



**MARINA COAST WATER DISTRICT
MARINA, CA**

**REGIONAL URBAN WATER AUGMENTATION PROJECT
RECYCLED WATER DISTRIBUTION PIPELINES**

CIP # RW-0174

**ADDENDUM NO. 3
TO THE
CONTRACT DOCUMENTS**

MARCH 19, 2020



Digitally signed by Jonathon P. Marshall
Contact Info: Carollo Engineers, Inc.
Date: 2020.03.19 16:51:06-08'00'



Bidders on the above-named project are hereby notified that the Bidding Documents are modified as indicated below. Bidders are required to acknowledge receipt of this Addendum in the space provided on the Document 00 41 00 Bid Form.

This Addendum shall become part of the Contract and provisions of the Contract apply.

SPECIFICATIONS

The following sections are modified as indicated below.

1. SECTION 00 11 00 - Invitation to Bidders:
 - a. REPLACE section in its entirety with the attached section.
2. SECTION 00 21 00 - Instructions to Bidders:
 - a. REPLACE section in its entirety with the attached section.
3. SECTION 00 41 00 - Bid Form:
 - a. REPLACE section in its entirety with attached section.
4. SECTION 00 43 00 - Bid Bond:
 - a. REPLACE section in its entirety with attached section.
5. SECTION 00 52 00 - Agreement:
 - a. REPLACE section in its entirety with attached section.
6. SECTION 01270 - Unit Prices:
 - a. REPLACE section in its entirety with attached section.
7. SECTION 15211 - Ductile Iron Pipe: AWWA C151:
 - a. REPLACE section in its entirety with attached section.
8. APPENDIX F - MCWD RUWAP RECYCLED WATER PIPELINE AND BLACKHORSE RESERVOIR - AS-BUILT DRAWINGS
 - a. REPLACE the appendix in its entirety with attached appendix.

DRAWINGS

The following drawings are modified as indicated below.

1. ALL DRAWINGS:
 - a. Update total page count on each Drawing from 58 to 62.
2. DRAWING G01 - COVER SHEET:
 - a. Updates drawing list.
 - b. REPLACE drawing in its entirety with the attached drawing.
3. DRAWING G04 - INDEX MAP:
 - a. Adds locations of new Pressure Reducing Stations.
 - b. REPLACE drawing in its entirety with the attached drawing.

4. DRAWING T02 - AGENCY TYPICAL DETAILS -2:
 - a. Adds MCWD Std. Dtl. W-18A.
 - b. REPLACE drawing in its entirety with the attached drawing.
5. DRAWING T03 - AGENCY TYPICAL DETAILS -3:
 - a. Modifies MCWD Std. Dtl. W-10A & W-11A.
 - b. REPLACE drawing in its entirety with the attached drawing.
6. DRAWING CD04 - YARD PIPING PLANS - 4:
 - a. ADD attached drawing in its entirety.
7. DRAWING CD05 - YARD PIPING PLANS - 5:
 - a. ADD attached drawing in its entirety.
8. DRAWING CD06 - YARD PIPING PLANS - 6:
 - a. ADD attached drawing in its entirety.
9. DRAWING M06 - TYPICAL PRESSURE REDUCING VALVE VAULTS:
 - a. ADD attached drawing in its entirety.

MARINA COAST WATER DISTRICT
MARINA, CA
CIP # RW-0174, REGIONAL URBAN WATER AUGMENTATION PROJECT
RECYCLED WATER DISTRIBUTION PIPELINES

INVITATION TO BIDDERS

Sealed Bids for the construction of the **Regional Urban Water Augmentation Project Recycled Water Distribution Pipelines** will be received by the Marina Coast Water District (herein after referred to as MCWD), at 11 Reservation Road, Marina, CA 93933, until **2:00 p.m. local time on ~~Wednesday, March 25~~ Thursday, April 16, 2020**, at which time the Bids received will be publicly opened and read. The Project consists of constructing approximately 5 miles of 8-inch diameter to 16-inch diameter ductile iron and polyvinyl chloride recycled water and potable water pipeline in paved and non-paved roadways and easements, connecting to existing pipelines, pipeline valves and appurtenances, a guided auger bore trenchless roadway crossing, five pressure reducing stations, and roadway paving for a complete in-place operational system.

Bids will be received for a single prime Contract. Bids shall be on a lump sum and unit price basis, with additive alternate bid items as indicated in the Bid Form.

The Issuing Office for the Bidding Documents is: MCWD Engineering Office, 2840 4th Avenue, Marina, CA 93933, point of contact: **Don Wilcox, PE, Ph. (831) 883-5935 or email DWilcox@mcwd.org**. The primary point of contact for all technical questions related to the project during bidding is Jonathon Marshall and secondary point of contact is Andrew Coulter. All questions must be submitted in writing to JPMarshall@carollo.com and copied to ACoulter@carollo.com. Prospective Bidders may confirm their questions are received by calling the point of contact at (925) 932-1710. Prospective Bidders may examine the Bidding Documents at the Issuing Office on Mondays through Thursdays between the hours of 8:00 a.m. to 5:00 p.m., and may obtain copies of the Bidding Documents from the Issuing Office online at www.mcwd.org.

Bidding Documents also may be examined at the Central Coast Builder's Exchange Plan Room, 242 E Romie Ln, Salinas, CA 93901; (831) 883-3933.

Hard copies of the Bidding Documents are not available for purchase; the Bidding Documents are only available as a free download from the Issuing Office website at www.mcwd.org. Neither Owner nor Engineer will be responsible for full or partial sets of Bidding Documents, including Addenda if any, obtained from sources other than the Issuing Office.

