Please check appropriate box and provide additional information:

- | | | | |
|--------------------------|-------------------------------|------------------------------|-------|
| <input type="checkbox"/> | Corporation | Date of incorporation: | _____ |
| <input type="checkbox"/> | Limited Liability Company | Date organized: | _____ |
| <input type="checkbox"/> | Limited Liability Partnership | Date of registration: | _____ |
| <input type="checkbox"/> | Limited Partnership | Date established: | _____ |
| <input type="checkbox"/> | General Partnership | Date established: | _____ |
| <input type="checkbox"/> | Sole Proprietor | How many years in business?: | _____ |
| <input type="checkbox"/> | Other (explain) | Date established: | _____ |

Was the business entity formed in the State of Arizona? Yes _____ No _____

If no, indicate jurisdiction where Business Entity was formed: _____

Business License Number and Classification: _____

Business Transaction Privilege License Number: _____

Special Use or other zoning permits required for Bidder's operation and performance of the services under this Agreement:

Is the Business Entity currently registered to do business in Arizona with the Arizona Corporation Commission? Yes_____ No_____ Not required _____ (if sole proprietor or general partnership)

Does the Business Entity have a City of Phoenix business privilege license? Yes_____ No_____ If "no" explain and provide detail such as "not required" or "application in progress" or other reason.

Is the Business Entity publicly traded? Yes_____ No_____

Is the responding Business Entity a Joint Venture? Note: If the Submitting Business entity is a Joint Venture, also submit a questionnaire for each Business Entity comprising the Joint Venture. Yes_____ No_____

Is the Business Entity's Principal Place of Business/Executive office in Phoenix? If "no" does the Business Entity maintain an office in Phoenix? Yes_____ No_____

Provide the address and phone number for the Phoenix office. _____

Is the business certified by Phoenix as a Small Business Enterprise? Yes_____ No_____

Identify Business Entity Officials and principal Owners:

Name(s) _____ Title _____ Percentage ownership ____%(Enter 0% if not applicable).

Name(s) _____ Title _____ Percentage ownership ____%(Enter 0% if not applicable).

Name(s) _____ Title _____ Percentage ownership ____%(Enter 0% if not applicable).

Name(s) _____ Title _____ Percentage ownership ____%(Enter 0% if not applicable).

Affiliates and Joint Venture Relationships

Does the Business entity have any Affiliates? Yes_____ No_____ Attach additional pages if necessary.

Affiliate name: _____

Affiliate EIN (if available):_____.

Affiliate's primary Business Activity:_____

Explain relationship with Affiliate and indicate percent ownership, if applicable. _____

Are there any Business Entity Officials or Principal Owners that the Business Entity has un common with this Affiliate? _____

Individual's name: _____

Position/Title with Affiliate: _____

Has the Business Entity participated in any joint Ventures within the past three years? Yes _____ No _____
(Attach additional pages if necessary)

Joint Venture Name: _____

Joint venture EIN (if applicable): _____

Identify parties to the Joint Venture: _____

Contract History

Has the Business Entity held any contracts with the city of Phoenix in the last three (3) years? Yes _____ No _____ If "yes" attach a list.

Integrity – Contract Bidding

Within the past three (3) years, has the Business Entity or any Affiliate been suspended or debarred from any government contracting process or been disqualified on any government procurement? Yes _____ No _____

Been subject to a denial or revocation of a government prequalification? Yes _____ No _____

Been denied a contract award or had a bid rejected based upon a finding of a non-responsibility by a government entity? Yes _____ No _____

Agreed to a voluntary exclusion from bidding/contracting with a government entity? Yes _____ No _____

Initiated a request to withdraw a bid submitted to a government entity or made any claim of an error on a bid submitted to a government entity? Yes _____
No _____

Initiated a request to withdraw a bid submitted to a government entity or made any claim of an error on a bid submitted to a government entity? Yes _____
No _____

For each "Yes" answer above, provide an explanation of the issues.

Integrity – Contract Award

Within the past three (3) years has the Business Entity or any Affiliate been suspended, cancelled, or terminated for cause on any government contract? Yes _____ No _____

Been subject to an administrative proceeding or civil action seeking specific performance or restitution in connection with any government contract? Yes _____
No _____

For each "yes" answer, provide an explanation. (Attach explanation on a separate sheet of paper).

Certifications/Licenses

Within the past three (3) years, has the Business Entity or Affiliate had a revocation, suspension, or disbarment of any business or professional permit and/or license? Yes_____ No_____

If “yes” provide an explanation of the issue(s), the Business Entity involved, the relationship to the submitting Business Entity, relevant dates, the government entity involved, and any remedial or corrective action(s) taken and the current status of the issues.

Legal Proceedings

Within the past three (3) years, has the Business Entity of any Affiliate:

Been the subject of an investigation, whether open or closed, by any government entity for a civil or criminal violation? Yes_____ No_____

Been the subject of an indictment, grant of immunity, judgment or conviction, (including entering into a plea bargain for conduct constituting a crime)? Yes_____ No_____

Received any OSHA citation and Notification of Penalty containing a violation classified as serious or willful? Yes_____ No_____

Had a government entity find a willful prevailing wage or supplemental payment violation? Yes_____ No_____

Been involved in litigation as either a plaintiff or a defendant involving a copyright or patent infringement violation or an anti-trust violation? Yes_____ No_____

Other than previously disclosed, for the past three (3) years:

(i) Been subject to the imposition of a fine or penalty in excess of \$1000 imposed by any government as a result of the issuance of citation, summons or notice of violation, or pursuant to any administrative, regulatory, or judicial determination ; Yes_____ No_____

(ii) Been charged or convicted of a criminal offense pursuant to any administrative and/or regulatory action taken by any government entity? Yes_____ No_____

If “yes” provide an explanation of the issue(s), the Business Entity involved, the relationship to the submitting Business Entity, relevant dates, the government entity involved, and any remedial or corrective action(s) taken and the current status of the issues.

Leadership Integrity

If the Business Entity is a joint Venture Entity, answer “N/A – Not Applicable” to questions below:

Within the past three (3) years has any individual previously identified, or any other Business Entity Leader not previously identified, or any individual having the authority to sign, execute, or approve bids, proposals, contracts or supporting documentation with the City of Phoenix been subject to:

A sanction imposed relative to any business or professional permit and/or license? Yes_____ No_____

An investigation, whether open or closed, by any government entity for a civil or criminal violation for any business related conduct? Yes_____ No_____



City of Phoenix
AFFIDAVIT OF IDENTITY

Your completion of this form is required by Arizona state law. A.R.S. §§ 1-501 and -50 only if you are a sole proprietor.

I, _____ (print full name exactly as on document), hereby affirm, upon penalty of perjury, that I presented the document marked below to the City of Phoenix, that I am lawfully present in the United States, and that I am the person stated on the document. (select one category only)

Arizona driver license issued after 1996.

Print first four numbers/letters from license:

Four empty boxes for license numbers/letters

Arizona non-operating identification license.

Print first four numbers/letters:

Four empty boxes for license numbers/letters

Birth certificate or delayed birth certificate issued in any state, territory or possession of the U.S.

Year of birth: _____; Place of birth: _____

United States Certificate of Birth Abroad.

Year of birth: _____; Place of birth: _____

United States Passport.

Print first four numbers/letters on Passport:

Four empty boxes for passport numbers/letters

Foreign Passport with United States Visa.

Print first four numbers/letters on Passport:

Four empty boxes for passport numbers/letters

Print first four numbers/letters on Visa:

Four empty boxes for visa numbers/letters

I-94 Form with a photograph.

Print first four numbers on I-94:

Four empty boxes for I-94 numbers

USCIS Employment Authorization Document (EAD).

Print first four numbers/letters on EAD:

Four empty boxes for EAD numbers/letters

or Perm. Resident Card (acceptable alternative):

Four empty boxes for Perm. Resident Card numbers/letters

Refugee Travel Document.

Date of issuance: _____; Refugee country: _____

U.S. Certificate of Naturalization.

Print first four digits of CIS Reg. No.:

Four empty boxes for CIS Reg. No. digits

U.S. Certificate of Citizenship.

Date of issuance: _____; Place of issuance: _____

Tribal Certificate of Indian Blood.

Date of issuance: _____; Name of tribe: _____

Tribal or Bureau of Indian Affairs Affidavit of Birth.

Year of birth: _____; Place of birth: _____

Signed: _____

Dated: _____

BUY AMERICA CERTIFICATE

FOR COMPLIANCE WITH TITLE 49 USC § 5323(J)(1)
(For Procurement of Steel, Iron, or Manufactured Products)
(EXCLUDES ROLLING STOCK)

PROJECT NO. _____

PROJECT TITLE _____

(Complete form and submit with bid)

The Bidder/Proposer hereby certifies that it will comply with the requirements of Title 49 USC § 53230) (1) and the applicable regulations in 49 CFR Part 661.

Executed on _____, 2025 at _____
(Date) (City) (State)

Printed Name Signature of Authorized Official Title

BUY AMERICA CERTIFICATE FOR NON-COMPLIANCE WITH TITLE 49 use §. 5323(J)(1)

The Bidder/Proposer hereby certifies that it cannot comply with the requirements of Title 49 USC § 5323(j)(1), but it may qualify for an exception pursuant to Title 49 USC § 5323 (j)(2)(B) or (j)(2)(D) and the regulations in 49 CFR 661.7.

Executed on _____, 2025 at _____
(Date) (City) (State)

Printed Name Signature of Authorized Official Title

NON-COLLUSION AFFIDAVIT

AFFIDAVIT BY CONTRACTOR
CERTIFYING THAT THERE WAS
NO COLLUSION IN BIDDING OF
CONTRACT

PROJECT NO. _____

PROJECT TITLE _____

STATE OF:

COUNTY OF:

(Name of

Individual} being first duly sworn upon oath deposes and

says:

That I am the _____
(Title)

Of _____
(Name of Company, Firm or Corporation)

and that, pursuant to Subsection 112(c) of Title 23, United States Code and Title 44, Chapter 10, Article 1, and Title 34, Chapter 2, Article 4 of Arizona Revised Statutes, he certifies that neither he nor anyone associated with the company, firm, or corporation mentioned above has, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of fully competitive bidding in connection with project.

Subscribed and sworn to before me this

_____ day of _____, **2025** _____
Signature

My Commission expires: _____

Notary Public

If by Corporation

(Seal)



City of Phoenix

Disadvantaged Business Enterprise Program

DBE –Engineering Contract Clause Race & Gender-Neutral – Non-Negotiated

PROJECT #: WS85509031

CONTRACT #:

PROJECT NAME: WATER MAIN REPLACEMENT: AREA BOUNDED BY: MOUNTAIN VIEW ROAD TO PEORIA AVENUE AND 19TH AVENUE TO 15TH AVENUE

Phoenix is one of the fastest growing, multicultural cities in the country and has shown a historical commitment to business diversity. The City and its partners strive to advance the economic growth of small businesses through its Disadvantaged Business Enterprise (DBE) Program.

The City of Phoenix DBE Program is managed and administered by the City's Equal Opportunity Department, Contract Compliance Division. Through a coordinated effort among several city departments and partner agencies, the DBE Program provides certification and opportunities in construction, purchasing, management and technical assistance, educational services, and networking.

SECTION I. DEFINITIONS

Agency means the City of Phoenix for purposes of this Contract.

Arizona Unified Certification Program (AZUCP) means a consortium of government agencies organized to provide reciprocal DBE certification within Arizona pursuant to 49 Code of Federal Regulations (CFR) Part 26. The official DBE database containing eligible DBE firms certified by AZUCP can be accessed at: <https://utracs.azdot.gov>. The certification system is called the Arizona Unified Transportation Registration and Certification System (AZ UTRACS).

Business to Government Now (B2G) means the web-based certification and compliance system used to track and monitor DBE and Small Business Participation. The B2G system can be accessed at: <https://phoenix.diversitycompliance.com>

Contract means a legally binding relationship obligating a seller to furnish supplies or services (including construction and professional services) and the buyer to pay for them.

DBE Compliance Specialist means an Agency employee responsible for compliance with this DBE Contract Clause.

EOD means the City of Phoenix Equal Opportunity Department.

Joint Venture (JV) means an association between two or more persons, partnerships, corporations, or any combination thereof, formed to carry on a single business activity. The JV is limited in scope and duration to this Contract. The resources, asset, and labor of the participants must be combined in an effort to accrue profit.

Outreach Efforts means the diligent and good faith efforts demonstrated by a Bidder to solicit participation from interested and qualified DBEs and other Small Businesses. Bidder shall identify and document potential business opportunities for DBEs and other Small Businesses, describe what efforts were undertaken to solicit DBE and Small Business participation, disclose results of negotiations with Small Businesses, and communicate and record Bidder's selection decisions relating to DBE and Small Business participants.

Equal Opportunity Department

200 W. Washington St., 15th Floor, Phoenix, AZ 85003
602-262-7716/Voice | 602-534-1124/Fax | 602-534-1557/TTY



City of Phoenix

Disadvantaged Business Enterprise Program

Disadvantaged Business Enterprise (DBE) means a Small Business Concern that has successfully completed the DBE certification process and has been granted DBE status by an AZUCP member pursuant to the criteria contained in 49 CFR Part 26.

Commercially Useful Function means that a DBE is responsible for executing the work of the contract and is carrying out its responsibilities by performing, managing, and supervising the work involved. If a DBE does not perform or exercise responsibility for at least 30% of the total cost of its contract with its own work force, or if the DBE subcontracts a greater portion of the work of a contract than would be expected on the basis of normal industry practice for the type of work involved, the DBE is presumed not to be performing a Commercially Useful Function.

Goods and Services Providers are firms that provide goods and services that represent a Commercially Useful Function directly to Transit as a DBE or Small Business.

Manufacturer means a firm that owns; operates or maintains a factory or establishment that produces on the premises the components, materials, or supplies obtained by the recipient, successful bidder, or Transit Vehicle Manufacturer.

Regular dealer/broker is a firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials, supplies, articles or equipment of the general character described by the specifications and required under the contract are bought, kept in stock, and regularly sold or released to the public in the usual course of business.

Supplier means a firm that engages in, as its principal business, the purchase and sale of material or supplies required for the performance of a contract. The firm must own, operate, and maintain a store, warehouse or other establishment where the supplies are bought, kept in stock, and regularly sold to the public in the usual course of business.

Small Business Concern (SBC) means, with respect to firms seeking to participate in contracts funded by the U.S. Department of Transportation (US DOT), a Small Business Concern as defined in section 3 of the Small Business Act and Small Business Administration regulations implementing the Act (13 CFR part 121), which Small Business Concern does not exceed the cap on average annual gross receipts specified in 49 CFR § 26.65(b). "Small Business" and "Small Business Concern" are used interchangeably in this DBE Contract Clause.

Small Business Enterprise (SBE) means a small business that has been determined to meet the requirements for SBE certification with the City of Phoenix and whose certification is in force at the time of the award of business by the City. A directory of currently certified SBE firms is located at <https://phoenix.diversitycompliance.com>.

Race- and Gender-Neutral (RGN) Measures means a measure or program that is or can be used to assist all Small Businesses.

Subcontract means a contract at any tier below the prime contract, including a purchase order.

Subcontractor means an individual, partnership, JV, corporation or firm that holds a contract at any tier below the prime contract, including a vendor under a purchase order.

Submitter means an individual, partnership, JV, contractor, corporation, or firm that tenders a submittal to the Agency to perform services requested by a solicitation or procurement. The submittal may be direct or through an authorized representative. (Submitter is inclusive of the terms: *Bidder, Offeror, Proposer, Respondent*, etc.).

Equal Opportunity Department

200 W. Washington St., 15th Floor, Phoenix, AZ 85003
602-262-7716/Voice | 602-534-1124/Fax | 602-534-1557/TTY



City of Phoenix

Disadvantaged Business Enterprise Program

Responsive Submitter means a firm that has met the minimum program requirements as outlined in the solicitation and due at the time of submittal.

Successful Submitter means a firm that has been awarded the contract by the Agency to perform services or furnish supplies requested by a solicitation or procurement.

Responsible Submitter means a firm that has been selected to continue in the procurement process by the Agency.

Transit Vehicle Manufacturers (TVMs) means any manufacturer whose primary business purpose is to manufacture vehicles specifically built for public mass transportation. Such vehicles include, but are not limited to buses, rail cars, trolleys, ferries, and vehicles manufactured specifically for paratransit purposes. Producers of vehicles that receive post-production alterations or retrofitting to be used for public transportation purposes (e.g., so-called cutaway vehicles, vans customized for service to people with disabilities) are also considered transit vehicle manufacturers. Businesses that manufacture, mass-produce, or distribute vehicles solely for personal use and for sale “off the lot” are not considered transit vehicle manufacturers.

Transit Vehicle Manufacturers Goals for FTA recipients each transit vehicle manufacturer, as a condition of being authorized to bid or propose on FTA-assisted transit vehicle procurements, to certify that it has complied with the requirements of 49 CFR Part 26.49.

SECTION II. GENERAL REQUIREMENTS

A. Applicable Federal Regulations

This Contract is subject to DBE requirements issued by USDOT in 49 CFR Part 26. Despite the lack of a race- and gender-conscious DBE participation goal for this Contract, the Agency must track and report DBE participation that occurs as a result of any procurement, JV, goods/services, or other arrangement involving a DBE. For this reason, the Successful Bidder shall provide all relevant information to enable the required reporting.

B. DBE Participation

For this solicitation, the Agency has *not* established a race- or gender-conscious DBE participation goal. The Agency extends to each individual, firm, vendor, supplier, contractor, and subcontractor an equal economic opportunity to compete for business. The Agency uses race- and gender-neutral measures to facilitate participation by DBEs and Small Businesses. The Agency *encourages* each Bidder to voluntarily subcontract with DBEs and Small Businesses to perform part of the work—a Commercially Useful Function—that Bidder might otherwise perform with its own forces.

C. Small Business Participation

The Agency will track the participation of all approved businesses throughout the life of this contract. The Agency will count Small Business participation as authorized by federal regulations. A summary of these regulations can be found at www.ecfr.gov (49 CFR Part 26.39).

D. DBE Certification

Only firms (1) certified by the Agency or another AZUCP member, and (2) contracted to perform a Commercially Useful Function on scopes of work for which they are certified, may be considered to determine DBE participation resulting from RGN measures on this Contract. This DBE determination affects the Agency’s tracking and reporting obligations to USDOT.

Equal Opportunity Department

200 W. Washington St., 15th Floor, Phoenix, AZ 85003
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City of Phoenix

Disadvantaged Business Enterprise Program

E. Civil Rights Assurances.

As a recipient of USDOT funding, the Agency has agreed to abide by the assurances found in 49 CFR Parts 21 and 26. Each Contract signed by the Agency and the Successful Bidder, and each Subcontract signed by the Successful Bidder and a Subcontractor, must include the following assurance verbatim:

“The contractor, subrecipient, or subcontractor shall not discriminate on the basis of race, color, national origin, sex, or creed in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Parts 21 and 26 in the award and administration of USDOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the City of Phoenix deems appropriate.”

Note: For purposes of the required Contract and Subcontract language above, Successful Bidder is the “contractor” awarded the contract.

SECTION III. REQUIRED OUTREACH EFFORTS

The Agency has implemented outreach requirements for this Contract. Specifically, Bidders shall: (1) identify small-business-participation opportunities, including Commercially Useful Functions; (2) actively solicit proposals from small businesses; (3) evaluate small-business proposals; and (4) communicate selection decisions to small businesses, including each rejection of a small-business proposal. If a Bidder fails to conduct these Outreach Efforts or fails to submit the required documentation of Bidder’s Outreach Efforts as indicated in Section IV, Parts A and B below, the Agency may determine that the Bidder is nonresponsive. A determination of non-responsiveness *disqualifies* Bidder from further consideration for the Contract award.

SECTION IV. BID REQUIREMENTS

A. Documentation due at time of bid:

All required Outreach Efforts documentation due with the bid must be submitted in a separate sealed envelope with the bid submittal.

1. Form EO2 (Outreach Efforts)

Each Bidder shall submit Form EO2 with Columns A through D completed to document their diligent and earnest Outreach Efforts.

Each Bidder shall list in Form EO2 all Small Businesses contacted by Bidder in preparing its bid. Each Bidder shall also provide the following minimum information to document its Outreach Efforts. The DBE Compliance Specialist will consider this information to determine whether Bidder has demonstrated the required Outreach Efforts:

a. Column A - Small Business Name and Contact Information

Must list each business’s full legal name and contact information. Successful Bidder shall inquire to obtain the following: the number of its employees, number of years in business and its estimated range of annual gross receipts.

b. Column B - Business Status

Indicate the business status. Check all that apply, if known.

- The official DBE database containing eligible DBE and SBC firms can be accessed at: <https://utracs.azdot.gov>

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- City of Phoenix SBE Certification Directory can be accessed at:
<https://phoenix.diversitycompliance.com>

c. Column C - Scope(s) of Work Solicited

List the scope(s) of work solicited for which the small business was considered for participation in the proposal. The solicitation shall include a description of the scope(s) of work being requested.

d. Column D - Solicitation Method

Indicate the solicitation method by which each small business was contacted for your outreach efforts and provide supporting documentation. Supporting documentation must include a copy of the actual solicitation sent to Small Businesses. The solicitation may be in the form of letters or attachments to email, phone logs, newspapers and trade papers, outreach events, etc. If using a log as supporting documentation, it must include:

- List the Solicitation Method
- Name of Bidder's Representative
- Name of Company Contacted
- Name of Person Contacted
- Date and Time of Contact
- Details of the Communication

Each Bidder shall complete Columns A through D on Form EO2 in accordance with the following instructions:

1. Each Bidder shall actively contact Small Businesses for each scope of work or business opportunity selected for Outreach Efforts (**Columns A and C**).
2. Bidder's contacts with Small Businesses should occur well before the deadline for the bid to afford the firms contacted a reasonable opportunity to prepare a proposal and participate in the Contract.
3. Bidder shall ask each firm to indicate the number of its employees (**Column A**).
4. For each Small Business's annual gross receipts, Bidder shall ask the firm to indicate the gross-receipts bracket into which it fits (e.g., less than \$500,000; \$500,000 – \$1 million; \$1 – 2 million; \$2 – 5 million; etc.) rather than requesting an exact figure (**Column A**).

B. Documentation due within FIVE (5) CALENDAR DAYS of the Bid Deadline

All required Outreach Efforts documentation is due within the five (5) calendar days of the bid deadline must be submitted in a sealed envelope.

1. Form EO2 (Outreach Efforts)

Each Bidder shall submit **Form EO2 with Columns E and F** completed to document its diligent, earnest Outreach Efforts.

a. Column E - Selection Decision

Indicate the Successful Bidders selection decision for each small business that responded to the solicitation.

If selected, indicate the Dollar Value.

If not selected, provide an explanation why firm was NOT selected.

