

ADDENDUM NO. 4

TO

BDVWA WATER SYSTEM IMPROVEMENTS AND CONSOLIDATION PROJECTS

October 20, 2026

All prospective bidders for the above-referenced project are to be aware that the following changes, additions, and/or clarifications shall be included as an integral part of the Contract Documents for the above-referenced project and that they are bound by the conditions set forth therein.

THIS ADDENDUM SHOULD BE ACKNOWLEDGED WHEN YOUR BID IS SUBMITTED.
FAILURE TO ACKNOWLEDGE THE ADDENDUM MAY CONSTITUTE GROUNDS FOR
REJECTION OF THE BID.

THE BIDDER SHALL ACKNOWLEDGE RECEIPT OF THIS ADDENDUM ON THE ADDENDA
ACKNOWLEDGEMENT FORM INCLUDED IN THE BID FORMS.

In accordance with the provisions of the Business and Professions Code of the State of California, this addendum has been prepared under the general supervision and direction of the following professional engineer, licensed in the State of California.

Jared Nelson

Name

Project Engineer

Title

California Rural Water Association

Company/Firm Name



Seal

October 20, 2026

Date

BIGHORN-DESERT VIEW WATER AGENCY

Water System Improvements and Consolidation Projects

ADDENDUM 4 October 20, 2026

This Addendum consists of the following Items:

- Title Page
- Project Questions/Answers
- Project Manual / Specification Amendments
- Attachment 1 – Amended Project Manual Sections

QUESTIONS – ANSWERS

1	Question: <i>I was just going through Addendum 3 and have a question about #21 on the Q&A: Regarding, Forshock it states that we must list them as a subcontractor; however, looking into them they do NOT have a contractors license. I called them to ask what it was and was told that they do not have a contractors license and will NOT be installing or doing any work on the project just providing a pre-assembled board and that OUR electrical sub would be doing the installation on and that they will be onsite to observe start-up only to make sure everything goes correctly. If they are not performing any work and only supplying material, why do we need to list them as a subcontractor?</i> Answer: Forshock is designated by the Agency as the required material/equipment supplier for Bid Item No. 26. The Contractor shall procure and coordinate the equipment, software, and technical services furnished by Forshock through the Contract. Forshock shall not be listed as a construction subcontractor on the Designation of Subcontractors form. The Contractor remains responsible for installation, coordination, testing, startup, and successful operation of the completed control system in accordance with the Contract Documents. This clarification supersedes all previous instructions in Addendum Nos. 1 and 3 requiring Forshock to be listed as a construction subcontractor.
2	Question: <i>We already have our Bid Bond using the form from Addendum 2. However, Addendum 3 has a revised Bid Bond form.</i> <i>Please advise if we can use our Bid Bond.</i> Answer: The Bid Bond form issued under Addendum No. 3 incorporates the revisions previously issued under Addendum No. 2. These earlier revisions are no longer shown in red because they have already been incorporated into the document. For clarification, additions and deletions shown in red within each Addendum represent only the changes made by that particular Addendum. Revisions incorporated from previous Addenda are shown as standard text. No additional substantive changes were made to the Bid Bond form under Addendum No. 3. Accordingly, bidders may use the Bid Bond form issued under Addendum No. 2, provided the revisions identified therein are incorporated and the bond otherwise complies with the Contract Documents. Where a document has been revised by multiple Addenda, the most recently issued revision shall govern.

SPECIFICATION AMENDMENTS

Item No.	Spec. Section	Description
1	01150 – Measurement and Payment	Part 2.30, Bid Item No. 26: Revised Paragraph A to identify Forshock as the Owner-Designated Equipment Supplier rather than a construction subcontractor. Added Paragraphs E and F to clarify the supplier's scope, the Contractor's electrical installation and coordination responsibilities, and restrictions on substitution of the designated supplier. The established allowance of \$41,750, including the Contractor's 13% markup, remains unchanged. Revised Section 01150 Measurement and Payment attached in its entirety, this Addendum.

Attachment 1 – Amended Project Manual Sections

SECTION 01150
MEASUREMENT AND PAYMENT

PART 1 - APPLICATIONS FOR PAYMENT

1.1 SUMMARY

- A. General work included in this Section:
 - 1. Measurement and Payment.

1.2 GENERAL

- A. Measurement and Payment shall be in accordance with Section III of the Special Conditions of Division 0. In the event of conflict between the technical specifications and the Section III of the Special Conditions, Section III shall govern.
- B. Submit Applications for Payment to Engineer in accordance with the schedule established by conditions of the Contract and Agreement between Owner and Contractor.
- C. Additional requirements specified elsewhere.
 - 1. Total Bid Price: Agreement.
 - 2. Progress payments, retainages, and final payment: Conditions of the Contract and Agreement.
 - 3. Schedule of Values: Section 01370.

1.3 FORMAT AND DATA REQUIRED

- A. Submit applications per form included Application for Payment with itemized data typed on 8-1/2 IN x 11 IN white paper continuation sheet.
- B. Provide itemized data on continuation sheet.
 - 1. Format, schedules, line items, and values: Those of the Schedule of Values.

1.4 PREPARATION OF APPLICATION FOR EACH PROGRESS PAYMENT

- A. Application form:
 - 1. Fill in the required information, including that for Change Orders executed prior to the date of submittal application.
 - 2. Fill in summary of dollar values to agree with the respective totals indicated on the continuation sheets.
 - 3. Execute certification with the signature of a responsible officer of the Contractor's firm.
- B. Continuation Sheets:
 - 1. Fill in total list of all scheduled component items of work with item number and the scheduled dollar value for each item.
 - 2. Fill in the dollar value in each column for each scheduled line item when work has been performed or products stored.
 - 3. List each Change Order executed prior to the date of submission at the end of the continuation sheets.
 - a. List by Change Order number and description, as for an original component item of work.

1.5 SUBSTANTIATING DATA FOR PROGRESS PAYMENTS

- A. When Owner or Engineer requires substantiating data, Contractor shall submit suitable information, with a cover letter identifying:
 - 1. Project.
 - 2. Application number and date.
 - 3. Detailed list of enclosures.
 - 4. For stored products:
 - a. Item number and identification as shown on application.
 - b. Description of specific material.
- B. Submit one copy of data and cover letter for each copy of application.

1.6 PREPARATION OF APPLICATION FOR FINAL PAYMENT

- A. Fill in application form as specified for progress payments.

1.7 SUBMITTAL PROCEDURE

- A. Submit Applications for Payment to Engineer as described in General Conditions.
- B. When Engineer finds the application properly completed and correct, he will transmit a Certificate for Payment to Owner, with a copy to Contractor.

PART 2 - PAYMENT FOR BID ITEMS

2.1 SUMMARY

- A. The Bid Amounts for Each Bid Item will be used for comparative bid analysis.
- B. The Bid Amounts will also form the basis of monthly progress payments. Each Lump Sum bid amount will undergo further breakdown as described in Section 01370, Schedule of Values.
- C. Quality of Work to be paid for under any items for which a unit price is fixed in Contract Documents shall be a number, as determined by Owner, of units of work satisfactorily completed in accordance with Contract Documents or as Directed by Owner. Unless otherwise provided, determination of number of units of work completed will be based, so far as practicable, on actual measurement or count within prescribed or ordered limits, and no payment will be made for work done outside of limits.
- D. Payment of Work governed by unit prices will be made on the basis of the actual measurements and quantities determined by the Engineer multiplied by the unit price of the Work which is incorporated in or made necessary by the Work.
- E. Progress payments on account of Unit Price Work will be based on the number of units completed during the monthly pay period.
- F. Bid Items are not intended to be exclusive descriptions of work categories, and the Contractor shall include in its pricing all labor, materials, equipment, overhead, profit, and incidentals necessary to complete the Work as shown on the Drawings and specified in the Contract Documents.

