

COUNTY OF MOHAVE

NOTICE OF INVITATION FOR BID

IFB NO.: 24B06

HORIZON 6 WATERLINE REPLACEMENT RE-BID

INTERESTED OFFERORS MAY DOWNLOAD A COPY OF THIS SOLICITATION FROM THE MOHAVE COUNTY PROCUREMENT DEPARTMENT WEB SITE AT: <http://procurementbids.mohave.gov> INTERNET ACCESS IS AVAILABLE AT ALL PUBLIC LIBRARIES. INTERESTED OFFERORS MAY ALSO OBTAIN A COPY OF THIS SOLICITATION BY CALLING (928) 753-0752.

Competitive sealed bids for the specified material or service shall be received by the Procurement Department, 700 W. Beale Street, 1st Floor East, Kingman, Arizona 86401, until the time and date cited. Bids received by the correct time and date shall be publicly recorded. The Mohave County Procurement Department takes no responsibility for informing recipients of changes to the original solicitation document. Failure to submit amendments with the solicitation response may be grounds for deeming submittal non-responsive.

Bids shall be in the actual possession of the Procurement Department at the location indicated, on or prior to the exact time and date indicated above. Late proposals shall not be considered. The prevailing clock shall be the Mohave County Procurement Department clock.

Bids shall be submitted in a sealed envelope. The Invitation for Bids number, bidder's name and address shall be clearly indicated on the outside of the envelope. All bids must be completed in blue or black ink or typewritten. Written questions regarding this IFB must be received by the Procurement Department no later than January 16, 2024. Questions must be addressed to the Procurement Officer listed below.

BID DUE DATE:
BID SUBMITTAL LOCATION:

January 25, 2024 AT 2:00 P.M. LOCAL AZ TIME
Mohave County Procurement Department
700 W. Beale Street, 1st Floor East
Kingman, Arizona 86401

PRE-BID CONFERENCE AND SITE WALK DATE:
TIME:
LOCATION:

January 4, 2024
10:00 A.M. LOCAL AZ TIME
Mohave County LHC Complex
Conference/Training Room
2001 College Dr
Lake Havasu City, AZ
Site Walk will immediately follow the Pre-Bid Conference
at corner of Window Rock Dr and Lakeside Dr

QUESTIONS SHALL BE DIRECTED TO:

DUSTY FAYE MARTINEZ
PROCUREMENT OFFICER I
(928) 753-0752
MartiD@mohave.gov
Mohave County Department of Procurement
700 W. Beale Street, 1st Floor East
P.O. Box 7000
Kingman, Arizona 86402-7000

PUBLISH DATES: December 6 and 13, 2023

ISSUE DATE: December 6, 2023

INTRODUCTION & GENERAL INFORMATION

1. GENERAL INFORMATION

1.1 PURPOSE: Mohave County (hereinafter referred to as “the County”) is soliciting competitive bids from qualified firms to establish a contract for the replacement of waterlines in the Horizon 6 Improvement District east of Lake Havasu City, AZ, on behalf of the Mohave County Public Works Department.

1.2 ARPA FUNDED PROJECT: This project is receiving funding through the American Rescue Plan Act (ARPA).

1.2.1 The Contractor must have adequate experience with government projects to include Construction Management Services for the full conformance with applicable law, regulatory rules, regulations, and permitting requirements and in accordance with all applicable provisions of Title 2, Subtitle A, Chapter II, Part 200—UNIFORM ADMINISTRATIVE REQUIREMENTS, COST PRINCIPLES, AND AUDIT REQUIREMENTS FOR FEDERAL AWARDS contained in Title 2 C.F.R. § 200 et seq.

1.2.2 As part of Federal Funding Requirements, the Entity must register with SAM.GOV to be assigned a Unique Entity ID from the System of Award Management website at: <https://sam.gov/content/home>

1.3 SOLICITATION DOCUMENTS: The complete solicitation includes the IFB and all associated exhibits:

1.3.1 The IFB sections are as follows:

Introduction and General Information,
Instructions to Bidders,
Special Terms and Conditions,
Standard Terms and Conditions,
General Conditions,
Federal Funding Requirements For Construction
Contractor’s Qualifications Statement,
Tax Information,
Certification,
List of Sub-Contractors,
Bid Schedule,
Offer Page,
Exhibit 1 - Plan Set
Exhibit 2 - Engineer’s Technical Specifications
Any solicitation amendments which may be issued.

1.4 All bid documents and all supplemental documents specified in the Bid Documents are essential parts thereof, and a requirement occurring in one is binding as though occurring in all; and are intended to be complementary and to describe and provide for a complete Work. In instances where details, specific instructions or specifications for performance of the Work have not been included, the most recent edition of the MAG Specifications shall govern except sections 102, 103, 104, 105, 106, 108 and 110, which have not been accepted by Mohave County. In case of discrepancy or conflict, the order of precedence of documents is as follows: MAG Specifications, Plans, and Specifications, IFB. The order of precedence of sections of this IFB is: Engineer’s Technical Specifications; Special Terms and Conditions, Standard Terms and Conditions, Instructions to Bidders.

1.5 DEFINITIONS: Definitions of select terms used frequently in this IFB may be found in **STANDARD TERMS AND CONDITIONS** and **GENERAL CONDITIONS**.

1.6 PROJECT COMPLETION:

1.6.1 All work shall be completed within **365 calendar days** of Notice to Proceed.

1.6.2 Liquidated damages shall be assessed at **\$450.00** per Calendar Day.

1.7 SCOPE OF WORK:

1.7.1 Contractor shall provide all labor and materials necessary to supply and construct waterlines in accordance with Exhibit 1 - Plan Set and Exhibit 2 - Engineer's Technical Specifications.

INSTRUCTIONS TO BIDDERS

1. PARTICIPATION AND SUBMISSION INSTRUCTIONS

1.1. NON-MANDATORY PRE-BID CONFERENCE AND SITE WALK:

- 1.1.1. The date and time of the Pre-Bid Conference is indicated on the cover page of this document.
- 1.1.2. The purpose of the Pre-Bid Conference and Site Walk is to clarify the contents of this IFB in order to prevent any misunderstanding of the County's position. Any doubt as to the requirements of this IFB, any apparent omission, or any discrepancy should be presented to the County at this Conference. The County will then determine the appropriate action necessary, if any, and issue a written solicitation amendment. Oral statements or instructions will not constitute an amendment to this IFB. No minutes or recording will be taken at the Pre-Bid Conference or Site Walk.
- 1.1.3. A Site Walk will immediately follow the Pre-Bid Conference at the site of work – on Window Rock Dr near the corner intersection with Lakeside Dr.

1.2. INQUIRIES:

- 1.2.1. Any question related to this solicitation must be directed to the Procurement Officer whose name appears on the front page of this document. The Bidder may not contact or ask questions of the end-user department prior to award. Written questions regarding this IFB must be received by the Procurement Department no later than the date indicated on the front page of this IFB.
- 1.2.2. Questions must be submitted in writing. Conventional mail, facsimile, or email may be used, but email is preferred.
 - 1.2.2.1. Any correspondence related to a solicitation should refer to the appropriate Solicitation number, page, and paragraph number.
- 1.2.3. Oral interpretations or clarifications will be without legal effect. Only answers provided by formal written solicitation amendment will bind the County.

1.3. VENDOR APPLICATION: Prior to the award of a contract, the successful Bidder should have a completed vendor application on file with the Department of Procurement. The completed vendor application is required for payment processing. Public access to the Internet is available at all public libraries. The vendor application can be downloaded from the procurement website at: <http://procurement.mohave.gov>

1.4. SUBMITTAL INSTRUCTIONS:

- 1.4.1. In order to be considered, the Bidder must send a competitive sealed bid for the specified material or service to the Procurement Department, located at 700 W. Beale Street, 1st Floor East, Kingman, Arizona 86401, by the time and date cited on the front page of this IFB.
 - 1.4.1.1. Bids received by the correct time and date will be publicly recorded.
 - 1.4.1.2. Bids must be in the actual possession of the Procurement Department at the location indicated, on or prior to the exact time and date indicated above. Late Bids will not be considered, regardless of the reason for being late. The prevailing clock will be the Mohave County Procurement Department clock.
 - 1.4.1.3. Kingman is considered a “rural” area by many express delivery carriers and thus, they do not guarantee priority delivery (next day). Bidders are encouraged to keep this in mind when arranging delivery of their submittals to avoid late delivery.
- 1.4.2. All bids must be completed in blue or black ink or typewritten.
- 1.4.3. The Bidder's submittal must be presented in a sealed envelope. The following items must be clearly written or marked on the envelope:

- 1.4.3.1. Bidder's (firm) name
- 1.4.3.2. Return address
- 1.4.3.3. The words "SEALED BID"
- 1.4.3.4. Solicitation number
- 1.4.3.5. Description of services/product
- 1.4.3.6. Date and Time of Bid Opening (as specified herein, or as otherwise specified in a bid amendment)

2. FORMATTING AND ACCEPTANCE REQUIREMENTS

2.1. BID FORMAT:

2.1.1. A complete Bid must include, at minimum, the following items:

- 2.1.1.1. Signed original offer page,
- 2.1.1.2. Signed original solicitation amendments,
- 2.1.1.3. Completed Bid Schedule,
- 2.1.1.4. Contractor's Qualifications Statement
- 2.1.1.5. Tax Information
- 2.1.1.6. Certification,
- 2.1.1.7. List of Sub-Contractors,
- 2.1.1.8. Bid Bond / Security

2.1.2. All bids must be on the forms provided in this IFB package. It is permissible to copy these forms if required. Facsimiles or mailgrams will not be considered.

2.1.3. The Mohave County Procurement Department takes no responsibility for informing recipients of changes to the original solicitation document. Failure to submit amendments with the solicitation response may be grounds for deeming submittal non-responsive.

2.1.4. The Offer and Acceptance page must be submitted with an original ink signature by the person authorized to sign the Bid.

2.1.5. The Bid Schedule must be completed and included in the Bid.

2.1.6. Erasures, interlineations, or other modifications in the bid must be initialed in original ink by the authorized person signing the Bid.

2.1.7. In case of error in the extension of prices in the Bid, unit price governs. No bid will be altered, amended, or withdrawn after the specified bid due time and date, unless in accordance with the Mohave County Procurement Code.

2.1.8. Periods of time, stated as a number of days, are in calendar days.

2.1.9. The County will not reimburse the cost of developing, presenting, or providing any response to this Solicitation. Bids submitted for consideration should be prepared simply and economically, providing adequate information in the straightforward and concise manner.

3. ADVISORIES AND RELATED INSTRUCTIONS

3.1. SOLICITATION AMENDMENTS:

3.1.1. Bidders must acknowledge receipt of all issued solicitation amendments by signing and submitting them with their Bid. Failure to submit signed amendments with the bid response may be grounds for deeming a Bid non-responsive.

- 3.1.2. It is the Bidder's responsibility to obtain a copy of any amendment relevant to this Solicitation. Mohave County takes no responsibility for informing recipients of changes to the original solicitation document. Amendments can be obtained in the following ways:
 - 3.1.2.1. Amendments can be obtained from the Mohave County website at: <http://procurementbids.mohave.gov>. Internet access is available at all public libraries.
 - 3.1.2.2. Bidders may call (928) 753-0752 to request a mailed or facsimile copy.
 - 3.1.2.3. Amendments may be picked up during regular business hours at the Procurement Department, 700 W. Beale St., Kingman, AZ.
- 3.2. **OFFER AND ACCEPTANCE PERIOD:** In order to allow for an adequate evaluation, the County requires an offer in response to this solicitation to be valid and irrevocable for sixty (60) days after the opening time and date. Any modifications to this will be considered an exception subject to INSTRUCTIONS TO BIDDERS, "EXCEPTIONS TO CONTRACT PROVISIONS."
- 3.3. **ACCEPTANCE OF BID:**
 - 3.3.1. Notwithstanding any other provision of the solicitation, the County reserves the right to:
 - 3.3.1.1. waive any immaterial defect or informality;
 - 3.3.1.2. reject any or all Bids, or portions thereof;
 - 3.3.1.3. cancel and reissue the solicitation.
- 3.4. **FAMILIARIZATION WITH SCOPE OF WORK:** Before signing a contract, a bidder must become familiar with the Scope of Work, applicable laws and regulations, and any other factors affecting performance of work. By signing the Offer Page, the Bidder agrees that they have familiarized themselves with the Scope of Work, applicable laws and regulations, and any other factors affecting performance of the work to the best of their knowledge. There will be no subsequent financial adjustment, other than that provided by the Contract, for lack of such familiarization.
- 3.5. **WITHDRAWAL OF BID:** At any time prior to a specified solicitation due time and date a bidder (or designated representative) may withdraw a bid by submitting a written request stating the reason for withdrawal.
- 3.6. **CONFIDENTIAL INFORMATION:** Confidential information will be considered and reviewed per the Mohave County Procurement Code Article 1, Section 5. If a bidder wishes to keep any portion of a bid, submittal, offer, specification, protest, or correspondence confidential, a statement must be provided with the Bid or other documentation. Confidential information must be identified as such wherever it appears. The Procurement Director will review the request and make a determination to confirm or deny it. The information identified as confidential will not be disclosed unless and until the Procurement Director makes a written determination to disclose the information.
 - 3.6.1. Notwithstanding the above, all bids submitted in response to this invitation will become the property of the County and will become a matter of public record available for review pursuant to the Mohave County Procurement Code.
- 3.7. **BID RESULTS:** Bid results will not be provided in response to telephone inquiries. A PRELIMINARY bid tabulation will be posted on the Procurement Department website procurement.mohavecounty.us within four (4) business days of the advertised bid opening. The information on the PRELIMINARY tabulation will be posted as it was read and prepared during the bid opening. The County makes no guarantee as to the accuracy of any information on the PRELIMINARY tabulation. A FINAL bid tabulation will be posted on the website after contract award and will remain on the website for sixty (60) days after the posting date.
- 3.8. **EXCEPTIONS TO CONTRACT PROVISIONS:** Any exceptions to language or requirements listed in the Solicitation must be submitted in a clearly identified separate section of the sealed Bid in which the Bidder clearly identifies the specific paragraphs of the Solicitation where the exceptions occur.

Any exceptions will be without force and effect in any resulting Contract unless the exception is specifically accepted by the Procurement Director in a written statement. The Bidder's preprinted or standard terms will not be considered by the County as a part of any resulting Contract.

- 3.8.1. All exceptions that are contained in the Bid may negatively impact a Bidder's susceptibility for award. A Bid that takes exception to any material requirement of the Solicitation may be rejected.
- 3.9. CONFLICT OF INTEREST: For purposes of determining any possible conflict of interest, all bidders must disclose if any current Mohave County employee is also an owner, corporate officer, or employee of your business. Bidders are to indicate on the Offer Page of this solicitation either "Yes" (County employee is associated with your business), or "No." If "Yes", bidders must provide the name(s) of the County employee(s) and the position(s) County employee(s) hold within your business where indicated.
- 3.10. DISCOUNTS: Payment discount periods will be computed from the date of receipt of the material/service or correct invoice, whichever is later, to the date County's warrant is mailed. Unless freight and other charges are itemized, any discount provided will be taken on full amount of invoice. Payment discounts of twenty-one (21) calendar days or more will be deducted from the bid price in determining the low bid. However, the County will be entitled to take advantage of any payment discount offered by a vendor provided payment is made within the discount period.
- 3.11. PAYMENT: All payments made by Mohave County for goods or services will be made to the firm named on the Offer and Acceptance form. If the Contractor does not wish payment to be made to that address, the vendor must submit an attached sheet indicating the proper mailing address with this bid.
- 3.12. QUALIFICATIONS: Bidders must be fully licensed, certified, and qualified to perform the work described in the Scope of Work prior to bidding.
- 3.13. ALTERNATE PRODUCT: Submittals are required that provide product data for any product that is a substitute or equal to the product specified. Submittals for product substitutions require Owner approval and are due ten (10) days before bids are due. Owner response to substitution requests will be provided by the deadline for submitting questions.

SPECIAL TERMS AND CONDITIONS

1. INSURANCE REQUIREMENTS:

- 1.1. Contractor and subcontractors must procure and maintain until all of their obligations have been discharged, including any warranty periods under this Contract, are satisfied, insurance against claims for injury to persons or damage to property which may arise from or in connection with the performance of the work hereunder by the Contractor, his agents, representatives, employees or subcontractors.
- 1.2. The insurance requirements herein are minimum requirements for this Contract and in no way limit the indemnity covenants contained in this Contract. Mohave County in no way warrants that the minimum limits contained herein 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 is free to purchase additional insurance.
- 1.3. MINIMUM SCOPE AND LIMITS OF INSURANCE: Contractor must provide coverage with limits of liability not less than those stated below.
 - 1.3.1. Commercial General Liability – Occurrence Form: Policy must include bodily injury, property damage, personal and advertising injury and broad form contractual liability coverage.
 - 1.3.1.1. General Aggregate \$2,000,000
 - 1.3.1.2. Each Occurrence \$1,000,000
 - 1.3.1.2.1. The policy must be endorsed to include the following additional insured language: “Mohave County and its officers, officials, agents, and employees are named as additional insureds with respect to liability arising out of the work, services, or activities performed by or on behalf of the Contractor.” Such additional insured must be covered to the full limits of liability purchased by the Contractor, even if those limits of liability are in excess of those required by this Contract.
 - 1.3.1.2.2. Policy must contain a waiver of subrogation endorsement in favor of Mohave County, and its officers, officials, agents, and employees for losses arising from work performed by or on behalf of the Contractor.
 - 1.3.2. Business Automobile Liability: Bodily Injury and Property Damage for any owned, hired, and/or non-owned vehicles used in the performance of this Contract.
 - 1.3.2.1. Combined Single Limit (CSL) for Any Auto: \$1,000,000
 - 1.3.2.2. The policy must be endorsed to include the following additional insured language: “Mohave County, and its officers, officials, agents, and employees are named as additional insureds with respect to liability arising out of the work, services, or activities performed by or on behalf of the Contractor, involving automobiles owned, leased, hired or borrowed by the Contractor.” Such additional insured must be covered to the full limits of liability purchased by the Contractor, even if those limits of liability are in excess of those required by this Contract.
 - 1.3.2.3. Policy must contain a waiver of subrogation endorsement in favor of “Mohave County, and its officers, officials, agents, and employees” for losses arising from work performed by or on behalf of the Contractor.
 - 1.3.2.4. Policy must contain a severability of interest provision.
 - 1.3.3. Workers’ Compensation and Employers’ Liability
 - 1.3.3.1. Workers’ Compensation Statutory

1.3.3.2. Each Accident	\$1,000,000
1.3.3.3. Disease – Each Employee	\$1,000,000
1.3.3.4. Disease – Policy Limit	\$1,000,000

1.3.3.5. This requirement must not apply to: Separately, EACH contractor or subcontractor exempt under A.R.S. § 23-901, AND when such contractor or subcontractor executes the appropriate waiver form.

1.3.3.6. Policy must contain a waiver of subrogation endorsement in favor of “Mohave County, and its officers, officials, agents, and employees” for losses arising from work performed by or on behalf of the Contractor.

1.4. ADDITIONAL INSURANCE REQUIREMENTS: The policies must include, or be endorsed to include, the following provisions:

1.4.1. The Contractor's policies must stipulate that the insurance afforded the contractor is primary insurance and that any insurance carried by Mohave County, and its agents, officials, or employees is excess and not contributory insurance, as provided by A.R.S. § 41-621 (E).

1.4.2. Coverage provided by the Contractor will not be limited to the liability assumed under the indemnification provisions of this Contract.

1.4.3. Commercial General Liability Additional Insured Endorsements must be as broad as CG2010 1185.

1.4.4. Mohave County, at its sole discretion, may increase or decrease the insurance limits and coverages outlined herein.

1.5. NOTICE OF CANCELLATION: With the exception of (10) day notice of cancellation for non-payment of premium, any changes material to compliance with this contract in the insurance policies above require (30) days written notice to Mohave County. Such notice must be sent directly to Mohave County and must be sent by certified mail, return receipt requested.

1.6. ACCEPTABILITY OF INSURERS: Contractors insurance must be placed with companies licensed in the State of Arizona or hold approved non-admitted status on the Arizona Department of Insurance List of Qualified Unauthorized Insurers. Insurers must have an “A.M. Best” rating of not less than A-VII. Mohave County in no way warrants that the above-required minimum insurer rating is sufficient to protect the Contractor from potential insurer insolvency.

1.7. VERIFICATION OF COVERAGE: Prior to beginning of work or services, Contractor must furnish Mohave County with Certificates of Insurance (ACORD form or equivalent approved by Mohave County) as required by this Contract. The certificates for each insurance policy are to be signed by an authorized representative.

1.7.1. All certificates and endorsements are to be received and approved by Mohave County 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.

1.7.2. All certificates required by this Contract must be sent directly to Mohave County. The Mohave County project/contract number and project description must be noted on the Certificate of Insurance. Mohave County reserves the right to require complete copies of all insurance policies required by this Contract at any time.

1.8. SUBCONTRACTORS: Contractors' certificate(s) must include all subcontractors as insureds under its policies or Contractor must furnish to Mohave County separate certificates and endorsements for each subcontractor. All coverages for subcontractors are subject to the minimum requirements identified above.

- 1.9. **APPROVAL:** Any modification or variation from the insurance requirements in this Contract must be made by the contracting agency in consultation with Mohave County. Such action will not require a formal Contract amendment, but may be made by administrative action.
2. **OTHER CONTRACTS:** The County may, as its sole option, enter into Contracts for additional work related to this project. The Contractor must fully cooperate with other Contractors and with County employees to accommodate such other work. The Contractor must not commit or permit any act that interferes with the performance of such work by other Contractors.
3. **PAYMENT:**
 - 3.1. **RATES:** In consideration of the receipt of the materials, or the performance of services described in the Scope of Work, the County will pay the Contractor in accordance with the negotiated contract rates, and the Contractor must charge the County only in accordance with those same rates.
 - 3.2. **ITEMIZED INVOICES:** The County will pay the Contractor following the submission of itemized invoice(s). Each itemized invoice must bear a written certification by an authorized County representative confirming the services for which payment is requested.
 - 3.2.1. When submitting invoices for payment, vendors are to include the applicable Purchase Order number on the invoice.
 - 3.2.2. The Contractor must not submit any invoices until the Contractor has supplied the materials and/or services covered by the purchase order bearing the same number. If the vendor is unable to fulfill all of the purchase order, submit an itemized invoice for the portion of the order supplied, or service completed. Once the backordered/uncompleted portion of the purchase order is shipped/completed, a new invoice is required. Vendors are requested to submit invoice(s) within 30 days of delivery and/or date of service.
4. **DISCOUNTS:** Payment discount periods will be computed from the date of receipt of the material/service or correct invoice, whichever is later, to the date County's warrant is mailed. Unless freight and other charges are itemized, any discount provided will be taken on full amount of invoice. Payment discounts of twenty-one calendar days or more will be deducted from the Bid price in determining the low Bid. However, the County is entitled to take advantage of any payment discount offered by vendor provided payment is made within the discount period.
5. **WARRANTY:** Contractor warrants that all material or service delivered under this Contract must conform to the specifications of this Contract. Mere receipt of shipment of the material or service specified and any inspection incidental thereto by the County, must not alter or affect the obligations of the Contractor or the rights of the County under the foregoing warranties. Additional warranty requirements may be set forth in this document.
6. **CONTRACT MODIFICATIONS:** The Contract will only be modified by a written Contract Amendment signed by persons duly authorized to enter into contracts on behalf of the County and the Contractor. County's field representatives are not authorized to approve change orders and amendments affecting contract price or completion time. These must be approved by the Mohave County Board of Supervisors.
7. **INTERPRETATION OF QUANTITIES IN PROPOSAL:** When quantities appear in the Bid documents, they are approximate only. Payment to the Contractor will be made only in accordance with the lump sum Bid in the proposal.
8. **PROPOSAL GUARANTEE OR BID BOND**
 - 8.1. Each Proposal shall be accompanied by a Surety Bond, Cashiers' or certified check or postal money order equal to ten percent (10%) of the Bidder's total bid, made payable to the Mohave County Treasurer as a guarantee that, if the Work is awarded to the Contractor, the Contractor intends to enter into proper Contract and provide the proper Performance and Payment Bonds, and Certificates of Insurance and endorsements, and any other documents or information required of the Bidder which is deemed necessary by the Owner for the Owner to enter into proper Contract with the Bidder as Contractor, for the faithful performance of the Work.

- 8.2. Surety bonds 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. The surety bond shall not be executed by an individual surety or sureties. In addition, said company or companies shall be rated FSC VIII A- or better as required by the Owner, as currently listed in the most recent Best Key Guide, published by the A.M. Best Company.
- 8.3. Failure on the part of the Bidder to enter into a Contract and provide satisfactory Performance and Payment Bonds, Certificates of Insurance, and other required documents in a timely manner after the date of the Notice of Intent to Award letter shall be just cause for the cancellation of the award and the forfeiture of the Proposal Guarantee which shall become the property of the Owner, not as a penalty, but in liquidated damages, except to the extent that the applicable Laws permit a penalty. Bid Bonds submitted by unsuccessful Bidders will be returned after the successful Award of Contract, including the Owner and successful Bidder entering into a binding Contract with the Contractor; or upon rejection of all proposals by the Owner.

9. PERFORMANCE AND PAYMENT BONDS:

- 9.1. Within ten (10) days of Notice of Intent to Award and prior to commencing any construction activities, Contractor shall furnish Owner with an irrevocable security for the protection of all persons supplying labor and material to Contractor or any subcontractor for the performance of any work related to the Agreement. Payment security shall be in the amount of one hundred percent (100%) of the Contract amount and be payable to Mohave County. Payment security shall be in the form of a payment bond, as required by Arizona law. All payment bonds shall be executed on State of Arizona approved forms, duly executed by Contractor as Principal and having as Surety thereon a Surety company approved by Owner and holding a Certificate of Authority issued by the Arizona Department of Insurance to transact surety business in the State of Arizona. 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 this Agreement. The conditions and provisions of the bonds regarding the surety's obligation shall follow the form required under A.R.S. § 34-222; Subsection F. The cost of the bonds shall be included in the bid. Individual sureties are unacceptable. All Insurers and Sureties shall have at the time of submission of bonds a rating FSC VIII A- or better as currently listed in the most recent Best Key Guide, published by the A.M. Best Company.
- 9.2. 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 by law required, and Contractor shall require the attorney-in-fact who executes the required bond on behalf of the surety to affix thereto a certified and current copy of the Power of Attorney.
- 9.3. **Upon the request of any person or entity appearing to be a potential beneficiary of bonds covering payment of obligations arising under the Agreement, Contractor shall promptly furnish a copy of the bonds or shall permit a copy to be made.**

STANDARD TERMS AND CONDITIONS

1. DEFINITION OF KEY WORDS USED IN SOLICITATIONS:

- 1.1. Must, Will: Indicates a mandatory requirement. Failure to meet these mandatory requirements may result in the rejection of an Offer as non-responsive.
- 1.2. Should: Indicates something that is recommended but not mandatory. If the offeror fails to provide recommended information, the County may, at its sole option, ask the offeror to provide the information or evaluate the submittal without the information.
- 1.3. May: Indicates something that is not mandatory but permissible.
- 1.4. For purposes of this solicitation, the following definitions apply:
 - 1.4.1. Contractor, Company or Firm – Used interchangeably in referring to the organization offering materials or services to the County.
 - 1.4.2. Contract - The legal agreement executed between the County and the Contractor.
 - 1.4.3. County – Mohave County, Arizona, 86401
 - 1.4.4. County Project Manager, County Contract Manager, or County Contract Administrator - The County employee specifically designated as responsible for monitoring and overseeing the Contractor's performance under this Contract.
 - 1.4.5. Evaluation Committee – The committee established to formally evaluate proposals according to the evaluation criteria listed in a Solicitation.
 - 1.4.6. Joint Venture – Two or more persons or entities combining their property, money, skills, and knowledge to form a distinct legal entity to carry out a single business enterprise for profit, pursuant to a written agreement.
 - 1.4.7. Offer or Response – A general term for a Bid, Proposal, or Submittal in response to an Invitation for Bid, Request for Proposals, or Request for Qualifications, respectively.
 - 1.4.8. Offeror – The party making an Offer to Mohave County in response to a Solicitation. This term may refer to a Bidder responding to an Invitation for Bids or Proposer responding to a Request for Proposals.
 - 1.4.9. Procurement Director - The contracting authority for the County authorized to sign contracts and amendments thereto on behalf of the County.
 - 1.4.10. Solicitation – A general term for an Invitation for Bid, Request for Proposals, or Request for Qualifications issued by the County.

2. ACCEPTANCE: The Contractor acknowledges that all material or service delivered under this Contract must conform to the specifications of this Contract. Mere receipt of shipment of the material or service specified and any inspection incidental thereto by the County, will not alter or affect the obligations of the Contractor or the rights of the County under the foregoing warranties. Additional warranty requirements may be set forth in this document. All material and services provided under this Contract are subject to final inspection and acceptance by the County. Nonconforming material per the specifications of this Contract will be held at the Contractor's risk and may be returned to the Contractor. If nonconforming material is returned, the Contractor bears all responsibility for all costs associated with original delivery and return. If a service is deemed nonconforming, the Contractor bears responsibility for all costs associated with providing the service. Noncompliance is subject to STANDARD TERMS AND CONDITION, "TERMINATION OF CONTRACT."

3. ADDITIONAL COMPENSATION: The Contractor must submit a written proposal to the County's Designated Representative and secure the County's written approval of same prior to the performance by the Contractor of any work for which additional compensation will be requested.

- 3.1. Without the prior written approval of the proposed work and the fee therefor, the County will not consider payment of any sums other than those already set forth under this Contract.
4. **ADVERTISING:** Contractor must not advertise or publish information concerning this Contract without prior written consent of the County.
5. **AMERICANS WITH DISABILITIES ACT:** The Contractor must comply with all applicable provisions of the Americans with Disabilities Act, Public Law 101-336, 42 U.S.C. 12101-12213, and applicable federal regulations under the Act.
6. **APPLICABLE LAW:** This Contract is governed by the law of the State of Arizona, and suits pertaining to this Contract must be brought only in Federal or State courts in the State of Arizona.
7. **ARBITRATION:** It is understood and agreed that no provision of this Contract relating to arbitration or requiring arbitration will apply to or be binding upon the County except by the County's express written consent given subsequent to the execution of the Contract. However, if both parties agree, disputes may be resolved through arbitration. The dispute must be resolved as provided for in A.R.S. Sec. 12-1501, et seq. The Contractor must continue to render the services required by this Contract without interruption, notwithstanding the provisions of this section.
8. **ASSIGNMENT – DELEGATION:** No right or interest in this Contract is assignable in whole or in part without the written consent of the parties hereto, and no delegation of any duty of the Contractor will be made without prior written permission of the County's Procurement Director. This Contract and all of the terms, conditions and provisions herein, extend to and bind upon the heirs, administrators, executors, successors, and assignees of the parties hereto. The County will not unreasonably withhold approval of assignment and will notify the Contractor of the County's position within fifteen (15) days of receipt of written notice by the Contractor.
9. **BUSINESS LICENSES AND PERMITS:** The Contractor must maintain in current status all Federal, State, and local registrations, licenses and permits required for the operation of the business conducted by the Contractor as applicable to this Contract.
10. **CERTIFICATION:** By providing an authorized signature in the offer section of the Offer and Acceptance page, the Offeror certifies:
- 10.1. The submission of the Offer did not involve collusion or other anti-competitive practices.
- 10.2. The Contractor must not discriminate against any employee or applicant for employment in violation of Federal Executive Order 11246, or A.R.S. § 41-1461, et seq.
- 10.3. The Contractor has not given, offered to give, nor intends to give at any time hereafter, any economic opportunity, future employment, gift, loan, gratuity, special discount, trip, favor, or service to a public servant in connection with the submitted offer.
- 10.4. The Contractor submitting the Offer hereby certifies that the individual signing the proposal is an authorized agent for the Offeror and has the authority to bind the Offeror to the contract.
- 10.5. The Contractor certifies that, to the best knowledge and belief of the Contractor, the Contractor is not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any federal, state, or local government.
11. **CONFIDENTIALITY OF RECORDS:** The Contractor must establish and maintain procedures and controls that are acceptable to the County for the purpose of assuring that no information contained in its records or obtained from the County or from others in carrying out its functions under the Contract will be used by or disclosed by it, its agents, officers, or employees, except as required to efficiently perform duties under the Contract. Persons requesting such information should be referred to the County. The Contractor also agrees that any information pertaining to individual persons must not be divulged other than to employees or officers of Contractor as needed for the performance of duties under the Contract, unless otherwise agreed to in writing by the County.

- 12. CONTINUITY:** The Contractor must maintain all pertinent files, records, and documents which relate to the delivery of materials or services provided in this Contract. Supporting documents, files, and records must be retained by the Contractor for five (5) years after the termination of this Contract.
- 13. CONTRACT:** The Contract will be based upon the Solicitation issued by the County, the Offer submitted by the Contractor in response to the Solicitation, and any negotiations entered into and changes agreed upon by both parties. The Offer must substantially conform to the terms, conditions, specifications and other requirements set forth within the Solicitation. The County reserves the right to clarify any contractual terms with the concurrence of the Contractor; however, any substantial non-conformity in the offer, as determined by the County's Procurement Director, may be deemed non-responsive and the Offer rejected. The Contract will contain the entire agreement between the County and the Contractor relating to this requirement and prevails over any and all previous agreements, contracts, proposals, negotiations, purchase orders, or master agreements in any form.
- 14. CONTRACT AMENDMENTS:** This Contract may be modified only by a written contract amendment approved and signed by the County Board of Supervisors or by the Procurement Director per the Mohave County Procurement Code or any other relevant resolution approved by the Board of Supervisors.
- 15. COST OF PROPOSAL PREPARATION:** The County will not reimburse the cost of developing, presenting, or providing any response to a Solicitation, except as required by statute. Offers submitted for consideration should be prepared simply and economically, providing adequate information in a straightforward and concise manner.
- 16. DEFAULT IN ONE INSTALLMENT TO CONSTITUTE TOTAL BREACH:** The Contractor must deliver conforming materials in each installment or lot of this contract and may not substitute nonconforming materials. Delivery of nonconforming materials or a default of any nature, at the option of the County, will constitute breach of the contract as a whole. Noncompliance is subject to STANDARD TERMS AND CONDITIONS, "TERMINATION OF CONTRACT."
- 17. EXCLUSIVE POSSESSION:** All work of authorship, including but not limited to calculations, designs, drawings, specifications, graphics, text, and all copy writable works resulting from this Contract will become property of the County. Additionally, all services, information, computer program elements, reports, plans, specifications, and other deliverables which may be created under this Contract are the sole property of the County. Property of the County must not be used or released by the Contractor or any other person except with prior written permission from the County.
- 18. FORCE MAJEURE:** Except for payment of sums due, neither party is liable to the other nor deemed in default under this Contract if and to the extent that such party's performance of this Contract is prevented by reason of Force Majeure. The term "Force Majeure" means a major occurrence that is beyond the control of the party affected and occurs without its fault or negligence. Force Majeure will not include late performance by a subcontractor unless the delay arises out of a Force Majeure occurrence in accordance with this Force Majeure term and condition.
- 18.1. If either party is delayed at any time in the progress of the work by Force Majeure, the delayed party must immediately notify the other party in writing of such a delay at the commencement thereof, and further specify the causes of the delay in the notice. Such notice must be hand-delivered, mailed certified-return receipt, or emailed and must make a specific reference to this article, thereby invoking its provisions. The delayed party must make all reasonable efforts to overcome conditions causing delay as soon as practicable and must notify the other party in writing when it has done so. The time of completion will be extended by contract modification for a period of time equal to the time required to overcome the Force Majeure or the time required to overcome the effects of the Force Majeure that delayed the party from performing in accordance with this Contract.
- 19. GRATUITIES:** The County may, by written notice to the Contractor, cancel this Contract if it is found that gratuities, in the form of entertainment, gifts or otherwise, were offered or given by the Contractor or any agent or representative of the Contractor, to any officer or employee of the County. In the event this Contract is canceled by the County pursuant to this provision, the County is entitled, in addition to any other rights and remedies, to recover or withhold from the Contractor the amount of the gratuity.

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

The scope of this indemnity will not be limited by the Insurance Requirements contained herein.

21. INDEPENDENT CONSULTANT: Each party will act in its individual capacity and not as an agent, employee, partner, joint venturer, or associate of the other. An employee or agent of one party will not be deemed or construed to be the employee or agent of the other party for any purpose whatsoever.

21.1. The Contractor is not entitled to compensation in the form of salaries, paid vacation, or sick days by the County. Such days do not accumulate for the Contractor's use at a later date.

21.2. The County will not provide any insurance coverage to the Contractor, including Worker's Compensation coverage. The Contractor is advised that taxes or social security payments will not be withheld from a County payment issued hereunder and that Contractor should make arrangements to directly pay such expenses, if any.

22. INTERPRETATION - PAROL EVIDENCE: This Contract is intended by the parties to be the final expression of their agreement and is intended also as a complete and exclusive statement of the terms of the agreement. No course of prior dealings between the parties and no usage of the trade is relevant to supplement or explain any term used in this Contract. Acceptance or acquiescence in a course of performance rendered under this Contract is not relevant to determine the meaning of this Contract even though the accepting or acquiescing party has knowledge of the nature of the performance and opportunity to object.

23. ISRAEL BOYCOTT CERTIFICATION: Written Certification Pursuant to A.R.S. § 35-393.01. If VENDOR engages in for-profit activity and has 10 or more employees, and if this Agreement has a value of \$100,000 or more, VENDOR certifies it is not currently engaged in, and agrees for the duration of this Agreement to not engage in, a boycott of goods or services from Israel. This certification does not apply to a boycott prohibited by 50 U.S.C. § 4842 or a regulation issued pursuant to 50 U.S.C. § 4842.

24. LEGAL REMEDIES: All claims and controversies regarding this Contract are subject to the Mohave County Procurement Code and any applicable Arizona Revised Statutes.

25. LICENSES: The Contractor must maintain in current status all Federal, State, and local licenses and permits required for the operation of the business conducted by the Contractor as applicable to this Contract.

26. LIENS: All materials, services, and other deliverables supplied to the County under this Contract must be free of all liens other than the security interest held by the Contractor until payment in full is made by the County. Upon request of the County, the Contractor must provide a formal release of all liens.

- 27. MOHAVE COUNTY SEAL USE:** Pursuant to A.R.S. §11-251.17, a firm or individual is not permitted to use, display or otherwise employ a copy or other resemblance of the Mohave County seal without obtaining approval from Mohave County Board of Supervisors.
- 28. NON-EXCLUSIVE CONTRACT:** Any contract resulting from this Solicitation will be awarded with the understanding and agreement that it is for the sole convenience of Mohave County. The County reserves the right to obtain like goods or services from another source when necessary.
- 29. PATENT INFRINGEMENT:** The County will advise the Contractor of any impending patent suit and provide all information available. The Contractor must defend any suit or proceeding brought against the County based on a claim that any equipment, or any part thereof, furnished under this contract constitutes an infringement of any patent, and the Contractor must pay all damages and costs awarded therein, excluding incidental and consequential damages, against the County. In case said equipment, or any part thereof, is in such suit held to constitute infringement and use of said equipment or part is enjoined, the Contractor must, at its own expense and at its option, provide for the County either the right to continue using said equipment or part, replacement non-infringing equipment, or modification to the infringing equipment that renders it non-infringing.
- 30. PROJECT COMPLIANCE:** It is the Contractor's sole responsibility to comply with all applicable Federal, State, and Local regulations. At a minimum, the project, materials, or services provided under this Contract must comply with all applicable Federal, State, and Local regulations and any amendments thereto that are adopted during the life of this Contract.
- 31. PROTECTION OF GOVERNMENT BUILDINGS:** The Contractor must use reasonable care to avoid damaging existing buildings, equipment, and vegetation (such as trees, shrubs, and grass) on County property. If the Contractor fails to do so and damages such buildings, equipment and vegetation, the Contractor must replace or repair the damage at no expense to the County, in coordination with County staff and as approved by the Procurement Director. If the Contractor fails to or refuses to make such repair or replacement, the Contractor is liable for the cost thereof, which may be deducted from the contract price.
- 32. PROTEST PROCEDURE:** Should an Offeror believe that the County has not properly followed the selection procedures as outlined in the Mohave County Procurement Code, the firm may file a protest as described in the Mohave County Procurement Code.
- 32.1. A protest must be submitted in writing and will be filed with the Procurement Director. A protest of a Solicitation must be received at the Procurement Office before the solicitation opening date. A protest of a proposed award or of an award must be filed within ten (10) days after the protestor knows or should have known the basis of the protest. A protest must include:
- 32.1.1. The name, address, and telephone number of the protestor;
 - 32.1.2. The signature of the protestor or its representative;
 - 32.1.3. Identification of the solicitation number;
 - 32.1.4. A detailed statement of the legal and factual grounds of protest including copies of relevant documents.
- 33. PROVISIONS REQUIRED BY LAW:** Each and every provision of law and any clause required by law to be included in this Contract is read and enforced as though it were included herein. If through mistake or otherwise any such provision is not inserted, or is not correctly inserted, then upon the application of either party the Contract must forthwith be physically amended to make such insertion or correction.
- 34. PUBLIC HEARINGS:** The Contractor must, upon request, attend any public hearing on matters related to the scope of services set forth in this Contract.
- 35. PUBLIC RECORD:** All Offers submitted in response to this Solicitation become the property of the County and become a matter of public record available for review subsequent to award. Any information or materials deemed proprietary must be specifically designated as such and may be maintained as a confidential record at the discretion of the County.

- 36. RECORDS:** Internal control over all financial transactions related to this Contract must be in accordance with sound fiscal policies. The County may, at reasonable times and places, audit the books and records of Contractor or any and all of Contractor's subcontractors. Said audit will be limited to this Contract and its scope of services.
- 37. RELATIONSHIP OF PARTIES:** It is clearly understood that each party acts in its individual capacity and not as an agent, employee, partner, joint venture, or associate of the other. An employee or agent of one party will not be deemed or construed to be the employee or agent of the other party for any purpose whatsoever. The Contractor is advised that taxes or social security payments will not be withheld from a County payment issued hereunder and that Contractor should make arrangements to directly pay such expenses, if any.
- 38. RIGHT TO ASSURANCE:** Whenever one party to this Contract in good faith has reason to question the other party's intent to perform, the former party may demand that the other party give a written assurance of this intent to perform. In the event that a demand is made and no written assurance is given within five (5) days, the demanding party may treat this failure as an anticipatory repudiation with this Contract.
- 39. RIGHT TO INSPECT:** The County may, at reasonable times, and at the County's expense, inspect the place of business of a Contractor or subcontractor which is related to the performance of any contract as awarded or to be awarded.
- 40. RIGHTS AND REMEDIES:** No provision in this document or in the Offer will be construed, expressly or by implication, as a waiver by either party of any existing or future right or remedy available by law to seek the cure of any claim, default, or breach of contract. The failure of either party to insist upon the strict performance of any term or condition of the Contract or delay the exercise of any right or remedy provided in the Contract or by law will not be deemed a waiver to such rights or remedies. Furthermore, the acceptance of materials or services and delivery of obligations imposed by this Contract or by law does not constitute a waiver of any right or remedy provided by this Contract or by law, nor will such an act constitute a waiver of any right of either party to insist upon the strict performance of the Contract.
- 41. SEVERABILITY:** The provisions of this Contract are severable at the sole discretion of the County to the extent that any provision or application held to be invalid will not affect any other provision or application of the Contract which may remain in effect without the invalid provision or application.
- 42. SHIPMENT UNDER RESERVATION PROHIBITED:** The Contractor is not authorized to ship materials under reservation and no tender of a bill of lading will operate as a tender of the materials. Noncompliance will be subject to **STANDARD TERMS AND CONDITIONS, "TERMINATION OF CONTRACT."**
- 43. SUBCONTRACTS:** No subcontract will be entered into by the Contractor with any other party to furnish any of the materials or services specified herein without the advance written approval of the County's Procurement Director. All subcontracts must comply with Federal and State laws and regulations which are applicable to the services covered by the subcontract and must include all the terms and conditions set forth herein which will apply with equal force to the subcontract, as if the subcontractor were the Contractor referred to herein. The Contractor is responsible for contract performance whether or not subcontractors are employed. The County will not unreasonably withhold approval and will notify the Contractor of the County's position within fifteen (15) days of receipt of written notice by the Contractor.
- 44. SUBSEQUENT EMPLOYMENT:** The County may terminate this Contract pursuant to A.R.S. Section 38-511 without penalty or further obligation if any person significantly involved in initiating, negotiating, securing, drafting, or creating the Contract, on behalf of the County is or becomes, at any time while the Contract or any extension of the Contract is in effect, an employee of, or a Contractor to any other party to this Contract with respect to the subject matter of the Contract. Such cancellation takes effect when written notice from the Procurement Director is received by the parties to this Contract, unless the notice specifies a later time.
- 45. SUSPENSION OF WORK:** The County may order the Contractor, in writing, to suspend, delay, or interrupt all or any part of the work under this Contract for the period of time that the County determines appropriate for the convenience of the County.

45.1. The Contractor agrees that no charges or claims for damages will be made against the County for any delays or hindrances during the progress of this Contract. Such delays or hindrances, if any will be covered by an extension of time for such reasonable period as mutually agreed upon between the parties. It is agreed and understood, however, that permission to proceed with the Contract after the established completion date, will not be construed as a waiver by the County of any of the rights herein.

46. TERMINATION OF CONTRACT: Unless otherwise specifically provided herein, this contract may be terminated at any time by mutual written consent. The County may, with or without cause, terminate this Contract in whole or in part upon giving thirty (30) days written notice to the Contractor. If this contract is terminated, the County will be liable only for payment under the payment provisions of this contract for services rendered and materials accepted by the County before the effective date of termination, unless the subject items are nonconforming. If the materials or services for which the County would otherwise be liable to pay are nonconforming, STANDARD TERMS AND CONDITIONS, "ACCEPTANCE" governs.

46.1. The County may terminate this Contract in whole or, from time to time, in part, for the County's convenience or because of the failure of the Contractor to fulfill the Contract obligations. Upon receipt of the notice of termination, the Contractor must:

46.1.1. Immediately discontinue all services affected (unless the notice directs otherwise), and

46.1.2. Deliver to the Department of Procurement all data, drawings, specifications, reports, estimates, summaries, and other information and materials accumulated in performing this Contract, whether completed or in process.

46.2. If the termination is for the convenience of the County, the County will make an equitable adjustment in the contract price but will allow no anticipated profit on unperformed services.

46.3. If the termination is for failure of the Contractor to fulfill the contract obligations, the County may complete the work by contract or otherwise, and the Contractor is liable for any additional cost incurred by the County.

46.4. If, after termination for failure to fulfill contract obligations, it is determined that the Contractor has not failed, the rights and obligations of the parties are the same as if the termination had been issued for the convenience of the County.

46.5. The rights and remedies of the County provided in this clause are in addition to any other rights or remedies provided by law or under this Contract.

46.6. Each payment obligation of the County created hereby is conditioned upon the availability of County, State and Federal funds which are appropriated or allocated for the payment of such an obligation. If funds are not allocated by the County and available for the continuance of service herein contemplated, the contract period for the service may be terminated by the County at the end of the period for which funds are available. The County will notify Contractor at the earliest possible time which service will or may be affected by a shortage of funds. No penalty will accrue to the County in the event this provision is exercised, and the County will not be obligated or liable for any future payments due or for any damages as a result of termination under this paragraph.

47. TIME RECORDS: The Contractor must maintain complete, current and daily records covering all hours actually worked on this project by each employee. The County reserves the right to audit and examine such records at any time during the progress of this Contract. The County may withhold payment if such documentation is found by the County to be incomplete or erroneous.

48. TITLE AND RISK OF LOSS: The title and risk of loss of material or services will not pass to the County until the County actually receives the material or services at the point of delivery, unless otherwise provided within this Contract.

49. WARRANTIES: Contractor warrants that all material or service delivered under this Contract will conform to the specifications of this Contract. Mere receipt of shipment of the material or service specified, and any inspection incidental thereto by the County, does not alter or affect the obligations of the Contractor or the

rights of the County under the foregoing warranties. Additional warranty requirements may be set forth in this Contract.

50. WRITTEN CERTIFICATION PURSUANT TO A.R.S. §35-394: Contractor certifies that Contractor does not currently, and agrees for the duration of the contract that it will not, use: 1) the forced labor of ethnic Uyghurs in the People's Republic of China; 2) any goods or services produced by the forced labor of ethnic Uyghurs in the People's Republic of China; and 3) 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. If Contractor becomes aware during the term of the contract that the company is not in compliance with the written certification, the company shall notify Mohave County within five business days after becoming aware of the noncompliance. If the Company does not provide Mohave County with a written certification that the Company has remedied the noncompliance within 180 days after notifying Mohave County of the noncompliance, this Contract terminates, except that if the contract termination date occurs before the end of the remedy period the Contract terminations on the Contract termination date.

GENERAL CONDITIONS

SECTION 101

ABBREVIATIONS AND DEFINITIONS

101.1 ABBREVIATIONS:

Wherever the following abbreviations are used in these specifications, standard details or on the plans, they are to be construed the same as the respective expressions represented.

AASHTO	American Association of State Highway and Transportation Officials
AB	Aggregate Base
ABC	Aggregate Base Course
AC	Asphalt Cement or Concrete
ACB	Asphalt Concrete Base
ACI	American Concrete Institute
ACP	Asbestos Cement Pipe
ACPA	American Concrete Pipe Association
ACWS	Asphalt Concrete Wearing Surface
AGC	Associated General Contractors of America, Inc.
ADOT	Arizona Department of Transportation
Ahd	Ahead
AIA	American Institute of Architects
AIEE	American Institute of Electrical Engineers
AISC	American Institute of Steel Construction
ANSI	American National Standards Institute
APA	American Plywood Association
Approx	Approximate
APWA	American Public Works Association
AR	Aged Residue
ARS	Arizona Revised Statutes
ASCE	American Society of Civil Engineers
ASME	American Society of Mechanical Engineers
Asph	Asphalt
ASTM	American Society for Testing Materials
Ave	Avenue
AWPA	American Wood Preservers Association
AWSC	American Welding Society Code
AWWA	American Water Works Association
Bbl	Barrel
BC	Beginning of Curve
BCR	Beginning of Curb Return
BFE	Base Flood Elevation
Beg	Beginning
Bk	Book or Back
Bldv	Boulevard
BM	Bench Mark or Board Measure
Brg	Bearing
BST	Bituminous Surface Treatment
BTB	Bituminous Treated Base
BVC	Beginning of Vertical Curve
C	Celsius or Curb
CB	Catch Basin
CBF&C	Catch Basin Frame & Cover
CC or C/C	Center to Center
CE	City or County Engineer
Cem	Cement
CF	Curb Face
CIP	Cast Iron Pipe

CIPP	Cast-in-Place Concrete Pipe
CL or C	Centerline
cm	Centimeter
CMP	Corrugated Metal Pipe
CO	Clean Out
Col	Column
Conc	Concrete
Const	Construct
CP	Concrete Pipe (Non-reinforced)
CTB	Cement Treated Base
Cu	Cubic
Deg	Degree
DF	Douglas Fir
DG	Decomposed Granite
Dia	Diameter
Dim	Dimension
DIP	Ductile Iron Pipe
Div	Division
Dr	Drive
Drwg	Drawing
Dwy	Driveway
Ea	Each
Ease	Easement
E	East
EC	End of Curve
ECR	End of Curb Return
El or Elv	Elevation
Equa or Eq	Equation
EVC	End of Vertical Curve
Ex or Exist	Existing
FB	Field Book
F & C	Frame & Cover
FH	Fire Hydrant
FF	Finished Floor Elevation
FL or F	Floor Line or Flow Line
FI El	Floor Elevation
Fnd	Found
FS	Finished Surface
FSS	Federal Specifications and Standards
G	Gutter
Ga	Gage
Galv	Galvanized
GL	Ground line
GLO	General Land Office
Gr	Grade
H	High or Height
h	Hour
HC	House Connection
Hdwl	Headwall
Horiz	Horizontal
Hwy	Highway
Hz	Hertz
ICA	Industrial Commission of Arizona
ID	Improvement District or Inside Diameter
IE	Invert Elevation
IEEE	Institute of Electrical and Electronic Engineers

Inv	Invert
IP	Iron Pipe
IPS	Iron Pipe Size
Irrig	Irrigation
Jt	Joint
JC	Junction Chamber
Jct	Junction
JS	Junction Structure
Kw	Kilowatt
L	Length
L&T	Lead and Tack
LD	Local Depression
LH	Lamp Hole
Lin	Linear
Long	Longitudinal
Lt	Left
M	Map or Maps
Max	Maximum
MCPW	Mohave County Public Works
MCR	Mohave County Records
Meas	Measured
MH	Manhole
MHF&C	Manhole Frame and Cover
Min	Minutes or minimum
Misc	Miscellaneous
ML or M	Monument Line
Mon	Monolithic or Monument
MTD	Multiple Tile Duct
N	North
NBS	National Bureau of Standards
NCPI	National Clay Pipe Institute
NE	Northeast
NEC	National Electric Code
NEMA	National Electrical Manufacturer's Association
NFPA	National Fire Protection Association
NP	Non-Plastic
NPI	Non Pay item
NSC	National Safety Council
NSF	National Sanitation Foundation
NW	Northwest
No	Number
OC	On Center
OD	Outside Diameter
P.C.	Point of Curvature
PCC	Point of Compound Curve or Portland Cement Concrete
PI	Point of Intersection or Plastic Index
PL	Property Line
POC	Point of Curve
POS	Point of Spiral
PP	Power Pole
ppm	Parts per Million
PRC	Point of Reverse Curve
Prod	Produced
Prop	Proposed or Property

PT or POT	Point of Tangent
P&TP	Power and Telephone Pole
Pvmt	Pavement
Q	Rate of Flow
R	Radius
RC	Reinforced Concrete
RCP	Reinforced Concrete Pipe
Rd	Road
Rdwy	Roadway
Reinf	Reinforced, Reinforcing
Ret Wall	Retaining Wall
RGRCP	Rubber Gasket Reinforced Concrete Pipe
rpm	Revolutions Per Minute
Rt	Right
R/W	Right-of-way
S	South or Slope
SAE	Society of Automotive Engineers
San	Sanitary
SC	Spiral to Curve
SCCP	Steel Cylinder Concrete Pipe
SD	Storm Drain or Sewer District
Sdl	Saddle
s	Seconds
Sect	Section
SE	Southeast
Sht	Sheet
Spec	Specifications
SPR	Simplified Practice Recommendation
Sp MH	Special Manhole
SS	Sanitary Sewer
St	Street
Sta	Station
Std	Standard
Str gr	Structural Grade
Struct	Structure or Structural
SW	Southwest
T	Tangent Distance
Tel	Telephone
Temp	Temporary
TH	Test Hole
TP	Telephone pole
Tr	Tract
Trans	Transition
TS	Traffic Signal or Tangent to Spiral
TSC	Traffic Signal Conduit
Typ	Typical
UL	Underwriters' Laboratories Inc.
USC & GS	United States Coast and Geodetic Survey
USGS	United States Geological Survey
V	Velocity of Flow
VC	Vertical Curve
VCP	Vitrified Clay Pipe
Vert	Vertical
W	West or Width

WI Wrought Iron
WS Wearing Surface
Wt Weight

° Degrees
% Percent
Number
@ At
/ Per
= Equals
' Minutes
" Seconds

101.2 DEFINITIONS AND TERMS:

Whenever in these General Conditions, Specifications or in other Contract Documents the following terms or pronouns in place of them are used, the intent and meaning shall be interpreted as follows:

Acceptance: Activities performed by the owner, or its designated representative, to determine the quality and acceptability of the materials and workmanship incorporated in a project.

Addendum: A supplement to any of the Bid Documents issued, in writing, after advertisement of but prior to the opening of bids for a Contract.

Architect: The individual or firm who has accomplished the architectural services for the Project, including his representatives.

Award: The formal action by the Mohave County Public Works Department of accepting a proposal.

Bidder: Any qualified individual, firm, partnership, corporation or combination thereof, acting directly or through a duly authorized representative who legally submits a proposal for the advertised Work.

Bid Documents: The integral documents necessary for and pertinent to the preparation of the proposal which are referenced in and shall become a part of the Contract as Contract Documents, and which may include but may not be limited to, Call for Bids, General Conditions, Special Conditions, Plans, Standard Specifications, Standard Details, Special Provisions, Proposal, Addenda, and Sample Contract.

Board of Directors: The Mohave County Board of Supervisors.

Bridge: A structure, including supports, erected over a depression or an obstruction, as water, highway or railway and having a track or passageway for carrying traffic or other moving loads and having opening measured along the center of the roadway of more than twenty (20) feet between under copings of abutments or extreme ends of openings for multiple boxes.

Bridge Length: The greater dimension of a structure measured along the center of the roadway between the backs of abutment back walls or between ends of bridge floor.

Bridge Roadway Width: The clear width of structure measured at right angles to the center of the roadway between the bottom of curbs or, if curbs are not used, between the inner faces of parapet or railing.

Substructure: All that part of a structure below the bearings of simple and continuous spans, skewbacks of arches and top of footings of rigid frames; excluding back walls, wing walls and wing protection railings.

Superstructure: All that part of a structure above the bearings of simple and continuous spans, skewbacks of arches and top of footings of rigid frames; excluding back walls, wing walls and wing protection railings.

Building: Any structure built for the support, shelter, or enclosure of persons, animals, chattel or movable property.

Building Code: The regulations adopted by Mohave County establishing minimum standards of construction for the protection of the public health, safety, and welfare in terms of measured performance rather than in terms of rigid specification of materials and methods.

Calendar Day: Any and Everyday shown on the calendar, beginning at midnight and ending at midnight of the next day.

Call for Bids: or otherwise referred to as Request for Bids, Advertisement for Bids, or Invitation for Bids, which invites proposals or bids for a particular Project or Projects.

“Careful and prudent manner” when referring to Work near underground facilities means conducting excavation in such a way that when it approaches within two (2) feet of the underground facility located and marked by the owner or operator, by stakes, paint or in some customary manner, the exact location is manually determined, and the uncovered facility is supported and protected.

Change Order: A written order issued by the Owner to the Contractor to make changes in the Work or to perform extra Work, and setting forth conditions for payment and/or adjustment in time of completion.

Completion Times: The number of calendar days for Substantial Completion of the Contract, including authorized time extensions. In case a calendar date of completion is shown in the proposal in lieu of the number of calendar days, the Contract shall be completed by that date.

Conflicting Utility: An existing utility, shown or not shown on the plans is conflicting when any part of the utility falls within the dimensions of the new installation, such that it would be in physical contact with the new installation.

Construction Project: The erection, installation, remodeling, alteration, of durable facilities upon, under, or over the ground. This shall include, but is not limited to buildings, roadways and utility pipes, lines, poles or other structures.

Contract: The written instrument executed by the Contractor and Mohave County Public Works Department, the Owner, by which the Contractor is bound to furnish all labor, equipment, and materials and to perform the Work specified, and by which the Mohave County Public Works Department, the Owner, is obligated to compensate the Contractor therefore at the prices set forth therein. The Bid Documents are herewith by reference made a part of the Contract as if fully set forth therein.

Contract Documents: The integral documents, including the Bid Documents, which are referenced in and shall become a part of the Contract, and may include but may not be limited to, Call for Bids, General Conditions, Special Conditions, Plans, Standard Specifications, Standard Details, Special Provisions, Proposal, Addenda, Certificates of Insurance, Ordinance, Contract, and Change Orders.

Contractor: The individual, firm, partnership, corporation or combination thereof entering into a Contract with the Mohave County Public Works Department, the Owner, to perform the advertised Work.

County: Mohave County, a body politic and corporate organized and existing under and by virtue of the laws of the State of Arizona.

District Clerk: or otherwise known as the Clerk of the Mohave County Board of Supervisors, being duly authorized to perform the duties of clerk for the Mohave County Board of Supervisors.

Culvert: Any structure not classified as a bridge, which provides an opening under or adjacent to the roadway.

Days: Unless otherwise designated, days will be understood to mean calendar days.

Emergency: Unforeseen occurrences and combinations of circumstances involving the public welfare or the protection of Work already done under the Contract Documents, or which endanger life or property and call for immediate action or remedy.

Engineer: The person appointed as County Engineer by the Board of Supervisors acting directly or through his duly authorized representative(s).

Equipment: (Construction) - All machinery and equipment, together with the necessary supplies for upkeep and maintenance, and also tools and apparatus necessary for the proper construction and acceptable completion of Work. (Installed) - All material or articles used in equipping a facility as furnishings or apparatus to fulfill a functional design.

Flooding: Flooding will consist of the inundation of the entire lift with water, puddled with poles or bars to insure saturation of the entire lift.

Foundation: For buildings or structures, this will be the substructure. For pipe this will be the native material or prepared material on which the pipe rests; normally, this is the bottom grade line of the trench.

Full Depth Pavement: An asphalt concrete pavement structure in which the granular base and subbase are replaced by proportionate thicknesses of asphalt concrete.

Inspector: The Engineer's authorized representative assigned to make detailed inspections of Contract performance.

Laboratory: The established materials testing laboratory of the Owner's Engineering Department, or other laboratories acceptable to and/or authorized by the Engineer to test materials and Work involved in the Contract.

Major Item: Any item of Work and/or materials having an original Contract value which exceeds ten percent (10%) of the amount of the original Contract.

Materials: Any substance specified in the Project, equipment and other material used or consumed in the performance of the Work.

Median: The portion of a divided highway separating the roadways used by traffic going in opposite directions.

Non Pay Item: An item of Work which may or may not be specifically called for in the Contract Documents but which is essential for the proper performance of the Work, and for which no separate payment will be made under the proposal, but which cost must be included as an incidental to the bid item(s) in the Proposal.

Notice of Award: A letter from the Engineer (Owner) advising the Contractor that he is the successful bidder and the Board of Supervisors (Owner) has accepted his proposal.

Notice to Proceed: A directive issued by the Engineer (Owner), authorizing the Contractor to start the Work or improvements required in the Contract.

Open Trench: The excavated area shall be considered as open trench until all the aggregate base course for pavement replacement has been placed and compacted or, if outside of a pavement area, until the excavated area is brought to finish grade or natural grade.

Owner: Mohave County Public Works Department, organized and existing under and by virtue of the laws of the State of Arizona, and acting through its legally constituted Board, officials, officers or employees and with whom the Contractor has Contracted for the performance of the Work and for whom the Work is being performed.

Pavement: Any surfacing of streets, alleys, sidewalks, courts, driveways, etc., consisting of mineral aggregate bound into a rigid or semi-rigid mass by a suitable binder such as, but not limited to, Portland cement or asphalt cement.

Pavement Structure: The combination of subbase, base course, and surface course placed on a subgrade to support the traffic load and distribute it to the roadbed.

Pay Item: A detail of Work for which separate payments are to be made under the Contract, as specified in the proposal.

Payment Bond: The security provided by the Contractor solely for the protection of claimants, supplying labor and materials to the Contractor or his Subcontractors.

Performance Bond: The security provided by the Contractor solely for the protection of the Owner and conditioned upon the faithful performance of the Contract in accordance with the plans, specifications and conditions thereof.

Permit: The written approval or permission granted by Mohave County to allow a Contractor or utility company to work within a public right-of-way or easement or for an individual to access personal property.

Plans: All drawings or reproductions thereof prepared, provided or approved by the County Engineer pertaining to the Work and details therefore, which are made a part of the Contract Documents.

Plant: The Contractor's and/or Subcontractor's facilities, including but not limited to small tools and mobile equipment, located on and/or offsite, necessary for preparation of materials and prosecution of Work for the Project.