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b. **Column F - Method of Communication of Final Selection Outcome**

The Successful Bidder must notify the final selection outcome to all small businesses that responded. The supporting documentation for this notification may be in the form of an email, fax, letter, in person or a telephone log, etc. This documentation must show the following information regarding the final selection:

- List the Selection Outcome
- Name of Bidder's Representative
- Name of Company Contacted
- Name of Person Contacted
- Date and Time of Contact
- Details of the Communication

*Successful Bidder shall provide supporting documentation that shows Bidder has communicated its final selection decisions and outcomes to all Small Businesses, including those not chosen to participate in this Contract.

2. **Form EO2 Supporting Documentation**

Each Bidder shall complete and submit supporting documentation of its Outreach Efforts related to Form EO2 – as specifically related to Columns E & F.

- Within FIVE (5) Calendar Days of the Bid Deadline, Bidder shall submit all supporting documentation of Bidder's contacts with Small Businesses for each scope of work or business opportunity in regard to their Outreach Efforts.
- This documentation must include: (1) descriptions of scopes of work and business opportunities identified for Small Business participation, and (2) a copy of the actual solicitation sent to interested Small Businesses. The solicitation may be in the form of a letter, attachment to an e-mail, advertisements in newspapers and trade papers, or written communications with chambers of commerce.
- For all of the above documentation, if Bidder uses a blast e-mail or fax format, the documentation submitted must include a copy of the e-mail or fax, and Bidder must disclose all e-mail addresses and fax numbers to which the solicitation or outcome notification was sent and the date and time of the transmission. For telephone contacts, Bidder shall document the date and time of the call and the names of the respective persons representing Bidder and the Small Business.
- Bidder shall submit documentation that establishes how Bidder communicated its selection decisions and outcomes to each Small Businesses **SELECTED OR NOT SELECTED** for this Contract. This documentation may be in the form of a letter, e-mail, or a telephone log and must show the name of the person contacted and date.
- For all of the above documentation, if Bidder uses an email blast or fax format, the documentation submitted must include a copy of the e-mail or fax, and Bidder must disclose all e-mail addresses and fax numbers to which the solicitation or outcome notification was sent and the date and time of the transmission. For telephone contacts, Bidder shall document the date and time of the call and the names of the respective persons representing Bidder and the Small Business.

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City of Phoenix

Disadvantaged Business Enterprise Program

3. Form EO3 (Small Business Utilization Commitment)

Due within FIVE (5) CALENDAR DAYS of the Bid Deadline. Bidder shall complete, sign, date and submit Form EO3 within the five (5) calendar days of the bid deadline, EO3 commits Bidder to the Agency as follows:

- a. The firms indicated as "Selected" on Form EO2 – Small Business Outreach Efforts will participate in the Contract;
- b. Bidder will comply with the Race- and Gender-Neutral post-award requirements as stated in the DBE contract clause;
- c. Any and all changes or substitutions will be authorized by the Compliance Specialist before implementation; and
- d. The proposed total Small Business participation percentage is true and correct.

Bidder shall ensure that the dollar amount or percentages proposed for Small Business participation on Form EO2 equal the total percentage proposed in Form EO3.

C. Failure to Meet Outreach Requirements

The DBE Compliance Specialist will determine, in writing, whether the Bidder has satisfied all outreach requirements. If the DBE Compliance Specialist determines the Bidder failed to satisfy the outreach requirements, then the DBE Compliance Specialist may determine the bid is nonresponsive. A determination of non-responsiveness *disqualifies* Bidder from further consideration for the Contract award. The Agency shall send written notice to Bidder stating the basis for the DBE Compliance Specialist's decision.

D. Administrative Reconsideration

In the event the City determines the Bidder failed to submit required documentation to meet the Small Business Outreach Requirements, an opportunity for reconsideration of this determination will be provided. This opportunity for reconsideration will seek to obtain clarification of documentation submitted with the bid.

Within three business days of being informed by the City that the Bidder is not responsive based on insufficient demonstration and/or documentation of Outreach Efforts, the Bidder may submit its written request to:

**City of Phoenix Equal Opportunity Department
Office of the Director
200 W. Washington St., 15th Floor
Phoenix, AZ 85003**

If the request for Administrative Reconsideration is not submitted within the allotted three business days, the non-responsive Bidder shall not utilize the DBE Program submittal requirements as the basis for its future protest.

As part of this reconsideration process, the Bidder will have an opportunity to provide written clarification or argument concerning the issue of whether it met the Outreach Requirements or

provided sufficient supporting documentation of this efforts at the time of bid. As the Disadvantaged Business Enterprise Liaison Officer (DBELO) for the City, The Equal Opportunity Director shall review solely the written clarification or argument, along with any document(s) originally submitted at the time of bid. No new or revised forms or supporting documentation will be reviewed for consideration.



City of Phoenix

Disadvantaged Business Enterprise Program

The DBELO or his designee will send the Bidder a written decision on the reconsideration, explaining the basis for finding that the Bidder did or did not meet the Small Business Outreach Requirements. The result of the DBE reconsideration process is not administratively appealable and cannot be escalated or included in any other protest not related to the DBE Program.

SECTION VI. POST-AWARD COMPLIANCE REQUIREMENTS

A. Subcontracting Commitment

The small business subcontractors identified and accepted in the Small Business Outreach documents must have an executed contract* in place prior to the performance of work.

Successful Bidder shall submit to Agency, through the B2G system, all executed contracts, purchase orders, subleases, JV agreements, and other arrangements formalizing agreements between Successful bidder and all subcontractors, upon execution throughout the life of this contract.

The Successful Bidder shall not terminate any approved DBE or Small Business Subcontracts, nor shall the Successful Bidder alter the scope of work or reduce the Subcontract amount, without the DBE Compliance Specialist's prior written approval. Any request to alter a DBE or Small Business Subcontract must be submitted in writing to the DBE Compliance Specialist before any change is made. If the Successful Bidder fails to do so, the Agency may declare Successful Bidder in breach of contract.

*Executed contracts and all lower tier contracts must contain the required Civil Rights Assurances and Prompt Payment provisions.

B. Post-Award Relief from Small Business Requirements

After Contract award, the Agency will not grant relief from the proposed Small Business utilization except in extraordinary circumstances. The Successful Bidder's request to modify Small Business participation must be in writing to the DBE Compliance Specialist, which has final discretion and authority to determine if the request should be granted.

The Successful Bidder's waiver request must contain the amount of relief being sought, evidence demonstrating why the relief is necessary, and any additional relevant information the DBE Compliance Specialist should consider. The Successful Bidder shall include with the request all documentation of its attempts to subcontract with the Small Business and any other action taken to locate and solicit a replacement Small Business.

If an approved DBE allows its DBE status to expire or its DBE certification is removed during the course of the subcontract, the Agency will consider all work performed by the DBE under the original contract to count as DBE participation. No increased scopes of work negotiated after expiration or revocation of the DBE's certification may be counted. Likewise, any work performed under a Contract extension granted by the Agency may not be counted as DBE participation.

C. Counting Small Business Participation

The prime contractor may only count expenditures to AZUCP certified DBE subcontractors that perform a commercially useful function on the contract. A DBE performs a commercially useful function when it is responsible for execution of the work of the contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. A DBE subcontractor must perform a minimum of 30% of its subcontract value with its own

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City of Phoenix

Disadvantaged Business Enterprise Program

workforce and equipment before its participation can be counted. DBEs must manage and control the performance of its contract and not be dependent on the prime's personnel and equipment to complete its work. Scope(s) of work not covered in the DBE firm's certification description **will not** be counted as DBE participation.

Commercially Useful Function & Counting of DBE Trucking/Hauling:

49 CFR Part 26.55 Section (d) defines Commercially Useful Function and the counting of DBE participation Trucking/Hauling as follows:

- The DBE must be responsible for **the management and supervision of the entire trucking operation for which it is responsible on a particular contract**, and there cannot be a contrived arrangement for the purpose achieving DBE participation.
- The DBE must itself own and operate at least one fully licensed, insured, and operational truck used on the contract.
- The DBE receives credit for the total value of the transportation services it provides on the contract using trucks it owns, insures, and operates using drivers it employs.
- The DBE may lease trucks from another DBE firm, including an owner-operator who is certified as a DBE. The DBE who leases trucks from another DBE receives credit for the total value of the transportation services the lessee DBE provides on the contract.
- The DBE may also lease trucks from a non-DBE firm, including from an owner-operator. The DBE who leases trucks from a non-DBE is entitled to credit for the total value of transportation services provided by non-DBE lessees not to exceed the value of transportation services provided by DBE-owned trucks on the contract. Additional participation by non-DBE lessees receives credit only for the fee or commission it receives as a result of the lease arrangement.
- Amounts paid for dump fees or materials being hauled/dumped cannot be counted as DBE participation.

Counting DBE certified Manufactures, Suppliers, and Brokers:

49 CFR Part 26.55 Section (e) permits the counting of expenditures with DBEs for materials or supplies toward DBE participation as provided in the following:

- If the materials or supplies are obtained from a **DBE manufacturer**, count 100 percent of the cost of the materials or supplies toward DBE participation,
- If the materials or supplies are purchased from a **DBE regular dealer (supplier)**, count 60 percent of the cost of the materials or supplies toward DBE participation.
- If materials or supplies purchased from a DBE which is neither a manufacturer nor a regular dealer, **(broker or manufacturer's rep.)** count the entire amount of fees or commissions charged for assistance in the procurement of the materials and supplies toward DBE participation.

If an approved DBE allows its DBE certification to expire, or the certification is revoked during the course of the Subcontract, the Agency will consider all work performed by the DBE under the original contract to count as DBE participation. No increased scope of work negotiated after expiration or revocation of the DBE's certification may be counted. Any work performed under a Contract extension granted by the Agency may not be counted as DBE participation.

D. Small Business Substitutions or Terminations

As set forth in 49 CFR Section 26.53 (f)(1)(2)(3) after Contract award, the Agency will not allow substitution or termination from the proposed Small Business utilization except in

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City of Phoenix

Disadvantaged Business Enterprise Program

extraordinary circumstances. The Successful Bidder's request to modify Small Business participation must be in writing to the Phoenix DBE Compliance Specialist.

Successful Bidder's written request must set forth the amount of substitution or why termination is sought, evidence that demonstrates why it is necessary, and any additional relevant information that the Phoenix DBE Compliance Specialist should consider. The Successful Bidder shall include with the request all documentation of Bidder's attempts to subcontract with the Small Business and any other action taken to locate and solicit a replacement Small Business.

If the Small Business was approved by the Agency, the Phoenix DBE Compliance Specialist will consider whether or not the Successful Bidder has exercised diligent and good-faith efforts to find another Small Business as a replacement. The Successful Bidder shall notify the Phoenix DBE Compliance Specialist in writing of the necessity to substitute a Small Business and provide specific reason(s) for the substitution or replacement. Actual substitution or replacement of a Small Business may not occur before the Phoenix DBE Compliance Specialist's written approval has been obtained.

E. Prompt Payment of Subcontractors

The prompt payment clause shall be included in every contract and subcontract.

Per A.R.S. § 32-1129.01 the Successful Bidder must promptly pay its subcontractors, subconsultants, or suppliers **within seven (7) calendar days**. If the Successful Bidder diverts any payment received for a DBE's,

Small Business's, or other Subcontractor's work performed on the Contract or fails to reasonably account for the application or use of the payment, the Agency may declare the Successful Bidder in breach of contract.

Under the prompt-payment provisions of 49 CFR Part 26, the Successful Bidder must ensure prompt and full release of retentions to Subcontractors and suppliers when their scope of work is complete, and the Agency has paid Successful Bidder for the work. The Successful Bidder shall pay each Subcontractor's and supplier's retention no later than 30 days after the Agency has paid for the scope(s) of work, regardless if there's outstanding retention held against the Successful Bidder. If the Agency reduces the Successful Bidder's retention, the Successful Bidder shall correspondingly reduce the retentions of Subcontractors and suppliers that have performed satisfactory work.

Nothing in this section prevents the Successful Bidder from enforcing its Subcontract with a Subcontractor or supplier for defective work, late performance, and other claims arising under the Subcontract.

F. Remedies

If the Successful Bidder fails to comply with these contract provisions and the requirements set forth in 49 CFR 26.101 and 26.103, the Agency may take any one or more of the following actions:

1. Withhold future payments, including retention, until the Successful Submitter is determined to be in compliance;
2. Cancel the Contract.

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City of Phoenix

Disadvantaged Business Enterprise Program

SECTION VII. RECORDS & REPORTING REQUIREMENTS

A. Records

During performance of the Contract, the Successful Bidder shall keep all records necessary to document Small Business participation. The Successful Bidder shall provide the records to the Agency within 72 hours of the Agency's request and at final completion of the Contract. The Agency will prescribe the form, manner, and content of reports. The required records may include but not limited to:

1. A complete listing of all Subcontractors and suppliers on the project;
2. Each Subcontractor's and supplier's scope performed;
3. The dollar value of all subcontracting work, services, and procurement;
4. Copies of all executed Subcontracts, purchase orders, and invoices: and
5. Copies of all payment documentation and Change Orders.

B. Reports

Successful Bidder is required to file the following payment reports in the B2G system:

1. **Progress Payments:**

By the 15th of ***each*** month, the Successful Bidder must enter payment information and related supporting documentation into the Agency's web-based certification and compliance reporting system.

- a. The total of all payments received from the Agency during the previous month.
- b. All payments made to Subcontractors during the previous month.

The Successful Bidder is responsible for ensuring that subcontractors confirm receipt of payment in the B2G system by the end of each month.

2. **Final Payment:**

Before the Agency processes the Successful Bidder's final payment and/or outstanding retention held against the Successful Bidder, the Successful Bidder shall notate in the B2G system:

- a. The payment to each subcontractor is considered "Final".
- b. Every subcontractor must confirm they have received full and "Final" payment in the B2G system.
- c. For federal reporting purposes, Attachment E must be completed and signed by the Successful Bidder and DBE firm(s) prior to Successful Bidder receiving final payment.

The Successful Bidder is responsible for ensuring that subcontractors confirm the receipt of full and "Final" payment in the B2G system.

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City of Phoenix

Disadvantaged Business Enterprise (DBE) Program

DBE-Race & Gender Neutral (Negotiated)

**FORM EO1 STATEMENT OF OUTREACH COMMITMENT
(Due with initial submittal)**

Project Number: WS85509031	Project Title: Water Main Replacement: Area Bounded By: Mountain View Road to Peoria Avenue and 19th Avenue to 15th Avenue
-----------------------------------	---

On behalf of the Submitter, I certify under penalty of perjury that the following information is true and correct.

If selected as the Successful Submitter, the Successful Submitter will:

- 1) Fulfill all required small business outreach requirements and shall submit all required outreach efforts documentation for contracting opportunities within 30 days or a date determined by the City following contract award recommendation;
- 2) Conduct all required small business outreach and will submit all supporting documentation; and
- 3) Comply with the Race - and Gender-Neutral post-award requirements stated in the DBE Contract Clause.

Company Name: _____

Company Mailing Address: _____

Representative Name: _____

Title: _____

Email Address: _____

Phone Number: _____

Signature: _____

Date: _____

**Disadvantaged Business Enterprise (DBE) Program
DBE-Race & Gender-Neutral (Negotiated)
Form EO2 SMALL BUSINESS OUTREACH EFFORTS**

Name of Company (Submitter):	Contract # / Project #: / WS85509031	Contract Name:
Email:	Phone #:	Point of Contact:

Successful Submitter must conduct outreach efforts and submit supporting documentation of those outreach efforts as described in the Disadvantaged Business Enterprise (DBE) Program Race- and Gender-Neutral Contract Clause (Contract Clause). Detailed instructions for this form are included in the Contract Clause. Supporting documentation is required for columns D and F. Successful Submitter should make additional copies of this form as needed.

(A) Small Business Name and Contact Information	(B) Business Status	(C) Scope(s) of Work Solicited	(D) Solicitation Method	(E) Selection Decision	(F) Communication Final Selection Outcome
Name: Address: City, State, Zip: Number of Employees: Phone Number: Email or Fax: Number of Years in Business: Range of Annual Gross Receipts:	<input type="checkbox"/> DBE <input type="checkbox"/> SBC - Small Business Concern <input type="checkbox"/> SBE - City of Phoenix Certified <input type="checkbox"/> Unknown	List Scope(s) of Work	<input type="checkbox"/> E-mail Blast <input type="checkbox"/> Phone Call <input type="checkbox"/> In-Person <input type="checkbox"/> Newspaper <input type="checkbox"/> Website <input type="checkbox"/> Trade Listing <input type="checkbox"/> Outreach Event <input type="checkbox"/> Other	<input type="checkbox"/> Firm was selected Dollar Value: <input type="checkbox"/> Firm was not selected Provide explanation of why firm NOT selected _____ _____	Date Firm was Notified: <hr/> Method used to Communicate Selection: <input type="checkbox"/> Email <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> Letter <input type="checkbox"/> In person
Name: Address: City, State, Zip: Number of Employees: Phone Number: Email or Fax: Number of Years in Business: Range of Annual Gross Receipts:	<input type="checkbox"/> DBE <input type="checkbox"/> SBC - Small Business Concern <input type="checkbox"/> SBE - City of Phoenix Certified <input type="checkbox"/> Unknown	List Scope(s) of Work	<input type="checkbox"/> E-mail Blast <input type="checkbox"/> Phone Call <input type="checkbox"/> In-Person <input type="checkbox"/> Newspaper <input type="checkbox"/> Website <input type="checkbox"/> Trade Listing <input type="checkbox"/> Outreach Event <input type="checkbox"/> Other	<input type="checkbox"/> Firm was selected Dollar Value: <input type="checkbox"/> Firm was not selected Provide explanation of why firm NOT selected _____ _____	Date Firm was Notified: <hr/> Method used to Communicate Selection: <input type="checkbox"/> Email <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> Letter <input type="checkbox"/> In person

***Firms must be notified of final selection outcome prior to submittal of columns E&F of this form.**



City of Phoenix

Disadvantaged Business Enterprise (DBE) Program

DBE-Race & Gender Neutral (Negotiated)

FORM EO3 SMALL BUSINESS UTILIZATION COMMITMENT

Project Number: WS85509031	Project Title: Water Main Replacement: Area Bounded By: Mountain View Road to Peoria Avenue and 19th Avenue to 15th Avenue
-----------------------------------	---

On behalf of the Successful Submitter, I certify under the penalty of perjury that the information submitted herein is true and correct:

1. The firms indicated as "Selected" in **Form EO2 Small Business Outreach Efforts**, will participate in this contract;
2. The Successful Submitter will comply with the Race- and Gender-Neutral post-award compliance requirements as stated in the DBE contract clause;
3. Successful Submitter understands and agrees that any and all changes or substitutions to subcontracts with DBE's and Small Businesses must be authorized by the Phoenix DBE Compliance Specialist prior to implementation; and
4. The following statement is true and correct:

The proposed total participation of DBE, SBC, and SBE firms on this contract will be:

\$ _____ %

Company Name: _____

Company Mailing Address: _____

Representative Name: _____

Title: _____

Email Address: _____

Phone Number: _____

Signature: _____

Date: _____

Geotechnical Services

City of Phoenix Waterline Replacement
Mountain View Road and Peoria Avenue:
15th Avenue to 19th Avenue
Phoenix, Arizona
Project No. 115.177G

Entellus

3033 North 44th Street, Suite 250 | Phoenix, Arizona 85018

June 21, 2019 | Project No. 606040001



Geotechnical | Environmental | Construction Inspection & Testing | Forensic Engineering & Expert Witness

Geophysics | Engineering Geology | Laboratory Testing | Industrial Hygiene | Occupational Safety | Air Quality | GIS

Ninyo & Moore

Geotechnical & Environmental Sciences Consultants

Geotechnical Services

City of Phoenix Waterline Replacement
Mountain View Road and Peoria Avenue:
15th Avenue to 19th Avenue
Phoenix, Arizona
Project No. 115.177G

Mr. Bill Link, PE

Entellus

3033 North 44th Street, Suite 250 | Phoenix, Arizona 85018

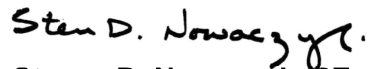
June 21, 2019 | Project No. 606040001



Dylan Walker, PE
Senior Staff Engineer

DCW/SDN/tlp

Distribution: (1) Addressee (via e-mail)



Steven D. Nowaczyk, PE
Managing Principal Engineer



CONTENTS

1	INTRODUCTION	1
2	SCOPE OF SERVICES	1
3	SITE DESCRIPTION	2
4	AERIAL PHOTOGRAPH REVIEW	2
5	PROPOSED CONSTRUCTION	3
6	FIELD EXPLORATION AND LABORATORY TESTING	3
7	GEOLOGY AND SUBSURFACE CONDITIONS	4
7.1	Subsurface Conditions	5
7.1.1	AC	5
7.1.2	Aggregate Fill	5
7.1.3	Subsurface Obstructions	6
7.1.4	Fill	6
7.1.5	Alluvium	6
7.2	Groundwater Conditions	6
8	GEOLOGIC HAZARDS	6
8.1	Land Subsidence and Earth Fissures	7
8.2	Faulting	7
9	GEOTECHNICAL CONSIDERATIONS	8
10	RECOMMENDATIONS	9
10.1	Instrumentation and Documentation	9
10.1.1	Documentation of Existing Conditions	9
10.1.2	Lateral Movement of Shoring Support System	9
10.1.3	Ground Surface Settlement	10
10.2	Earthwork	10
10.2.1	Excavations	10
10.2.2	Temporary Slopes	11
10.2.3	Temporary Shoring and Trench Boxes	11
10.2.4	Bottom Stability	12
10.2.5	Construction Dewatering	12
10.2.6	Backfill Material and Re-use of On-site Soils	12

10.3	Pipe Bedding and Modulus of Soil Reaction (E')	13
10.4	Fill Placement and Compaction	13
10.5	Controlled Low Strength Material (CLSM)	14
10.6	Trenchless Installation	15
	10.6.1 Trenchless Installation Considerations	16
10.7	T-Top Pavement Replacement	16
10.8	Corrosion	17
10.9	Concrete	17
10.10	Site Drainage	18
10.11	Pre-Construction Conference	18
10.12	Construction Observation and Testing	18
11	LIMITATIONS	18
12	REFERENCES	20

TABLES

1 – Aerial Photograph Descriptions	2
2 – Summary of Compaction Recommendations	14

FIGURES

1 – Site Location
2 – Boring Locations
3 – Lateral Earth Pressures for Braced Excavations in Granular Soils
4 – Pipe Bedding Guidelines
5 – Jacking Force Resistance Diagram

APPENDICES

A – Boring Logs
B – Laboratory Testing

1 INTRODUCTION

In accordance with our proposal dated February 11, 2019, and your authorization, we have performed a geotechnical evaluation for the proposed Mountain View Road and Peoria Avenue: 15th Avenue to 19th Avenue Water Main Replacement Program Project located in Phoenix, Arizona (Figure 1). The purpose of our evaluation was to assess the subsurface conditions at the site in order to provide geotechnical recommendations for the design and construction of the project. This report presents the results of our evaluation, geotechnical considerations, and geotechnical design parameters for the planned waterline project.