- G. Bid Items are established for the purpose of measurement and payment only and are not intended to define or limit the full extent of the Work required by the Contract Documents. Work shown on the Drawings or specified in the Specifications shall be considered included in the appropriate Bid Item, or in Bid Item No. 27 where not specifically measured under another Bid Item.
- H. No additional or separate payment will be made for work that is reasonably inferable from the Drawings and Specifications as being required for a complete and operable Project.
- I. All elements of the Work shall be encompassed within the sum of all bid items for a complete and working Project as shown on the Drawings and Specifications. No Additional Payment will be made for work shown on the Drawings and Specifications not specifically identified within a bid item description.
- J. Compensation for cleaning the trash removal associated with individual bid items shall be included within the price for that bid item.
- K. Compensation for excess excavation hauling to disposal site associated with individual bid items shall be included within the price for the bid item.
- L. Rock excavation, if any, is to be included with each bid item that contains excavation. No additional payment will be made for rock excavation.

2.2 NON-PAYMENT FOR REJECTED PRODUCTS

- A. Payment will not be made for any of the following:
 - 1. Products wasted.
 - 2. Products disposed of in a manner that is not acceptable.
 - 3. Products determined as unacceptable before or after placement.
 - 4. Products not completely unloaded from the transporting vehicle.
 - 5. Products placed beyond the lines and levels of the required Work.
 - 6. Products remaining on hand after completion of the Work.
 - 7. Loading, hauling, and disposing of rejected products, notwithstanding that payment shall be made for excess excavation within individual bid items, where the material is not usable as native fill, properly disposed, and made within the lines and levels of the Work.

2.3 BID ITEM NO. 1 – BONDS AND INSURANCE

- A. Measurement and payment shall be on a Lump Sum basis.
- B. The Lump Sum bid price shall include full compensation for furnishing and maintaining all required Performance, Payment, and Maintenance Bonds, and all insurance required by the Contract Documents, including premiums and administrative costs.
- C. Payment for bonds and insurance will be made upon receipt and acceptance of required bonds, insurance certificates, and endorsements. Payment shall not exceed the actual cost substantiated by invoices, and shall be subject to applicable retainage.

2.4 BID ITEM NO. 2 - MOBILIZATION/DEMobilIZATION (MAXIMUM AMOUNT 5% OF TOTAL BID PRICE)

- A. The lump sum bid for mobilization/demobilization shall not exceed five percent (5%) of the total bid price. Mobilization shall include: moving onto the site of all equipment; submittal and approval of initial project schedule and safety plan; obtaining and paying for all permits by other agencies as applicable; furnishing temporary construction utilities (temporary power, toilets, water, fences, etc.); installing construction signs; temporary buildings and field office trailer(s); and other construction all as required for the proper performance and completion of the work.
- B. Demobilization shall include site cleaning and restoration of surfaces within the job site, post-construction meeting, removal of all temporary facilities and equipment from the work area, disconnection of the temporary construction utilities, record drawings, and turnover of Project to the Owner.
- C. Contractor shall remove all debris, trash, excess soil, and unused material generated during construction. The contractor shall be responsible and pay for all hauling and applicable disposal costs.
- D. Mobilization/Demobilization will be paid in installments as follows
 - 1. Twenty-five percent (25%) upon issuance of Notice to Proceed and completion of initial mobilization activities (including delivery of major equipment, establishment of field office/temporary facilities, and submittal of initial project schedule and safety plan).
 - 2. Fifty percent (50%) when the Work is twenty-five percent (25%) complete.
 - 3. Twenty-five percent (25%) upon Substantial Completion and completion of demobilization activities, including site cleanup and removal of temporary facilities.
 - 4. Payment shall be subject to applicable retainage.
- E. Contractor may apply for payment of demobilization after the overall Project Substantial Completion is achieved and the Project begins to demobilize.
- F. The lump sum price shall be full compensation for the preparation and installation or submittal of these materials, and for all labor, equipment, tools and incidentals to complete this item.

2.5 BID ITEM NO. 3 – TRAFFIC CONTROL PLAN PREPARATION AND IMPLEMENTATION

- A. Measurement and payment for Traffic Control Plan Preparation and Implementation shall be lump sum. Payment will be made in proportion to the progress of the Work requiring traffic control, as determined by the Engineer.
- B. Traffic control shall conform to the California Manual on Uniform Traffic Control Devices (CA MUTCD), applicable permit requirements, and all Owner specifications. Traffic control shall be provided at all locations where construction activities occur within or adjacent to the traveled way or otherwise affect vehicular, bicycle, or pedestrian traffic, including but not limited to County roads, local streets, private access roads, driveways, and other areas where the Work encroaches upon the path of travel. Where work occurs within San Bernardino County right-of-way, traffic control shall also comply with the requirements of the County Encroachment Permit and/or Excavation Permits and applicable County

standards. The Contractor shall prepare and submit a Traffic Control Plan (TCP) for review and approval prior to beginning work in any area requiring traffic control.

- C. The lump sum price shall include furnishing all labor, materials, equipment, and incidentals necessary to prepare, implement, maintain, adjust, relocate, and remove the approved Traffic Control Plan. Work shall include, but is not limited to, preparation and submittal of Traffic Control Plans, all required signage and temporary traffic control devices, flaggers and flagging operations, temporary signals, arrow boards, and portable changeable message signs, barricades, cones, drums, delineators, and channelizing devices, K-rail concrete barriers and associated anchorage where required, temporary pavement markings and striping where required, maintenance and adjustment of traffic control throughout construction, removal of all temporary traffic control devices, and restoration of surfaces disturbed by traffic control operations. The Contractor shall provide all traffic control necessary to safely perform the Work, whether or not specifically shown on the Drawings, and as required by applicable standards, permits, or field conditions. Traffic control required for the Contractor's convenience or construction operations shall be included in this bid item and shall not be paid for separately.
- D. The lump sum price shall include all coordination necessary for implementation of traffic control, including coordination with agencies and service providers as required, including but not limited to: County agencies, Police and Fire Departments, School Districts, Utility companies, Postal service and waste collection providers, and adjacent property owners when access restrictions occur. This includes preparation and distribution of any required public notifications or advance notice of lane closures or road restrictions required by permits or applicable standards.
- E. The lump sum price shall include all traffic control required for the duration of the project, including initial installation, relocation, adjustment, maintenance, replacement, and removal of traffic control devices as construction operations progress or shift locations. No additional compensation will be provided for moving, resetting, or modifying traffic control devices required to accommodate the Contractor's operations.

2.6 BID ITEM NO. 4 – STORM WATER POLLUTION CONTROL

- A. Measurement and Payment by Lump Sum Paid on a Percent of Work Complete.
- B. Payment Basis Lump sum price for "Storm Water Pollution Control" includes full compensation for all labor, materials, equipment, services, and incidentals to comply with Section 01503 and applicable permits. This includes all Contractor services necessary to support obtaining and maintaining CGP coverage (Order WQ

2022-0057-DWQ), including preparation and management of NOI/WDID and SMARTS submittals (SWPPP upload, amendments, REAPs, reports, and NOT), and coordination with the Agency's Legally Responsible Person (LRP) or Duly Authorized Representative (DAR) for required electronic certification and submittal; preparation, certification, implementation, and updates of the SWPPP by a Qualified SWPPP Developer (QSD); retention of qualified QSD/QSP consultant(s) for inspections, monitoring, sampling, reporting, and LRP coordination; compliance with Flood District Permit No. FCCON-2025-00075 and CDFW LSAA requirements; installation, maintenance, inspection, repair, and removal of BMPs for erosion/sediment control, non-storm water pollution prevention, dewatering, waste handling, and pollutant discharge prevention; required inspections, training, preconstruction meeting, on-site records, reporting, and final stabilization/cleanup; and all permitting fees, QSD/QSP services, and corrective measures directed by the Engineer or regulatory agencies. No separate payment for components; all work included in lump sum unless otherwise specified.