Principal: The individual, firm or corporation primarily liable on an obligation, as distinguished from a surety.

Profile Grade: The trace of a vertical plane intersecting the surface of and designating the vertical alignment of a road, channel, ditch, or other such construction being described, usually along its longitudinal centerline.

Project: A specific coordinated construction or similar undertaking usually identified by a single Project number and bid and awarded as one Contract. On occasion two or more Projects may be bid and awarded as a single Contract.

Proposal: Or otherwise referred to as Bid or Bid Proposal, being the offer of a bidder on the prescribed form, to perform the Work and to furnish the labor and materials at the prices quoted.

Proposal Form: The approved form on which the Owner requires bids to be prepared and submitted for the Work.

Proposal Guarantee: Or otherwise referred to as Bid Bond, being the security furnished with a bid to guarantee that the bidder will enter into the Contract if his bid is accepted and to provide, certificates of insurance, and any other required documents and information within the time prescribed.

Proposal Pamphlet: the book or pamphlet pertaining to a specific Project, containing the Bid Documents and any other information necessary for and pertinent to the preparation of the proposal.

Quality Assurance: All those planned and systematic activities necessary to provide adequate confidence that the work satisfies the given requirements for quality.

Quality Control: Contractor or supplier techniques and activities that are performed or conducted to fulfill the contract requirements.

Referred Documents: On all Work authorized by the Owner, any referenced documents in the specification, i.e.: Bulletins, Standards, Rules, Methods of Analysis or test. Codes and Specifications of other Agencies, Engineering Societies or Industrial Associations, refer to the Latest Edition thereof, including Amendments, which are in effect and published at the time of Advertising for Bids or the issuing of a permit for the Work, unless otherwise stated.

Right-of-way: A general term denoting land, property, or interest therein, usually in a strip, acquired for or devoted to a street, highway, drainage way, or other public improvement.

Road: A general term denoting a public way for purposes of vehicular travel, including the entire area within the right-of-way or roadway easement.

Roadside: A general term denoting the area adjoining the outer edge of the roadway. Extensive areas between the roadways of a divided highway may also be considered roadside.

Roadside Development: Those items necessary to the complete roadway which provide for the preservation of landscape materials and features; the rehabilitation and protection against erosion of all areas disturbed by construction through seeding, sodding, mulching and the placing of other ground covers; such suitable planting and other improvements as may increase the effectiveness and enhance the appearance of the roadway.

Roadway: The portion of the right-of-way intended primarily for vehicular traffic, and including all appurtenant structures and other features necessary for proper drainage and protection. Where curbs exist, it is that portion of roadway between the faces of the curbs.

Sewers: Conduits and related appurtenances employed to collect and carry off water and waste matter to a suitable point of final discharge.

Shop Drawings: Drawings or reproduction of drawings, detailing; fabrication and erection of structural elements, falsework and forming for structures, fabrication of reinforcing steel, installed equipment and installation of systems, or any other supplementary plans or similar data, which the Contractor is required to submit for approval.

Shoulder: The portion of the roadway contiguous with the traveled way for accommodation of stopped vehicles, for emergency use, and for lateral support of base and surface courses.

Sidewalk: That portion of the roadway primarily constructed for the use of pedestrians.

Special Provisions: The special conditions, requirements, additions, and/or revisions to the Standard Specifications, applicable to the Work, to cover conditions or requirements peculiar to the Project under consideration.

Specifications: The descriptions, directions, provisions, and requirement for performing the Work as contained in or specified for use by the Engineer in the Contract Documents.

Standard Details: Uniform general detail drawings of structures or devices contained in or specified for use by the District Engineer in the Contract Documents.

Standard Specifications: Uniform general specifications contained in or specified for use by the District Engineer in the Contract Documents.

Storm Drain: Any conduit and appurtenance intended for the reception and transfer of storm water.

Street: Streets, roads, avenues, alleys, highways, crossings, lanes, intersections, courts, places, and grounds now open or dedicated or hereafter opened or dedicated to public use and public ways.

Structures: Bridges, culverts, catch basins, drop inlets, retaining walls, cribbing, manholes, end walls, sewers, service pipes underdrains foundation drains, fences, swimming pools, and other features which may be encountered in the Work and not otherwise classed herein.

Subbase: The lower course of the base of a roadway, immediately above the subgrade.

Subcontractors: Those having direct Contracts with the Contractor and those who furnish material worked into a special design according to the Plans and Specifications for the Work, but not those who merely furnish material not so worked.

Subgrade: The supporting structures on which the pavement and its special under courses rest.

Substructure: All of that part of the structure or building below the bearings of simple and continuous spans, skewbacks of arches and tops of footings of rigid frames, together with the back walls, wing walls and wing protection railings.

Superintendent: The Contractor's authorized representative in responsible charge of the Work.

Superintendent of Streets: the County Engineer duly appointed by the Board of Supervisors, as provided by Sections 9-601 and 11-701 of the Arizona Revised Statutes.

Superstructure: The entire structure or building except the substructure.

Supplemental Specifications: or otherwise referred to as Special Provisions, being: additions and/or revisions to the Standard Specifications.

Supplementary General Conditions: or otherwise referred to as Special Conditions, being requirements, or revisions, to the Standard and/or General Conditions, applicable to the Work, and to cover conditions or requirements peculiar to the Project under consideration.

Surety: The individual, firm or corporation, bound with and for the Contractor for the acceptable performance, execution, and completion of the Work, and for the satisfaction of all obligations incurred.

Surface Course: The finished or wearing course of an asphalt concrete pavement structure.

Title or Headings: The titles or headings of the sections and subsections herein are intended for convenience of reference and shall not be considered as having any bearing on their interpretation.

Traveled Way: The portion of the roadway for the movement of vehicles, exclusive of shoulders and auxiliary lanes.

“Underground Facility” means any item which shall be buried or placed below ground for use in connection with the storage or conveyance of water, sewage, electronic, telephone or telegraphic communications, electric energy, oil, gas or other substances, and shall include, but not be limited to pipes, sewers, conduits, cables, valves, lines, wires, manholes, attachments and those portions of poles and their attachments below ground.

Utility: Pipe lines, conduits, ducts, transmission lines, overhead or underground wires, railroads, storm drains, sanitary sewers, irrigation facilities, street lighting, traffic signals, and fire alarm systems, and appurtenances of public utilities and those of private industry, businesses or individuals solely for their own use or use of their customers which are operated or maintained in, on, under, over or across public right-of-way or public or private easement.

Waterworks (Water Supply System): The reservoirs, pipe lines, wells, pumping equipment, purification works, mains, service pipes, and all related appliances and appurtenances utilized in the procurement, transportation and delivery of an adequate, safe, and palatable water supply.

Work: Any or all of the improvements mentioned and authorized to be made, and the construction, demolition, reconstruction, and repair of all or any portion of such improvements, and the furnishing of all of the needed experienced supervision and labor, materials, equipment, transportation, utilities, supplies, services, facilities and any other incidentals and incidental expenses necessary or convenient to the successful completion of the Project and the carrying out of all the duties and obligations imposed by the Contract.

Working Day: A calendar day, exclusive of Saturdays, Sundays, and Owner recognized legal holidays, on which weather and other conditions not under the control of the Contractor will permit construction operations to proceed for the major part of the day with the normal working force engaged in performing the controlling item or items of Work which would be in progress at that time.

101.3 In order to avoid cumbersome and confusing repetition of expressions in these specifications, it is provided that whenever anything is, or is to be, done, if, as, or, when, or where contemplated required, determined, directed, specified, authorized, ordered, given, designated, indicated, considered necessary, deemed necessary, permitted, reserved, suspended, established, approval, approved, disapproved, acceptable, unacceptable, suitable, accepted, satisfactory, unsatisfactory, sufficient, insufficient, rejected, or condemned, if not already written or designated as a responsibility of someone other than the Engineer, it shall be understood as if the expression were followed by the words by the Engineer or to the Engineer.

SECTION 102

BIDDING REQUIREMENTS AND CONDITIONS

102.1 ELIGIBILITY AND PREFERENCE:

The employment of Contractors and Subcontractors on Public Works Projects shall be governed by the provisions of Section 34-241 of the Arizona Revised Statutes.

102.2 CONTENTS OF PROPOSAL PAMPHLET:

The prospective bidder may examine a complete set of Bid Documents by contacting the Mohave County Procurement Department, 700 W. Beale Street, P.O. Box 7000, Kingman, Arizona 86402-7000 or by calling (928) 753-0752.

Those wishing to submit a Bid Proposal must obtain a complete set of Bid Documents. The complete contents of the Bid Documents will be listed in the Call for Bids and may include but may not necessarily be limited to the Call for Bids, these General Conditions, Bid Proposal, Special Provisions, Standard Specifications, Standard Details, Special Provisions, Plans and Sample Contract.

The Bid Documents will state the location of the contemplated construction; give the description of the Work to be performed or materials to be furnished, and have a bid schedule of a lump sum total or of pay items for which unit bid prices are invited. In addition, the Call for Bids and the Bid Documents will state the form and amount of the proposal guarantee, the time in which the Work shall be completed and may include additional instructions not included in these General Conditions.

The Plans, Standard Specifications, Standard Details, Special Provisions, and all supplementary documents specified in the Bid Documents are essential parts thereof, and a requirement occurring in one is as binding as though occurring in all. They are intended to be complementary and to describe and provide for a complete Work. In case of discrepancy or conflict, plans will govern over both standard specifications and standard details; special provisions will govern over general Conditions, standard specifications, standard details and plans.

Each and every provision of law and clause required by law to be inserted in the Contract shall be deemed to be inserted herein, and the Contract shall be read and enforced as though it were included herein.

102.3 INTERPRETATION OF QUANTITIES IN PROPOSAL:

When quantities appear in the proposal, they are approximate only and are to be used for the comparison of bids. Payment to the Contractor will be made only for the actual Work performed, measured as provided for and accepted by the Owner or for materials furnished to the Owner, all in accordance with the Contract Documents at the lump sum or unit price bid in the proposal.

After the Contract is awarded the actual quantities of Work may be increased or decreased from the estimated quantities stated in the proposal as outlined in Section 104.2 without in any way invalidating the bid price.

102.4 EXAMINATION OF PLANS, SPECIFICATIONS, SPECIAL PROVISIONS AND SITE OF WORK:

The Owner will prepare or have prepared such plans, specifications and/or special provisions thereto in accordance with acceptable engineering standards, giving such direction as will enable any competent Contractor to carry them out.

The Bidder shall examine the Site of the proposed Work and all documents pertaining to the Work. It is mutually agreed that the submission of a proposal shall be considered prima facie evidence that the Bidder has made such examination and is familiar with the character, quality and quantity of the Work to be performed and material to be furnished.

After the submission of the proposal, no complaint or claim that there was any misunderstanding as to the quantities, conditions or nature of the Work will be entertained.

102.5 PREPARATION OF PROPOSAL:

The Bidder shall submit his proposal on the forms obtained from the Owner. The Bidder shall specify a lump sum or in the case of a unit price bid, the unit bid price and extension in words, figures or both, whichever is required, for each pay item where units and approximate quantities are given.

The proposal total will be the lump sum bid or in the case of a unit price bid, obtained by adding the extended amount or lump sum indicated for the individual pay items. If there is a conflict between words and figures, the words shall apply. If there is a conflict between the unit price bid and the extended amount for a particular pay item, the unit price bid shall govern. In either case, the Owner shall correct the discrepancy in accordance with the above procedure and the corrected proposal total will apply.

In addition, the following shall be completed by the bidder on the proposal:

- (A) Acknowledge receipt of and agree that the proposal is based on the listed Addenda received with and/or after receipt of the proposal pamphlet.
- (B) Note the Bidder's Arizona State Contractor's License number and classification.
- (C) Signatures in ink and attested or witnessed as applicable.

102.6 QUALIFICATIONS OF BIDDERS AND GENERAL INFORMATION LIST:

To demonstrate the Bidder's qualifications to perform the Work, the bidder shall submit with his bid on the forms provided the following such information as may be called for below when included in and requested in the Bid Documents:

- (A) Construction Contractor's Qualification Statement and information required therein.
- (B) Tax Information.
- (C) Certification.
- (D) List of Subcontractors

102.7 IRREGULAR PROPOSALS:

Proposals will be considered irregular and may be rejected for the following reasons:

- (A) If the proposal is on a form other than that furnished by the Owner; or if the form is altered or any part thereof is detached.
- (B) If there are unauthorized additions, statements, conditional or alternate bids, or irregularities of any kind.
- (C) If the bidder adds any provisions reserving the right to accept or reject an award, or to enter into a Contract pursuant to an award.
- (D) If the proposal does not contain a unit price for each pay item listed where the unit price is requested except in the case of authorized alternate pay items.
- (E) If, when required by inclusion in the Bid Documents, the Bidder fails to accomplish and submit the List of Subcontractors' form or any other form.

102.8 PROPOSAL GUARANTEE OR BID BOND: **SEE SPECIAL TERMS AND CONDITIONS**

102.9 SUBMISSION OF PROPOSAL:

The proposal and proposal guarantee shall be submitted in a sealed envelope, the outside, lower right hand corner of which shall be marked as follows:

Sealed Bid for: *Project Name*
 Invitation for Bid number
 Date and Time of Bid Opening
 Contractor's Name and Address

Envelopes shall be mailed or delivered to the office of the Mohave County Procurement Department, at 700 W. Beale Street, P.O. Box 7000, Kingman, Arizona 86402-7000.

Bids must be in the possession of the Mohave County Procurement Department on or prior to the time and date stated in the Call for Bids or any Addenda.

Late bids shall not be considered. Proposals received after the time and date specified will be returned, unopened, to the Bidder.

102.10 WITHDRAWAL OR REVISION OF PROPOSAL:

Any Bidder may withdraw or revise a proposal after it has been deposited with the Mohave County Procurement Department, provided his request is received by the Mohave County Procurement Department, in writing or by telegram, before the time specified for opening proposals or as stipulated herein.

102.11 PUBLIC OPENING OF PROPOSALS:

Proposals will be opened and read publicly at the time and place specified in the Call for Bids or any duly issued Addenda. Bidders, their authorized agents and other interested parties are invited to be present.

When proposals for more than one Project are to be opened at the same time, any Bidder may, after the time set for the opening proposals, request to withdraw his second or succeeding proposal prior to the opening of proposals for that Project. Should this occur, there will be a brief delay in the opening of proposals to permit the bidder to submit his request. Upon receipt of the bidder's written request, by the Owner, his proposal will be returned unopened.

102.12 DISQUALIFICATION OF BIDDERS:

Any of the following reasons may be considered as being sufficient for the disqualification of a Bidder and the rejection of his proposal:

- (A) Receipt of more than one proposal for the same Work from an individual, partnership or corporation under the same or different names.
- (B) Failure to submit proper Proposal Guarantee.
- (C) Receipt of an Irregular Proposal.
- (D) Evidence of collusion among Bidders or assistance from any officer of the Owner, or of any Department thereof.
- (E) Falsifying information on the proposal.
- (F) Failure to properly complete and submit the proposal form and other required information.

102.13 SUCCESSFUL BIDDER:

Unless otherwise specified in the proposal pamphlet, the successful Bidder may obtain five (5) sets of plans and Contract Documents (Plans and Specifications) for the Project from the Owner, at no cost.

SECTION 103

AWARD AND EXECUTION OF CONTRACT

103.1 CONSIDERATION OF PROPOSALS:

After the proposals for the contemplated Work have been opened and read as provided in these specifications, the respective totals will be checked and compared by the Owner. The basis of comparison will be to verify the accuracy of the total proposal by checking the extensions and additions. In the event of a discrepancy, in the amount bid for a pay item, the unit bid price will govern unless obviously in error. The results of such comparison will be considered public information.

It is the intent of the Owner to award the Bid on evaluation to the lowest and/or most responsive, best responsible and qualified Bidder. However, the Owner reserves the right to reject any and all Bids or to waive what the Owner, in its sole discretion, considers minor and non-material defects and technicalities, as it may deem in its best interest.

In case all proposals are rejected, any subsequent changes, additions, addenda, or new sets of plans and special provisions will be provided to all recipients of the first issue of the plans and special provisions at no charge, except that out-of-town bidders will pay shipping charges.

103.2 RETURN OF PROPOSAL GUARANTEE:

All proposal guarantees, except those of the three lowest responsible bidders, will be returned immediately following the acceptance of a proposal or Notice of Award by the Board of Supervisors (Owner). The retained proposal guarantee or guarantees will be returned after the Contract has been executed by all parties.

103.3 AWARD OF CONTRACT:

The Owner will award the Contract, if awarded, to the lowest and/or most responsible and qualified Bidder, whose proposal complies with the requirements prescribed in the Contract Documents, except as otherwise required by law, or alternatively, all proposals will be rejected. No proposal shall be withdrawn for a period of sixty (60) calendar days after opening without consent of the Owner.

If written Notice of Award of a proposal is delivered to the successful bidder within the times noted above, or at any time thereafter before such proposal has been withdrawn, the bidder shall within ten (10) calendar days after receipt of such notice to execute and deliver to the Owner all necessary documents including the Contract in the prescribed form, provide proper Performance and Payment Bonds, Certificates of Insurance, and supply any other required documents to allow or enable Owner to execute the Contract, and endorsements, and other required documents or Bidder's proposal guarantee shall be forfeited as provided elsewhere herein.

103.4 CANCELLATION OF AWARD:

The Owner reserves the right to cancel the award of any contract at any time before the execution of said Contract by all parties, without any liability against the Owner.

103.5 REQUIREMENT OF CONTRACT BONDS: **SEE SPECIAL TERMS AND CONDITIONS**

103.6 CONTRACTOR'S INSURANCE: **SEE SPECIAL TERMS AND CONDITIONS**

SECTION 104

SCOPE OF WORK

104.1 WORK TO BE DONE:

104.1.1 General: It is the intent of the Contract Documents to require the Contractor to provide for the complete construction in every detail of the Work described. The Contractor shall perform all Work as may be necessary to complete the Contract in a satisfactory and acceptable manner in full compliance with the Contract Documents.

The Contractor shall be responsible to perform any or all of the improvements mentioned and authorized to be made, and the construction, demolition, reconstruction, and repair of all or any portion of such improvements, and the furnishing of all of the needed experienced supervision and labor, materials, equipment, transportation, utilities, supplies, services, facilities and any other incidentals and incidental expenses necessary or convenient to the successful completion of the Project and the carrying out of all the duties and obligations imposed by the Contract (the **"Work"**).

104.1.2 Maintenance of Traffic: The Contractor's maintenance and traffic control operations shall be in accordance with the Manual on Uniform Traffic Control Devices (latest edition), and in accordance with the Contract Documents. Unless otherwise provided in the Special Provisions or on a temporary basis when authorized by the Engineer, the Contractor shall keep all roadways within the Project area open to all traffic and provide for and accommodate vehicles and pedestrians alike in a safe and efficient manner. The Contractor shall also provide and maintain in a safe condition temporary and permanent approaches or crossings and intersections with trails, roads, streets, businesses, parking lots, residences, garages, and driveways. Access to residential property shall be in accordance with Section 107. The Contractor shall also coordinate with the various agencies both commercial and public, involved in the collection and removal of trash and garbage, so that adequate services are maintained.

Grading operations, roadway excavation and fill construction shall be conducted and maintained in such a manner as to provide a reasonably satisfactory and safe surface for vehicular and pedestrian traffic. When rough grading is completed, the roadbed shall be brought to and maintained in a reasonably smooth condition, satisfactory and safe for vehicular traffic at the posted speed limit. Pedestrian walkways shall be provided and maintained in a like manner. The Contractor shall accomplish any additional grading operations and/or repairs, including barricade replacement or repairs during working and nonworking periods which, in the opinion of the Engineer, are required.

In the event of inclement weather conditions, such as windstorms, rainstorms, etc., the Contractor shall immediately inspect his Work area and take all necessary actions to insure that public access and safety are maintained.

The Contractor shall provide the Engineer with the emergency address of his representatives as required by Section 105.

The Engineer shall be the sole judge as to the sufficiency of the Contractor's maintenance activities required to insure the safety of the traveling public through the Project Site. If the Engineer deems that the maintenance activities by the Contractor are not sufficient for the safety and convenience of the traveling public through the Project Site, the Engineer may order the Contractor to perform additional maintenance such as, but not necessarily limited to, sweeping, watering, grading, rolling, additional or alternate signage, dewatering, patching roadway and subgrade repair, safety feature repair, debris removal, repair of pedestrian features, and other work necessary to provide a smooth and safe traveled way.

The Contractor shall bear all expense of maintaining traffic within the Project area as well as constructing, maintaining and subsequently removing Contractor requested detours, approaches, crossings, intersections and other features, to include maintenance directed by the Engineer, as may be necessary without direct compensation and at no cost to the Owner.

If the Contractor fails to perform Maintenance of Traffic as required by the Contract Documents or as ordered by the Engineer, the provisions of Section 104.4 apply.

104.1.3 Cleanup and Dust Control: Throughout all phases of construction, including suspension of Work, and until final acceptance of the Project, the Contractor shall keep the Work area clean and free from rubbish, excess materials and debris generated by Construction Activities.

The Contractor shall be responsible for all required dust control measures during the course of the Work and until project acceptance to include disposal sites, storage sites, temporary yard, staging areas and on all unpaved haul or delivery roads which are being used by the Contractor, his Subcontractors or employees. The Contractor shall take whatever steps, procedures or means required to prevent any dust nuisance due to his construction operations. The dust control measures shall be maintained at all times to the satisfaction of the Engineer.

Failure of the Contractor to comply with the Engineer's cleanup and dust control orders may result in an order to suspend Work until the condition is corrected. No additional compensation or time will be allowed as a result of such suspension and the Engineer has the authority to take such other measures as may be necessary to remedy the situation.

If the Contractor fails to perform Cleanup or Dust Control as required by the Contract Documents or as ordered by the Engineer, the provisions of Section 104.3 apply.

104.1.4 Final Cleaning Up: Before final acceptance, all private or public property and grounds occupied by the Contractor in connection with the Work shall be cleaned of all rubbish, excess materials, temporary structures and equipment, and all parts of the Work area shall be left in an acceptable condition.

104.2 ALTERATION OF WORK:

104.2.1 By the Owner: The Owner reserves the right to make, at any time during the progress of the Work, such alterations in the details of construction and such increases or decreases in quantities as may be found necessary or desirable. Such alterations and changes shall not invalidate the Contract nor release the surety and the Contractor agrees to perform the Work as altered, the same as if it had been a part of the original Contract.

The Owner or Engineer will issue Change Orders to cover unforeseen circumstances which make it impossible to carry out the Work in accordance with the original Contract Documents.

If the alterations or changes made by the Owner increase or decrease the total cost of the Contract or the total cost of any major item by more than twenty percent (20%), or increase or decrease the Contract time for completion of the Work, either party may request an adjustment in Contract time for completion of the Work, or request an adjustment in payment in accordance with Section 109.

104.2.2 Due to Differing Conditions:

The Bidders are responsible to investigate the site of Work and fully inform themselves of the subsurface conditions at the site to the extent the bidders deem necessary to satisfy themselves as to the site subsurface conditions prior to bidding on the project. Should the bidder as Contractor encounter or discover during the process of the Work, subsurface or latent physical conditions at the Site differing substantially from those indicated in the Contract, or unknown physical conditions at the Site of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in Work of the character provided for in the Contract, the Engineer shall be promptly notified in writing by the Contractor of such conditions before they are disturbed, to include a detailed description specifically outlining what is considered substantially differing conditions and outside of the scope of Work contemplated in and required by Contract Documents, along with request for any increase in Contract Time for Completion of the Work and/or request for additional compensation in accordance with Section 109 for the Work. The Engineer will thereupon promptly investigate the conditions and, if he finds the conditions do so materially differ and cause an increase or decrease in the cost of or the time required for performance of the Contract, an equitable adjustment will be made and the Contract modified in writing accordingly by Change Order duly issued by the Owner or Engineer. Failure of the Contractor to notify the Engineer of the differing conditions prior to doing any Work shall be just cause to reject any claims for additional monies and/or time.

After any portion of the Work has been opened up, saturation of material caused by irrigation water, storm drainage, weather or such similar causes will be considered as within the responsibility of the Contractor and shall be the responsibility of the Contractor to remove and replace or otherwise correct to the satisfaction of the Engineer at the Contractor's sole expense.

104.2.3 Due to Extra Work: The Contractor shall perform Extra Work which is outside of the scope of Work contemplated in and required by the Contract Documents only if requested to do so through Change Order duly issued by the Owner or Engineer, and only whenever it is deemed necessary by the Engineer and/or Owner to fully complete the Work, or when it is deemed necessary or desirable by the Owner. Such Work shall be governed by all applicable provisions of the Contract Documents and payment will be made in accordance with the provisions set forth in Section 109.

Should the Contractor claim that it is necessary to perform Extra Work which is outside of the scope of Work contemplated in and required by the Contract Documents to fully complete the Work, the Contractor shall give the Engineer written notice of the claim for Extra Work, prior to proceeding to execute the Work, specifically outlining what is considered Extra Work and outside of the scope of Contract Documents, along with request for any increase in Contract Time for Completion of the Work and/or request for additional compensation in accordance with Section 109 for the Work, except in emergencies endangering life or property.

Change order proposals shall be submitted promptly and shall remain firm for a period of not less than ninety (90) days from delivery of the change proposal. Any delay in submission will not justify or constitute the basis for an increase in the Cost of the work or contract time.

No claim on Extra Work shall be considered unless written notice of Extra Work is given by the Contractor to the Engineer prior to proceeding to execute the Work.

If this Extra Work is performed by others, the Contractor agrees to cooperate fully with the other source accomplishing this Work and agrees that this action shall not invalidate the Contract or release the surety.

104.2.4 At the Contractor's Request: Changes in the plans or specifications, which do not materially affect and are not detrimental to the Work or to the interests of the Owner, may be granted to facilitate the Work at the sole discretion of the Engineer. Requests shall be in writing and submitted by the Contractor to the Engineer for approval. These changes, if approved and when resulting in a saving to the Contractor and the Owner, will be made at an equitable reduction in cost or in no case at any additional cost to the Owner.

104.3 NONCOMPLIANCE OF CONTRACTOR'S WORK WITH CONTRACT REQUIREMENTS

The Engineer shall be the sole judge of the Contractor's failure to perform Work in compliance and conformance with the requirements and conditions of the Contract Documents. Failure on the part of the Contractor to perform the Work or any portion thereof in full compliance or conformance with the requirements and conditions of the Contract Documents shall be deemed sufficient justification for the Owner to declare the Contractor in Default of the Contractor's obligations under Contract with the Owner.

Upon notice or discovery of the Work performed by the Contractor failing to comply or conform with the requirement and conditions of the Contract, the Engineer will immediately notify the Contractor in writing of such noncompliance. If the Contractor fails to remedy the noncompliance within twenty-four (24) hours after receipt of such notice, and notwithstanding any other remedies set forth in the Contract Documents, the Engineer and or the Owner may:

- A) Suspend Work partially or fully until the noncompliance is corrected. No additional compensation or Contract Time will be allowed as a result of such suspension of the Work.
- B) Take control of all or part of the Work and/or have all or part of the Work accomplished by others, all costs of which shall be born by the Contractor and be deducted from monies due or to become due to the Contractor under this Contract.
- C) Terminate the Contract in whole or in part and take any other action authorized under the Contract or allowed by Law.

In the event the Owner takes control of all or part of the Work, and/or has all or part of the Work accomplished by others, the Contractor agrees to cooperate fully with the Owner and/or other source accomplishing this Work and agrees that this action shall not invalidate the Contract or release the surety or any responsibility of the Contractor to the Contract and the Work

SECTION 105 CONTROL OF WORK

105.1 AUTHORITY OF THE ENGINEER:

The Engineer will decide all questions which may arise as to the quality and acceptability of the materials furnished and Work performed and as to the rate of progress of the Work; all questions which may arise as to the interpretation of the plans and specifications; and all questions as to the acceptable fulfillment of the Contract on the part of the Contractor. The Engineer's estimates and decisions shall be final and conclusive. In case any question should arise, relative to the Contract Documents, the determination or decision of the Engineer shall be a condition precedent to the right of the Contractor to receive final approval of the Work being questioned under the Contract.

The Engineer may make minor changes in the Work by written Change Order to the Contractor, for issues not involving Extra Work, compensation, or changes in Contract Time for Completion, and not inconsistent with the purpose or Scope of Work, except in emergencies endangering life or property.

Notwithstanding other remedies set forth in the Contract Documents, the Engineer may suspend the Work wholly or in part due to the failure of the Contractor; to correct conditions unsafe for the workmen or the general public; for failure to carry out provisions of the Contract; for failure to carry out orders; for such periods as he may deem necessary due to unsuitable weather; for conditions considered unsuitable for the prosecution of the Work or for any other condition or reason deemed to be in the public interest.

105.2 PLANS AND SHOP DRAWINGS:

The Contractor shall submit, for review, a proposed schedule of shop drawings and product data submittals. This schedule will include concrete and asphalt concrete mix designs unless they are previously approved supplier's mix design. The schedule will show the needed response date for each submittal and will indicate the relationship of the submittal to the Project construction schedule.

The Contractor shall submit five copies of each shop drawing, product data or mix design to the Engineer for review. Each submittal shall be numbered sequentially and shall be submitted in accordance with the schedule established in conjunction with the Owner so as to cause no delay in the Work schedule. The Contractor shall certify, by stamp or letter, that he has reviewed and approved the submittal and that it conforms to the requirements of the Contract Documents. If this certification is not included, the submittal will be returned without action.

At the time of each submittal, the Contractor shall define and delineate in writing, separate from the certification, any deviations from the Contract Documents. If the Engineer accepts this deviation, he will authorize the deviation by issuing a Change Order or if the deviation is minor by endorsement to the letter.

The Engineer will review and return the submittals in accordance with the previously established response date. The review will be only for conformance with the design concept of the Work and for compliance with the information contained in the Contract Documents. The review of a specified item, as such, will not indicate review of the assembly in which the item functions. Review by the Engineer will not relieve the Contractor from responsibility for any errors or omissions in the submittals nor from his responsibility for complying with the Contract Documents. The only exception is deviations accepted in accordance with the preceding paragraph.

If the submittal is acceptable, one (1) copy with each page stamped or written and signed by the Engineer "Approved as Submitted" will be returned to the Contractor. The Contractor shall submit additional copies (as required) to the Engineer.

If the Engineer determines that the submittal requires corrections or is to be rejected, one (1) copy stamped or written by the Engineer "Approved as Noted" or "Revise and Resubmit" will be returned to the Contractor. The Contractor will submit five corrected or new copies.

The copy stamped or written "Approved as Submitted", returned to the Contractor, will become a part of the Contract Documents and will be kept at the job Site. Any Work done prior to the receipt of this review will be at the Contractor's risk and expense.

105.3 CONFORMITY WITH PLANS AND SPECIFICATIONS:

All Work performed and all materials furnished shall be in conformity with the lines, elevations, grades, cross sections, dimensions and material requirements, including tolerances, shown on the plans or indicated in the specifications.

In the event the Engineer finds the materials or the finished product in which the materials are used not in conformity with the plans and specifications, but that reasonably acceptable Work has been produced, he shall then make a determination if the Work shall be accepted and remain in place. In this event, the Engineer will document the basis of acceptance by Contract modification which will provide for an appropriate adjustment in the Contract price for such Work or materials as the Engineer deems necessary to conform to his determination based on engineering judgment.

In the event the Engineer finds the materials or the finished product in which the materials are used or the Work performed are not in conformity with the plans and specifications and have resulted in an inferior or unsatisfactory product, the Work or materials shall be removed and replaced or otherwise corrected by the Contractor to the satisfaction of the Engineer at no additional cost to the Owner.

In all instances wherein the items and/or specifications require installation or construction in accordance with either manufacturers' or suppliers' recommendations and/or instructions, said recommendations and/or instructions shall be submitted with the applicable portion clearly marked for approval prior to the commencement of Work on that item or portions of the Contract.

105.4 COORDINATION OF PLANS AND SPECIFICATIONS:

The Contractor shall take no advantage of any apparent error or omission in the plans or specifications. In the event the Contractor discovers such an error or omission, he shall immediately notify the Engineer. The Engineer will then make such corrections and interpretations as the Engineer may deem necessary for fulfilling the intent of the plans and specifications.

105.5 COOPERATION OF CONTRACTOR:

The Contractor will be supplied with a minimum of five sets of approved Contract Documents, one (1) set of which the Contractor shall keep available on the Project at all times.

The Contractor shall give the Work the constant attention necessary to facilitate the progress thereof, and shall cooperate with the Engineer, his inspectors, and other Contractors in every way possible.

The Contractor shall at all times be present at the Project Site in person or represented by a competent superintendent authorized to receive and fulfill instructions from the Engineer and who shall supervise and direct the Work. Instructions and information given by the Engineer to the Contractor's superintendent shall be considered as having been given to the Contractor.

- (A) All phases of the Project shall be under the direct supervision of a foreman or his designated representative on the Site who shall have authority to accept instructions, with respect to that particular phase of the Project, and take action required to properly carry out the Work.
- (B) In the event of noncompliance with the above, and notwithstanding other remedies set forth in the Contract Documents, the Engineer may require the Contractor to stop Work on that part of the Project until the required supervision is present. Further, no additional compensation or Contract Time will be allowed as a result of such suspension.

The Contractor shall file with the Engineer, the names, addresses, and telephone numbers of representatives who can be contacted, at any time, in case of emergency. These representatives must be fully authorized and equipped to correct unsafe or excessively inconvenient conditions on short notice.

Emergencies may arise during the progress of the Work which may require special effort or require extra shifts of men to continue the Work beyond normal working hours. The Contractor shall be prepared in case of such emergencies from whatever cause, to do all necessary Work promptly.

105.6 COOPERATION WITH UTILITIES:

The Engineer (Owner) will notify all utility companies, all pipe line owners, or other parties affected, and endeavor to have all necessary adjustments of the public or private utility fixtures, pipe lines, and other appurtenances within or adjacent to the limits of construction, made as soon as practicable.

The Contractor shall comply with the requirements of ARS-40-360.21 through 40-360.29 (one call system, Blue Stake) in notification to the interested utility owners prior to start of construction. The Contractor shall resolve all problems with the utility owners concerned.

It shall be the Contractor's responsibility to ascertain whether any utility, utility appurtenance or utility property occupies the area of Work contemplated herein. It is understood and agreed that the Contractor has considered in his proposal all of the permanent and temporary utilities and utility appurtenances in their present or relocated positions as indicated on the Plans. No additional compensation will be granted to the Contractor for any utility or utility appurtenance that the Contractor could have fully informed himself of prior to Bidding whether shown on the Plans or not shown on the Plans. No compensation will be made because of any delays, inconvenience, or damage sustained by the contractor due to any interference from the said utility or utility appurtenance or the operation of moving them or for the maintaining or operation of any utility by the utility owner. If delays are encountered because utility owners have not relocated or adjusted their facilities as indicated on the Plans, the Contract Time will be adjusted in accordance with Section 108 however no monetary or other compensation will be made for the delay due to any direct, delayed or ripple effect to the work or work schedule.

It shall be the responsibility of the Contractor to ascertain the need for bracing or shoring of utility poles during the construction of the Project and no additional compensation will be allowed for such bracing or shoring.

105.6.1 Notifications Requirement in the Event of Any Damage to or Dislocation of Underground Facilities: In the event of any damage to or dislocation of any underground facility, the Contractor responsible for the excavation operation shall immediately notify the Engineer and the owner of such facility and shall not attempt to repair any facility, except those intended for the conveyance or storage of water and sewage. The excavation shall be left open until the arrival of representatives of the owner of the facility.

105.7 COOPERATION BETWEEN CONTRACTORS:

The Owner reserves the right at any time to contract for and perform other or additional Work on or near the Work covered by the contract.

When separate contracts are let within the limits of any one Project, each Contractor shall conduct his Work so as not to interfere with or hinder the progress or completion of the work being performed by other Contractors. Contractors working on the same Project shall cooperate with each other as directed.

Each Contractor involved shall assume all liability, financial or otherwise, in connection with his contract and shall protect and save harmless the Owner from any and all damages or claims that may arise because of inconvenience, delay, or loss experienced by him because of the presence and operations of other Contractors working within the limits of the same Project.

The Contractor shall arrange his Work and shall place and dispose of the materials being used so as not to interfere with the operations of the other Contractors within the limits of the same Project. He shall join his Work with that of others in an acceptable manner and shall perform it in proper sequence to that of the others.

The Owner will not honor any claim for extra compensation due to delays, extra Work, or extension of time caused by any other Contractors working within the limits of the same Project.

105.8 CONSTRUCTION STAKES, LINES AND GRADES BY CONTRACTOR:

Unless stated otherwise in the Specifications and/or Special Provisions, the Contractor shall be responsible for providing construction stakes, lines and grades as follows. The Contractor will set construction stakes establishing lines and grades for road work, curbs, gutters, sidewalks, structures and centerlines for utilities and necessary appurtenances as he may deem necessary, and will furnish all necessary information relating to the lines and grades.

The Contractor shall perform the Work in accordance with the plans and specifications.

The Contractor shall be held responsible for the preservation of all stakes and marks, and if the construction stakes or marks have been carelessly or willfully destroyed or disturbed, the cost for replacing them will be born by the Contractor and not be a responsibility of the Owner.

The Contractor shall set the construction stakes for buildings establishing lines, grades, and elevations to include necessary utilities and appurtenances and shall be responsible for their conformance with plans and specifications. The Engineer will establish or designate a control line or bench mark of known location and elevation for use as a reference.

105.9 DUTIES OF INSPECTOR:

The Engineer may provide Inspector(s), assistant(s), and other field staff to assist the Engineer in observing performance of the Work of the Contractor. Through onsite observations of the Work in progress, the Inspector shall endeavor to provide further protection for the Owner against defects and deficiencies in the Work of the Contractor; but, the furnishing of such services will not make the Inspector responsible for or give the Inspector control over the Work, methods, techniques, sequences, or procedures or for safety precautions or programs, or responsibility for the Contractor's failure to perform the Work in accordance with the Contract Documents.

Inspectors employed by the Owner will be authorized to inspect all Work. Such inspection may extend to all or any part of the Work. The inspector will not be authorized to alter or waive the provisions of the Contract. The inspector will not be authorized to issue instructions contrary to the plans and specifications or to act as foreman for the Contractor.

105.10 INSPECTION OF WORK:

Inspection of the Work by the Engineer or his authorized representative shall not be considered as direct control of the individual workman and his Work. The direct control shall be solely the responsibility of the Contractor.

The Engineer shall be permitted to inspect each part or detail of the Work at any time for the purpose of expediting and facilitating the progress of the Work. He shall be furnished with such information and assistance by the Contractor as is required to make a complete and detailed inspection.

Any Work done or materials used without supervision and inspection by the Engineer or his authorized representative may be ordered removed and replaced at no additional cost to the Owner. Failure to reject any defective Work or materials shall not in any way prevent later rejection when such defect is discovered, nor obligate the Engineer to final acceptance.

When any unit of government or political subdivision is to pay a portion of the cost of the Work covered by the Contract, its representatives shall have the right to inspect the Work. Such inspection shall in no sense make any unit of government or political subdivision a party to the Contract, and shall in no way interfere with the rights of either party to the Contract.

105.11 REMOVAL OF UNACCEPTABLE AND UNAUTHORIZED WORK:

Unacceptable Work not in conformance with or meeting the requirements of the Contract Documents, found to exist prior to the final acceptance of the Work, shall be immediately removed and replaced or otherwise corrected in an acceptable manner by the Contractor to the satisfaction of the Engineer at no additional cost to the Owner.

No Work shall be done without lines and grades having been approved by the Engineer. Work done contrary to the instructions of the Engineer, Work done beyond the lines shown on the plans, or any extra Work done without authority, will be considered as unauthorized and will not be paid for under the provisions of the Contract. Work so done may be ordered removed or replaced or otherwise corrected by the Contractor to the satisfaction of the Engineer at no additional cost to the Owner.

105.12 MAINTENANCE DURING CONSTRUCTION:

The Contractor shall maintain the Work during construction and until the Project is accepted. This maintenance shall constitute continuous and effective Work prosecuted day by day, with adequate equipment and forces to the end so that the roadway or structures are kept in satisfactory conditions at all times.

In the case of a Contract for the placing of a course upon a course or subgrade previously constructed, the Contractor shall maintain the previous course or subgrade during all construction operations. The course or subgrade, upon which a course is to be placed shall be constructed and maintained by the Contractor so that the course or subgrade will meet the requirements of the Contract Documents up to, until and immediately prior to the placement of the subsequent course. All cost of maintenance Work during construction and before the Project is accepted shall be included in the lump sum or unit bid price on the various pay items.

105.13 FAILURE TO MAINTAIN ROADWAY OR STRUCTURE:

The Engineer shall be the sole judge of failure on the Contractor's part for Maintenance during Construction. If the Contractor, at any time, fails to perform maintenance during construction as required by the Contract Documents or as ordered by the Engineer, the provisions of Section 104.3 apply.

105.14 PARTIAL USE OR OCCUPANCY:

In the case of Work on or within public right-of-ways, the Contractor shall provide for and insure that the Owner, utility companies and providers, and the general public shall have the right of occupancy and use of the Project areas for continued activities area within the right-of-way.

The Owner shall also have the right of partial occupancy of any portion of the completed Work, other than the rights described for Work within public right-of-ways, so long as that use does not unreasonably interfere with the Work of the Contractor.

Partial Occupancy by the Owner, or the general public prior to final acceptance shall not relieve the Contractor of any responsibilities for maintenance thereof or any other responsibilities of the Contractor for the Work under the Contract Documents. The Partial Occupancy by the Owner shall not be deemed by the Contractor as final acceptance of the Work, nor shall it relieve the Contractor of his responsibilities for maintaining in full force the bonds and insurance required by the Contract Documents

105.15 FINAL COMPLETION AND FINAL ACCEPTANCE:

Upon due notice from the Contractor of presumptive completion of the entire Project, the Engineer will make an inspection. If all construction provided for and contemplated by the contract is found completed to his satisfaction that inspection shall constitute the final inspection and the Engineer will make the final acceptance. The Contractor will be notified in writing of this acceptance as of the date of the final inspection.

If, however, the inspection discloses any Work, in whole or in part, as being unsatisfactory, the Engineer will give the Contractor the necessary instructions for correction of same, and the Contractor shall immediately comply with and execute such instructions.

If, in the opinion of the Engineer, the Work is deemed substantially complete and that any and all outstanding, unfinished or incomplete items of Work are minor in nature, number and value, and that the Owner has full, complete, and unobstructed use of the Project for which the Work was intended, the Engineer may notify the Contractor in writing that the Project is deemed substantially complete and of the date of substantial completion.

Substantial Completion is achieved when the Work is sufficiently complete, in the sole discretion of the County Engineer, for the Owner to occupy and use the Property for its intended purpose and may include but not be limited to: (a) approval by applicable jurisdictions and authorities including issuance of the Certificate of Occupancy; (b) all systems in place, functional, and displayed to the Owner; (c) all materials and equipment installed and accepted by the Owner; (d) all systems reviewed and accepted by the Owner; (e) landscaping and site work completed; and (f) final cleaning completed.

Upon correction of all the Work by the Contractor, another inspection will be made which shall constitute the final inspection provided the Work has been satisfactorily completed. In such event, the Engineer will make the final acceptance and notify the Contractor in writing of this acceptance as of the date of the final inspection.

SECTION 106

CONTROL OF MATERIALS

106.1 SOURCE OF MATERIALS AND QUALITY:

All construction materials to be used on the Work or incorporated into the Work, equipment, plant, tools, appliances or methods to be used on the Work shall be subject to the inspection and approval or rejection of the Engineer.

The materials used on the Work shall meet all quality requirements of the Contract. In order to expedite the inspection and testing of materials, the Contractor shall notify the Engineer of his proposed source of materials prior to delivery. At the option of the Engineer, materials may be approved at the source of supply before delivery is started. If it is found after trial that sources of supply for previously approved materials do not produce specified products meeting the requirements of the Contract Documents the Contractor shall furnish materials from other sources.

Unless otherwise noted, all materials used in the Project shall be new and unused. Additionally, any new materials used in this Project that are damaged during the construction of the Project and prior to final acceptance shall be removed and replaced by the Contractor with new materials meeting the requirements of the Contract Documents at no additional cost to the Owner.

106.2 SAMPLES AND TESTS OF MATERIALS:

106.2.1 Owner Quality Acceptance: All materials to be incorporated in the Work will be subject to acceptance sampling, testing and approval, by the Engineer. Any Work in which materials not previously approved by the Engineer for use are used or incorporated into the Work by the Contractor shall be performed at the Contractor's risk and may be considered as unauthorized and unacceptable Work and not subject to the payment provisions of the Contract, or the material may be required to be removed and replaced by the Contractor with materials approved by the Engineer.

The Engineer may sample, take or select samples to be tested, or may require that samples be taken and delivered by the Contractor to a laboratory or location designated by the Engineer. In the event samples are taken and furnished to the Engineer by the Contractor, samples shall be representative of the materials to be used and sampled or taken in accordance with the requirement of the Contract Documents and in accordance with good engineering practices.

The Engineer will test or have tested the materials at the Owner's expense for initial or normal acceptance testing as required by the Engineer to guard against unsuitable materials or defective workmanship. Any additional sampling and testing, required due to failure of the initial or normal test(s), shall be paid for by the Contractor. At the discretion of the Engineer, the Engineer or his representative shall be allowed by the Contractor to witness any and all sampling or testing by the Contractor. The Engineer shall have the authority to determine adequacy and accuracy of testing and to designate or approve the laboratory which will accomplish the additional test(s). All test results shall be provided to the Engineer and the Contractor as soon as possible after testing.

The procedures and methods used to sample and test materials will be determined by the Engineer. Unless otherwise specified, samples and tests will be made in accordance with either: the Arizona Test Methods; the standard methods of AASHTO or ASTM, which were in effect and published at the time of advertising for bids.

With respect to certain manufactured materials, the Engineer may permit the use of some materials prior to sampling and testing provided they are delivered with either a certificate of compliance or analysis or both, stating that the materials comply in all respects with the requirements of the specifications. These certificates shall be furnished in triplicate and clearly identify each delivery of materials to the Work area. The certificates shall be signed by a person having legal authority to bind the supplier or manufacturer.

106.2.2 Contractor Quality Control: Quality control measures sufficient to produce materials of acceptable quality are the sole responsibility of the Contractor. The Contractor shall be required to provide and maintain a Quality Control Plan, approved by the Engineer, along with providing sufficient personnel, equipment, supplies, and facilities, necessary to obtain, samples, perform tests, and otherwise assure the quality of the Work.

Prior to the start of Work, the Contractor shall submit the Contractor's Quality Control Plan to and obtain approval from the Engineer. The Quality Control Plan shall include a statement stating that all sampling and testing will be done at a frequency sufficient to insure that all work is done in accordance with the plans and specification.

The Contractor shall perform process control sampling, testing and inspection during all phases of the Work and shall perform the process control sampling, testing and inspection at a rate sufficient to assure that the Work conforms to the requirements of the Contract Documents. The Contractor shall provide or engage, at the Contractor's expense, the services of a certified testing laboratory licensed to do business in the State of Arizona to perform the sampling, testing and inspection. All the testing equipment to be employed shall be properly calibrated and meet the specifications applicable, and all personnel used qualified to perform the specified test procedure.

It shall be the Contractor's responsibility to sufficiently document to the Engineer the suitability of the laboratory, equipment, and personnel used in the quality control sampling, testing and inspection. In the event the Engineer determines that the Contractor is not employing a suitable laboratory, testing equipment, or personnel for quality control, the Engineer shall notify the Contractor in writing of his finding, and the Contractor shall replace or have replaced or otherwise provide satisfactory laboratory, equipment and personnel along with documentation thereof meeting the approval of the Engineer.

106.3 PLANT INSPECTION:

The Engineer may undertake the inspection of materials at the source. In this event, the following conditions shall be met:

- (A) The Engineer shall have the cooperation and assistance of the Contractor and the producer with whom he has contracted for materials.
- (B) The Engineer shall have full entry at all times to such parts of the plant as may concern the manufacture or production of the materials being furnished.

It is understood that the Owner reserves the right to retest all materials, prior to their use in the Work, upon delivery.

106.4 TRADE NAMES AND SUBSTITUTIONS:

Plans and specifications may contain references to equipment, materials or patented processes by manufacturer, trade name, make or catalog number. Unless the name is followed by words indicating that no substitution is permitted, such references shall be regarded as establishing a standard of quality, finish, appearance, performance or, as indicated, a selection based upon compatibility with existing equipment or materials.

The use of an alternate or substitute item or source will be permitted, subject to the following:

- (A) No consideration will be given to a substitution prior to award of the Contract.
- (B) Only substitutions submitted by the Contractor will be accepted for review. The substitution shall be submitted in writing to the Engineer.
- (C) The submittal shall certify that the substitution will perform the functions and achieve the results called for by the general design, be similar and of equal substance, and be suited to the same use as that specified.
- (D) The submittal shall state any required changes in the Contract Documents to adapt the design to the proposed substitution. This will include all changes required of other contractors/subcontractors affected by the resulting changes.
- (E) The submittal shall contain an itemized estimate of all costs and credits that will result directly or indirectly from the acceptance of such substitution, including costs of design, license fees, royalties, testing, Engineer's evaluation, claims of other contractors/subcontractors, etc. Also, the submittal shall include any adjustments in the Contract Time created by substitution.
- (F) The Contractor, on request of the Engineer, shall submit samples or any additional information the Engineer may deem necessary to evaluate the acceptability of the substitution. The Engineer will evaluate the information provided, perform tests when necessary and make comparisons. The Engineer will then make the final decision as to the acceptability of the proposed substitution. The Contractor will be notified in writing by the Engineer as to whether his substitution has been accepted or rejected.

- (G) The submittal, for purposes of review, number of copies, etc., shall follow the procedures as outlined in Section 105.2. If the Engineer does not respond in a timely manner, which in turn, impacts the substitution, the Contractor shall continue to perform the Work in accordance with the Contract and the substitution will be considered rejected. Also, no adjustments in the Contract Time will be granted for nonacceptance of the substitution.
- (H) There will be no additional costs to the Owner for the substitution. If the substitution yields a net savings in the Contract price, the amount of savings shall be divided between the Owner and the Contractor in a percentage established by the Owner.
- (I) If the substitution is accepted and an adjustment in the Contract cost and/or Contract Time is in order, a Change Order will be issued to the Contractor for the changes.

106.5 STORAGE OF MATERIALS:

The Contractor shall provide storage facilities and exercise such measures as will insure the preservation of the quality and fitness of all materials and/or equipment to be used in the Work. Stored materials and/or equipment, even though approved before storage, may again be inspected prior to their use in the Work. Stored items shall be located so as to facilitate their prompt inspection. That portion of the right-of-way and easements not required for public travel may be used for storage purposes, when approved by the Engineer. Any additional storage area as required must be provided by the Contractor. Private property shall not be used for storage purposes without written permission of the owner or lessee. If requested, by the Engineer, copies of such written permission shall be made available.

106.6 HANDLING MATERIALS:

All materials and/or equipment shall be handled in such a manner as to preserve their quality and fitness for the Work.

106.7 UNACCEPTABLE MATERIALS:

All materials and/or equipment not conforming to the requirements of the specifications, whether in place or not, may be rejected. Rejected materials and/or equipment shall be removed immediately from the Site of Work unless otherwise permitted by the Engineer. No rejected material and/or equipment, the defects of which have been subsequently corrected, shall be used until approved in writing by the Engineer.

106.8 FURNISHED MATERIALS:

Materials and/or equipment, furnished by the Owner, will be delivered or made available to the Contractor as indicated in the special provisions. The cost of handling and placing shall be considered as included in the Contract price for the pay item with which they are used.

The Contractor will be held responsible for all materials and/or equipment accepted by him and will make good any shortages, deficiencies and damages which may occur after such acceptance.

SECTION 107

LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC

107.1 LAWS TO BE OBSERVED:

The Contractor shall keep fully informed of all Federal and State laws, County and City ordinances, regulations, codes, rules, and all orders and decrees of bodies or tribunals having any jurisdiction or authority, which in any way affect the conduct of the Work (hereinafter "**Laws**"). The Contractor shall at all times observe and comply with all such Laws and shall protect and indemnify the Owner and its representatives, including without limitation its Board of Supervisors, officials, employees, and agents, against any claim or liability arising from or based on the violation of such Laws, whether by the Contractor itself, the Contractor's employees, consultants, subcontractors, material suppliers, equipment suppliers, or agents. These indemnifications provisions, are more fully set forth in Section 107.15 of these General Conditions.

Without limitation, the attention of the Contractor's without limitation, is directed to the provisions of the following sections, Arizona Revised Statutes:

- (A) ARS § 41-1461 et. seq. The Contractor understands and agrees that therewith the following contractual provisions apply to the Contract with the Owner that in connection with the performance of Work under this Contract, the Contractor agrees not to discriminate against any employee or applicant for employment because of race, religion, color or national origin, as well as to age for people forth (40) or more years of age. The aforesaid provision 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 hereafter in conspicuous places, available for employees and applicants for employment, notices to be provided by the contracting officer setting forth the provision of the nondiscrimination clause.

The Contractor further agrees to insert the foregoing provision in all subcontracts, except subcontracts for standard commercial supplies or raw materials.

- (B) When Federal-aid funds are used on a 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 to perform the Contract.
- (C) ARS § 40-360.22 Excavations: determining location of underground facilities; providing information, or amongst other things. This statute requires that no person shall begin excavating before the location and marking are complete or the excavator is notified that marking is unnecessary and requires that upon notification, the owner of the facility shall respond as promptly as practical, but in no event later than two days, excluding Saturdays, Sundays and legal holidays.

This section is not applicable to an excavation made during an emergency which involves danger to life, health or property if reasonable precautions are taken to protect underground facilities.

- (D) ARS § 40-360.23. Making excavations in careful, prudent manner: liability for negligence, etc. Among other things, this statute states that obtaining information as required does not excuse any person making any excavation from doing so in a careful and prudent manner nor shall it excuse such persons from liability for any damage or injury resulting from his negligence.
- (E) ARS § 40-360.28 Civil penalty; liability. Among other things, this Statutes states that if the owner or operator fails to locate, or incorrectly locates the underground facility, pursuant to this article, the owner or operator becomes liable for resulting damages, costs and expenses to the injured party.
- (F) ARS § 32-2311 et. sec. including ARS § 32-2313. Business license; business name; branch office registration; renewal, etc. Among other things, this Statute states that no person, partnership, corporation or association shall engage in the business of general pest or weed control without being duly licensed/certified by the Structural Pest Control Board.
- (G) ARS §38-511. Provides for cancellation of the Contract for Statutory prohibited conflicts.

Referencing the above sections does not invalidate or minimize the importance of other of these or other Arizona Statutes or all other applicable portions of Laws.

107.2 PERMITS, BONDING, AND INSURANCE:

Permits, bonding and insurance requirements shall be as required by the Owner, and Laws statutes, codes, ordinances or regulations.

The Contractor shall, at his own expense, obtain all the required permits which have not been furnished or which have not been stated to be furnished by the Owner in the Bid Documents.

In all cases, the Contractor shall notify the appropriate permit agency so as to insure proper inspection by the agency concerned.

107.3 PATENTED DEVICES, MATERIALS AND PROCESSES:

If the Contractor employs any design, device, material, or process covered by letters of patent or copyright, he shall provide for such use by suitable legal agreement with the patentee or owner. The Contractor and the Contractor's surety(ies) and insurer(s) shall indemnify and save harmless the Owner, any affected third party or political subdivision from any and all claims for infringement by reason of the use of any such patented design, device, material or process, or any trademark or copyright, and shall indemnify and defend the Owner for any costs, expenses, and damages which it may be obligated to pay by reason of any infringement, at any time during the prosecution or after the completion of the Work.

107.4 ARCHAEOLOGICAL REPORTS:

Attention is directed to Arizona Revised Statutes Sections 41-841, 41-844 and 41-846 et. seq. In view of the above, it shall be a provision of any Contract issued that when archaeological features are encountered or unearthed in the excavation of material pits or of the roadway prism, or other excavation, the Contractor shall report promptly to the Director of the Arizona State Museum and the Owner. The Contractor may be allowed extra time, as appropriate, in accordance with the provisions of Section 108; however, no additional compensation shall be provided for compliance herewith.

107.5 SAFETY, HEALTH AND SANITATION PROVISIONS:

The Contractor shall provide and maintain in a neat, sanitary condition such accommodations for the use of his employees as may be necessary to comply with the requirements and regulations of the Arizona State Department of Health and/or as specified by the Mohave County Health Department.

The Contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions, on his own responsibility or as the Engineer may determine, reasonably necessary to protect the life and the health of employees on the job, the safety of the public and to protect property in connection with the performance of the Work covered by the Contract.

Precaution shall be exercised by the Contractor at all times for the protection of persons (including employees) and property. The Contractor shall comply with the provisions of all applicable Laws including without limitation, pertaining to such protection including all Federal and State occupational safety and health acts, and standards and regulations promulgated thereunder.

107.5.1 Asbestos Materials: If asbestos materials are encountered during any building remodeling/demolition Work, the Contractor shall comply fully with all laws including without limitation, the Arizona Administrative Code, A.A.C. R18-2-901 and notify the Engineer. An extension of Contract Time will be granted for any delay resulting from the asbestos material in accordance with Section 108.

107.5.2 Lead-Containing Paint: Paint and similar surface coating materials shall comply with Laws, and any materials that contain lead compounds and in which the lead content exceeds six hundredths (0.06) of the total weight of the non-volatile content of the paint or the weight of the dried paint film is declared a banned hazardous product and will not be used (Consumer Product Safety Act Part 1303 dated 9-1-77).

107.6 PUBLIC CONVENIENCE AND SAFETY:

The Contractor shall at all times so conduct the Work as to assure the least possible obstruction to traffic and adjacent residents and businesses. The safety, convenience, and the protection of persons and property, of the County and any other political subdivision, the general public, businesses and residents along the street, highway, and areas adjacent to the Work area shall be provided for by the Contractor.

107.6.1 Contractor's Marshaling Yard: Contractors shall notify the Engineer when using property(ies) other than property(ies) owned, leased or rented by the Contractor, including vacant property to park and service equipment and store material for use on the Owner construction contracts.

- (A) Any use of any properties including vacant property adjacent to or near the Project for parking or servicing equipment and/or storing of material will require the Contractor to obtain written signed and notarized approval from the property owner(s).
- (B) A copy of the document evidencing the Contractors ownership, lease, rights, rental rights or other of the property owner's approval shall be submitted to the Engineer, stating the use of the Marshaling Yard in connection with the Project.
- (C) The Yard shall be adequately maintained to control dust and mud from leaving the property.
- (D) Work in the Marshaling Yard shall be scheduled so as to comply with the all the Laws.
- (E) Equipment, materials, etc., shall be located so as to minimize impact on adjacent properties.
- (F) The Contractor shall clean up and restore any property(ies) used or effected by the Project activity (ies) promptly upon completion of use.
- (G) Contractor's notification to the Engineer shall specify in detail how the Contractor proposes to comply with (C) through (F) above.
- (H) The Contractor shall obtain a written release which also expressly releases the Owner, its Officials, Agents and Employees from the property owner after completion of use. A copy of the release shall be presented to the Engineer.

107.6.2 Marshalling Yard Work Hours: The Contractor shall comply with all Laws concerning Work hours and noise level during construction.

107.7 BARRICADES AND WARNING SIGNS:

The Contractor shall provide, erect, and maintain all necessary barricades, suitable and sufficient lights, danger signals, signs and other traffic control devices, and shall take all necessary precautions for the protection of the Work and safety of the public. Roads, partially or fully closed to traffic, shall be protected by effective barricades, and obstructions shall be illuminated during hours of darkness. Suitable warning signs shall be provided to properly control and direct traffic.

The Contractor shall erect warning signs in advance of any place on the Project where operations may interfere with the use of the road by traffic, and at all intermediate points where the new Work crosses or coincides with an existing road. Such warning signs shall be constructed and erected in accordance with the Manual on Uniform Traffic Control Devices and the requirements of the Contract Documents.

107.8 USE OF EXPLOSIVES:

The use of explosives or blasting agents is controlled by the Laws, including without limitation, the Uniform Fire Code, which is generally administered by the local or District Fire Department. The Contractor shall obtain a special permit from the appropriate Fire Department or Fire District for the use of explosives. A copy of this permit shall be delivered to the Engineer prior to the use of explosives. If the Fire Department or District does not use the Uniform Fire Code or have a department for enforcement of this Code, the Contractor shall use explosives only when authorized in writing by the Engineer. The approval by the Engineer for the use of explosives shall not relieve the Contractor from full compliance with his responsibilities for proper use and handling of the explosives or for any and all damages resulting from their use.

Explosives shall be transported, stored, handled and used in accordance with the provisions and requirements of all applicable laws, ordinances and regulations. Work shall be done in accordance with all applicable Laws, and the recommendations of the AGC Manual of Accident Prevention in Construction, the Institute of Makers of Explosives, and the Occupational Safety and Health Administration Regulations (29 CFR 1926.1(U)). In addition to the applicable regulations, the Contractor shall:

- (A) Exercise the utmost care not to endanger life or damage property.
- (B) Furnish and erect special signs to warn the public of his blasting operations. Such signs shall be located and maintained so as to be clearly evident to the public during all critical periods of blasting operations.
- (C) Provide actual notice to each public utility company, having structures adjacent to the Work, of his intention to use explosives. Such notice shall be given sufficiently in advance to enable the companies to advise the Contractor of any precautions that should be taken to protect all affected structures from damage.
- (D) Make a survey of adjacent properties, before commencing blasting operations, locating on drawings and by photographs all existing cracks and damages to structures. A copy shall be filed with the Engineer, including a report of any property owners who refused to cooperate and permit entry and inspection.
- (E) Blasting shall be accomplished in such a manner that all affected buildings, structures, railways, highways, etc. will be safe from rocks and other projectiles. Adequate blasting mats or other means of protection shall be employed when blasting in congested area or close proximity to any of the above improvements. Steel mats shall not be allowed within two thousand (2,000) feet of power lines.
- (F) At the time of firing, the Contractor shall station men along the road at sufficient distance from the blasting operation to flag down any vehicles.

The Owner reserves the right to order the discontinuance of blasting operations at any time.

107.9 PROTECTION AND RESTORATION OF PROPERTY AND LANDSCAPE:

The Contractor shall be responsible for the preservation and/or restoration of all public and private property and shall protect carefully from disturbance or damage all land monuments and property marks until the Engineer has witnessed or otherwise referenced their location and shall not move nor restore them until directed, and how directed.

The Contractor shall be responsible for all damage or injury to property of any character, during the prosecution of the Work, resulting from any act, omission, neglect, or misconduct in his manner or method of executing the Work, or at any time due to defective Work or materials, and said responsibility will not be released until the Project shall have been completed and accepted.

When or where any direct or indirect damage or injury is done to public or private property by or on account of any act, omission, neglect, or misconduct in the execution of the Work, or in consequence of the nonexecution thereof by the Contractor, he shall restore, at no cost to the Owner, such property to a condition similar or equal to that existing before such damage or injury was done, by repairing, rebuilding, or otherwise restoring as may be directed, or he shall make good such damage or injury in an acceptable manner. Such damage will include but not be limited to landscaped areas. The Contractor shall regrade the disturbed area as directed and restore the surface material to match existing in type and quality.

When construction is within temporary construction easements, the Contractor shall restore all disturbed areas to a condition equal to or better than the existing improvements. Such restoration will include but not be limited to asphalt, walkways, fences, lights, sprinklers, landscaping, etc. In the case of landscaping, the Contractor may remove and store sod and plant material. If, in the determination of the Engineer, the sod and/or plant material did not survive the transplanting in good condition, the Contractor shall replace the sod and/or plant material to match in type and quality. Also, the Contractor may salvage any sprinkler system materials, lighting materials, etc. In the event that it is not feasible to reinstall the salvaged material, new material shall be installed.