2 SCOPE OF SERVICES

The scope of our services for this project generally included:

- Reviewing readily available aerial photographs and published geologic literature, including maps and reports pertaining to the project site and vicinity.
- Obtaining permits from City of Phoenix (COP) to conduct the field work.
- Conducting a visual geological reconnaissance of the site.
- Marking out the boring locations and notifying Arizona 811 of the locations prior to drilling.
- Drilling, logging, and sampling 24 exploratory soil borings along the project alignment to depths of approximately 10 to 15 feet below ground surface (bgs); however, due to auger refusal in specific locations, some of our borings extended as shallow as about 0.8 to 4.3 feet bgs.
- Performing laboratory tests on selected samples obtained from the borings to evaluate in-situ moisture content and dry density, gradation, Atterberg limits, consolidation, direct shear, swell, and corrosivity characteristics (including pH, minimum electrical resistivity, sulfide, and soluble sulfate and chloride contents).
- Compiling the collected data and performing engineering analyses.
- Preparing this geotechnical engineering report that presents our findings, considerations, and recommendations regarding the design and construction of the project.

Our scope of services did not include environmental consulting services such as hazardous waste sampling or analytical testing at the site. If needed, a scope and fee for these services can be provided.

3 SITE DESCRIPTION

At the time of our evaluation, Peoria Avenue and Mountain View Road were east-west traversing, asphalt concrete (AC)-paved collector roadways. 19th Avenue was a north-south traversing, AC-paved major arterial roadway. 15th Avenue was also a north-south traversing, AC-paved minor collector roadway. The enclosed residential neighborhood consisted of AC-paved residential collectors which fed to the minor collector and major arterial roadways. Residential and commercial developments were situated adjacent to the project alignments.

According to the Sunnyslope, Arizona-Maricopa Co., 7.5-Minute Series United States Geological Survey Topographic Quadrangle Maps (2018), the elevation along the project alignments ranges from approximately 1,267 feet relative to mean sea level (MSL) near the intersection of Peoria Avenue and 15th Avenue and slopes gently from the northeast to the southwest to an approximate elevation of 1,240 feet relative to MSL near the intersection of 19th Avenue and Mountain View Road. A small rock outcrop was also present along the eastern side of the project alignment with an approximate elevation of 1,313 feet relative to MSL at its peak.

4 AERIAL PHOTOGRAPH REVIEW

Aerial photographs from the Flood Control District of Maricopa County dated 1949 through 2018 were reviewed for this project. A summary of the observations noted for each aerial photograph is presented in Table 1:

Table 1 – Aerial Photograph Descriptions			
Date(s)	Site Description		Adjacent Properties
1949, 1953	Undeveloped desert land with natural washes. Mountain View Road, Peoria Avenue, 15 th Avenue and 19 th Avenue depicted as two lane roadways.	North	Undeveloped desert land with natural washes. Scattered residential properties.
		South	Scattered residential properties.
		East	Scattered residential properties and natural washes.
		West	Undeveloped desert land with scattered commercial properties.
1959, 1961, 1964, 1969	Scattered undeveloped parcels surrounded by commercial and residential developments.	North	Residential properties.
		South	Residential properties.
		East	Residential properties.
		West	Undeveloped desert land with scattered commercial properties.

Table 1 – Aerial Photograph Descriptions			
Date(s)	Site Description	Adjacent Properties	
1976, 1979, 1982, 1986, 1991, 1993, 1996, 1998, 2000, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018	Commercial and residential properties. 19 th Avenue widened as early as 1982. Peoria Avenue widened as early as 1998. Mountain View Road and 15 th Avenue depicted similar to its current condition.	North	Residential and commercial properties.
		South	Residential and commercial properties.
		East	Residential properties.
		West	Commercial and industrial properties.

5 PROPOSED CONSTRUCTION

We understand the overall project consists of the design of approximately 29,500 linear feet of water main replacement. The new water main is assumed to extend 10 or less feet deep and will be constructed using traditional cut-and-cover techniques over much of the project alignments; however, trenchless (jack-and-bore) methods may be implemented at some of the signalized roadway intersections or at key project locations. We understand that jack-and-bore installation is tentatively being considered at the following signalized intersections along the alignment:

- 19th Avenue and Peoria Avenue;
- 19th Avenue and Mountain View Road;
- 15th Avenue and Peoria Avenue; and
- 15th Avenue and Mountain View Road.

6 FIELD EXPLORATION AND LABORATORY TESTING

On May 2, 2019 and May 3, 2019, Ninyo & Moore conducted a subsurface exploration at the site in order to evaluate the subsurface conditions and to collect soil samples for laboratory testing. Our evaluation consisted of drilling, logging, and sampling 24 exploratory soil borings denoted as B-1 through B-24 (Figure 2). The boring locations were approved by your office based on the anticipated locations where jack-and bore operations are planned. The borings were drilled using a CME-75 truck-mounted drill rig equipped with hollow-stem augers. Our borings were planned to be drilled to a depth of approximately 10 to 15 feet bgs; however, due

to auger refusal in specific locations, some of our borings extended as shallow as about 0.8 to 4.3 feet bgs.

Soil samples were collected at selected intervals and were logged in general accordance with the ASTM International (ASTM) D2488. Disturbed soil samples were collected during standard penetration testing using a split-spoon sampler. Relatively undisturbed soil samples were collected at regular intervals by using modified ring-lined split tube samplers. Descriptions of the soils encountered in our borings are presented on the boring logs in Appendix A.

Selected samples were visually classified and tested in our laboratory to evaluate their engineering properties as a basis for providing geotechnical recommendations for design and construction considerations.

Our laboratory testing included in-situ moisture content and dry density, gradation, Atterberg limits, consolidation, direct shear, swell, and corrosivity characteristics (including pH, minimum electrical resistivity, and soluble sulfate, sulfide, and chloride contents). In-situ moisture content and dry density test results are presented on the boring logs in Appendix A of this report. Brief descriptions of laboratory test procedures are and the remaining laboratory test results are presented in Appendix B of this report.

7 GEOLOGY AND SUBSURFACE CONDITIONS

The project site is located in the Sonoran Desert Section of the Basin and Range Physiographic Province, which is typified by broad alluvial valleys separated by steep, discontinuous, subparallel mountain ranges. The mountain ranges generally trend north-south and northwest-southeast. The basin floors consist of alluvium with thickness extending to several thousands of feet.

The basins and surrounding mountains were formed approximately 18 million years ago during the Mid-to Late-Tertiary age. Extensional tectonics resulted in the formation of horsts (mountains) and grabens (basins) with vertical displacement along high-angle normal faults. Intermittent volcanic activity also occurred during this time. The surrounding basins filled with alluvium from the erosion of the surrounding mountains, as well as from deposition from rivers. Coarser-grained alluvial material was deposited at the margins of the basins near the mountains.

With the exception of the volcanic outcrop near the eastern portion of project alignment, the surficial geology of the site is described as Late and Middle Pleistocene (10-750ka) alluvial fan and terrace deposits with moderate to strong soil development. Fan and

terrace deposits are primarily poorly sorted, moderately bedded gravel and sand, and basin floor deposits are primarily sand, silt, and clay (Pearthree et al., 1994). The United States Department of Agriculture National Resources Conservation Service depicts the surficial soils as consisting of Antho gravely sandy loam, Laveen Loam, Tremant-Rillito complex, and Rock outcrop-Cheriono complex. The loam in this region generally consists of silty sands, silt, and lean clays in the upper five feet. Tremant-Rillito complex and Rock outcrop-Cherioni complex generally consist of silty gravels, clayey sands, and clayey gravels in the upper five feet.

7.1 Subsurface Conditions

Our knowledge of the subsurface conditions at the project site is based on the results of one exploratory boring and our understanding of the general geology of the area.

The boring logs contain our field and laboratory test results, as well as our interpretation of conditions between actual samples retrieved. Therefore, the boring log contains both factual and interpretive information. Lines delineating subsurface strata on the boring log are intended to group soils having similar engineering properties and characteristics. They should be considered approximate, as the actual transition between soil types may be gradual. Detailed descriptions of the soils encountered in our borings as well as a key to the soil symbols and terms used on the boring log are provided in Appendix A.

7.1.1 AC

AC pavement was observed at the surface of each of our borings with the exception of B-15 and ranged in thickness from approximately 2½ to 9 inches thick in our borings. Below is a summary of the AC thicknesses based on roadway classification:

- 19th Avenue (Major Arterial): 3 to 9 inches;
- Peoria Avenue and Mountain View Road (Collector): 4 to 6 inches; and
- Interior Residential Collectors: 2.5 to 5.5 inches.

7.1.2 Aggregate Fill

Aggregate fill was observed underlying the AC pavement in each of our borings except Borings B-1, B-2, B-10, and B-15 and ranged in thickness from approximately 3 to 14 inches in our borings. Below is a summary of the aggregate fill thicknesses based on roadway classification:

- 19th Avenue (Major Arterial): No Aggregate Fill observed (B-1) to 14 inches;

- Peoria Avenue and Mountain View Road (Collector): No Aggregate Fill observed (B-2 and B-3) to 7 inches; and
- Interior Residential Collectors: 3 to 5 inches.

7.1.3 Subsurface Obstructions

Portland cement concrete (PCC) was encountered beneath the AC and aggregate fill layers in borings B-6 and B-16. This PCC may be a remnant of a previous roadway surface. Both of these borings were terminated early, prior to either target depths, as a result of the PCC layer.

7.1.4 Fill

Fill soils were encountered beneath the AC pavement in borings B-1, B-2, and B-10, and beneath the aggregate fill layer in the remaining borings except boring B-15. The fill ranged in thickness from approximately 2 to 7 feet and consisted of sandy lean clays, clayey sands, and silty, clayey sands in our borings.

7.1.5 Alluvium

Native alluvium was encountered at the surface of boring B-15 and below the fill as described above and extended to the termination depth of the borings, except borings B-6 and B-16. The alluvium generally consisted of clayey sand, poorly graded sand, lean clay, and silty, clayey sand in our boring. In boring B-15, auger refusal occurred on very dense sand, gravel, and cobbles underlying the native clayey sands.

7.2 Groundwater Conditions

Groundwater was not encountered in our borings. Based on well records provided by the Arizona Department of Water Resources (ADWR), the depth to the regional groundwater table in the vicinity of the site historically has been encountered approximately 250 feet bgs at an elevation of approximately 1,003 feet MSL. Groundwater levels can fluctuate due to seasonal variations, groundwater withdrawal or injection, and other factors. In general, groundwater is not anticipated to be a constraint to the design and construction of this project.

8 GEOLOGIC HAZARDS

The following sections describe potential geologic hazards at the site, including land subsidence and earth fissures, and faulting.

8.1 Land Subsidence and Earth Fissures

Groundwater depletion, due to groundwater pumping, has caused land subsidence and earth fissures in numerous alluvial basins in southern Arizona. It has been estimated that subsidence has affected more than 3,000 square miles and has caused damage to a variety of engineered structures and agricultural land (Schumann and Genualdi, 1986). From 1948 to 1983, excessive groundwater withdrawal has been documented in several alluvial valleys where groundwater levels have been reportedly lowered by up to 500 feet. With such large depletions of groundwater, the alluvium has undergone consolidation resulting in large areas of land subsidence.

In Arizona, earth fissures are generally associated with land subsidence and pose an on-going geologic hazard. Earth fissures generally form near the margins of geomorphic basins where significant amounts of groundwater depletion have occurred. Earth fissures form due to tensional stress caused by differential subsidence rates within unconsolidated alluvial materials, or differential subsidence over buried bedrock ridges and/or irregular bedrock surfaces (Schumann and Genualdi, 1986).

Based on our field reconnaissance and review of the referenced material, there are no known earth fissures exposed along the subject site. Published maps from Arizona Geological Survey depict the closest documented earth fissure to be approximately 5 miles northeast of the site. Continued groundwater withdrawal in the area may result in subsidence and the formation of new fissures or the extension of existing fissures. Due to the unpredictable nature of these phenomena, the future occurrence of land subsidence and earth fissures cannot accurately be predicted.

8.2 Faulting

The site lies within the Sonoran Zone, which is a relatively stable tectonic region located in southwestern Arizona, southeastern California, southern Nevada, and northern Mexico (Euge et al., 1992). This zone is characterized by sparse seismicity and few Quaternary faults. Based on our field observations, review of pertinent geologic data and analysis of aerial photographs, faults are not located on or adjacent to the property. The closest fault to the site is the Carefree Fault Zone, located approximately 20 miles northeast of the site (Pearthree, 1998). The Carefree Fault Zone is a series of northwest striking discontinuous normal faults that dip to the southwest. Recent movement along this fault was approximately 750,000 years ago during the Middle Pleistocene epoch. The slip-rate category of this fault is less than 0.2 millimeters per year (Pearthree, 1998).

9 GEOTECHNICAL CONSIDERATIONS

Based on the results of our subsurface evaluation, laboratory testing, and data analysis, the proposed construction is feasible from a geotechnical standpoint, provided the recommendations in this report are incorporated into the design and construction of the project, as appropriate. Geotechnical considerations include the following:

- The soils along the project alignment generally consist of interlayered deposits of cohesive and cohesionless soils. Some of these soil layers were classified as very loose to loose.
- Groundwater was not observed in our borings at the time of drilling. Based on published well data by ADWR groundwater has been encountered historically at 250 feet bgs (elevation approximately 1,003 feet MSL) at the site vicinity.
- Based on referenced material in our library, geologic hazards are not present along the project alignments.
- A condition survey should be performed prior to construction to document existing conditions of nearby and adjacent settlement sensitive features.
- Due to the widely spaced nature of our borings, soil conditions that differ from what was encountered in our borings may be encountered during construction.
- Conventional heavy-duty earthmoving construction equipment may be used to excavate the waterline. However, cobbles, cemented material, buried PCC, and abandoned utilities were observed in our borings which will be more difficult to excavate and will slow the rate of excavation.
- Due to the heterogeneity of the soil conditions at the site and the very loose to loose densities encountered, sloughing of soils during construction will occur; specifically where the excavation abuts other fill soils from adjacent utilities. In addition, vibrations caused by the influence of vibration from nearby traffic may cause sloughing into excavations.
- Due to the presence of very loose to loose and/or cohesionless soils along the alignment, care should be taken during excavation. Shoring or the use of trench boxes may be needed during construction.
- Imported soils and soils generated from on-site excavation activities that exhibit a very low to low swell potential, have a plasticity index (PI) less than 15 and are free of deleterious materials can generally be used as trench backfill.
- Many of the on-site soils can be re-used as trench backfill for this project.
- Due to presence of very dense deposits of sand, gravel, cobbles, and PCC, using jack-and-bore methods pipe installation methods may be difficult to perform.
- The on-site soils are considered corrosive to ferrous metals. A corrosion specialist should be consulted for corrosion recommendations.
- The sulfate content of the soils presents a negligible potential for sulfate exposure to concrete.

10 RECOMMENDATIONS

The following sections present our geotechnical recommendations and were developed based on our understanding of the proposed construction (Section 5), the observed subsurface conditions (Section 7.1), and our experience. In general, the recommendations and guidelines outlined in the Maricopa Association of Governments (MAG) Standard Specifications and Details and/or any COP amendments should be used unless recommended differently herein.

The recommendations in this report pertain to the locations where our borings were drilled at. If the proposed construction is changed from that discussed herein or subsurface conditions other than those shown on the boring logs (Appendix A) are observed at the time of construction, Ninyo & Moore should be retained to conduct a review of the new information and to evaluate the need for additional recommendations.

10.1 Instrumentation and Documentation

Given the proximity of the planned excavations to existing settlement sensitive features, consideration should be given to implementing documentation and instrumentation programs to evaluate design assumptions, existing conditions, and to monitor movements, levels, and deformations prior to and during construction. The monitoring programs may include the use of inclinometers, convergence points, and/or an array of surface control points. The resulting data should be reviewed and evaluated during construction. These programs should be in-place or conducted prior to the start of construction.

10.1.1 Documentation of Existing Conditions

We recommend that a pre-construction survey be performed prior to construction on pavements, residences, and structures within 50 feet of the proposed trench excavations. The pre-construction survey should consist of photographic documentation of the pavement condition, exterior portions of the buildings, including distress features, such as cracks and/or separations that may be present. Consideration may be given to videotaping the survey. In addition, interviews with owners should be conducted to provide knowledge of the age and type of the buildings as well as maintenance history and utility problems.

10.1.2 Lateral Movement of Shoring Support System

We recommend that inclinometers and/or survey points be established behind excavations located in areas where structures are located above a 1:1 (horizontal to vertical [H:V]) plane projected from the bottom of the proposed excavations. The inclinometers or survey points

should be monitored and evaluated daily during excavation activities to provide an advanced warning system of potential problems.

10.1.3 Ground Surface Settlement

An array of ground survey points should be installed along the pipeline alignment to monitor settlement. The survey points should be installed as close as practical to the pipeline alignment and incrementally away from the alignment. The contractor should be responsible for maintaining the total settlement to less than ½-inch. If settlements reach ¼-inch, we recommend that a review of the contractor's methods be performed and appropriate changes be made, if needed.

Consideration should be given to placing survey monitoring points on nearby structures to monitor the performance of the structures. In this way, a record of the performance of the structures will be maintained and available. This information, in conjunction with pre-construction surveys, may help in reducing potential claims and expediting and limiting settlement of legitimate claims.

10.2 Earthwork

The following sections present our earthwork recommendations for this project. In general, MAG and any COP construction standards and specifications are expected to apply, unless otherwise noted.

10.2.1 Excavations

Our evaluation of the excavation characteristics of the on-site materials is based on the results of our exploratory borings, site observations, and experience with similar materials. In our opinion, many of the surface soils may be excavated or ripped using conventional heavy-duty earthmoving or excavation equipment; however, due to the widely spaced nature of our borings, soil conditions encountered during construction may differ from what were encountered in our borings. Cobbles, caliche filaments, cemented soils, buried PCC, and abandoned utilities were observed in our borings which will be more difficult to excavate and will slow the rate of excavation.

Equipment and procedures should be used that do not cause significant disturbance to the excavation bottoms. If the subgrade becomes disturbed, it should be compacted before placing the backfill material.

The bottoms of trench excavations should expose competent soils and should be dry and free of loose, soft, or disturbed soil. Any soft, wet, weak, or deleterious materials should be over-excavated to expose competent soils.

10.2.2 Temporary Slopes

Excavations for this project should be designed in accordance with current applicable, state, and federal trenching guidelines, including the Occupational Safety and Health Administration (OSHA) requirements for excavations presented in 29 CFR Part 1926 (Revised July 1992), Subpart P, Excavations.

For planning purposes, and according to OSHA soil classifications, a "Type C" soil should be considered for this project due to the loose and cohesionless (e.g., sandy and gravelly) nature of the fill and alluvial soils. In general, temporary slopes excavations in competent "Type C" soil should be inclined no steeper than 1.5:1 (H:V), however flatter slopes or shoring may be needed.

Details for open-cut slopes and shoring based on soil type and groundwater conditions are provided in the latest amended OSHA regulations. These details apply to temporary open-trench excavations up to 20 feet deep. Trenches more than 20 feet deep, or in areas where seepage is encountered should be designed by the contractor's engineer based on alignment-specific geotechnical analyses. Upon excavation, soil classifications and excavation performance should be evaluated in the field by the geotechnical consultant in accordance with the OSHA regulations.

Temporary excavations that encounter groundwater seepage or surface runoff, if any, may need shoring or dewatering. Flatter slopes or bracing should be used if excessive sloughing or raveling is observed. If material is stored or equipment is operated near an excavation, stronger shoring should be used to resist the extra pressure due to superimposed loads.

10.2.3 Temporary Shoring and Trench Boxes

Because of previously described soil conditions, the proposed depths of the excavations, and presence of existing utilities and structures (e.g., roadways, utilities, and buildings), it may be preferable to temporarily shore or brace the trenches rather than using open cuts to the base of the excavations. Temporary earth retaining systems will be subjected to lateral loads resulting from earth pressures. Shored and braced trench excavations may be designed using the parameters on Figure 3.

The earth pressure values presented on Figure 3 assume that spoils from the excavation or other surcharge loads will not be placed above the excavation within a 1:1 (H:V) plane extending up and back from the base of the excavation. If spoil piles are placed closer than this to the braced excavation, the resulting surcharge loads should be considered in the bracing design. We recommend that an experienced structural engineer design the shoring system. The shoring parameters presented in this report should be considered as guidelines.

The contractor should anticipate repairing cracks in pavements adjacent to shored portions of the excavation due to anticipated lateral displacements of the shoring system. Horizontal and vertical movements of the shoring system should be monitored by a surveyor and the results reviewed by the project Geotechnical Engineer.

Trench boxes may also be a suitable alternative to laying back the side walls; however, due to the presence of granular soils, the excavations may not stand open long enough to install the trench boxes. The contractor should be prepared to deal with these soil conditions and plan accordingly. Once installed, some sloughing is possible at the ends of the trench box; therefore, any loose material should be removed prior to backfilling of the trench.

10.2.4 Bottom Stability

Bottom of the excavations should be stable for the purpose of the planned construction. However, if excavations are open during a heavy rain event, the bottom of the trench may become saturated and unstable. Dewatering as discussed in Section 10.2.5 below may be anticipated in such events.

10.2.5 Construction Dewatering

Excavations that encounter seepage or surface run-off could be dewatered by pumping the water out and away from the excavation. Such zones may call for more aggressive means of dewatering and consultation with a qualified expert. Discharge of water from the excavations to natural drainage channels, if needed, may entail securing a special permit.

10.2.6 Backfill Material and Re-use of On-site Soils

On-site and imported soils that exhibit relatively low PI and very low to low expansive potential are generally suitable for re-use as engineered fill. Relatively low PI are defined as a PI value of 15, or less, as evaluated by ASTM D4318.

In addition, engineered fill should not include organic material, construction debris, or other non-soil fill materials. Clay lumps and rock particles should not be larger than 4 inches in dimension. This material should be disposed of off-site or in non-structural areas.

Based on MAG guidelines, the definition of “granular backfill” may be used for engineered fill for this project. Granular backfill is material in which the sum of the PI and the percent of material passing a No. 200 sieve does not exceed 23.

Engineering fill in contact with ferrous metals should also have low corrosion potential (minimum resistivity more than 2,000 ohm-cm, chloride content less than 25 parts per million [ppm]). Fill material in contact with concrete should have a soluble sulfate content of less than 0.1 percent.

Based on laboratory test results and our general observations, we anticipate that many of the on-site soils are suitable for re-use as engineered fill during construction. We suggest additional field sampling and laboratory testing be conducted by the contractor either prior to or during construction to better evaluate the quality of the on-site materials.

10.3 Pipe Bedding and Modulus of Soil Reaction (E')

We recommend the pipeline being installed using cut-and-cover techniques be supported on 4 inches or more of granular bedding material such as sand and gravel, or crushed rock meeting the MAG Section 702 Standard Specifications (pea gravel or crushed chips are not acceptable) [Figure 4]. This bedding/pipe-zone backfill should extend 1 foot above the pipe crown. Care should be taken not to allow voids to form beneath the pipe (i.e., the pipe haunches should be continuously supported) to avoid damaging the pipeline. This may involve fill placement by hand or small compaction equipment. The pipe bedding should be moisture-conditioned and compacted as discussed in Section 10.4.