- C. The lump sum price shall include all coordination necessary for implementation of traffic control and work within public rights-of-way, including coordination with agencies and service providers as required, including but not limited to: San Bernardino County Department of Public Works, County Road Inspector, Police and Fire Departments, School Districts, Utility companies, Postal service and waste collection providers, and adjacent property owners when access restrictions occur. This includes preparation and distribution of any required public notifications or advance notice of lane closures, road restrictions, or work within County right-of-way required by permits or applicable standards. For work subject to San Bernardino County Excavation Permit No. TREXC-2025-00579, and CoSB Special Districts Permit the lump sum price shall include required County inspector notification, public notification, maintaining required permit documents and traffic control plans on site, coordination with County field personnel, and adjustment of traffic control measures as required by the County permit, CA MUTCD, actual field conditions, or direction from the County Inspector or Engineer.

2.7 BID ITEM NO. 5 - ADEQUATE SHEETING, SHORING, AND BRACING, OR EQUIVALENT METHOD, FOR THE PROTECTION OF LIFE OR LIMB, CONFORMING TO APPLICABLE CALIFORNIA SAFETY ORDERS FOR ALL BID ITEMS, INCLUDING DEDUCTIVE ALTERNATIVES.

- A. Measurement and Payment by Lump Sum Paid on a Percent of Work Complete.
- B. Adequate Sheeting, Shoring, and Bracing shall include full compensation for furnishing all labor, materials, tools and equipment and for doing all the work required for providing necessary shoring and bracing per State of California Labor Code 6705 – Protection of Workers in Excavations.

- C. As required by Section 6705 of the California Labor Code and in addition thereto, whenever work under the Contract involves the excavation of any trench or trenches 5 feet or more in depth, the Contractor shall submit for acceptance by the Owner or by a registered civil or structural engineer, employed by the Owner, to whom authority to accept has been delegated, in advance of excavation, a detailed plan showing the design of shoring, bracing, sloping, or other provisions to be made for work protection from the hazard of caving ground during the excavation, of such trench or trenches.
- D. If such plan varies from the shoring system standards established by the Construction Safety Orders of the Division of Industrial Safety, the plan shall be prepared by a registered civil or structural engineer employed by the Contractor, and all costs therefore shall be included in the price named in the Contract for completion of the Work as set forth in the Contract Documents.
- E. Nothing in this Section shall be deemed to allow the use of a shoring, sloping, or other protective system less effective than that required by the Construction Safety Orders.
- F. Nothing in this Section shall be construed to impose tort liability on the Owner, or any of their officers, agents, representatives, or employees.

2.8 BID ITEM NO. 6 – Zone B 6-inch Transmission Pipeline

- A. Measurement and Payment shall be by Unit Price Per Linear Foot installed.
- B. Work shall conform to these contract plans and specifications.
- C. The footage of pipe to be paid for shall be the number of linear feet of pipe installed in-place complete, and approved. The footage of pipe shall be measured along the centerline of the pipe from one end, or connection to existing pipe, to the other end, or connection to new pipe, whichever is applicable. The unit price per linear foot shall include full compensation for furnishing and installing all **6-inch DR 14 AWWA C900 PVC** pipe and associated ductile iron fittings, tees, elbows, couplings, reducers; joint restraints, thrust blocks, connections, locating wire, service connections, and all appurtenances required to complete the pipeline installation regardless of the number, type, or configuration required. The unit price shall include all labor, materials and equipment required for potholing, trenching, saw cutting, paving demolition and disposal, dewatering, excavation and backfill, sand bedding and backfill in the pipe zone, backfill above the pipe zone, compaction, and all trench plating. Excavation unit prices exclude shoring/bracing, which shall be paid under bid item 5.
- D. Refer to Volume 1, sheets C205-C214 for pipeline details.
- E. The Contractor's bid price shall include all labor, equipment, and materials necessary to verify the location of existing utilities as required in Section 310523 of the Technical Specifications, including Utility Service Alert notifications, coordination with utility owners, and potholing required to expose and confirm existing utilities prior to installation of new pipe, fittings, and associated appurtenances.

- F. This bid item does not include the Zone B Flush Out Station (covered in bid item 11), PRV Station (covered in bid item 19), CAV assembly (covered in bid item 20), Blow Off Assembly (covered in bid item 21), and Trench Cutoff Walls (covered in bid item 22).
- G. The Contractors bid price shall include all costs for asbestos cement pipe removal, handling, and disposal for work at locations where the pipeline installation requires connecting to existing asbestos cement pipe. The contractor shall remove, handle, and dispose of asbestos cement pipe as outlined in Section 028213.19 of these contract documents.
- H. The Contractors bid price shall include all costs to perform and complete the work within the easements and work zone buffers shown within the drawings.
- I. The Contractor's bid price shall include all costs necessary to perform and complete the Work in compliance with the environmental requirements of the Contract Documents and all requirements applicable to the Contractor's Work under the California Department of Fish and Wildlife Streambed Alteration Agreement No. EPIMS-SBR-64495-R6, *Pipes Wash and Associated Streams*, the Western Joshua Tree Incidental Take Permit, and the San Bernardino County Flood Control District Permit, including required coordination, scheduling, access restrictions, work limits, and temporary protective measures. Prior to mobilization or commencement of any construction activity at the site, the Contractor shall attend a preconstruction biological coordination meeting with BDVWA and the Project Biologist to review the Contractor's responsibilities and applicable permit requirements. An overview of the Streambed Alteration Permit requirements is presented within Section II of the Special Conditions. The full document is included by reference in Attachment D.

2.9 BID ITEM NO. 7 – Warren Vista 6-inch Pipeline

- A. Measurement and Payment shall be by Unit Price Per Linear Foot installed.
- B. Work shall conform to these contract plans and specifications.
- C. The footage of pipe to be paid for shall be the number of linear feet of pipe installed in-place complete, and approved. The footage of pipe shall be measured along the centerline of the pipe from one end, or connection to existing pipe, to the other end, or connection to new pipe, whichever is applicable. The unit price per linear foot shall include full compensation for furnishing and installing all **6-inch DR 18 AWWA C900 PVC** pipe and associated ductile iron fittings, tees, elbows, couplings, reducers; joint restraints, thrust blocks, connections, locating wire, and all appurtenances required to complete the pipeline installation regardless of the number, type, or configuration required. The unit price shall include all labor, materials and equipment required for potholing, trenching, saw cutting, paving demolition and disposal, dewatering, excavation and backfill, sand bedding and backfill in the pipe zone, backfill above the pipe zone, compaction, and all trench plating. Excavation unit prices exclude shoring/bracing, which shall be paid under bid item 5.
- D. Refer to Volume 1, sheets C301-C304 for pipeline details.

- E. The Contractor's bid price shall include all labor, equipment, and materials necessary to verify the location of existing utilities as required in Section 310523 of the Technical Specifications, including Utility Service Alert notifications, coordination with utility owners, and potholing required to expose and confirm existing utilities prior to installation of new pipe, fittings, and associated appurtenances.
- F. This bid item does not include CAVs (covered in bid item 20) and Fire Hydrants (covered in bid item 23).
- G. The Contractors bid price shall include all costs for asbestos cement pipe removal, handling, and disposal for work at locations where the pipeline installation requires connecting to existing asbestos cement pipe. The contractor shall remove, handle, and dispose of asbestos cement pipe as outlined in Section 028213.19 of these contract documents.
- H. The Contractors bid price shall include all costs to perform and complete the work within the easements and shown within the drawings.
- I. The Contractors bid price shall include all costs to perform and complete the work while meeting the environmental requirements specified within the Special Provisions and as required by the WJT Incidental Take Permit.