The Contractor shall not dump spoil or waste material on private property without first obtaining from the owner written permission for such dumping. All such dumping shall be in strict conformance with the Uniform Building Code as modified, adopted, and enforced by the Owner, and in accordance with the requirements of the Mohave County Public Works Department.

Access to private property shall be maintained to keep inconvenience to the property owner to a minimum. Prior to any construction in front of driveways the Contractor shall notify the property owner twenty-four (24) hours in advance. Inconvenience caused by construction across driveways and sidewalks shall be kept to a minimum by restoring the serviceability as soon as possible. If it is necessary to leave open excavation so that it becomes a hazard the Contractor shall provide structurally adequate steel plates to bridge the excavation.

107.10 CONTRACTOR'S RESPONSIBILITY FOR WORK:

The Contractor shall properly guard, protect, and take every precaution necessary against injury or damage to all finished or partially finished Work, by the action of the elements or from any other cause until the entire Project is completed and accepted by the Owner. The Contractor shall rebuild, repair, restore, and make good all injuries or damages to any portion of the Work before final acceptance at no cost to the Owner. Partial payment for completed portions of the Work shall not release the Contractor from such responsibility.

In case of suspension of the Work for any cause whatever, the Contractor shall be responsible for the Project and shall take such precautions as may be necessary to prevent damage to the Project and shall erect any necessary temporary structures, signs, or other facilities at no cost to the Owner.

107.11 CONTRACTOR'S RESPONSIBILITY FOR UTILITY PROPERTY AND SERVICES:

At points where the Contractor's operations are adjacent to properties of utility firms or other property, damage to which might result in considerable expense, loss, or inconvenience, Work shall not commence until all arrangements necessary for the protection thereof have been made.

The Contractor shall cooperate with the owners of any underground or overhead utilities in their removal and rearrangement operations in order that these operations may progress in a reasonable manner, that duplication of Work may be reduced to a minimum, and that services rendered by those parties will not be unnecessarily interrupted.

If any utility service is interrupted as a result of accidental breakage, the Contractor shall promptly notify the utility provider and all other proper authority and shall cooperate with the said utility provider and any involved authority(ies) in the restoration of service. No Work shall be undertaken around fire hydrants until provisions for continued service have been approved by the local fire authority.

The Contractor shall identify and expose all underground utilities and structures which might interfere with the construction of the Project, in order to permit survey location prior to starting the Work construction.

The Contractor shall assume full responsibility for damages to any underground facility/utility as a result of failing to obtain information as to its location, failing to excavate in a careful, prudent manner or failing to take measures for protection of the facilities/utilities. The Contractor is liable to the owner of the underground facility/utility for the total cost of the repair.

107.12 FURNISHING RIGHT-OF-WAY:

The Owner will provide right-of-way and easements for all Work in advance of construction. Any exceptions will be indicated in the Special Provisions.

107.13 PERSONAL LIABILITY OF PUBLIC OFFICIALS:

In carrying out any provisions of these Contract Documents, or in exercising any power or authority granted to them by or within the Scope of the Contract, there shall be no liability upon the Owner, the Engineer, or any other of the Owners agents, employees, representatives, or employees, either personally or as officials of the Owner or Engineer.

107.14 NO WAIVER OF LEGAL RIGHTS:

Upon completion of the Work, the Engineer will expeditiously make final inspection and notify the Contractor of acceptance. Such final acceptance, however, shall not preclude or estop the Owner from correcting any measurement, estimate, or certificate made before or after completion of the Work, nor shall the Owner be precluded or estopped from recovering from the Contractor or his surety, or both, such overpayment as it may sustain, or by failure on the part of the Contractor to fulfill his obligations under the Contract. A non-action or an express waiver or other non-enforcement on the part of the Owner against the Contractor for of any breach of any part of the Contract shall not be held to be a waiver of any other or subsequent breach. No waiver of the Owner shall be implied; any waiver must be express and written.

The Contractor, without prejudice to the terms of the Contract and in addition to any specific remedy provided the Owner in the Contract Documents, shall be liable to the Owner for latent defects, fraud or such gross mistakes as may amount to fraud, or as regards the Owner's rights under any warranty or guaranty or remedy required by law.

107.15 INDEMNIFICATION: SEE STANDARD TERMS AND CONDITIONS

SECTION 108

COMMENCEMENT, PROSECUTION AND PROGRESS

108.1 NOTICE TO PROCEED:

Neither the Contractor nor any Subcontractor shall commence Work on the Project prior to receipt of the written Notice to Proceed from the Engineer. The Contractor shall commence Work as soon as practicable after the starting date specified in the Notice to Proceed. All Work under the Contract shall be completed within the number of calendar days stated in the Bid Documents, plus extensions of time, if any, authorized by Change Orders to the Contract duly issued by the Owner or Engineer, beginning with the day following the starting date specified in the Notice to Proceed.

The Contractor shall notify the Engineer twenty-four (24) hours in advance of the time and place where Work will begin shall duly and diligently continue to do so throughout the duration of the Project unless directed otherwise by the Engineer.

108.2 SUBLETTING OF CONTRACT:

The Contractor shall not sublet, sell, transfer, assign, or otherwise dispose of the Contract or contracts, or of his right, title, or interest therein, without written consent of the Owner.

Subcontracts shall be in accordance with and the Contractor shall be bound by the following provisions:

- (A) All subcontracts shall be subject to the approval of the Engineer.
- (B) All subcontracts shall be in writing and shall provide that all Work to be performed thereunder shall be performed in accordance with the terms of the Contract.
- (C) Subcontractors shall conform to the regulations governing employment of labor.
- (D) The subcontracting of any portion of the Work will in no way release the Contractor of his liability under the Contract and bonds.
- (E) On all contracts for pipeline construction, roadway construction or roadway maintenance, the Contractor shall perform, with his own organization, Work amounting to not less than fifty percent (50%) of the total Contract cost.

On other types of contracts the Owner shall determine the percentage or waive this requirement.

108.3 CORRESPONDENCE TO THE CONTRACTOR AND THE OWNER:

NOTICE. Any notice which shall be necessary shall be in writing and shall be given by telefax, personal delivery, by deposit with an overnight express delivery service such as Federal Express, or by deposit in the United States Mail, certified mail, return receipt requested, postage prepaid, addressed to a Party at the addresses set forth below, or such other address as a Party may hereafter designate by prior notice, in writing. The delivery of a mailed notice shall be deemed complete within three (3) days of posting. Delivered notice shall be deemed complete at the time of delivery. Telefax notice shall be deemed complete at the time of faxing except if faxed on a non-business day, it shall be deemed complete on the beginning of the next business day following the fax.

Mailed or Delivered To:

OWNER:

Mohave County
Attention: Procurement Department
P. O. Box 7000, 700 East Beale Street
Kingman, Arizona 86402-7000 (mailed)
700 East Beale Street, Kingman, Arizona 86401 (delivered)
Telephone: (928) 753-0752
Telefax: (928) 753-0787

ENGINEER/COUNTY ENGINEER:

Mohave County Public Works Director/County Engineer
Mohave County Public Works Department
P. O. Box 7000, Kingman, Arizona 86402-7000 (mailed)
3715 Sunshine Drive, Kingman, Arizona 86401 (delivered)
Kingman, Arizona 86402-7000
Telephone: (928) 757-0910
Telefax: (928) 757-0921

CONTRACTOR:

At address(es) and fax number designated in the Contractor's Bid Proposal or as afterward noticed to the owner in writing.

A written notice, to the Contractor from the Owner, shall also be considered delivered and the service thereof completed, within three days after unless confirmed otherwise in writing, when said notice is posted, by certified mail, to the said Contractor at his last given address, or delivered in person to the Contractor or his authorized representative on the Project Site of the Work.

108.4 CONTRACTOR'S CONSTRUCTION SCHEDULE:

The Contractor, when required, shall furnish the Engineer a construction schedule for his review. The Engineer's review of the Contractor's schedule is for purposes of: 1) the Owner's staffing the Project as may be required; 2) to insure general compliance with the Contract Documents as it relates to the completion of all Work; and 3) to monitor and evaluate the construction status for purposes of approving progress payments. In the event the schedule does not contain sufficient information to meet the above purpose, as determined by the Engineer, the Contractor shall resubmit a new schedule with the additional information requested by the Engineer. The right to determine the sequence of the Work is a function vested solely in the Engineer and the construction schedule, when established, shall not be changed without the written consent of the Engineer. The orderly procedure of all Work to be performed shall be the full responsibility of the Contractor.

Review of a submitted schedule by the Engineer shall in no way be construed as an affirmation or admission that the schedule is reasonable or workable which responsibilities remain the obligations of the Contractor.

108.5 LIMITATION OF OPERATIONS:

The Contractor shall conduct the Work at all times in such a manner and sequence that will assure the least interference to the public. The Engineer may require the Contractor to finish a section on which Work is in progress before Work is started on any additional sections if the opening of such section is essential to public convenience.

All traffic affected by the construction will be regulated in accordance with the current Manual on Uniform Traffic Control Devices and in accordance with the Contract Documents.

Except in emergencies endangering life or property, written permission shall be obtained from the Engineer to perform any Work after regular working hours, on weekends, or legal holidays. Prior to the start of such Work, the Contractor shall arrange with the Engineer for the continuous or periodical inspection of the Work, surveys and tests of materials, when necessary.

If, in the opinion of the Engineer, the Contractor has fallen behind the approved progress schedule, the Contractor shall take such steps as may be required by the Engineer, including but not limited to, increasing the number of personnel, shifts, and/or overtime operations, days of Work, and/or amount of construction equipment until such time as the Work is back on schedule. He shall also submit for approval no later than the time of submittal of the next request for partial payment, such supplementary schedule or schedules as may be deemed necessary to demonstrate the manner in which the approved rate of progress will be regained, all at no additional cost to the Owner.

108.6 CHARACTER OF WORKMEN; METHODS AND EQUIPMENT:

The Contractor shall at all times employ sufficient labor and equipment for prosecuting the Work to full completion in the manner and time required by the Contract Documents.

All workmen shall be competent and have sufficient skill, knowledge and experience in their class of work and in the operation of equipment required to perform all Work properly, satisfactorily and in accordance with the Contract Documents.

Any person employed by the Contractor or any Subcontractor who, in the opinion of the Engineer, does not perform his Work in a proper and skillful manner or is intemperate or disorderly shall, at the written request of the Engineer, be removed from the Work by the Contractor or Subcontractor employing such person, and shall not be employed again in any portion of the Work without the approval of the Engineer. The Contractor or Subcontractor shall keep the Owner harmless from damages or claims for compensation that may occur in the enforcement of this section.

Should the Contractor or Subcontractor fail to remove such person as required above, or fail to furnish suitable and sufficient personnel for the proper prosecution of the Work, notwithstanding any other remedies set forth in the Contract Documents, the Engineer may suspend the Work by written notice until such orders are complied with.

All equipment which is proposed to be used on or for the Work shall be of sufficient size and in such mechanical condition as to meet requirements of the Work and to produce a satisfactory quality of Work. Equipment used on any portion of the Project shall be such that it will not damage property adjacent to the Work area.

When the methods and equipment to be used by the Contractor in accomplishing the Work are not prescribed, the Contractor is free to use any methods or equipment that he demonstrates to the satisfaction of the Engineer will accomplish the Work in conformity with the requirements of the Contract Documents.

When the Contract Documents state the Work shall be performed by the use of certain methods and equipment, such methods and equipment shall be used unless others are authorized by the Engineer. If the Contractor desires to use a method or type of equipment other than those specified, he may request authority from the Engineer to do so. The request shall be in writing and shall include a full description of the methods and equipment proposed to be used and an explanation of the reasons for desiring to make the change. If approval is given, it will be on the condition that the Contractor will be fully responsible for producing construction Work in conformity with the specifications. If, after trial use of the substituted methods or equipment, the Engineer determines that the Work produced does not meet the specifications, the Contractor shall discontinue the use of the substitute method or equipment and shall complete the remaining construction with the specified methods and equipment. The Contractor shall remove the deficient Work and replace it with Work of specified quality, or take such other corrective action as the Engineer may direct. No change will be made in basis of payment or in Contract Time as result of authorizing a change in methods or equipment under these provisions.

108.7 DETERMINATION AND EXTENSION OF CONTRACT TIME:

The number of calendar days allowed for the completion of the Work included in the Contract will be as stated in the Bid Documents and will be known as the Contract Time for Completion of the Work ("**Contract Time**").

When the Contract Time is on a calendar day basis it shall consist of the number of calendar days specified, including all weekends and legal holidays. All calendar days elapsing between the effective dates of any written notice from the Engineer to suspend Work and to resume Work following suspensions, not the fault of the Contractor, shall be excluded.

When the Contract Time is a fixed calendar date it shall be the date on which all Work on the Project shall be completed and meet final inspection.

If the Contractor finds it impossible for reasons beyond his control to complete the Work within Contract Time as specified or as extended due to no fault, action, inaction or other omission of the Contractor or the Contractor's subcontractor(s), agent(s), employee(s), laborer(s), material supplier(s), or equipment supplier(s), including by way of example storms, strikes, wars, or riots directly related to and affecting the Project or Project Site, the Contractor, the Contractor shall immediately submit a written request to the Engineer for an extension of Contract Time, Contract Time setting forth therein the reasons which he believes will justify the granting of his request. The Contractor's plea that insufficient time was specified is not a valid reason for extensions of Contract Time. If the Engineer finds that the Work was delayed because of conditions beyond the control and through no fault of the Contractor, he may extend the Contract Time in such amount as the conditions justify through Change Order duly issued by the Owner or Engineer. The extended Contract Time for Completion of the Work shall then be in full force and effect the same as though it were the original Contract Time for Completion of the Work.

108.8 GUARANTEE AND WARRANTEE PROVISIONS:

The Contractor shall guarantee the Work against defective workmanship or materials for a period of two (2) years from the date of final acceptance of the Work under the Contract.

Any omission on the part of the Engineer to condemn defective Work or materials at the time of construction shall not be deemed an acceptance, and the Contractor to stop his operations will be required to correct defective Work or materials at any time before final acceptance and within two (2) years thereafter.

Should any defects develop within two (2) year from the date of final acceptance due to faults in workmanship or materials the Contractor shall, within fourteen (14) calendar days of receipt of written notice from the Owner, begin making the necessary repairs to the satisfaction of the Engineer at no cost to the Owner. Such Work shall include the repair or replacement of other Work or materials damaged or affected by making the above repairs or corrective Work, all at no cost to the Owner.

If defects develop which are determined by the Engineer to be an emergency, the Engineer shall notify the Contractor, via the most expeditious means, regarding the nature and condition of the defects. In turn, the Contractor shall immediately dispatch necessary forces to correct the damage. The Engineer, at his sole discretion and only when it is deemed by him to be in the Owner's best interest, may suspend Calendar Days through Change Order for a reasonable number of Calendar Days to allow defect or the emergency condition. If the Contractor, in his initial action, resolves the emergency condition but not the defect, a letter as discussed above will follow and normal procedures for corrections will be employed. If immediate or appropriate action, satisfactory to the Engineer, is not taken by the Contractor, or if the Contractor cannot be contacted, the Engineer will deploy necessary forces to correct and/or secure the deficiency. Costs of the Engineer's action shall be paid by the Contractor and/or his bonding agency. Should it later be determined that the defects requiring such emergency action are not the responsibility of the Contractor, the Contractor will be paid for all costs incurred as a result of these demands in accordance with Subsection 109.5. Such action by the Engineer will not relieve the Contractor of the guarantees required by this section or elsewhere in the Contract Documents.

In case of Work, materials, or equipment for which written warranties are required by the special provisions, the Contractor shall provide or secure from the appropriate Subcontractor or supplier such warranties addressed to and in favor of the Owner and deliver same to the Engineer prior to final acceptance of the Work. Delivery of such warranties shall not relieve the Contractor from any obligation assumed under any other provisions of the Contract.

The warranties and guarantees provided in this subsection of the Contract Documents shall be in addition to and not in limitation of any other warranties, guarantees or remedies required by law.

108.9 FAILURE TO COMPLETE ON TIME:

For each and every calendar day that Contractor fails to achieve substantial completion of the Work after the Contract Time for completion of the Work specified in the Contract Documents, or as adjusted by the Owner or Engineer through Change Order duly issued, the sum of **\$450.00** per calendar day shall be deducted from monies due to or to become due to the Contractor, not as a forfeit or penalty but as liquidated damages. This sum is fixed and agreed upon between the parties because the actual loss to the Owner and to the public caused by delay in completion will be impractical and extremely difficult to ascertain and determine.

Permitting the Contractor to continue and finish the Work or any part of it after the time fixed for its completion, or after the date to which the time fixed for its completion may have been extended, will in no way operate as a waiver on the part of the Owner of any of its rights under the Contract.

In the event the Owner, in the Owner's sole discretion determines that it can and desires to calculate actual damages, and therewith, the Owner determines that it desires to make claim against the Contractor for actual damages rather than liquidated damages, then the Owner may but need not claim and deduct the amount of actual damages in lieu of liquidated damages. Actual damages shall include all damages whatsoever, without limitation, the actual cost(s) of maintaining the Owner's Engineering and inspection and other necessary forces and equipment for those calendar days beyond the Contract Times for completion and the actual date of completion of the Project in accordance with the terms of the Contract Documents, together with any other cost(s), fee(s), expense(s), or damage(s) suffered by the Owner due to the Contractor not completing the Project within the Contract Times.

Permitting the Contractor to continue and finish the Work or any part of it after the time fixed for its completion, as initially specified or as may have been duly extended, shall in no way operate as a waiver or estoppel as against the Owner, nor shall the Owner be prohibited from asserting any of its claims or rights under the Contract Documents for liquidated damages or actual damages..

108.10 FORFEITURE AND DEFAULT OF CONTRACT:

It is further agreed to by the Contractor that if he:

(A) Fails to begin the Work under the Contract within a reasonable time, or

- (B) Fails to perform the Work with sufficient workmen and equipment or with sufficient materials to assure the prompt completion of said Work, or
- (C) Performs the Work unsuitably or neglects or refuses to remove materials or to perform anew such Work as may be rejected as unacceptable and unsuitable, or
- (D) Discontinues the prosecution of the Work, or
- (E) Fails to resume Work which has been discontinued within a reasonable time after notice to do so, or
- (F) Becomes insolvent or is declared bankrupt or commits any act of bankruptcy or insolvency, or
- (G) Makes an "assignment for the benefit of creditors", or
- (H) At any time colluded with any party or parties, or
- (I) Allows any final judgment to stand against him unsatisfied for a period of fourteen (14) calendar days, or
- (J) For any cause whatsoever, fails to carry on the Work in an acceptable manner, the Engineer will give notice in writing to the Contractor and his surety of such delay, neglect, or default, and advise them that the Work must be resumed immediately.

If the Contractor or surety, within a period of fourteen (14) calendar days after such notice, has not proceeded in accordance therewith, then the Owner will, upon written notification from the Engineer of the fact of such delay, neglect or default and the Contractor's failure to comply with such notice, have full power and authority without violating the Contract, to terminate the Contract and/or to take the prosecution of the Work out of the hands of the Contractor. The Owner may appropriate or use any or all materials and equipment on the ground as may be suitable and acceptable and may enter into an agreement for the completion of said Contract according to the terms and provisions thereof, or use such other methods as in the opinion of the Engineer will be required for the completion of said Contract in an acceptable manner.

All costs and charges incurred by the Owner, together with the cost of completing the Work under Contract, will be deducted from any monies due or which may become due said Contractor. If such expense exceeds the sum which would have been payable under the Contract, then the Contractor and the surety shall be liable and shall pay to the Owner the amount of such excess.

The Owner's payment for represented Work of the Contractor shall not be under any circumstances considered a waiver or an estoppel as to the Owner requiring full, complete, and lawful specific performance of the Contractor under the terms of the Contract Documents, and the Owner's right to receive the payment of damages from the Contractor upon the Owner's recognition of and action or demand regarding the Contractor's default.

In the event of the cancellation or termination of the Contract, either in whole or in part, by reason of default or breach thereof by the Contractor, any loss or damage sustained by the Owner in procuring another contract and in completing the Work shall be borne and paid for by the Contractor.

Cancellation or termination of the Contract shall not waive, expire, or terminate any warranty of the Contractor and its agents, Subcontractors, and employees to the Owner unless such waiver(s) are expressly in writing from the Owner.

Rights and remedies of the Owner provided in the Contract Documents shall not be exclusive and are in addition to any other rights and remedies provided by Laws or under the Contract.

Specifically, but without limitation, it is agreed that the exercise of the above remedies by the Owner, is not a waiver or an estoppel of the Owner or others making claims under or against the Performance Bond and Payment Bond but may be acted upon independently upon or in conjunction with claims upon said bonds.

108.11 TERMINATION OF CONTRACT FOR CONVENIENCE:

In addition to cancellation or termination of the Contract for cause or as otherwise stated in the Contract Documents, the Owner may, by written order from the Engineer, terminate the Contract after determining that, for reasons beyond the control of either the Owner or the Contractor, the Contractor is prevented from proceeding with or completing the Work as originally contracted, or that the termination will be in the best interest of the Owner. Such reasons for termination may include, but need not be necessarily limited to, executive orders of the President relating to prosecution of war or national defense, national emergency which creates a serious shortage of materials, orders from duly constituted authorities relating to energy conservation, and restraining orders or injunctions obtained by third-party citizen actions resulting from national or local environmental protection laws or where the issuance of such order or injunction is primarily caused by acts or omissions of persons or agencies other than the Contractor, and local emergencies.

When contracts, or any portion thereof, are terminated before completion of all Work in the Contract, adjustments in the amount bid for the pay items will be made on the actual quantity of Work performed and accepted, or as mutually agreed for pay items of Work partially completed or not started. No claim for loss of anticipated profits will be considered.

Termination of the Contract or any portion thereof shall not relieve the Contractor of his responsibilities for the completed Work or the surety of its obligation for and concerning any just claims arising out of the Work performed.

SECTION 109

MEASUREMENTS AND PAYMENTS

109.1 MEASUREMENT OF QUANTITIES:

All Work completed under the Contract will be measured by the Engineer according to United States standard measures.

The methods of measurement and computation to be used in determination of quantities of materials furnished and of Work performed under the Contract will be those methods generally recognized as conforming to good engineering practice.

A station, when used as a definition or term of measurement, will be one hundred (100) linear feet.

Unless otherwise specified, longitudinal measurements will be made along the grade line.

Unless otherwise specified, transverse measurements for area computations will be the neat dimensions shown on the plans or ordered in writing by the Engineer.

Unless otherwise specified, all items which are to be measured by the linear foot will be measured along or parallel to the longitudinal axis of that item in such a manner as to ascertain reasonably the true length of the item.

The term ton will mean the short ton consisting of two thousand (2,000) pounds avoirdupois. All materials which are measured or proportioned by weight shall be weighed on accurate certified approved scales.

Unless otherwise specified, structures will be measured according to neat lines shown on the plans or as altered to fit field conditions.

In computing volumes of excavations, fill, or other earthwork, the average end area method or other acceptable methods as determined by the Engineer will be used.

The nominal diameter of wire and the thickness of plates and sheets used in the manufacture of corrugated metal pipe, metal plate pipe culverts and arches, and metal cribbing will be specified and measured in decimal fractions of inches.

The wire size in welded wire fabric used for concrete reinforcement will be identified by a W number directly corresponding to the cross-sectional area of the wire in hundredths of a square inch.

The weighing system shall conform to and be maintained in accordance with the requirements of and be certified by the Department of Weights and Measures Division.

When required in the Specifications or requested by the Engineer, materials shall be weighed by, or under the inspection of the Engineer or his representative.

During weighing operations, weights will be read and recorded to the nearest one hundred (100) pounds. The gross, tare and net weights of each load will be recorded and documented with all or part of the following information as applicable to the type of scales and recording system used:

- Project Identification
- Contract Item Number
- Material Source/Plant Identification
- Date
- Load Number
- Truck Identification
- Time of Weighing
- Applicable Weights
- Weighpersons Signature

Scales shall be resealed as often as required to assure accurate weights; scales shall be resealed at least once every three hundred sixty-five (365) calendar days. The Contractor shall also provide with each scale at least twenty (20) fifty-pound (50lb) certified weights to be used in checking the scale. Each weight shall be recertified one (1) year from the date of previous certification. Each weight shall be stamped with a number and the Contractor shall furnish a certificate showing the number of the weights and the date of certification.

Tests conducted by the Engineer to check the accuracy of scales shall not relieve the Contractor of the responsibility of maintaining the accuracy of the scales.

No measurement or direct payment will be made for all of the measures hereinbefore described taken to seal scales, provide and certify weights and to weigh material.

Trucks used to haul material being paid for by weight shall be weighed empty at least once daily and at such other times as the Engineer directs and each truck shall bear a plainly legible identification mark.

Materials measured by volume in the hauling vehicles shall be hauled in approved vehicles and measured therein at the point of delivery. Vehicles for this purpose may be of any size or type acceptable to the Engineer, provided that the body is of such shape that the actual contents may be readily and accurately determined. All vehicles shall be loaded to at least their water level capacity.

When requested by the Contractor and approved by the Engineer in writing, material specified to be measured by the cubic yard may be weighed and such weight will be converted to cubic yards for payment purposes. Factors for conversion from weight measurement to volume measurement will be determined by the Engineer and shall be agreed to by the Contractor before such method of measurement of pay quantities is used.

Bituminous materials will be measured either by the gallon or by the ton.

Volumes will be measured at sixty (60) degrees F. or will be corrected to the volume at sixty (60) degrees F. in accordance with the requirements of ASTM D-1250 for Asphalt or ASTM D-633 for Tars.

Emulsified asphalt will be converted from volume to weight by using a factor of two hundred forty (240) gallons per ton, regardless of temperature.

Cement will be measured by the ton.

Lumber will be measured by the one thousand (1,000) feet board measure (M.F.B.M.) actually incorporated in the structure. Measurement will be based on nominal widths and thicknesses and the extreme length of each piece actually used in the Work.

The term "lump sum", when used as a pay item, will mean complete payment for the Work described complete and in place with all appurtenances, fittings or accessories.

Items which have a basis for measurement and payment herein and which are incidental to or required in the construction of the Work but are not included as items in the bid schedule shall be considered an integral part of the Contract, and all labor, materials, etc. required for such items shall be furnished by the Contractor and the cost of same included in the unit price bid.

109.2 SCOPE OF PAYMENT:

It is the intent of the contract to provide for the construction and completion in every detail of the work described, complete in place for the total cost. The Contractor shall accept the compensation provided in the Contract Documents Bid as full payment for furnishing all labor, materials, tools, supplies, equipment, and incidentals necessary to the completed Work and for performing all Work contemplated and embraced under the Contract Documents; for loss or damage arising from the nature of the Work from the actions of the elements; from any unforeseen difficulties which may be encountered during the prosecution of the Work; for all risks of every description connected with the prosecution of the Work; for all expenses incurred in consequence of the suspension or discontinuation of the Work as provided in the

Contract Documents; and for completing the Work according to the plans and specifications, until the final acceptance by the Owner. Neither the payment of any estimate nor of any retained percentage shall relieve the Contractor of any obligation to make good any defective Work or materials.

No compensation will be made in any case for loss of anticipated profits. No additional payment will be made for Work related to any item unless specifically called for in the proposal.

109.3 ASSIGNMENT OF PAYMENTS:

The Contractor shall not assign payments of the Contract or any portion thereof without approval of surety and written consent of the Owner.

Claims for monies due or to become due the Contractor may be assigned to a bank, trust company, or other financing institution, and may thereafter be further assigned and reassigned to any such institution. Any such assignment or reassignment may be made to one party as agent or trustee for two or more parties participating in such financing. Any assignment of money shall be subject to all proper setoffs and withholdings in favor of the Owner and to all deductions provided for in these specifications.

109.4 COMPENSATION FOR ALTERATION OF WORK:

It is the intent of this Contract to have the contractor include all prices, cost, work, materials, etc. to provide the County with a complete project as prescribed by the Contract Documents for the total sum of the Contractor's Bid. It is the Bidder's responsibility to fully inform himself as to all work and materials required or necessary, or possible problems that may be incurred due to the nature of the project or any other cause and include all costs for the completion of the project, in compliance with the Contract Documents, in his Contract Bid for the complete construction in every detail of the Work described.

Any alteration to the proposed Work as specified in the Contract Documents shall only be authorized by duly issued Change Order, in accordance with the Contract Documents.

109.4.1 By The Owner:

- (A) For a decrease greater than twenty percent (20%) in either the total cost of the Contract or the total cost of a major item and when a reasonable cost analysis supports an increase in the pro rata share of fixed cost chargeable to this item in total, an increase adjustment in the monies due the Contractor may be made. This adjusted compensation will not exceed eighty percent (80%) of the original lump sum Contract amount or, if for a unit price item, the adjustment will not exceed eighty percent (80%) of the original extended unit bid price. This does not apply to contingent bid item in the bid proposal.
- (B) For an increase greater than twenty percent (20%), any adjustment made will only apply to that cost in excess of one hundred twenty percent (120%) of the original bidding schedule. If either party presents a reasonable cost analysis that shows a change in the pro rata share of fixed costs chargeable to this item in total, an increase or decrease adjustment will be made. This increase or decrease adjustment will be made on such basis as is necessary to cover a reasonable estimate of cost, plus an allowance, not to exceed fifteen percent (15%), for overhead and profit. If the parties are unable to reach an agreement, the Engineer has the authority to order the excess Work done on an actual cost basis as specified in Subsection 109.5.
- (C) For either an increase or decrease in cost, no claim shall be made by the Contractor for any loss of anticipated profits.

109.4.2 Due to Physical Conditions:

It shall be the Contractor's responsibility to ascertain whether any subsurface or latent physical conditions at the site of work exist as no extra or additional compensation shall be granted the Contractor in this respect for conditions which the Contractor could have fully informed himself of prior to bidding.

- (A) If the Engineer, after his investigation of the Contractor's claim and of the Site conditions, agrees that they materially differ from those indicated in the Contract and the Contractor, as bidder, could not have discovered prior to bidding, and that the differing conditions would cause an increase in the Contractor's bid cost of accomplishing the Work, new unit bid prices or a lump sum cost (for the additional Work only) may be negotiated in accordance with Section 109.5. If the parties are unable to reach an agreement on price, the Engineer has the authority to order this additional Work accomplished on an actual cost basis as specified in Section 109.5.
- (B) If the Engineer, after his investigation of the Site conditions, finds that these conditions do not materially differ from those indicated in the Contract, and that the Contractor could have informed himself of prior to bidding, he has the authority to order the Work to be accomplished at the original bid price(s).

109.4.3 Due to Extra Work: If the Contractor can present valid, factual evidence, satisfactory to the Engineer, that the Work in question is an item not provided for in or essential for the completion of the Contract as awarded then a unit bid price or lump sum cost, for this item only, may be negotiated under separate agreement. If the parties are unable to reach an agreement on price or cost, the Engineer has the authority to order the extra Work accomplished on an actual cost basis as specified in Subsection 109.5.

109.4.4 Made at the Contractor's Request: Any alterations, if approved, will be a reduction in cost or at no additional cost to the Owner.

109.4.5 Failure of the Contractor to Comply with Contract Requirements: As stated in Section 104.3, failure on the part of the Contractor to perform the Work or any portion thereof in full compliance or conformance with the requirements and conditions of the Contract Documents shall be deemed sufficient justification for the Owner to declare the Contractor in Default of the Contractor's obligations under Contract with the Owner.

For any suspension of Work due to failure of the Contractor to perform the Work in compliance or conformance with the requirements of the Contract, there will be no additional compensation or Contract Time allowed the Contractor.

In the event the Owner takes control of all or part of the Work and/or has all or part of the Work accomplished by others due to failure of the Contractor to perform the Work in compliance or conformance with the requirements of the Contract, all costs of which shall be born by the Contractor and be deducted from monies due or to become due to the Contractor under this Contract. Computation of the cost will be in accordance with Subsection 109.5.4.2.

109.4.6 Allowable Mark-Ups: Only the allowable mark-ups as defined in Subsection 109.5 shall be allowed. Additional compensation for other items shall not be considered or allowed.

109.5 ACTUAL COST WORK:

The compensation for actual cost of Work performed by the Contractor (Subcontractor) shall be determined by the Engineer in the following manner.

109.5.1 Equipment: For all equipment, the use of which has been authorized by the Engineer, except for small tools and manual equipment, the Contractor will be paid in accordance with the latest Schedule of Equipment Rates used by the Arizona Department of Transportation.

109.5.2 Material: For all material, accepted by the Engineer and used in the Work, the Contractor will be paid the actual cost of such material including transportation cost, to which total cost will be added a sum equal to fifteen percent (15%) thereof.

109.5.3 Labor: For all labor and for the foreman, when he is in direct charge of the operation, the Contractor will be paid:

- (A) The actual wages paid plus the current percentage thereof as determined by the Arizona Department of Transportation which is deemed to cover the Contractor's cost incurred as a result of payment imposed by State or Federal Law and payments that are made to, or on behalf of, the Workman other than the actual wage. Actual wage is defined as the required current hourly rate paid to the labor classification concerned and does not include any fringe benefits or dislocation allowances. If the Contractor is not required to pay fringe benefits equivalent to the Current rates published in the Federal Register, an equitable deduction will be made from the current percentage established by the Arizona Department of Transportation.
- (B) For the first Fifty Thousand Dollars (\$50,000) of labor cost computed under paragraph (A) above, the Contractor will be paid an amount equal to fifteen percent (15%) for overhead and profit.
- (C) For all labor cost computed under paragraph (A) above, in excess of Fifty Thousand Dollars (\$50,000) but not exceeding \$100,000, the Contractor will be paid an amount equal to twelve percent (12%) for overhead and profit.
- (D) For any labor cost computed under paragraph (A) above in excess of One Hundred Thousand Dollars (\$100,000) the Contractor will be paid an amount equal to ten percent (10%) for overhead and profit.

109.5.4 Work Performed by Subcontractors or Other Sources:

109.5.4.1 Work Performed by Subcontractors: If it is determined by the Engineer that portions of the Actual Cost of Work to be performed requires specialized labor or equipment not normally used by the Contractor and such Work is then authorized to be performed by a Subcontractor(s), the Subcontractor(s) will be paid by the Contractor in accordance with the actual cost Work procedures outlined herein. The Contractor will be paid by the Owner the full amount of the subcontract plus the following percentages for administration and supervision.

- (A) For the first Ten Thousand Dollars (\$10,000) accumulated total of all Change Order Work performed by Subcontractors (less mark-up for overhead and profit), the Contractor will be paid an amount equal to ten percent (10%) of the accumulated total for administration and supervision. If the accumulated total is Three Thousand Dollars (\$3,000) or less, the Contractor will be paid Three Hundred Dollars (\$300) for administration and supervision.
- (B) For all Change Order Work in excess of Ten Thousand Dollars (\$10,000) accumulated total performed by Subcontractors (less mark-up for overhead and profit), the Contractor will be paid an amount equal to five percent (5%) of the accumulated total for administration and supervision.

109.5.4.2 Work performed by Other Sources: If the Owner has Work performed by other sources, in accordance with Subsection 104.3 (B), the Owner will deduct, from monies due or to become due to the Contractor, the full amount of the cost of accomplishing the Work by other sources plus the following percentages for administration and supervision:

- (A) For the first Ten Thousand Dollars (\$10,000) accumulated total of Work performed by other sources, the Owner will deduct an amount equal to ten percent (10%) of the accumulated total for administration and supervision. If the accumulated total is Three Thousand Dollars (\$3,000) or less, the Owner will deduct Three Hundred Dollars (\$300) for administration and supervision.
- (B) For all Work in excess of Ten Thousand Dollars (\$10,000) accumulated total performed by other sources, the Owner will deduct an amount equal to five percent (5%) of the accumulated total for administration and supervision.

109.5.5 Documentation:

- (A) Except in emergency situations, the Owner will not be liable for any Actual Cost Work performed by the Contractor prior to written authorization through Change Order duly issued by the Owner or Engineer or prior to full execution of a written agreement by all parties concerned.
- (B) Payment for Work performed on an actual cost basis will not be made until the Contractor has furnished the Engineer, on forms agreed to by the Owner, duplicate itemized statements of such Work, including Subcontractor(s) costs, detailed as follows:
 - 1. Name, classification, date, daily hours, total hours, rate and extension for each laborer and foreman.
 - 2. Designation, dates, daily hours, total hours, rental rates and extension for each unit of equipment, and machinery.
 - 3. Quantities of material, prices, extension and transportation cost on a daily basis. These charges shall be substantiated by vendor invoices.
- (C) The Engineer will compare his records with the statement furnished by the Contractor, resolving any differences and making the required adjustments. This statement when agreed upon and signed by both parties, shall be the basis of payment for the Work performed.

109.5.6 Bonds and Insurance: The Contractor shall be paid for the actual cost plus ten percent (10%) for Administrative cost when the Contractor can provide evidence of payment for premiums on required payment and performance bonds, premiums on railroad and/or airport extended liability insurance, and premiums for property damage and/or public liability insurance. No duplication of payment for Contractor's costs included under Subsection 109.5.3(A) will be allowed.

109.5.7 Authority of Engineer: The Engineer is in charge of Actual Cost Work and has the authority to direct which labor and equipment will be used, to suspend operations, and to refuse to pay for any labor or equipment which he feels is not doing productive Work.

109.6 PAYMENT FOR IMPROVEMENT DISTRICT PROJECTS: NOT USED

109.7 PAYMENT:

- (A) Partial Payments: The Owner will make a partial payment to the Contractor on the basis of an estimate prepared by the Contractor for Work completed through the last day of the preceding calendar month. Payment will be within thirty (30) calendar days after the estimate has been approved by the Engineer and received by the Owner and only after the receipt and approval by the Owner of lien waivers in accordance with Section 109.9 of these General Conditions.

The Owner will retain ten percent (10%) of all estimates as a guarantee for complete performance of the Contract in accordance with ARS Section 34-221, unless the Contractor elects to deposit securities in accordance with ARS Section 34-221, Paragraph 5.

- (B) Products, supplies, materials or equipment on hand: No partial payment will be made for products, supplies, materials or equipment on hand or stored on the Project which have not been incorporated into the Work. This does not relieve the Contractor of the responsibilities for the equipment, materials or supplies stored on Site. The Contractor shall assume all responsibility for protection of and in ensuring the safety and security of the supplies, equipment and materials stored or stockpiled on Site. The Contractor shall be responsible to ensure that the materials are in a new, undamaged condition, free of defects up to, until, and during incorporation into the Project. Materials or equipment must be stored or stockpiled either on Site in a warehouse, or in a secured storage area. Additionally, the Contractor shall insure the materials, supplies and equipment to cover loss or damage to same without additional liability or added costs to the Owner.

The Contractor will provide access to the storage area or warehouse upon request of the Engineer. When not located within the onsite, the storage site shall be within the general geographical area of the Project.

The acceptance of the Project and the making of the final payment shall not constitute a waiver by the Owner of any claims arising from faulty or defective supplies, equipment, material, and the Work appearing after the completion or from failure of the Contractor to comply with the requirements of the Contract Documents.

- (C) Final Payment will be made to the Contractor by the Owner within thirty (30) days from the date that the Contractor fully completes all the Work required by the Contract Documents including cleanup and restoration, to the satisfaction of the Engineer and the Owner and only after receipt and approval by the Owner of lien waivers in accordance with Section 109.9 of these General Conditions.

109.8 PAYMENT FOR DELAY: The procedures contained in this Subsection shall not be construed to void any provision of the Contract which require notice of delays, provides for negotiation of other procedures for settlement or provide for liquidated damages.

109.8.1 Failure to Locate or Incorrect Location of Utilities: ARS 40-360 states "that if the owner or operator fails to locate or incorrectly locates the underground facility, pursuant to this article, the owner or operator becomes liable for resulting damages, costs and expense to the injured party." The Project Owner will deny any claims for damages or delays if another owner or operator is at fault.

109.8.2 Owner Delays: ARS 34-221 states "A contract for the procurement of construction shall include a provision which provides for negotiations between the Agent and the Contractor for the recovery of damages related to expenses incurred by the Contractor for a delay for which the Agent is responsible, which is unreasonable under the circumstances and which was not within the contemplation of the parties to the contract."

In this case, if the Contractor sustains damages which could not have been avoided by the judicious handling of forces, equipment and plant or by reasonable revision in the Contractor's schedule of operation, the compensation for such damages will be negotiated under separate agreement. The Contractor shall notify the Engineer of the condition in writing by the next Work day. Failure to notify the Engineer within this time may be just cause to reject any claims for such damages.

Compensation for such damages will be negotiated as follows:

- (A) The Engineer shall be satisfied that the Contractor has made every reasonable effort to prosecute the Work despite any delays encountered or revisions in the Contractor's scheduling of Work.
- (B) The Compensation paid to the Contractor shall be in accordance with Section 109.

109.8.3 Extension of Contract Time: For any such delays, the Contract Time will be adjusted in accordance with Subsection 108.7.

109.9 LIENS AND LIEN WAIVERS:

It is understood and agreed that neither the Contractor nor its subcontractors, agents, employees, laborers, material suppliers, or equipment suppliers shall lien or encumber the Project. The Contractor so agrees on its own behalf as a material part of the Contract Documents. As to the subcontractors, agents, employees, laborers, material suppliers or equipment suppliers, a Payment Bond shall be supplied by the Contractor and shall be in place for this Project, pursuant to A.R.S. §§ 34-222 and 34-223. The Payment Bond together with the Contract shall be recorded with the Mohave County Recorder's Office, pursuant to A.R.S. § 33-1003.

Further, the Contractor shall with each Application for Payment, warrant in writing that it has already paid or will use the monies received from the payment to promptly pay in full all of its laborers, subcontractors, and suppliers for all work materials, services, equipment and any charges or fees associated with and required by the Contract. With any Application for Final Payment, and prior to payment, the Contractor shall provide to the Owner its own signed and notarized Unconditional Waiver and Release in a form prescribed herein.

The Contractor shall inform all Project subcontractors, laborers, material suppliers and equipment suppliers that the Project has a Payment Bond posted pursuant to A.R.S. § 34-222, and that thus the subcontractors, laborers, material suppliers and equipment suppliers have no right to lien the Project, but rather shall make claims for non-payment, (if any) directly to the Contractor upon the Payment Bond, pursuant to A.R.S. § 34-223.

FEDERAL FUNDING REQUIREMENTS FOR CONSTRUCTION

1. CONTRACTOR'S RESPONSIBILITY.

- 1.1. CONTRACTOR shall be responsible for compliance with requirements in 2 C.F.R. Part 200, including its subparts, appendices, and supplemental guidance.
- 1.2. CONTRACTOR shall be responsible for compliance with all requirements for the receipt of federal funds for this project. These responsibilities remain as duties of the CONTRACTOR even if the CONTRACTOR hires a subcontractor.
- 1.3. A breach of any of the federal requirements may be grounds for termination of this Agreement and for disbarment of CONTRACTOR and subcontractor as provided in 29 C.F.R. §5.12.

2. DRUG-FREE WORKPLACE REQUIREMENTS.

- 2.1. CONTRACTOR shall comply with the drug-free workplace requirements in accordance with Drug-Free Workplace Act of 1988 (Publ. 100-690, Title Y, Subtitle D).

3. COMPLIANCE WITH COPELAND'S "ANTI-KICKBACK" ACT.

- 3.1. CONTRACTOR shall comply with 18 U.S.C. §874, 40 U.S.C. §3145, and the requirements of 29 C.F.R. Part 3, as may be applicable. CONTRACTOR, or subcontractor, shall insert in any subcontracts the clause above and such other clauses as American Rescue Plan Act (ARPA) may by appropriate instructions require, and a clause requiring the subcontractors to include these clauses in any lower tier subcontracts.

4. CLEAN AIR ACT AND THE FEDERAL WATER POLLUTION ACT.

4.1. Clean Air Act.

- 4.1.1. CONTRACTOR agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. §7401 et seq.
- 4.1.2. CONTRACTOR agrees to report each violation to COUNTY and understands and agrees that COUNTY will, in turn, report each violation as required to assure notification to ARPA and the appropriate Environmental Protection Agency Regional Office.
- 4.1.3. CONTRACTOR agrees to include these requirements in each subcontract exceeding One Hundred Fifty Thousand Dollars (\$150,000.00) financed in whole or in part with Federal assistance provided by ARPA.

4.2. Federal Water Pollution Control Act.

- 4.2.1. CONTRACTOR agrees to comply with all applicable standards, orders, or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. §1251 et seq.
- 4.2.2. CONTRACTOR agrees to report each violation to COUNTY and understands and agrees that COUNTY will, in turn, report each violation as required to assure notification to ARPA and the appropriate Environmental Protection Agency Regional Office.
- 4.2.3. CONTRACTOR agrees to include these requirements in each subcontract exceeding One Hundred Fifty Thousand Dollars (\$150,000.00) financed in whole or in part with Federal assistance provided by ARPA.

5. SUSPENSION AND DEBARMENT.

- 5.1. This contract is a covered transaction for purposes of 2 C.F.R. pt. 180 and 2 C.F.R. pt. 3000. As such, the contractor is required to verify that none of the contractor's principals (defined at 2 C.F.R. § 180.995) or its affiliates (defined at 2 C.F.R. § 180.905) are excluded (defined at 2 C.F.R. § 180.940) or disqualified (defined at 2 C.F.R. § 180.935).

- 5.2. The contractor must comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, and must include a requirement to comply with these regulations in any lower tier covered transaction it enters into.
- 5.3. This certification is a material representation of fact relied upon by (insert name of recipient/sub recipient/applicant). If it is later determined that the contractor did not comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, in addition to remedies available to (insert name of recipient/sub recipient/applicant), the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment.
- 5.4. The bidder or proposer agrees to comply with the requirements of 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C while this offer is valid and throughout the period of any contract that may arise from this offer. The bidder or proposer further agrees to include a provision requiring such compliance in its lower tier covered transactions.

6. ACCESS TO RECORDS.

- 6.1. CONTRACTOR agrees to provide COUNTY, the ARPA Administrator, the Comptroller General of the United States, or any of their authorized representatives access to any books, documents, papers, and records of CONTRACTOR which are directly pertinent to this Agreement for the purposes of making audits, examinations, excerpts, and transcriptions.
- 6.2. CONTRACTOR agrees to permit any of the foregoing parties to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed.
- 6.3. CONTRACTOR agrees to provide the ARPA Administrator or his/her authorized representatives access to construction or other work sites pertaining to the Work being completed under this Agreement.
- 6.4. In compliance with the Disaster Recovery Act of 2018, COUNTY and CONTRACTOR acknowledge and agree that no language in this Agreement is intended to prohibit audits or internal reviews by the ARPA Administrator or the Comptroller General of the United States.

7. DHS SEAL, LOGO AND FLAGS.

- 7.1. CONTRACTOR shall not use the Department of Homeland Security ("OHS") seal(s), logos, crests, or reproductions of flags or likenesses of DHS agency officials without specific pre-approval.

8. COMPLIANCE WITH FEDERAL LAW, REGULATIONS, AND EXECUTIVE ORDERS.

- 8.1. This is an acknowledgement that ARPA financial assistance will be used to fund all or a portion of this Agreement. CONTRACTOR will comply with all applicable Federal law, regulations, executive orders, ARPA policies, procedures, and directives.

9. NO OBLIGATION BY FEDERAL GOVERNMENT.

- 9.1. The Federal Government is not a party to this Agreement and is not subject to any obligations or liabilities to COUNTY, CONTRACTOR, or any other party pertaining to any matter resulting from this Agreement.

10. PROGRAM FRAUD AND FALSE OR FRAUDULENT STATEMENTS OR RELATED ACTS.

- 10.1. CONTRACTOR acknowledges that 31 U.S.C. Chap. 38 (Administrative Remedies for False Claims and Statements) applies to CONTRACTOR's actions pertaining to this Contract.

11. CONFLICT OF INTEREST.

- 11.1. CONTRACTOR must disclose in writing any potential conflict of interest to COUNTY or any passthrough entity in accordance with applicable Federal policy.

12. MANDATORY DISCLOSURES.

12.1. CONTRACTOR must disclose in writing all violations of Federal criminal law involving fraud, bribery or gratuity violations, potentially affecting the Federal award.

13. UTILIZATION OF MINORITY AND WOMEN FIRMS (M/WBE).

13.1. CONTRACTOR must take all necessary affirmative steps to assure that minority businesses, women's business enterprises, and labor surplus area firms are used when possible.

13.2. CONTRACTOR has documented its efforts to utilize M/BWE firms, including what firms were solicited as suppliers and/or subcontractors as applicable, and submitted this information with CONTRACTOR's bid, which has been made a part of this Agreement.

14. DOMESTIC PREFERENCES FOR PROCUREMENTS.

14.1. In accordance with 2 CFR 200.322, as appropriate and to the extent consistent with law, the Grantee should, to the greatest extent practicable under this Award, provide a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States (including but not limited to iron, aluminum, steel, cement, and other manufactured products). The requirements of this paragraph must be included in all subawards and in all contracts and purchase orders for work or products under this Award.

15. PROCUREMENT OF RECOVERED MATERIALS.

15.1. In accordance with Section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act, the Contractor shall procure items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR Part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition. The Contractor shall procure items designated in the EPA guidelines that contain the highest percentage of recovered materials practicable unless the Contractor determines that such items: (1) are not reasonably available in a reasonable period of time; (2) fail to meet reasonable performance standards, which shall be determined on the basis of the guidelines of the National Institute of Standards and Technology, if applicable to the item; or (3) are only available at an unreasonable price.

16. NON-DISCRIMINATION.

16.1. CONTRACTOR will comply with all state and federal non-discrimination laws.

17. CONTRACT WORK HOURS AND SAFETY STANDARDS.

17.1. CONTRACTOR will comply with Contract Work Hours and Safety Standards Act (40 U.S.C. 3701-3708). Where applicable, all contracts awarded by the non-Federal entity in excess of \$100,000 that involve the employment of mechanics or laborers must include a provision for compliance with 40 U.S.C. 3702 and 3704, as supplemented by Department of Labor regulations (29 CFR Part 5). Under 40 U.S.C. 3702 of the Act, each contractor must be required to compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the work week. The requirements of 40 U.S.C. 3704 are applicable to construction work and provide that no laborer or mechanic must be required to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous. These requirements do not apply to the purchases of supplies or materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence.

18. PROHIBITION ON CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT.

18.1. This term and condition implements 2 CFR 200.216 and is effective for obligations and expenditures of EPA financial assistance funding on or after 8/13/2020. As required by 2 CFR 200.216, EPA recipients and subrecipients, including borrowers under EPA funded revolving loan fund programs, are prohibited from obligating or expending loan or grant funds to procure or obtain; extend or renew a contract to procure or obtain; or enter into a contract (or extend or renew a contract) to procure or obtain equipment, services, or systems that use covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. As described in Public Law 115-232, section 889, covered telecommunications equipment is telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities). Recipients, subrecipients, and borrowers also may not use EPA funds to purchase.

19. EQUAL EMPLOYMENT OPPORTUNITY.

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

19.1.1. The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, 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, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to the following:

Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

19.1.2. 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, sexual orientation, gender identity, or national origin.

19.1.3. The contractor will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the contractor's legal duty to furnish information.

19.1.4. 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 advising the said labor union or workers' representatives of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

- 19.1.5. The contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
- 19.1.6. The contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
- 19.1.7. In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
- 19.1.8. The contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (8) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance:

Provided, however, that in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

The applicant further agrees that it will be bound by the above equal opportunity clause with respect to its own employment practices when it participates in federally assisted construction work: Provided, That if the applicant so participating is a State or local government, the above equal opportunity clause is not applicable to any agency, instrumentality or subdivision of such government which does not participate in work on or under the contract.

The applicant agrees that it will assist and cooperate actively with the administering agency and the Secretary of Labor in obtaining the compliance of contractors and subcontractors with the equal opportunity clause and the rules, regulations, and relevant orders of the Secretary of Labor, that it will furnish the administering agency and the Secretary of Labor such information as they may require for the supervision of such compliance, and that it will otherwise assist the administering agency in the discharge of the agency's primary responsibility for securing compliance.

The applicant further agrees that it will refrain from entering into any contract or contract modification subject to Executive Order 11246 of September 24, 1965, with a contractor debarred from, or who has not demonstrated eligibility for, Government contracts and federally assisted construction contracts pursuant to the Executive Order and will carry out such sanctions and penalties for violation of the equal opportunity clause as may be imposed upon contractors and subcontractors by the administering agency or the Secretary of Labor pursuant to Part II, Subpart D of the Executive Order. In addition, the applicant agrees that if it fails or refuses to comply with these undertakings, the administering agency may take any or all of the following actions: Cancel, terminate, or suspend in whole or in part this grant

(contract, loan, insurance, guarantee); refrain from extending any further assistance to the applicant under the program with respect to which the failure or refund occurred until satisfactory assurance of future compliance has been received from such applicant; and refer the case to the Department of Justice for appropriate legal proceedings.

20. CONTRACT MODIFICATIONS: The Contract will only be modified by a written Contract Amendment signed by persons duly authorized to enter into contracts on behalf of the County and the Contractor. County's field representatives are not authorized to approve change orders and amendments affecting contract price or completion time. These must be approved by the Mohave County Board of Supervisors. All modifications will require the County's independent cost or price analysis prior to reviewing Contract modifications.

21. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT.

21.1. The regulation at 29 C.F.R. § 5.5(b) provides contract clause language concerning compliance with the Contract Work Hours and Safety Standards Act:

Compliance with the Contract Work Hours and Safety Standards Act.

(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. 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 (b)(1) of this section, in the sum of

\$27 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) of this section.

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

(4) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (b)(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 (b)(1) through (4) of this section.

22. BYRD ANTI-LOBBYING AMENDMENT, 31 U.S.C. § 1352 (as amended).

22.1. Contractors who apply or bid for an award of \$100,000 or more shall file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, officer or employee of Congress, or an employee of a Member of Congress in connection with obtaining any Federal contract, grant, or any other award covered by 31 U.S.C. § 1352. Each tier shall also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the recipient who in turn will forward the certification(s) to the awarding agency.

22.2. Required Certification. If applicable, contractors must sign and submit to the non-federal entity the following certification.

22.2.1. APPENDIX A, 44 C.F.R. PART 18 – CERTIFICATION REGARDING LOBBYING

Certification for Contracts, Grants, Loans, and Cooperative Agreements

The undersigned certifies, to the best of his or her knowledge and belief, that:

No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

The undersigned shall require that the language of this certification be included in the award documents for all sub awards at all tiers (including subcontracts, sub grants, and contracts under grants, loans, and cooperative agreements) and that all sub recipients shall certify and disclose accordingly.

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

The Contractor, certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Contractor understands and agrees that the provisions of 31 U.S.C. Chap. 38, Administrative Remedies for False Claims and Statements, apply to this certification and disclosure, if any.

CONTRACTOR'S QUALIFICATIONS STATEMENT

The Undersigned certifies under oath that the information provided herein is true and sufficiently complete so as not to be misleading.

SUBMITTED TO: Mohave County, a body politic and corporate of the State of Arizona
 ADDRESS: Post Office Box 7000, Kingman, Arizona 86401

Name of licensed Contractor organization:			
Submitted By (Name):			
Address:			
Phone #:		Email:	
Is your organization a licensed Contractor in the State of Arizona?		Yes:	No:
Principal Office (Headquarters Address, if applicable)			
Address:			
Phone #:		Email:	
Form of Business (check one):	Corporation:	Partnership:	Joint Venture:
	Individual:	Other (Specify):	
How many years of operation in the State of Arizona?			
How many years under the present business name?			
Under what other names has your organization operated?			
Dun and Bradstreet (D&B) Number:			
Federal Unique Entity ID Number (http://sam.gov):			
Please Provide the Following (Attach additional sheets if necessary): LICENSING			
AZ Registrar of Contractor License Information:	Classification(s):		
	Number(s):		
List relevant license number(s) for jurisdictions and trade categories in which your organization is legally qualified to do business: (Provide copies of licenses)			
List relevant jurisdictions in which your organization's partnership, trade name, or factitious name is filed: (Provide copies)			

EXPERIENCE

(Attach additional sheets, if necessary)

<p>List the relevant categories of work that your organization normally performs with its own forces:</p>	
<p>List relevant major construction projects your organization has in progress, giving the name of project, owner, architect, contract amount, percent complete and scheduled completion date:</p> <p>(Provide additional sheets with details if needed)</p>	
<p>State total dollar value of work in progress and under contract:</p>	\$
<p>State average annual amount of construction work performed during the past five years:</p>	\$
<p>List the relevant major projects your organization has completed in the past five years, giving the name of project, owner, contract amount, date of completion and percentage of the cost of the work performed with your own forces:</p> <p>(Provide additional sheets, if needed)</p>	
<p>List the relevant construction experience and present commitments of relevant key individuals of your organization:</p> <p>(Provide additional sheets, if needed)</p>	
<p>List supervisory personnel to be assigned to the project, qualifications, and Project Manager contact information:</p> <p>(Provide additional sheets, if needed)</p>	
<p>Provide a basic overview of work plan, major tasks, & schedule for completion:</p> <p>(Provide additional sheets, if needed)</p>	

CLAIMS, SUITS, AND ARBITRATIONS (If the answer to any of the questions below is Yes, please attach details to explain)		
Has your organization ever failed to complete any work awarded to it?	Yes:	No:
Are there any judgments, claims, arbitration proceedings or suits pending or outstanding against your organization or its officers?	Yes:	No:
Has your organization filed any lawsuits or requested arbitration with regard to construction contracts within the last five years?	Yes:	No:
Is your organization currently listed on any Federal Contracting Debarment List?	Yes:	No:
Is your organization currently listed on the State of Arizona Debarment List?	Yes:	No:
Within the last five years, has any officer or principal of your organization ever been an officer or principal of another organization when it failed to complete a contract?	Yes:	No:
REFERENCES, FINANCIALS, AND CREDIT INFORMATION (Attach additional sheets, if necessary)		
Bank References: (Attach details, if needed)		
Surety:	Name of Bonding Company:	
	Name and Address of Agent:	
Has your firm ever been audited by an Accounting Firm?		
If Yes, name the Accounting Firm that performed the audit and list the date of the audit:	Yes:	No:
Is your firm currently engaged in or contemplating filing bankruptcy?		
Credit References: (Provide at least three, attach details if necessary)	Yes:	No:
The undersigned contractor understands and agrees that the Owner may check credit status and ratings, and expressly directs the release of any credit information to the Owner.		

The under-signed, being duly sworn deposes and says that under penalty of perjury and understanding the Owner's reliance upon the foregoing statements and the Owner's right to rely, avows and asserts that the information provided herein is true and sufficiently complete so as not to be misleading.

Dated this _____ day of _____, 20_____

 Signature of Person Authorized to Sign for Organization

 Direct Telephone Number

 Printed Name

 Direct Email Address

 Title

 Name of Organization

TAX INFORMATION

The following information must be completed and submitted with each Bid.

Where Bidders claim a sales tax, the Bidders justify said tax by showing either their "Arizona Use Tax Number" or their "Arizona Privilege Sales Tax Number". If the vendor includes an additional city sales tax in his tax, the vendor must show the rate of percentage, the city and respective number.

Does the Bidder have an Arizona Privilege Sales Tax Certificate Registration?	YES:	NO:
If the answer is "YES", list the number:	#	
Does the Bidder have a city tax registration?	YES:	NO:
If the answer is "YES", list the city and registration number:	City:	#

OUT-OF-STATE VENDORS

The following information must be completed if the Bidder is an Out-of-State Vendor. Awarded Out-of-State contractors are subject to the provisions of [A.R.S. §42-5007](#).

Does the Out-of-State Bidder have an Arizona Use Tax Certificate Registration?	YES:	NO:
If the answer is "YES", list the city and registration number:	City:	#
List the amount of tax included in the bid offer, if applicable:	\$	%
Does the Out-of-State Bidder have an additional city tax registration in the State of Arizona?	YES:	NO:
If the answer is "YES", list the city and registration number:	City:	#

NOTE TO VENDORS: Mohave County pays sales tax *only* to the State of Arizona and does not pay sales tax to any other state.

Authorized Signatory of Bidder:

Signature

Date

Title

CERTIFICATION

The following information must be completed and submitted with each Bid.

Each Bidder must specify whether or not their Bid meets all specifications set forth in the Invitation for Bids and whether or not the terms and conditions are accepted by the Bidder as set forth in the IFB.

If the answer is "NO" on specifications, bids will be considered if all elements of the Bid comply substantially with the specifications called for; however, the Bidder must show each deviation of the substitution and must include all necessary manufacturer's technical data for comparison evaluation. Any deviation must be in writing, clearly stating that it is a deviation, and must be in letter form attached to the submitted Bid.

THE ABOVE PARAGRAPHS MUST BE COMPLIED WITH, OTHERWISE THE ENTIRE BID IS VOID.

This Bidder certifies that it meets all specifications contained in the Invitation for Bids, without exception (check one):	YES:	NO:
This Bidder certifies that all terms and conditions set forth in this Invitation for Bids are accepted (check one):	YES:	NO:

NOTARIZED SIGNATURE

This form must be filled in and signed by authorized personnel only and returned with Bid. If this is not complied with, the ENTIRE Bid will be void.

Name of Bidding Firm:					
Address of Firm:					
City:		State:		Zip Code:	
Telephone #:		Fax #:			
Printed Name of Signatory:					
Title of Signatory:					

Authorized Signatory of Bidder:

_____ **Signature** _____ **Date** _____

NOTARY ACKNOWLEDGEMENT

My commission Expires: _____ STATE OF _____ COUNTY OF _____

This instrument was acknowledged before me on this _____ day of _____, 20____,
(day) (month) (year)
 by _____ . **IN WITNESS WHEREOF**, I set my hand and official seal.
(name of signatory).

(seal)

 Notary Public Signature

SUBCONTRACTING INFORMATION

The following information must be completed and submitted with each Bid.

At the time of this bid submittal, my intention concerning subcontracting a portion of the Work is as indicated below. By indicating my intentions, this will acknowledge that such subcontractors will be identified and approved by the County prior to award of the Contract and that documentation, such as copies of letters, request for quotations, quotations, etc. substantiating the actions taken and the responses to such actions are on file and available for review.