The modulus of soil reaction (E') is used to characterize the stiffness of soil backfill placed on the sides of buried pipelines for the purpose of evaluating deflection caused by the weight of the backfill over the pipe. For granular backfill soils for pipes, we recommend using an E' value of 1,200 pounds per square inch (psi).

10.4 Fill Placement and Compaction

Backfill soils should be moisture-conditioned within the moisture range shown below in Table 2 and mechanically compacted to the percent compaction shown. Fill should generally be placed in 8-inch-thick loose lifts such that each lift is firm and non-yielding under the weight of

construction equipment. Jetting and other forms of water consolidation are not recommended for this project.

Description	Percent Relative Compaction per ASTM D698	Moisture Content
Pipe Bedding	95 percent	±2 percent of optimum
Granular Trench Backfill – Within 2 feet below pavement	100 percent	
Non-Granular Trench Backfill – Within 2 feet below pavement	95 percent	
Trench Backfill – Deeper than 2 feet below pavement	95 percent	

10.5 Controlled Low Strength Material (CLSM)

It is our opinion that the backfill zone may be filled with CLSM. CLSM consists of a fluid, workable mixture of aggregate, Portland cement, and water. The use of CLSM has some advantages:

- A narrower backfill zone can be used, thereby minimizing the quantity of soil to be excavated and possibly reducing disturbance to the near-by traffic;
- Relatively higher E' values may be used (E'= 3,000 psi);
- The support given to the connecting pipes is generally better;
- Because little compaction is needed to place CLSM, there is less risk of damaging the connecting pipes; and
- CLSM can be batched to flow into irregularities in the trench bottom and walls.

The CLSM design mix should be in accordance with current MAG or Standard Specifications for Public Works Construction standards. Additional mix design information can be provided upon request. The 28-day strength of the material should be no less than 50 psi and no more than 120 psi.

Buoyant or uplift forces on the piping should be considered when using CLSM and prudent construction techniques may result in multiple pours to avoid inducing excessive uplift forces. Sufficient time should be provided to allow the CLSM to cure before placing additional lifts of CLSM or trench backfill.

10.6 Trenchless Installation

As indicated earlier, trenchless technologies (i.e. jack-and-bore or micro-tunneling operations) may be needed to cross under signalized intersections along the alignment. However, as previously described in Section 7.1, the presence of cobbles, buried PCCP, and abandoned utilities were observed in our borings which will be more difficult to excavate and will slow the rate of construction during construction.

Please note that drilling between the anticipated launching (jacking) and receiving pits was not performed during the field exploration. However, based on our knowledge of the site, caving of the pipe shaft may occur, particularly if relatively loose or wet surface soils are present. For stability and safety purposes, and to reduce ground movement, a perimeter shaft support system (carrier casing) should be installed as the excavation progresses.

Following the installation of the utility inside the carrier casing, the annulus space should be in-filled with fine gravel or sand that is blown in with air from the ends or CLSM. A portion of the gravel or sand could be blown in first (so as to fill under the haunches of the utility) to reduce the potential for future movement of the pipe.

We recommend the contractor be responsible for the design of access shaft shapes, dimensions and ground support systems for the launching and receiving pit excavations so that such design can be compatible with their construction equipment and methods. Soldier piles with lagging or other types of shored excavations may serve as a suitable system for this project. Driven sheeting may be difficult to install because of hard ground conditions and the possibility of encountering buried gravel, cobbles, and or boulders. In addition, driven sheeting may cause real and perceived damage by vibrations to nearby structures.

Jacking reaction force is developed by passive soil pressure resistance to the jacking operation against the surface of the opposite wall of the jacking pit. For the case of a jacking pit geometry, which consists of a vertical face extending at a 1.5:1 (H:V) plane to the horizontal ground surface, an ultimate passive resistance of 590 pounds per square foot (psf) per foot of depth may be used (Figure 5). This value assumes no groundwater conditions. For different jacking pit geometry, we should be contacted for supplemental recommendations. A factor of safety of 2.0 should be used to calculate the allowable jacking pit resistance.

Surface subsidence associated with these operations was not evaluated as part of our analysis. Nevertheless, the contractor should implement a monitoring program during these operations to observe any ground movement above and adjacent to the pipe being installed. If signs of subsidence or disturbance are noted, construction operations should be stopped to address the

ground movement. The integrity of nearby utilities, roadways and canal lining will need to be protected during these operations.

10.6.1 Trenchless Installation Considerations

Excavations using trenchless construction techniques may encounter soils of little to no cohesion, as described previously in this report. If granular and/or cohesionless material occurs near the crown, the possibility exists for a “run-in” which could result in voids above the tunnel or a sinkhole at the ground surface. When granular materials are encountered at the invert, the possibility exists for bottom instability and difficulty in maintaining vertical alignment of the tunnel. Granular materials containing appreciable amounts of silt or clay behave more favorably to tunneling techniques than clean sands, although not as well as cohesive soils. The Contractor should be made aware of the potential for the difficult tunneling conditions described above, and plan for them accordingly.

In addition to the installation techniques described above, we also recommend that the installation of the pipe be continued with as little interruptions as possible. A delay in the advancement of pipe sections within the tunnel can allow for set-up of the surrounding soils in contact with the pipe, causing increased frictional resistance along the surface of the pipe.

10.7 T-Top Pavement Replacement

In AC paved areas over trench excavations, we recommend the use of MAG “T-Top” Type Trench Backfill (MAG detail 200-1) with respect to the AC and aggregate base (AB) replacement at the surface of the trench excavations, in order to reduce the potential for distress due to differential settlement and water infiltration into the subsurface. This includes the removal of AC and AB to 1 foot or more laterally beyond the extent of each side of the installation trench and extending to a depth of 1 foot or more below the bottom of the asphalt layer.

In the T-Top, the thickness of AB should be 12 inches or match either the existing or design thickness, whichever is more. We recommend a seal be placed at the saw cut joint between the patch and the existing AC. Periodic maintenance of the pavement should be performed. The AC thickness should be in accordance with any COP design standards, or match the existing thickness, whichever is thicker.

10.8 Corrosion

The corrosion potential of the on-site materials was analyzed to evaluate its potential effect on the ferrous metals used for this project. Corrosion potential was evaluated using the results of laboratory testing on a sample obtained during our subsurface evaluation that was considered representative of soils along the project alignment.

Laboratory testing consisted of pH, minimum electrical resistivity, and chloride and soluble sulfate contents. The pH and minimum electrical resistivity tests were performed in general accordance with Arizona Test 236b, while sulfate and chloride content tests were performed in accordance with Arizona Test Method 733 and 736, respectively. The results of the corrosivity tests are presented in Appendix B.

The soil pH values of the tested samples ranged from 7.1 to 9.1, which is considered to be alkaline. The minimum electrical resistivity ranged from 687 to 2,492 ohm-cm, which represents a corrosive environment to ferrous materials. The chloride content ranged from <1 to 135 ppm, which also represents a corrosive environment to ferrous metals. The soluble sulfate content of the soil samples ranged from 0.000 to 0.027 percent by weight, which is considered to represent negligible corrosive environment to concrete.

The results of the laboratory testing indicate that many of the on-site materials are corrosive to ferrous metals; however, present a negligible sulfate exposure for concrete. Because ductile iron is the planned material for the new pipe, we recommend that topsoil, organic soils, existing fill soils, and mixtures of sand and clay not be placed adjacent to buried metallic utilities. Rather, we suggest a relatively clean sand and/or gravel, or CLSM, be placed around buried metal piping. Also, buried utilities of different metallic construction and/or operating temperatures should be electrically isolated from each other to minimize galvanic corrosion problems. In addition, new piping should be electrically isolated from old piping so that the old metal will not increase the corrosion rate of the new metal. A corrosion specialist should be consulted for further recommendations.

10.9 Concrete

A laboratory chemical test performed on a selected sample of on-site soils indicated a sulfate content ranging from 0.000 to 0.027 percent by weight. Based on the sulfate test results and due to the limited number of chemical tests performed, as well as our experience with similar soil conditions and regional practice, we recommend that “Type II” cement be used for the construction of concrete structures at this site. Due to potential uncertainties as to the use of

reclaimed irrigation water, or topsoil that may contain higher sulfate contents, pozzolan or admixtures designed to increase sulfate resistance may be considered.

The concrete should have a water-cementitious materials ratio of no more than 0.50 by weight for normal weight aggregate concrete. The structural engineer should ultimately select the concrete design strength based on the project-specific loading conditions. However, higher strength concrete may be selected for increased durability and resistance to shrinkage cracking.

10.10 Site Drainage

Positive surface drainage should be provided to divert water away from the trench zone and pavements. Surface water should not be permitted to pond over the trench zone or on pavement surfaces after construction. Water that is pumped out of the trench should be done so in an area that drains the water away from the trench.

10.11 Pre-Construction Conference

We recommend a pre-construction conference be held. Representatives of the owner, civil engineer, the geotechnical consultant, and the contractor should be in attendance to discuss the project plans and schedule. Our office should be notified if the project description included herein is incorrect, or if the project characteristics are significantly changed.

10.12 Construction Observation and Testing

During construction operations, we recommend a qualified geotechnical consultant perform observation and testing services for the project. These services should be performed to evaluate exposed subgrade conditions, including the extent and depth of overexcavation, to evaluate the suitability of proposed borrow materials for use as fill and to observe placement and test compaction of fill soils. If another geotechnical consultant is selected to perform observation and testing services for the project, we request that the selected consultant provide a letter to the owner, with a copy to Ninyo & Moore, indicating that they fully understand our recommendations and they are in full agreement with the recommendations contained in this report. Qualified subcontractors utilizing appropriate techniques and construction materials should perform construction of the proposed improvements.

11 LIMITATIONS

The field evaluation, laboratory testing, and geotechnical analyses presented in this geotechnical report have been conducted in general accordance with current practice and the standard of care exercised by geotechnical consultants performing similar tasks in the project

area. No warranty, expressed or implied, is made regarding the recommendations, and opinions presented in this report. There is no evaluation detailed enough to reveal every subsurface condition. Variations may exist and conditions not observed or described in this report may be encountered during construction. Uncertainties relative to subsurface conditions can be reduced through additional subsurface exploration. Additional subsurface evaluation will be performed upon request. Please also note that our evaluation was limited to assessment of the geotechnical aspects of the project, and did not include evaluation of structural issues, environmental concerns, or the presence of hazardous materials.

This document is intended to be used only in its entirety. No portion of the document, by itself, is designed to completely represent any aspect of the project described herein. Ninyo & Moore should be contacted if the reader requires additional information or has questions regarding the content, interpretations presented, or completeness of this document.

This report is intended for design purposes only. It does not provide sufficient data to prepare an accurate bid by contractors. It is suggested that the bidders and their geotechnical consultant perform an independent evaluation of the subsurface conditions in the project areas. The independent evaluations may include, but not be limited to, review of other geotechnical reports prepared for the adjacent areas, site reconnaissance, and additional exploration and laboratory testing.

Our recommendations and opinions are based on an analysis of the observed site conditions. If geotechnical conditions different from those described in this report are encountered, our office should be notified and additional recommendations, if warranted, will be provided upon request. It should be understood that the conditions of a site could change with time as a result of natural processes or the activities of man at the subject site or nearby sites. In addition, changes to the applicable laws, regulations, codes, and standards of practice may occur due to government action or the broadening of knowledge. The findings of this report may, therefore, be invalidated over time, in part or in whole, by changes over which Ninyo & Moore has no control.

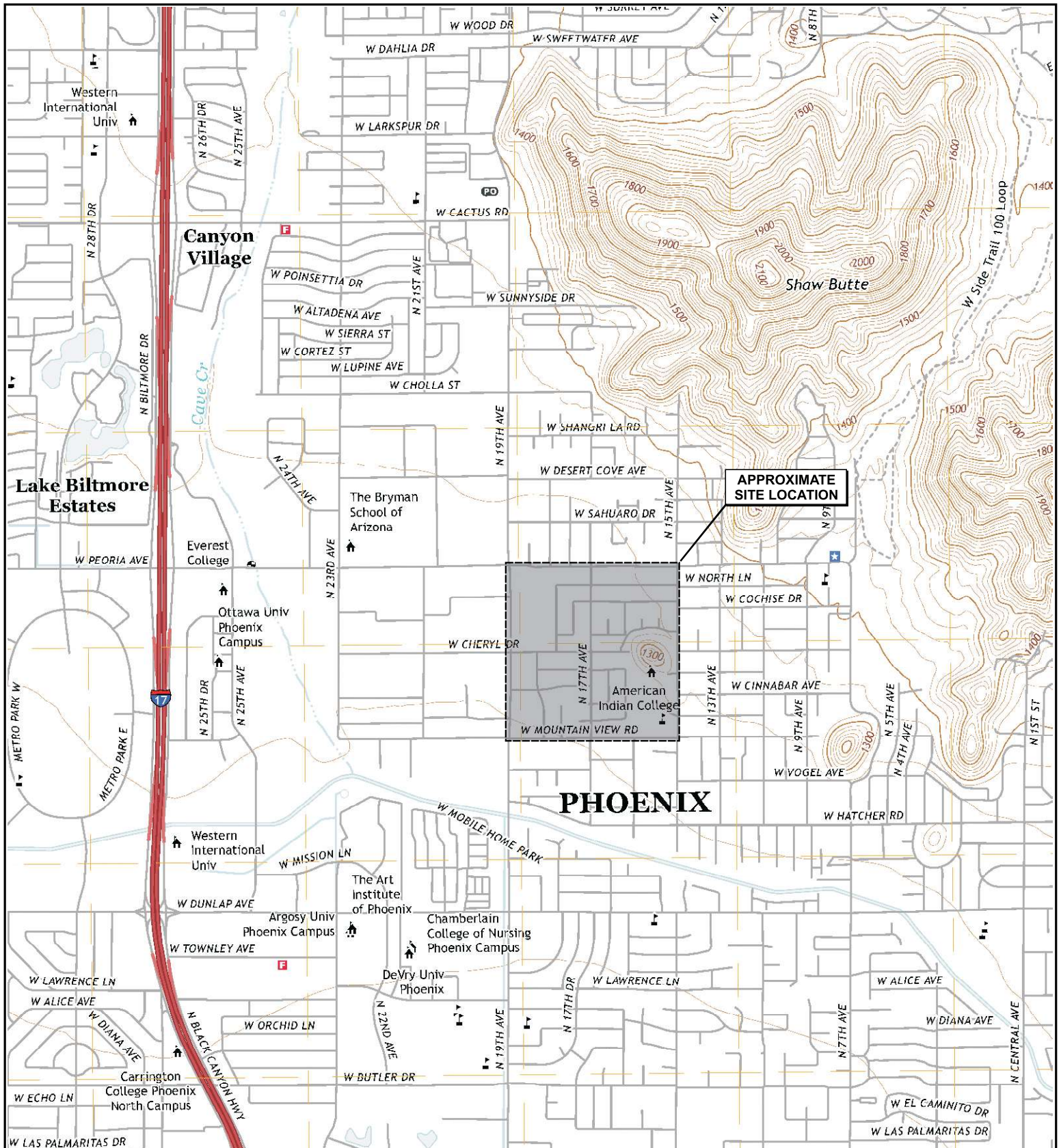
This report is intended exclusively for use by the client. Any use or reuse of the findings, conclusions, and/or recommendations of this report by parties other than the client is undertaken at said parties' sole risk.

12 REFERENCES

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FIGURES



Source: US Geological Survey 7.5-minute topographic map, Sunnyslope, Arizona, 2018.

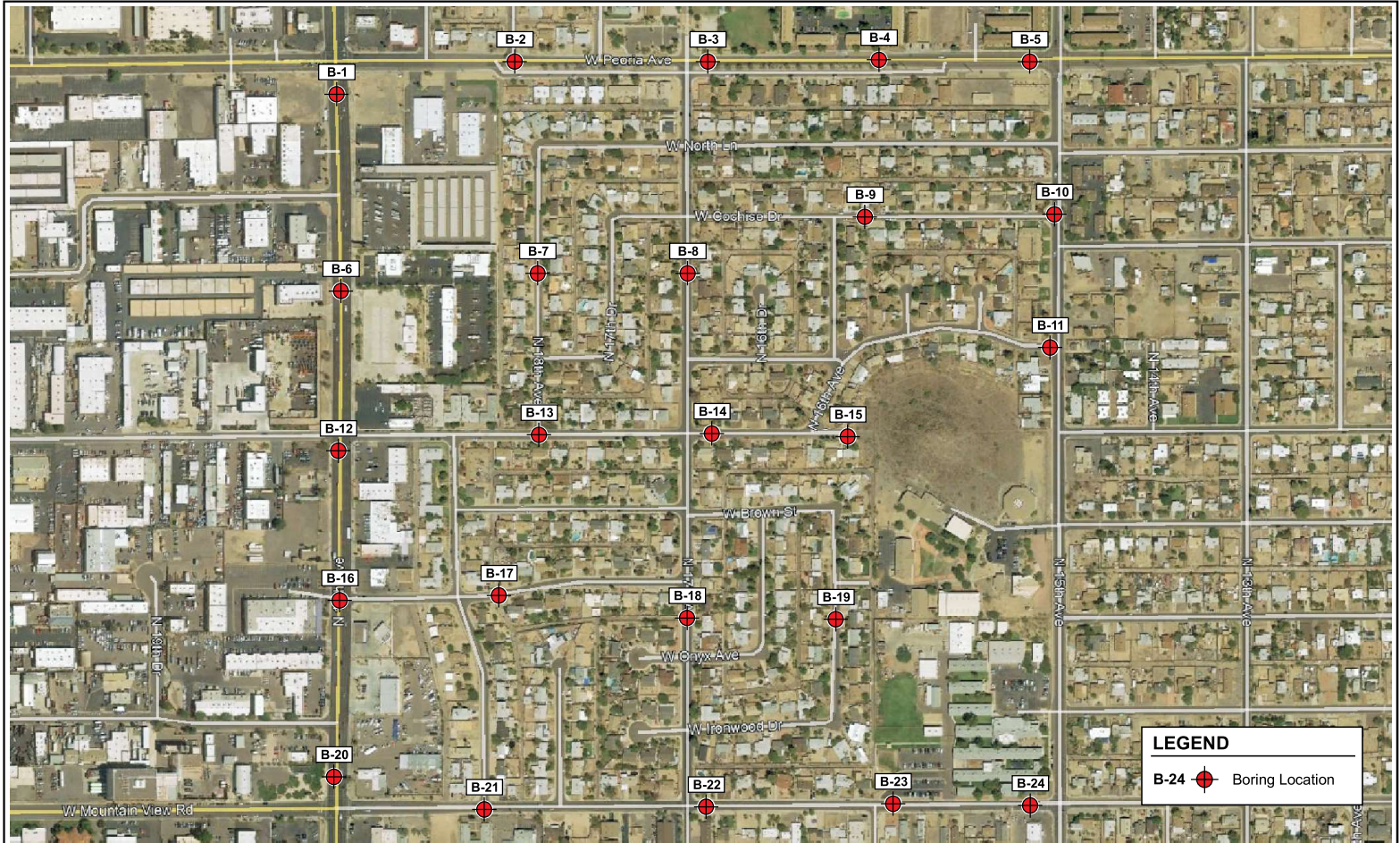


NOTE: DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

FIGURE 1

SITE LOCATION

CITY OF PHOENIX WATER MAIN REPLACEMENT
PHOENIX, ARIZONA



Source: NAVTEQ, 08/28/18.



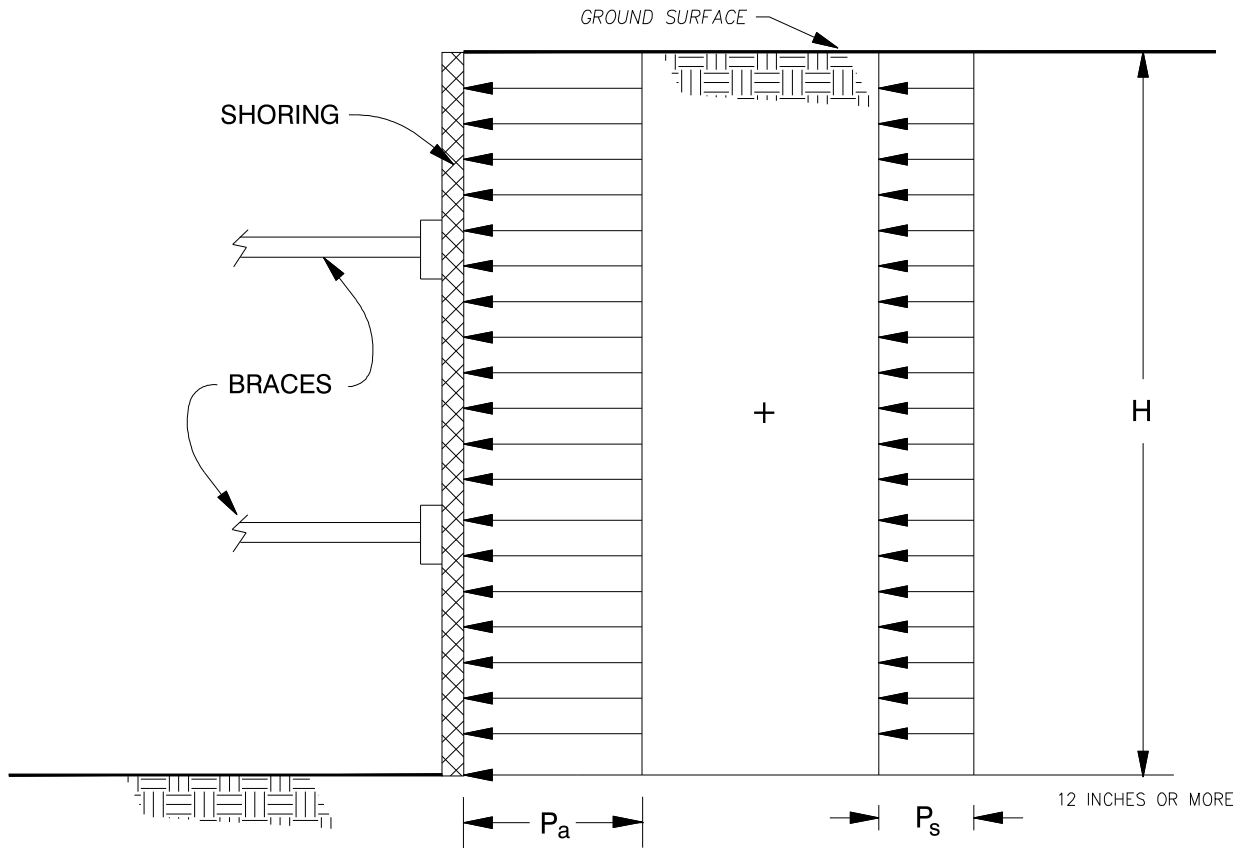
NOTE: DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