2.10 BID ITEM NO. 8 – Winters Road (3) 6-inch Pipelines Common Trench

- A. Measurement and Payment shall be by Unit Price per Linear Foot (LF) of common trench installation.
- B. Work shall conform to the Contract Plans and Specifications.
- C. The footage to be paid for shall be the number of linear feet of common trench run in which three (3) 6-inch AWWA C900 PVC pipelines are installed complete and approved. The LF quantity shall be measured once along the alignment (centerline of trench / pipeline baseline as shown) from one end connection to the other, or from connection to existing piping to connection to new piping, whichever is applicable. The measured LF shall not be multiplied by three (3) for the number of pipelines installed within the common trench. The unit price per linear foot shall include full compensation for furnishing and installing associated ductile iron fittings, tees, elbows, couplings, reducers; joint restraints, thrust blocks, connections, locating wire, and all appurtenances required to complete the pipeline installation regardless of the number, type, or configuration required. The unit price shall include all labor, materials, and equipment required for trenching, saw cutting, pavement demolition and disposal, dewatering, excavation and backfill, bedding and pipe zone materials, backfill above the pipe zone, compaction, and trench plating. Excavation unit prices exclude shoring/bracing, which shall be paid under bid item 5.
- D. Refer to Volume 1, Sheets C401–C403 for pipeline details.

- E. The Contractor's bid price shall include all labor, equipment, and materials necessary to verify the location of existing utilities as required in Section 310523 of the Technical Specifications, including Utility Service Alert notifications, coordination with utility owners, and potholing required to expose and confirm existing utilities prior to installation of new pipe, fittings, and associated appurtenances.
- F. The Contractors bid price shall include all costs to perform and complete the work within the easements and shown within the drawings.
- G. The Contractors bid price shall include all costs to perform and complete the work while meeting the environmental requirements specified within the Special Provisions and as required by the WJT Incidental Take Permit.

2.11 BID ITEM NO. 9 – Rainbow Drive 6-inch Pipeline

- A. Measurement and Payment shall be by Unit Price Per Linear Foot installed.
- B. Work shall conform to these contract plans and specifications.
- C. The footage of pipe to be paid for shall be the number of linear feet of pipe installed in-place complete, and approved. The footage of pipe shall be measured along the centerline of the pipe from one end, or connection to existing pipe, to the other end, or connection to new pipe, whichever is applicable. The unit price per linear foot shall include full compensation for furnishing and installing all **6-inch DR 18 AWWA C900 PVC** pipe and associated ductile iron fittings, tees, elbows, couplings, reducers; joint restraints, thrust blocks, connections, locating wire, and all appurtenances required to complete the pipeline installation regardless of the number, type, or configuration required. The unit price shall include all labor, materials and equipment required for trenching, saw cutting, paving demolition and disposal, dewatering, excavation and backfill, sand bedding and backfill in the pipe zone, backfill above the pipe zone, compaction, and all trench plating. Excavation unit prices exclude shoring/bracing, which shall be paid under bid item 5.
- D. Refer to Volume 1, sheets C501-C502 for pipeline details.
- E. The Contractor's bid price shall include all labor, equipment, and materials necessary to verify the location of existing utilities as required in Section 310523 of the Technical Specifications, including Utility Service Alert notifications, coordination with utility owners, and potholing required to expose and confirm existing utilities prior to installation of new pipe, fittings, and associated appurtenances.
- F. This bid item does not include Fire Hydrants (covered in bid item 23).
- G. The Contractors bid price shall include all costs for asbestos cement pipe removal, handling, and disposal for work at locations where the pipeline installation requires connecting to existing asbestos cement pipe. The contractor shall remove, handle, and dispose of asbestos cement pipe as outlined in Section 028213.19 of these contract documents.
- H. The Contractors bid price shall include all costs to perform and complete the work within the easements and shown within the drawings.

- H. The Contractors bid price shall include all costs to perform and complete the work while meeting the environmental requirements specified within the Special Provisions and as required by the WJT Incidental Take Permit.

2.12 BID ITEM NO. 10 – Lanes End 6-inch Pipeline

- A. Measurement and Payment shall be by Unit Price Per Linear Foot installed.
- B. Work shall conform to these contract plans and specifications.
- C. The footage of pipe to be paid for shall be the number of linear feet of pipe installed in-place complete, and approved. The footage of pipe shall be measured along the centerline of the pipe from one end, or connection to existing pipe, to the other end, or connection to new pipe, whichever is applicable. The unit price per linear foot shall include full compensation for furnishing and installing all **6-inch DR 18 AWWA C900 PVC** pipe and associated ductile iron fittings, tees, elbows, couplings, reducers; joint restraints, thrust blocks, connections, locating wire, and all appurtenances required to complete the pipeline installation regardless of the number, type, or configuration required. The unit price shall include all labor, materials and equipment required for trenching, saw cutting, paving demolition and disposal, dewatering, excavation and backfill, sand bedding and backfill in the pipe zone, backfill above the pipe zone, compaction, and all trench plating. Excavation unit prices exclude shoring/bracing, which shall be paid under bid item 5.
- D. Refer to Volume 1, sheet C601 for pipeline details.
- E. The Contractor's bid price shall include all labor, equipment, and materials necessary to verify the location of existing utilities as required in Section 310523 of the Technical Specifications, including Utility Service Alert notifications, coordination with utility owners, and potholing required to expose and confirm existing utilities prior to installation of new pipe, fittings, and associated appurtenances.
- F. This bid item does not include Fire Hydrants (covered in bid item 23).
- G. The Contractors bid price shall include all costs for asbestos cement pipe removal, handling, and disposal for work at locations where the pipeline installation requires connecting to existing asbestos cement pipe. The contractor shall remove, handle, and dispose of asbestos cement pipe as outlined in Section 028213.19 of these contract documents.
- H. The Contractors bid price shall include all costs to perform and complete the work within the easements and shown within the drawings.
- I. The Contractors bid price shall include all costs to perform and complete the work while meeting the environmental requirements specified within the Special Provisions and as required by the WJT Incidental Take Permit.

2.13 BID ITEM NO. 11 – Zone B Flush Out Station

- A. Measurement and Payment by Lump Sum Paid of Full Compensation for Each assembly.

- B. The Zone B Flush Out Station shall be measured by a complete and in-place assembly Per Volume 1 Detail 2/C705 as shown on the drawings. The contractor is responsible for coordinating final location with owner prior to installation and shall coordinate all installation with final road restoration work.
- C. The payment for each Flush Out Station assembly shall include full compensation for furnishing all labor, material, tools, and equipment required to install the Flush Out Station assembly complete and in-place from the main pipeline to the Flush Out Station location. This shall include, but not limited to, pipe, pipe saddle, fittings, thrust blocks, mechanical restraints; pre-cast concrete for vault; magnetic flow meters, pressure reducing valve, and any appurtenances and incidentals necessary to complete the Flush Out Station assembly. This item includes box adjustments to grade. The standpipe associated with this flushout shall be incidental to this bid item and is not counted under Bid Item 21.
- D. The Contractors bid price shall include all costs to perform and complete the work within the easements and shown within the drawings.
- E. The Contractors bid price shall include all costs to perform and complete the work while meeting the environmental requirements specified within the Special Provisions and as required by the WJT Incidental Take Permit.

2.14 BID ITEM NO. 12 – Reche Road and D-1 Pumpstation 8-inch Pipeline

- A. Measurement and Payment shall be by Unit Price Per Linear Foot installed.
- B. Work shall conform to these contract plans and specifications.
- C. The footage of pipe to be paid for shall be the number of linear feet of pipe installed in-place complete, and approved. The footage of pipe shall be measured along the centerline of the pipe from one end, or connection to existing pipe, to the other end, or connection to new pipe, whichever is applicable. The unit price per linear foot shall include full compensation for furnishing and installing all **8-inch DR 18 AWWA C900 PVC** pipe and associated ductile iron fittings, tees, elbows, couplings, reducers; joint restraints, thrust blocks, connections, locating wire, and all appurtenances required to complete the pipeline installation regardless of the number, type, or configuration required. The unit price shall include all labor, materials and equipment required for trenching, saw cutting, paving demolition and disposal, dewatering, excavation and backfill, sand bedding and backfill in the pipe zone, backfill above the pipe zone, compaction, all trench plating, temporary cold patch asphalt and hot mix asphalt pavement restoration. Excavation unit prices exclude shoring/bracing, which shall be paid under bid item 5.
- D. Refer to Volume 2, sheet C-01 for pipeline details.
- E. The Contractor's bid price shall include all labor, equipment, and materials necessary to verify the location of existing utilities as required in Section 310523 of the Technical Specifications, including Utility Service Alert notifications, coordination with utility owners, and potholing required to expose and confirm existing utilities prior to installation of new pipe, fittings, and associated appurtenances.
- F. This bid item does not include the Blow Off Assembly (covered in bid item 21).