_____ It is my intention to subcontract a portion of the Work, as specified herein.

_____ It is *not* my intention to subcontract any portion of the Work, as described herein.

I plan on using the following subcontractors or suppliers on the Project:

<u>Company Name & Address</u>	<u>Description of Work</u>	<u>Representative</u>	<u>Phone Number</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

AUTHORIZED SIGNATURE OF BIDDER:

_____ Date Signed

_____ (Name of Signatory and Title)

BID SCHEDULE					
HORIZON SIX WATERLINE PROJECT - MOHAVE COUNTY					
ITEM NO.	ITEM DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	SAWCUT, REMOVE AND REPLACE EXISTING AC PAVEMENT	370	SY		
2	REMOVE AND REPLACE EXISTING AC DRIVEWAY IN KIND	56	SY		
3	REMOVE AND REPLACE EXISTING CONCRETE DRIVEWAY IN KIND	1902	SF		
4	REMOVE AND REPLACE EXISTING CONCRETE BANK PROTECTION IN KIND	40	SF		
5	REMOVE AND RESET EXISTING MAILBOX	15	EA		
6	ABANDON EXISTING WATER VALVE	17	EA		
7	REMOVE AND REINSTALL EXISTING STREET SIGN	4	EA		
8	INSTALL WATER LINE, PVC C900, 8" DIA	2695	LF		
9	INSTALL WATER LINE, PVC C900, 16" DIA	4892	LF		
10	INSTALL WATER LINE, DIP, 6" DIA	29	LF		
11	INSTALL WATER LINE, DIP, 8" DIA	279	LF		
12	INSTALL WATER LINE, DIP, 16" DIA	122	LF		
13	INSTALL GATE VALVE, BOX AND COVER, 8" DIA	12	EA		
14	INSTALL GATE VALVE, BOX AND COVER, 16" DIA	12	EA		
15	INSTALL COMBINATION AIR RELEASE VALVE ASSEMBLY	12	EA		
16	CAP & ABANDON EXISTING WATER LINE	1	LS		
17	NEW ONE-INCH (1") SERVICE CONNECTION TO EXISTING METER	51	EA		
18	CONNECT TO EXISTING FIRE HYDRANT	12	EA		
19	INSTALL STEEL CASING PIPE, 36" DIA BY BORING AND JACKING	40	LF		

BID SCHEDULE					
HORIZON SIX WATERLINE PROJECT - MOHAVE COUNTY					
ITEM NO.	ITEM DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
20	ROCK EXCAVATION (CONTINGENT ITEM)	500	CY		
21	TRAFFIC CONTROL	1	LS		
22	MOBILIZATION	1	LS		
CONTRACTOR'S BID TOTAL =				\$	

OFFER PAGE

TO MOHAVE COUNTY: The Undersigned hereby offers and agrees to furnish the material or service in compliance with all terms, conditions, specifications, and amendments in the Invitation for Bid and any written exceptions in the offer. Signature also certifies understanding and compliance with the Mohave County Standard Terms and Conditions.

CONFLICT OF INTEREST: For purposes of determining any possible conflict of interest, all bidders **must disclose** if any current Mohave County employee is also an owner, corporate officer, or employee of your business. Indicate either "Yes" (County employee is associated with your business), or "No." If yes, provide the name(s) of the County employee(s) and the position(s) County employee(s) hold within your business.

No _____ Yes _____ Name & Position _____ (include additional page(s) if necessary)

PROMPT PAYMENT DISCOUNT: As stated in the "Special Terms & Conditions" "Discounts," the price(s) quoted herein can be discounted by _____%, if payment is made within _____ days.

SALES TAX PERCENTAGE: _____% (See Instructions to Bidders).

For clarification of this offer, contact:

Company Name

Name: _____

Address

Phone: _____

City State Zip

Fax: _____

Email: _____

Signature of Person Authorized to Sign

Printed Name

Title

ACCEPTANCE OF OFFER:
The offer is hereby accepted.

The Vendor is now bound to provide the materials or services listed in **IFB No. 24B06**, including all terms, conditions, specifications, amendments, etc., and the Contractor's Offer as accepted by County/public entity.

The Contractor has been cautioned not to commence any billable work or to provide any material or service under this contract until Contractor receives this signed sheet, or written notice to proceed.

Awarded this _____ day of _____, 2023

Hildy Angius, Chairman
Mohave County Board of Supervisors

MOHAVE COUNTY HORIZON SIX WATERLINE PROJECT - REPACKAGE

PROJECT CONTROL:
SECTION 9, TOWNSHIP 13 NORTH, RANGE 19 WEST, G&SRM, MOHAVE COUNTY, ARIZONA
ARIZONA STATE PLANE COORDINATE SYSTEM AZWEST(203) NAD83(2011), MODIFIED TO GROUND AT 0,0, WITH A COMBINED SCALE FACTOR OF 0.99990113, AS DETERMINED BY AN NGS OPUS SOLUTION, 86790691.220, OP1647024052617, DATED MARCH 11, 2022.
HORIZONTAL DATUM:
THE MONUMENT LINE OF WINDOW ROCK ROAD, AS PURPORTED ON THE DEPENDANT RESURVEY AND MONUMENTATION OF THE BOUNDARY IN HORIZON SIX, A SUBDIVISION RECORDED ON APRIL 5TH, 1961, AS AMENDED ON JANUARY 9, 1995, RECORDED IN RECEPTION 95-3492, RECORDS OF MOHAVE COUNTY, AZ, WITH A BEARING OF N 89° 36' 00" W, BETWEEN A FOUND GLO BRASS CAP, STAMPED ¼, 9/10, 1915 AND A FOUND BRASS CAP IN A HANDHOLE AT THE INTERSECTION OF WINDOW ROCK ROAD AND LAKE SIDE DRIVE FOR ¼, 8/9.

VERTICAL DATUM: NAVD88, GEOID 18 (CONUS)
LOCAL PROJECT CONTROL POINTS:

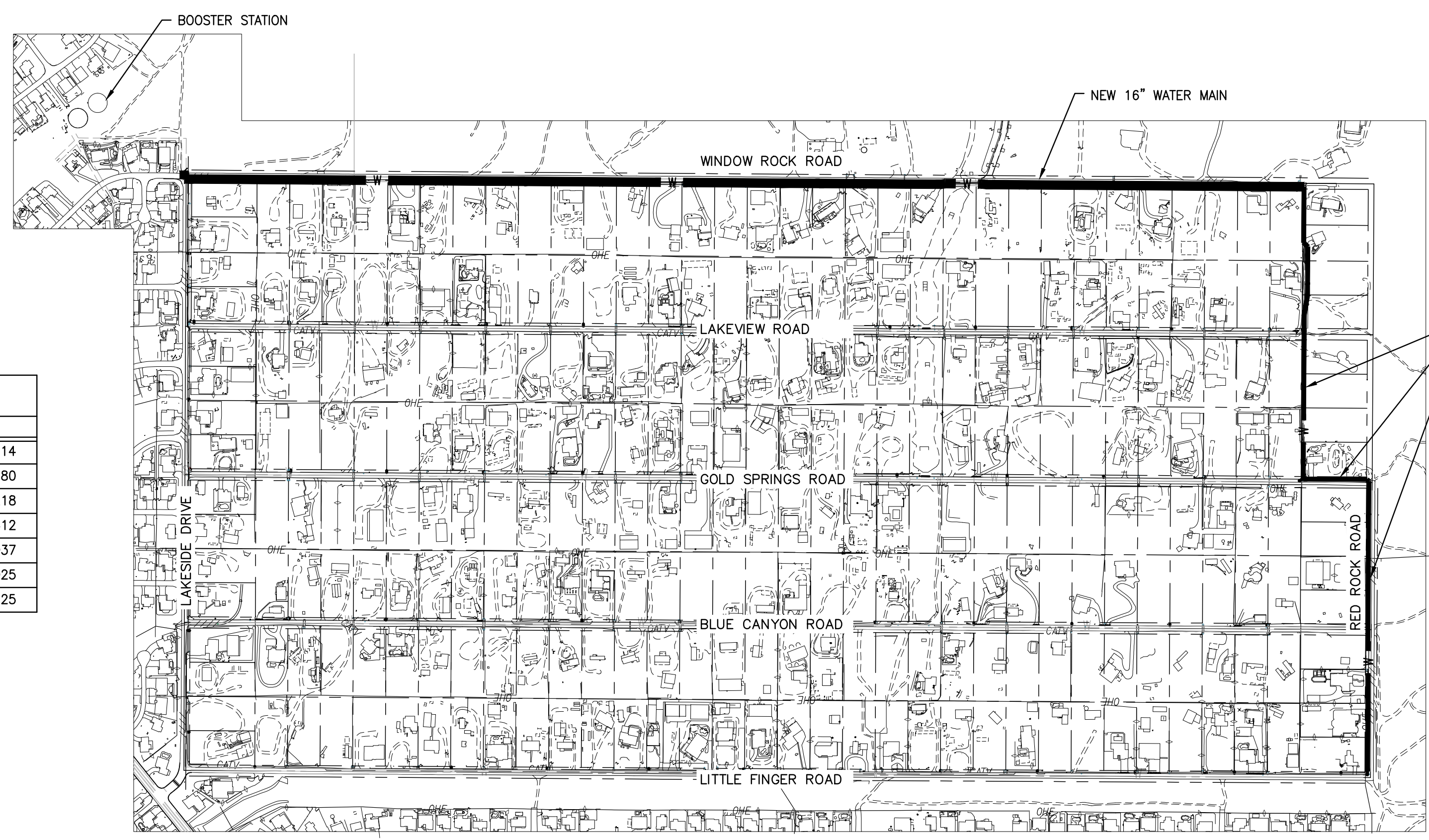
POINT	NORTH	EAST	ELEVATION	DESC.
400	1267139.982	550381.6962	1409.926	PANEL
401	1267007.618	548533.2985	1315.941	PANEL
402	1267021.41	546527.4932	1239.429	PANEL
403	1267539.716	544539.1976	1200.05	PANEL
404	1265628.098	544542.3709	1146.459	PANEL
405	1265695.278	546450.3425	1217.926	PANEL
406	1265682.473	548443.6736	1262.515	PANEL
407	1265643.976	550444.1864	1320.151	PANEL
408	1264316.735	550385.4216	1308.791	PANEL
409	1264192.263	544698.5753	1106.159	PANEL
410	1264320.265	548595.8797	1234.837	PANEL
411	1264340.714	546452.9708	1179.961	PANEL
213	1266976.845	550444.1424	1370.827	GLO BRASS CAP, STAMPED ¼ 9/10 1915

OWNER
MOHAVE COUNTY
3715 SUNSHINE DRIVE
KINGMAN, ARIZONA 86409
CONTACT: JASON GARNER, PE
PHONE: (928) 757-0910
EMAIL: GARNERJ@MOHAVE.GOV

CIVIL ENGINEER
RICK ENGINEERING COMPANY
2401 W PEORIA AVE STE 130
PHOENIX, ARIZONA 85029
CONTACT: DICK WALLACE, PE
PHONE: (480) 440-8251
EMAIL: DWALLACE@RICKENGINEERING.COM

UTILITY OWNER	UTILITY	REPRESENTATIVE	PHONE NO.
HORIZON 6 IMPROVEMENT DISTRICT	WATER	MIKE GARMON	(928) 757-0914
LAKE HAVASU CITY	WATER, SEWER, STREETLIGHTS	JAMES SCHINGECK	(928) 208-7980
FRONTIER COMMUNICATIONS	TELEPHONE	JIM HANSEN	(928) 757-0218
SUDDENLINK COMMUNICATIONS	CATV, FIBER OPTICS	JERRY POAGE	(702) 467-9612
UNISOURCE ENERGY SERVICES	ELECTRIC	KELLY GILBERT	(928) 505-7037
UNISOURCE ENERGY SERVICES	GAS	BEN MATTHEWS	(928) 505-7025
MOHAVE COUNTY	FLOOD CONTROL	STORM DRAIN	(928) 757-0925

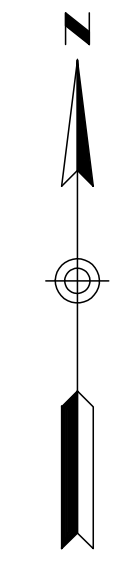
ESTIMATED QUANTITIES		
ITEM #	ITEM DESCRIPTION	QUANTITY UNIT
1	SAWCUT, REMOVE AND REPLACE EXISTING AC PAVEMENT	370 SY
2	REMOVE AND REPLACE EXISTING AC DRIVEWAY IN KIND	56 SY
3	REMOVE AND REPLACE EXISTING CONCRETE DRIVEWAY IN KIND	1,902 SF
4	REMOVE AND REPLACE EXISTING CONCRETE BANK PROTECTION IN KIND	40 SF
5	REMOVE AND RESET EXISTING MAILBOX	15 EA
6	ABANDON EXISTING WATER VALVE	17 EA
7	REMOVE AND REINSTALL EXISTING STREET SIGN	4 EA
8	INSTALL WATER LINE, PVC C900, 8" DIA	2,695 LF
9	INSTALL WATER LINE, PVC C900, 16" DIA	4,892 LF
10	INSTALL WATER LINE, DIP, 6" DIA	29 LF
11	INSTALL WATER LINE, DIP, 8" DIA	279 LF
12	INSTALL WATER LINE, DIP, 16" DIA	122 LF
13	INSTALL GATE VALVE, BOX AND COVER, 8" DIA	12 EA
14	INSTALL GATE VALVE, BOX AND COVER, 16" DIA	12 EA
15	INSTALL COMBINATION AIR RELEASE VALVE ASSEMBLY	12 EA
16	CAP & ABANDON EXISTING WATER LINE	1 LS
17	NEW ONE-INCH (1") SERVICE CONNECTION TO EXISTING METER	51 EA
18	CONNECT TO EXISTING FIRE HYDRANT	12 EA
19	INSTALL STEEL CASING PIPE, 36" DIA BY BORING AND JACKING	40 LF
20	ROCK EXCAVATION (CONTINGENT ITEM)	500 CY



PROJECT LOCATION
SEC 9, T13N, R19W
MOHAVE COUNTY, ARIZONA



Sheet Number	Sheet Title	Sheet Description
01	CV-01	COVER SHEET
02	GN-01	GENERAL NOTES
03	DT-01	DETAILS & LEGEND
04	KY-01	KEY MAP
05	WA-02	CONNECTION TO BOOSTER STATION
06 - 16	WA-03 - WA-13	PLAN & PROFILE WINDOW ROCK ROAD
17 - 18	WA-35 - WA-36	PLAN & PROFILE GOLD SPRING ROAD
19 - 21	WA-66 - WA-68	PLAN & PROFILE RED ROCK ROAD
21 - 24	WA-69 - WA-71	PLAN & PROFILE WATER EASEMENT



ACCEPTANCE

MOHAVE COUNTY _____ DATE _____

NO.	BY	DATE	REVISION

SEAL:

PROJECT NO: 6318 DRAWN/DESIGNED BY: BSH/DW
DATE: 10/31/2023 CHECKED BY: DEM

CONSTRUCTION DOCUMENTS PREPARED FOR:
HORIZON SIX WATERLINE PROJECT
MOHAVE COUNTY, ARIZONA

RICK ENGINEERING COMPANY
2401 W PEORIA AVE, STE 130
PHOENIX, AZ 85029
602.957.3350
rickengineering.com
San Diego - Riverside - Santa Clara - San Luis Obispo - Sacramento - Orange - Tucson - Phoenix - Las Vegas - Denver

COVER SHEET

DRAWING NO. **CV-01**
SHEET NO. 01 OF 24

\\p055000\g318_horizon_six_waterline\Civil\PlanSets\6318-CV-01.dwg - plotted by: kroechner ON 2023-10-31 @ 16:13 - ctbrec_msc.ctb - © 2023 Rick Engineering Company

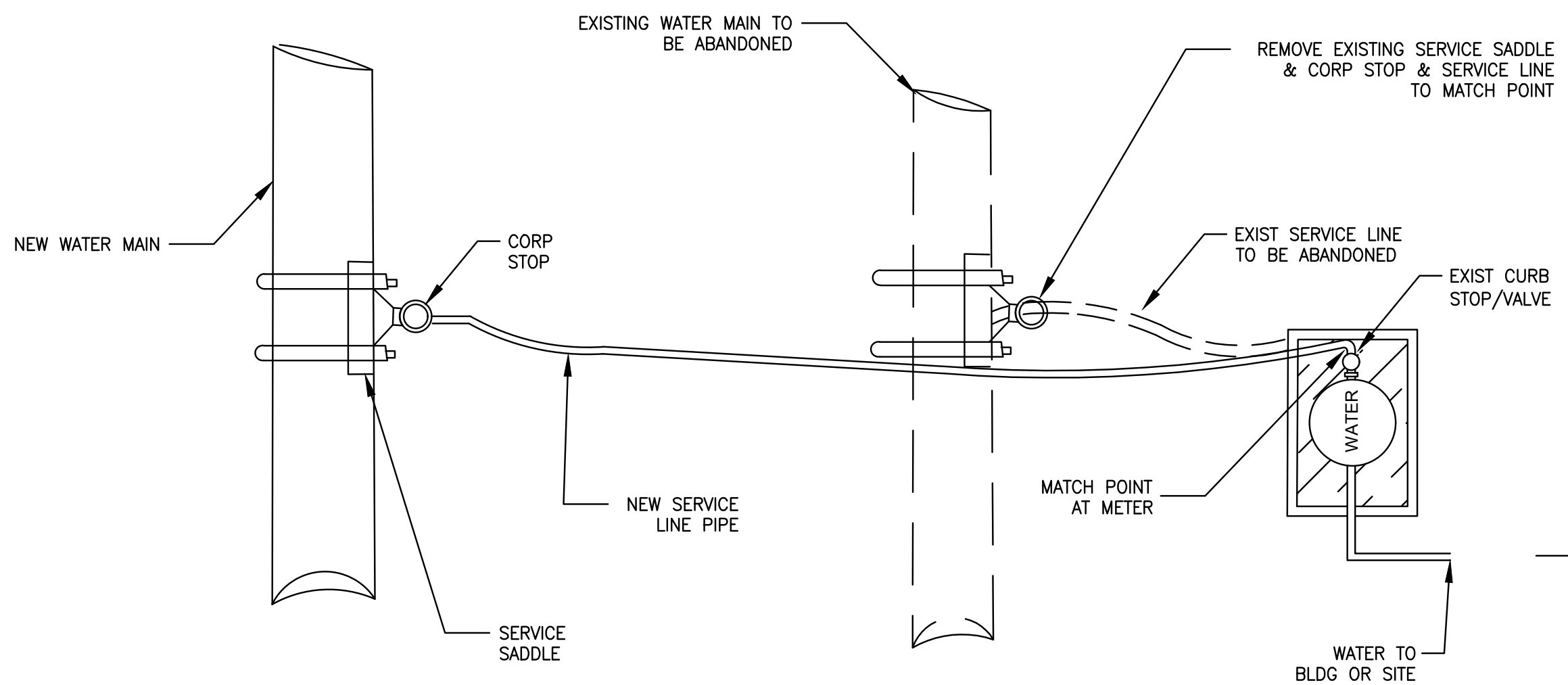
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ABBREVIATIONS

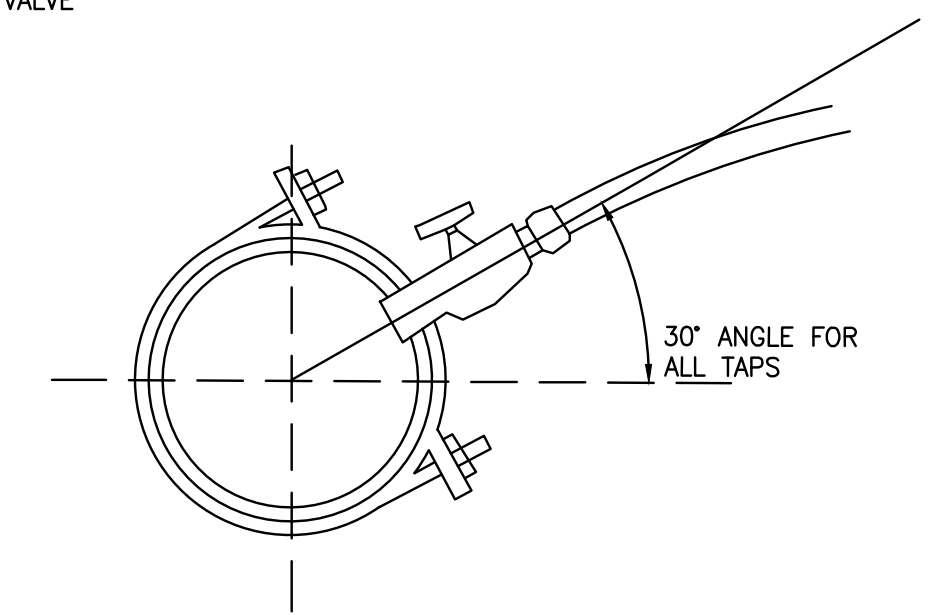
- ARV - AIR RELEASE VALVE
- BCHH - BRASS CAP IN HAND HOLE
- B/C - BACK OF CURB
- BCR - BEGIN CURB RETURN
- CATV - CABLE
- CY - CUBIC YARDS
- CL - CENTERLINE
- DET - DETAIL
- DIA - DIAMETER
- E - ELECTRIC
- EA - EACH
- ECR - END CURB RETURN
- ELEV - ELEVATION
- EX - EXISTING
- EXIST - EXISTING
- FD - FOUND
- FL - FLOW LINE
- FG - FINISH GRADE
- G - GAS
- G - GUTTER ELEVATION
- CG - CURB AND GUTTER
- GB - GRADE BREAK
- HZ - HORIZONTAL BEND
- INV - INVERT
- LT - LEFT
- LP - LOW POINT
- LF - LINEAL FEET
- MH - MANHOLE UTILITY ACCESS
- NTS - NOT TO SCALE
- OAE - OR APPROVED EQUAL
- OHE - OVER HEAD ELECTRIC
- P - PAVEMENT ELEVATION
- PIP - PROTECT IN PLACE
- PT - POINT OF TANGENCY
- PC - POINT OF CURVATURE
- R - RADIUS
- RD - ROAD
- RO - ROTATED BEND
- RT - RIGHT
- R/W - RIGHT OF WAY
- SD - STORM DRAIN
- SECT - SECTION
- SF - SQUARE FEET
- SS - SANITARY SEWER
- STA - STATION
- SY - SQUARE YARDS
- TC - TOP OF CURB
- TS - TRAFFIC SIGNAL
- TELE - TELEPHONE
- VG - VALLEY GUTTER
- VT - VERTICAL BEND
- W - WIDE

LEGEND

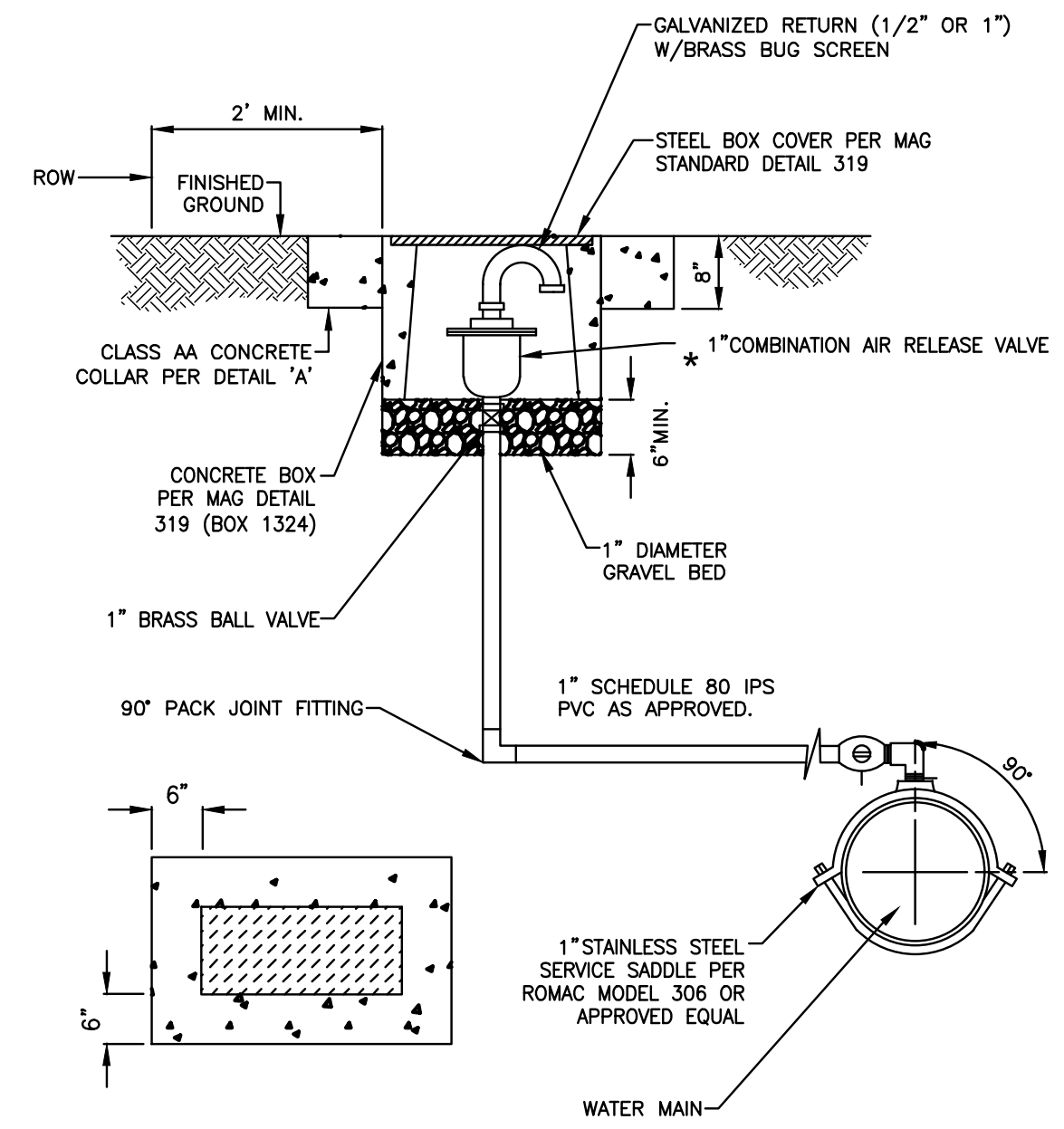
- FOUND BRASS CAP IN HANDHOLE
- FOUND BRASS CAP FLUSH
- FOUND 1/2" REBAR
- ▭ MAILBOX
- ▭ CABLE TV JUNCTION BOX
- ▭ CABLE TV RISER
- UTILITY POLE
- ▭ BUILDING
- ▭ SWIMMING POOL
- ⊙ MH ELECTRIC MANHOLE
- ⊙ MH TELEPHONE MANHOLE
- ⊙ MH WATER METER EXISTING
- ⊙ WATER VALVE
- ⊙ LIGHT POLE
- ⊙ POST
- ⊙ SIGN
- ⊙ OVERHEAD SIGNS
- ⊙ STREET SIGN
- TREE
- CACTUS
- PALM TREE
- FLAG
- GATE
- TELEPHONE RISER
- TRAFFIC SIGNAL W/MAST
- RIGHT OF WAY LINE
- CENTER LINE
- COMMUNICATION BLUE STAKE LINE
- VEGETATION LINE
- MINOR CONTOURS
- MAJOR CONTOURS
- FENCE
- ROAD / PAVEMENT
- EXISTING STRIPING
- DIRT ROAD / TRAIL
- GUARD RAIL
- FIRE HYDRANT PROPOSED
- WATER FITTING PROPOSED
- ⊙ WATER VALVE PROPOSED
- WATER MAIN PROPOSED
- WATER LATERAL PROPOSED



DETAIL 2 - WATER SERVICE CONNECTION DETAIL

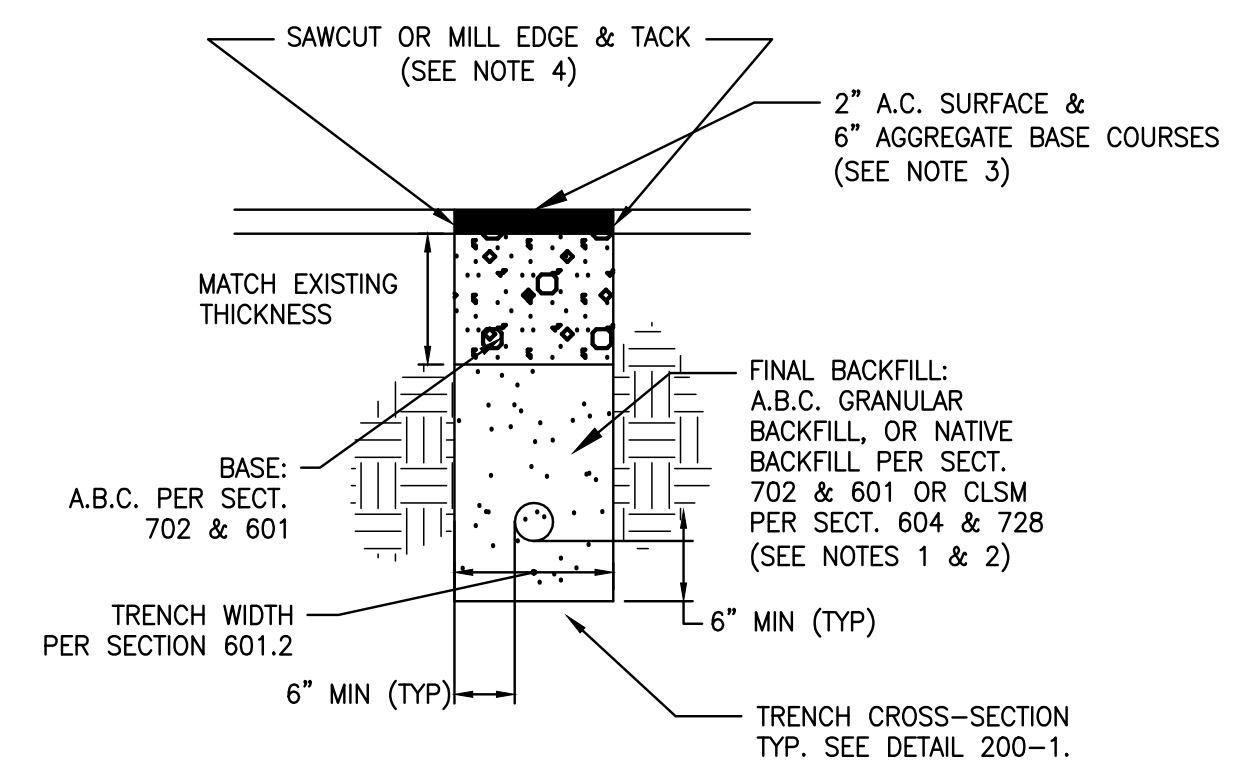
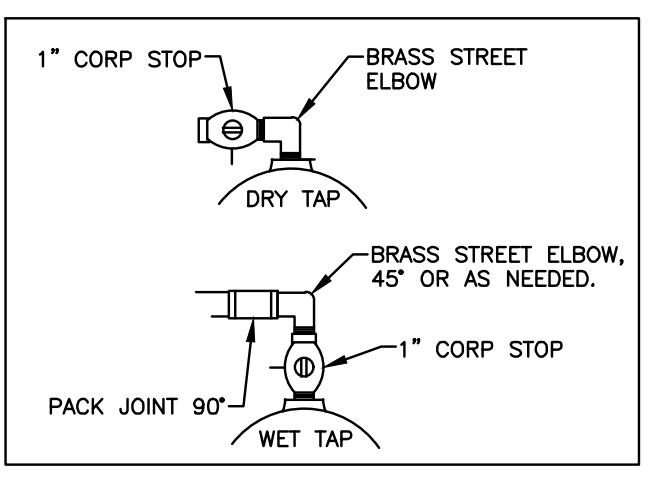


WATER SERVICE SADDLE CONNECTION DETAIL



DETAIL 3 - COMBINATION AIR RELEASE VALVE

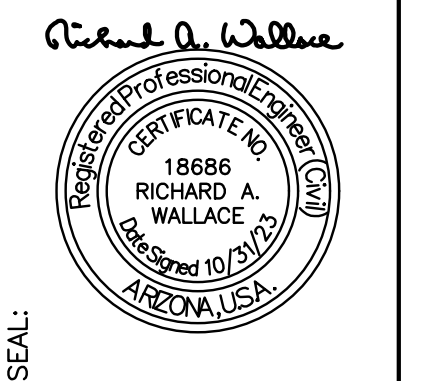
- NOTES:**
1. AIR RELEASE VALVES SHALL BE INSTALLED AT HIGH POINTS IN THE MAIN LINE, OR WHERE A LONG LENGTH OF MAIN LINE CHANGES SLOPE.
 2. THE AIR RELEASE VALVE ASSEMBLY SHALL BE EXTENDED TO A LOCATION AT LEAST 2 FEET ABOVE THE ELEVATION OF THE TOP OF THE WATER MAIN.
 3. AUTOMATIC AIR RELEASE VALVES SHALL NOT BE USED IN SITUATIONS WHERE FLOODING OF THE METER BOX MAY OCCUR.
 4. A COMBINATION AIR/VACUUM RELEASE VALVE ASSEMBLY SHALL BE USED IN SITUATIONS WHERE THE WATER MAIN MAY BE SUBJECTED TO VACUUM CONDITIONS, AS DETERMINED BY THE ENGINEER.
 5. AS AUTHORIZED BY THE COUNTY ENGINEER THE ASSEMBLY SHALL BE LOCATED WHERE IT WILL NOT BE SUBJECT TO TRAFFIC, DAMAGE OR TRIP HAZARD.
- * VALMATIC MODEL 201C.2 COMBINATION ARV OR APPROVED EQUAL



- NOTES:**
1. MATERIAL FOR FINAL BACKFILL AND BASE (IF APPLICABLE) SHALL BE AS NOTED HEREIN UNLESS OTHERWISE SPECIFIED IN CONTRACT DOCUMENTS. CLSM SHALL BE 1/2-SACK OR 1-SACK PER SECTION 604 AND 728.
 2. FINAL BACKFILL SHALL BE 1/2-SACK OR 1-SACK CLSM PER SECTIONS 604 AND 728 FOR TRENCH DEPTHS GREATER THAN 4 FEET UNLESS A SAFE (CLSM COMPLIANT) WORKING SPACE AT LEAST 30" WIDE IS PROVIDED TO CONDUCT COMPACTION TESTING.
 3. CONSTRUCT A 2" MIN ASPHALT CONCRETE SURFACE AND 6" AGGREGATE BASE COURSES WHERE SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER. COMPLY WITH SECTION 336.2.4.1 UNLESS OTHERWISE SPECIFIED IN CONTRACT DOCUMENTS.
 4. THE JOINT LOCATION OR JOINT CONFIGURATION MAY VARY FROM THAT SHOWN TO ELIMINATE REMNANTS, TO ELIMINATE FULL DEPTH SAWCUT JOINTS FROM BEING LOCATED WITHIN A WHEEL PATH AS REQUIRED BY SECTION 336, OR WHEN AN OFFSET JOINT IS CONSTRUCTED.

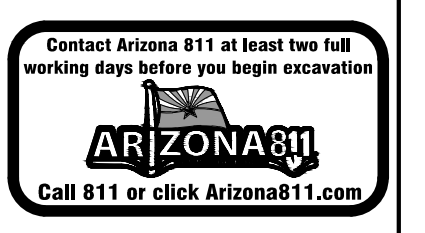
DETAIL 4 - TRENCH DETAIL

NO.	BY	DATE	REVISION



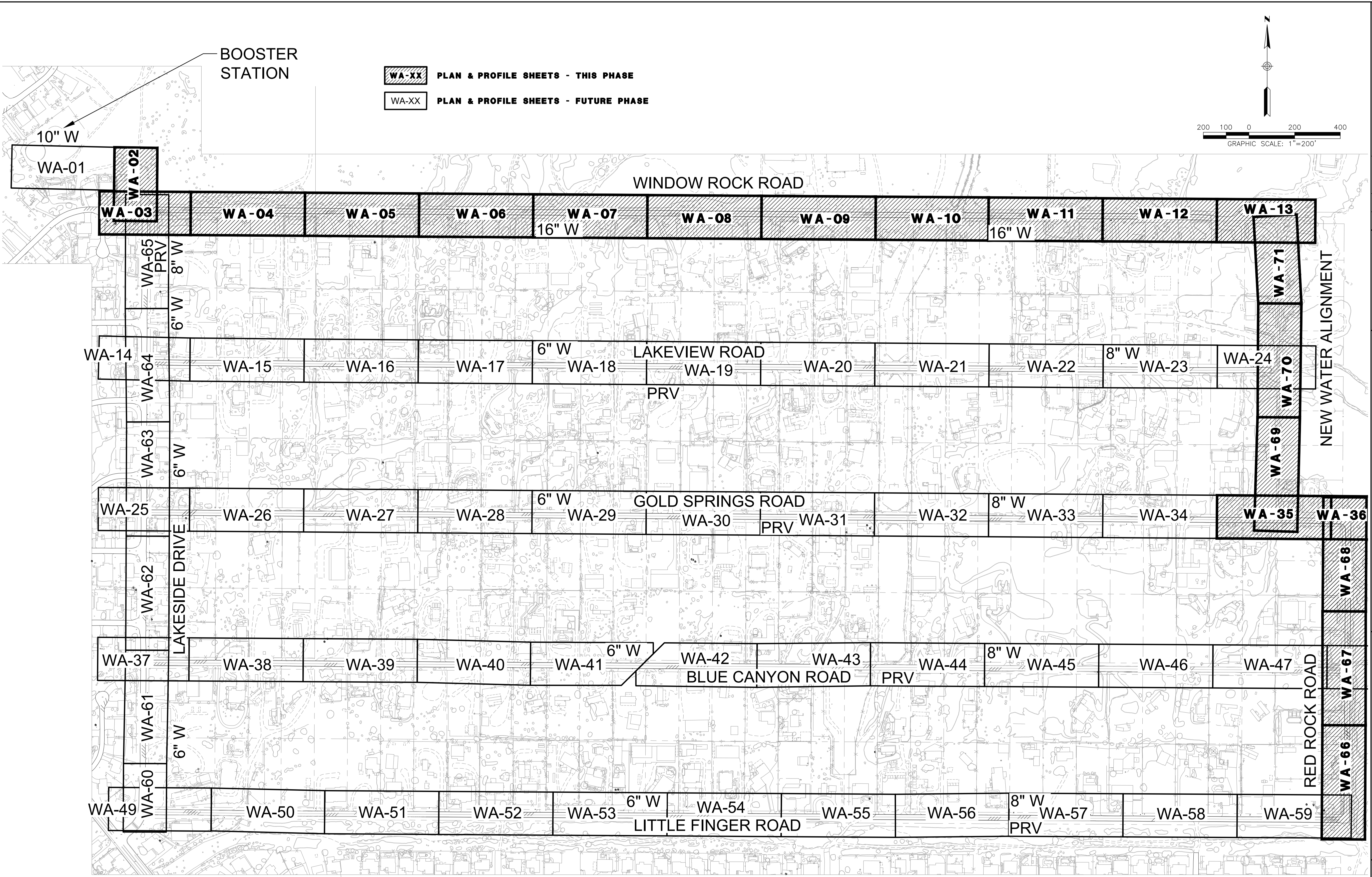
SEAL: **RICK ENGINEERING COMPANY**
 2401 W PEORIA AVE, STE 130
 PHOENIX, AZ 85029
 602.957.3350
 PROJECT NO: 6318 DRAWN/DESIGNED BY: BSH/DW
 DATE: 10/31/2023 CHECKED BY: DEM

CONSTRUCTION DOCUMENTS PREPARED FOR:
HORIZON SIX WATERLINE PROJECT
 MOHAVE COUNTY, ARIZONA



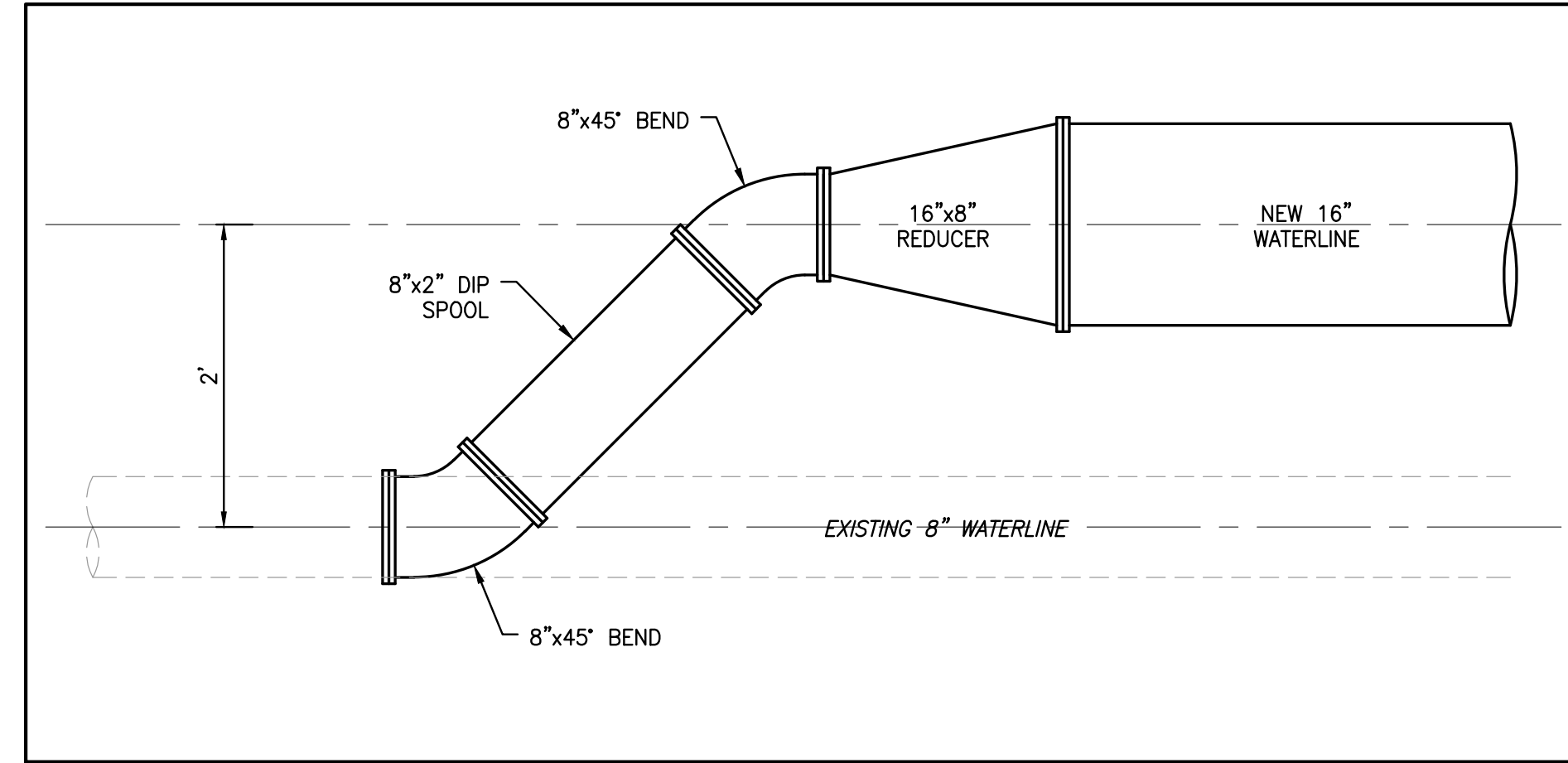
DRAWING NO. **DT-01**
 SHEET NO. 03 OF 24

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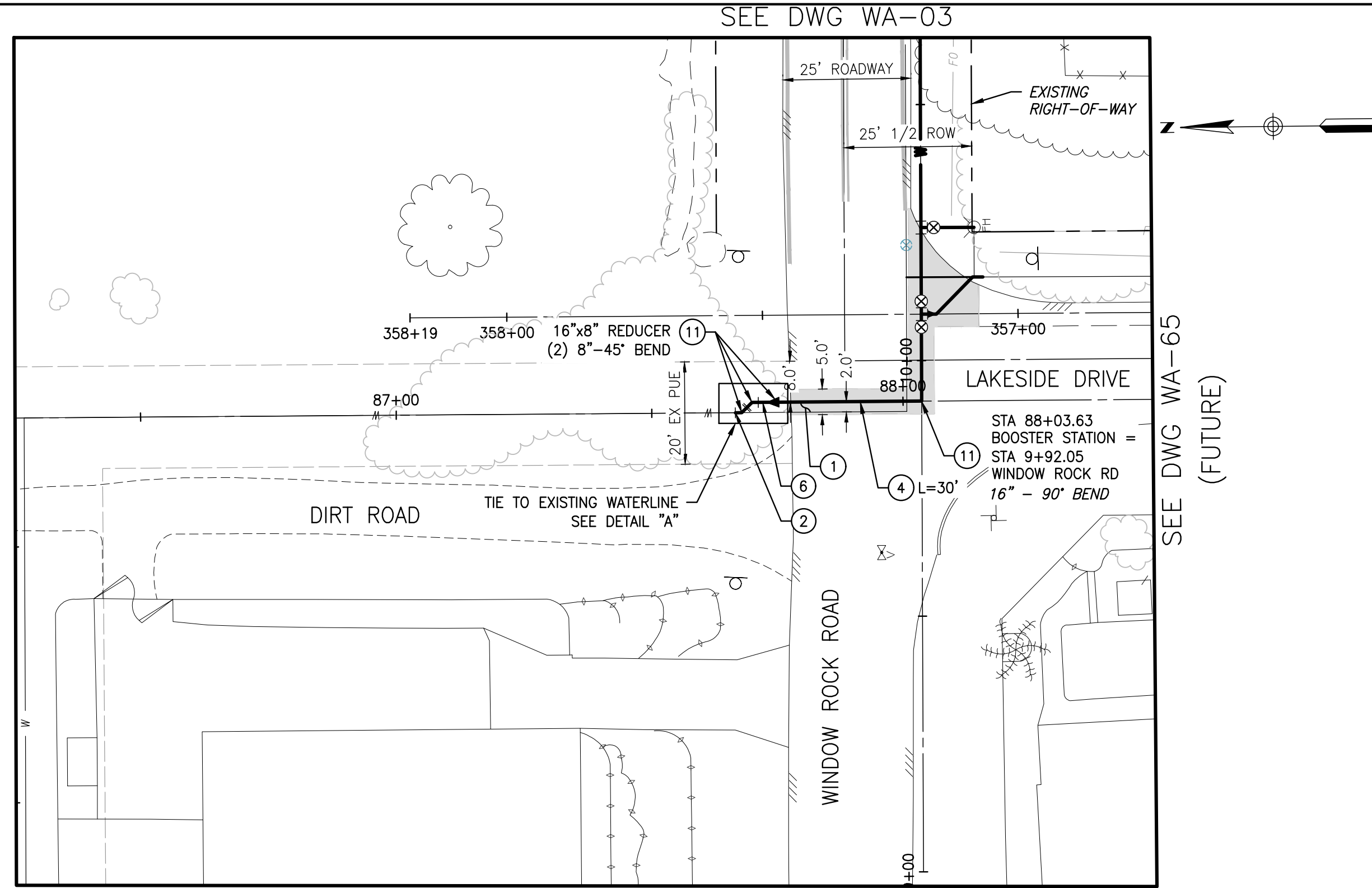


<p>SEAL:</p>	<p>6318 DRAWN/DESIGNED BY: BSH/DW 10/31/2023 CHECKED BY: DEM</p>
<p>2401 W PEORIA AVE, STE 130 PHOENIX, AZ 85029 602.957.3350 rickengineering.com</p>	
<p>RICK ENGINEERING COMPANY San Diego - Riverside - Santa Clarita - San Luis Obispo - Sacramento - Orange - Tucson - Phoenix - Las Vegas - Denver</p>	
<p>CONSTRUCTION DOCUMENTS PREPARED FOR: HORIZON SIX WATERLINE PROJECT MOHAVE COUNTY, ARIZONA</p>	
<p>KEY MAP</p>	
<p>CONTACT ARIZONA 811 AT LEAST TWO FULL WORKING DAYS BEFORE YOU BEGIN EXCAVATION Call 811 or click Arizona811.com</p>	
<p>DRAWING NO. KY-01 SHEET NO. 04 OF 24</p>	

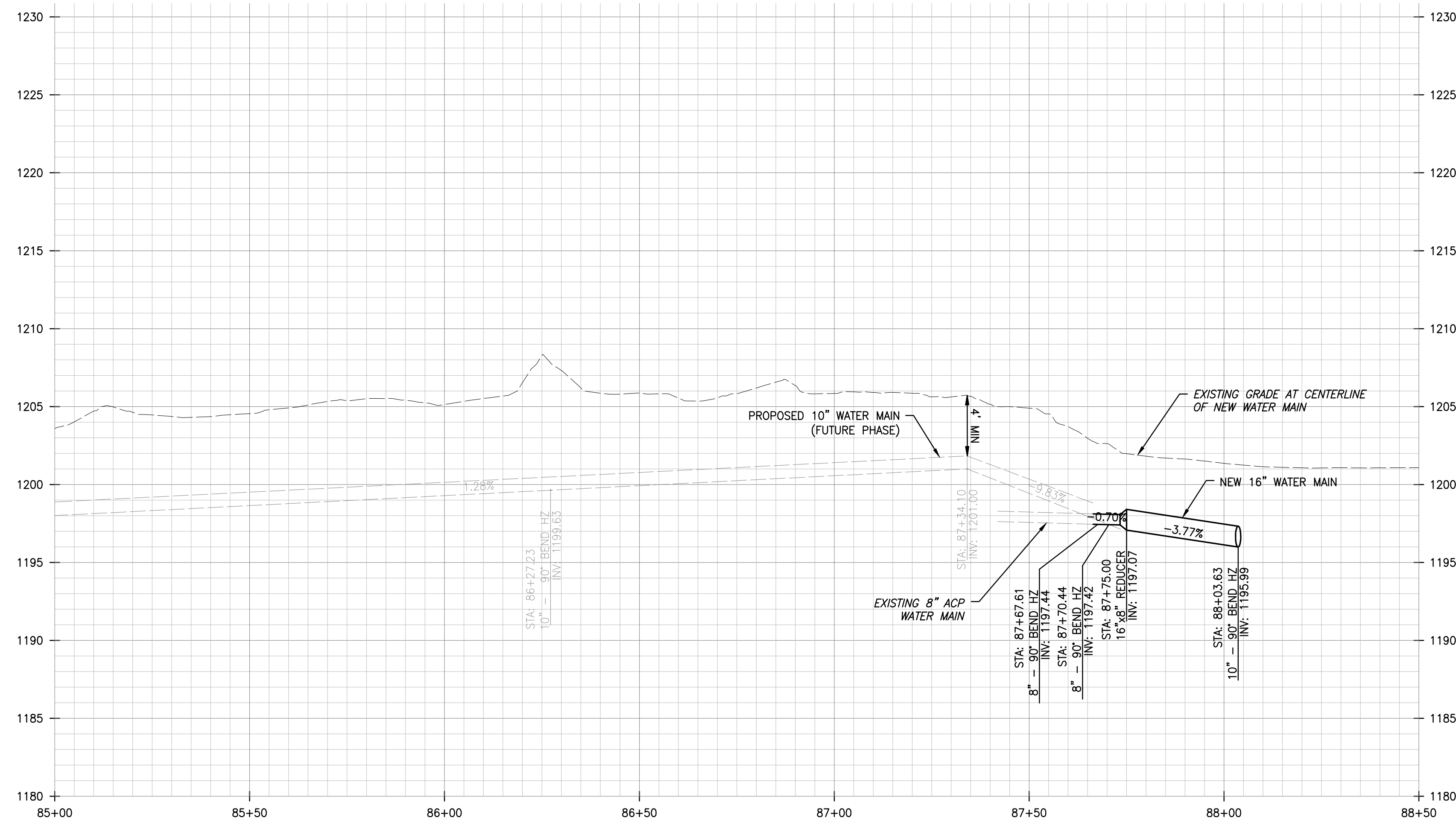
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DETAIL "A"
(NO SCALE)



CONNECTION TO BOOSTER STATION

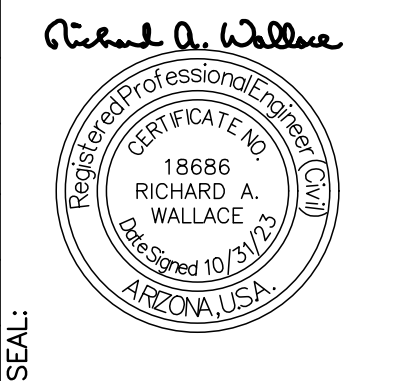


REMOVAL/RELOCATE NOTES	
NO.	DESCRIPTION
1	REMOVE & REPLACE AC PAVEMENT DRIVEWAY IN KIND
2	REMOVE & REPLACE CONCRETE DRIVEWAY IN KIND
3	REMOVE & REPLACE BRICK/CONCRETE PAVER DRIVEWAY IN KIND
4	REMOVE & RESET MAILBOX
5	ABANDON GATE VALVE BY REMOVING VALVE BOX & PATCHING PAVEMENT
6	NOT USED
7	REMOVE & REINSTALL STREET SIGN
8	REMOVE EXISTING WATER LINE
9	REMOVE & REPLACE CONCRETE BANK PROTECTION
S	SAWCUT AND MATCH EXISTING
P	PROTECT IN PLACE

CONSTRUCTION NOTES	
NO.	DESCRIPTION
1	SAWCUT, REMOVE & REPLACE EXISTING AC PAVEMENT PER DETAIL 4 ON SHEET DT-01
2	CONNECT TO EXISTING WATER LINE
3	INSTALL WATER LINE, PVC C900, 8" DIA
4	INSTALL WATER LINE, PVC C905, 16" DIA
5	INSTALL WATER LINE, DIP, 6" DIA
6	INSTALL WATER LINE, DIP, 8" DIA
7	INSTALL WATER LINE, DIP, 16" DIA
8	INSTALL GATE VALVE, BOX & COVER, 6" DIA
9	INSTALL GATE VALVE, BOX & COVER, 8" DIA
10	INSTALL GATE VALVE, BOX & COVER, 16" DIA
11	INSTALL FITTING/BEND - TYPE, ANGLE AND SIZE PER PLAN, INSTALL THRUST BLOCK PER MAG STD DET 360
12	INSTALL COMBINATION AIR RELEASE VALVE, 1" LINE PER DETAIL 3 ON SHEET DT-01.
13	CAP & ABANDON EXISTING WATER LINE
14	STORM DRAIN CROSSING, CONTRACTOR TO MAINTAIN MINIMUM SEPARATION PER ADEQ. PROTECT WATER LINE PER MAG STD DET 404-3
15	NEW 3/4" SERVICE CONNECTION TO EXISTING METER PER DETAIL 2 ON SHEET DT-01.
16	CONNECT NEW WATER LINE TO EXISTING FIRE HYDRANT
17	INSTALL 36" STEEL CASING PIPE BY JACK & BORE

GENERAL NOTES	
1	VERTICAL BENDS SHOWN IN PROFILE TO BE CONSTRUCTED WITH MAXIMUM OF 2.52' JOINT DEFLECTIONS
2	LOCATED DRY UTILITIES ASSUMED TO HAVE 30" OF COVER
3	RIGHT OF WAY LINES SHOWN ARE FROM PUBLIC RECORD AND ARE APPROXIMATE LOCATIONS ONLY
4	ALL STATIONING IS ALONG C OF THE PROPOSED WATER MAIN.

NO.	BY	DATE	REVISION



SEAL: **Richard A. Wallace**
 Registered Professional Engineer
 CERTIFICATE NO. 18686
 RICHARD A. WALLACE
 Expires 10/31/23
 ARIZONA, USA

2401 W PEORIA AVE, STE 130
 PHOENIX, AZ 85029
 602.957.3350

RICK ENGINEERING COMPANY
 San Diego - Riverside - Santa Clarita - San Luis Obispo - Sacramento - Orange - Tucson - Phoenix - Las Vegas - Denver

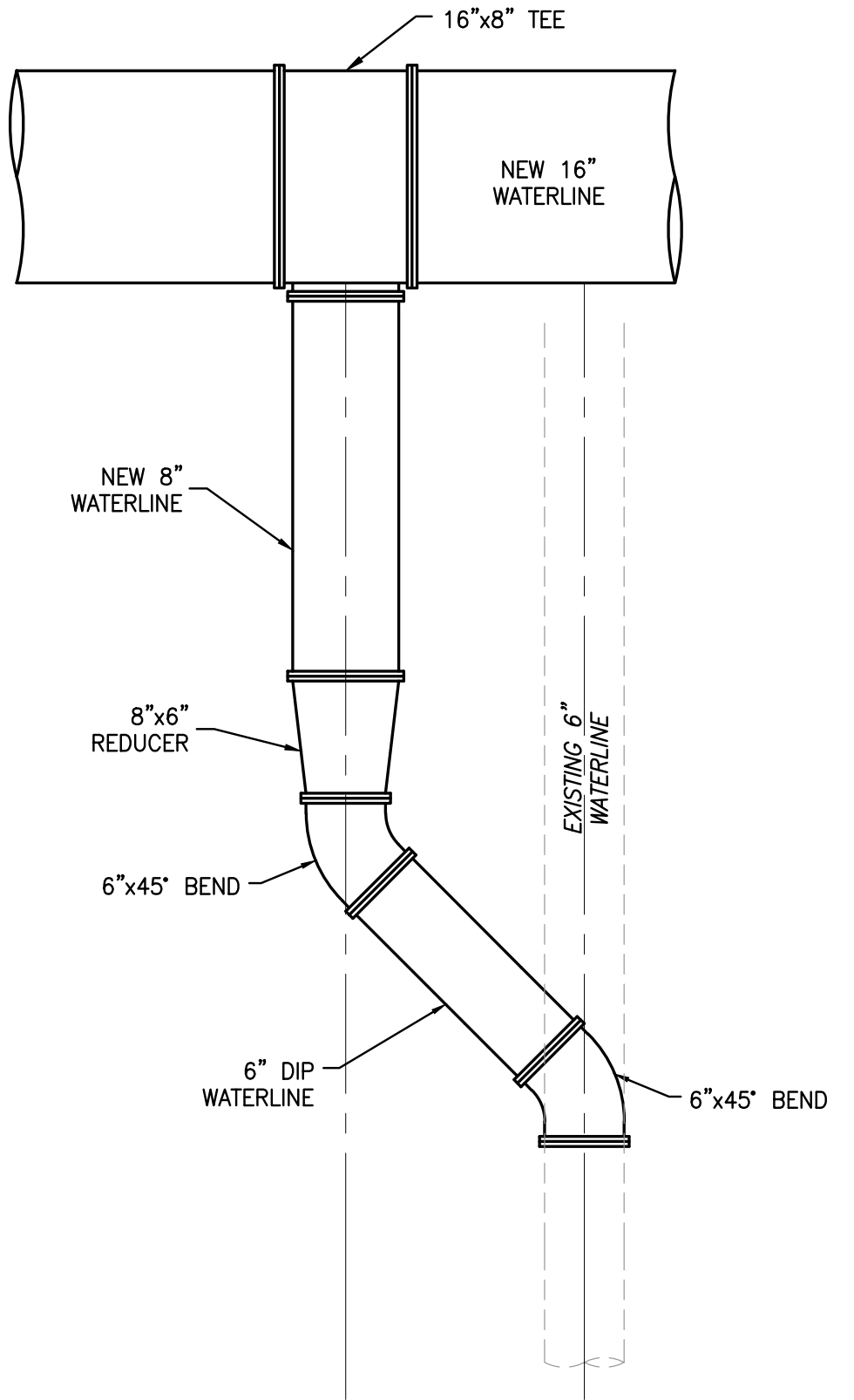
PROJECT NO: 6318 DRAWN/DESIGNED BY: BSH/DW
 DATE: 10/31/2023 CHECKED BY: DEM

CONSTRUCTION DOCUMENTS PREPARED FOR:
HORIZON SIX WATERLINE PROJECT
 MOHAVE COUNTY, ARIZONA

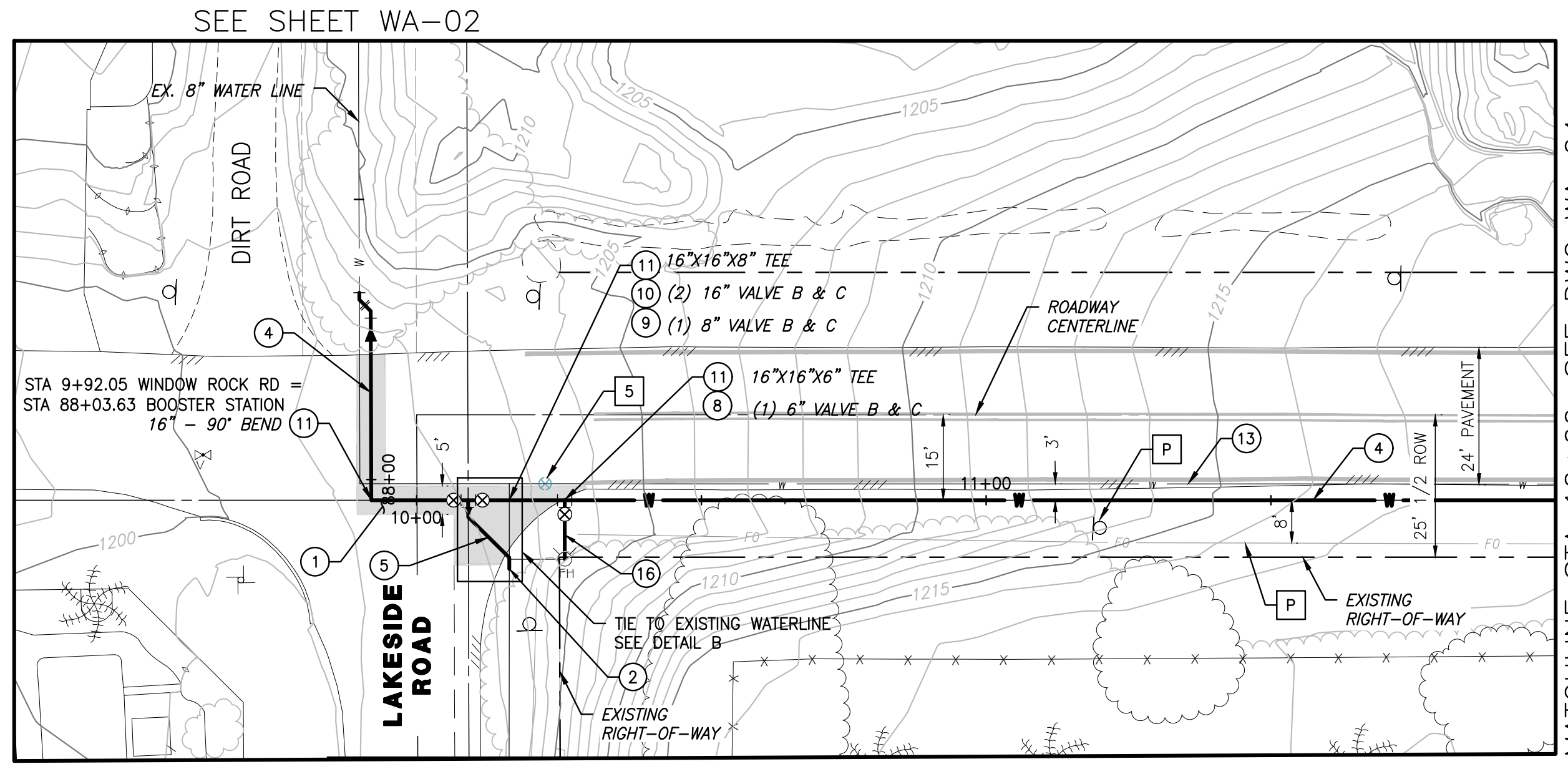
PLAN & PROFILE STA 85+00 TO 88+50



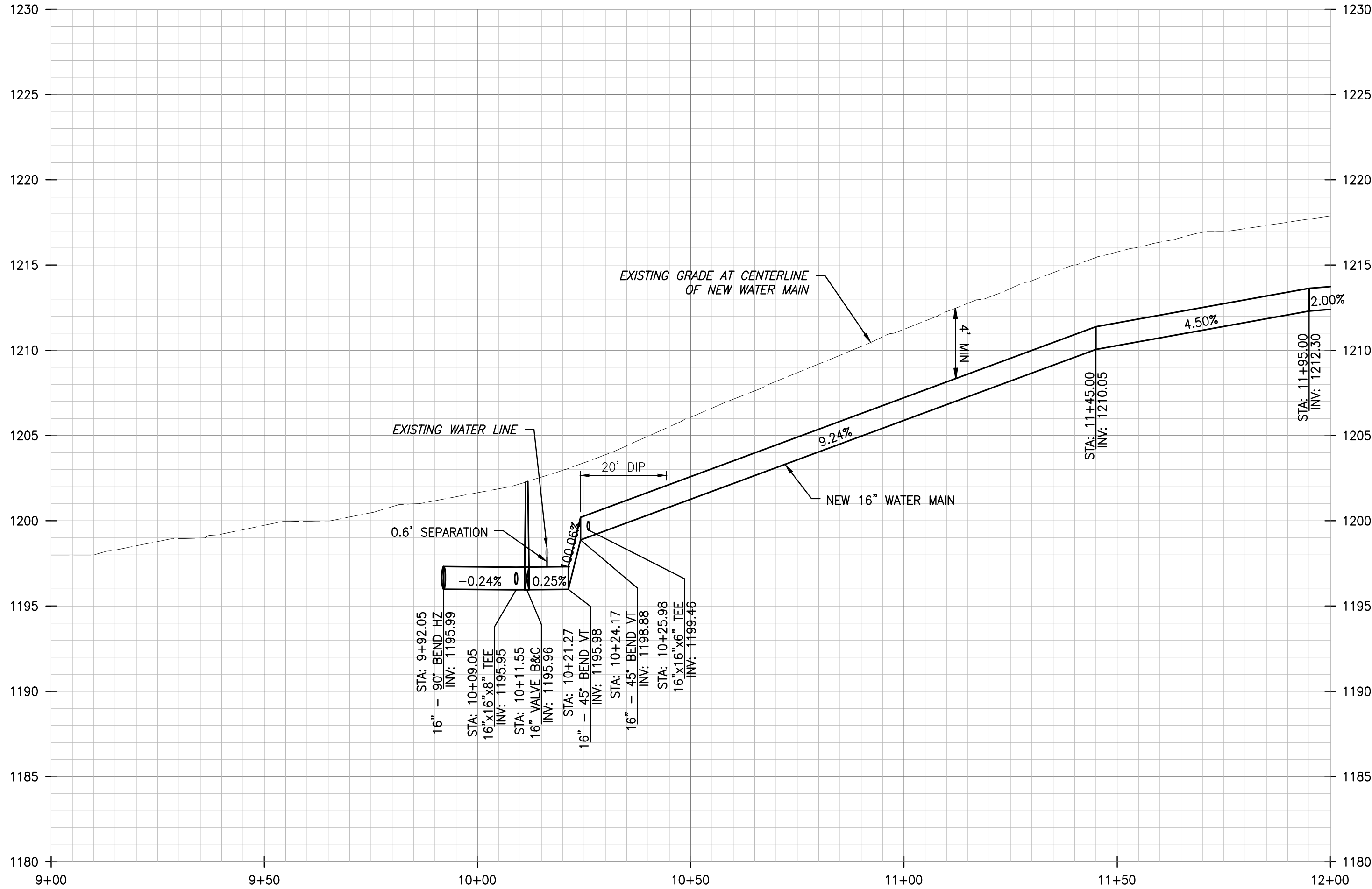
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DETAIL "B"
(NO SCALE)



WINDOW ROCK ROAD

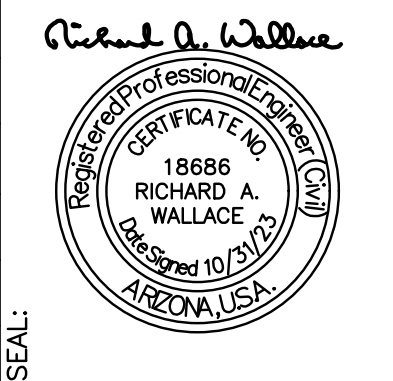


REMOVAL/RELOCATE NOTES	
NO.	DESCRIPTION
1	REMOVE & REPLACE AC PAVEMENT DRIVEWAY IN KIND
2	REMOVE & REPLACE CONCRETE DRIVEWAY IN KIND
3	REMOVE & REPLACE BRICK/CONCRETE PAVER DRIVEWAY IN KIND
4	REMOVE & RESET MAILBOX
5	ABANDON GATE VALVE BY REMOVING VALVE BOX & PATCHING PAVEMENT
6	NOT USED
7	REMOVE & REINSTALL STREET SIGN
8	REMOVE EXISTING WATER LINE
9	REMOVE & REPLACE CONCRETE BANK PROTECTION
S	SAWCUT AND MATCH EXISTING
P	PROTECT IN PLACE

CONSTRUCTION NOTES	
NO.	DESCRIPTION
1	SAWCUT, REMOVE & REPLACE EXISTING AC PAVEMENT PER DETAIL 4 ON SHEET DT-01
2	CONNECT TO EXISTING WATER LINE
3	INSTALL WATER LINE, PVC C900, 8" DIA
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10	INSTALL GATE VALVE, BOX & COVER, 16" DIA
11	INSTALL FITTING/BEND - TYPE, ANGLE AND SIZE PER PLAN, INSTALL THRUST BLOCK PER MAG STD DET 360
12	INSTALL COMBINATION AIR RELEASE VALVE, 1" LINE PER DETAIL 3 ON SHEET DT-01.
13	CAP & ABANDON EXISTING WATER LINE
14	STORM DRAIN CROSSING, CONTRACTOR TO MAINTAIN MINIMUM SEPARATION PER ADEQ. PROTECT WATER LINE PER MAG STD DET 404-3
15	NEW 3/4" SERVICE CONNECTION TO EXISTING METER PER DETAIL 2 ON SHEET DT-01.
16	CONNECT NEW WATER LINE TO EXISTING FIRE HYDRANT
17	INSTALL 36" STEEL CASING PIPE BY JACK & BORE

GENERAL NOTES	
1	VERTICAL BENDS SHOWN IN PROFILE TO BE CONSTRUCTED WITH MAXIMUM OF 2.52' JOINT DEFLECTIONS
2	LOCATED DRY UTILITIES ASSUMED TO HAVE 30" OF COVER
3	RIGHT OF WAY LINES SHOWN ARE FROM PUBLIC RECORD AND ARE APPROXIMATE LOCATIONS ONLY
4	ALL STATIONING IS ALONG C OF THE PROPOSED WATER MAIN.