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FIGURE 2

BORING LOCATIONS

CITY OF PHOENIX WATER MAIN REPLACEMENT
PHOENIX, ARIZONA



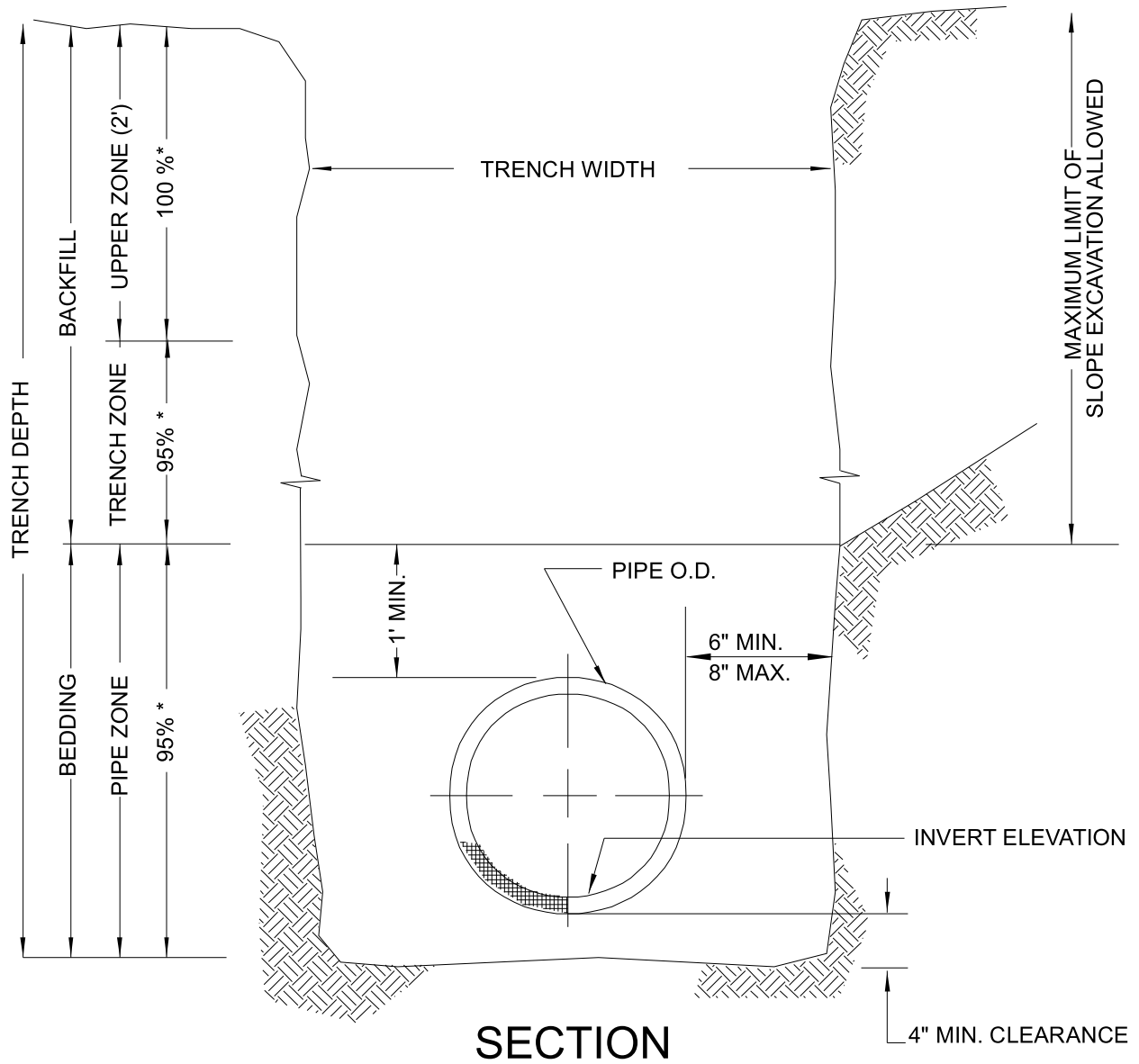
NOTES:

1. APPARENT LATERAL EARTH PRESSURE, P_a
 $P_a = 33H$ psf
2. CONSTRUCTION TRAFFIC INDUCED SURCHARGE PRESSURE, P_s
 $P_s = 120$ psf
3. ASSUMES GROUNDWATER IS NOT PRESENT
4. SURCHARGES FROM EXCAVATED SOIL OR CONSTRUCTION MATERIALS ARE NOT INCLUDED
5. H IS IN FEET

FIGURE 3

LATERAL EARTH PRESSURES FOR BRACED EXCAVATION IN GRANULAR SOILS

CITY OF PHOENIX WATER MAIN REPLACEMENT
PHOENIX, ARIZONA



NOTE

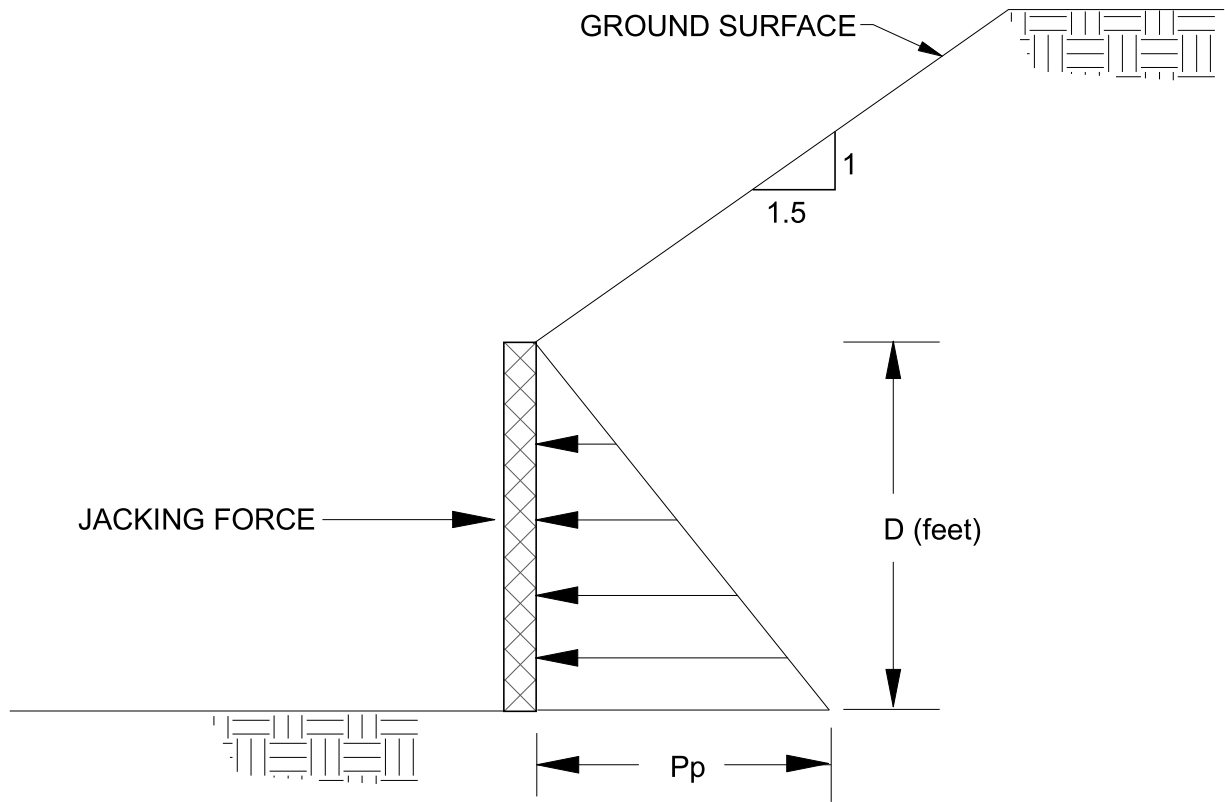
- * Indicates minimum relative compaction (see report for details).
- Upper zone required for pavement areas only.
- Diagram not drawn to scale.

NOTE: DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

FIGURE 4

PIPE BEDDING GUIDELINES

CITY OF PHOENIX WATER MAIN REPLACEMENT
PHOENIX, ARIZONA



ASSUMPTIONS AND NOTES

1. NO GROUNDWATER
2. JACKING PIT GEOMETRY AS SHOWN
3. $P_p = 590D$ psf

NOT TO SCALE

NOTE: DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

FIGURE 5

JACKING FORCE RESISTANCE DIAGRAM

CITY OF PHOENIX WATER MAIN REPLACEMENT
PHOENIX, ARIZONA



APPENDIX A

Boring Logs

APPENDIX A

BORING LOGS

Field Procedure for the Collection of Disturbed Samples

Disturbed soil samples were obtained in the field using the following methods.

Bulk Samples

Bulk samples of representative earth materials were obtained from the exploratory borings. The samples were bagged and transported to the laboratory for testing.

The Standard Penetration Test Spoon

Disturbed drive samples of earth materials were obtained by means of a Standard Penetration Test spoon sampler. The sampler is composed of a split barrel with an external diameter of 2 inches and an unlined internal diameter of 1-3/8 inches. The spoon was driven up to 18 inches into the ground with a 140-pound hammer free-falling from a height of 30 inches in general accordance with ASTM D 1586. The blow counts were recorded for every 6 inches of penetration; the blow counts reported on the logs are those for the last 12 inches of penetration. Soil samples were observed and removed from the spoon, bagged, sealed, and transported to the laboratory for testing.

Field Procedure for the Collection of Relatively Undisturbed Samples

Relatively undisturbed soil samples were obtained in the field using the following method.

The Modified Split-Barrel Drive Sampler

The sampler, with an external diameter of 3.0 inches, was lined with 1-inch long, thin brass rings with inside diameters of approximately 2.4 inches. The sample barrel was driven into the ground with the weight of a hammer or the Kelly bar of the drill rig in general accordance with ASTM D 3550. The driving weight was permitted to fall freely. The approximate length of the fall, the weight of the hammer or bar, and the number of blows per foot of driving are presented on the boring logs as an index to the relative resistance of the materials sampled. The samples were removed from the sample barrel in the brass rings, sealed, and transported to the laboratory for testing.

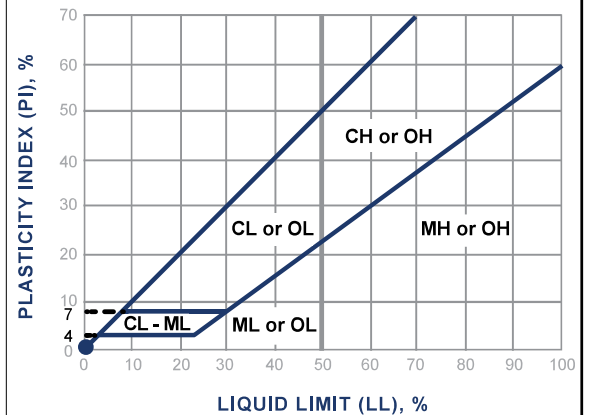
Soil Classification Chart Per ASTM D 2488

Primary Divisions		Secondary Divisions				
		Group Symbol	Group Name			
COARSE-GRAINED SOILS more than 50% retained on No. 200 sieve	GRAVEL more than 50% of coarse fraction retained on No. 4 sieve	CLEAN GRAVEL less than 5% fines	GW	well-graded GRAVEL		
			GP	poorly graded GRAVEL		
		GRAVEL with DUAL CLASSIFICATIONS 5% to 12% fines	GW-GM	well-graded GRAVEL with silt		
			GP-GM	poorly graded GRAVEL with silt		
			GW-GC	well-graded GRAVEL with clay		
			GP-GC	poorly graded GRAVEL with		
	GRAVEL with FINES more than 12% fines	GM	silty GRAVEL			
		GC	clayey GRAVEL			
		GC-GM	silty, clayey GRAVEL			
		CLEAN SAND less than 5% fines	SW	well-graded SAND		
			SP	poorly graded SAND		
			SAND with DUAL CLASSIFICATIONS 5% to 12% fines	SW-SM	well-graded SAND with silt	
	SP-SM			poorly graded SAND with silt		
	SAND with FINES more than 12% fines		SW-SC	well-graded SAND with clay		
			SP-SC	poorly graded SAND with clay		
	FINE-GRAINED SOILS 50% or more passes No. 200 sieve	SILT and CLAY liquid limit less than 50%	INORGANIC	CL	lean CLAY	
				ML	SILT	
				CL-ML	silty CLAY	
ORGANIC			OL (PI > 4)	organic CLAY		
			OL (PI < 4)	organic SILT		
			SILT and CLAY liquid limit 50% or more	INORGANIC	CH	fat CLAY
MH		elastic SILT				
OH (plots on or above "A"-line)		organic CLAY				
ORGANIC		OH (plots below "A"-line)		organic SILT		
		Highly Organic Soils		PT	Peat	

Grain Size

Description	Sieve Size	Grain Size	Approximate Size
Boulders	> 12"	> 12"	Larger than basketball-sized
Cobbles	3 - 12"	3 - 12"	Fist-sized to basketball-sized
Gravel	Coarse	3/4 - 3"	Thumb-sized to fist-sized
	Fine	#4 - 3/4"	Pea-sized to thumb-sized
Sand	Coarse	#10 - #4	Rock-salt-sized to pea-sized
	Medium	#40 - #10	Sugar-sized to rock-salt-sized
	Fine	#200 - #40	Flour-sized to sugar-sized
Fines	Passing #200	< 0.0029"	Flour-sized and smaller

Plasticity Chart






Apparent Density - Coarse-Grained Soil

Apparent Density	Spooling Cable or Cathead		Automatic Trip Hammer	
	SPT (blows/foot)	Modified Split Barrel (blows/foot)	SPT (blows/foot)	Modified Split Barrel (blows/foot)
Very Loose	≤ 4	≤ 8	≤ 3	≤ 5
Loose	5 - 10	9 - 21	4 - 7	6 - 14
Medium Dense	11 - 30	22 - 63	8 - 20	15 - 42
Dense	31 - 50	64 - 105	21 - 33	43 - 70
Very Dense	> 50	> 105	> 33	> 70

Consistency - Fine-Grained Soil

Consistency	Spooling Cable or Cathead		Automatic Trip Hammer	
	SPT (blows/foot)	Modified Split Barrel (blows/foot)	SPT (blows/foot)	Modified Split Barrel (blows/foot)
Very Soft	< 2	< 3	< 1	< 2
Soft	2 - 4	3 - 5	1 - 3	2 - 3
Firm	5 - 8	6 - 10	4 - 5	4 - 6
Stiff	9 - 15	11 - 20	6 - 10	7 - 13
Very Stiff	16 - 30	21 - 39	11 - 20	14 - 26
Hard	> 30	> 39	> 20	> 26

BORING LOG EXPLANATION SHEET

DEPTH (feet)	SAMPLES		BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	
	Bulk	Driven						
0	■							Bulk sample. Modified split-barrel drive sampler. No recovery with modified split-barrel drive sampler. Sample retained by others. Standard Penetration Test (SPT). No recovery with a SPT. Shelby tube sample. Distance pushed in inches/length of sample recovered in inches. No recovery with Shelby tube sampler. Continuous Push Sample. Seepage. Groundwater encountered during drilling. Groundwater measured after drilling.
5			XX/XX					
10								
15						 	SM MAJOR MATERIAL TYPE (SOIL): Solid line denotes unit change. CL Dashed line denotes material change. Attitudes: Strike/Dip b: Bedding c: Contact j: Joint f: Fracture F: Fault cs: Clay Seam s: Shear bss: Basal Slide Surface sf: Shear Fracture sz: Shear Zone sbs: Shear Bedding Surface	
20								The total depth line is a solid line that is drawn at the bottom of the boring.

DEPTH (feet)	Bulk Samples Driven	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>5/3/19</u> BORING NO. <u>B-1</u>
							GROUND ELEVATION <u>1,255' ± (MSL)</u> SHEET <u>1</u> OF <u>1</u>
							METHOD OF DRILLING <u>CME-75, 8" Diameter Hollow-Stem Auger (Wildcat)</u>
							DRIVE WEIGHT <u>140 lbs. (Automatic Trip Hammer)</u> DROP <u>30"</u>
							SAMPLED BY <u>DM</u> LOGGED BY <u>DM</u> REVIEWED BY <u>DT</u>
DESCRIPTION/INTERPRETATION							
0							ASPHALT CONCRETE: Approximately 9 inches thick.
5		11	14.6	95.1		CL	FILL: Brown, dry, firm, sandy lean CLAY. Stiff.
10		4				SC	Brown, moist, loose, clayey SAND.
15		20	4.8	112.5		SC	ALLUVIUM: Brown, moist, medium dense, clayey SAND.
20							Total Depth = 10 feet. Groundwater not encountered during drilling. Backfilled and asphalt concrete patched on 5/3/19 shortly after completion of drilling. Notes: Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report. The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.

FIGURE A- 1

DEPTH (feet)	Bulk Driven	SAMPLES	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>5/3/19</u> BORING NO. <u>B-2</u>
								GROUND ELEVATION <u>1,254' ± (MSL)</u> SHEET <u>1</u> OF <u>1</u>
								METHOD OF DRILLING <u>CME-75, 8" Diameter Hollow-Stem Auger (Wildcat)</u>
								DRIVE WEIGHT <u>140 lbs. (Automatic Trip Hammer)</u> DROP <u>30"</u>
								SAMPLED BY <u>DM</u> LOGGED BY <u>DM</u> REVIEWED BY <u>DT</u>
								DESCRIPTION/INTERPRETATION
0							SC	ASPHALT CONCRETE: Approximately 4 inches thick.
11								FILL: Brown, dry, medium dense, clayey SAND.
2								Very loose: no recovery; possible unmarked utility line.
5			(Push)	13.9	99.8			Total Depth = 6 feet. Groundwater not encountered during drilling. Backfilled and asphalt concrete patched on 5/3/19 shortly after completion of drilling.
10								<u>Notes:</u> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.
15								The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.
20								

FIGURE A- 2

DEPTH (feet)	SAMPLES		BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DESCRIPTION/INTERPRETATION
	Bulk	Driven						
DATE DRILLED <u>5/3/19</u>		BORING NO. <u>B-3</u>		GROUND ELEVATION <u>1,255' ± (MSL)</u>		SHEET <u>1</u> OF <u>1</u>		METHOD OF DRILLING <u>CME-75, 8" Diameter Hollow-Stem Auger (Wildcat)</u>
DRIVE WEIGHT <u>140 lbs. (Automatic Trip Hammer)</u>		DROP <u>30"</u>		SAMPLED BY <u>DM</u>		LOGGED BY <u>DM</u>		REVIEWED BY <u>DT</u>
DESCRIPTION/INTERPRETATION								
0								ASPHALT CONCRETE: Approximately 5 inches thick.
								AGGREGATE FILL: Approximately 4 inches thick.
			8				SC	FILL: Brown, dry, medium dense, clayey SAND.
			23	12.6	106.0			
5			8				SC	ALLUVIUM: Brown, dry, medium dense, clayey SAND; trace gravel.
			36	12.6	98.5			
10								Total Depth = 10 feet. Groundwater not encountered during drilling. Backfilled and asphalt concrete patched on 5/3/19 shortly after completion of drilling.
								Notes: Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.
								The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.
15								
20								

FIGURE A- 3

DEPTH (feet)	Bulk Driven	SAMPLES	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED	BORING NO.	
								5/3/19	B-4	
								GROUND ELEVATION	SHEET	OF
								1,258' ± (MSL)	1	1
								METHOD OF DRILLING		
								CME-75, 8" Diameter Hollow-Stem Auger (Wildcat)		
								DRIVE WEIGHT	DROP	
								140 lbs. (Automatic Trip Hammer)	30"	
								SAMPLED BY	LOGGED BY	REVIEWED BY
								DM	DM	DT
								DESCRIPTION/INTERPRETATION		
0								ASPHALT CONCRETE: Approximately 6 inches thick.		
								AGGREGATE FILL: Approximately 7 inches thick.		
			6				SC	FILL: Brown, dry, loose, clayey SAND; trace gravel.		
			8					Medium dense.		
5							SC	ALLUVIUM: Brown, dry, medium dense, clayey SAND.		
			17	9.3	104.8					
			31	6.4	101.1					
10								Total Depth = 10 feet. Groundwater not encountered during drilling. Backfilled and asphalt concrete patched on 5/3/19 shortly after completion of drilling.		
								Notes: Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.		
								The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.		
15										
20										

FIGURE A- 4

DEPTH (feet)	SAMPLES		BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	METADATA	
	Bulk	Driven						DATE DRILLED	BORING NO.
								5/3/19	B-5
								1,264' ± (MSL)	SHEET 1 OF 1
								CME-75, 8" Diameter Hollow-Stem Auger (Wildcat)	
								140 lbs. (Automatic Trip Hammer)	DROP 30"
								DM	LOGGED BY DM REVIEWED BY DT
DESCRIPTION/INTERPRETATION									
0								ASPHALT CONCRETE: Approximately 6 inches thick.	
								AGGREGATE FILL: Approximately 7 inches thick.	
			9				SC	FILL: Brown, dry, medium dense, clayey SAND; trace gravel.	
			17	11.0	97.1				
5							SC	ALLUVIUM: Brown, dry, medium dense, clayey SAND; trace gravel.	
			10						
			37	8.4	109.9				
10								Total Depth = 10 feet. Groundwater not encountered during drilling. Backfilled and asphalt concrete patched on 5/3/19 shortly after completion of drilling.	
								Notes: Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.	
								The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.	
15									
20									

FIGURE A- 5

DEPTH (feet)	SAMPLES		BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>5/3/19</u> BORING NO. <u>B-6</u>
	Bulk	Driven						GROUND ELEVATION <u>1,250' ± (MSL)</u> SHEET <u>1</u> OF <u>1</u>
								METHOD OF DRILLING <u>CME-75, 8" Diameter Hollow-Stem Auger (Wildcat)</u>
								DRIVE WEIGHT <u>140 lbs. (Automatic Trip Hammer)</u> DROP <u>30"</u>
								SAMPLED BY <u>DM</u> LOGGED BY <u>DM</u> REVIEWED BY <u>DT</u>
								DESCRIPTION/INTERPRETATION
0								ASPHALT CONCRETE: Approximately 5 inches thick.
								AGGREGATE FILL: Approximately 3 inches thick.
								Total Depth = 0.8 feet. (Refusal on PCC)
								Groundwater not encountered during drilling.
								Backfilled and asphalt concrete patched on 5/3/19 shortly after completion of drilling.
								<u>Notes:</u> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.
5								The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.
10								
15								
20								

FIGURE A- 6

DEPTH (feet)	SAMPLES		BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DESCRIPTION/INTERPRETATION
	Bulk	Driven						
DATE DRILLED <u>5/3/19</u> BORING NO. <u>B-7</u> GROUND ELEVATION <u>1,249' ± (MSL)</u> SHEET <u>1</u> OF <u>1</u> METHOD OF DRILLING <u>CME-75, 8" Diameter Hollow-Stem Auger (Wildcat)</u> DRIVE WEIGHT <u>140 lbs. (Automatic Trip Hammer)</u> DROP <u>30"</u> SAMPLED BY <u>DM</u> LOGGED BY <u>DM</u> REVIEWED BY <u>DT</u>								
0								ASPHALT CONCRETE: Approximately 4 inches thick. AGGREGATE FILL: Approximately 4 1/2 inches thick.
3			3				SC	FILL: Brown, moist, loose, clayey SAND.
5			14	11.8	100.4			
5			4				SC	ALLUVIUM: Brown, moist, loose, clayey SAND; scattered caliche nodules.
10			24	14.6	99.8			Medium dense.
10								Total Depth = 10 feet. Groundwater not encountered during drilling. Backfilled and asphalt concrete patched on 5/3/19 shortly after completion of drilling.
								Notes: Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.
								The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.
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FIGURE A- 7