- G. The Contractors bid price shall include all costs for asbestos cement pipe removal, handling, and disposal for work at locations where the pipeline installation requires connecting to existing asbestos cement pipe. The contractor shall remove, handle, and dispose of asbestos cement pipe as outlined in Section 028213.19 of these contract documents.
- H. The Contractors bid price shall include all costs to perform and complete the work within the easements and shown within the drawings.
- I. The Contractors bid price shall include all costs to perform and complete the work while meeting the environmental requirements specified within the Special Provisions and as required by the WJT Incidental Take Permit.
- J. The Contractor's bid price shall include all labor, materials, equipment, and incidentals necessary to perform the work within San Bernardino County right-of-way in compliance with the County Excavation Permit and applicable County requirements. This includes protection of existing pavement, shoulders, drainage facilities, signs, striping, monuments, utilities, and other existing improvements; restoration of disturbed shoulder and roadside areas; compaction and grading of trench backfill; removal of loose material from paved surfaces; and repair of pavement, shoulder, drainage, or roadway damage caused by Contractor operations to the satisfaction of San Bernardino County Department of Public Works. No separate payment will be made for such protection, coordination, cleanup, or restoration.

2.16 BID ITEM NO. 13 – Stearman Road 8-inch Pipeline

- A. Measurement and Payment shall be by Unit Price Per Linear Foot installed.
- B. Work shall conform to these contract plans and specifications.
- C. The footage of pipe to be paid for shall be the number of linear feet of pipe installed in-place complete, and approved. The footage of pipe shall be measured along the centerline of the pipe from one end, or connection to existing pipe, to the other end, or connection to new pipe, whichever is applicable. The unit price per linear foot shall include full compensation for furnishing and installing all **8-inch DR 18 AWWA C900 PVC** pipe and associated ductile iron fittings, tees, elbows, couplings, reducers; joint restraints, thrust blocks, connections, locating wire, and all appurtenances required to complete the pipeline installation regardless of the number, type, or configuration required. The unit price shall include all labor, materials and equipment required for trenching, saw cutting, paving demolition and disposal, dewatering, excavation and backfill, sand bedding and backfill in the pipe zone, backfill above the pipe zone, compaction, and all trench plating. Excavation unit prices exclude shoring/bracing, which shall be paid under bid item 5.
- D. Refer to Volume 2, sheet C-02 for pipeline details.

- E. The Contractor's bid price shall include all labor, equipment, and materials necessary to verify the location of existing utilities as required in Section 310523 of the Technical Specifications, including Utility Service Alert notifications, coordination with utility owners, and potholing required to expose and confirm existing utilities prior to installation of new pipe, fittings, and associated appurtenances.
- F. This bid item does not include CAVs (covered in bid item 20) and Fire Hydrants (covered in bid item 23).
- G. The Contractors bid price shall include all costs to perform and complete the work within the easements and shown within the drawings.
- H. The Contractors bid price shall include all costs to perform and complete the work while meeting the environmental requirements specified within the Special Provisions and as required by the WJT Incidental Take Permit.

2.17 BID ITEM NO. 14 – Osgood Avenue 6-inch Pipeline

- A. Measurement and Payment shall be by Unit Price Per Linear Foot installed.
- B. Work shall conform to these contract plans and specifications.
- C. The footage of pipe to be paid for shall be the number of linear feet of pipe installed in-place complete, and approved. The footage of pipe shall be measured along the centerline of the pipe from one end, or connection to existing pipe, to the other end, or connection to new pipe, whichever is applicable. The unit price per linear foot shall include full compensation for furnishing and installing all **6-inch DR 18 AWWA C900 PVC** pipe and associated ductile iron fittings, tees, elbows, couplings, reducers; joint restraints, thrust blocks, connections, locating wire, and all appurtenances required to complete the pipeline installation regardless of the number, type, or configuration required. The unit price shall include all labor, materials and equipment required for trenching, saw cutting, paving demolition and disposal, dewatering, excavation and backfill, sand bedding and backfill in the pipe zone, backfill above the pipe zone, compaction, and all trench plating. Excavation unit prices exclude shoring/bracing, which shall be paid under bid item 5.
- D. Refer to Volume 2, sheet C-03 & C-04 for pipeline details.
- E. The Contractor's bid price shall include all labor, equipment, and materials necessary to verify the location of existing utilities as required in Section 310523 of the Technical Specifications, including Utility Service Alert notifications, coordination with utility owners, and potholing required to expose and confirm existing utilities prior to installation of new pipe, fittings, and associated appurtenances.
- F. This bid item does not include CAVs (covered in bid item 20).
- G. The Contractors bid price shall include all costs for asbestos cement pipe removal, handling, and disposal for work at locations where the pipeline installation requires connecting to existing asbestos cement pipe. The contractor shall remove, handle, and dispose of asbestos cement pipe as outlined in Section 028213.19 of these contract documents.
- H. The Contractors bid price shall include all costs to perform and complete the work within the easements and shown within the drawings.

- I. The Contractors bid price shall include all costs to perform and complete the work while meeting the environmental requirements specified within the Special Provisions and as required by the WJT Incidental Take Permit.

2.19 BID ITEM NO. 15 – Reche Road 6-inch Pipeline

- A. Measurement and Payment shall be by Unit Price Per Linear Foot installed.
- B. Work shall conform to these contract plans and specifications.
- C. The footage of pipe to be paid for shall be the number of linear feet of pipe installed in-place complete, and approved. The footage of pipe shall be measured along the centerline of the pipe from one end, or connection to existing pipe, to the other end, or connection to new pipe, whichever is applicable. The unit price per linear foot shall include full compensation for furnishing and installing all **6-inch DR 18 AWWA C900 PVC** pipe and associated ductile iron fittings, tees, elbows, couplings, reducers; joint restraints, thrust blocks, connections, locating wire, and all appurtenances required to complete the pipeline installation regardless of the number, type, or configuration required. The unit price shall include all labor, materials and equipment required for trenching, saw cutting, paving demolition and disposal, dewatering, excavation and backfill, sand bedding and backfill in the pipe zone, backfill above the pipe zone, compaction, and all trench plating. Excavation unit prices exclude shoring/bracing, which shall be paid under bid item 5.
- D. Refer to Volume 2, sheet C-05 for pipeline details.
- E. The Contractor's bid price shall include all labor, equipment, and materials necessary to verify the location of existing utilities as required in Section 310523 of the Technical Specifications, including Utility Service Alert notifications, coordination with utility owners, and potholing required to expose and confirm existing utilities prior to installation of new pipe, fittings, and associated appurtenances.
- F. This bid item does not include Fire Hydrants (covered in bid item 23).
- G. The Contractors bid price shall include all costs for asbestos cement pipe removal, handling, and disposal for work at locations where the pipeline installation requires connecting to existing asbestos cement pipe. The contractor shall remove, handle, and dispose of asbestos cement pipe as outlined in Section 028213.19 of these contract documents.
- H. The Contractors bid price shall include all costs to perform and complete the work within the easements and shown within the drawings.
- I. The Contractors bid price shall include all costs to perform and complete the work while meeting the environmental requirements specified within the Special Provisions and as required by the WJT Incidental Take Permit.
- J. The Contractor's bid price shall include all labor, materials, equipment, and incidentals necessary to perform the work within San Bernardino County right-of-way in compliance with the County Excavation Permit and applicable County requirements. This includes protection of existing pavement, shoulders, drainage facilities, signs, striping, monuments, utilities, and other existing improvements; restoration of disturbed shoulder

and roadside areas; compaction and grading of trench backfill; removal of loose material from paved surfaces; and repair of pavement, shoulder, drainage, or roadway damage caused by Contractor operations to the satisfaction of San Bernardino County Department of Public Works. No separate payment will be made for such protection, coordination, cleanup, or restoration.