NO.	BY	DATE	REVISION



SEAL: **Richard A. Wallace**
Professional Engineer
18686
RICHARD A. WALLACE
License No. 18686
State of Arizona

PROJECT NO: 6318 DRAWN/DESIGNED BY: BSH/DW
DATE: 10/31/2023 CHECKED BY: DEM

2401 W PEORIA AVE, STE 130
PHOENIX, AZ 85029
602.957.3350

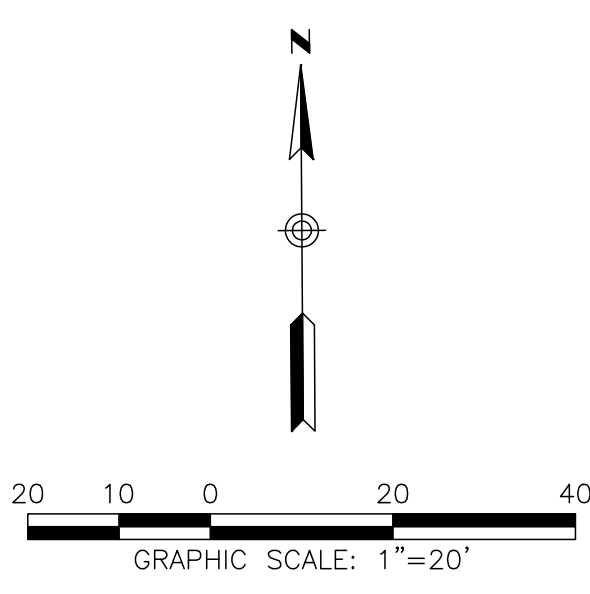
RICK ENGINEERING COMPANY
San Diego - Riverside - Santa Clarita - San Luis Obispo - Sacramento - Orange - Tucson - Phoenix - Las Vegas - Denver

CONSTRUCTION DOCUMENTS PREPARED FOR:
HORIZON SIX WATERLINE PROJECT
MOHAVE COUNTY, ARIZONA

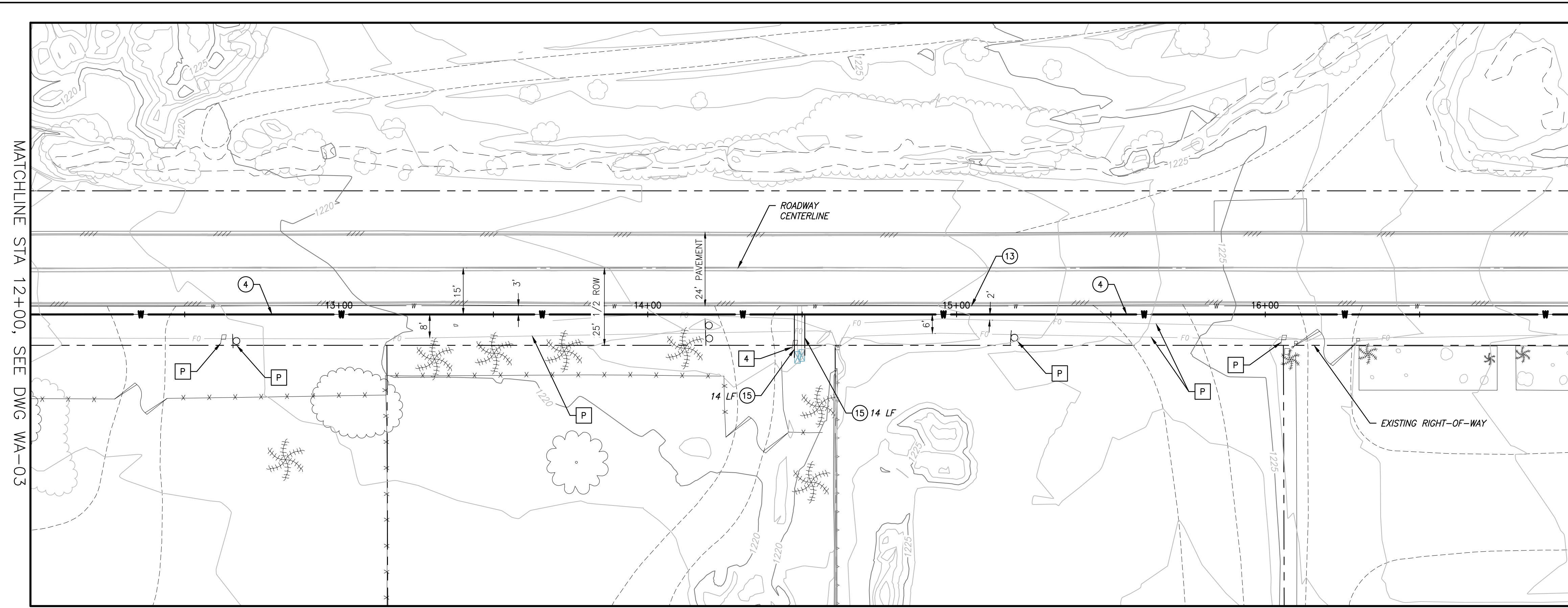
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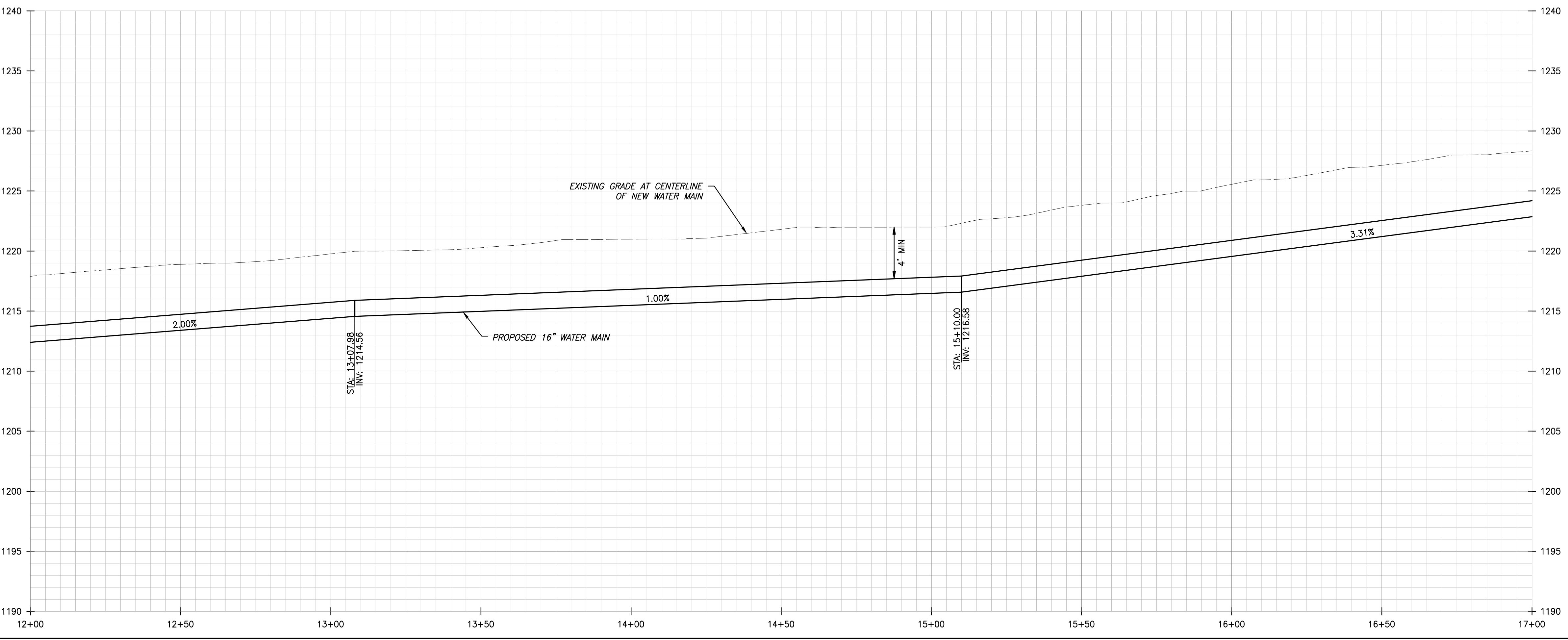
DRAWING NO. **WA-03**
SHEET NO. 06 OF 24



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WINDOW ROCK ROAD



REMOVAL/RELOCATE NOTES	
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GENERAL NOTES	
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4	ALL STATIONING IS ALONG C/L OF THE PROPOSED WATER MAIN.

NO.	BY	DATE	REVISION

Richard A. Wallace
 Registered Professional Engineer
 CERTIFICATE NO. 18686
 RICHARD A. WALLACE
 LICENSED 10/12/23
 ARIZONA, USA

SEAL:

2401 W PEORIA AVE, STE 130
 PHOENIX, AZ 85029
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PROJECT NO: 6318 DRAWN/DESIGNED BY: BSH/DW
 DATE: 10/31/2023 CHECKED BY: DEM

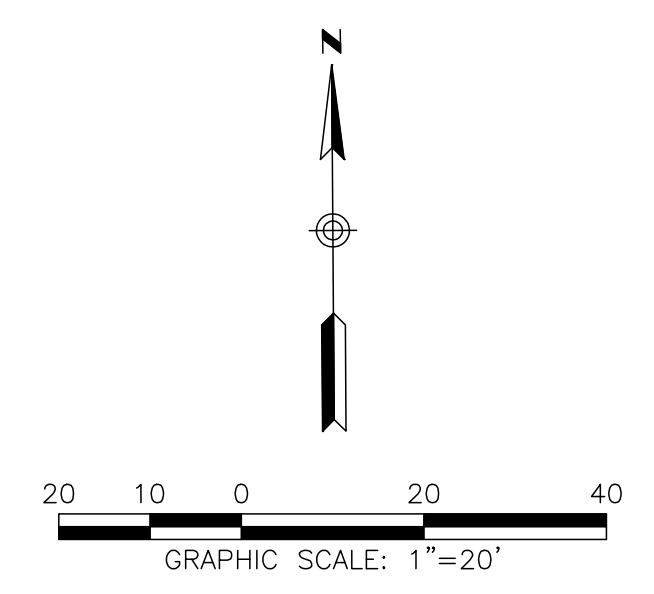
CONSTRUCTION DOCUMENTS PREPARED FOR:
HORIZON SIX WATERLINE PROJECT
 MOHAVE COUNTY, ARIZONA

PLAN & PROFILE STA 12+00 TO 17+00

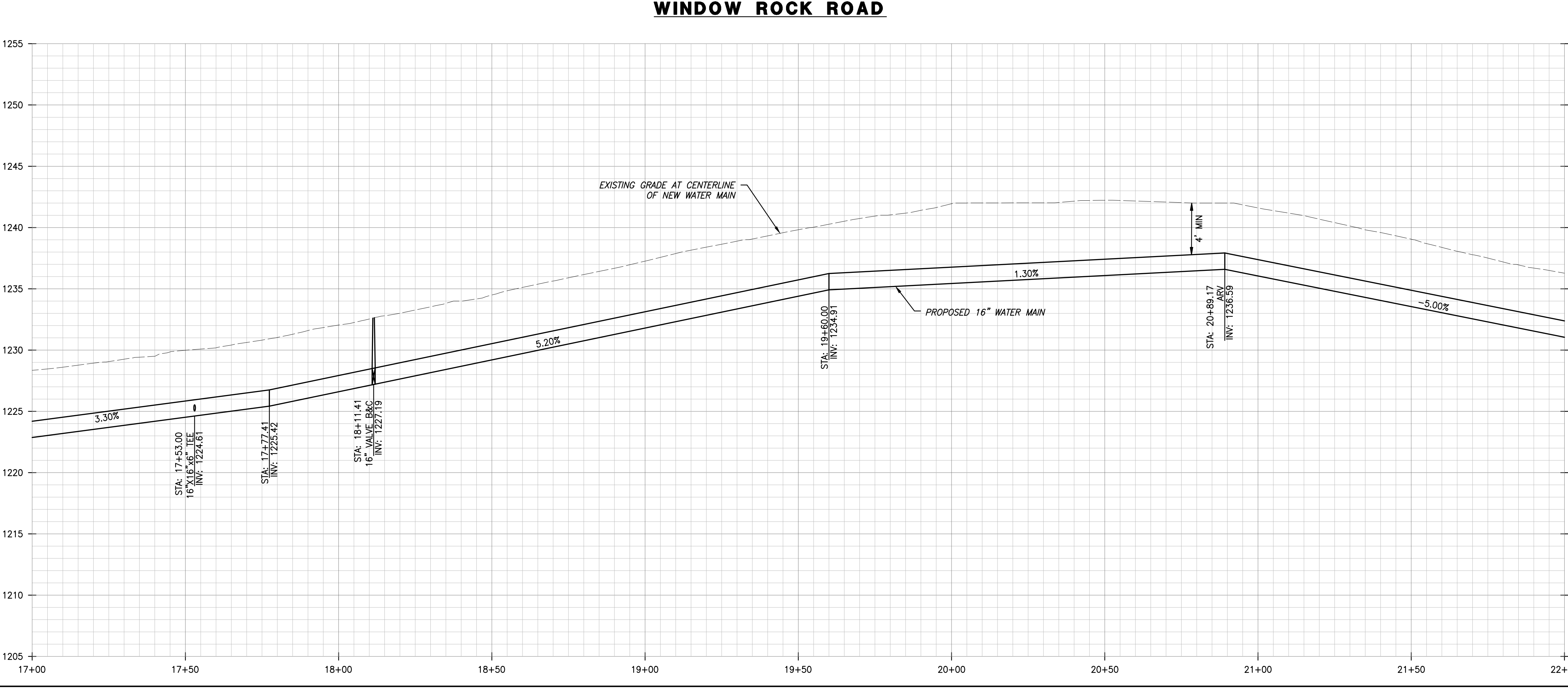
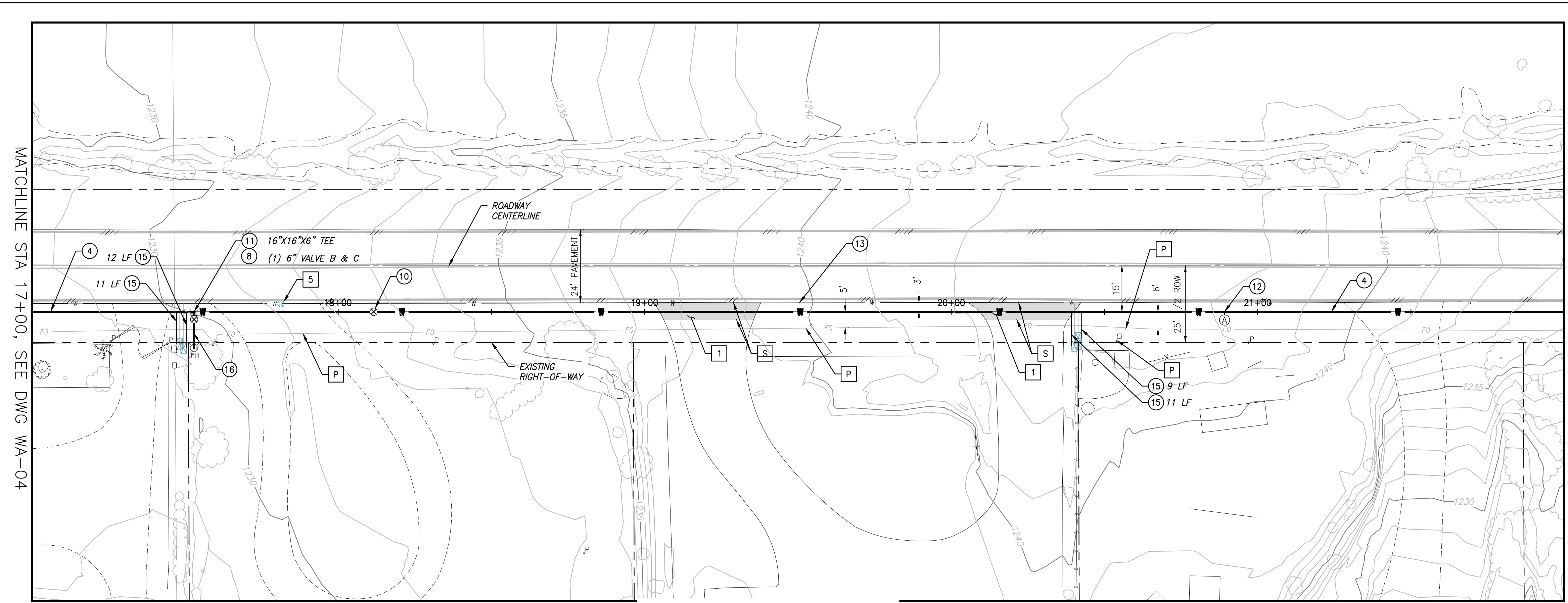
Contact Arizona 811 at least two full working days before you begin excavation

 Call 811 or click Arizona811.com

DRAWING NO. **WA-04**
 SHEET NO. 07 OF 24



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REMOVAL/RELOCATE NOTES	
NO.	DESCRIPTION
1	REMOVE & REPLACE AC PAVEMENT DRIVEWAY IN KIND
2	REMOVE & REPLACE CONCRETE DRIVEWAY IN KIND
3	REMOVE & REPLACE BRICK/CONCRETE PAVER DRIVEWAY IN KIND
4	REMOVE & RESET MAILBOX
5	ABANDON GATE VALVE BY REMOVING VALVE BOX & PATCHING PAVEMENT
6	NOT USED
7	REMOVE & REINSTALL STREET SIGN
8	REMOVE EXISTING WATER LINE
9	REMOVE & REPLACE CONCRETE BANK PROTECTION
S	SAWCUT AND MATCH EXISTING
P	PROTECT IN PLACE

CONSTRUCTION NOTES	
NO.	DESCRIPTION
1	SAWCUT, REMOVE & REPLACE EXISTING AC PAVEMENT PER DETAIL 4 ON SHEET DT-01
2	CONNECT TO EXISTING WATER LINE
3	INSTALL WATER LINE, PVC C900, 8" DIA
4	INSTALL WATER LINE, PVC C905, 16" DIA
5	INSTALL WATER LINE, DIP, 6" DIA
6	INSTALL WATER LINE, DIP, 8" DIA
7	INSTALL WATER LINE, DIP, 16" DIA
8	INSTALL GATE VALVE, BOX & COVER, 6" DIA
9	INSTALL GATE VALVE, BOX & COVER, 8" DIA
10	INSTALL GATE VALVE, BOX & COVER, 16" DIA
11	INSTALL FITTING/BEND - TYPE, ANGLE AND SIZE PER PLAN. INSTALL THRUST BLOCK PER MAG STD DET 360
12	INSTALL COMBINATION AIR RELEASE VALVE, 1" LINE PER DETAIL 3 ON SHEET DT-01.
13	CAP & ABANDON EXISTING WATER LINE
14	STORM DRAIN CROSSING, CONTRACTOR TO MAINTAIN MINIMUM SEPARATION PER ADEQ. PROTECT WATER LINE PER MAG STD DET 404-3
15	NEW 3/4" SERVICE CONNECTION TO EXISTING METER PER DETAIL 2 ON SHEET DT-01.
16	CONNECT NEW WATER LINE TO EXISTING FIRE HYDRANT
17	INSTALL 36" STEEL CASING PIPE BY JACK & BORE

GENERAL NOTES	
1	VERTICAL BENDS SHOWN IN PROFILE TO BE CONSTRUCTED WITH MAXIMUM OF 2.52' JOINT DEFLECTIONS
2	LOCATED DRY UTILITIES ASSUMED TO HAVE 30" OF COVER
3	RIGHT OF WAY LINES SHOWN ARE FROM PUBLIC RECORD AND ARE APPROXIMATE LOCATIONS ONLY
4	ALL STATIONING IS ALONG C OF THE PROPOSED WATER MAIN.

NO.	BY	DATE	REVISION

Richard A. Wallace

 Registered Professional Engineer
 CERTIFICATE NO. 18686
 RICHARD A. WALLACE
 License # 18686
 ARIZONA, USA

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 State of Arizona

HORIZON SIX WATERLINE PROJECT
 MOHAVE COUNTY, ARIZONA

CONSTRUCTION DOCUMENTS PREPARED FOR:

PLAN & PROFILE STA 17+00 TO 22+00

DRAWING NO. **WA-05**
 SHEET NO. 08 OF 24

GENERAL NOTES

1 VERTICAL BENDS SHOWN IN PROFILE TO BE CONSTRUCTED WITH MAXIMUM OF 2.52' JOINT DEFLECTIONS

2 LOCATED DRY UTILITIES ASSUMED TO HAVE 30" OF COVER

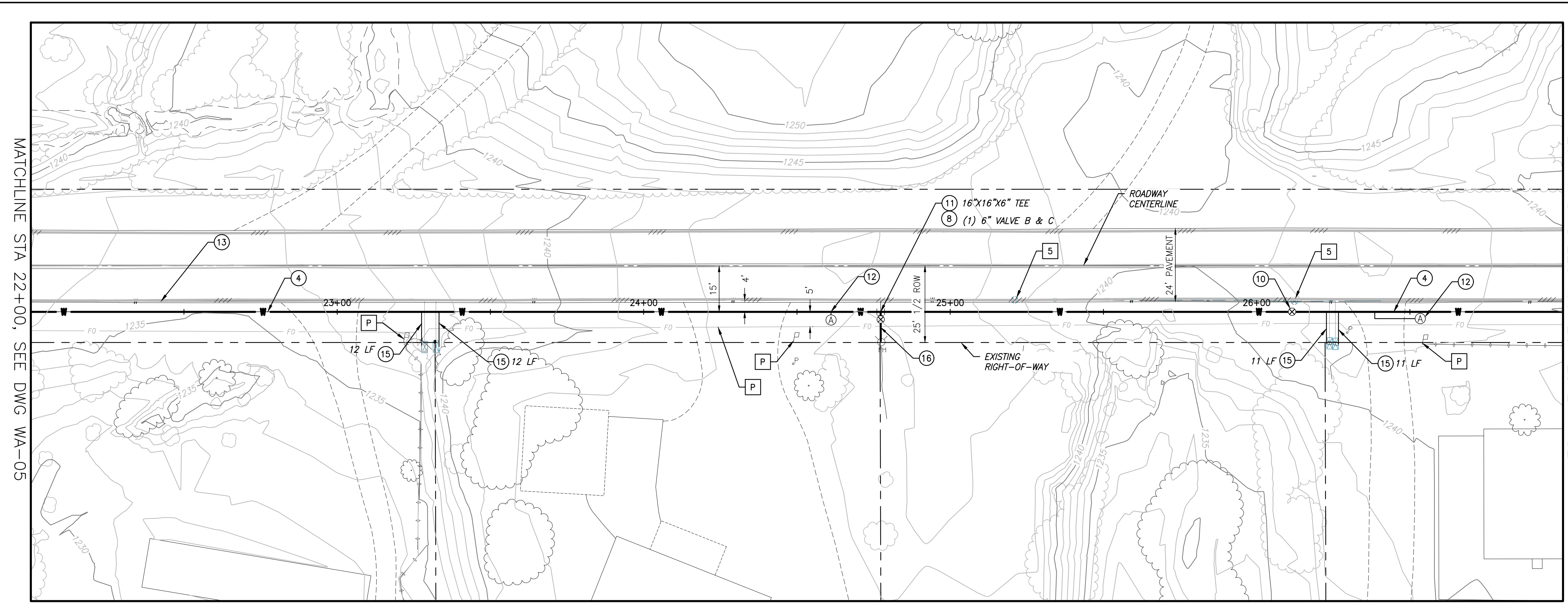
3 RIGHT OF WAY LINES SHOWN ARE FROM PUBLIC RECORD AND ARE APPROXIMATE LOCATIONS ONLY

4 ALL STATIONING IS ALONG C OF THE PROPOSED WATER MAIN.

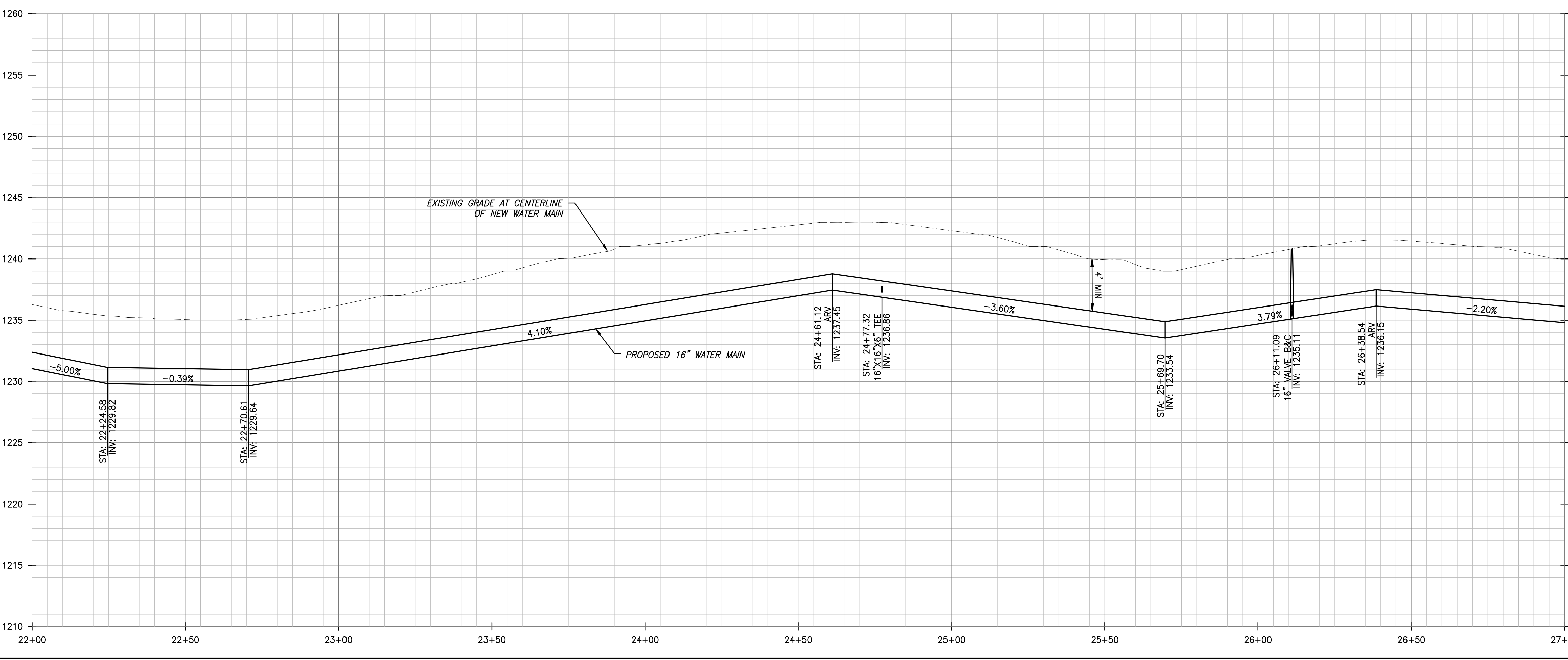
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WINDOW ROCK ROAD



REMOVAL/RELOCATE NOTES	
NO.	DESCRIPTION
1	REMOVE & REPLACE AC PAVEMENT DRIVEWAY IN KIND
2	REMOVE & REPLACE CONCRETE DRIVEWAY IN KIND
3	REMOVE & REPLACE BRICK/CONCRETE PAVER DRIVEWAY IN KIND
4	REMOVE & RESET MAILBOX
5	ABANDON GATE VALVE BY REMOVING VALVE BOX & PATCHING PAVEMENT
6	NOT USED
7	REMOVE & REINSTALL STREET SIGN
8	REMOVE EXISTING WATER LINE
9	REMOVE & REPLACE CONCRETE BANK PROTECTION
S	SAWCUT AND MATCH EXISTING
P	PROTECT IN PLACE

CONSTRUCTION NOTES	
NO.	DESCRIPTION
1	SAWCUT, REMOVE & REPLACE EXISTING AC PAVEMENT PER DETAIL 4 ON SHEET DT-01
2	CONNECT TO EXISTING WATER LINE
3	INSTALL WATER LINE, PVC C900, 8" DIA
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6	INSTALL WATER LINE, DIP, 8" DIA
7	INSTALL WATER LINE, DIP, 16" DIA
8	INSTALL GATE VALVE, BOX & COVER, 6" DIA
9	INSTALL GATE VALVE, BOX & COVER, 8" DIA
10	INSTALL GATE VALVE, BOX & COVER, 16" DIA
11	INSTALL FITTING/BEND - TYPE, ANGLE AND SIZE PER PLAN, INSTALL THRUST BLOCK PER MAG STD DET 360
12	INSTALL COMBINATION AIR RELEASE VALVE, 1" LINE PER DETAIL 3 ON SHEET DT-01.
13	CAP & ABANDON EXISTING WATER LINE
14	STORM DRAIN CROSSING, CONTRACTOR TO MAINTAIN MINIMUM SEPARATION PER ADEQ. PROTECT WATER LINE PER MAG STD DET 404-3
15	NEW 3/4" SERVICE CONNECTION TO EXISTING METER PER DETAIL 2 ON SHEET DT-01.
16	CONNECT NEW WATER LINE TO EXISTING FIRE HYDRANT
17	INSTALL 36" STEEL CASING PIPE BY JACK & BORE

GENERAL NOTES	
1	VERTICAL BENDS SHOWN IN PROFILE TO BE CONSTRUCTED WITH MAXIMUM OF 2.52' JOINT DEFLECTIONS
2	LOCATED DRY UTILITIES ASSUMED TO HAVE 30" OF COVER
3	RIGHT OF WAY LINES SHOWN ARE FROM PUBLIC RECORD AND ARE APPROXIMATE LOCATIONS ONLY
4	ALL STATIONING IS ALONG C OF THE PROPOSED WATER MAIN.

NO.	BY	DATE	REVISION

SEAL:

CONSTRUCTION DOCUMENTS PREPARED FOR:

RICK ENGINEERING COMPANY
 2401 W PEORIA AVE, STE 130
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 602.957.3350

PROJECT NO: 6318
 DRAWN/DESIGNED BY: BSH/DW
 CHECKED BY: 10/31/2023

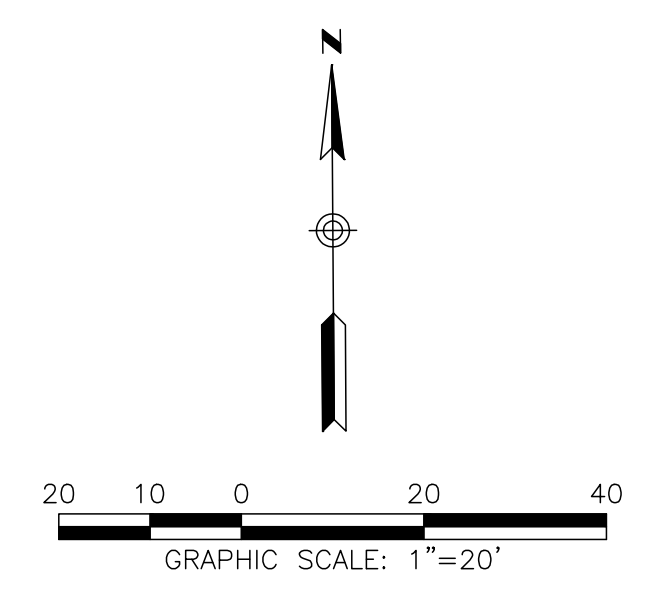
HORIZON SIX WATERLINE PROJECT
 MOHAVE COUNTY, ARIZONA

PLAN & PROFILE STA 22+00 TO 27+00

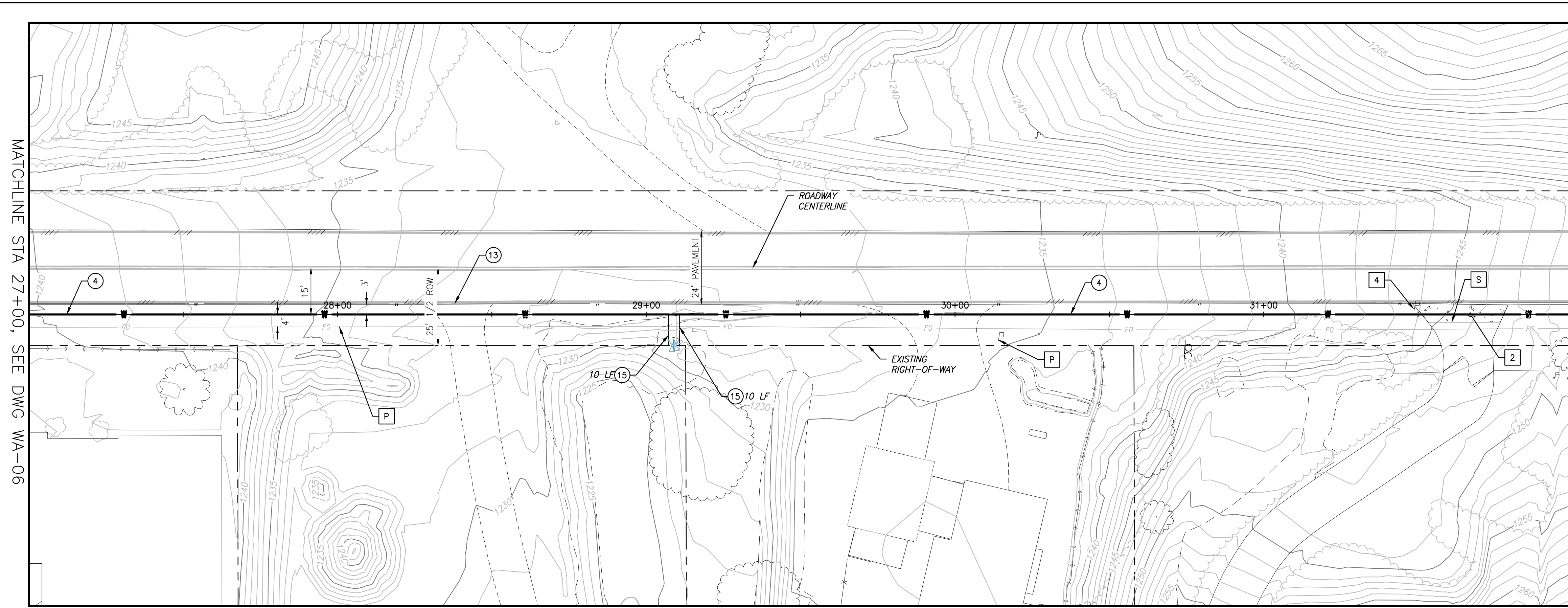
Contact Arizona 811 at least two full working days before you begin excavation

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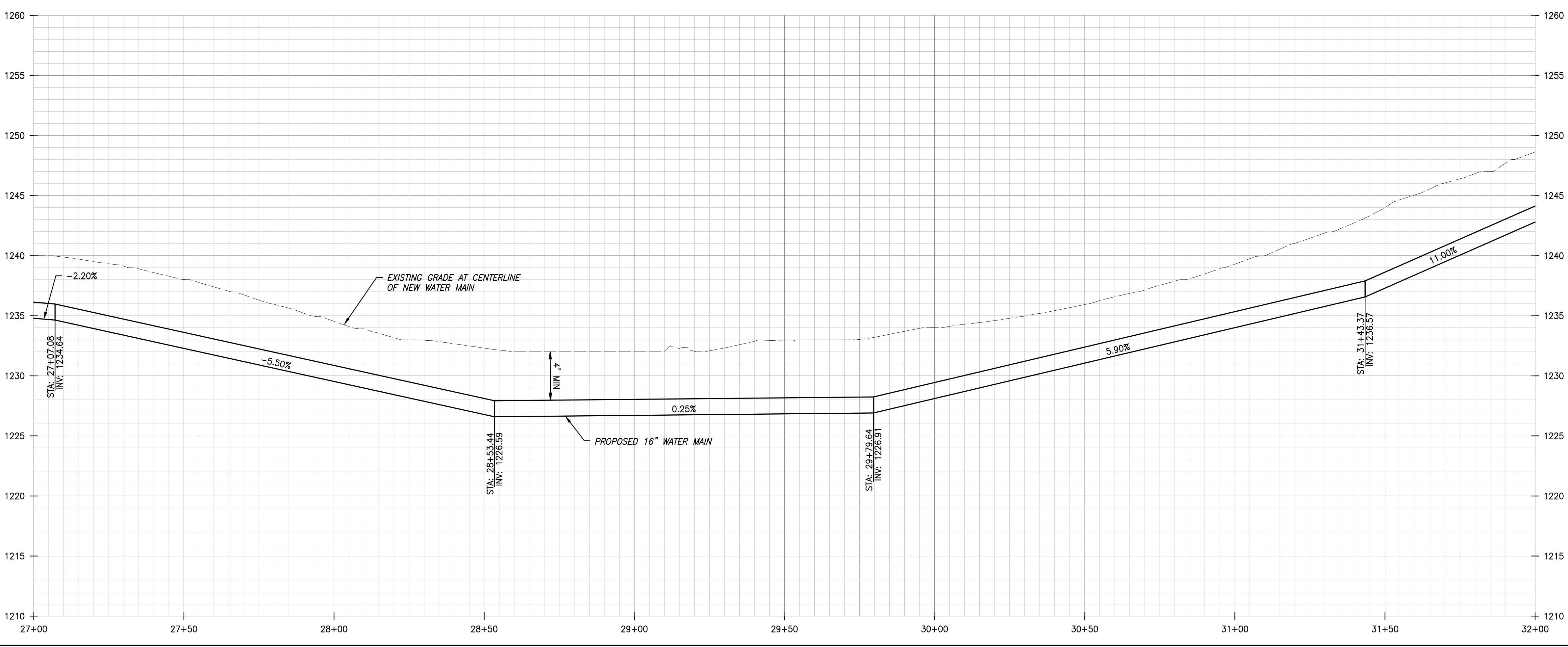
DRAWING NO. **WA-06**
 SHEET NO. 09 OF 24



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WINDOW ROCK ROAD



REMOVAL/RELOCATE NOTES	
NO.	DESCRIPTION
1	REMOVE & REPLACE AC PAVEMENT DRIVEWAY IN KIND
2	REMOVE & REPLACE CONCRETE DRIVEWAY IN KIND
3	REMOVE & REPLACE BRICK/CONCRETE PAVER DRIVEWAY IN KIND
4	REMOVE & RESET MAILBOX
5	ABANDON GATE VALVE BY REMOVING VALVE BOX & PATCHING PAVEMENT
6	NOT USED
7	REMOVE & REINSTALL STREET SIGN
8	REMOVE EXISTING WATER LINE
9	REMOVE & REPLACE CONCRETE BANK PROTECTION
S	SAWCUT AND MATCH EXISTING
P	PROTECT IN PLACE

CONSTRUCTION NOTES	
NO.	DESCRIPTION
1	SAWCUT, REMOVE & REPLACE EXISTING AC PAVEMENT PER DETAIL 4 ON SHEET DT-01
2	CONNECT TO EXISTING WATER LINE
3	INSTALL WATER LINE, PVC C900, 8" DIA
4	INSTALL WATER LINE, PVC C905, 16" DIA
5	INSTALL WATER LINE, DIP, 6" DIA
6	INSTALL WATER LINE, DIP, 8" DIA
7	INSTALL WATER LINE, DIP, 16" DIA
8	INSTALL GATE VALVE, BOX & COVER, 6" DIA
9	INSTALL GATE VALVE, BOX & COVER, 8" DIA
10	INSTALL GATE VALVE, BOX & COVER, 16" DIA
11	INSTALL FITTING/BEND - TYPE, ANGLE AND SIZE PER PLAN, INSTALL THRUST BLOCK PER MAG STD DET 360
12	INSTALL COMBINATION AIR RELEASE VALVE, 1" LINE PER DETAIL 3 ON SHEET DT-01.
13	CAP & ABANDON EXISTING WATER LINE
14	STORM DRAIN CROSSING, CONTRACTOR TO MAINTAIN MINIMUM SEPARATION PER ADEQ. PROTECT WATER LINE PER MAG STD DET 404-3
15	NEW 3/4" SERVICE CONNECTION TO EXISTING METER PER DETAIL 2 ON SHEET DT-01.
16	CONNECT NEW WATER LINE TO EXISTING FIRE HYDRANT
17	INSTALL 36" STEEL CASING PIPE BY JACK & BORE

GENERAL NOTES	
1	VERTICAL BENDS SHOWN IN PROFILE TO BE CONSTRUCTED WITH MAXIMUM OF 2.52' JOINT DEFLECTIONS
2	LOCATED DRY UTILITIES ASSUMED TO HAVE 30" OF COVER
3	RIGHT OF WAY LINES SHOWN ARE FROM PUBLIC RECORD AND ARE APPROXIMATE LOCATIONS ONLY
4	ALL STATIONING IS ALONG C OF THE PROPOSED WATER MAIN.

NO.	BY	DATE	REVISION

SEAL:

CONSTRUCTION DOCUMENTS PREPARED FOR:

RICK ENGINEERING COMPANY
 2401 W PEORIA AVE, STE 130
 PHOENIX, AZ 85029
 602.957.3350

PROJECT NO: 6318
 DATE: 10/31/2023

DESIGNED BY: BSH/DW
 CHECKED BY: DEM

CONSTRUCTION DOCUMENTS PREPARED FOR:

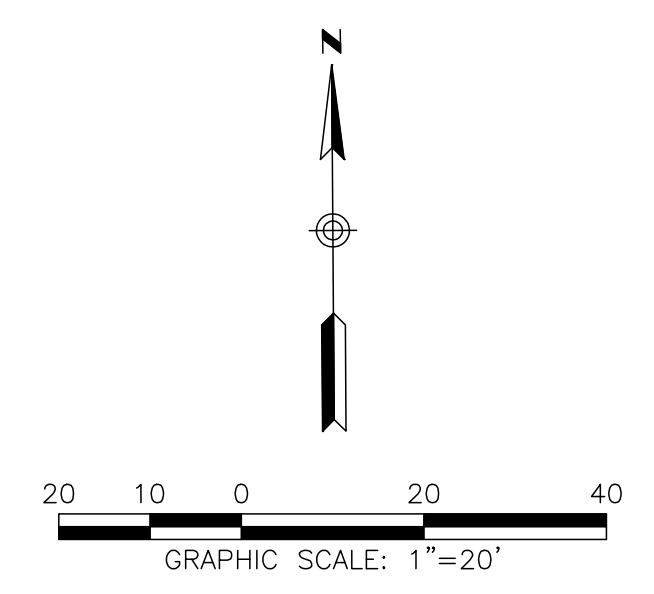
HORIZON SIX WATERLINE PROJECT
 MOHAVE COUNTY, ARIZONA

MOHAVE COUNTY, ARIZONA

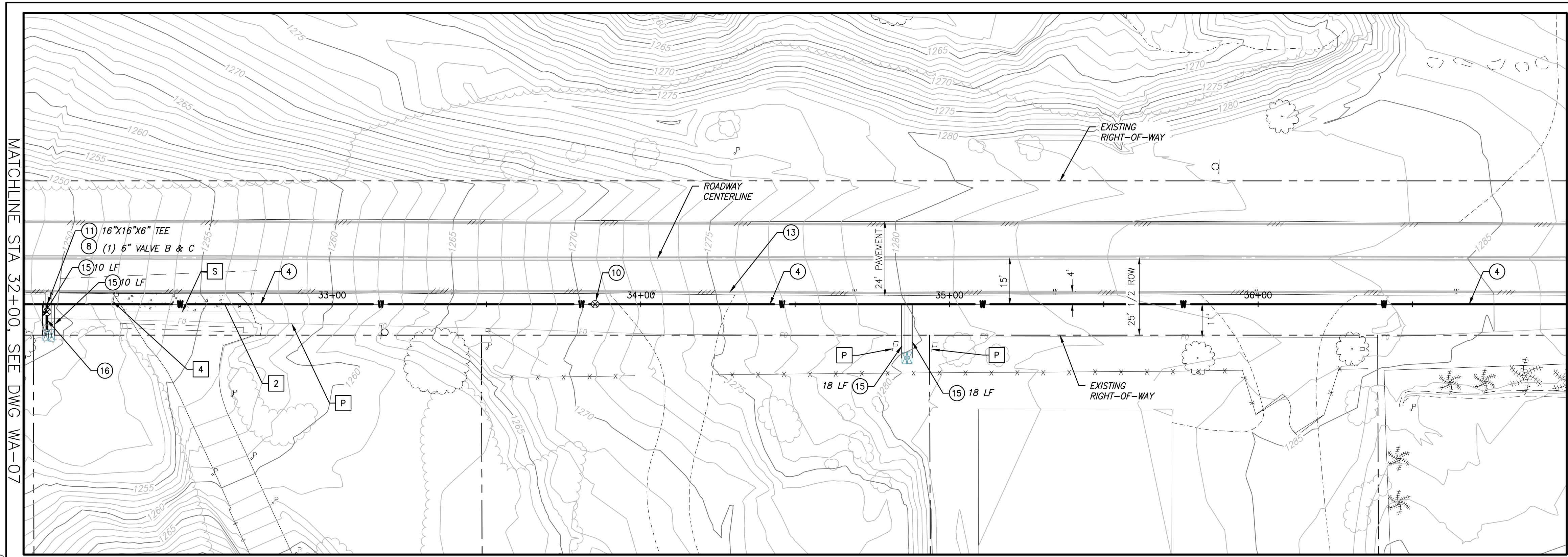
PLAN & PROFILE STA 27+00 TO 32+00

DRAWING NO. **WA-07**
 SHEET NO. 10 OF 24

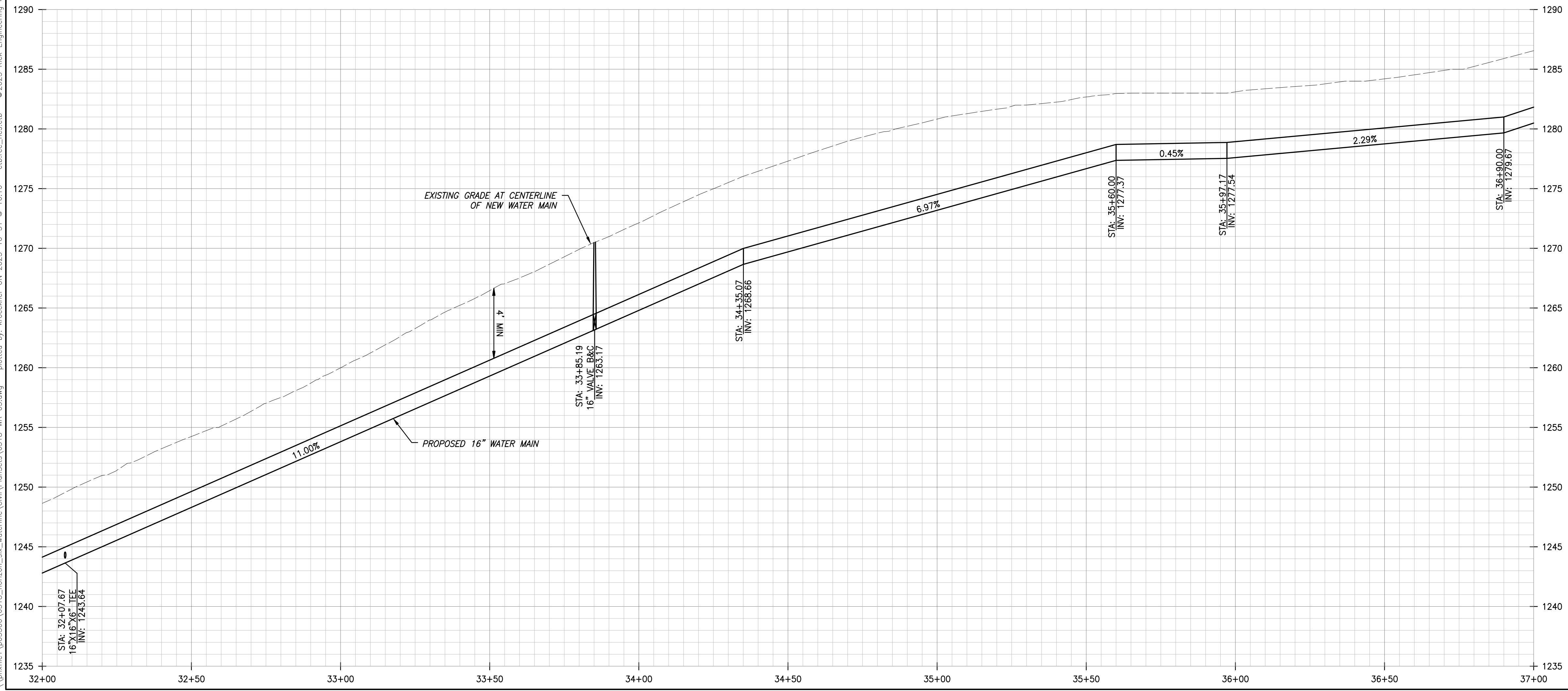
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WINDOW ROCK ROAD



REMOVAL/RELOCATE NOTES	
NO.	DESCRIPTION
1	REMOVE & REPLACE AC PAVEMENT DRIVEWAY IN KIND
2	REMOVE & REPLACE CONCRETE DRIVEWAY IN KIND
3	REMOVE & REPLACE BRICK/CONCRETE PAVER DRIVEWAY IN KIND
4	REMOVE & RESET MAILBOX
5	ABANDON GATE VALVE BY REMOVING VALVE BOX & PATCHING PAVEMENT
6	NOT USED
7	REMOVE & REINSTALL STREET SIGN
8	REMOVE EXISTING WATER LINE
9	REMOVE & REPLACE CONCRETE BANK PROTECTION
S	SAWCUT AND MATCH EXISTING
P	PROTECT IN PLACE

CONSTRUCTION NOTES	
NO.	DESCRIPTION
1	SAWCUT, REMOVE & REPLACE EXISTING AC PAVEMENT PER DETAIL 4 ON SHEET DT-01
2	CONNECT TO EXISTING WATER LINE
3	INSTALL WATER LINE, PVC C900, 8" DIA
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9	INSTALL GATE VALVE, BOX & COVER, 8" DIA
10	INSTALL GATE VALVE, BOX & COVER, 16" DIA
11	INSTALL FITTING/BEND - TYPE, ANGLE AND SIZE PER PLAN. INSTALL THRUST BLOCK PER MAG STD DET 360
12	INSTALL COMBINATION AIR RELEASE VALVE, 1" LINE PER DETAIL 3 ON SHEET DT-01.
13	CAP & ABANDON EXISTING WATER LINE
14	STORM DRAIN CROSSING, CONTRACTOR TO MAINTAIN MINIMUM SEPARATION PER ADEQ. PROTECT WATER LINE PER MAG STD DET 404-3
15	NEW 3/4" SERVICE CONNECTION TO EXISTING METER PER DETAIL 2 ON SHEET DT-01.
16	CONNECT NEW WATER LINE TO EXISTING FIRE HYDRANT
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GENERAL NOTES	
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3	RIGHT OF WAY LINES SHOWN ARE FROM PUBLIC RECORD AND ARE APPROXIMATE LOCATIONS ONLY
4	ALL STATIONING IS ALONG C/L OF THE PROPOSED WATER MAIN.

NO.	BY	DATE	REVISION

Richard A. Wallace
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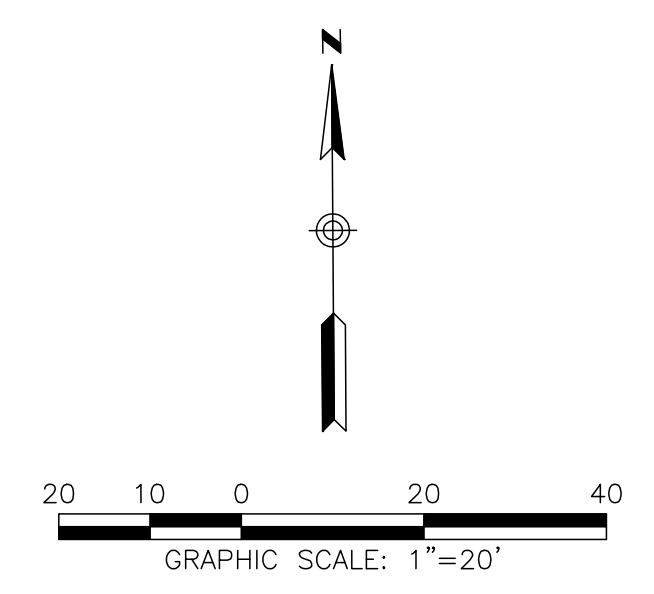
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 CHECKED BY: 10/31/2023

CONSTRUCTION DOCUMENTS PREPARED FOR:
HORIZON SIX WATERLINE PROJECT
 MOHAVE COUNTY, ARIZONA

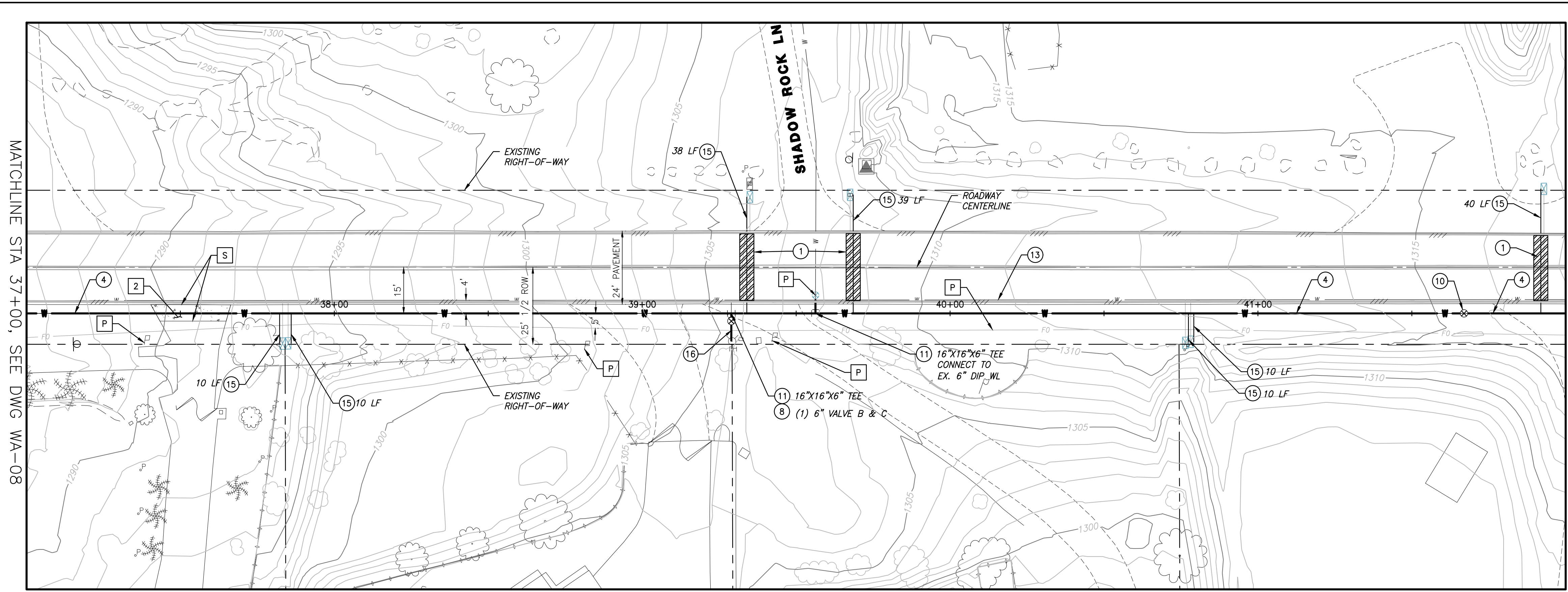
PLAN & PROFILE STA 32+00 TO 37+00

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 Call 811 or click Arizona811.com

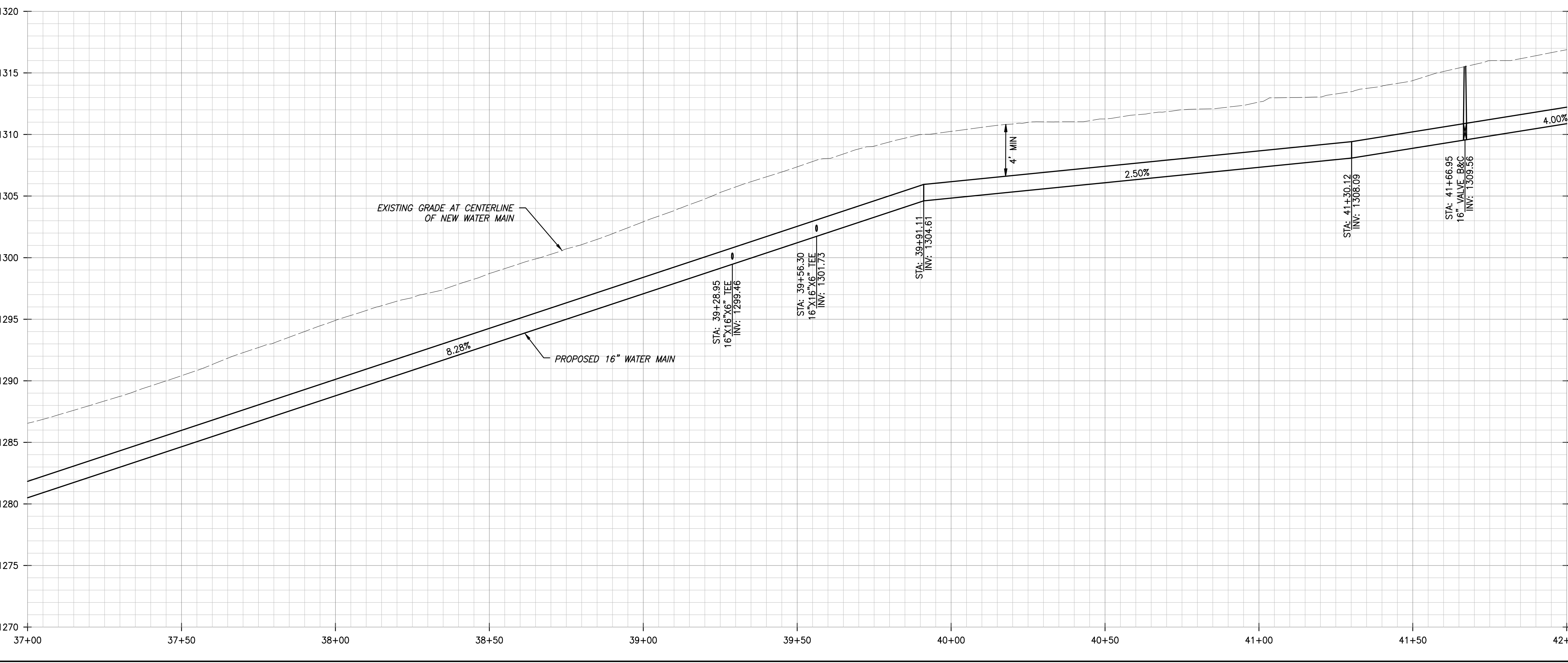
DRAWING NO. **WA-08**
 SHEET NO. 11 OF 24



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WINDOW ROCK ROAD

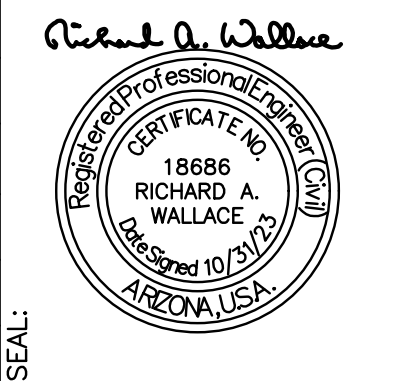


REMOVAL/RELOCATE NOTES	
NO.	DESCRIPTION
1	REMOVE & REPLACE AC PAVEMENT DRIVEWAY IN KIND
2	REMOVE & REPLACE CONCRETE DRIVEWAY IN KIND
3	REMOVE & REPLACE BRICK/CONCRETE PAVER DRIVEWAY IN KIND
4	REMOVE & RESET MAILBOX
5	ABANDON GATE VALVE BY REMOVING VALVE BOX & PATCHING PAVEMENT
6	NOT USED
7	REMOVE & REINSTALL STREET SIGN
8	REMOVE EXISTING WATER LINE
9	REMOVE & REPLACE CONCRETE BANK PROTECTION
S	SAWCUT AND MATCH EXISTING
P	PROTECT IN PLACE

CONSTRUCTION NOTES	
NO.	DESCRIPTION
1	SAWCUT, REMOVE & REPLACE EXISTING AC PAVEMENT PER DETAIL 4 ON SHEET DT-01
2	CONNECT TO EXISTING WATER LINE
3	INSTALL WATER LINE, PVC C900, 8" DIA
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9	INSTALL GATE VALVE, BOX & COVER, 8" DIA
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11	INSTALL FITTING/BEND - TYPE, ANGLE AND SIZE PER PLAN. INSTALL THRUST BLOCK PER MAG STD DET 360
12	INSTALL COMBINATION AIR RELEASE VALVE, 1" LINE PER DETAIL 3 ON SHEET DT-01.
13	CAP & ABANDON EXISTING WATER LINE
14	STORM DRAIN CROSSING, CONTRACTOR TO MAINTAIN MINIMUM SEPARATION PER ADEQ. PROTECT WATER LINE PER MAG STD DET 404-3
15	NEW 3/4" SERVICE CONNECTION TO EXISTING METER PER DETAIL 2 ON SHEET DT-01.
16	CONNECT NEW WATER LINE TO EXISTING FIRE HYDRANT
17	INSTALL 36" STEEL CASING PIPE BY JACK & BORE

GENERAL NOTES	
1	VERTICAL BENDS SHOWN IN PROFILE TO BE CONSTRUCTED WITH MAXIMUM OF 2.52' JOINT DEFLECTIONS
2	LOCATED DRY UTILITIES ASSUMED TO HAVE 30" OF COVER
3	RIGHT OF WAY LINES SHOWN ARE FROM PUBLIC RECORD AND ARE APPROXIMATE LOCATIONS ONLY
4	ALL STATIONING IS ALONG C OF THE PROPOSED WATER MAIN.