DEPTH (feet)	BULK SAMPLES Driven	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED	BORING NO.	
							5/3/19	B-8	
							GROUND ELEVATION	SHEET	OF
							1,252' ± (MSL)	1	1
							METHOD OF DRILLING		
							CME-75, 8" Diameter Hollow-Stem Auger (Wildcat)		
							DRIVE WEIGHT	DROP	
							140 lbs. (Automatic Trip Hammer)	30"	
							SAMPLED BY	LOGGED BY	REVIEWED BY
							DM	DM	DT
							DESCRIPTION/INTERPRETATION		
0							ASPHALT CONCRETE: Approximately 4 1/2 inches thick.		
							AGGREGATE FILL: Approximately 4 inches thick.		
		3				SC	FILL: Brown, dry, loose, clayey SAND.		
		8					Medium dense; scattered caliche nodules.		
5		10	12.4	100.5			Loose; trace gravel.		
						SC	ALLUVIUM: Brown, moist, loose, clayey SAND.		
		13	16.7	98.1		SC-SM	Brown, dry, loose, clayey, silty SAND.		
10							Medium dense.		
		22	12.4	101.3					
15							Total Depth = 15 feet. Groundwater not encountered during drilling. Backfilled and asphalt concrete patched on 5/3/19 shortly after completion of drilling.		
							<u>Notes:</u> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report. The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.		
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FIGURE A- 8

DEPTH (feet)	Bulk Driven	SAMPLES	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED	BORING NO.	
								5/3/19	B-9	
								GROUND ELEVATION	SHEET	OF
								1,254' ± (MSL)	1	1
								METHOD OF DRILLING		
								CME-75, 8" Diameter Hollow-Stem Auger (Wildcat)		
								DRIVE WEIGHT	DROP	
								140 lbs. (Automatic Trip Hammer)	30"	
								SAMPLED BY	LOGGED BY	REVIEWED BY
								DM	DM	DT
								DESCRIPTION/INTERPRETATION		
0								ASPHALT CONCRETE: Approximately 4 inches thick.		
								AGGREGATE FILL: Approximately 5 inches thick.		
			4				SC	FILL: Brown, dry, loose, clayey SAND.		
			10	10.9	108.2					
5			6							
			21	6.9	102.5		SC	ALLUVIUM: Brown, moist, medium dense, clayey SAND; trace gravel.		
10										
								Total Depth = 10 feet. Groundwater not encountered during drilling. Backfilled and asphalt concrete patched on 5/3/19 shortly after completion of drilling.		
								Notes: Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report. The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.		
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FIGURE A- 9

DEPTH (feet)	BULK SAMPLES Driven	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED	BORING NO.	
							5/2/19	B-10	
							GROUND ELEVATION	SHEET	OF
							1,262' ± (MSL)	1	1
							METHOD OF DRILLING		
							CME-75, 8" Diameter Hollow-Stem Auger (Wildcat)		
							DRIVE WEIGHT	DROP	
							140 lbs. (Automatic Trip Hammer)	30"	
							SAMPLED BY	LOGGED BY	REVIEWED BY
							DM	DM	DT
							DESCRIPTION/INTERPRETATION		
0						SC	ASPHALT CONCRETE: Approximately 4 1/2 inches thick.		
		6				SC	FILL: Brown, dry, loose, clayey SAND; trace gravel.		
		40				SC	ALLUVIUM: Brown, dry, very dense, clayey SAND; decomposed granite.		
5		43	4.9	118.5			Dense.		
		50/5"	6.4	102.0			Few gravel.		
10							Total Depth = 9.4 feet. Groundwater not encountered during drilling. Backfilled and asphalt concrete patched on 5/2/19 shortly after completion of drilling.		
							<u>Notes:</u> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report. The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.		
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FIGURE A- 10

DEPTH (feet)	Bulk Driven	SAMPLES	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED	BORING NO.	
								5/2/19	B-11	
								GROUND ELEVATION	SHEET	OF
								1,260' ± (MSL)	1	1
								METHOD OF DRILLING		
								CME-75, 8" Diameter Hollow-Stem Auger (Wildcat)		
								DRIVE WEIGHT	DROP	
								140 lbs. (Automatic Trip Hammer)	30"	
								SAMPLED BY	LOGGED BY	REVIEWED BY
								DM	DM	DT
								DESCRIPTION/INTERPRETATION		
0								ASPHALT CONCRETE: Approximately 4 inches thick.		
								AGGREGATE FILL: Approximately 5 inches thick.		
			4				SC	FILL: Brown, dry, loose, clayey SAND; few gravel.		
			14	10.0	105.9					
5										
			10				SC	ALLUVIUM: Brown, dry, medium dense, clayey SAND; few gravel; scattered caliche nodules; weakly cemented.		
			79/9"	8.2	108.7			Very dense.		
10								Total Depth = 9.8 feet. Groundwater not encountered during drilling. Backfilled and asphalt concrete patched on 5/2/19 shortly after completion of drilling.		
								<u>Notes:</u> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report. The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.		
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FIGURE A- 11

DEPTH (feet)	Bulk Samples Driven	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>5/3/19</u> BORING NO. <u>B-12</u>
							GROUND ELEVATION <u>1,246' ± (MSL)</u> SHEET <u>1</u> OF <u>1</u>
							METHOD OF DRILLING <u>CME-75, 8" Diameter Hollow-Stem Auger (Wildcat)</u>
							DRIVE WEIGHT <u>140 lbs. (Automatic Trip Hammer)</u> DROP <u>30"</u>
							SAMPLED BY <u>DM</u> LOGGED BY <u>DM</u> REVIEWED BY <u>DT</u>
DESCRIPTION/INTERPRETATION							
0							ASPHALT CONCRETE: Approximately 6 1/2 inches thick.
							AGGREGATE FILL: Approximately 8 inches thick.
		8				SC	FILL: Brown, dry, medium dense, clayey SAND.
		15	10.0	101.6			
5						SC	ALLUVIUM: Brown, dry, medium dense, clayey SAND.
		11					
		23	10.6	82.1			
10							Total Depth = 10 feet. Groundwater not encountered during drilling. Backfilled and asphalt concrete patched on 5/3/19 shortly after completion of drilling.
							Notes: Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report. The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.
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FIGURE A- 12

DEPTH (feet)	Bulk Samples Driven	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED	BORING NO.	
							5/3/19	B-13	
							GROUND ELEVATION	SHEET	OF
							1,247' ± (MSL)	1	1
							METHOD OF DRILLING CME-75, 8" Diameter Hollow-Stem Auger (Wildcat)		
							DRIVE WEIGHT	DROP	
							140 lbs. (Automatic Trip Hammer)	30"	
							SAMPLED BY	LOGGED BY	REVIEWED BY
							DM	DM	DT
							DESCRIPTION/INTERPRETATION		
0							ASPHALT CONCRETE: Approximately 4 inches thick.		
							AGGREGATE FILL: Approximately 4 inches thick.		
		7				SC	FILL: Brown, dry, loose, clayey SAND.		
		5					Few gravel.		
5						SC	ALLUVIUM: Brown, moist, medium dense, clayey SAND.		
		15	3.2	115.4		SP	Brown, dry, medium dense, poorly graded SAND; trace gravel.		
		20	19.8	94.2		SC	Brown, dry, medium dense, clayey SAND.		
10							Total Depth = 10 feet. Groundwater not encountered during drilling. Backfilled and asphalt concrete patched on 5/3/19 shortly after completion of drilling.		
							Notes: Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report. The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.		
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FIGURE A- 13

DEPTH (feet)	Bulk Samples Driven	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>5/3/19</u> BORING NO. <u>B-14</u>
							GROUND ELEVATION <u>1,248' ± (MSL)</u> SHEET <u>1</u> OF <u>1</u>
							METHOD OF DRILLING <u>CME-75, 8" Diameter Hollow-Stem Auger (Wildcat)</u>
							DRIVE WEIGHT <u>140 lbs. (Automatic Trip Hammer)</u> DROP <u>30"</u>
							SAMPLED BY <u>DM</u> LOGGED BY <u>DM</u> REVIEWED BY <u>DT</u>
DESCRIPTION/INTERPRETATION							
0							ASPHALT CONCRETE: Approximately 4 inches thick.
							AGGREGATE FILL: Approximately 4 inches thick.
		3				CL	FILL: Brown, dry, soft, sandy lean CLAY; trace gravel.
		22	13.3	101.7			
5						SC	Brown, dry, medium dense, clayey SAND.
		8				SC	ALLUVIUM: Brown, dry, medium dense, clayey SAND.
		46	17.0	103.2			Dense.
10							Total Depth = 10 feet. Groundwater not encountered during drilling. Backfilled and asphalt concrete patched on 5/3/19 shortly after completion of drilling.
							Notes: Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report. The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.
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FIGURE A- 14

DEPTH (feet)	SAMPLES		BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DESCRIPTION/INTERPRETATION	
	Bulk	Driven						DATE DRILLED	BORING NO.
								5/3/19	B-15
								1,255' ± (MSL)	SHEET 1 OF 1
								CME-75, 8" Diameter Hollow-Stem Auger (Wildcat)	
								140 lbs. (Automatic Trip Hammer)	DROP 30"
								DM	LOGGED BY DM REVIEWED BY DT
0			8				SC	ALLUVIUM: Brown, dry, medium dense, clayey SAND; few gravel.	
			50/3"					Very dense. Total refusal at 4.3 feet; coarse gravel; cobbles. Total Depth = 4.3 feet. (Refusal) Groundwater not encountered during drilling. Backfilled on 5/3/19 shortly after completion of drilling.	
5								Notes: Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report. The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.	
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FIGURE A- 15

DEPTH (feet)	SAMPLES		BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>5/3/19</u> BORING NO. <u>B-16</u>
	Bulk	Driven						GROUND ELEVATION <u>1,243' ± (MSL)</u> SHEET <u>1</u> OF <u>1</u>
								METHOD OF DRILLING <u>CME-75, 8" Diameter Hollow-Stem Auger (Wildcat)</u>
								DRIVE WEIGHT <u>140 lbs. (Automatic Trip Hammer)</u> DROP <u>30"</u>
								SAMPLED BY <u>DM</u> LOGGED BY <u>DM</u> REVIEWED BY <u>DT</u>
								DESCRIPTION/INTERPRETATION
0								ASPHALT CONCRETE: Approximately 3 inches thick.
								AGGREGATE FILL: Approximately 6 inches thick.
								CONCRETE: Approximately 6 inches thick.
								Total Depth = 1.3 feet. (Refusal on PCC) Groundwater not encountered during drilling. Backfilled and asphalt concrete patched on 5/3/19 shortly after completion of drilling.
5								<u>Notes:</u> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report. The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.
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FIGURE A- 16

DEPTH (feet)	Bulk Samples Driven	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>5/3/19</u> BORING NO. <u>B-17</u>
							GROUND ELEVATION <u>1,243' ± (MSL)</u> SHEET <u>1</u> OF <u>1</u>
							METHOD OF DRILLING <u>CME-75, 8" Diameter Hollow-Stem Auger (Wildcat)</u>
							DRIVE WEIGHT <u>140 lbs. (Automatic Trip Hammer)</u> DROP <u>30"</u>
							SAMPLED BY <u>DM</u> LOGGED BY <u>DM</u> REVIEWED BY <u>DT</u>
							DESCRIPTION/INTERPRETATION
0							ASPHALT CONCRETE: Approximately 2 1/2 inches thick.
						SC	AGGREGATE FILL: Approximately 4 inches thick.
		5					FILL: Brown, moist, loose, clayey SAND; scattered caliche nodules.
		25	15.0	104.0		SC	ALLUVIUM: Brown, moist, medium dense, clayey SAND.
5							
		9					
		27	16.4	100.8			
10							Total Depth = 10 feet. Groundwater not encountered during drilling. Backfilled and asphalt concrete patched on 5/3/19 shortly after completion of drilling.
							Notes: Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report. The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.
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FIGURE A- 17

DEPTH (feet)	Bulk Driven	SAMPLES	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED	BORING NO.	
								5/3/19	B-18	
								GROUND ELEVATION	SHEET	OF
								1,244' ± (MSL)	1	1
								METHOD OF DRILLING		
								CME-75, 8" Diameter Hollow-Stem Auger (Wildcat)		
								DRIVE WEIGHT	DROP	
								140 lbs. (Automatic Trip Hammer)	30"	
								SAMPLED BY	LOGGED BY	REVIEWED BY
								DM	DM	DT
								DESCRIPTION/INTERPRETATION		
0								ASPHALT CONCRETE: Approximately 5 1/2 inches thick.		
							SC	AGGREGATE FILL: Approximately 3 inches thick.		
			4					FILL: Brown, dry, loose, clayey SAND; trace gravel.		
			6							
5			13	11.5	102.6					
			27	10.9	95.6		SC	ALLUVIUM: Brown, dry, medium dense, clayey SAND.		
10								Total Depth = 10 feet. Groundwater not encountered during drilling. Backfilled and asphalt concrete patched on 5/3/19 shortly after completion of drilling.		
								Notes: Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report. The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.		
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FIGURE A- 18

DEPTH (feet)	Bulk Samples Driven	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED	BORING NO.	
							5/3/19	B-19	
							GROUND ELEVATION	SHEET	OF
							1,246' ± (MSL)	1	1
							METHOD OF DRILLING CME-75, 8" Diameter Hollow-Stem Auger (Wildcat)		
							DRIVE WEIGHT	DROP	
							140 lbs. (Automatic Trip Hammer)	30"	
							SAMPLED BY	LOGGED BY	REVIEWED BY
							DM	DM	DT
							DESCRIPTION/INTERPRETATION		
0							ASPHALT CONCRETE: Approximately 5 inches thick.		
							AGGREGATE FILL: Approximately 3 inches thick.		
		6				SC	FILL: Brown, dry, loose, clayey SAND; few gravel.		
		26	8.7	108.3		SC	ALLUVIUM: Brown, dry, medium dense, clayey SAND; scattered caliche nodules.		
5									
		12							
		24	10.6	103.3					
10							Total Depth = 10 feet. Groundwater not encountered during drilling. Backfilled and asphalt concrete patched on 5/3/19 shortly after completion of drilling.		
							Notes: Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report. The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.		
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FIGURE A- 19

DEPTH (feet)	Bulk Driven	SAMPLES	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED	BORING NO.	
								5/3/19	B-20	
								GROUND ELEVATION	SHEET	OF
								1,238' ± (MSL)	1	1
								METHOD OF DRILLING		
								CME-75, 8" Diameter Hollow-Stem Auger (Wildcat)		
								DRIVE WEIGHT	DROP	
								140 lbs. (Automatic Trip Hammer)	30"	
								SAMPLED BY	LOGGED BY	REVIEWED BY
								DM	DM	DT
								DESCRIPTION/INTERPRETATION		
0								ASPHALT CONCRETE: Approximately 6 inches thick.		
								AGGREGATE FILL: Approximately 14 inches thick.		
			7				CL	FILL: Brown, dry, stiff, sandy lean CLAY.		
			14	8.3	109.3		SC	ALLUVIUM: Brown, dry, medium dense, clayey SAND; scattered caliche nodules. Few gravel; scattered caliche nodules.		
5										
			10							
			38	6.4	102.3					
10								Total Depth = 10 feet. Groundwater not encountered during drilling. Backfilled and asphalt concrete patched on 5/3/19 shortly after completion of drilling.		
								Notes: Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report. The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.		
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FIGURE A- 20

DEPTH (feet)	BULK SAMPLES Driven	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED	BORING NO.	
							5/3/19	B-21	
							GROUND ELEVATION	SHEET	OF
							1,239' ± (MSL)	1	1
							METHOD OF DRILLING CME-75, 8" Diameter Hollow-Stem Auger (Wildcat)		
							DRIVE WEIGHT	DROP	
							140 lbs. (Automatic Trip Hammer)	30"	
							SAMPLED BY	LOGGED BY	REVIEWED BY
							DM	DM	DT
							DESCRIPTION/INTERPRETATION		
0							ASPHALT CONCRETE: Approximately 4 inches thick.		
							AGGREGATE FILL: Approximately 5 inches thick.		
		6				CL	FILL: Brown, dry, stiff, lean CLAY; trace gravel.		
		5					Firm.		
5						CL	ALLUVIUM: Brown, dry, very stiff, lean CLAY; trace gravel.		
		26	8.2	91..5					
		43					No recovery; possible gravel and cobbles.		
10							Total Depth = 10 feet. Groundwater not encountered during drilling. Backfilled and asphalt concrete patched on 5/3/19 shortly after completion of drilling.		
							Notes: Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report. The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.		
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FIGURE A- 21

DEPTH (feet)	SAMPLES		BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED	BORING NO.				
	Bulk	Driven						5/2/19	B-22				
								GROUND ELEVATION	SHEET	OF			
								METHOD OF DRILLING	CME-75, 8" Diameter Hollow-Stem Auger (Wildcat)				
								DRIVE WEIGHT	140 lbs. (Automatic Trip Hammer)	DROP	30"		
								SAMPLED BY	DM	LOGGED BY	DM	REVIEWED BY	DT
								DESCRIPTION/INTERPRETATION					
0								ASPHALT CONCRETE: Approximately 5 inches thick.					
								AGGREGATE FILL: Approximately 7 inches thick.					
			3				SC	FILL: Brown, dry, loose, clayey SAND; scattered caliche nodules.					
			22	11.5	102.0								
5							SC	ALLUVIUM: Brown, dry, loose, clayey SAND.					
			5										
			21	5.1	103.8			Medium dense; trace gravel.					
10								Total Depth = 10 feet. Groundwater not encountered during drilling. Backfilled and asphalt concrete patched on 5/2/19 shortly after completion of drilling.					
								Notes: Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report. The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.					
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FIGURE A- 22

DEPTH (feet)	BULK SAMPLES Driven	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED	BORING NO.	
							5/2/19	B-23	
							GROUND ELEVATION	SHEET	OF
							1,245' ± (MSL)	1	1
							METHOD OF DRILLING CME-75, 8" Diameter Hollow-Stem Auger (Wildcat)		
							DRIVE WEIGHT	DROP	
							140 lbs. (Automatic Trip Hammer)	30"	
							SAMPLED BY	LOGGED BY	REVIEWED BY
							DM	DM	DT
							DESCRIPTION/INTERPRETATION		
0							ASPHALT CONCRETE: Approximately 4 inches thick.		
							AGGREGATE FILL: Approximately 6 inches thick.		
		10				SC	FILL: Brown, dry, medium dense, clayey SAND; few gravel.		
		9					Trace gravel.		
5									
		19	9.3	106.9		SC	ALLUVIUM: Brown, dry, medium dense, clayey SAND; trace gravel.		
		42	7.8	114.9					
10									
							Total Depth = 10 feet. Groundwater not encountered during drilling. Backfilled and asphalt concrete patched on 5/2/19 shortly after completion of drilling.		
							Notes: Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report. The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.		
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FIGURE A- 23

DEPTH (feet)	Bulk Driven	SAMPLES	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED	BORING NO.	
								5/2/19	B-24	
								GROUND ELEVATION	SHEET	OF
								1,249' ± (MSL)	1	1
								METHOD OF DRILLING		
								CME-75, 8" Diameter Hollow-Stem Auger (Wildcat)		
								DRIVE WEIGHT	DROP	
								140 lbs. (Automatic Trip Hammer)	30"	
								SAMPLED BY	LOGGED BY	REVIEWED BY
								DM	DM	DT
								DESCRIPTION/INTERPRETATION		
0								ASPHALT CONCRETE: Approximately 4 inches thick.		
								AGGREGATE FILL: Approximately 6 inches thick.		
			7				SC-SM	FILL: Brown, dry, loose, clayey, silty SAND; few gravel.		
			20	6.2	95.2			Medium dense.		
5							SC	ALLUVIUM: Brown, dry, medium dense, clayey SAND; trace gravel.		
			18							
			44	4.1	126.8			Dense.		
10								Total Depth = 10 feet. Groundwater not encountered during drilling. Backfilled and asphalt concrete patched on 5/2/19 shortly after completion of drilling.		
								Notes: Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report. The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.		
15										
20										

FIGURE A- 24



APPENDIX B

Laboratory Test Results

APPENDIX B

LABORATORY TESTING

Classification

Soils were visually and texturally classified in accordance with the Unified Soil Classification System (USCS) in general accordance with ASTM D2488-00. Soil classifications are indicated on the logs of the exploratory borings in Appendix B.

In-Place Moisture and Density Tests

The moisture content and dry density of relatively undisturbed samples obtained from the exploratory borings were evaluated in general accordance with ASTM D2937-04. The test results are presented on the logs of the exploratory borings in Appendix A.

Gradation Analysis

Gradation analysis tests were performed on selected representative soil samples in general accordance with ASTM D422. The grain-size distribution curve is shown on Figures B-1 through B-5. These test results were used in evaluating the soil classifications in accordance with the USCS.

Atterberg Limits

Tests were performed on selected representative fine-grained soil samples to evaluate the liquid limit, plastic limit, and plasticity index in general accordance with ASTM D4318. These test results were utilized to evaluate the soil classification in accordance with the Unified Soil Classification System (USCS). The test results are presented on Figure B-6.

Consolidation Tests

Consolidation tests were performed on selected relatively undisturbed soil samples in general accordance with ASTM D2435-04. The samples were inundated during testing to represent adverse field conditions. The percent of consolidation for each load cycle was recorded as a ratio of the amount of vertical compression to the original height of the sample. The results of the tests are summarized on Figures B-7 and B-8.

Direct Shear Tests

Direct shear tests were performed on relatively undisturbed samples in general accordance with ASTM D3080 to evaluate the shear strength characteristics of selected materials. The samples were inundated during shearing to represent adverse field conditions. The results are shown on Figures B-9 and B-10.