2.20 BID ITEM NO. 16 – Alta Avenue 6-inch Pipeline

- A. Measurement and Payment shall be by Unit Price Per Linear Foot installed.
- B. Work shall conform to these contract plans and specifications.
- C. The footage of pipe to be paid for shall be the number of linear feet of pipe installed in-place complete, and approved. The footage of pipe shall be measured along the centerline of the pipe from one end, or connection to existing pipe, to the other end, or connection to new pipe, whichever is applicable. The unit price per linear foot shall include full compensation for furnishing and installing all **6-inch DR 18 AWWA C900 PVC** pipe and associated ductile iron fittings, tees, elbows, couplings, reducers; joint restraints, thrust blocks, connections, locating wire, and all appurtenances required to complete the pipeline installation regardless of the number, type, or configuration required. The unit price shall include all labor, materials and equipment required for trenching, saw cutting, paving demolition and disposal, dewatering, excavation and backfill, sand bedding and backfill in the pipe zone, backfill above the pipe zone, compaction, and all trench plating. Excavation unit prices exclude shoring/bracing, which shall be paid under bid item 5.
- D. Refer to Volume 2, sheets C-06, C-07, C-08 and C-09 for pipeline details.
- E. The Contractor's bid price shall include all labor, equipment, and materials necessary to verify the location of existing utilities as required in Section 310523 of the Technical Specifications, including Utility Service Alert notifications, coordination with utility owners, and potholing required to expose and confirm existing utilities prior to installation of new pipe, fittings, and associated appurtenances.
- F. This bid item does not include the PRV Station (covered in bid item 19), CAVs (covered in bid item 20), the Blow Off Assembly (covered in bid item 21), and Fire Hydrants (covered in bid item 23).
- G. The Contractors bid price shall include all costs for asbestos cement pipe removal, handling, and disposal for work at locations where the pipeline installation requires connecting to existing asbestos cement pipe. The contractor shall remove, handle, and dispose of asbestos cement pipe as outlined in Section 028213.19 of these contract documents.
- H. The Contractors bid price shall include all costs to perform and complete the work within the easements and shown within the drawings.
- I. The Contractors bid price shall include all costs to perform and complete the work while meeting the environmental requirements specified within the Special Provisions and as required by the WJT Incidental Take Permit.

2.21 BID ITEM NO. 17 – North Kuna Avenue 6-inch Pipeline

- A. Measurement and Payment shall be by Unit Price Per Linear Foot installed.
- B. Work shall conform to these contract plans and specifications.
- C. The footage of pipe to be paid for shall be the number of linear feet of pipe installed in-place complete, and approved. The footage of pipe shall be measured along the centerline of the pipe from one end, or connection to existing pipe, to the other end, or connection to new pipe, whichever is applicable. The unit price per linear foot shall include full compensation for furnishing and installing all **6-inch DR 18 AWWA C900 PVC** pipe and associated ductile iron fittings, tees, elbows, couplings, reducers; joint restraints, thrust blocks, connections, locating wire, and all appurtenances required to complete the pipeline installation regardless of the number, type, or configuration required. The unit price shall include all labor, materials and equipment required for trenching, saw cutting, paving demolition and disposal, dewatering, excavation and backfill, sand bedding and backfill in the pipe zone, backfill above the pipe zone, compaction, and all trench plating. Excavation unit prices exclude shoring/bracing, which shall be paid under bid item 5.
- D. Refer to Volume 2, sheets C-10, C-11, and C-12 for pipeline details.
- E. The Contractor's bid price shall include all labor, equipment, and materials necessary to verify the location of existing utilities as required in Section 310523 of the Technical Specifications, including Utility Service Alert notifications, coordination with utility owners, and potholing required to expose and confirm existing utilities prior to installation of new pipe, fittings, and associated appurtenances.
- F. This bid item does not include the PRV Station (covered in bid item 19), CAVs (covered in bid item 20), and Fire Hydrants (covered in bid item 23).
- G. The Contractors bid price shall include all costs for asbestos cement pipe removal, handling, and disposal for work at locations where the pipeline installation requires connecting to existing asbestos cement pipe. The contractor shall remove, handle, and dispose of asbestos cement pipe as outlined in Section 028213.19 of these contract documents.
- H. The Contractors bid price shall include all costs to perform and complete the work within the easements and shown within the drawings.
- I. The Contractors bid price shall include all costs to perform and complete the work while meeting the environmental requirements specified within the Special Provisions and as required by the WJT Incidental Take Permit.

2.22 BID ITEM NO. 18 – Yucca Mesa Road Interties

- A. Measurement and Payment by Lump Sum Paid of Full Compensation for Each assembly, (2) two assemblies in total.

- B. The Yucca Mesa Road Interties shall be measured by a complete and in-place installation per Volume 2 Sheet C-13 Details 1 and 2. The contractor is responsible for coordinating final location with owner prior to installation and shall coordinate all installation with final road restoration work.
- C. The payment for each Yucca Mesa Road Intertie shall include full compensation for furnishing all labor, material, tools, and equipment required to install the Interties complete and in-place from the main pipeline to the Intertie location. This shall include, but not limited to, pipe, fittings, restraints, adapters, thrust blocks, valves, and any appurtenances and incidentals necessary to complete the Interties.
- D. The Contractor's bid price shall include all labor, equipment, and materials necessary to verify the location of existing utilities as required in Section 310523 of the Technical Specifications, including Utility Service Alert notifications, coordination with utility owners, and potholing required to expose and confirm existing utilities prior to installation of new pipe, fittings, and associated appurtenances.
- E. The Contractors bid price shall include all costs for asbestos cement pipe removal, handling, and disposal for work at locations where the pipeline installation requires connecting to existing asbestos cement pipe. The contractor shall remove, handle, and dispose of asbestos cement pipe as outlined in Section 028213.19 of these contract documents.
- F. This bid item does not include the PRV Station (covered in bid item 19).
- G. The Contractors bid price shall include all costs to perform and complete the work within the easements and shown within the drawings.
- H. The Contractors bid price shall include all costs to perform and complete the work while meeting the environmental requirements specified within the Special Provisions and as required by the WJT Incidental Take Permit.

2.23 BID ITEM NO. 19 – PRV Station

- A. Measurement and Payment by Lump Sum Paid of Full Compensation for Each assembly.
- B. The PRV Station assembly shall be measured by a complete and in-place assembly as shown in Volume 2 Details 1, 2, and 3 on sheet C-23 and as shown in Volume 1 on sheet C708. The contractor is responsible for coordinating final location with owner prior to installation and shall coordinate all installation with final road restoration work.
- C. The payment for each PRV Station assembly shall include full compensation for furnishing all labor, material, tools, and equipment required to install the PRV Station assembly complete and in-place from the main pipeline to the PRV Station location. This shall include, but not limited to, site piping to adjacent mainline, ductile iron pipe fittings, pipe saddle, fittings, restraints including bolts and washers; valves, and any appurtenances and incidentals necessary to complete the PRV Station assembly. This item includes box adjustments to grade. This bid item also includes flow meter stations as indicated on each PRV station site plan. This bid item does not include Combination Air Valve assemblies.