NO.	BY	DATE	REVISION



SEAL: **Richard A. Wallace**
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 CERTIFICATE NO. 18686
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RICK ENGINEERING COMPANY
 San Diego - Riverside - Santa Clarita - San Luis Obispo - Sacramento - Orange - Tucson - Phoenix - Las Vegas - Denver

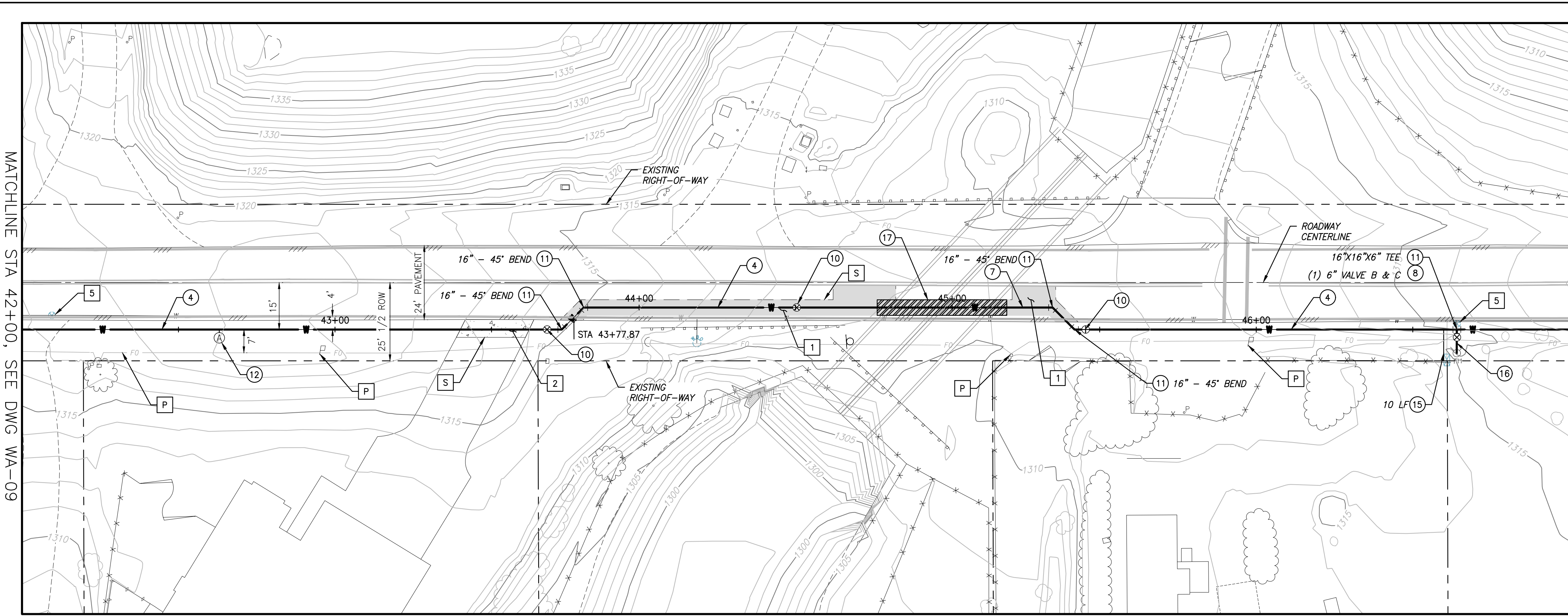
PROJECT NO: 6318 DRAWN/DESIGNED BY: BSH/DW
 DATE: 10/31/2023 CHECKED BY: DEM

CONSTRUCTION DOCUMENTS PREPARED FOR:
HORIZON SIX WATERLINE PROJECT
 MOHAVE COUNTY, ARIZONA

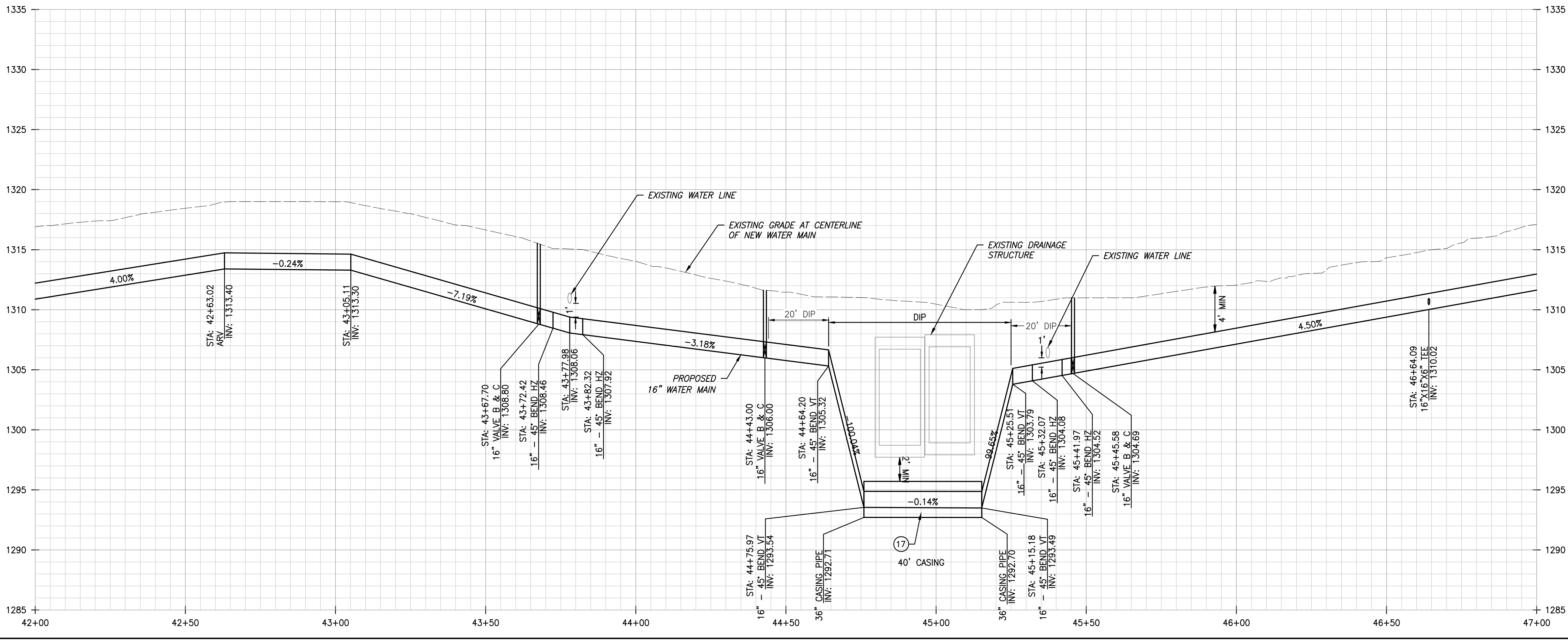
PLAN & PROFILE STA 37+00 TO 42+00



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WINDOW ROCK ROAD



REMOVAL/RELOCATE NOTES	
NO.	DESCRIPTION
1	REMOVE & REPLACE AC PAVEMENT DRIVEWAY IN KIND
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7	REMOVE & REINSTALL STREET SIGN
8	REMOVE EXISTING WATER LINE
9	REMOVE & REPLACE CONCRETE BANK PROTECTION
S	SAWCUT AND MATCH EXISTING
P	PROTECT IN PLACE

CONSTRUCTION NOTES	
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1	SAWCUT, REMOVE & REPLACE EXISTING AC PAVEMENT PER DETAIL 4 ON SHEET DT-01
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GENERAL NOTES	
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NO.	BY	DATE	REVISION

Richard A. Wallace
Professional Engineer
18686
RICHARD A. WALLACE
LICENSED 10/17/23
ARIZONA, USA

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RICK
ENGINEERING COMPANY

rickengineering.com
Richard A. Wallace - Phoenix - Las Vegas - Denver
San Diego - Riverside - Santa Clarita - San Luis Obispo - Sacramento - Orange - Tucson - Phoenix - Las Vegas - Denver

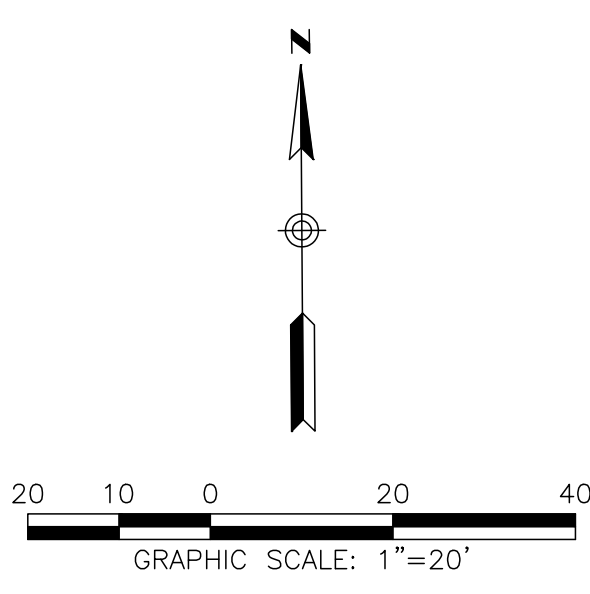
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DRAWN/DESIGNED BY: BSH/DW
CHECKED BY: DEM
DATE: 10/31/2023

CONSTRUCTION DOCUMENTS PREPARED FOR:
HORIZON SIX WATERLINE PROJECT
MOHAVE COUNTY, ARIZONA

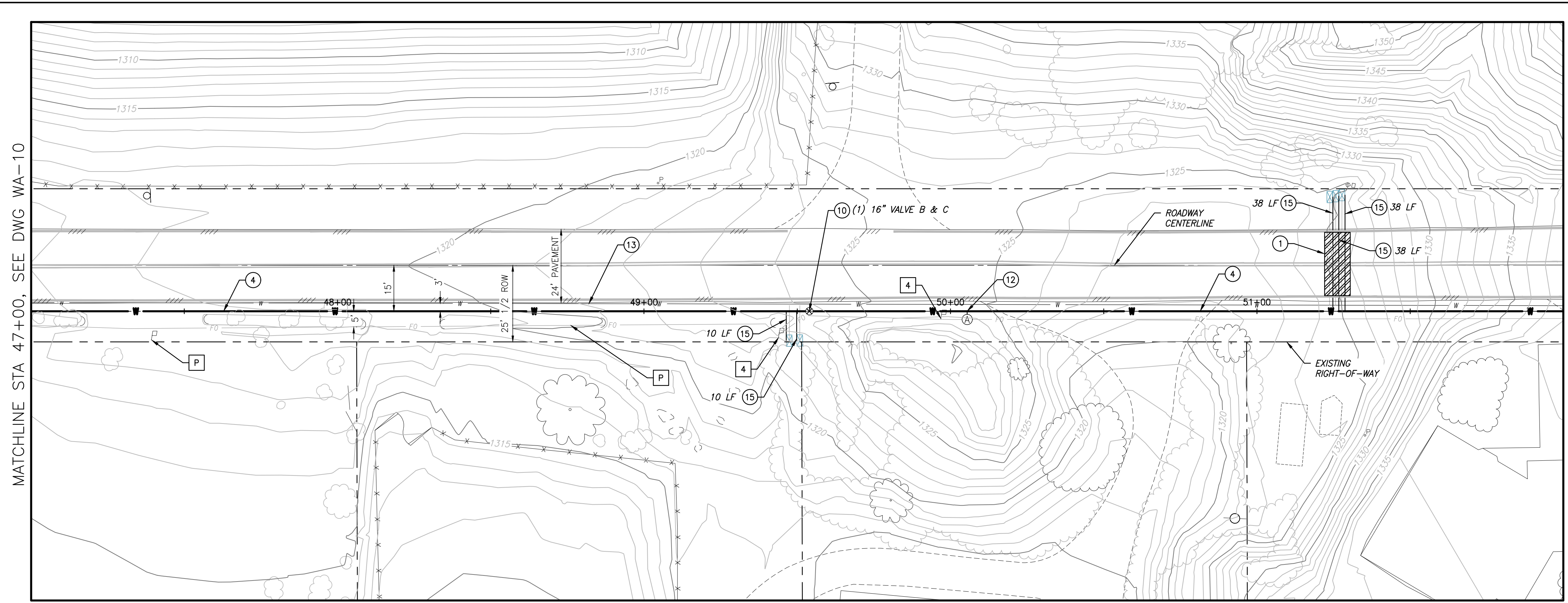
PLAN & PROFILE STA 42+00 TO 47+00

Arizona 811
Call 811 or click Arizona811.com

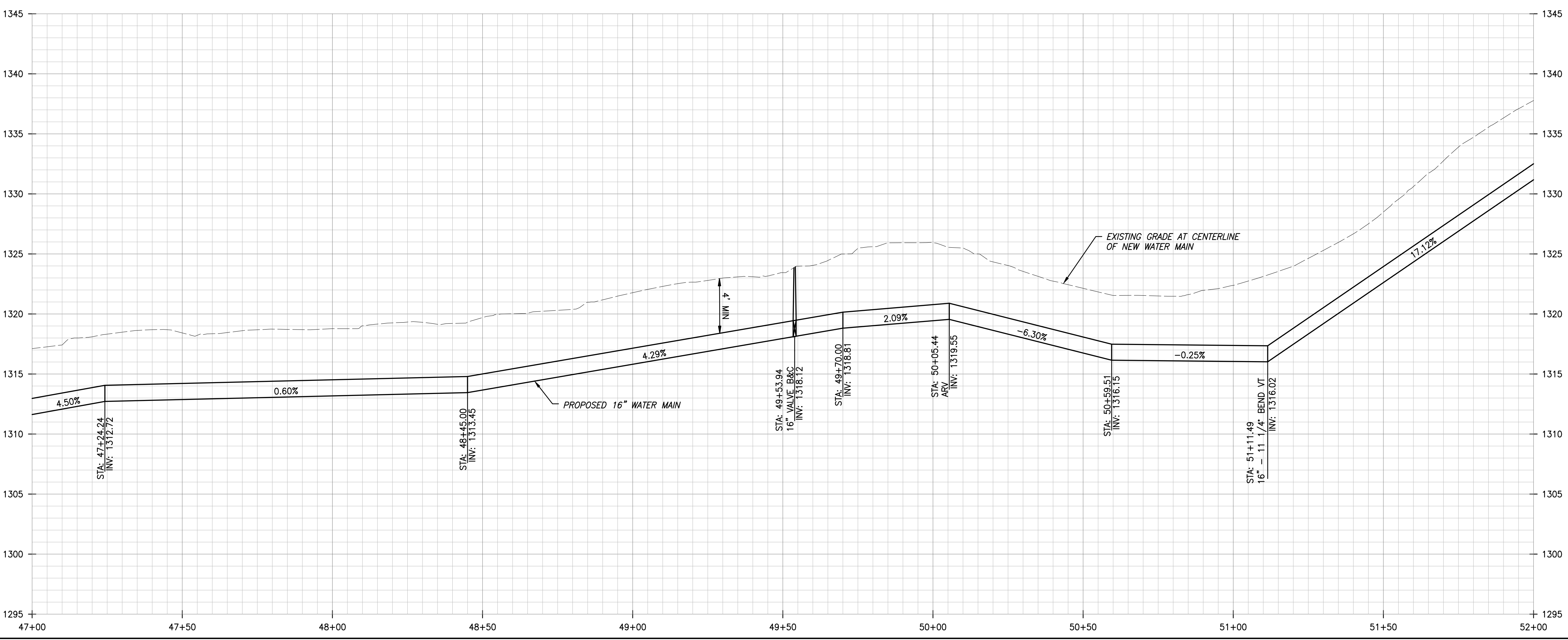
DRAWING NO. **WA-10**
SHEET NO. 13 OF 24



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WINDOW ROCK ROAD



REMOVAL/RELOCATE NOTES	
NO.	DESCRIPTION
1	REMOVE & REPLACE AC PAVEMENT DRIVEWAY IN KIND
2	REMOVE & REPLACE CONCRETE DRIVEWAY IN KIND
3	REMOVE & REPLACE BRICK/CONCRETE PAVER DRIVEWAY IN KIND
4	REMOVE & RESET MAILBOX
5	ABANDON GATE VALVE BY REMOVING VALVE BOX & PATCHING PAVEMENT
6	NOT USED
7	REMOVE & REINSTALL STREET SIGN
8	REMOVE EXISTING WATER LINE
9	REMOVE & REPLACE CONCRETE BANK PROTECTION
S	SAWCUT AND MATCH EXISTING
P	PROTECT IN PLACE

CONSTRUCTION NOTES	
NO.	DESCRIPTION
1	SAWCUT, REMOVE & REPLACE EXISTING AC PAVEMENT PER DETAIL 4 ON SHEET DT-01
2	CONNECT TO EXISTING WATER LINE
3	INSTALL WATER LINE, PVC C900, 8" DIA
4	INSTALL WATER LINE, PVC C905, 16" DIA
5	INSTALL WATER LINE, DIP, 6" DIA
6	INSTALL WATER LINE, DIP, 8" DIA
7	INSTALL WATER LINE, DIP, 16" DIA
8	INSTALL GATE VALVE, BOX & COVER, 6" DIA
9	INSTALL GATE VALVE, BOX & COVER, 8" DIA
10	INSTALL GATE VALVE, BOX & COVER, 16" DIA
11	INSTALL FITTING/BEND - TYPE, ANGLE AND SIZE PER PLAN. INSTALL THRUST BLOCK PER MAG STD DET 360
12	INSTALL COMBINATION AIR RELEASE VALVE, 1" LINE PER DETAIL 3 ON SHEET DT-01.
13	CAP & ABANDON EXISTING WATER LINE
14	STORM DRAIN CROSSING, CONTRACTOR TO MAINTAIN MINIMUM SEPARATION PER ADEQ. PROTECT WATER LINE PER MAG STD DET 404-3
15	NEW 3/4" SERVICE CONNECTION TO EXISTING METER PER DETAIL 2 ON SHEET DT-01.
16	CONNECT NEW WATER LINE TO EXISTING FIRE HYDRANT
17	INSTALL 36" STEEL CASING PIPE BY JACK & BORE

GENERAL NOTES	
1	VERTICAL BENDS SHOWN IN PROFILE TO BE CONSTRUCTED WITH MAXIMUM OF 2.52' JOINT DEFLECTIONS
2	LOCATED DRY UTILITIES ASSUMED TO HAVE 30" OF COVER
3	RIGHT OF WAY LINES SHOWN ARE FROM PUBLIC RECORD AND ARE APPROXIMATE LOCATIONS ONLY
4	ALL STATIONING IS ALONG C OF THE PROPOSED WATER MAIN.

NO.	BY	DATE	REVISION

SEAL:

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PHOENIX, AZ 85029
602.957.3350

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PROJECT NO: 6318
DATE: 10/31/2023

DESIGNED BY: BSH/DW
CHECKED BY: DEM

CONSTRUCTION DOCUMENTS PREPARED FOR:

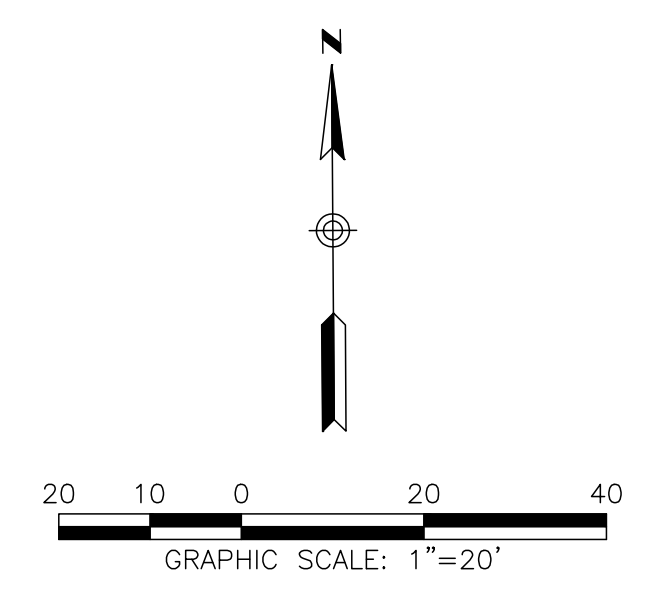
HORIZON SIX WATERLINE PROJECT
MOHAVE COUNTY, ARIZONA

PLAN & PROFILE STA 47+00 TO 52+00

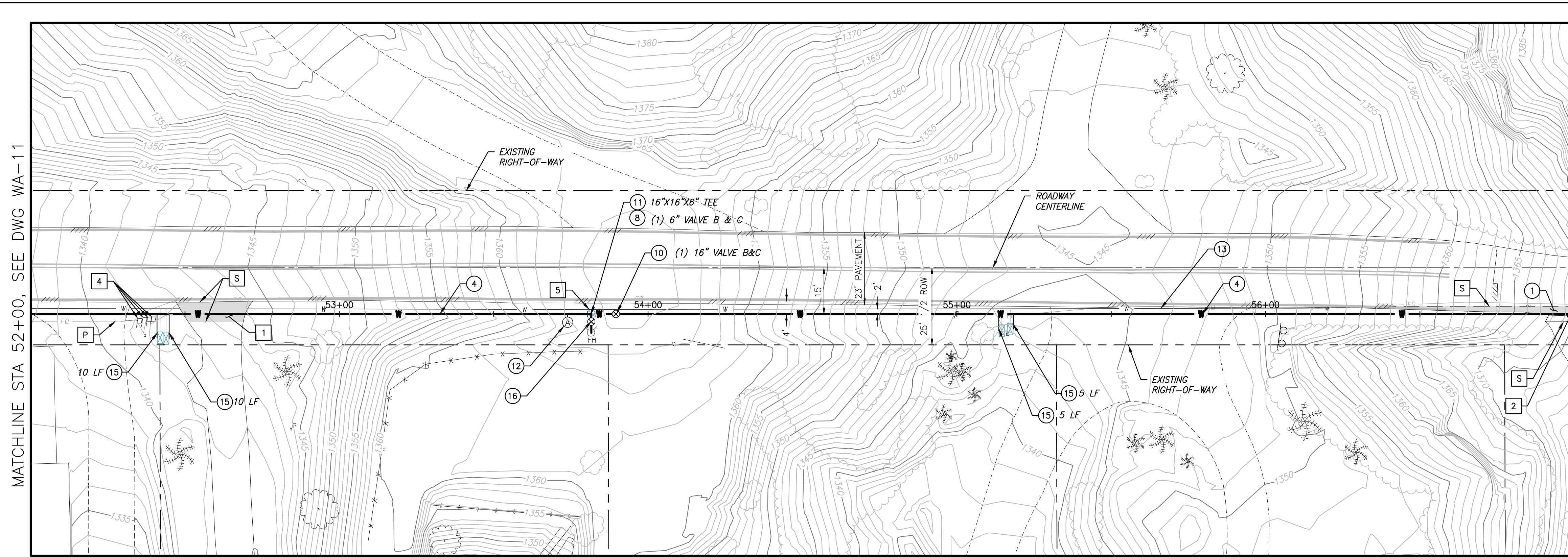
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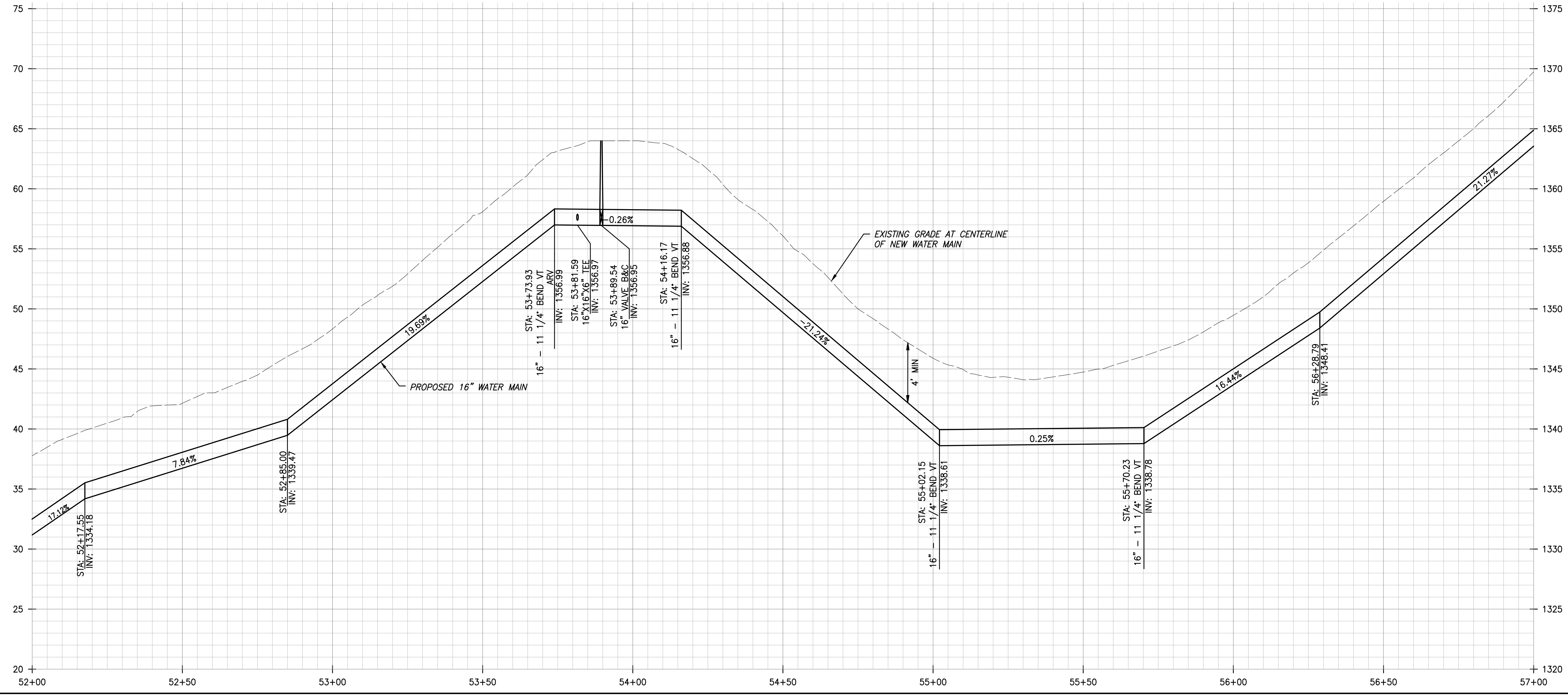
DRAWING NO. **WA-11**
SHEET NO. 14 OF 24



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WINDOW ROCK ROAD



REMOVAL/RELOCATE NOTES

NO.	DESCRIPTION
1	REMOVE & REPLACE AC PAVEMENT DRIVEWAY IN KIND
2	REMOVE & REPLACE CONCRETE DRIVEWAY IN KIND
3	REMOVE & REPLACE BRICK/CONCRETE PAVER DRIVEWAY IN KIND
4	REMOVE & RESET MAILBOX
5	ABANDON GATE VALVE BY REMOVING VALVE BOX & PATCHING PAVEMENT
6	NOT USED
7	REMOVE & REINSTALL STREET SIGN
8	REMOVE EXISTING WATER LINE
9	REMOVE & REPLACE CONCRETE BANK PROTECTION
S	SAWCUT AND MATCH EXISTING
P	PROTECT IN PLACE

CONSTRUCTION NOTES

NO.	DESCRIPTION
1	SAWCUT, REMOVE & REPLACE EXISTING AC PAVEMENT PER DETAIL 4 ON SHEET DT-01
2	CONNECT TO EXISTING WATER LINE
3	INSTALL WATER LINE, PVC C900, 8" DIA
4	INSTALL WATER LINE, PVC C905, 16" DIA
5	INSTALL WATER LINE, DIP, 6" DIA
6	INSTALL WATER LINE, DIP, 8" DIA
7	INSTALL WATER LINE, DIP, 16" DIA
8	INSTALL GATE VALVE, BOX & COVER, 6" DIA
9	INSTALL GATE VALVE, BOX & COVER, 8" DIA
10	INSTALL GATE VALVE, BOX & COVER, 16" DIA
11	INSTALL FITTING/BEND - TYPE, ANGLE AND SIZE PER PLAN, INSTALL THRUST BLOCK PER MAG STD DET 360
12	INSTALL COMBINATION AIR RELEASE VALVE, 1" LINE PER DETAIL 3 ON SHEET DT-01.
13	CAP & ABANDON EXISTING WATER LINE
14	STORM DRAIN CROSSING, CONTRACTOR TO MAINTAIN MINIMUM SEPARATION PER ADEQ. PROTECT WATER LINE PER MAG STD DET 404-3
15	NEW 3/4" SERVICE CONNECTION TO EXISTING METER PER DETAIL 2 ON SHEET DT-01.
16	CONNECT NEW WATER LINE TO EXISTING FIRE HYDRANT
17	INSTALL 36" STEEL CASING PIPE BY JACK & BORE

GENERAL NOTES

1	VERTICAL BENDS SHOWN IN PROFILE TO BE CONSTRUCTED WITH MAXIMUM OF 2.52' JOINT DEFLECTIONS
2	LOCATED DRY UTILITIES ASSUMED TO HAVE 30" OF COVER
3	RIGHT OF WAY LINES SHOWN ARE FROM PUBLIC RECORD AND ARE APPROXIMATE LOCATIONS ONLY
4	ALL STATIONING IS ALONG C OF THE PROPOSED WATER MAIN.

NO.	BY	DATE	REVISION

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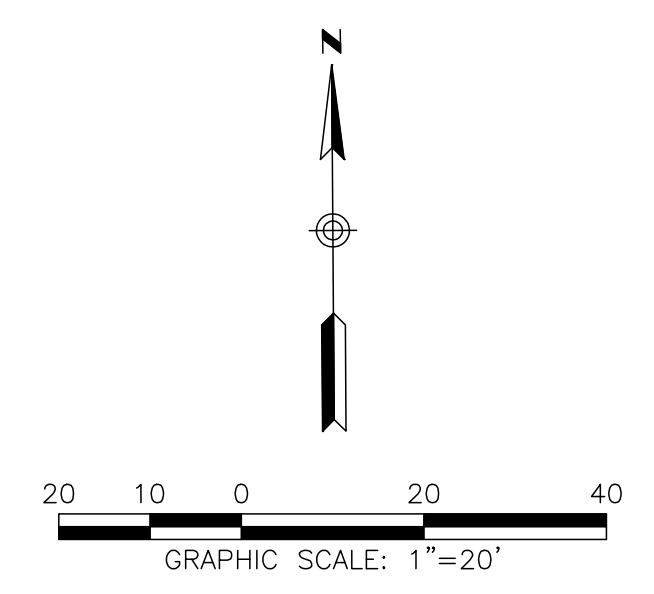
PROJECT NO: 6318 DRAWN/DESIGNED BY: BSH/DW
 DATE: 10/31/2023 CHECKED BY: DEM

CONSTRUCTION DOCUMENTS PREPARED FOR:
HORIZON SIX WATERLINE PROJECT
 MOHAVE COUNTY, ARIZONA

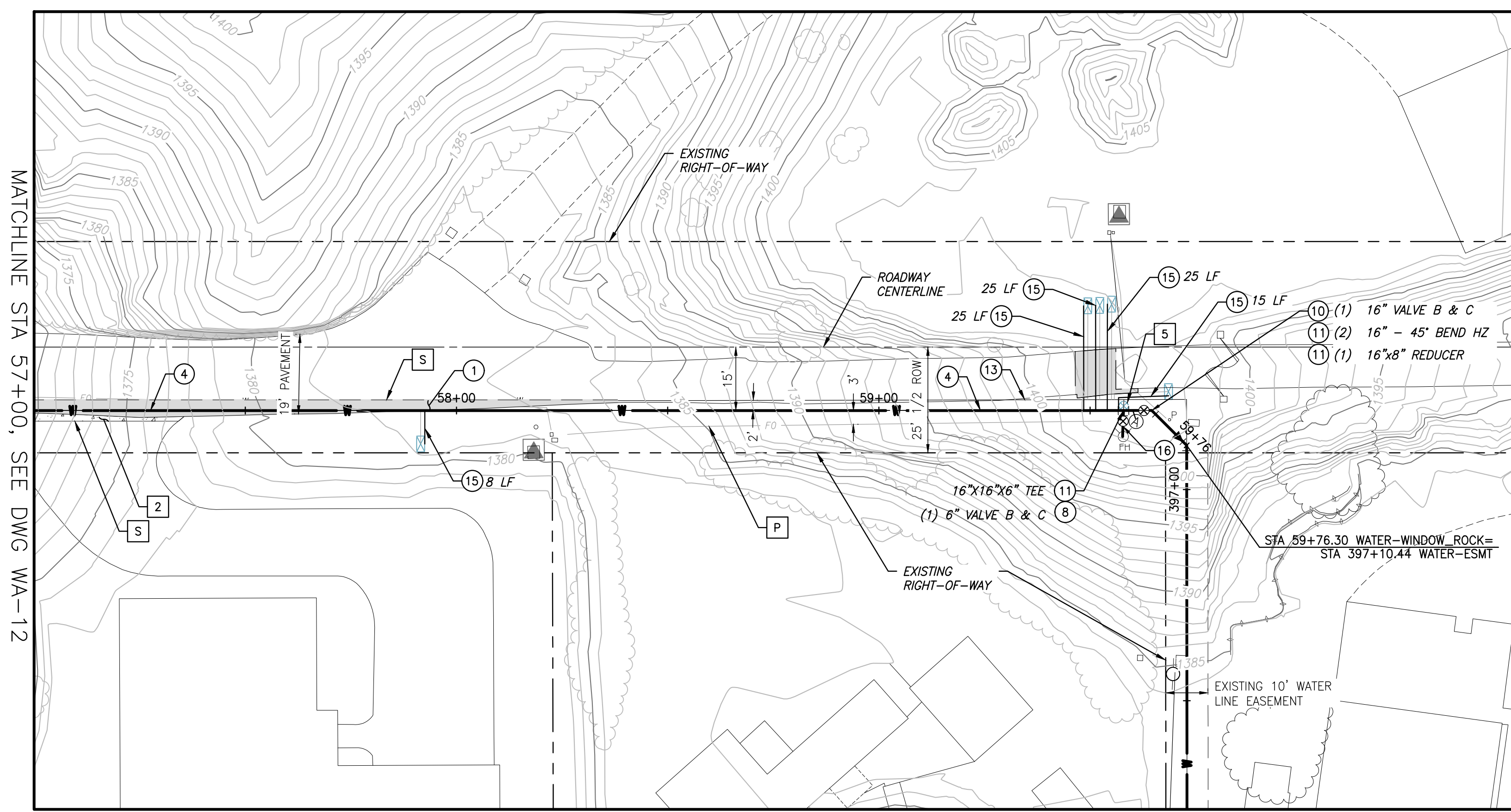
PLAN & PROFILE STA 52+00 TO 57+00

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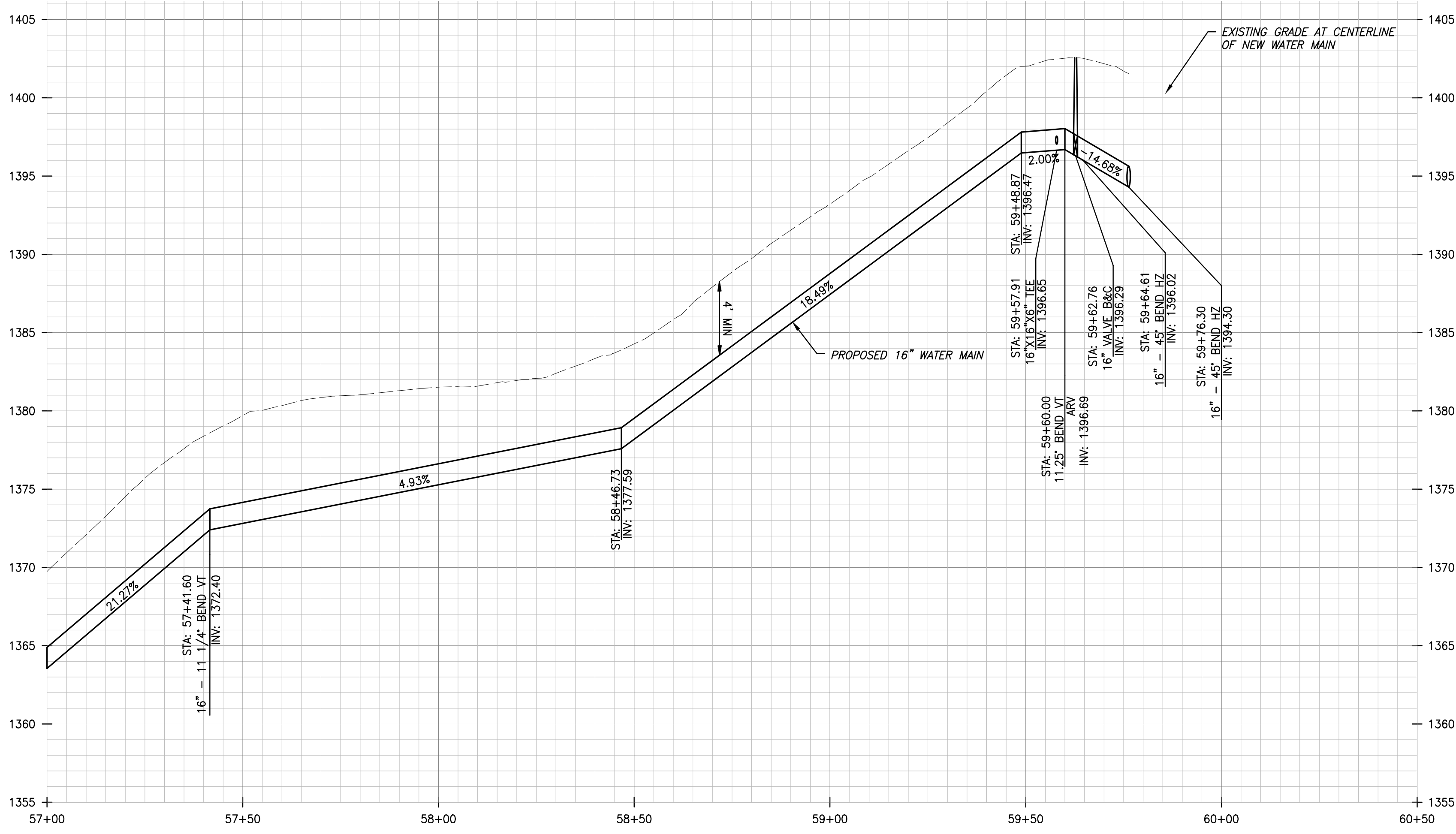
DRAWING NO. **WA-12**
 SHEET NO. 15 OF 24



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WINDOW ROCK ROAD SEE DWG WA-71

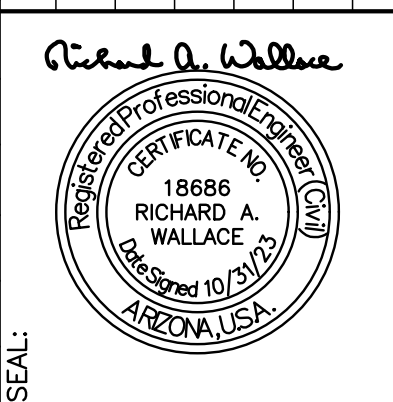


REMOVAL/RELOCATE NOTES	
NO.	DESCRIPTION
1	REMOVE & REPLACE AC PAVEMENT DRIVEWAY IN KIND
2	REMOVE & REPLACE CONCRETE DRIVEWAY IN KIND
3	REMOVE & REPLACE BRICK/CONCRETE PAVER DRIVEWAY IN KIND
4	REMOVE & RESET MAILBOX
5	ABANDON GATE VALVE BY REMOVING VALVE BOX & PATCHING PAVEMENT
6	NOT USED
7	REMOVE & REINSTALL STREET SIGN
8	REMOVE EXISTING WATER LINE
9	REMOVE & REPLACE CONCRETE BANK PROTECTION
S	SAWCUT AND MATCH EXISTING
P	PROTECT IN PLACE

CONSTRUCTION NOTES	
NO.	DESCRIPTION
1	SAWCUT, REMOVE & REPLACE EXISTING AC PAVEMENT PER DETAIL 4 ON SHEET DT-01
2	CONNECT TO EXISTING WATER LINE
3	INSTALL WATER LINE, PVC C900, 8" DIA
4	INSTALL WATER LINE, PVC C905, 16" DIA
5	INSTALL WATER LINE, DIP, 6" DIA
6	INSTALL WATER LINE, DIP, 8" DIA
7	INSTALL WATER LINE, DIP, 16" DIA
8	INSTALL GATE VALVE, BOX & COVER, 6" DIA
9	INSTALL GATE VALVE, BOX & COVER, 8" DIA
10	INSTALL GATE VALVE, BOX & COVER, 16" DIA
11	INSTALL FITTING/BEND - TYPE, ANGLE AND SIZE PER PLAN, INSTALL THRUST BLOCK PER MAG STD DET 360
12	INSTALL COMBINATION AIR RELEASE VALVE, 1" LINE PER DETAIL 3 ON SHEET DT-01.
13	CAP & ABANDON EXISTING WATER LINE
14	STORM DRAIN CROSSING, CONTRACTOR TO MAINTAIN MINIMUM SEPARATION PER ADEQ. PROTECT WATER LINE PER MAG STD DET 404-3
15	NEW 3/4" SERVICE CONNECTION TO EXISTING METER PER DETAIL 2 ON SHEET DT-01.
16	CONNECT NEW WATER LINE TO EXISTING FIRE HYDRANT
17	INSTALL 36" STEEL CASING PIPE BY JACK & BORE

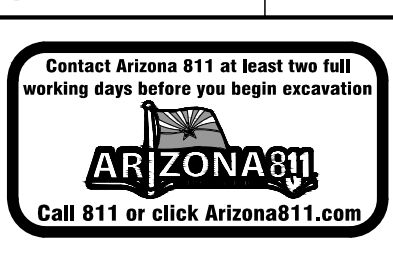
GENERAL NOTES	
1	VERTICAL BENDS SHOWN IN PROFILE TO BE CONSTRUCTED WITH MAXIMUM OF 2.52' JOINT DEFLECTIONS
2	LOCATED DRY UTILITIES ASSUMED TO HAVE 30" OF COVER
3	RIGHT OF WAY LINES SHOWN ARE FROM PUBLIC RECORD AND ARE APPROXIMATE LOCATIONS ONLY
4	ALL STATIONING IS ALONG C OF THE PROPOSED WATER MAIN.

NO.	BY	DATE	REVISION

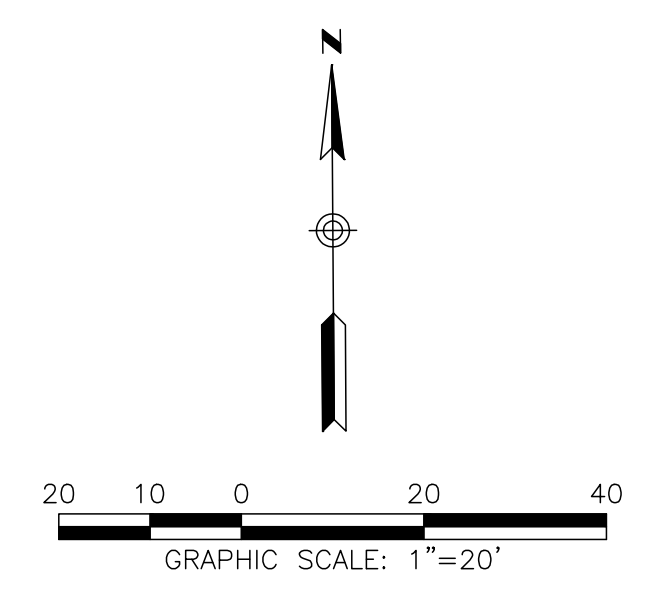


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 PROJECT NO: 6318 DRAWN/DESIGNED BY: BSH/DW
 DATE: 10/31/2023 CHECKED BY: DEM

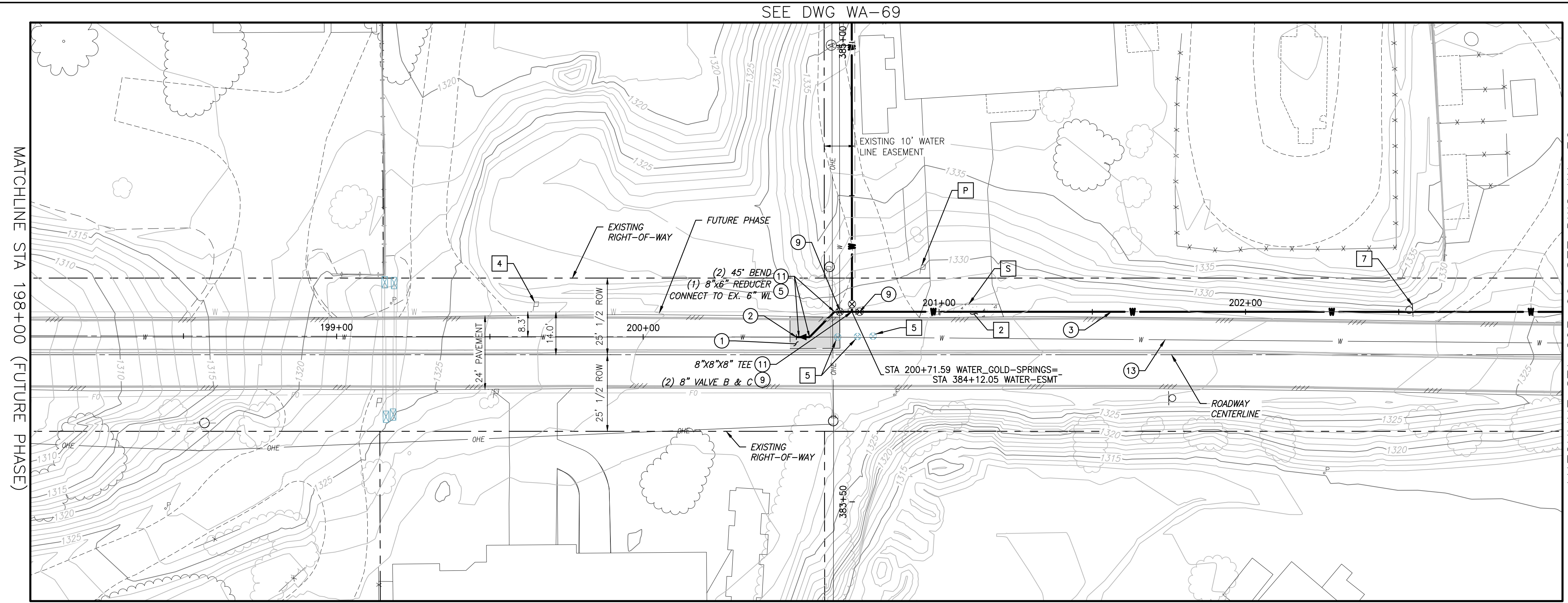
CONSTRUCTION DOCUMENTS PREPARED FOR:
HORIZON SIX WATERLINE PROJECT
 MOHAVE COUNTY, ARIZONA
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 602.957.3350
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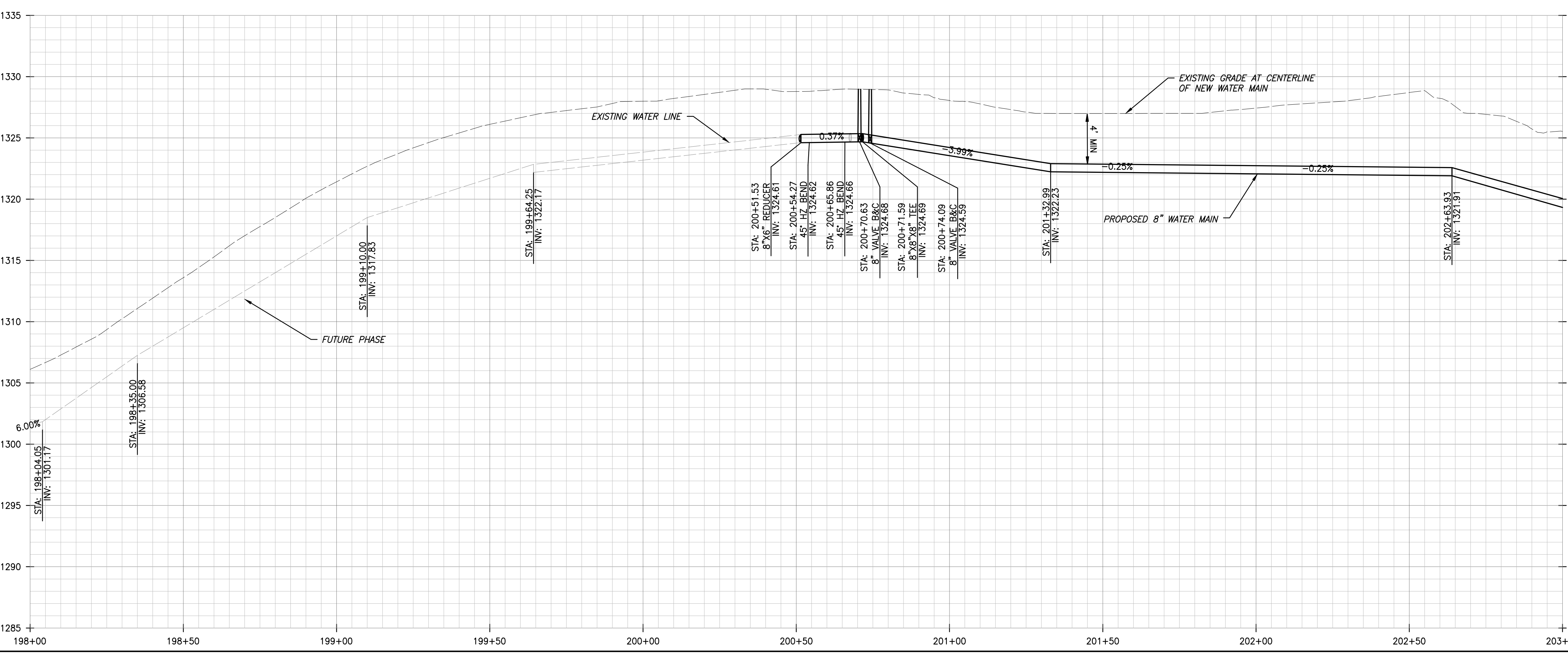
DRAWING NO. **WA-13**
 SHEET NO. 16 OF 24



SEE DWG WA-69



GOLD SPRINGS ROAD

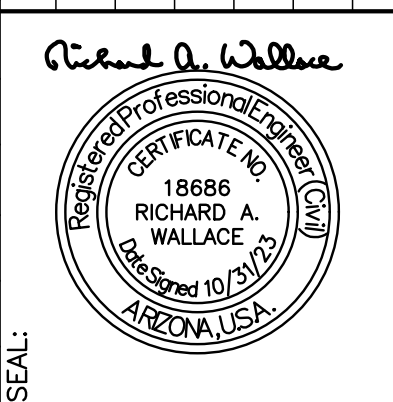


REMOVAL/RELOCATE NOTES	
NO.	DESCRIPTION
1	REMOVE & REPLACE AC PAVEMENT DRIVEWAY IN KIND
2	REMOVE & REPLACE CONCRETE DRIVEWAY IN KIND
3	REMOVE & REPLACE BRICK/CONCRETE PAVER DRIVEWAY IN KIND
4	REMOVE & RESET MAILBOX
5	ABANDON GATE VALVE BY REMOVING VALVE BOX & PATCHING PAVEMENT
6	NOT USED
7	REMOVE & REINSTALL STREET SIGN
8	REMOVE EXISTING WATER LINE
9	REMOVE & REPLACE CONCRETE BANK PROTECTION
S	SAWCUT AND MATCH EXISTING
P	PROTECT IN PLACE

CONSTRUCTION NOTES	
NO.	DESCRIPTION
1	SAWCUT, REMOVE & REPLACE EXISTING AC PAVEMENT PER DETAIL 4 ON SHEET DT-01
2	CONNECT TO EXISTING WATER LINE
3	INSTALL WATER LINE, PVC C900, 8" DIA
4	INSTALL WATER LINE, PVC C905, 16" DIA
5	INSTALL WATER LINE, DIP, 6" DIA
6	INSTALL WATER LINE, DIP, 8" DIA
7	INSTALL WATER LINE, DIP, 16" DIA
8	INSTALL GATE VALVE, BOX & COVER, 6" DIA
9	INSTALL GATE VALVE, BOX & COVER, 8" DIA
10	INSTALL GATE VALVE, BOX & COVER, 16" DIA
11	INSTALL FITTING/BEND - TYPE, ANGLE AND SIZE PER PLAN. INSTALL THRUST BLOCK PER MAG STD DET 380
12	INSTALL COMBINATION AIR RELEASE VALVE, 1" LINE PER DETAIL 3 ON SHEET DT-01.
13	CAP & ABANDON EXISTING WATER LINE
14	STORM DRAIN CROSSING, CONTRACTOR TO MAINTAIN MINIMUM SEPARATION PER ADEQ. PROTECT WATER LINE PER MAG STD DET 404-3
15	NEW 3/4" SERVICE CONNECTION TO EXISTING METER PER DETAIL 2 ON SHEET DT-01.
16	CONNECT NEW WATER LINE TO EXISTING FIRE HYDRANT
17	INSTALL 36" STEEL CASING PIPE BY JACK & BORE

GENERAL NOTES	
1	VERTICAL BENDS SHOWN IN PROFILE TO BE CONSTRUCTED WITH MAXIMUM OF 2.52' JOINT DEFLECTIONS
2	LOCATED DRY UTILITIES ASSUMED TO HAVE 30" OF COVER
3	RIGHT OF WAY LINES SHOWN ARE FROM PUBLIC RECORD AND ARE APPROXIMATE LOCATIONS ONLY
4	ALL STATIONING IS ALONG C OF THE PROPOSED WATER MAIN.