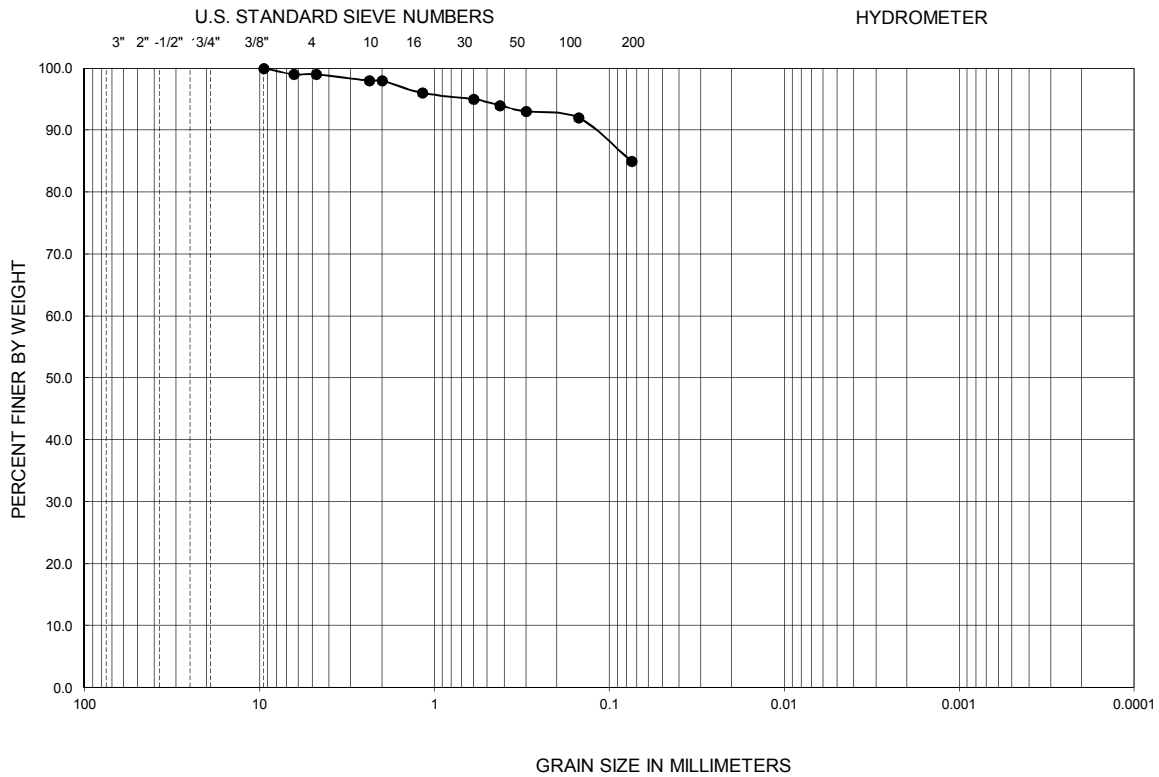
Swell Test

A swell test was performed on a relatively undisturbed sample in general accordance with ASTM D 4546 to evaluate the swell characteristics of selected materials. The sample was inundated to represent adverse field conditions. The test results are shown on Figure B-11.

Soil Corrosivity Tests

Soil pH and minimum resistivity tests were performed on a representative soil sample in general accordance with Arizona Test 236b. The sulfate content was evaluated in general accordance with Arizona Test 733. The chloride content was evaluated in general accordance with Arizona Test 736. The test results are presented on Figure B-12.

GRAVEL		SAND			FINES	
Coarse	Fine	Coarse	Medium	Fine	SILT	CLAY

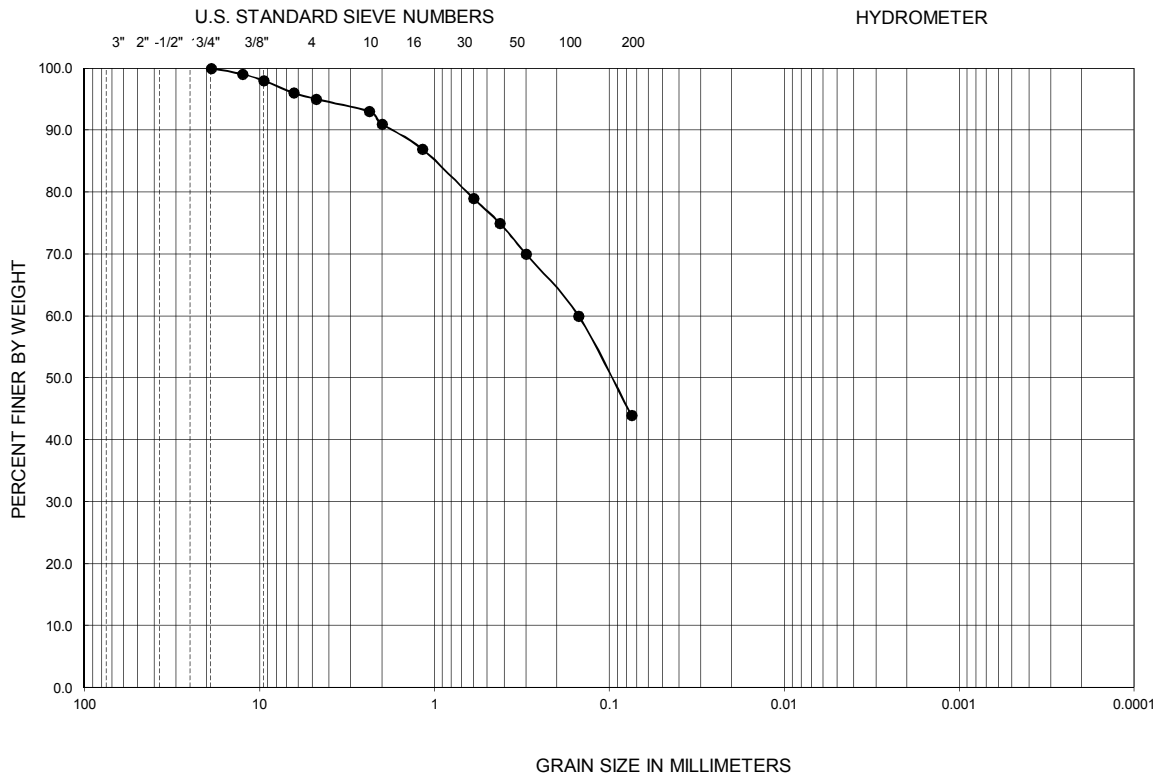


Symbol	Sample Location	Depth (ft)	Liquid Limit	Plastic Limit	Plasticity Index	D ₁₀	D ₃₀	D ₆₀	C _u	C _c	Passing No. 200 (percent)	USCS
●	B-1	1.0-5.0	35	19	16	--	--	--	--	--	85.0	CL

PERFORMED IN GENERAL ACCORDANCE WITH ASTM C136 / D422

FIGURE B-1

GRAVEL		SAND			FINES	
Coarse	Fine	Coarse	Medium	Fine	SILT	CLAY

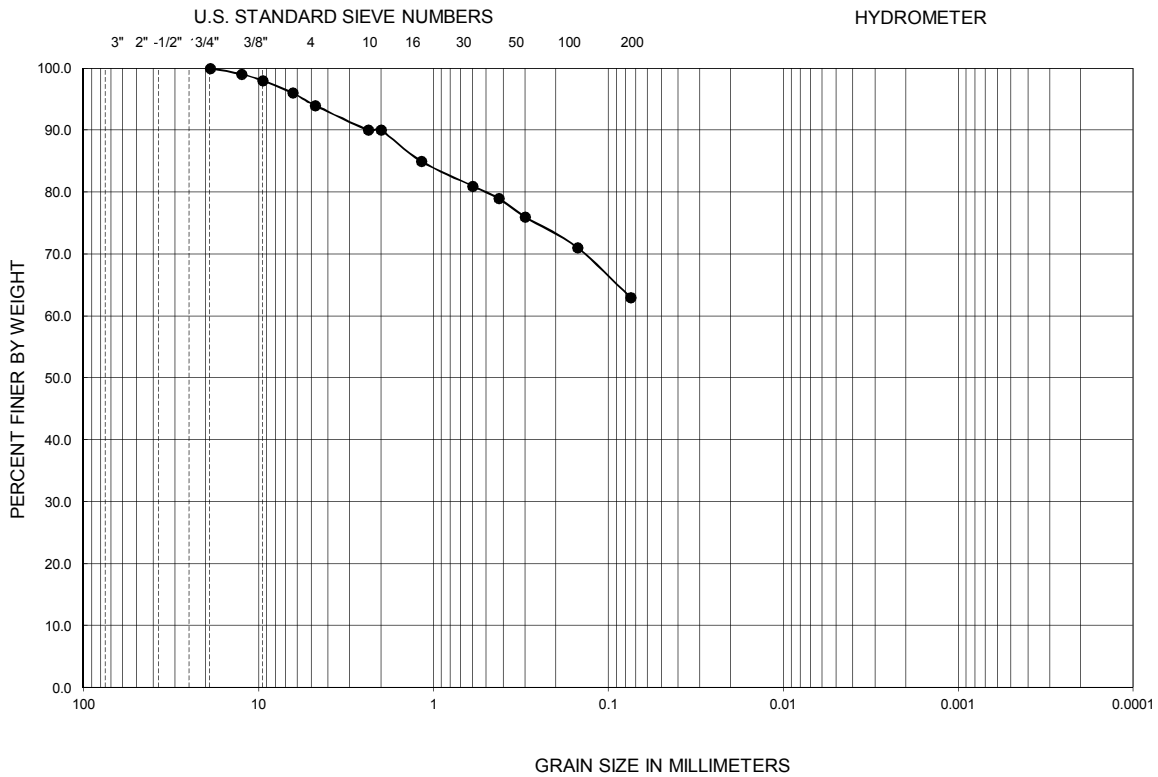


Symbol	Sample Location	Depth (ft)	Liquid Limit	Plastic Limit	Plasticity Index	D ₁₀	D ₃₀	D ₆₀	C _u	C _c	Passing No. 200 (percent)	USCS
●	B-5	1.0-5.0	28	18	10	--	--	0.15	--	--	44.0	SC

PERFORMED IN GENERAL ACCORDANCE WITH ASTM C136 / D422

FIGURE B-2

GRAVEL		SAND			FINES	
Coarse	Fine	Coarse	Medium	Fine	SILT	CLAY

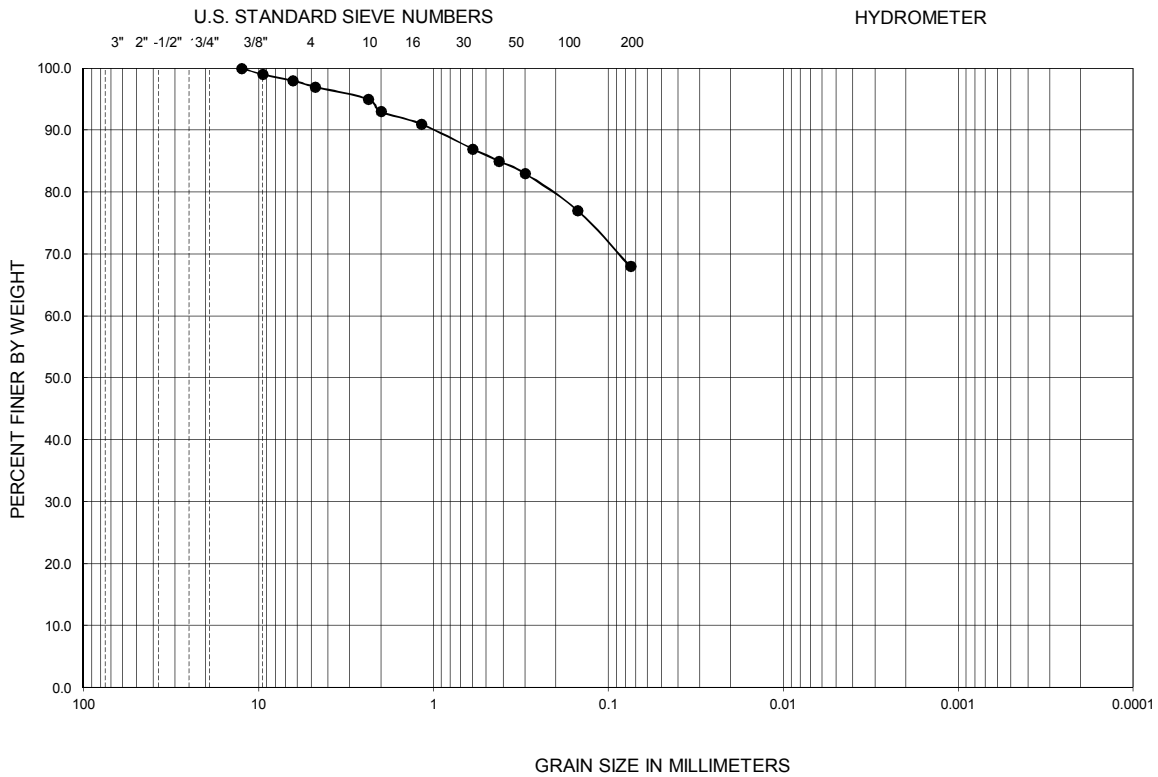


Symbol	Sample Location	Depth (ft)	Liquid Limit	Plastic Limit	Plasticity Index	D ₁₀	D ₃₀	D ₆₀	C _u	C _c	Passing No. 200 (percent)	USCS
●	B-14	1.0-5.0	30	15	15	--	--	--	--	--	63.0	CL

PERFORMED IN GENERAL ACCORDANCE WITH ASTM C136 / D422

FIGURE B-3

GRAVEL		SAND			FINES	
Coarse	Fine	Coarse	Medium	Fine	SILT	CLAY

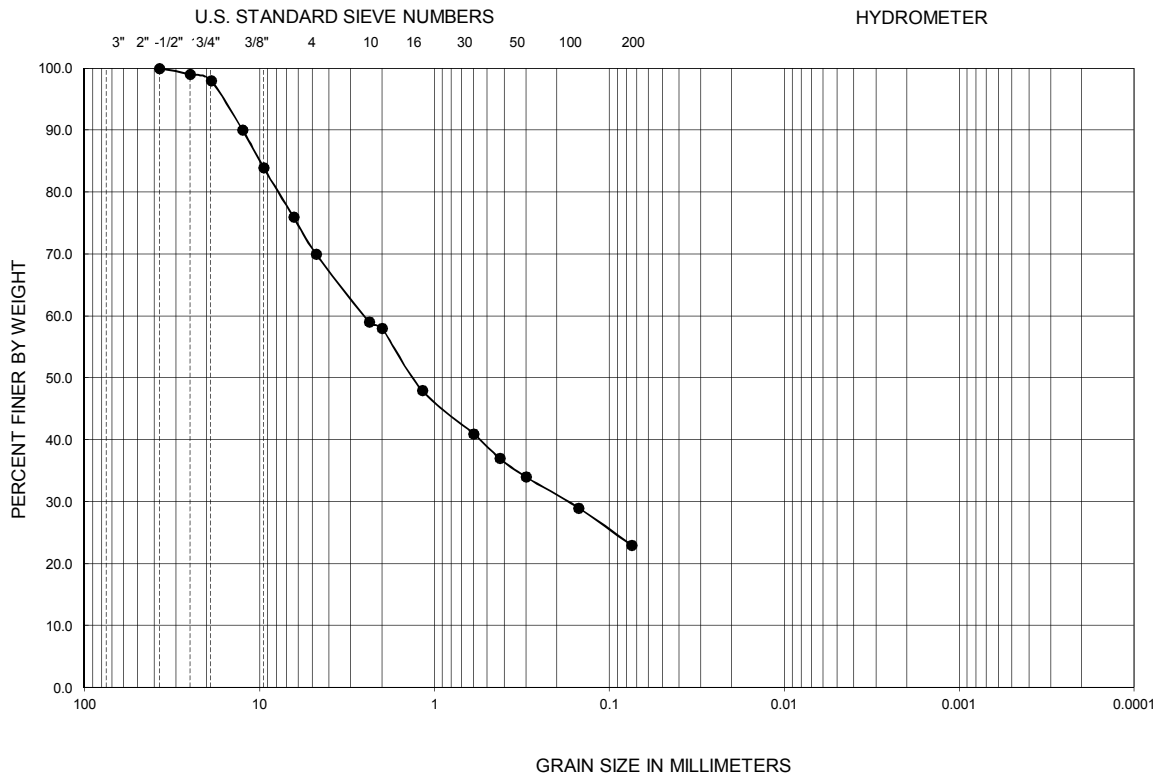


Symbol	Sample Location	Depth (ft)	Liquid Limit	Plastic Limit	Plasticity Index	D ₁₀	D ₃₀	D ₆₀	C _u	C _c	Passing No. 200 (percent)	USCS
●	B-20	1.0-3.5	36	16	20	--	--	--	--	--	68.0	CL

PERFORMED IN GENERAL ACCORDANCE WITH ASTM C136 / D422

FIGURE B-4

GRAVEL		SAND			FINES	
Coarse	Fine	Coarse	Medium	Fine	SILT	CLAY



Symbol	Sample Location	Depth (ft)	Liquid Limit	Plastic Limit	Plasticity Index	D ₁₀	D ₃₀	D ₆₀	C _u	C _c	Passing No. 200 (percent)	USCS
●	B-24	1.0-5.0	21	17	4	--	0.173	2.55	--	--	23.0	SC-SM

PERFORMED IN GENERAL ACCORDANCE WITH ASTM C136 / D422

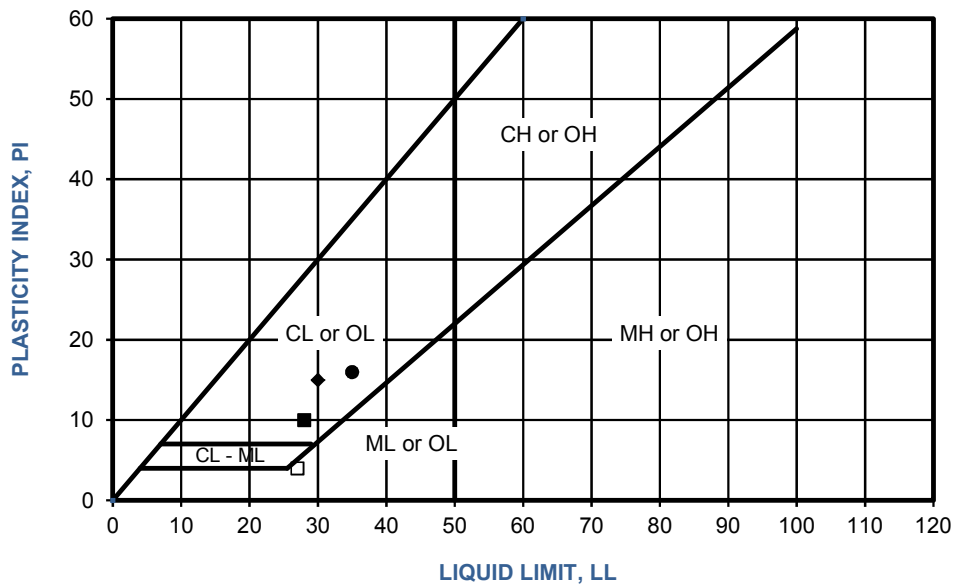
FIGURE B-5

GRADATION TEST RESULTS

CITY OF PHOENIX WATER MAIN REPLACEMENT
PHOENIX, ARIZONA

SYMBOL	LOCATION	DEPTH (ft)	LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	USCS CLASSIFICATION (Fraction Finer Than No. 40 Sieve)	USCS
●	B-1	1.0-5.0	35	19	16	CL	CL
■	B-5	1.0-5.0	28	18	10	CL	SC
◆	B-14	1.0-5.0	30	15	15	CL	CL
○	B-20	1.0-3.5	36	16	20	CL	CL
□	B-24	1.0-5.0	27	14	4	CL-ML	SC-SM