- D. The Contractors bid price shall include all costs to perform and complete the work within the easements and shown within the drawings.
- E. The Contractors bid price shall include all costs to perform and complete the work while meeting the environmental requirements specified within the Special Provisions and as required by the WJT Incidental Take Permit.

2.24 BID ITEM NO. 20 – Combination Air Valve

- A. Measurement and Payment by Lump Sum Paid of Full Compensation for Each assembly.
- B. The combination air valve (CAV) assembly shall be measured by a complete and in-place assembly Per Volume 1 Detail 1 Sheet C703 and Per Volume 2 Detail 4 Sheet C-16; as shown on the drawings. The contractor is responsible for coordinating the final location with the owner prior to installation.
- C. The payment for the CAV assembly shall include full compensation for furnishing all labor, material, tools, and equipment required to install the CAV assembly complete and in place from the main pipeline to the valve, to the setting of the foundation. This shall include, but not limited to, valves; enclosure; pipe, pipe saddle, fittings, restraints including bolts and washers; tracer wire; 10-mil polyethylene wrap; excavation and backfill; utility marker, and any appurtenances and incidentals necessary to complete the CAV assembly. This item includes box adjustments to grade.
- D. The Contractors bid price shall include all costs to perform and complete the work within the easements and shown within the drawings.
- E. The Contractors bid price shall include all costs to perform and complete the work while meeting the environmental requirements specified within the Special Provisions and as required by the WJT Incidental Take Permit.

2.25 BID ITEM NO. 21 – Blow Off

- A. Measurement and Payment by Lump Sum of Full Compensation for Each assembly.
- B. The blow-off assembly shall be measured by a complete and in-place assembly Per Volume 1 Detail 2 Sheet C703 and Per Volume 2 Detail 2 Sheet C-15; as shown on the drawings. The contractor is responsible for coordinating final location with the owner prior to installation.
- C. The payment for the blow-off assembly shall include full compensation for furnishing all labor, material, tools, and equipment required to install the blow-off assembly complete and in place from the new waterline to the setting of the per-cast box. This shall include, but not limited to, valves; pre-cast traffic box and lid; pipe, pipe saddle, flushing hydrant connection, fittings, restraints including bolts and washers; tracer wire; concrete; valve boxes and covers, 10-mil polyethylene wrap; excavation and backfill; thrust blocks, and any appurtenances and incidentals necessary to complete the blow-off. This item includes box adjustments to grade.
- D. This bid does not include the permanent pavement replacement that will be paid under separate bid items.

- E. The Contractors bid price shall include all costs to perform and complete the work within the easements and shown within the drawings.
- F. The Contractors bid price shall include all costs to perform and complete the work while meeting the environmental requirements specified within the Special Provisions and as required by the WJT Incidental Take Permit.

2.26 BID ITEM NO. 22 – Trench Cutoff Wall

- A. Measurement and Payment by Lump Sum of Full Compensation for Each assembly.
- B. The Trench Cutoff Wall Assembly shall be measured by a complete and in-place assembly Per Volume 1 Detail 1 Sheet C704 as shown on the drawings. The contractor is responsible for coordinating final location with owner prior to installation.
- C. The payment for each Trench Cutoff Wall assembly shall include full compensation for furnishing all labor, material, tools, and equipment required to install the Trench Cutoff Wall assembly complete and in-place from the main pipeline to the Trench Cutoff Wall location. This shall include, but not limited to, concrete, plywood (for casting a mold), and any appurtenances and incidentals necessary to complete the Trench Cutoff Wall assembly. This item includes box adjustments to grade.
- D. The Contractors bid price shall include all costs to perform and complete the work within the easements and shown within the drawings.
- E. The Contractors bid price shall include all costs to perform and complete the work while meeting the environmental requirements specified within the Special Provisions and as required by the WJT Incidental Take Permit.

2.27 BID ITEM NO. 23 – Fire Hydrant

- A. Measurement and Payment by Lump Sum of Full Compensation for Each assembly regardless of connection size.
- B. The Fire Hydrant assembly shall be measured by a complete and in-place assembly Per Volume 1 Detail 5 Sheet C703 and Per Volume 2 Detail 3 Sheet C-16; as shown on the drawings. Contractor is responsible for coordinating final location with owner prior to installation and shall coordinate all installation with final road restoration work.

- C. The payment for each Fire Hydrant assembly shall include full compensation for furnishing all labor, material, tools, and equipment required to install the fire hydrant assembly complete and in place from the main pipeline to the fire hydrant location. This shall include, but not limited to, saw cutting, paving demolition and disposal, hard scrap restoration, new fire hydrant, isolating valve and valve box, concrete pad around valve box (when specified in specifications or plans), piping, anchoring tee at main, anchoring couplings, fire hydrant extension, excavation, concrete blocking, granular drainage material, backfill, restoration, testing, and flushing, to install a new fire hydrant assembly as indicated on plans and on standard drawings complete and ready for use.
- D. This bid item does not include the permanent pavement replacement that will be paid under separate bid item.
- E. The Contractors bid price shall include all costs to perform and complete the work within the easements and shown within the drawings.
- F. The Contractors bid price shall include all costs to perform and complete the work while meeting the environmental requirements specified within the Special Provisions and as required by the WJT Incidental Take Permit.

2.28 BID ITEM NO. 24 – Zone B Booster Pump Station

- A. Measurement and Payment by Lump Sum Paid on a Percent of Work Complete.
- B. The Zone B Pump Station shall be measured and paid per complete in-place as shown in the Plans and Details of Volume 3 Drawings. The Contractor shall include all labor, equipment, and materials necessary for a complete and operating booster pump station.
- C. The payment for the Zone B Pump Station shall include full compensation for furnishing all labor, material, tools, and equipment required to provide and install the pump station building, pumps, electrical equipment, and accessories. This item shall include all structures, (2) multi-stage vertical inline pumps, piping, fittings, instrumentation, valves, actuators, electrical service, electrical components, flow meters, telemetry, building materials, concrete, site grading, site improvements, fencing and gates, potholing, excavation, backfill, testing and disinfection, and any other appurtenances, labor, equipment, to complete the pump station installation as required by the plans, standard drawings, and specifications, complete and ready for use.
- D. This bid item includes pump and instrumentation Manufacturer's field, startup and training services.
- E. This bid item does not include SCADA and PLC Customized Programming Work.
- F. The Contractors bid price shall include all costs to perform and complete the work within the easements and shown within the drawings.
- G. The Contractors bid price shall include all costs to perform and complete the work while meeting the environmental requirements specified within the Special Provisions and as required by the WJT Incidental Take Permit.

2.29 BID ITEM NO. 25 – Zone D1 Booster Pump Station Improvements

- A. Measurement and Payment by Lump Sum Paid on a Percent of Work Complete.
- B. The Zone D1 Booster Pump Station Improvements shall be measured and paid per complete in-place as shown in the Plans and Details of Volume 3 Drawings. The Contractor shall include all labor, equipment, and materials necessary for a complete and operating booster pump station.
- C. The payment for the Zone D1 Pump Station Improvements shall include full compensation for furnishing all labor, material, tools, and equipment required to provide and install the vertical turbine pump, electrical equipment, and accessories. This item shall include all structures, piping, fittings, valving, instrumentation, valves, electrical service, electrical components, flow meters, telemetry, building materials, concrete, site improvements, potholing, excavation, backfill, testing and disinfection, and any other appurtenances, labor, equipment, to complete the pump station installation as required by the plans, standard drawings, and specifications, complete and ready for use.
- D. This bid item includes pump and instrumentation Manufacturer's field, startup and training services.
- E. This bid item does not include SCADA and PLC Customized Programming Work.
- F. The Contractors bid price shall include all costs to perform and complete the work within the easements and shown within the drawings.
- G. The Contractors bid price shall include all costs to perform and complete the work while meeting the environmental requirements specified within the Special Provisions and as required by the WJT Incidental Take Permit.