NO.	BY	DATE	REVISION



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PROJECT NO: 6318 DRAWN/DESIGNED BY: BSH/DW
 DATE: 10/31/2023 CHECKED BY: DEM

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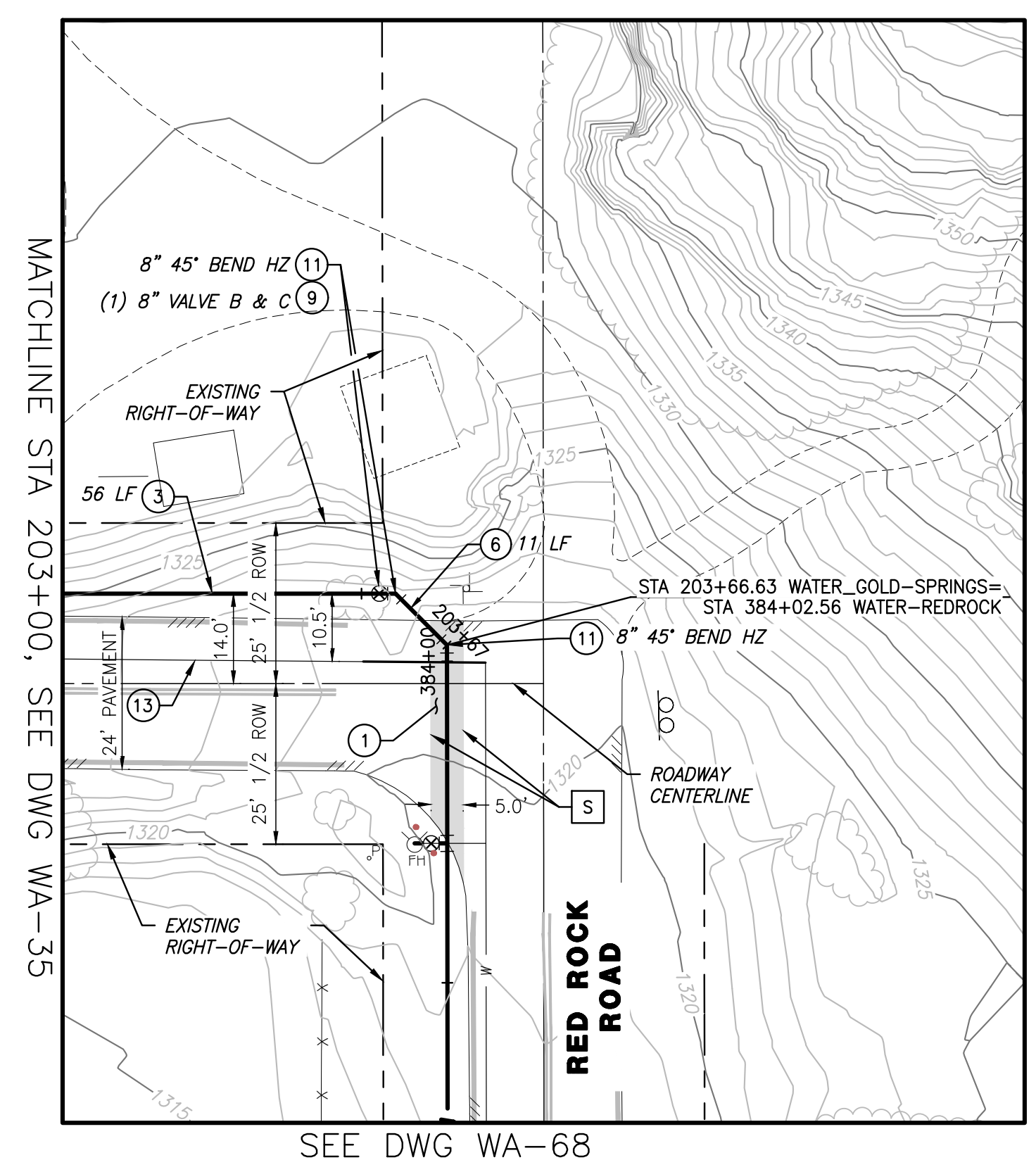
PLAN & PROFILE STA 198+00 TO 203+00

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DRAWING NO. **WA-35**
 SHEET NO. 17 OF 24

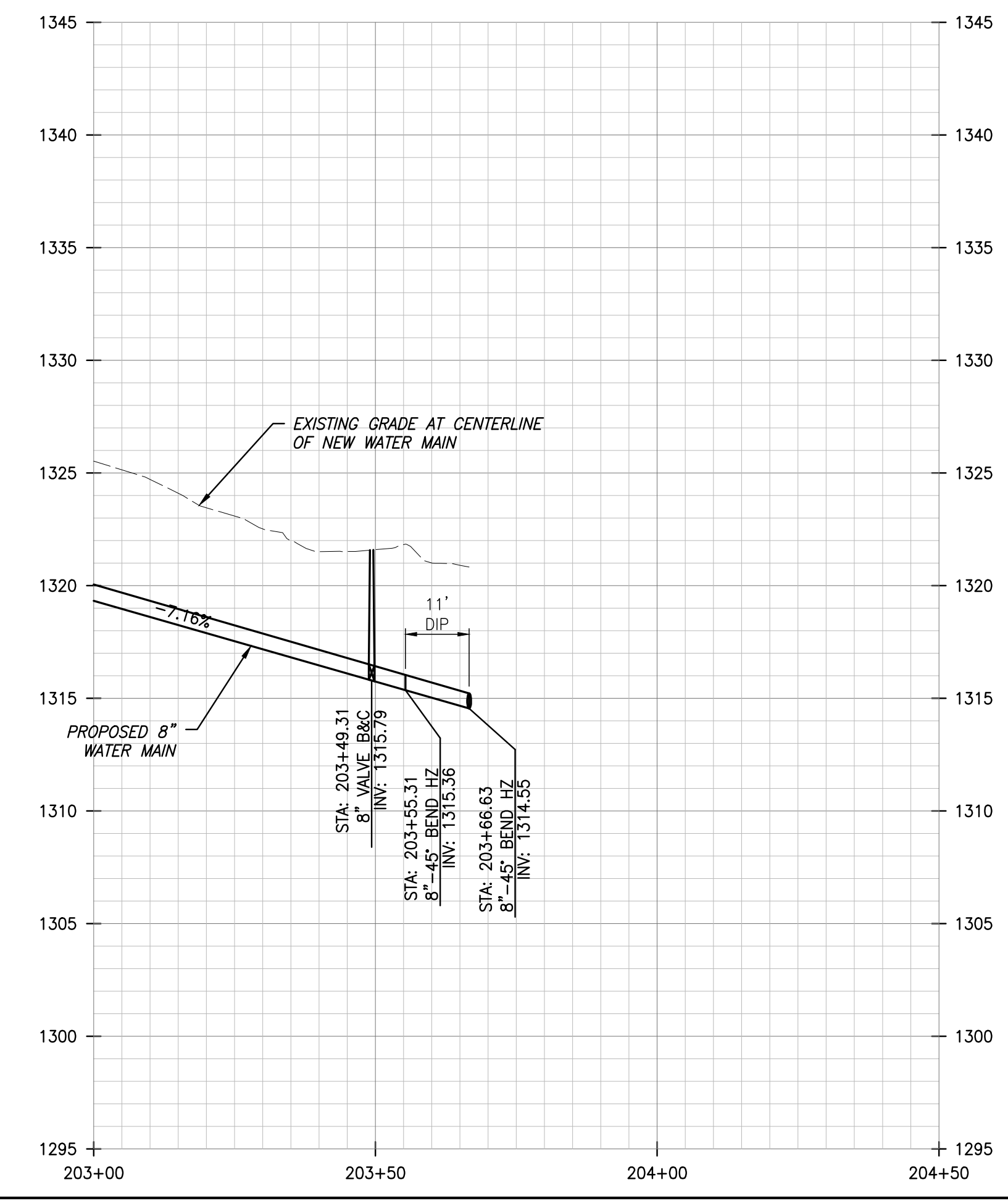
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SEE DWG WA-68

GOLD SPRINGS ROAD



REMOVAL/RELOCATE NOTES	
NO.	DESCRIPTION
1	REMOVE & REPLACE AC PAVEMENT DRIVEWAY IN KIND
2	REMOVE & REPLACE CONCRETE DRIVEWAY IN KIND
3	REMOVE & REPLACE BRICK/CONCRETE PAVER DRIVEWAY IN KIND
4	REMOVE & RESET MAILBOX
5	ABANDON GATE VALVE BY REMOVING VALVE BOX & PATCHING PAVEMENT
6	NOT USED
7	REMOVE & REINSTALL STREET SIGN
8	REMOVE EXISTING WATER LINE
9	REMOVE & REPLACE CONCRETE BANK PROTECTION
S	SAWCUT AND MATCH EXISTING
P	PROTECT IN PLACE

CONSTRUCTION NOTES	
NO.	DESCRIPTION
1	SAWCUT, REMOVE & REPLACE EXISTING AC PAVEMENT PER DETAIL 4 ON SHEET DT-01
2	CONNECT TO EXISTING WATER LINE
3	INSTALL WATER LINE, PVC C900, 8" DIA
4	INSTALL WATER LINE, PVC C905, 16" DIA
5	INSTALL WATER LINE, DIP, 6" DIA
6	INSTALL WATER LINE, DIP, 8" DIA
7	INSTALL WATER LINE, DIP, 16" DIA
8	INSTALL GATE VALVE, BOX & COVER, 6" DIA
9	INSTALL GATE VALVE, BOX & COVER, 8" DIA
10	INSTALL GATE VALVE, BOX & COVER, 16" DIA
11	INSTALL FITTING/BEND - TYPE, ANGLE AND SIZE PER PLAN. INSTALL THRUST BLOCK PER MAG STD DET 360
12	INSTALL COMBINATION AIR RELEASE VALVE, 1" LINE PER DETAIL 3 ON SHEET DT-01.
13	CAP & ABANDON EXISTING WATER LINE
14	STORM DRAIN CROSSING, CONTRACTOR TO MAINTAIN MINIMUM SEPARATION PER ADEQ. PROTECT WATER LINE PER MAG STD DET 404-3
15	NEW 3/4" SERVICE CONNECTION TO EXISTING METER PER DETAIL 2 ON SHEET DT-01.
16	CONNECT NEW WATER LINE TO EXISTING FIRE HYDRANT
17	INSTALL 36" STEEL CASING PIPE BY JACK & BORE

GENERAL NOTES	
1	VERTICAL BENDS SHOWN IN PROFILE TO BE CONSTRUCTED WITH MAXIMUM OF 2.52' JOINT DEFLECTIONS
2	LOCATED DRY UTILITIES ASSUMED TO HAVE 30" OF COVER
3	RIGHT OF WAY LINES SHOWN ARE FROM PUBLIC RECORD AND ARE APPROXIMATE LOCATIONS ONLY
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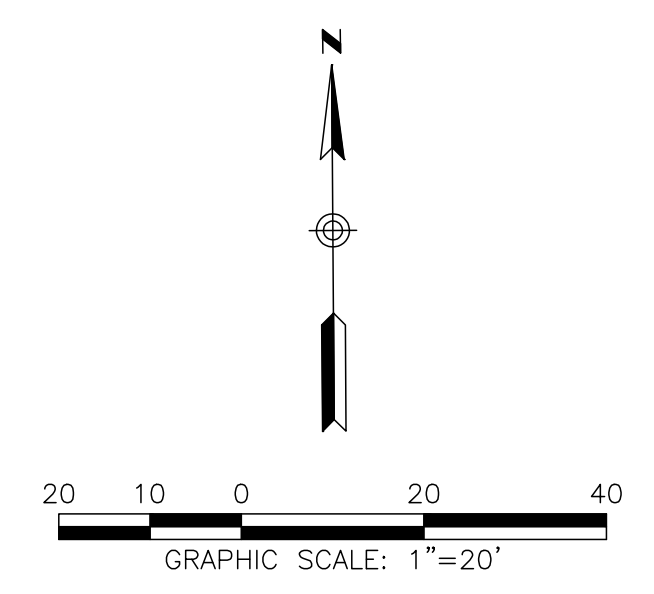
SEAL: Richard A. Wallace
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PROJECT NO: 6318
 DATE: 10/31/2023
 DRAWN/DWG BY: BSH/DW
 CHECKED BY: DEM

CONSTRUCTION DOCUMENTS PREPARED FOR:
HORIZON SIX WATERLINE PROJECT
 MOHAVE COUNTY, ARIZONA

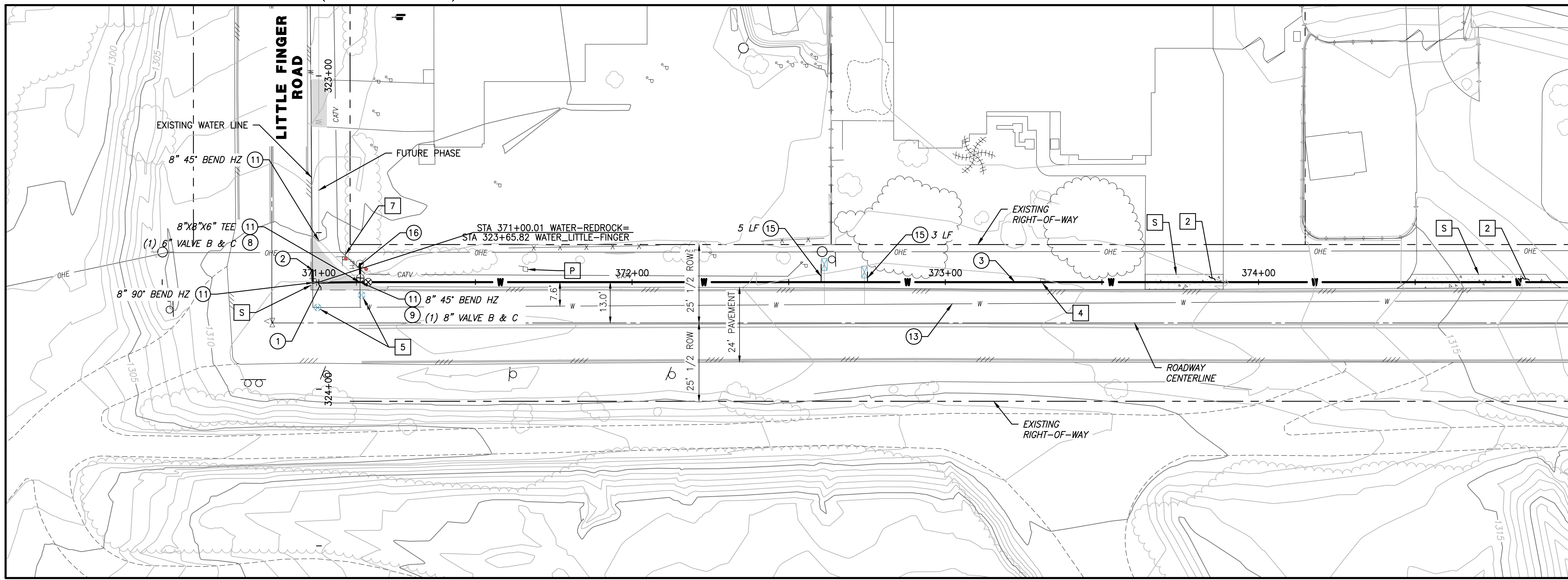
PLAN & PROFILE STA 203+00 TO 204+50



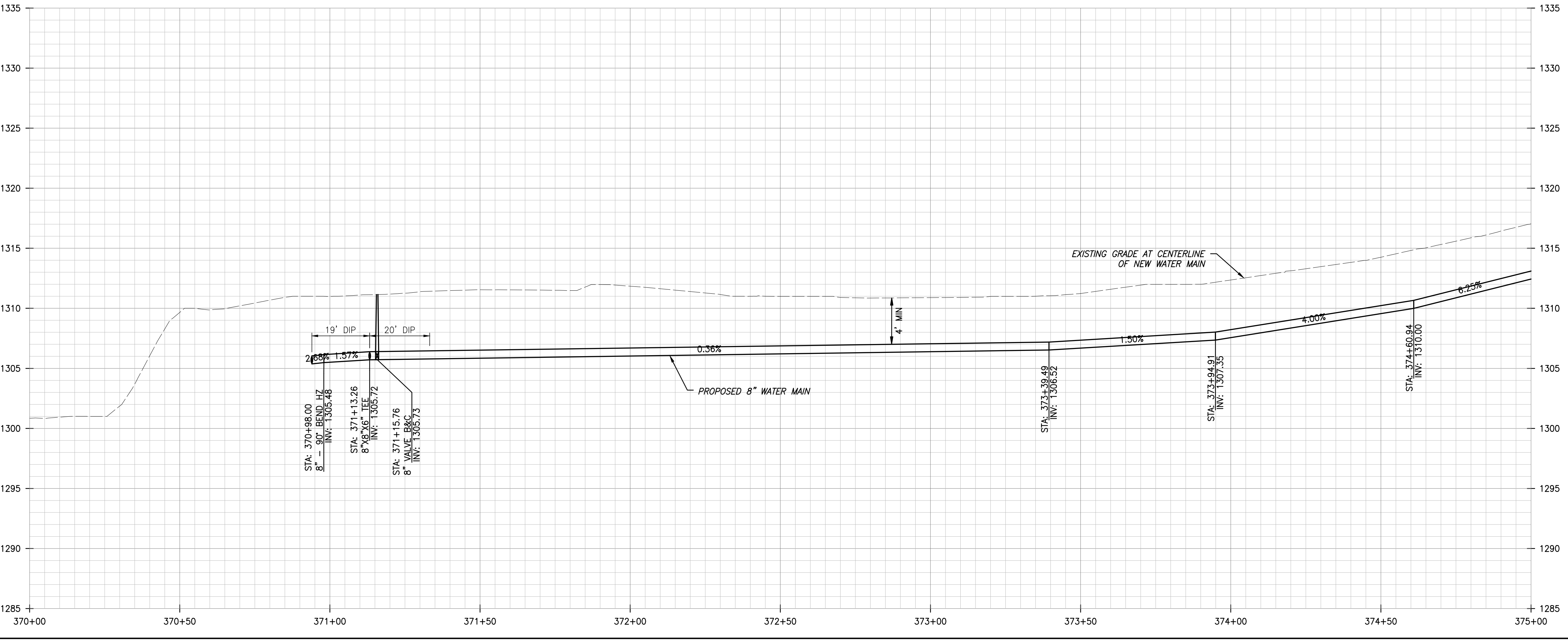
DRAWING NO. **WA-36**
 SHEET NO. 18 OF 24

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SEE DWG WA-59 (FUTURE PHASE)



RED ROCK ROAD



MATCHLINE STA 375+00, SEE DWG WA-67

REMOVAL/RELOCATE NOTES	
NO.	DESCRIPTION
1	REMOVE & REPLACE AC PAVEMENT DRIVEWAY IN KIND
2	REMOVE & REPLACE CONCRETE DRIVEWAY IN KIND
3	REMOVE & REPLACE BRICK/CONCRETE PAVER DRIVEWAY IN KIND
4	REMOVE & RESET MAILBOX
5	ABANDON GATE VALVE BY REMOVING VALVE BOX & PATCHING PAVEMENT
6	NOT USED
7	REMOVE & REINSTALL STREET SIGN
8	REMOVE EXISTING WATER LINE
9	REMOVE & REPLACE CONCRETE BANK PROTECTION
S	SAWCUT AND MATCH EXISTING
P	PROTECT IN PLACE

CONSTRUCTION NOTES	
NO.	DESCRIPTION
1	SAWCUT, REMOVE & REPLACE EXISTING AC PAVEMENT PER DETAIL 4 ON SHEET DT-01
2	CONNECT TO EXISTING WATER LINE
3	INSTALL WATER LINE, PVC C900, 8" DIA
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6	INSTALL WATER LINE, DIP, 8" DIA
7	INSTALL WATER LINE, DIP, 16" DIA
8	INSTALL GATE VALVE, BOX & COVER, 6" DIA
9	INSTALL GATE VALVE, BOX & COVER, 8" DIA
10	INSTALL GATE VALVE, BOX & COVER, 16" DIA
11	INSTALL FITTING/BEND - TYPE, ANGLE AND SIZE PER PLAN. INSTALL THRUST BLOCK PER MAG STD DET 360
12	INSTALL COMBINATION AIR RELEASE VALVE, 1" LINE PER DETAIL 3 ON SHEET DT-01.
13	CAP & ABANDON EXISTING WATER LINE
14	STORM DRAIN CROSSING, CONTRACTOR TO MAINTAIN MINIMUM SEPARATION PER ADEQ. PROTECT WATER LINE PER MAG STD DET 404-3
15	NEW 3/4" SERVICE CONNECTION TO EXISTING METER PER DETAIL 2 ON SHEET DT-01.
16	CONNECT NEW WATER LINE TO EXISTING FIRE HYDRANT
17	INSTALL 36" STEEL CASING PIPE BY JACK & BORE

GENERAL NOTES	
1	VERTICAL BENDS SHOWN IN PROFILE TO BE CONSTRUCTED WITH MAXIMUM OF 2.52' JOINT DEFLECTIONS
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NO.	BY	DATE	REVISION

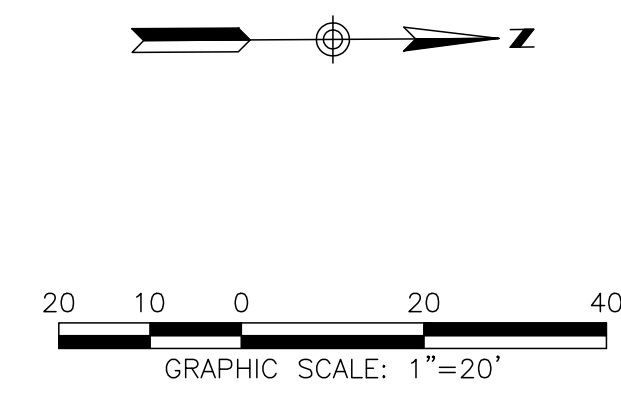
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 RICHARD A. WALLACE
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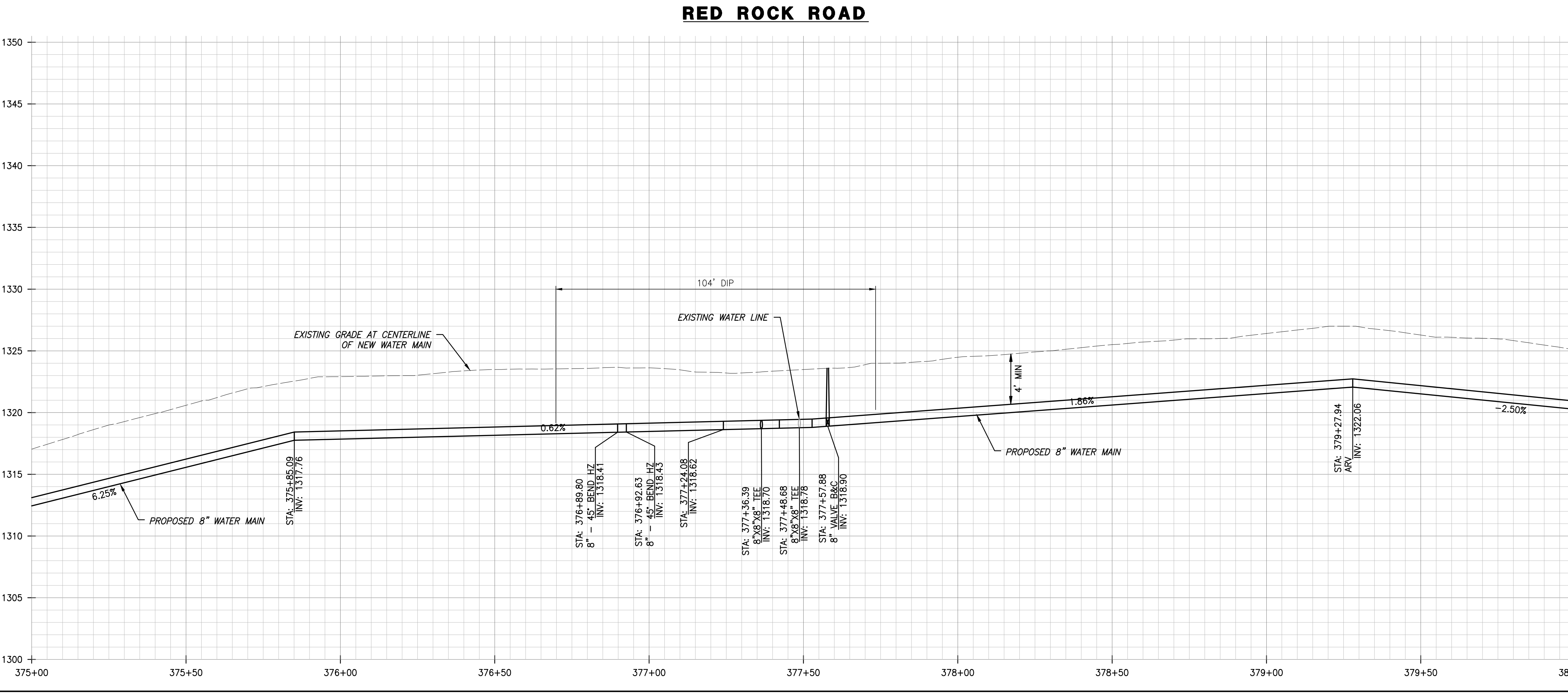
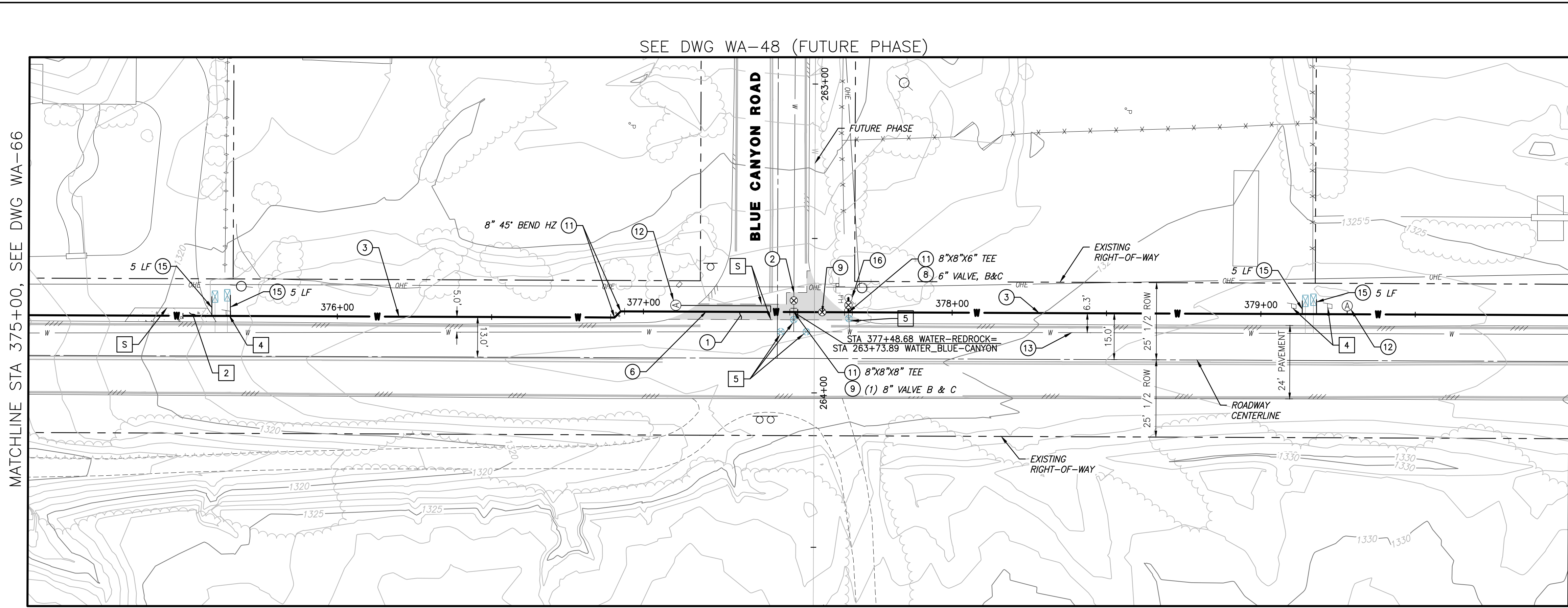
CONSTRUCTION DOCUMENTS PREPARED FOR:
HORIZON SIX WATERLINE PROJECT
 MOHAVE COUNTY, ARIZONA

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DRAWING NO. **WA-66**
 SHEET NO. 19 OF 24



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SEE DWG WA-48 (FUTURE PHASE)

RED ROCK ROAD

REMOVAL/RELOCATE NOTES

NO.	DESCRIPTION
1	REMOVE & REPLACE AC PAVEMENT DRIVEWAY IN KIND
2	REMOVE & REPLACE CONCRETE DRIVEWAY IN KIND
3	REMOVE & REPLACE BRICK/CONCRETE PAVER DRIVEWAY IN KIND
4	REMOVE & RESET MAILBOX
5	ABANDON GATE VALVE BY REMOVING VALVE BOX & PATCHING PAVEMENT
6	NOT USED
7	REMOVE & REINSTALL STREET SIGN
8	REMOVE EXISTING WATER LINE
9	REMOVE & REPLACE CONCRETE BANK PROTECTION
S	SAWCUT AND MATCH EXISTING
P	PROTECT IN PLACE

CONSTRUCTION NOTES

NO.	DESCRIPTION
1	SAWCUT, REMOVE & REPLACE EXISTING AC PAVEMENT PER DETAIL 4 ON SHEET DT-01
2	CONNECT TO EXISTING WATER LINE
3	INSTALL WATER LINE, PVC C900, 8" DIA
4	INSTALL WATER LINE, PVC C905, 16" DIA
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12	INSTALL COMBINATION AIR RELEASE VALVE, 1" LINE PER DETAIL 3 ON SHEET DT-01.
13	CAP & ABANDON EXISTING WATER LINE
14	STORM DRAIN CROSSING, CONTRACTOR TO MAINTAIN MINIMUM SEPARATION PER ADEQ. PROTECT WATER LINE PER MAG STD DET 404-3
15	NEW 3/4" SERVICE CONNECTION TO EXISTING METER PER DETAIL 2 ON SHEET DT-01.
16	CONNECT NEW WATER LINE TO EXISTING FIRE HYDRANT
17	INSTALL 36" STEEL CASING PIPE BY JACK & BORE

GENERAL NOTES

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- LOCATED DRY UTILITIES ASSUMED TO HAVE 30" OF COVER
- RIGHT OF WAY LINES SHOWN ARE FROM PUBLIC RECORD AND ARE APPROXIMATE LOCATIONS ONLY
- ALL STATIONING IS ALONG C OF THE PROPOSED WATER MAIN.

NO.	REVISION	DATE	BY

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PROJECT NO: 6318
 DRAWN/DESIGNED BY: BSH/DW
 CHECKED BY: 10/31/2023

CONSTRUCTION DOCUMENTS PREPARED FOR:
HORIZON SIX WATERLINE PROJECT
 MOHAVE COUNTY, ARIZONA

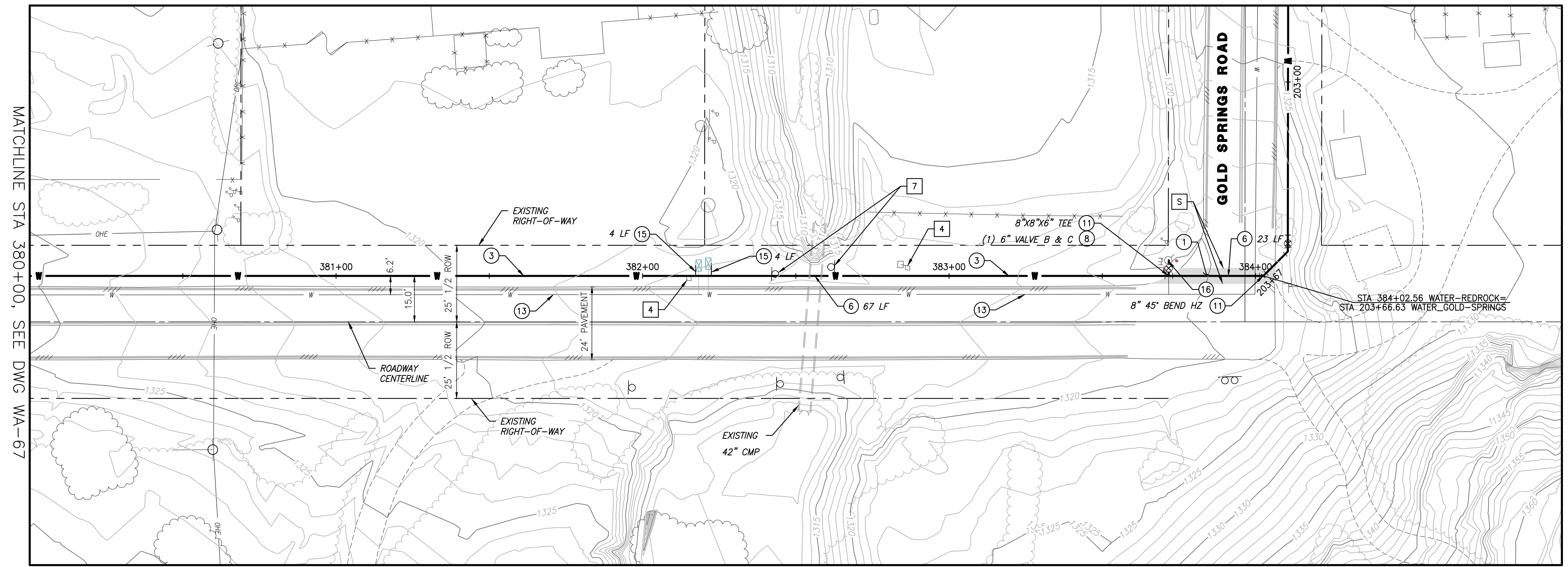
PLAN & PROFILE STA 375+00 TO 380+00

Contact Arizona 811 at least two full working days before you begin excavation

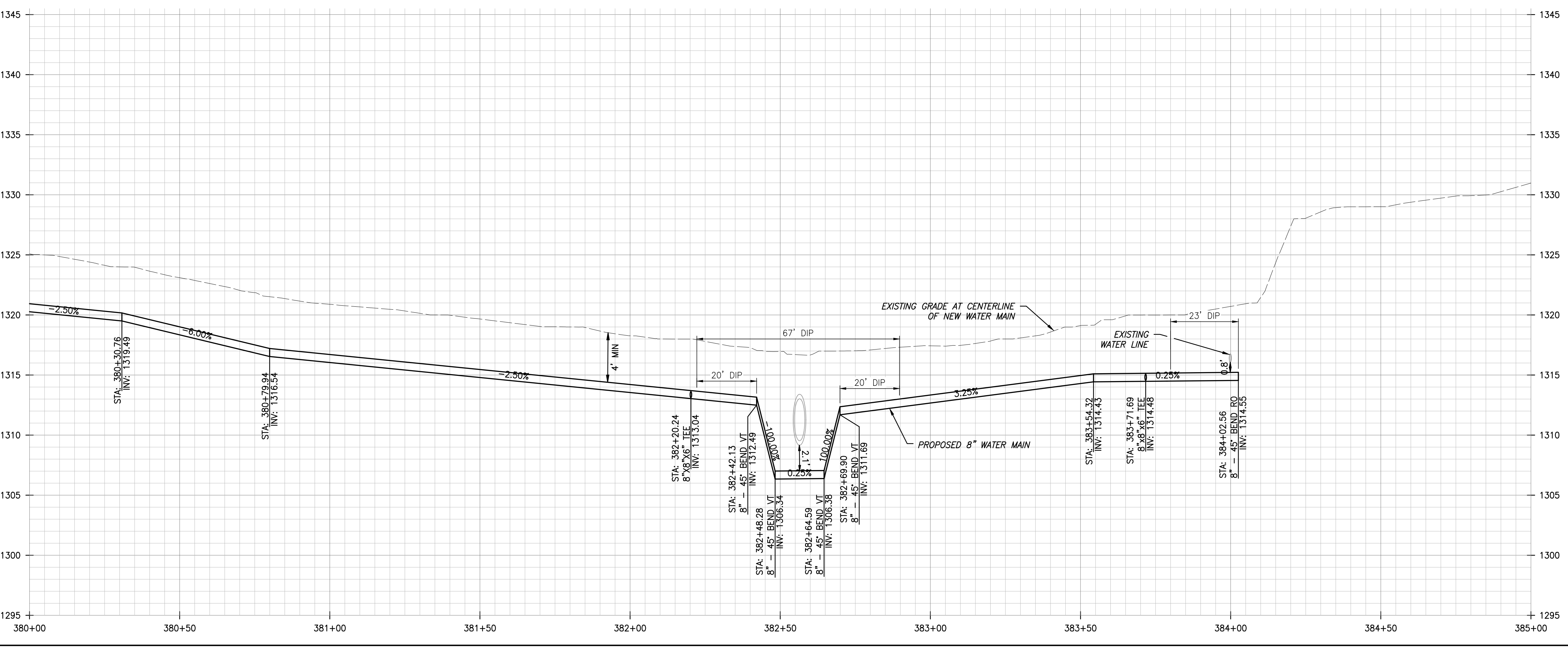
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SEE DWG WA-36



RED ROCK ROAD



REMOVAL/RELOCATE NOTES	
NO.	DESCRIPTION
1	REMOVE & REPLACE AC PAVEMENT DRIVEWAY IN KIND
2	REMOVE & REPLACE CONCRETE DRIVEWAY IN KIND
3	REMOVE & REPLACE BRICK/CONCRETE PAVER DRIVEWAY IN KIND
4	REMOVE & RESET MAILBOX
5	ABANDON GATE VALVE BY REMOVING VALVE BOX & PATCHING PAVEMENT
6	NOT USED
7	REMOVE & REINSTALL STREET SIGN
8	REMOVE EXISTING WATER LINE
9	REMOVE & REPLACE CONCRETE BANK PROTECTION
S	SAWCUT AND MATCH EXISTING
P	PROTECT IN PLACE

CONSTRUCTION NOTES	
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NO.	BY	DATE	REVISION

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 LICENSED 10/17/23
 ARIZONA, USA

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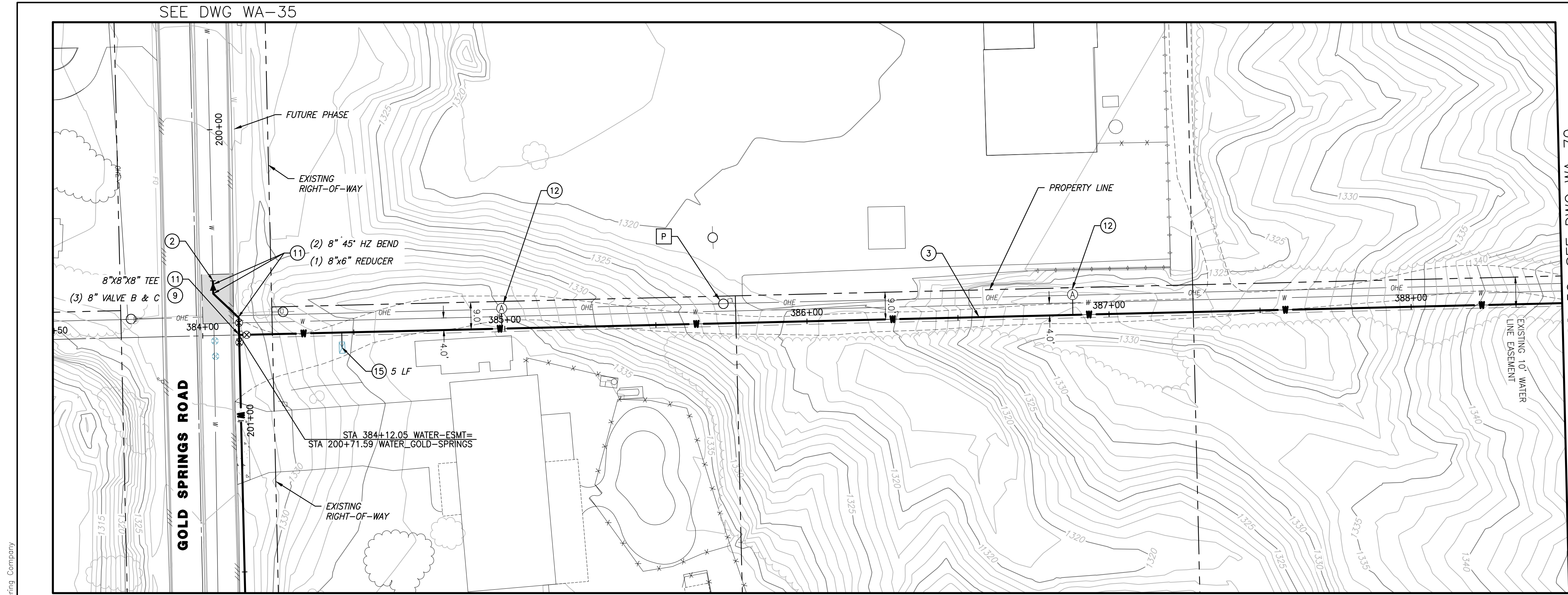
PROJECT NO: 6318 DRAWN/DESIGNED BY: BSH/DW
 DATE: 10/31/2023 CHECKED BY: DEM

CONSTRUCTION DOCUMENTS PREPARED FOR:
HORIZON SIX WATERLINE PROJECT
 MOHAVE COUNTY, ARIZONA

RICK ENGINEERING COMPANY

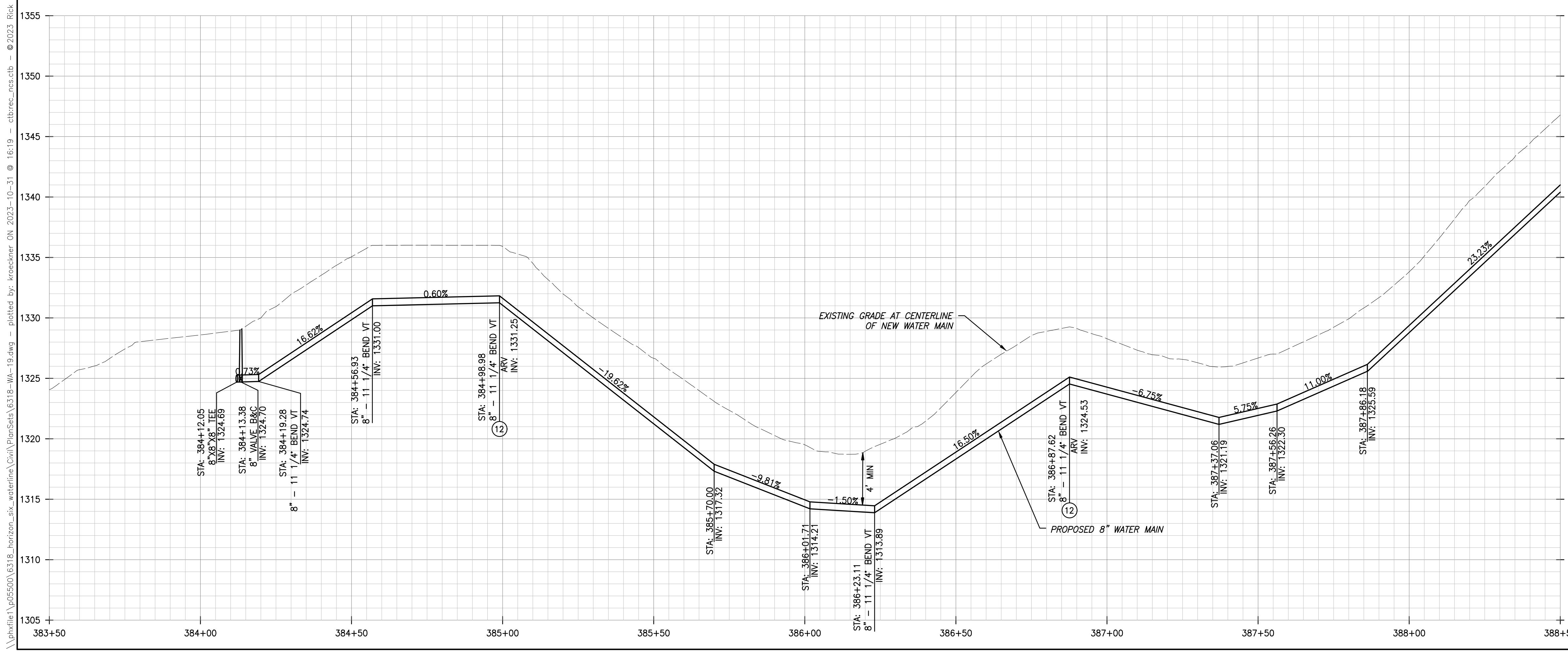
PLAN & PROFILE STA 380+00 TO 385+00

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ARIZONA 811
 Call 811 or click Arizona811.com



MATCHLINE STA 388+50, SEE DWG WA-70

NEW WATER ALIGNMENT

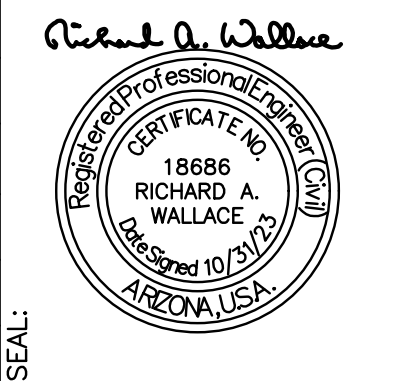


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PROJECT NO: 6318
 DRAWN/DESIGNED BY: BSH/DW
 CHECKED BY: 10/31/2023

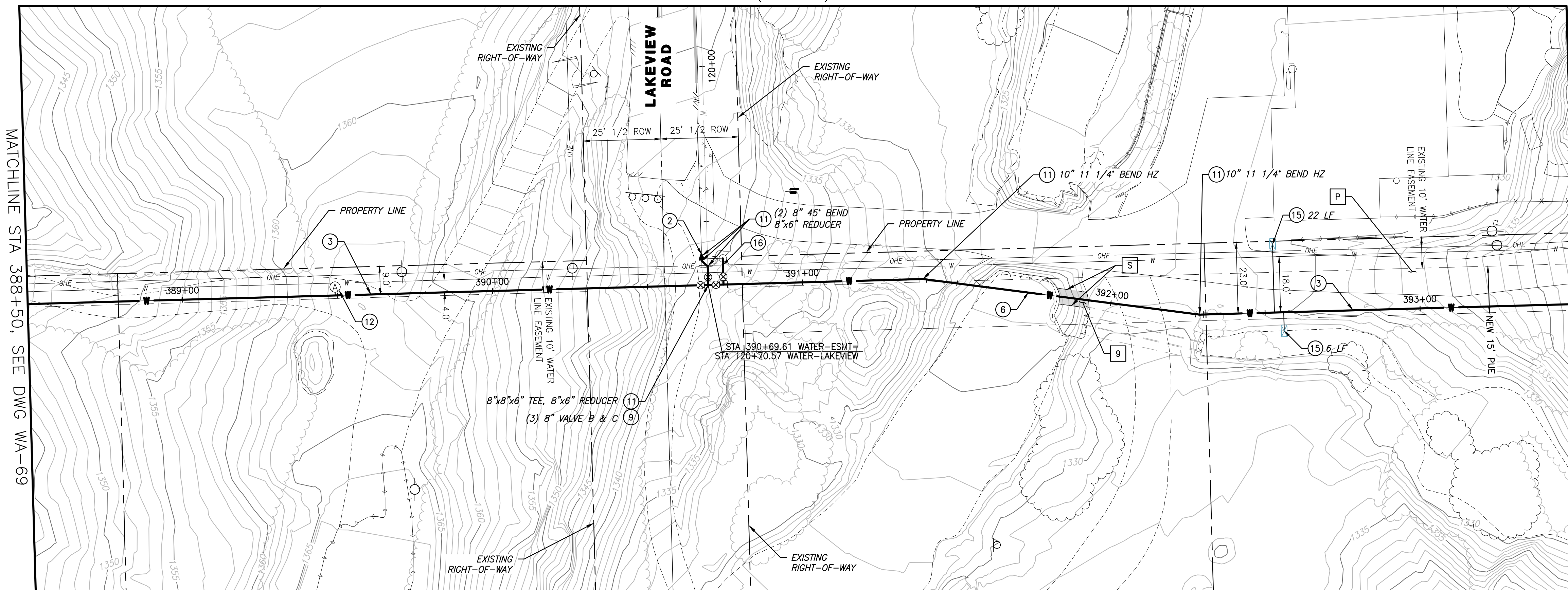
CONSTRUCTION DOCUMENTS PREPARED FOR:
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 MOHAVE COUNTY, ARIZONA

PLAN & PROFILE STA 383+50 TO 388+50

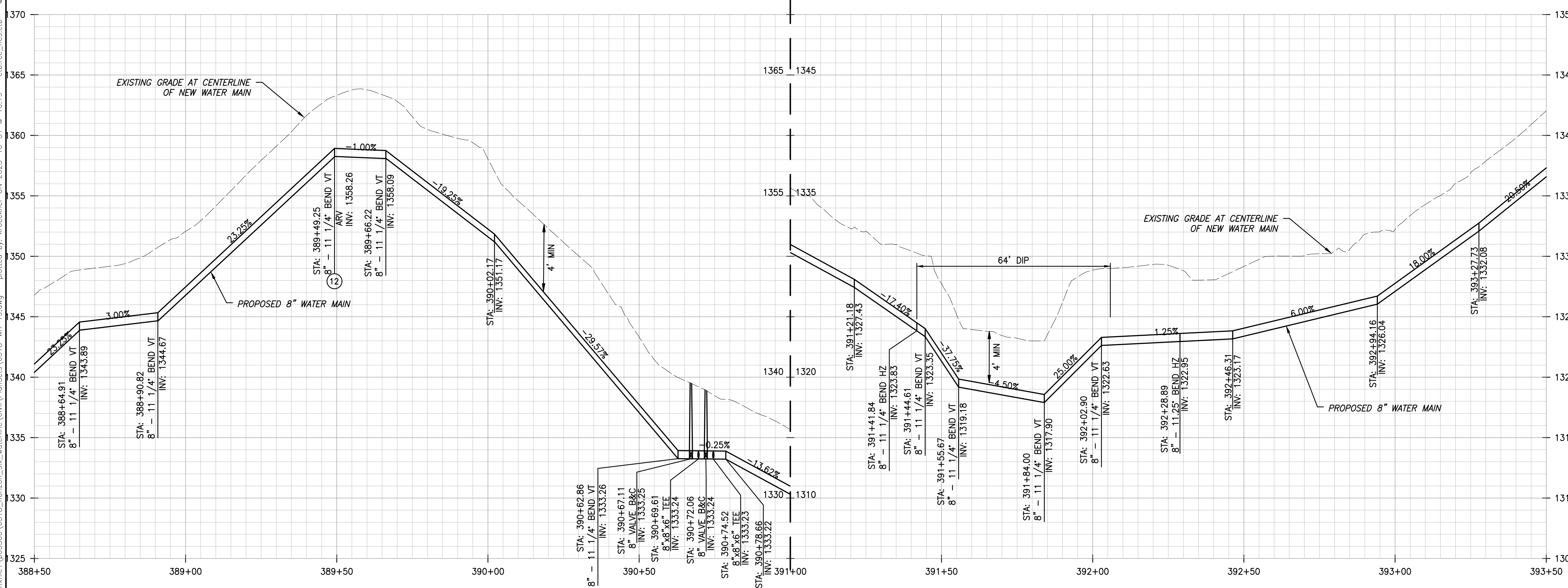


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SEE DWG WA-24 (FUTURE)



NEW WATER ALIGNMENT



REMOVAL/RELOCATE NOTES

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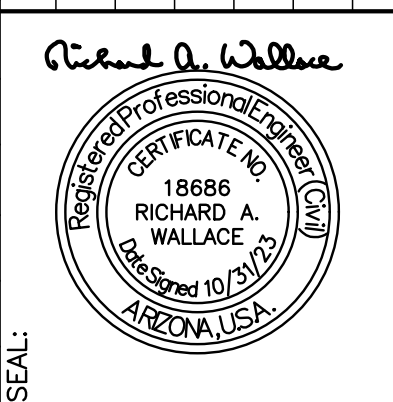
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NO.	BY	DATE	REVISION



SEAL: **Rick Engineering Company**
 2401 W PEORIA AVE, STE 130
 PHOENIX, AZ 85029
 602.957.3350
 PROJECT NO: 6318 DRAWN/DESIGNED BY: BSH/DW
 DATE: 10/31/2023 CHECKED BY: DEM

CONSTRUCTION DOCUMENTS PREPARED FOR:
HORIZON SIX WATERLINE PROJECT
 MOHAVE COUNTY, ARIZONA
PLAN & PROFILE STA 388+50 TO 393+50

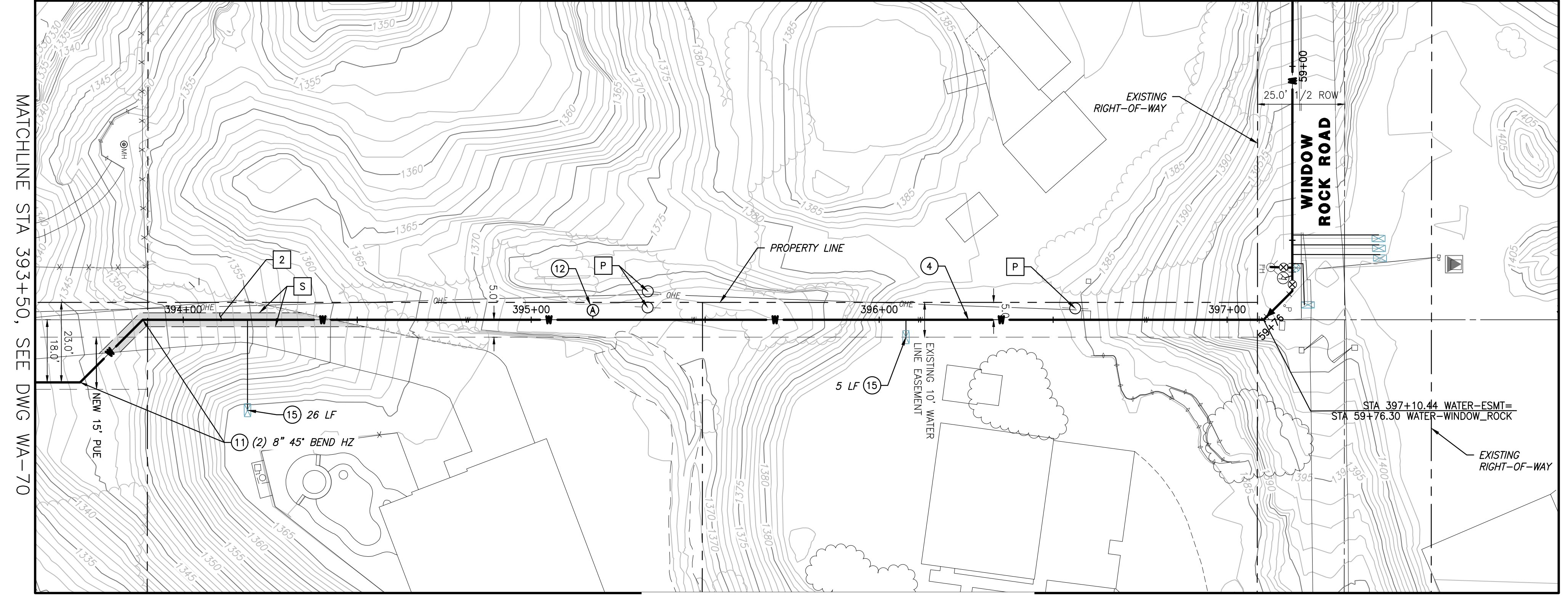


DRAWING NO. **WA-70**
 SHEET NO. 23 OF 24

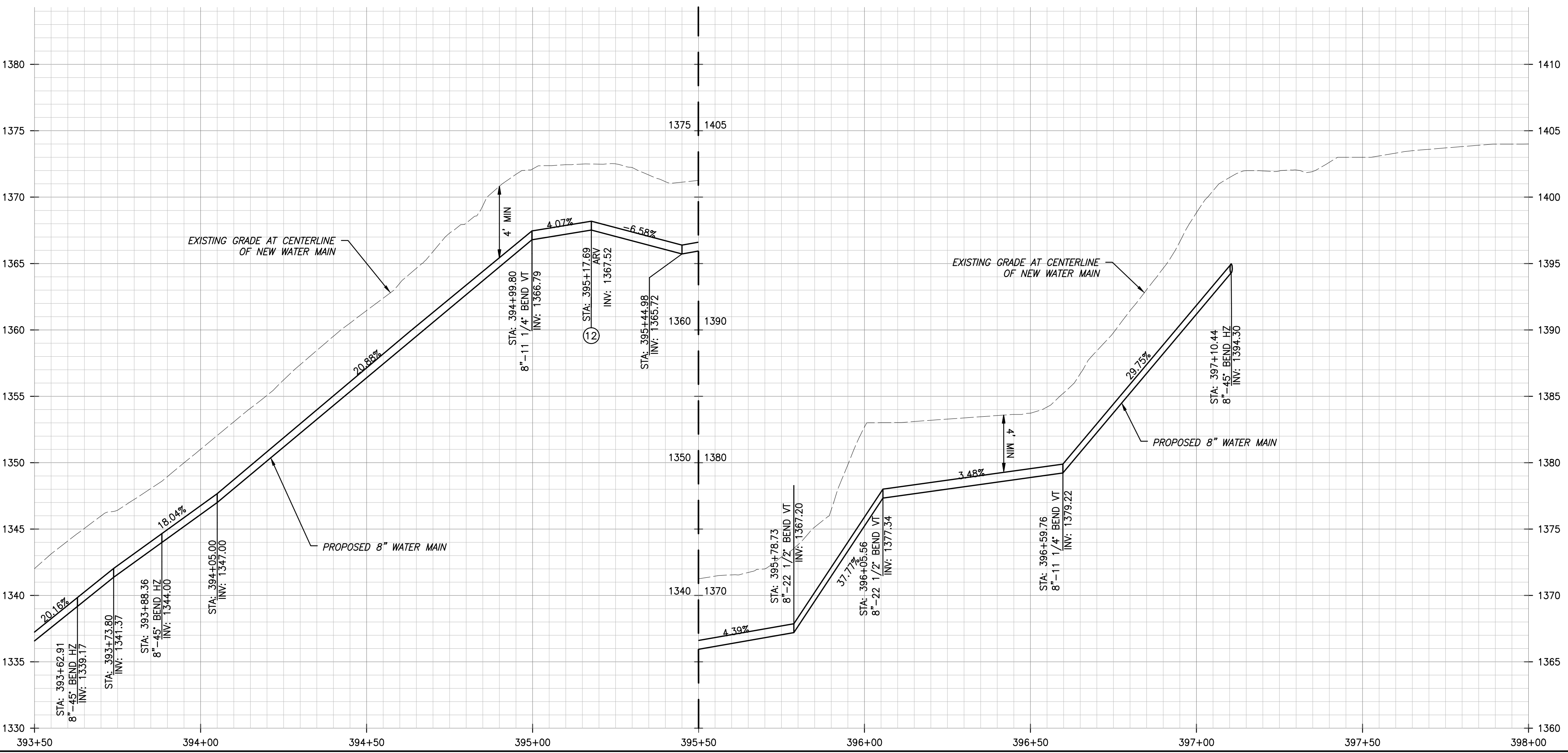
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SEE DWG WA-13



NEW WATER ALIGNMENT



REMOVAL/RELOCATE NOTES	
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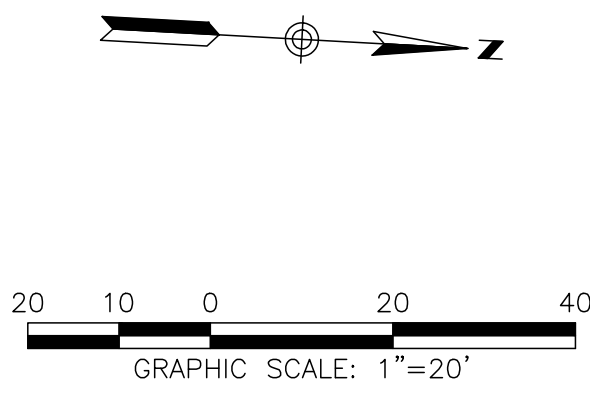


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 STATE OF ARIZONA
 PROJECT NO: 6318 DRAWN/DESIGNED BY: BSH/DW
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 rickengineering.com
 RICK ENGINEERING COMPANY
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CONSTRUCTION DOCUMENTS PREPARED FOR:
HORIZON SIX WATERLINE PROJECT
 MOHAVE COUNTY, ARIZONA
PLAN & PROFILE STA 393+50 TO 398+00



DRAWING NO. **WA-71**
 SHEET NO. 24 OF 24



HORIZON SIX WATERLINE PROJECT

TECHNICAL SPECIFICATIONS

STANDARD SPECIFICATIONS GOVERNING THE WORK FOR THIS PROJECT

The construction of the project shall be in accordance with the following standards:

- **2023 Revision to the 2020 Edition**
Uniform Standard Specifications and Details for Public Works Construction
Sponsored and distributed by the Maricopa Association of Governments, January 2023
- Arizona Department of Transportation
Standard Specifications for Road and Bridge Construction
2021 Edition, latest revision
- Manual on Uniform Traffic Control Devices (latest revision)
Arizona Supplement to the MUTCD (latest revision)

These Technical specifications:

1. Establish and describe the various bid items associated with this project
2. Provide supplemental information regarding the bid line items
3. Shall be used in conjunction with the Bid Schedule(s) for determination of the quantities and line item costs for measurement and payment purposes for this project

These technical specifications shall govern and control anywhere they may deviate or conflict with the MAG Standard Specifications and Details.

In addition, anywhere the Maricopa Association of Governments Uniform Standards and Details for Public Works Construction, the ADOT Standard Specifications and Drawings, these Technical Specifications, the Bid/Contract Documents, and/or the General Conditions conflict, the more stringent of the document requirements shall apply, except that the measurement and payment of construction bid items shall be strictly governed by these technical specifications.

The Horizon Six Water Line Project shall be completed in accordance with:

1. These Technical Specifications
2. Information for Bidders (IFB) and other bid/contract documents issued by Mohave County
3. Plan set (construction drawings) for the project

PROJECT OVERVIEW

The Horizon Six Water Line Project includes the installation of new 16-inch and 8-inch diameter C900 PVC and Ductile Iron Pipe Water Main to replace the existing water distribution lines within the subdivision where shown on the plans and in accordance with these Technical Specifications. A new 16-inch water main will be installed on Window Rock Road east of Lakeside Drive and new 8-inch water main will be installed along the east boundary of the subdivision between Little Finger Road and Window Rock Road. The existing water line to be replaced is believed to be predominately asbestos cement (AC) pipe, which will be abandoned in place.

The existing water lines shown on the plans are from information made available to the Engineer, including record drawings, supplemental survey and personal knowledge of County staff. The Contractor may encounter different field conditions during excavation and, if so, shall work diligently with the County to maintain service and incorporate the changed conditions into the system, as necessary.

The existing water distribution pipe shall be kept in service during the installation of the new water line to provide continuous service to the residents during construction. Once the existing water service lines have been disconnected from the existing water lines and then connected to the new water main that has been disinfected, tested, and placed in service, the existing water lines can be taken out of service and abandoned in place with the exposed terminal ends capped or plugged.

REFERENCES

AWWA Standards referenced herein are detailed below:

- a. American Water Works Association, (AWWA)
- b. AWWA C900, Polyvinyl Chloride (PVC) Pressure Pipe and Fabricated Fittings, 4 Inch through 12 Inch, For Water Distribution
- c. AWWA C512-07 Air-Release, A/Vacuum, and Combination Air Valves for Waterworks Service
- d. AWWA C153-11 Ductile-Iron Compact Fittings
- e. AWWA C605-13 Underground Installation of Polyvinyl Chloride (PVC) and Molecularly Oriented Polyvinyl Chloride (PVCO) Pressure Pipe and Fittings
- f. AWWA C651-14 Disinfecting Water Mains
- g. AWWA C206-17 Field Welding of Steel Water Pipe

American Society for Testing & Materials, (ASTM):

- a. ASTM A53 Specification for Pipe, Carbon Steel, Black & Hot Dipped Zinc Coated, Welded and Seamless
- b. ASTM A240 Standard Specification for Chromium and Chromium-Nickel Stainless Steel Plate, Sheet and Strip for Pressure Vessels and for General Applications.

GEOTECHNICAL EVALUATION & REPORT

No geotechnical investigation and evaluation was conducted for this project. Bidders/contractors shall satisfy themselves as to the local site conditions (surface and below ground) through close and careful site reconnaissance and any potholing and/or testing needed to prepare the bid and for construction of the project.

PROJECT BID ITEMS

The various bid items set forth in the Bid Schedule are hereby described on the subsequent pages.

The measurement and payment for each bid item are defined for this project, as provided for in this technical specifications section of the project's bid/contract documents.

The Contractor shall provide a base bid price for the entire project, which shall include all work shown on the construction drawings and itemized on the "Bid Schedule" contained within these contract documents.

Mohave County will evaluate the Contractor's bid and determine the final extent of construction. Mohave County reserves the right to modify the limits or extent of the proposed work and determine the most responsive bid accordingly.

1. SAWCUT, REMOVE AND REPLACE EXISTING ASPHALT CONCRETE PAVEMENT

Specifications: Maricopa Association of Governments Uniform Standard Specifications and Details for Public Works Construction, Part 300, Section 301, Section 310, Section 321, Section 336, Section 350, Part 600, Section 601, Section 610, Part 700, Section 701, Section 702, Section 710, Detail No. 200-1, Detail 200-2, and other related sections and details.

Description: The work under this item shall include sawcutting and removing existing asphalt pavement for the installation of the new waterline facilities and replacing the AC surface with new AC pavement where shown on the plans and in accordance with MAG Detail 200-1 and 200-2.

The pavement removal work shall include all materials, equipment, and labor costs to sawcut and remove the existing asphalt paving materials and to properly transport and dispose of these materials at a legal and approved site.

The pavement repair and replacement work shall include all materials, equipment, and labor costs to furnish, place, compact, and complete the construction of the required depth of asphalt pavement surface course per the plans, these specifications, and per Standard Detail 200-1, Type "A" Trench Repair.

The depth of the new surface replacement pavement section shall be the thickness of the existing pavement. The replacement asphalt pavement shall be 3/8" asphalt concrete mix designation, Marshall Mix Design, per MAG Specification Section 710. The new asphalt pavement surface course shall be constructed on the final CLSM course placed to the bottom of the new asphalt pavement as part of the water line trench backfill. CLSM installation shall be per MAG Specification Sections 604 and 728.

Trench repair and surface replacement for granular/aggregate road and driveway surfaces, and for earth surfaced areas, shall not be measured or paid for under this bid item as this work is included in, subsidiary to, and incidental to the water line pipe installation and construction work items.

Measurement and Payment: Measurement will be based on the square yards (SY) of existing asphalt pavement removed and replaced to the required extent, width, and depth as established by the plans, specifications, and details and approved by the County Inspector. This pay item includes sawcutting existing pavement and underlying materials removal and disposal, and construction of the replacement asphalt pavement surface course. Payment will be made at the bid unit price per square yard (SY) based on the measured quantity.

2. REMOVE & REPLACE EXISTING ASPHALT CONCRETE DRIVEWAY IN KIND

Specifications: Maricopa Association of Governments Uniform Standard Specifications and Details for Public Works Construction, Section 301, Section 310, Section 321, Section 336, Section 350, Section 601, Section 702, Section 710, Detail No. 200-1, Detail No. 200-2, and other related sections.

Description: In all locations where the waterline installation is beneath an existing asphalt concrete (AC) driveway, Contractor shall sawcut the asphalt pavement for the complete length of the longitudinal run. Between the sawcut lines, asphalt pavement shall be completely removed and disposed of by the Contractor. The County Inspector shall approve the limits of pavement removal prior to sawcutting. The pavement removal work shall include all materials, equipment, and labor costs to sawcut and remove the existing asphalt paving materials and to properly dispose of these materials at a legal and approved site.

The surface replacement shall be a "T-Top" Trench Repair per MAG Details 200-1 & 200-2. The depth of the trench repair pavement section shall match the existing pavement thickness or 2-inches minimum, whichever is greater. The base material below the asphalt pavement shall be included in and incidental to the waterline pipe installation item.

Replacement of any portion of the driveway beyond the replacement limits damaged during construction shall be considered incidental to this item and no additional payment will be made to the Contractor, including proper disposal of damaged or excess materials.

The AC pavement shall be half-inch (3/8") asphalt concrete mix designation, Marshall Mix Design, per MAG Specification Section 710. The asphalt pavement placement and compaction shall be per MAG Sections 321 and 336.

The AC driveway section removal and replacement work shall include all materials, equipment, and labor costs to remove and dispose of the existing asphalt pavement material and to furnish, place, compact, and complete the construction of the 2-inch minimum thickness of asphalt pavement surface course per the plans, specifications, and Standard Detail 200-1. The Contractor shall replace the removed portion of existing driveway to the same line and grade as existed prior to construction.

Measurement & Payment: Measurement will be based on the square yards (SY) of existing AC driveway pavement removed and replaced to the required extent and depth as established by the plans, specifications, and details, as directed by the County Inspector.

Payment will be made on the bid unit price per square yard (SY) based on the measured quantity. This pay item includes existing pavement material removal and disposal, and construction of the new AC driveway surface course.