NP - INDICATES NON-PLASTIC

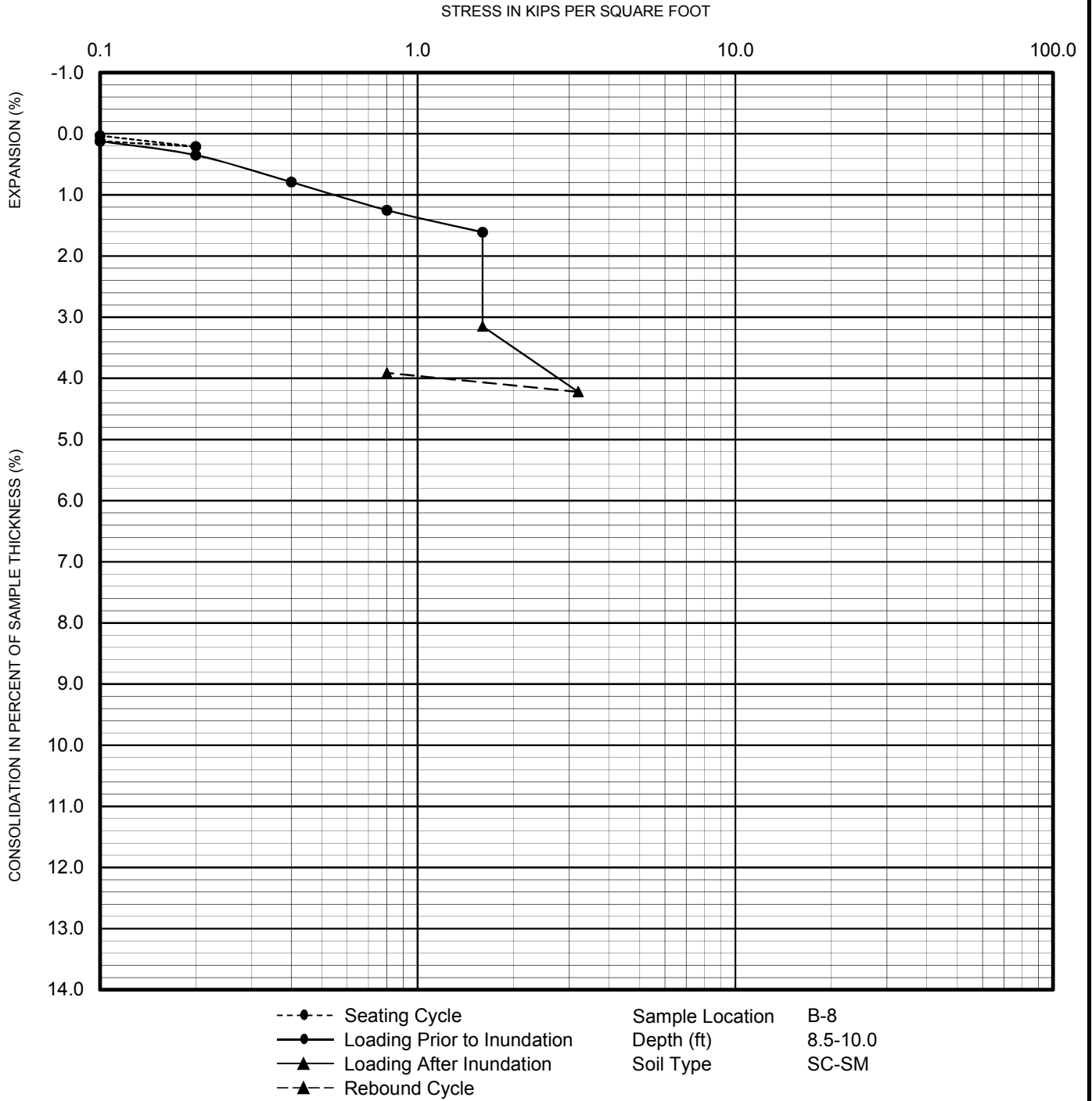


PERFORMED IN GENERAL ACCORDANCE WITH ASTM D 4318

FIGURE B-6

ATTERBERG TEST RESULTS

CITY OF PHOENIX WATER MAIN REPLACEMENT
PHOENIX, ARIZONA



PERFORMED IN GENERAL ACCORDANCE WITH ASTM D 2435

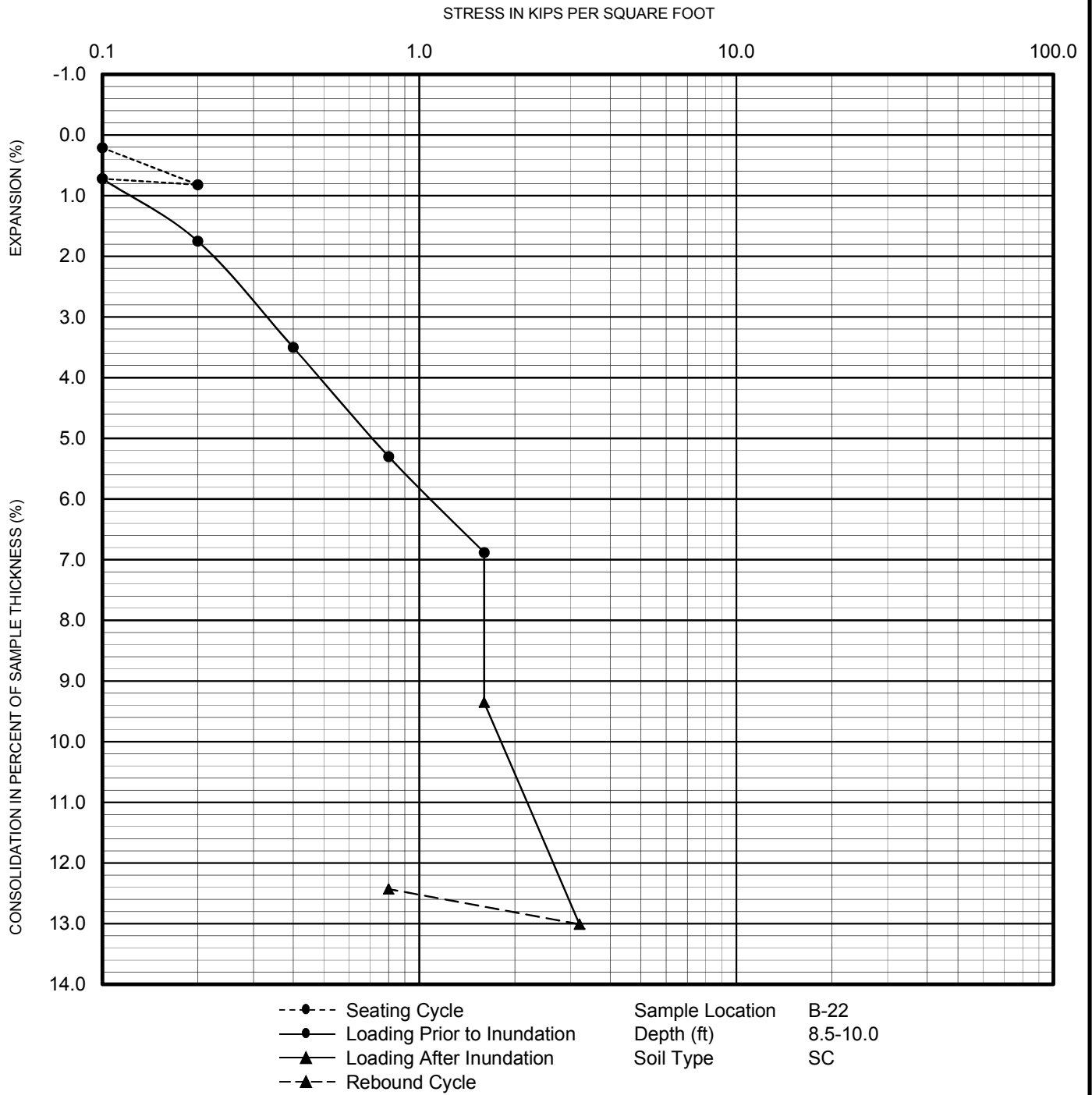
FIGURE B-7

CONSOLIDATION TEST RESULTS

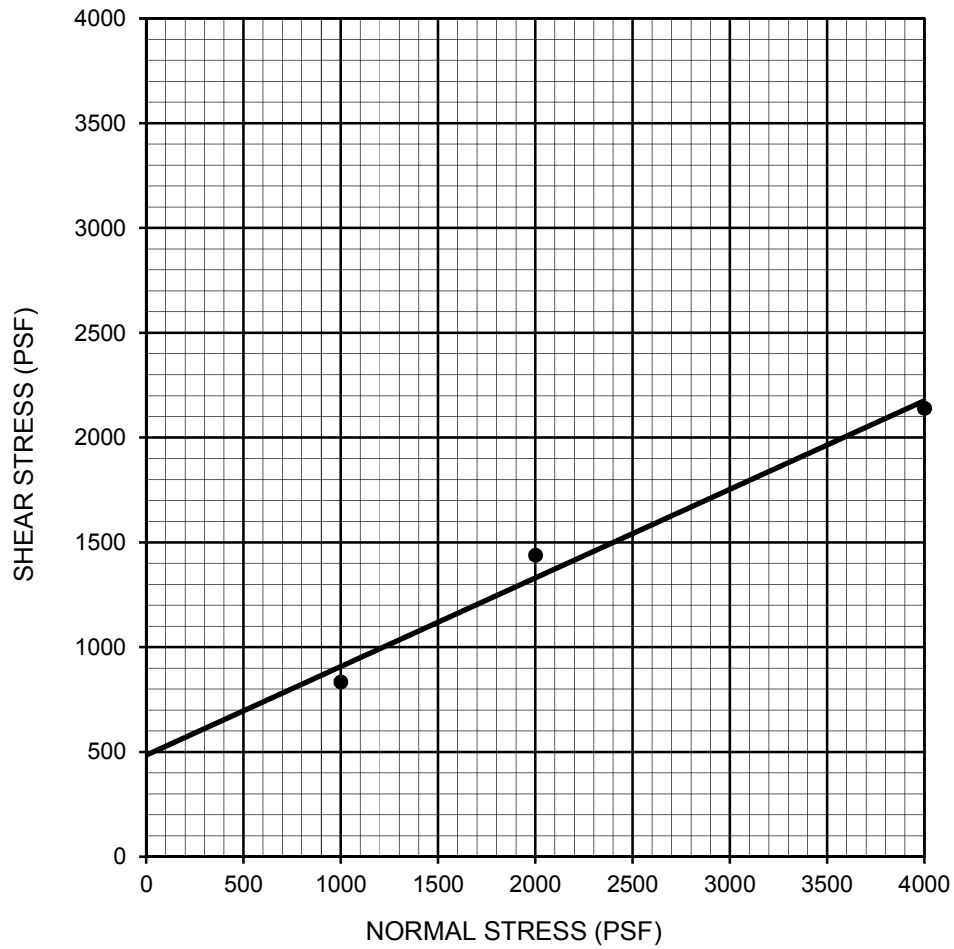
CITY OF PHOENIX WATER MAIN REPLACEMENT

PHOENIX, ARIZONA

606040001 | 6/19



PERFORMED IN GENERAL ACCORDANCE WITH ASTM D 2435



Description	Symbol	Sample Location	Depth (ft)	Shear Strength	Cohesion (psf)	Friction Angle (degrees)	Soil Type
RELATIVELY UNDISTURBED		B-5	3.5-5.0	Peak	485	23	SC

PERFORMED IN GENERAL ACCORDANCE WITH ASTM D 3080

FIGURE B-9

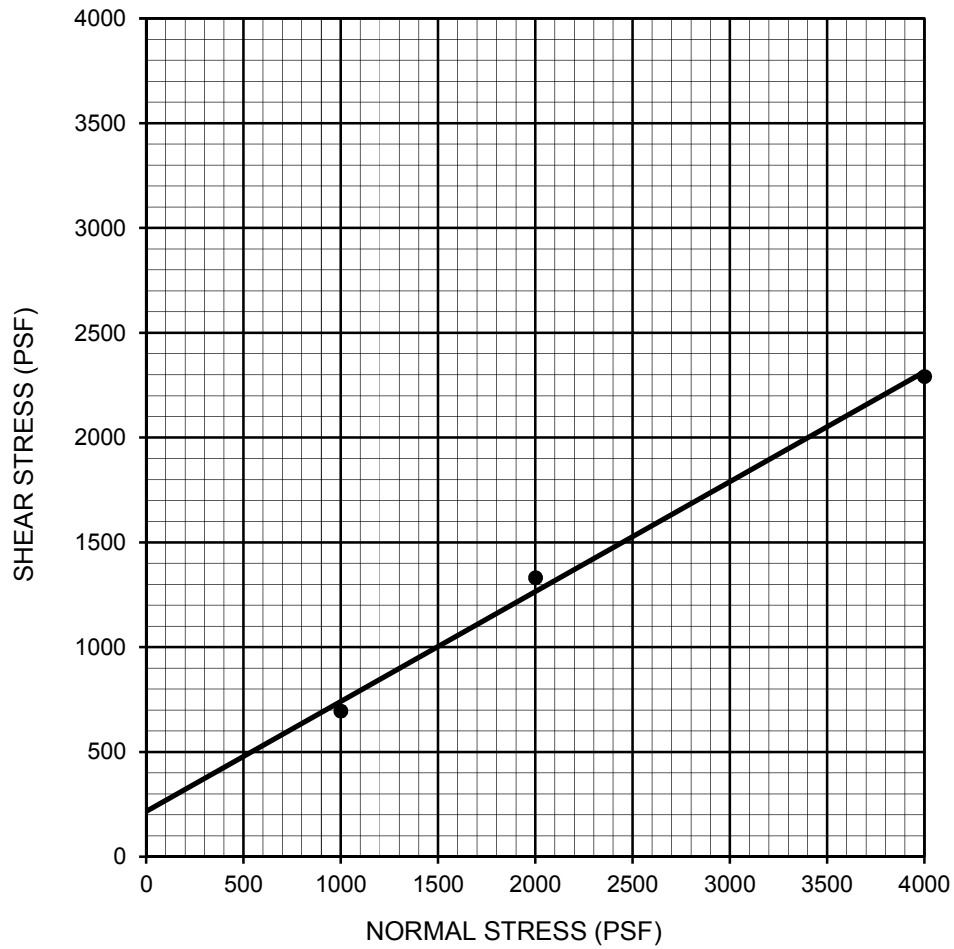
DIRECT SHEAR TEST RESULTS

CITY OF PHOENIX WATER MAIN REPLACEMENT

PHOENIX, ARIZONA

606040001

6/19



Description	Symbol	Sample Location	Depth (ft)	Shear Strength	Cohesion (psf)	Friction Angle (degrees)	Soil Type
RELATIVELY UNDISTURBED		B-20	3.5-5.0	Peak	216	28	SC

PERFORMED IN GENERAL ACCORDANCE WITH ASTM D 3080

FIGURE B-10

DIRECT SHEAR TEST RESULTS

CITY OF PHOENIX WATER MAIN REPLACEMENT

PHOENIX, ARIZONA

606040001

6/19

SAMPLE LOCATION	SAMPLE DEPTH (ft)	U.S.C.S	SWELL (%)
B-1	3.5-5.0	CL	0.0

PERFORMED IN GENERAL ACCORDANCE WITH ASTM D 4546

FIGURE B-11

SWELL TEST RESULTS

CITY OF PHOENIX WATER MAIN REPLACEMENT
PHOENIX, ARIZONA

606040001 | 6/19

SAMPLE LOCATION	SAMPLE DEPTH (ft)	pH ¹	RESISTIVITY ¹ (Ohm-cm)	SULFATE CONTENT ²		CHLORIDE CONTENT ³ (ppm)
				(ppm)	(%)	
B-1	1.0-5.0	7.1	687	7	0.001	5
B-5	1.0-5.0	7.2	1,146	35	0.004	<1
B-14	1.0-5.0	9.1	2,492	15	0.002	<1
B-20	1.0-5.0	9.0	1,642	269	0.027	135
B-24	1.0-5.0	9.1	1,936	4	0.000	9

¹ PERFORMED IN GENERAL ACCORDANCE WITH ARIZONA TEST METHOD 236c

² PERFORMED IN GENERAL ACCORDANCE WITH ARIZONA TEST METHOD 733

³ PERFORMED IN GENERAL ACCORDANCE WITH ARIZONA TEST METHOD 736

FIGURE B-12

CORROSIVITY TEST RESULTS

CITY OF PHOENIX WATER MAIN REPLACEMENT

PHOENIX, ARIZONA



3202 East Harbour Drive | Phoenix, Arizona 85034 | p. 602.243.1600

ARIZONA | CALIFORNIA | COLORADO | NEVADA | TEXAS | UTAH

www.ninyoandmoore.com

ContractorHole	ProjectNumber	ProjectName	Contractor	UtilityCompany	ReqStation	ReqOffset
1	WS85509031	Mountain View Rd - Peoria Ave / 19th Ave - 15th CARDNO	SWG		0+09.00	20.00
2	WS85509031	Mountain View Rd - Peoria Ave / 19th Ave - 15th CARDNO	SWG		0+11.00	20.00
3	WS85509031	Mountain View Rd - Peoria Ave / 19th Ave - 15th CARDNO	CLNK		5+50.00	11.50
4	WS85509031	Mountain View Rd - Peoria Ave / 19th Ave - 15th CARDNO	SWG		18+29.00	11.50
5	WS85509031	Mountain View Rd - Peoria Ave / 19th Ave - 15th CARDNO	CLNK		0+51.00 W	16.00
6	WS85509031	Mountain View Rd - Peoria Ave / 19th Ave - 15th CARDNO	CLNK		0+26.00 W	16.00
7	WS85509031	Mountain View Rd - Peoria Ave / 19th Ave - 15th CARDNO	SWG		0+05.00	16.00
8	WS85509031	Mountain View Rd - Peoria Ave / 19th Ave - 15th CARDNO	SWG		0+20.00	16.00
9	WS85509031	Mountain View Rd - Peoria Ave / 19th Ave - 15th CARDNO	SWG		5+68.00	16.00
10	WS85509031	Mountain View Rd - Peoria Ave / 19th Ave - 15th CARDNO	APS		6+40.00	22.00
11	WS85509031	Mountain View Rd - Peoria Ave / 19th Ave - 15th CARDNO	SWG		26+14.00	13.00
12	WS85509031	Mountain View Rd - Peoria Ave / 19th Ave - 15th CARDNO	SWG		5+34.00	17.00
13	WS85509031	Mountain View Rd - Peoria Ave / 19th Ave - 15th CARDNO	SWG		5+38.00	20.00
14	WS85509031	Mountain View Rd - Peoria Ave / 19th Ave - 15th CARDNO	SWG		19+70.00	20.00
15	WS85509031	Mountain View Rd - Peoria Ave / 19th Ave - 15th CARDNO	SWG		17+74.00	16.00
16	WS85509031	Mountain View Rd - Peoria Ave / 19th Ave - 15th CARDNO	SWG		25+58.00	16.00
17	WS85509031	Mountain View Rd - Peoria Ave / 19th Ave - 15th CARDNO	SWG		26+08.00	16.00
18	WS85509031	Mountain View Rd - Peoria Ave / 19th Ave - 15th CARDNO	CLNK		26+91.00	16.00

ContractorHole	ReqDir	SurStation	SurOffset	SurDir	BenchMarkElevation	XLocation	YLocation	ZLocation
1	LT	0+09.41	20.03	LT	1253.91	44281.47	136755.57	1236.10
2	LT	0+12.31	19.98	LT	1253.91	44284.37	136755.53	1236.07
3	LT	5+43.13	11.15	LT	1253.91	45530.58	139086.34	1251.21
4	LT	18+28.90	11.30	LT	1253.91	46816.36	139086.54	1263.78
5	LT	0+50.19 W	15.09	LT	1253.91	44229.94	139383.28	1254.41
6	LT			LT	1253.91	44254.06	139384.75	1254.42
7	LT			LT	1253.91	44285.45	139384.90	1254.59
8	LT	0+20.02	16.14	LT	1253.91	44300.37	139385.03	1254.55
9	LT	5+67.50	16.03	LT	1253.91	44847.84	139384.99	1251.23
10	LT	6+39.04	21.74'	LT	1253.91	44919.39	139347.24	1251.98
11	LT			LT	1253.91	46894.03	139383.20	1264.00
12	LT	5+35.22	11.93	LT	1253.91	44285.98	137270.66	1238.99
13	LT	5+37.77	19.68	LT	1253.91	44293.74	137273.19	1239.02
14	LT	19+69.95	19.39'	LT	1253.91	44297.83	138705.36	1248.60
15	LT			LT	1253.91	44294.33	138709.33	1248.76
16	LT	25+58.63	16.78	LT	1253.91	44263.36	139294.15	1253.51
17	LT	26+07.52	16.58	LT	1253.91	44263.70	139343.04	1253.99
18	LT			LT	1253.91	44264.00	139426.73	1254.944

ContractorHole	SurfaceElevation	UtilityElevTop	UtilityElevBottom	Top	Bottom	SizeWidth	Structure	Material	Upper
1	1236.1	1,236.10	1,226.10		10				AC
2	1236.07	1,231.41	1,231.03	4.66	5.04	4.5	P	STL	AC
3	1251.21	1,248.23	1,247.90	2.98	3.31	4	P	PE	AC
4	1263.78	1,260.30	1,260.01	3.48	3.77	3.5	P	PE	AC
5	1254.41	1,254.41	1,244.41		10				AC
6	1254.42	1,254.42	1,254.42						
7	1254.59	1,254.59	1,254.59						
8	1254.55	1,249.99	1,249.61	4.56	4.94	4.5	P	STL	AC
9	1251.23	1,245.67	1,245.38	5.56	5.85	3.5	P	PE	AC
10	1251.98	1,250.70	1,243.72	1.28	8.26	28			AC
11	1264								
12	1238.99		1,229.24		9.75				AC
13	1239.02	1,235.04	1,234.62	3.98	4.4	5.00	P	STL	AC
14	1248.6	1,244.04	1,243.66	4.56	4.94	4.5	P	STL	AC
15	1248.76	1,248.76	1,248.76						
16	1253.51	1,249.93	1,249.55	3.58	3.96	4.5	P	STL	AC
17	1253.99	1,250.29	1,249.87	3.7	4.12	5	P	SL	AC
18	1254.944	1,254.94	1,254.94						

ContractorHole	Upper Depth	Soil Code	Location	Comments
1	0.580	Clay	Mountain View Rd & 19th AVE	Dry Hole, Hooked up locating equipment . to dig down to 10' and did not locate utility. Could not dig deeper due to hard soil conditions.
2	1.580	Clay	19th Ave and Mountain View Rd	4.5" Steel Pipe running N/S. Marked as Gas Pavement = 7" asphalt + Concrete 12"
3	0.420	Clay	17th Ave and North Lane	4" Plastic Conduit Pipe running N/S. Marked as Telephone 3.5" Plastic Pipe running N/S. Marked as Gas Client requested 2" PE pipe at this Location
4	0.500	Clay	15th Ave & North Lane	Dry Hole, Hooked up locating equipment . to Century Link test point dug down to 10' and did not locate utility. Could not dig deeper due to hard soil conditions.
5	0.750	Clay	Peoria Ave and 19th Ave	Hole not dug at this time due to construction in the area. Survey Pin was Staked out prior to cancellation.
6		Clay	19th Ave and Peoria Ave	Hole not dug at this time due to construction in the area. Survey Pin was Staked out prior to cancellation.
7		N/A	19th Ave and Peoria Ave	Hole not dug at this time due to construction in the area. Survey Pin was Staked out prior to cancellation.
8	0.830	Clay	Peoria Ave and 19th Ave	4.5" metal Pipe running N/S. Marked as Gas 3.5" Plastic Pipe Running N/S. Marked as Gas.
9	0.420	Clay	Peoria Ave West of 18th Ave	Client Requested 2" Gas Line 28" Concrete Slurry Encasement Running N/S Marked as Electric Bottom of utility is apparent bottom; additional material and/or utilities may exist below apparent bottom.
10	0.500	Clay	18th Ave and Peoria Ave	Hole not dug at this time due to construction in the area. Survey Pin was Staked out prior to cancellation.
11		N/A	Peoria Ave East of 15th Ave	Hole not dug at this time due to construction in the area. Survey Pin was Staked out prior to cancellation.
12	1.580	Clay	19th Ave North of Ironwood Dr	Dry Hole, Hooked up locating equipment . to Southwest Gas test point dug down to 9.75' and did not locate utility. Could not dig deeper due to hard soil conditions. Pavement = 7" asphalt + Concrete 12"
13	1.580	Clay	19th AVE North of Ironwood	5" Metal Pipe running N/S. Marked as Gas Pavement = 7" asphalt + Concrete 12"
14	1.580	Clay	19th Ave South of North Lane	4.5" Metal Pipe Running N/S Marked as Gas Pavement = 7" asphalt + Concrete 12"
15		Clay	19th Ave South of North Lane	Hole not dug at this time due to construction in the area. Survey Pin was Staked out prior to cancellation. 4.5" Metal Pipe Running E/W Marked as Gas Pavement = 7" asphalt + Concrete 12"
16	1.580	Clay	19th Ave South of Peoria Ave	5" Metal Pipe running E/W. Marked as Gas
17	1.000	Clay	Peoria Ave and 19th Ave	Hole not dug at this time due to construction in the area. Survey Pin was Staked out prior to cancellation.
18		N/A		Hole not dug at this time due to construction in the area. Survey Pin was Staked out prior to cancellation.



Approval Date: 9/13/2024

MCESD Project: No. DWR-24-00439
 PWS SYSTEM No. 0407025

CERTIFICATE OF APPROVAL TO CONSTRUCT
 (WITH STIPULATIONS)
PUBLIC WATER SYSTEM EXTENSION

PROJECT DESCRIPTION: WS85509031 - WMR ABB: Mountain View Rd - Peoria Ave/15th Ave - 19th Ave - potable water distribution system of approximately 28,385 linear feet (18950 LF of 6", 4061 LF of 8", 5374 LF of 12") and associated appurtenances with a point of connection to the Phoenix Municipal Water Department water system.

LOCATION: City of Phoenix, Maricopa County
 Section 30, T3N, R3E
 Mountain View Rd to Peoria Ave & 19th Ave to 15th Ave


PROJECT OWNER: City of Phoenix – Water Services Department
 200 West Washington Street, 8th Floor
 Phoenix, AZ 85003

Pursuant to Arizona Administrative Code (AAC) Title 18: Chapters 4 and 5 and the Maricopa County Environmental Health Code: Chapters IV and V.

Approval to construct the above described facilities as represented in the approved plan documents on file with the Maricopa County Environmental Services Department is hereby given subject to the following stipulations: 1. In addition to obtaining a permit from Maricopa County Environmental Services Department, it may be necessary to obtain a permit from your local municipality or Maricopa County Planning and Development Department – if the property is in the unincorporated County. Please contact these entities for additional information.

2. Operation of this public water system project shall not begin until an Approval of Construction is issued by Maricopa County Environmental Services Department.

WATER AND WASTE MANAGEMENT DIVISION

By 
 Subdivision Infrastructure & Planning Program

From the approval date noted above this certificate will EXPIRE, if construction has not substantially started within one year or if no Approval OF Construction has been received within three years showing verification of completion.