2.30 BID ITEM NO. 26 – FORSHOCK FOR ALL SCADA AND PLC CUSTOMIZED PROGRAMMING WORK

- A. Measurement and Payment by a lump sum allowance paid in the amount of **\$41,750** shall be included in the Contract Price for Forshock PLC/SCADA control system work associated with the D1 Booster Pump Improvements and Zone B Booster Pump Station Improvements, as shown on the Volume 3 Drawings and described in the Contract Specifications. This allowance includes the Contractor's markup of thirteen percent (13%) for overhead and profit. ~~Forshock shall perform the following work as the Owner-designated PLC/SCADA subcontractor retained by the Contractor.~~ Forshock shall furnish the equipment, software, programming, and related technical services described herein as the Owner-Designated Equipment Supplier, retained by the Contractor. Forshock shall not be required to be listed as a construction subcontractor on the Bid Forms – Designation of Subcontractors.

- B. This bid item shall include payment for the D1 Booster Pump Improvements consisting of full compensation for PLC and SCADA programming services furnished by Forshock. The allowance shall include all labor, software development, programming, startup assistance, mileage, travel, and other incidentals required to modify, test, and commission the existing PLC/SCADA system for the D1 Booster Pump Improvements.
- C. This bid item shall also include payment for the Zone B Booster Pump Station Improvements consisting of full compensation for furnishing the Forshock PLC/SCADA Control System, including the PLC/RTU control panel and enclosure, associated radio communications equipment, PLC and HMI programming, software development, startup assistance, mileage, travel, and all other labor, materials, equipment, and incidentals required to provide the Forshock PLC/SCADA Control System complete. The PLC/RTU control panel enclosure and HMI enclosure shall be furnished by Forshock and installed by the Contractor as indicated on the Drawings.
- D. The Contractor shall coordinate procurement, delivery, installation, testing, and commissioning of the Forshock PLC/SCADA Control System directly with Forshock, the electrical work, and all other affected trades to provide a complete and fully operational control system.
- E. Forshock's responsibilities shall be limited to furnishing the specified control equipment, software development, PLC/HMI programming, software integration, and technical assistance during startup and commissioning, including software configuration, troubleshooting, and adjustments. Forshock shall not perform equipment installation, field wiring, electrical connections, or other construction work requiring a California contractor's license. Such work shall be performed by the Contractor or its appropriately licensed electrical subcontractor.
- F. The Contractor shall procure Forshock's equipment and services under Bid Item No. 26 and remain responsible for coordinating delivery, installation, testing, startup, and integration of the complete PLC/SCADA control system in accordance with the Contract Documents. Substitution of Forshock as the designated equipment supplier shall not be permitted.

2.31 BID ITEM NO. 27 – ALL REMAINING WORK INCLUDED IN THE CONTRACT DRAWINGS AND SPECIFICATIONS NOT INCLUDED IN BID ITEMS NO. 1 THROUGH 26

- A. **Measurement:** Bid Item No. 27 shall be measured as a single lump sum item for completion of ALL WORK shown in the Contract Drawings and specified in the Technical Specifications and Division 0 of the Project Manual that is required for the completion of the finished and operable pipeline and pump station improvements presented in the drawings not including, Bid Items No. 1 through 26.

- B. **Payment:** Payment for Bid Item No. 27 shall constitute full compensation for furnishing all labor, materials, equipment, tools, incidentals, overhead, profit, coordination, supervision, and administrative costs necessary to perform and complete all Work described above, including but not limited to miscellaneous and ancillary work, construction surveying, permitting, appurtenances, connections, adjustments, minor removals and reinstatement, and all other items required to deliver a complete Project in accordance with the Contract Documents, whether or not such items are specifically called out in the Bid Item descriptions.
- C. **Coordination with Other Bid Items:** This Bid Item is intended to capture only those elements of the Work not paid for under Bid Items No. 1 through 26. No separate or additional payment will be made for Work properly included in other Bid Items.
- D. Contractor shall include adequate value in Bid Item No. 27 to cover all miscellaneous work not specifically measured or paid for under other Bid Items.

2.32 BID ITEM NO. 28 – D-1 – DEDUCTIVE ALTERNATIVE NO. 1: LANES END 6-INCH PIPELINE

- A. Bid Item D-1 is Deductive Alternative No. 1 as indicated in the bid form. Bid Item D-1 is provided so the Owner may delete the Lanes End 6-inch pipeline portion of the Work if necessary to meet budget constraints. Bid Item D-1 shall include deletion of all Work shown and specified for the Lanes End 6-inch pipeline segment, including all associated appurtenances, fittings, valves, connections, trenching/excavation, dewatering, bedding, backfill, compaction, traffic control associated with this segment, surface restoration (as applicable to this segment), testing, disinfection, and all incidentals necessary for a complete deletion of this segment as shown on the Drawings and specified in the Contract Documents. This deductive alternative also includes one (1) fire hydrant assembly located on the Lanes End pipeline segment, as separately measured under Base Bid Item No. 23.
- B. If Deductive Alternative No. 1 is accepted, the Contractor shall omit the Lanes End 6-inch pipeline Work described above from construction, and the Contract Price will be reduced by the amount bid for Bid Item D-1. All remaining Work shall be completed as shown and specified.
- C. Bid Item D-1 consists of the full extended price of Base Bid Item No. 10 – Lanes End 6-inch Pipeline (705 linear feet multiplied by the Base Bid Item No. 10 unit price), plus the unit price of one (1) fire hydrant assembly under Base Bid Item No. 23. The fire hydrant unit price used for this deduction shall be identical to the unit price submitted for Base Bid Item No. 23. The pipeline deduction shall include all labor, materials, equipment, overhead, profit, fittings, connections, and incidentals included in Base Bid Item No. 10. No separate or duplicate deduction shall be taken for appurtenances already included in the pipeline unit price. The total amount bid for D-1 shall equal the sum of these two components. Deductive amounts inconsistent with the corresponding Base Bid prices may be considered irregular or non-responsive at the Agency's discretion.

2.33 BID ITEM NO. 29 – D-2 – DEDUCTIVE ALTERNATIVE NO. 2: RECHE ROAD 6-INCH PIPELINE

- A. Bid Item D-2 is Deductive Alternative No. 2 as indicated in the bid form. Bid Item D-2 is provided so the Owner may delete the Reche Road 6-inch pipeline portion of the Work if necessary to meet budget constraints. Bid Item D-2 shall include deletion of all Work shown and specified for the Reche Road 6-inch pipeline segment, including all associated appurtenances, fittings, valves, connections, trenching/excavation, dewatering, bedding, backfill, compaction, traffic control associated with this segment, surface restoration (as applicable to this segment), testing, disinfection, and all incidentals necessary for a complete deletion of this segment as shown on the Drawings and specified in the Contract Documents. This deductive alternative also includes one (1) fire hydrant assembly located on the Reche Road pipeline segment, as separately measured under Base Bid Item No. 23.
- B. If Deductive Alternative No. 2 is accepted, the Contractor shall omit the Reche Road 6-inch pipeline Work described above from construction, and the Contract Price will be reduced by the amount bid for Bid Item D-2. All remaining Work shall be completed as shown and specified.
- C. Bid Item D-2 consists of the full extended price of Base Bid Item No. 15 – Reche Road 6-inch Pipeline (685 linear feet multiplied by the Base Bid Item No. 15 unit price), plus the unit price of one (1) fire hydrant assembly under Base Bid Item No. 23. The fire hydrant unit price used for this deduction shall be identical to the unit price submitted for Base Bid Item No. 23. The pipeline deduction shall include all labor, materials, equipment, overhead, profit, fittings, connections, and incidentals included in Base Bid Item No. 15. No separate or duplicate deduction shall be taken for appurtenances already included in the pipeline unit price. The total amount bid for D-2 shall equal the sum of these two components. Deductive amounts inconsistent with the corresponding Base Bid prices may be considered irregular or non-responsive at the Agency's discretion.

END OF SECTION