3. REMOVE & REPLACE EXISTING CONCRETE DRIVEWAY IN KIND

Specifications: Maricopa Association of Governments Uniform Standard Specifications and Details for Public Works Construction, Section 301, Section 310, Section 340, Section 336, Section 350, Section 601, Section 702, Section 725, Detail No. 200-1, Detail No. 200-2, and other related sections.

Description: In all locations where the waterline installation is beneath an existing concrete driveway, Contractor shall sawcut the concrete driveway for the complete length of the longitudinal run. If proposed sawcut line is within 4 feet of an existing concrete joint, removal shall extend to the next joint. Between the sawcut lines, concrete shall be completely removed and disposed of by the Contractor. The County Inspector shall approve the limits of concrete removal prior to sawcutting. The concrete removal work shall include all materials, equipment, and labor costs to sawcut and remove the existing concrete materials and to properly dispose of these materials at a legal and approved site.

The surface replacement shall be a "T-Top" Trench Repair per MAG Details 200-1 & 200-2. The depth of the surface repair concrete section shall match the existing concrete thickness or 5-inches minimum, whichever is greater. The base material below the concrete shall be included in and incidental to the waterline pipe installation item.

Replacement of any portion of the driveway beyond the replacement limits damaged during construction shall be considered incidental to this item and no additional payment will be made to the Contractor, including proper disposal of damaged or excess materials.

The new concrete shall be Class A Portland Cement Concrete (3000psi) per MAG Specification Section 725. Concrete placement shall be per MAG Sections 340 and 336.

The concrete driveway section removal and replacement work shall include all materials, equipment, and labor costs to remove and dispose of the existing concrete material and to furnish, place, compact, and complete the construction of the 5-inch minimum thickness of new concrete driveway surface per the plans, specifications, and Standard Detail 200-1. The Contractor shall replace the removed portion of existing driveway to the same line and grade as existed prior to construction.

Measurement & Payment: Measurement will be based on the square foot (SF) of existing concrete driveway removed and replaced to the required extent and depth as established by the plans, specifications, and details, as directed by the County Inspector.

Payment will be made on the bid unit price per square foot (SF) based on the measured quantity. This pay item includes existing concrete removal and disposal, and construction of the new concrete driveway surface.

4. REMOVE & REPLACE EXISTING CONCRETE BANK PROTECTION IN KIND

Specifications: Maricopa Association of Governments Uniform Standard Specifications and Details for Public Works Construction, Section 301, Section 310, Section 336, Section 350, Section 601, Section 702, Section 725, Detail No. 550, and other related sections.

Description: In all locations where the waterline installation is beneath existing concrete bank protection, Contractor shall sawcut the concrete for the complete length of the trench crossing. If proposed sawcut line is within 4 feet of an existing concrete joint, removal shall extend to the next joint. Between the sawcut lines, concrete shall be completely removed and disposed of by the Contractor. The County Inspector shall approve the limits of concrete removal prior to sawcutting. The concrete removal work shall include all materials, equipment, and labor costs to sawcut and remove the existing concrete materials and to properly dispose of these materials at a legal and approved site.

Upon completion of the waterline installation, the bank shall be restored to its previous shape and compacted per Section 301 prior to placement of the new bank protection. The subgrade material below the concrete shall be included in and incidental to the waterline pipe installation item. The new bank protection shall match the existing thickness or 3" minimum, whichever is greater. The new concrete shall be Class B Concrete (2500psi) per MAG Specification Section 725. Concrete placement shall be per MAG Sections 336. Concrete shall be reinforced with 6 x 6 W1.4 x W1.4 wire mesh per MAG Detail 550 and tied to the existing bank protection in an approved manner to the satisfaction of the County Inspector.

Any alternative repair methods or materials proposed by the Contractor shall be approved by the County Inspector in writing prior to installation.

Replacement of any portion of the bank protection beyond the replacement limits damaged during construction shall be considered incidental to this item and no additional payment will be made to the Contractor, including proper disposal of damaged or excess materials.

The concrete bank protection removal and replacement work shall include all materials, equipment, and labor costs to remove and dispose of the existing concrete material and to furnish, place, compact, and complete the construction of the 3-inch minimum thickness of new concrete bank protection per the plans, specifications, MAG Detail 550. The Contractor shall replace the removed portion of existing bank protection to the same line and grade as existed prior to construction.

Measurement & Payment: Measurement will be based on the square foot (SF) of existing concrete bank protection removed and replaced to the required extent and depth as established by the plans, specifications, and details, as directed by the County Inspector.

Payment will be made on the bid unit price per square foot (SF) based on the measured quantity. This pay item includes existing concrete removal and disposal, and construction of the new concrete bank protection.

5. REMOVE AND RESET EXISTING MAILBOX

Specifications: Maricopa Association of Governments, Uniform Standard Specifications and Details for Public Works Construction, Section 350, Section 775, Section 778, and other related sections and details.

Description: The work associated with this item includes removing mailboxes in conflict with the proposed construction, relocating them to an acceptable location to provide secure, uninterrupted mail service; then reinstalling the mailbox upon completion of the waterline installation to as near its original location and condition as possible to the satisfaction of the County Inspector and Postmaster.

The Contractor shall furnish and install any needed hardware and supplies to complete the reinstallation of the mailbox. Replacement of any mailbox damaged during construction shall be considered incidental to this item and no additional payment will be made to the Contractor, including any new materials or the proper disposal of damaged materials.

The cost of all labor, equipment, tools, supplies, and materials necessary for executing the work to remove and reset the mailbox, complete, shall be included in the bid price for this item.

Measurement & Payment: Measurement shall be based on each (EA) mailbox removed and reset as determined by the County Inspector.

Payment will be made at the bid unit price per each (EA) based on the measured quantity.

6. ABANDON EXISTING WATER VALVE

Specifications: Maricopa Association of Governments, Uniform Standard Specifications and Details for Public Works Construction, Section 301, Section 350, Section 601, Section 610, and other related sections and details.

Description: Once an existing waterline segment has been capped and abandoned, the existing water valves on that line segment shall also be abandoned. Abandonment of the existing valve shall include removing the valve box, cover and concrete ring and the top two (2) feet of the existing riser pipe. The valve shall be left in the fully open position when abandoned in place. The remaining portion of the valve box structure shall be filled with ABC slurry or 1/2-sack cement slurry to the top of subgrade.

If the abandoned valve is under existing pavement, after removing the box, cover, ring and riser, the backfill shall be made with aggregate base material, compacted per the specification requirements, brought to the subgrade elevation of the aggregate base course for the asphalt concrete replacement section. At the Contractor's option, 1/2 sack CLSM per MAG Sections 604 and 728 may be used instead of the aggregate base material for backfill. Asphalt surface removal and replacement associated with this work shall not be measured or paid for under this bid item as this work shall be included in and paid for under "Sawcut, Remove and Replace Existing Asphalt Concrete Pavement" item.

If the abandoned valve is under a natural ground or landscaped area, the final backfill may be made with the excavated trench material brought to the grade of the surrounding ground surface. The backfill surface area shall be graded to provide positive drainage so stormwater will not pond in the removed valve area.

Measurement & Payment: Measurement shall be based on each (EA) valve abandoned as measured and determined by the County Inspector.

Payment will be made at the bid unit price per each (EA) based on the measured quantity.

7. REMOVE AND REINSTALL EXISTING STREET SIGN

Specifications: Manual on Uniform Traffic Control Devices

Description: The work under this item includes all materials, supplies, equipment, hardware, and labor needed to remove the existing traffic sign and concrete base from its current location, provide temporary traffic control for the removed sign, and to reinstall the sign, post and concrete base at the same location or a location approved by the Town Inspector once underground construction is complete. Contractor shall safely and securely store/stockpile removed sign and concrete base until reinstalled.

Contractor shall be responsible for any damage to existing sign, post or concrete base that occurs during removal, storage or reinstallation. All work, supplies, materials, hardware, and labor related to the removal and reinstallation, including any new signs, posts, or foundations necessary due to damage shall be included in the bid unit price for this construction item.

Measurement & Payment: Measurement shall be based on each (EA) sign removed and reinstalled, complete, as determined by the Town Inspector.

Payment will be made at the bid unit price per each (EA) sign removed and reinstalled based on the measured quantity.

8. INSTALL C900 PVC WATERLINE, 8" DIA

Specifications: Maricopa Association of Governments Uniform Standard Specifications and Details for Public Works Construction, Part 600, Section 601, Section 610, Section 611, Section 630; and other related sections, specifications, and details.

Description: New water main pipe shall be 235 PSI rated, PVC, DR18, meeting the requirements of AWWA C900, and must be NSF approved and bear markings for potable water use. All fittings shall be ductile iron, conforming to AWWA C-153, with a minimum pressure rating of 250 PSI. The Contractor shall furnish and install **8-inch diameter C900 PVC Waterline** at all locations shown on the plans and in accordance with MAG Standard Specification Sections 601, 610, and 611. The finished installation includes the cost of labor, materials, loading, hauling, fittings, and equipment necessary for removal of obstructions; excavation and trenching (including dewatering if needed); legal disposal of excavated material; placing, bedding, and shading of the pipe line to grade; construction of concrete thrust blocks or alternate equivalent pipe restraints as required; placement of tracer wire and warning tape; and backfilling and compacting the trench excavation with approved material. This bid and construction item includes pressure testing, disinfecting, and flushing of the water lines, and all materials necessary to complete the installation so that it is fully functional for the purpose intended.

In asphalt pavement areas, trench bedding, haunching and initial backfill shall be aggregate base material to 12 inches above the top of pipe. Final backfill from 12 inches above the pipe to bottom of the asphalt pavement surfacing shall be 1/2-sack CLSM per MAG Section 702; Detail 200-1, Type 'B' Trench Repair; and Detail 200-2. Final trench backfill shall be made with controlled low strength material (CLSM), 1/2-sack cement mix, per MAG Section 604 and Section 728, to the bottom of the new asphalt pavement section.

In granular/aggregate road, parking, and driveway areas, trench bedding, haunching and initial backfill shall be aggregate base material to 12 inches above the top of pipe. Final backfill beneath granular roads and driveways shall be brought to the roadway/drive surface of the existing adjacent road/drive surfaces per MAG Section 702 and Detail 200-1, Type 'E' Trench Repair, and Detail 200-2. Native material backfill is not allowed in granular road and driveway surfaced areas. Final trench backfill shall be made with controlled low strength material (CLSM), 1/2-sack cement mix, per MAG Sections 604 and 728, with 2" depth of aggregate base course material placed and compacted on top of the CLSM surface.

In natural earth surfaced and landscaped areas, trench bedding, haunching, and initial backfill shall be aggregate base course material per MAG Section 702 and Detail 200-1, Type 'E' Trench Repair. Approved final backfill material in landscaped or natural earth surfaced areas shall be the excavated trench material provided it is free of rocks greater than 2" diameter, vegetation, and other deleterious materials. The ground surface shall be fine graded and provided with any aggregate/granular material surfacing (e.g. decomposed granite) that may have existed prior to the water main installation. The Contractor shall remove, stockpile, and replace any landscape or site features/items that will be disturbed by the water line installation. Landscape or site features/items removal and replacement shall be considered incidental and subsidiary to this bid item and will not be measured or paid for separately. The cost of any granular surfacing material is also considered subsidiary and incidental to this bid item and shall not be measured or paid for separately.

Locator wire shall be fastened to the top of the water main and secured with duct tape at 10 foot intervals. Contractor shall conduct a continuity test on all locator wire in the presence of the engineer.

Warning tape shall be non-metallic tape, buried 12 to 18 inches below finished grade or half the distance to finished grade, whichever is less. Tape shall be 3 inches wide with black lettering on a blue background indicating water line buried below.

Trench widths shall be per MAG table 601-1 Trench Widths.

Sideslopes of trenches shall comply with OSHA regulations with and without a trench box.

Measurement and Payment: Measurement will be based on the linear feet (LF) of **8" diameter C900 PVC Waterline** (DR18, 235 PSI) with all fittings included, installed complete as measured on the ground by the County Inspector. Payment will be made at the bid unit price per linear feet (LF) based on the measured quantity.

9. INSTALL C900 PVC WATERLINE, 16" DIA

Specifications: Maricopa Association of Governments Uniform Standard Specifications and Details for Public Works Construction, Part 600, Section 601, Section 610, Section 611, Section 630; and other related sections, specifications, and details.

Description: New water main pipe shall be 235 PSI rated, PVC, DR18, gasketed joints, meeting the requirements of AWWA C900, and must be NSF approved and bear markings for potable water use. All fittings shall be ductile iron, conforming to AWWA C-153, with a minimum pressure rating of 250 PSI. The Contractor shall furnish and install **16-inch diameter C900 PVC Waterline** at all locations shown on the plans and in accordance with MAG Standard Specification Sections 601, 610, and 611. The finished installation includes the cost of labor, materials, loading, hauling, fittings, and equipment necessary for removal of obstructions; excavation and trenching (including dewatering if needed); legal disposal of excavated material; placing, bedding, and shading of the pipe line to grade; construction of concrete thrust blocks or alternate equivalent pipe restraints as required; placement of tracer wire and warning tape; and backfilling and compacting the trench excavation with approved material. This bid and construction item includes pressure testing, disinfecting, and flushing of the water lines, and all materials necessary to complete the installation so that it is fully functional for the purpose intended.

In asphalt pavement areas, trench bedding, haunching and initial backfill shall be aggregate base material to 12 inches above the top of pipe. Final backfill from 12 inches above the pipe to bottom of the asphalt pavement surfacing shall be 1/2-sack CLSM per MAG Section 702; Detail 200-1, Type 'B' Trench Repair; and Detail 200-2. Final trench backfill shall be made with controlled low strength material (CLSM), 1/2-sack cement mix, per MAG Section 604 and Section 728, to the bottom of the new asphalt pavement section.

In granular/aggregate road, parking, and driveway areas, trench bedding, haunching and initial backfill shall be aggregate base material to 12 inches above the top of pipe. Final backfill beneath granular roads and driveways shall be brought to the roadway/drive surface of the existing adjacent road/drive surfaces per MAG Section 702 and Detail 200-1, Type 'E' Trench Repair, and Detail 200-2. Native material backfill is not allowed in granular road and driveway surfaced areas. Final trench backfill shall be made with controlled low strength material (CLSM), 1/2-sack cement mix, per MAG Sections 604 and 728, with 2" depth of aggregate base course material placed and compacted on top of the CLSM surface.

In natural earth surfaced and landscaped areas, trench bedding, haunching, and initial backfill shall be aggregate base course material per MAG Section 702 and Detail 200-1, Type 'E' Trench Repair. Approved final backfill material in landscaped or natural earth surfaced areas shall be the excavated trench material provided it is free of rocks greater than 2" diameter, vegetation, and other deleterious materials. The ground surface shall be fine graded and provided with any aggregate/granular material surfacing (e.g. decomposed granite) that may have existed prior to the water main installation. The Contractor shall remove, stockpile, and replace any landscape or site features/items that will be disturbed by the water line installation. Landscape or site features/items removal and replacement shall be considered incidental and subsidiary to this bid item and will not be measured or paid for separately. The cost of any granular surfacing material is also considered subsidiary and incidental to this bid item and shall not be measured or paid for separately.

Locator wire shall be fastened to the top of the water main and secured with duct tape at 10 foot intervals. Contractor shall conduct a continuity test on all locator wire in the presence of the engineer.

Warning tape shall be non-metallic tape, buried 12 to 18 inches below finished grade or half the distance to finished grade, whichever is less. Tape shall be 3 inches wide with black lettering on a blue background indicating water line buried below.

Trench widths shall be per MAG table 601-1 Trench Widths.

Sideslopes of trenches shall comply with OSHA regulations with and without a trench box.

Measurement and Payment: Measurement will be based on the linear feet (LF) of **16" diameter C900 PVC Waterline** (DR18, 235 PSI) with all fittings included, installed complete as measured on the ground by the County Inspector. Payment will be made at the bid unit price per linear feet (LF) based on the measured quantity.

10. INSTALL DIP WATERLINE, 6" DIA

Specifications: Maricopa Association of Governments, Uniform Standard Specifications and Details for Public Works Construction, Section 601, Section 610, Section 611, Section 750, Detail 200-1, Detail 200-2, and other related sections and details.

Description: New water main pipe shall be completed in accordance with Section 610, Water Line Construction, of the MAG Standard Specifications and Details. All fittings shall be ductile iron, conforming to AWWA C-153, with a minimum pressure rating of 250 PSI.

Where shown on the plans, the waterline shall be **6-inch diameter ductile iron pipe (DIP)** conforming with the requirements MAG Section 750.2. All ductile iron pipe and fittings shall be polywrapped per MAG Section 610, cement mortar lined and seal coated, and equipped with gasketed water-tight restrained mechanical joints per MAG Section 750.3. The finished installation includes the cost of labor, materials, loading, hauling, fittings, and equipment necessary for removal of obstructions; excavation and trenching (including dewatering if needed); legal disposal of excavated material; placing, bedding, and shading of the pipe line to grade; construction of concrete thrust blocks or alternate equivalent pipe restraints as required; placement of tracer wire and warning tape; and backfilling and compacting the trench excavation with approved material. This bid and construction item includes pressure testing, disinfecting, and flushing of the water lines, and all materials necessary to complete the installation so that it is fully functional for the purpose intended.

In asphalt pavement areas, trench bedding, haunching and initial backfill shall be aggregate base material to 12 inches above the top of pipe. Final backfill from 12 inches above the pipe to bottom of the asphalt pavement surfacing shall be 1/2-sack CLSM per MAG Section 702; Detail 200-1, Type 'B' Trench Repair; and Detail 200-2. Final trench backfill shall be made with controlled low strength material (CLSM), 1/2-sack cement mix, per MAG Section 604 and Section 728, to the bottom of the new asphalt pavement section.

In granular/aggregate road, parking, and driveway areas, trench bedding, haunching and initial backfill shall be aggregate base material to 12 inches above the top of pipe. Final backfill beneath granular roads and driveways shall be brought to the roadway/drive surface of the existing adjacent road/drive surfaces per MAG Section 702 and Detail 200-1, Type 'E' Trench Repair, and Detail 200-2. Native material backfill is not allowed in granular road and driveway surfaced areas. Final trench backfill shall be made with controlled low strength material (CLSM), 1/2-sack cement mix, per MAG Sections 604 and 728, with 2" depth of aggregate base course material placed and compacted on top of the CLSM surface.

In natural earth surfaced and landscaped areas, trench bedding, haunching, and initial backfill shall be aggregate base course material per MAG Section 702 and Detail 200-1, Type 'E' Trench Repair. Approved final backfill material in landscaped or natural earth surfaced areas shall be the excavated trench material provided it is free of rocks greater than 2" diameter, vegetation, and other deleterious materials. The ground surface shall be fine graded and provided with any aggregate/granular material

surfacing (e.g. decomposed granite) that may have existed prior to the water main installation. The Contractor shall remove, stockpile, and replace any landscape or site features/items that will be disturbed by the water line installation. Landscape or site features/items removal and replacement shall be considered incidental and subsidiary to this bid item and will not be measured or paid for separately. The cost of any granular surfacing material is also considered subsidiary and incidental to this bid item and shall not be measured or paid for separately.

Locator wire shall be fastened to the top of the water main and secured with duct tape at 10 foot intervals. Contractor shall conduct a continuity test on all locator wire in the presence of the engineer.

Warning tape shall be non-metallic tape, buried 12 to 18 inches below finished grade or half the distance to finished grade, whichever is less. Tape shall be 3 inches wide with black lettering on a blue background indicating water line buried below.

Trench widths shall be per MAG table 601-1 Trench Widths.

Sideslopes of trenches shall comply with OSHA regulations with and without a trench box.

Measurement and Payment: Measurement will be based on the linear feet (LF) of **6" diameter DIP Waterline** with all fittings included, installed complete as measured on the ground by the County Inspector. Payment will be made at the bid unit price per linear feet (LF) based on the measured quantity.

11. INSTALL DIP WATERLINE, 8" DIA

Specifications: Maricopa Association of Governments, Uniform Standard Specifications and Details for Public Works Construction, Section 601, Section 610, Section 611, Section 750, Detail 200-1, Detail 200-2, and other related sections and details.

Description: New water main pipe shall be completed in accordance with Section 610, Water Line Construction, of the MAG Standard Specifications and Details. All fittings shall be ductile iron, conforming to AWWA C-153, with a minimum pressure rating of 250 PSI.

Where shown on the plans, the waterline shall be **8-inch diameter ductile iron pipe (DIP)** conforming with the requirements MAG Section 750.2. All ductile iron pipe and fittings shall be polywrapped per MAG Section 610, cement mortar lined and seal coated, and equipped with gasketed water-tight restrained mechanical joints per MAG Section 750.3. The finished installation includes the cost of labor, materials, loading, hauling, fittings, and equipment necessary for removal of obstructions; excavation and trenching (including dewatering if needed); legal disposal of excavated material; placing, bedding, and shading of the pipe line to grade; construction of concrete thrust blocks or alternate equivalent pipe restraints as required; placement of tracer wire and warning tape; and backfilling and compacting the trench excavation with approved material. This bid and construction item includes pressure testing, disinfecting, and flushing of the water lines, and all materials necessary to complete the installation so that it is fully functional for the purpose intended.

In asphalt pavement areas, trench bedding, haunching and initial backfill shall be aggregate base material to 12 inches above the top of pipe. Final backfill from 12 inches above the pipe to bottom of the asphalt pavement surfacing shall be 1/2-sack CLSM per MAG Section 702; Detail 200-1, Type 'B' Trench Repair; and Detail 200-2. Final trench backfill shall be made with controlled low strength material (CLSM), 1/2-sack cement mix, per MAG Section 604 and Section 728, to the bottom of the new asphalt pavement section.

In granular/aggregate road, parking, and driveway areas, trench bedding, haunching and initial backfill shall be aggregate base material to 12 inches above the top of pipe. Final backfill beneath granular roads and driveways shall be brought to the roadway/drive surface of the existing adjacent road/drive surfaces per MAG Section 702 and Detail 200-1, Type 'E' Trench Repair, and Detail 200-2. Native material backfill is not allowed in granular road and driveway surfaced areas. Final trench backfill shall be made with controlled low strength material (CLSM), 1/2-sack cement mix, per MAG Sections 604 and 728, with 2" depth of aggregate base course material placed and compacted on top of the CLSM surface.

In natural earth surfaced and landscaped areas, trench bedding, haunching, and initial backfill shall be aggregate base course material per MAG Section 702 and Detail 200-1, Type 'E' Trench Repair. Approved final backfill material in landscaped or natural earth surfaced areas shall be the excavated trench material provided it is free of rocks greater than 2" diameter, vegetation, and other deleterious materials. The ground surface shall be fine graded and provided with any aggregate/granular material

surfacing (e.g. decomposed granite) that may have existed prior to the water main installation. The Contractor shall remove, stockpile, and replace any landscape or site features/items that will be disturbed by the water line installation. Landscape or site features/items removal and replacement shall be considered incidental and subsidiary to this bid item and will not be measured or paid for separately. The cost of any granular surfacing material is also considered subsidiary and incidental to this bid item and shall not be measured or paid for separately.

Locator wire shall be fastened to the top of the water main and secured with duct tape at 10 foot intervals. Contractor shall conduct a continuity test on all locator wire in the presence of the engineer.

Warning tape shall be non-metallic tape, buried 12 to 18 inches below finished grade or half the distance to finished grade, whichever is less. Tape shall be 3 inches wide with black lettering on a blue background indicating water line buried below.

Trench widths shall be per MAG table 601-1 Trench Widths.

Sideslopes of trenches shall comply with OSHA regulations with and without a trench box.

Measurement and Payment: Measurement will be based on the linear feet (LF) of **8" diameter DIP Waterline** with all fittings included, installed complete as measured on the ground by the County Inspector. Payment will be made at the bid unit price per linear feet (LF) based on the measured quantity.

12. INSTALL DIP WATERLINE, 16" DIA

Specifications: Maricopa Association of Governments, Uniform Standard Specifications and Details for Public Works Construction, Section 601, Section 610, Section 611, Section 750, Detail 200-1, Detail 200-2, and other related sections and details.

Description: New water main pipe shall be Class 250, completed in accordance with Section 610, Water Line Construction, of the MAG Standard Specifications and Details. All fittings shall be ductile iron, conforming to AWWA C-153, with a minimum pressure rating of 250 PSI.

Where shown on the plans, the waterline shall be **16-inch diameter ductile iron pipe (DIP)** conforming with the requirements MAG Section 750.2. All ductile iron pipe and fittings shall be polywrapped per MAG Section 610, cement mortar lined and seal coated, and equipped with gasketed water-tight restrained mechanical joints per MAG Section 750.3. The finished installation includes the cost of labor, materials, loading, hauling, fittings, and equipment necessary for removal of obstructions; excavation and trenching (including dewatering if needed); legal disposal of excavated material; placing, bedding, and shading of the pipe line to grade; construction of concrete thrust blocks or alternate equivalent pipe restraints as required; placement of tracer wire and warning tape; and backfilling and compacting the trench excavation with approved material. This bid and construction item includes pressure testing, disinfecting, and flushing of the water lines, and all materials necessary to complete the installation so that it is fully functional for the purpose intended.

In asphalt pavement areas, trench bedding, haunching and initial backfill shall be aggregate base material to 12 inches above the top of pipe. Final backfill from 12 inches above the pipe to bottom of the asphalt pavement surfacing shall be 1/2-sack CLSM per MAG Section 702; Detail 200-1, Type 'B' Trench Repair; and Detail 200-2. Final trench backfill shall be made with controlled low strength material (CLSM), 1/2-sack cement mix, per MAG Section 604 and Section 728, to the bottom of the new asphalt pavement section.

In granular/aggregate road, parking, and driveway areas, trench bedding, haunching and initial backfill shall be aggregate base material to 12 inches above the top of pipe. Final backfill beneath granular roads and driveways shall be brought to the roadway/drive surface of the existing adjacent road/drive surfaces per MAG Section 702 and Detail 200-1, Type 'E' Trench Repair, and Detail 200-2. Native material backfill is not allowed in granular road and driveway surfaced areas. Final trench backfill shall be made with controlled low strength material (CLSM), 1/2-sack cement mix, per MAG Sections 604 and 728, with 2" depth of aggregate base course material placed and compacted on top of the CLSM surface.

In natural earth surfaced and landscaped areas, trench bedding, haunching, and initial backfill shall be aggregate base course material per MAG Section 702 and Detail 200-1, Type 'E' Trench Repair. Approved final backfill material in landscaped or natural earth surfaced areas shall be the excavated trench material provided it is free of rocks greater than 2" diameter, vegetation, and other deleterious materials. The ground surface shall be fine graded and provided with any aggregate/granular material

surfacing (e.g. decomposed granite) that may have existed prior to the water main installation. The Contractor shall remove, stockpile, and replace any landscape or site features/items that will be disturbed by the water line installation. Landscape or site features/items removal and replacement shall be considered incidental and subsidiary to this bid item and will not be measured or paid for separately. The cost of any granular surfacing material is also considered subsidiary and incidental to this bid item and shall not be measured or paid for separately.

Locator wire shall be fastened to the top of the water main and secured with duct tape at 10 foot intervals. Contractor shall conduct a continuity test on all locator wire in the presence of the engineer.

Warning tape shall be non-metallic tape, buried 12 to 18 inches below finished grade or half the distance to finished grade, whichever is less. Tape shall be 3 inches wide with black lettering on a blue background indicating water line buried below.

Trench widths shall be per MAG table 601-1 Trench Widths.

Sideslopes of trenches shall comply with OSHA regulations with and without a trench box.

Measurement and Payment: Measurement will be based on the linear feet (LF) of **16" diameter DIP Waterline** with all fittings included, installed complete as measured on the ground by the County Inspector. Payment will be made at the bid unit price per linear feet (LF) based on the measured quantity.

13. INSTALL GATE VALVE, BOX AND COVER, 8" DIA

Specifications: Maricopa Association of Governments Uniform Standard Specifications and Details for Public Works Construction, Part 600, Section 601, Section 610, Section 630, Detail No. 391-1 (Type A), and other related sections and details.

Description: Gate valves shall be resilient wedge, non-rising stem, 2-inch square operating nut, with valve box/cover per MAG Detail 391-1, Type A. The Contractor shall furnish and install **8" diameter Gate Valves**, complete with valve boxes and covers, at all locations shown on the plans and in accordance with MAG Standard Specification Section 610, Section 630, and Standard Detail 391-1, Type A. The finished installation includes all costs associated with furnishing and installing the gate valve; loading and hauling; labor, materials, and equipment necessary for excavation and trenching; legal disposal of excess and waste materials; dewatering if needed; construction of thrust blocks or equivalent pipe and valve restraints; placement of bedding material; assembly of the valve; installation and adjustment of the valve box and cover to grade; concrete valve box apron; installation of tracer wire or conductivity connection; placing polywrap in accordance with AWWA C105 and the manufacturer's specifications; and 4,000 psi concrete saddle with number 4 rebar ties around the valve. Work shall include furnishing and installing valve boxes and stems, placing 1/4 yard washed rock around base of valve boxes, placing approved valve boxes at finished grade, raising or lowering valve boxes as required to the final grade, and installation of concrete diamond or circle aprons for all locations. The bid item shall include backfill with 1/2 sack CLSM up to and flush with the bottom of the concrete apron and replacement pavement; and outside the concrete apron and street pavement areas, to an elevation 12" below the existing ground surface, and then covered with 12" of topsoil, with repair and restoration of all existing landscaping to preconstruction conditions.

This bid item does not include gate valves associated with tapping sleeves or fire hydrants as those valves are included in those respective bid items.

Measurement and Payment: Measurement will be based on each (EA) completed **8" diameter Gate Valve**, box, and cover installation as measured on the ground by the County Inspector. Payment will be made at the bid unit price per each (EA) based on the measured quantity.

14. INSTALL GATE VALVE, BOX AND COVER, 16" DIA

Specifications: Maricopa Association of Governments Uniform Standard Specifications and Details for Public Works Construction, Part 600, Section 601, Section 610, Section 630, Detail No. 391-1 (Type A), and other related sections and details.

Description: Gate valves shall be resilient wedge, non-rising stem, 2-inch square operating nut, with valve box/cover per MAG Detail 391-1, Type A. The Contractor shall furnish and install **16" diameter Gate Valves**, complete with valve boxes and covers, at all locations shown on the plans and in accordance with MAG Standard Specification Section 610, Section 630, and Standard Detail 391-1, Type A. The finished installation includes all costs associated with furnishing and installing the gate valve; loading and hauling; labor, materials, and equipment necessary for excavation and trenching; legal disposal of excess and waste materials; dewatering if needed; construction of thrust blocks or equivalent pipe and valve restraints; placement of bedding material; assembly of the valve; installation and adjustment of the valve box and cover to grade; concrete valve box apron; installation of tracer wire or conductivity connection; placing polywrap in accordance with AWWA C105 and the manufacturer's specifications; and 4,000 psi concrete saddle with number 4 rebar ties around the valve. Work shall include furnishing and installing valve boxes and stems, placing 1/4 yard washed rock around base of valve boxes, placing approved valve boxes at finished grade, raising or lowering valve boxes as required to the final grade, and installation of concrete diamond or circle aprons for all locations. The bid item shall include 1/2 sack CLSM up to and flush with the bottom of the concrete apron and replacement pavement; and outside the concrete apron and street pavement areas, to an elevation 12" below the existing ground surface, and then covered with 12" of topsoil, with repair and restoration of all existing landscaping to preconstruction conditions.

This bid item does not include gate valves associated with tapping sleeves or fire hydrants as those valves are included in those respective bid items.

Measurement and Payment: Measurement will be based on each (EA) completed **16" diameter Gate Valve**, box, and cover installation as measured on the ground by the County Inspector. Payment will be made at the bid unit price per each (EA) based on the measured quantity.

15. INSTALL COMBINATION AIR RELEASE VALVE ASSEMBLY

Specifications: Maricopa Association of Governments Uniform Standard Specifications and Details for Public Works Construction, Section 601, Section 610, Section 611, Section 616, Section 625, Section 630, Section 631, Section 742, Section 750, and other related sections, specifications, and details.

Description: Combination air release valve (CARV) shall be Valmatic Water Combination Air Valve (single body) with 1-inch NPT inlet/outlet diameters and model number 201C.2, or engineer preapproved equal.

- a. Inlet shut off valve shall be a 1/4 turn 1-inch NPT X NPT brass, blowout proof, ball valve.
- b. Stainless steel tapping saddle, bolts, and nuts shall be 304 stainless steel, per ASTM A240; tapping saddle shall be model 306 as supplied by ROMAC industries, or engineer preapproved equal.
- c. CARV enclosure shall be a Traffic Rated Box and Cover per MAG Standard Detail 319, and as shown in the detail on the plans.
 - i. The enclosure shall be located in or near the shoulder adjacent to the waterline tap at a location approved by the Engineer.
 - ii. The enclosure shall include a 6" concrete collar around the box as shown in the detail.

The Contractor shall furnish and install a combination air release valve assembly in a traffic rated concrete box for the new water main at high points in the system, where shown on the plans. Installation of the combined air release valve shall be in accordance with the manufacturer's instructions. The finished work includes all labor, materials, equipment, supplies, tools and other costs to complete the installation of the CARV and related improvements as shown on the project plans that is fully functional for its intended purpose.

Shop Drawing Submittal: The Contractor shall submit a shop drawing for the combination air release valve, piping, and enclosure and cover for approval prior to construction.

Measurement and Payment: Measurement will be based on each (EA) completed installation of the combination air release valve assembly as measured on the ground by the County Inspector. Payment will be made at the bid unit price per each (EA) based on the measured quantity.

16. CAP AND ABANDON EXISTING WATERLINE

Specifications: Maricopa Association of Governments, Uniform Standard Specifications and Details for Public Works Construction, Section 601, Section 610, and other related sections and details.

Description: Cap and abandon the existing water line, 6" diameter, being replaced between the terminal points identified on the plans. This bid and construction item includes locating the existing water main to be abandoned, cutting the pipe where needed, and capping or plugging the exposed pipe end or fitting end to seal off the pipe that is being abandoned in place.

This item of work shall be coordinated closely with Mohave County (contact Mike Garmon, Engineering Manager, at 928.757.0910) as needed for shut down of the water line to enable the existing water line to be cut, capped, and abandoned in place. The Contractor shall provide a minimum of 24-hours advance notice to the residents affected by the water shutdown with an estimated time and duration of the shutdown period. The Contractor shall minimize the time frame needed to complete the work so the length of time the water line is shut down is minimized.

The location where existing pipe will be cut and capped shall be based on the Contractor's construction sequencing and approved by Mohave County prior to commencing the work. The cost of all labor, equipment, tools, and materials necessary for execution of the work; verification of existing pipe type and size at the abandonment locations; cutting pipes; removal and disposal of any pipe segments and/or obstructions such as thrust blocks; providing and installing caps, plugs, or other fittings as required to enable the pipe section to be removed from service; backfilling the excavation with aggregate base course material, and compacting the backfill material as specified (100% ASTM D698 Standard Proctor Density) up to the subgrade for the new pavement or to the surface of the adjacent grade; and construction clean-up and site restoration. All work needed to complete the abandonment of the existing water line should be included in the cost of this item, including disposal of any existing asbestos pipe in accordance with the following requirements:

Removal and Disposal of Asbestos Cement Pipe

Background

Asbestos Cement Pipe (ACP) is a mixture of Portland cement and asbestos fibers. It was introduced into North America in 1931 and by 1953 the American Water Works Association (AWWA) had established standards for ACP. Along with many other communities, ACP water mains were installed in Mohave County and, as a consequence, there is a considerable quantity of this material in service. Some of these mains are old and need to be replaced; some are undersized and need to be upsized; and others are in conflict with new utility installations and need to be relocated. These actions require all or part of the existing ACP system to be removed and disposed of in a legal manner.

Subsequent to ACP's introduction into the United States, the EPA determined that asbestos, in an airborne condition, is a hazardous material and established laws/guidelines for the handling and disposal of the material. The Asbestos National Emission Standards for Hazardous Air Pollutants (NESHAP) establishes requirements for the removal and disposal of regulated asbestos containing materials. This policy statement establishes procedures and identifies responsibilities for the

proper handling of asbestos-cement pipe in conformance with the Asbestos NESHAP requirements in effect as of November 1990.

NOTE: As used herein, the term "Excavator" shall refer to that entity (individual or contractor) which actually excavates and exposes the pipe. The term "Generator" means any owner or operator of a source (covered by the regulation) whose act or process produces asbestos containing waste material. The term "extra cost" shall refer to the cost over and above the removal and disposal of the pipe in a non-friable state.

Policy

(1) It is the intent of the Mohave County to comply with the requirements of the Asbestos NESHAPS found at 40 CFR Part 61, Subpart M. This Policy Statement will establish procedures to be used by all Excavators in the removal and disposal of ACP in compliance with NESHAPS. Nothing in this Policy Statement shall be construed to void any provision of a contract or other law, ordinance, regulation or policy whose requirements are more stringent.

(2) ACP is defined under NESHAPS as a Category II, non-friable, non-regulated material in its intact state but which may become friable upon removal, demolition, and/or disposal. Consequently, if the removal/disposal process renders the ACP friable, it is regulated under the disposal requirements of 40 CFR 61.150. If more than 260 linear feet of ACP is removed which on removal will become friable, a NESHAPS notification must be filed with the Mohave County Environmental Services Department. The notification must be filed at least 10 days prior to removal of the material. If it remains in its non-friable state, as defined by the NESHAPS, it can be disposed of as a conventional construction waste. EPA defines friable as material, when dry, which may be crumbled, pulverized or reduced to powder by hand pressures.

(3) The Generator of the hazardous material is responsible for the identification and proper handling, transportation, and disposal of the material. Therefore, it is the policy of the County that if the actions of the Excavator cause the material to become friable, and therefore subject to the regulations, that the Excavator becomes the Generator.

(4) The requirements of A.R.S. § 40-360.21 through 40-360.32 (Blue Stake Law) are important with respect to implementation of this policy statement. The Blue Stake Law mandates the owner of the facility to maintain installation records and, upon request, to properly locate the underground facility. The law also places requirements on the Excavator to:

- (a) Call Arizona 811 at least 2 working days prior to the start of excavation.*
- (b) Mark the boundaries of the location to be excavated.*
- (c) Excavate in a careful and prudent manner, including hand digging within 24 inches of the underground facility.*
- (d) Notify the County if the Excavator encounters an underground facility that has not been located and marked or has been marked in the wrong location.*

If the Excavator does not comply in full with Arizona 811 requirements and therefore causes nonfriable ACP to become friable, any and all extra costs incurred to handle, containerize, transport, and dispose of the asbestos containing waste shall not be paid or reimbursable by the City. If Arizona 811 requirements are met and ACP is accidentally or unknowingly disturbed thereby causing it to become friable, the Excavator may seek reimbursement from the County for

additional costs to handle, containerize, transport and dispose of the material following the procedures described herein.

(5) The Contractor shall retain the services of an independent, qualified, licensed asbestos abatement Consultant. All removal and disposal of ACP shall be under the cognizance of the Consultant. The Excavator is responsible to contact the Consultant a minimum of 2 working days prior to the initiation of removal/disposal operations. The Consultant will monitor the Excavator's work. If the ACP was not planned for removal and the Excavator accidentally disturbs the pipe, the Excavator will cease all work and notify the Engineer immediately for further instructions.

(6) It is the intent of the County that all ACP shall be removed in such careful and prudent manner that it remains intact and non-friable. The Excavator is responsible to deploy the means, methods, techniques, and sequences to ensure this result.

When it is a practical impossibility, as determined by the Engineer, to remove the ACP without creating a friable material, the County will pay the Excavator for the removal of friable material in accordance with the measurement and payment section. The Excavator shall take steps to minimize the amount of the friable waste and abide with all asbestos regulatory requirements. The Consultant shall be available to provide recommendations or suggestions, which the Excavator may or may not choose to deploy. The Consultant shall measure or otherwise assess and recommend to the Engineer the amount or percentage of friable waste for which the County should pay for removal and disposal with the remainder being the responsibility of the Excavator. If the ACP is caused to become friable, the Consultant shall conduct perimeter air monitoring upon request by the County.

If the Excavator fails to notify the Consultant, fails to excavate and remove the ACP in a careful and prudent manner creating friable material or fails to abide with all asbestos regulatory requirement, the Excavator shall be deemed to be the Generator responsible to handle, transport and disposal of the ACP in accordance with the NESHAPS requirements and will not be reimbursed for any cost incurred. This will include all penalties and associated legal fees of the Generator as well as any penalties assessed against the County, and any associated legal fees incurred by the County for violation of any of the asbestos regulatory requirements that are caused by the Excavator.

(7) ACP shall NOT be crushed and left in place.

(8) Compliance with all aspects of worker safety and health regulations including but not limited to the OSHA Asbestos Standard is the responsibility of the Excavator. The County assumes no responsibility for compliance programs which are the responsibility of the Excavator.

(9) If warranted, payment for removal of non-friable existing asbestos cement pipe not caused by the Contractor's actions shall be at the negotiated price for complete removal, proper disposal and trench backfill in accordance with the specifications. Payment for removal of friable existing asbestos cement pipe shall be a contingent item at the unit bid price shown in the bidding schedule for complete removal, proper disposal and trench backfill as determined by the Engineer in accordance with this section and other provisions of the specifications.

This pay item includes the required work at both terminal points of each segment of water line to be abandoned in place. This includes costs for disconnecting the old water line from the water system and installing caps and/or plugs and other fittings as needed to isolate and seal off the old water line from earth intrusion, resulting in the old water line being abandoned and left in place.

Capping / plugging and abandonment of the existing 6" water line cannot occur until the new water line has been installed, tested, disinfected, and placed in operation, including new service line connections to existing water meters, for any water line segment that provides water services to dwelling units or other buildings, structures, or facilities.

Measurement & Payment: Measurement shall be based on a lump sum (LS) basis to perform the work at all locations necessary to complete the project. Payment will be made as a lump sum price based on the percent complete of the overall project.

17. CONNECT EXISTING SERVICE LINE TO NEW WATERLINE – 1” SERVICE

Specifications: Maricopa Association of Governments Uniform Standard Specifications and Details for Public Works Construction, Part 600, Section 601, Section 610, Section 631, Section 755, and other related sections and details.

Description: **Connect Existing Service Line to New Waterline** includes all costs associated with:

- a. Switchover of existing water services to the newly installed water line can be completed only after the new water line section has been disinfected, tested, and placed into service
- b. Install a service saddle and corporation/angle stop on the new C900 PVC water main
- c. Locate and expose the existing water service line connection to the existing water main
- d. Shut off the existing corporation stop on the water service line
- e. Disconnect the existing water service line at or near the existing corporation stop
- f. Install 1” diameter HDPE water service line pipe from the new service saddle/corporation stop on the new water main to connect to the existing meter valve at the existing meter box, if one exists. Make connection with the appropriate coupling and reducer fittings as needed
- g. Take care to prevent contamination of the existing or new service line and flush each line thoroughly after the connection has been completed

Service Line Pipe – The water service line pipe from the water main to the existing meter stop shall be **one-inch (1”) diameter new polyethylene (HDPE) water service pipe meeting the requirements of ASTM D2239 and MAG Section 755**. Connection to the existing meter stop and/or any other size (diameter) water service pipe shall be made using an appropriate reducer couplings/fittings.

Contractor shall place ABC to 12 inches above the top of the service line and use 1/2-sack CLSM for final backfill. Final backfill requirements shall be the same as that for backfill over the water main. Service Saddle and Corporation Stop – The list below details the specification requirements for the water main line saddles, corporation stops, and meter couplings required for this project:

- Ford Meter Box Company (Brass & Copper)
 - Ford Style 202B Double Strap Brass Saddle (For AC or Iron Pipe) (1” Taps)
 - 1” Corp Stop – FB1100 Ball style or equal

Or the following pre-approved equal...

- A.Y. McDonald Mfg. Co.+(Brass & Copper)
 - Double Band Brass Saddle 6” X 1” FNPT Model #3826
 - 1” Corp Stop – MNPT X CTS Comp., Model #74704-22 or equal

Contractor shall submit shop drawings for proposed corporation stops and other waterline fittings for review and approval of the Engineer. Materials shall comply with MAG Section 755.

This construction item includes all materials, equipment, and labor needed to complete the water service line switchover connection from the existing water main to the new water main and consists of the new tap on the new water main, service saddle, corporation stop, water service line piping, tracer wire, locator tape, connecting sleeve, coupling, or fitting, associated excavation and trenching, backfill, compaction of backfill, disconnecting from the existing water main, and any other component or work needed to complete the work and provide an installation that is fully functional for the intended purpose.

The length of time any individual site's water service is shut down shall be kept to the minimum length of time possible. Coordinate this work closely with the Mohave County Inspector.

The existing water service line for each site shall remain in place and in operation until the new water main has been installed, disinfected, and placed in operation. The relocation and connection of the new water service lines can only be made after the new water main has been placed in operation to minimize the length of time that the associated site or facility is out of water service.

Measurement and Payment: Measurement shall be based on each (EA) completed installation of **Connect Existing Service Line to New Waterline** as shown and where denoted on the plans, including but not limited to, saddle, tap, corporation stop, new service line, connecting to existing meter stop, any fittings, couplings and adapters as needed, and trench excavation, backfill and compaction, all as confirmed fully functional and complete by the County Inspector. Payment will be made at the bid unit price per each (EA) based on the measured quantity.

18. CONNECT TO EXISTING FIRE HYDRANT

Specifications: Maricopa Association of Governments Uniform Standard Specifications and Details for Public Works Construction, Part 600, Section 601, Section 610, Section 756, Detail 360-1, Detail 391-1 (Type C), and other related sections and details.

Description: Connect to existing fire hydrant shall consist of disconnecting the existing fire hydrant from the existing water main and reconnecting the hydrant to the new water main.

Work associated with this item includes disconnecting the existing fire hydrant from the existing water main and reconnecting the hydrant to the new water main to provide a complete and functional fire hydrant assembly. This construction bid item includes the required size tee in the new water line for the 6" hydrant lead line (6"X6" tee, 8"X6" tee, or 16"X6" tee); the required length of 6" diameter DIP hydrant lead line, new 6-inch gate valve, valve box and cover, all fittings and components, to make a complete and functional fire hydrant assembly. The 6" DIP hydrant lead line shall be mechanically restrained from the water line tee to the new 6" gate valve and to the connection with the existing lead line with the Mega-Lug mechanical thrust restraint system throughout. Gate valves shall be resilient wedge, non-rising stem, 2-inch square operating nut, with valve box/cover per MAG Detail 391-1, Type A.

Work shall include the installation of a new 6-inch tee connection from the new water main, extending a new 6-inch diameter ductile iron pipe lead line with a new 6-inch gate valve and fittings to connect to the existing lead line from the existing hydrant. Contractor shall remove the existing water valve, box and cover, reconnect the existing hydrant to the new 6-inch DIP lead line, and adjust the new valve box and cover to finished grade. Contractor shall minimize disturbance to the existing hydrant location and assure existing hydrant is set to the proper grade and location with adequate backfill and compaction.

The bid item includes the cost of all labor, materials, fittings, and equipment necessary for excavation and trenching; legal disposal of excess excavated materials; placing and bedding of the fittings; placing polywrap around all DIP fittings and buried components; placement of tracer wire, backfilling the excavation up to existing grade with approved aggregate base course material covered with 12" of topsoil; and restoration of all existing landscaping to preconstruction conditions. Include in the cost all materials necessary to complete the installation in accordance with the Maricopa Association of Governments, Uniform Standard Specifications and Details for Public Works Construction, Detail 360-1, Detail 391-1 (Type C), and related specification sections and detail drawings.

Backfill for the removal trench/areas shall meet the requirements for trench backfill under pavements, aggregate driving/parking surfaces, and/or natural/landscaped areas as specified herein for the installation of water main pipe.

Measurement and Payment: Measurement shall be based on the number of installed and completed connections to the existing fire hydrant as determined by the County Inspector. Payment will be made at the bid unit price per each (EA) based on the measured quantity.

19. INSTALL STEEL CASING PIPE, 36" DIA, BY BORING AND JACKING

Specifications: Maricopa Association of Governments Uniform Standard Specifications and Details for Public Works Construction, Section 602, Section 610, Section 611, Section 759, and other related sections, specifications, and details.

Description: Installation of steel casing pipe by boring and jacking shall be completed in accordance with Section 602 of the MAG Standard Specifications and Details. The Contractor shall install steel casing pipe by horizontal earth boring and jacking beneath the existing box culverts at the locations shown on the plans for subsequent installation of the prescribed DIP waterline.

The steel casing pipe shall meet the requirements of MAG Specification Section 602, ASTM A283, and shall be 36-inch diameter with a minimum wall thickness of 0.375-inches. Casing spacers shall be a corrosion resistant material compatible with the ductile iron carrier pipe and approved by the County.

The work shall include all materials, equipment, and labor costs for trenchless installation of the steel casing pipe (36-inch diameter) including furnishing the pipe, boring/jacking equipment, casing spacers, bulkheads, excavation, shoring, and backfilling of boring/jacking and receiving pits, and installation of the casing pipe by boring and jacking.

Within the limits of existing or new pavement, the backfill of the bore pit shall be 1/2-sack CLSM per MAG Section 604. Outside the pavement limits, suitable native material or ABC is acceptable, placed and compacted in lifts per MAG Section 211. However, the new pipe trench backfill shall match the backfill requirements for pipe installation. The Engineer shall review and approve any proposed modifications to backfill of the bore pits.

Near the lower end of the casing pipe, the Contractor shall drill a 1" diameter hole in the bottom of the pipe to allow condensation to drain away and seep into the underlying soil. Provide a cubic foot of uniform graded rock, 1" to 2" nominal size, wrapped with highly permeable geotechnical fabric, installed directly beneath the drain hole to allow condensation water to freely drain away from the pipe and to help keep the drainage hole from plugging and clogging.

Measurement and Payment: Measurement will be based on the horizontal linear feet (LF) of steel casing pipe installed by boring and jacking from end of casing pipe to end of casing pipe.

Payment will be made at the bid unit price per linear feet (LF) based on the measured quantity for the complete installation of the steel casing pipe.

20. ROCK EXCAVATION (CONTINGENT ITEM)

Specifications: Maricopa Association of Governments Uniform Standard Specifications and Details for Public Works Construction Section 107, Section 201, Section 205, Section 301, Section 601, and other related sections.

Description: The work under this item shall consist of removing existing rock material for construction of the proposed waterline that cannot be otherwise accomplished using conventional excavating equipment. "Rock" includes all materials which, in the opinion of the Engineer, is too hard to simply excavate and it has to be removed by drilling, hammering, pneumatic hammers, blasting or other similar means.

The rock excavation work shall include loosening of the excavated material excavation, and properly disposing of all materials in the excavation areas in accordance with these specifications and in conformity with the limits, lines and grades shown on the plans or as established in the field by the Engineer.

The Contractor shall propose their rock excavation method to the Mohave County Engineer for review and approval.

Blasting, where approved, shall comply with MAG Section 107.8. The Contractor shall prevent damage outside the excavation limits, and shall prevent rocks and blast debris from entering adjacent properties. All damages resulting from rock excavation operations shall be repaired, and items replaced at the Contractor's expense to the satisfaction of the Engineer.

Work under this item shall include all labor, materials, and equipment, including public notice, traffic control, utility outages, repairs, and any related incidental items necessary to complete the work.

Measurement & Payment: Rock excavation will be the quantities measured prior to excavation based on the trench dimensions necessary to construct the water line to the lines and grades specified on the plans or as modified by the Engineer. Measurement will be based on the cubic yard (CY) of excavated material necessary, as determined by the Mohave County Inspector. The Contractor shall bear the expense of excavation outside the lines and grades shown on the plans or outside the limits established by the Engineer.

Payment will be made at the bid unit price per cubic yard (CY) based on the measured quantity and shall be considered full compensation for the work, including all incidental items necessary to complete the work.

21. TRAFFIC CONTROL

Specifications: Manual on Uniform Traffic Control Devices.

Description: Effective and safe traffic control is critically important for this project. The Contractor shall coordinate closely with Mohave County officials throughout the duration of the project to ensure safe passage of pedestrian, bicycle, and vehicular traffic through and around the construction work zones. Traffic control shall conform to the Manual on Uniform Traffic Control Devices.

This bid/construction item includes any and all traffic control supervisors, flaggers, barrels, cones, barricades, lights, signage, directional routing, and the development and implementation of an approved traffic control plan. This bid/construction item also includes the routine and daily maintenance of all traffic control devices to safeguard all travelers for the full duration of the project construction, including during nighttime hours.

Vehicular traffic passing through the construction zone shall be routed over a uniform durable driving surface at all times with no drop offs adjacent to traffic travel lanes greater than 2" at any time.

At least one traffic lane shall be provided during construction with appropriate flagging and traffic control for safe passage of vehicles, pedestrians, and bicyclists through the work zone.

Access to properties and dwelling units must be maintained to the greatest extent possible unless a minimum of 3 calendar days written notification is given to site residents including an estimated length of time for the entire duration of the planned closure; and all closures must be pre-approved by the County. The Contractor shall be responsible for individual notification to site users and occupants within the construction area whenever they are impacted by access restrictions, road closures, and construction activities impacting their recreational sites. The Contractor shall construct temporary driveway access ramps of aggregate base course material and maintain the ramps as needed to allow reasonable, continuous access to the properties to the greatest extent possible.

Traffic Control Plan: Prior to the start of work, the contractor shall submit a detailed "Traffic Control Plan" to Mohave County Public Works Department for approval. The plan will address and include:

- 1) A schedule for shutting down and reopening of streets/roads, site driveways, and/or sidewalk access with durations
- 2) Proposed signage indicating any applicable street and driveway closures or sidewalk detours
- 3) Signage and lighting layout and design in compliance with the MUTCD and other specifications
- 4) Overall total length (distance and duration) of street, driveway, and/or sidewalk access closures due to construction activities at any point in time during the overall project schedule
- 5) Construction staging and phasing to limit total length of closures at any time

Measurement and Payment: Measurement shall be on a lump sum (LS) basis for all labor, equipment, materials, rentals, and supplies involved in full time traffic control for the total duration of construction activities as required. Payment shall be a partial lump sum (LS) amount for the previous month based on the prorated percentage completion of the total contract amount and schedule duration (e.g. each

month of a 3-month project, the Contractor can submit a payment request for 1/3 the bid amount for traffic control).

22. MOBILIZATION

Specifications: Maricopa Association of Governments Uniform Standard Specifications and Details for Public Works Construction, Part 100, Section 109, and other related sections.

Description: The work under this item shall consist of preparatory work and operations, including but not limited to, the movement of personnel, equipment, materials, supplies, and incidentals to the project site; the establishment and on-going maintenance of restroom facilities; establishment and on-going maintenance of storage/staging facilities necessary for the prosecution of the work; project site restoration; and for all other work and operations that must be performed and costs incurred prior to beginning work and during the course of construction of the various items of work at the project site. The mobilization work shall also include demobilization including the movement of personnel, equipment, materials, supplies, tools, and other items from the site following completion of construction activities and restoration and clean-up of the overall project site and the Contractor storage and staging yard.

Project Site Restoration and Clean-up – Fine grading of disturbed surfaces; replacing in kind any landscape vegetation (trees, bushes, shrubs, succulents, flowers, etc.) damaged or removed during the construction of the project and related work; spreading new decomposed granite on disturbed surfaces where it existed prior to construction; returning all project areas and surrounding disturbed areas to their original condition (or better), and including reseeding, if necessary. Trees and shrubbery within the project right of way that conflict with the proposed improvements shall not be removed without prior approval from the County. Prior to final approval and acceptance of the work, the Contractor shall clean and repair nearby off-project roadways used or damaged during the course of construction for this project. The Contractor shall clean up and re-open individual roadway segments as soon as practical following construction affecting that roadway segment.

Contractor Storage and Staging Yard – The Contractor shall obtain approval of the property owner(s) and Mohave County when using vacant private property to park and service equipment, and/or to store materials for use on this project. The following conditions apply:

- a. The Contractor shall notify adjacent property owners/residents of this proposed use.
- b. Any use of vacant property adjacent to or near the project for parking or servicing equipment and/or storing of material will require the Contractor to obtain written approval from the property owner. This approval shall contain any requirements which are a condition of this approval.
- c. A copy of the property owner's approval shall be submitted along with the Contractor's request to the County for approval for the use of the marshaling yard in connection with the project. An appropriate distance from adjacent properties will be set by the Mohave County on a case by case basis based on the size and type of equipment to be used on the project.
- d. The yard shall be fenced and adequately dust-proofed in a manner such as to preclude dirt and dust blowing off the site and tracking of mud onto paved or unpaved streets.
- e. Work in the yard shall be scheduled so as to comply with the County's Noise Ordinance and other applicable ordinances, rules, and regulations pertaining to construction activities.

- f. Equipment, materials, supplies, etc., shall be located so as to minimize impact on adjacent properties. A sound barrier may be required if deemed necessary by the County.
- g. The Contractor shall clean up the property promptly upon completion of use and shall provide a signed property release as a condition of final acceptance.

The Contractor's request for approval of the storage and staging yard shall specify in detail how the Contractor proposes to comply with a. through g. above.

Storage and staging areas shall be provided with security fencing, scrubber pad to keep from tracking dirt/mud onto street surfaces, frequent housekeeping cleanup, and restoration of site to a condition as good if not better than found prior to construction. Storage and Staging Yard Clean-Up shall include fine grading of disturbed surfaces; spreading new decomposed granite on disturbed surfaces where it existed prior to construction; returning staging areas and surrounding disturbed areas to their original condition (or better), and including reseeding, if necessary.

Dust and Pollution Control – This bid item includes all costs associated with routine street sweeping as necessary to eliminate tracked dirt, mud, and debris from the project sites onto paved surfaces via construction vehicle traffic and domestic traffic as a storm water management, pollution, and sediment control mitigation measure. Sweeping and dust control shall be monitored and performed daily as needed and as may be directed by the County Inspector. Dust control measures (including spraying water and/or dust palliatives on disturbed ground surfaces) are to be employed as needed to minimize fugitive dust from project activities.

Measurement and Payment: 'MOBILIZATION' will be measured as a complete lump sum (LS) item of work. Payment will be made at the lump sum (LS) price indicated on the Bid Schedule, which amount shall be considered full compensation for the work as described herein and necessary for complete mobilization to the site and demobilization and clean-up when leaving the site. The lump sum amount shall be considered full compensation for all work associated with this bid item, whether specifically stated or not.

Include in the lump sum price all costs to mobilize for the project such as moving equipment, trucks, and personnel, both to the site and off the site upon completion of the work. Also include expenses for bonds, licenses, permits, project insurance, project coordination, materials, quality control testing, testing coordination, submittals, storage of materials, removal and disposal of construction debris, and the temporary supplies, power, and telephone, all necessary for the execution of the work.

Payment will be made in two equal portions:

- 1) The first half of the payment shall be made with the Contractor's initial billing invoice and shall be 1/2 (50%) of the contract lump sum amount for mobilization and site restoration.
- 2) The final half of the payment shall be made as part of the Contractor's final close-out billing invoice once the project has been fully completed and accepted by **Mohave County** and shall be 1/2 (50%) of the contract lump sum amount for mobilization and site restoration.

INCIDENTAL ITEMS

Any and all items of work to be provided by the Contractor that are not specifically listed in the Bid Schedule will NOT BE MEASURED OR PAID FOR SEPARATELY as they are considered “incidental” and “subsidiary” to the overall project. The cost associated with each incidental item of work shall be applied to its associated bid schedule line item or across all applicable bid schedule line items as most appropriate in the judgment of the Contractor.

The following is a list of some, but not all, construction items that are considered “incidental” to the construction project that shall be provided, but will not be paid for separately as a bid item:

- **Water Used by the Contractor for Construction Purposes**

The Contractor shall establish an account with the County to purchase water used at a nominal rate for construction purposes so the County has a record of water usage. The County will provide a meter for this purpose. The Contractor shall reimburse the County for the cost of water used for this project. The cost of associated work and the cost of water used are incidental to the overall project.

- **Construction Staking for all Improvements**

Cost for all labor, materials, and equipment associated with construction surveying and staking including, but not limited to, information gathering of existing elevations and the staking of waterlines, fixtures and appurtenances, utilities, removals and new paving, and other associated improvements for construction purposes. Any survey monuments that are disturbed during construction activities shall be replaced at the Contractor’s expense.

- **Record drawings**

Accurate red-lined “as-built” drawings of all pavements, street reconstruction, sidewalk and driveway construction, installed and constructed water lines and/or sewer lines, fixtures (including valves, meter boxes, and fittings), appurtenances, traffic signs, pavement markings, utilities, services, other improvements, and any encountered existing utility whether shown on the plans or not, shall be provided to the County and the Engineer of Record upon completion of the construction. The location of all installed features shall be dimensioned, with the location based on identifiable surface features. Two weeks prior to final contract settlement, full record (as-built) drawings and data will be required both in electronic file formats and in hard copy in triplicate.

▪ **Regular Construction Progress Meetings**

As directed by the County, the Contractor shall schedule and administer regular construction progress meetings and specially called meetings throughout the duration of work. The Contractor shall:

- a. Prepare agenda for meetings
- b. Distribute written notice of specially called meetings a minimum of 5 working days in advance of meeting date
- c. Make logistical arrangements for meetings
- d. Preside at meetings
- e. Record minutes; include significant proceedings and decisions
- f. Prepare formal minutes and distribute copies within 3 working days after each meeting to meeting participants, County representatives, engineer, and parties affected by decisions made at such meetings.

Representatives of the County, Contractor, Subcontractors, and Suppliers attending meetings shall be qualified and authorized to act on behalf of the entity each represents.

▪ **Quality Control Testing**

The Contractor is responsible for quality control testing. The Contractor shall provide the testing and inspection services required by the Contract Documents and other such test necessary to assure the quality of the work.

Contractor shall provide all pre-construction, during-construction, and post-construction testing required by the MAG standards and the project’s contract documents. Testing frequency minimums shall be governed first by current Maricopa Association of Governments, Uniform Standard Specifications and Details for Public Works Construction, and second by the Arizona Department of Transportation Materials Testing Manual-Series 900, Appendix C, and third by accepted industry standards.

The Contractor shall provide all test results to the County, the Engineer of Record, and the Inspector within 24 hours of completion of the testing.

The County may provide quality assurance testing as needed to verify the quality of the work and to satisfy themselves that the work has been constructed in compliance with the plans, specifications and contract documents.

The Contractor shall perform pipe flushing/cleaning, hydrostatic pressure testing, and disinfection/chlorination testing per MAG Sections 610 and 611.

- a. Pressure test, bacteria (BAC-T) test, and chlorine level test results shall be submitted to the Engineer.
- b. Contractor shall re-chlorinate and retest the pipe should any BAC-T test results be positive for bacteria presence.

Water mains shall be tested in accordance with AWWA standards.

Disinfection:

- a. Disinfection of water lines shall be completed in accordance with AWWA C651.
- b. Water quality test results shall be provided to the engineer.
- c. Test results shall indicate free chlorine content at initial sampling, at 24 hours, and after flushing.
- d. Contractor shall re-chlorinate and retest the pipe line should any bacteria test have positive results for the presence of bacteria.

Hydrostatic Pressure:

- a. Hydrostatic pressure testing results must be provided with the ADEQ Approval of Construction (AOC) application in order for the AOC permit to be issued.

▪ **Submittals**

Prior to the start of construction, the Contractor shall provide submittals to Mohave County for review and acceptance for the following materials and equipment:

- a. C900 PVC Pipe Water Main
- b. Ductile Iron Pipe Fittings
- c. Combined Air Release Valve (CARV)
- d. Service Saddle and Curb Stop/Angle Stop Valve
- e. Gate Valves
- f. Fire Hydrants

▪ **Other Items**

There may be other items of work shown and called for on the plans. Some of these items may specifically be labeled "No Pay Item – Incidental".

End of Technical Specifications Section



Richard A. Wallace