A **mandatory** pre-bid conference will be held at **10:00 a.m.** local time on **Wednesday February 19, 2020** at the MCWD Administration Office, 11 Reservation Road, Marina, CA 93933. At least one site visit to MCWD's Reservoir 2 is mandatory. See Section 002100 - Instructions to Bidders for options to perform a site visit to Reservoir 2. Bids will not be accepted from any bidder who did not attend the Pre-Bid Conference and perform a site visit to MCWD's Reservoir 2.

The Project will be funded in whole or in part by the following funding sources in addition to District funds:

- Drinking Water State Revolving Fund (SRF) and Proposition 1 Ground Water (Prop 1)

Bids must comply with all requirements associated with these funding sources, including, but not limited to, USEPA Disadvantaged Business Enterprise compliance and American Iron and Steel. In addition, the

successful Bidder will be required to comply with all requirements associated with the SRF and Prop 1 funding in carrying out the Project.

Since this Project is funded in whole or in part with SRF funds, the work must also comply with the minimum rates for wages for laborers and mechanics as determined by the Secretary of Labor in accordance with the provisions of Davis-Bacon. A copy of these wage rates is available on-line at <http://www.dir.ca.gov/oprl/DPreWageDetermination.htm>. **If there is a difference between the State and Federal rates, the higher of the two rates must be paid.** Attention is directed to the SRF Funding Requirements section of the Contract Documents.

Each bidder shall be a California licensed contractor pursuant to the Business and Professions Code and shall be licensed in the following appropriate classification(s) of contractor's license(s), for the work bid upon, and must maintain the license(s) throughout the duration of the Contract: A (General Engineering) or C-34 (Pipeline). In addition, the successful bidder will be required to self-perform at least 50% of the work.

Bid security shall be furnished in accordance with the Instructions to Bidders.

Owner: **Marina Coast Water District**

By: **Michael Wegley, PE**

Title: **District Engineer**

Pub. Date: **February 5 & 8, 2020**

+ + END OF INVITATION TO BIDDERS + +

INSTRUCTIONS TO BIDDERS

TABLE OF CONTENTS

	Page
ARTICLE 1 – Defined Terms	1
ARTICLE 2 – Copies of Bidding Documents	1
ARTICLE 3 – Qualifications of Bidders	1
ARTICLE 4 – Site and Other Areas; Existing Site Conditions; Examination of Site; Owner’s Safety Program; Other Work at the Site	1
ARTICLE 5 – Bidder’s Representations	3
ARTICLE 6 – Pre-Bid Conference	4
ARTICLE 7 – Interpretations and Addenda.....	4
ARTICLE 8 – Bid Security	5
ARTICLE 9 – Contract Times	5
ARTICLE 10 – Liquidated Damages.....	5
ARTICLE 11 – Substitute and “Or-Equal” Items.....	5
ARTICLE 12 – Subcontractors, Suppliers, and Others	6
ARTICLE 13 – Preparation of Bid	6
ARTICLE 14 – Basis of Bid	7
ARTICLE 15 – Submittal of Bid.....	8
ARTICLE 16 – Modification and Withdrawal of Bid.....	8
ARTICLE 17 – Opening of Bids	8
ARTICLE 18 – Bids to Remain Subject to Acceptance	9
ARTICLE 19 – Evaluation of Bids and Award of Contract	9
ARTICLE 20 – Bonds and Insurance.....	9
ARTICLE 21 – Signing of Agreement.....	9
ARTICLE 22 – Sales and Use Taxes (NOT USED)	10
ARTICLE 23 – Retainage	10
ARTICLE 24 – Prevailing Wage	10
ARTICLE 25 – Disadvantaged Business Enterprises.....	10
ARTICLE 26 – Disqualified Businesses	10

ARTICLE 1 – DEFINED TERMS

1.01 Terms used in these Instructions to Bidders have the meanings indicated in the General Conditions and Supplementary Conditions. Additional terms used in these Instructions to Bidders have the meanings indicated below:

- A. *Issuing Office* – The office from which the Bidding Documents are to be issued, which is the MCWD Engineering Office, 2840 4th Avenue, Marina, CA 93933.

ARTICLE 2 – COPIES OF BIDDING DOCUMENTS

2.01 Complete sets of the Bidding Documents may be obtained from the Issuing Office on the website www.MCWD.org in the number and format stated in the advertisement or invitation to bid.

2.02 Complete sets of Bidding Documents shall be used in preparing Bids; neither Owner nor Engineer assumes any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.

2.03 Owner and Engineer, in making copies of Bidding Documents available on the above terms, do so only for the purpose of obtaining Bids for the Work and do not authorize or confer a license for any other use.

ARTICLE 3 – QUALIFICATIONS OF BIDDERS

3.01 To demonstrate Bidder's qualifications to perform the Work, Bidder shall submit with its Bid (a) written evidence establishing its qualifications such as financial data, previous experience, and present commitments, and (b) the following additional information:

- A. Evidence of Bidder's authority to do business in the state where the Project is located.
B. Bidder's state or other contractor license number, if applicable.

3.02 To demonstrate Bidder's qualifications to perform the Work, Bidder shall submit within 3 business days following the bid opening the following additional information:

- A. Disadvantaged Business Enterprise documentation not required at the time of bid opening.

3.03 A Bidder's failure to submit required qualification information within the times indicated may disqualify Bidder from receiving an award of the Contract.

3.04 No requirement in this Article 3 to submit information will prejudice the right of Owner to seek additional pertinent information regarding Bidder's qualifications.

3.05 Bidder is advised to carefully review those portions of the Bid Form requiring Bidder's representations and certifications.

ARTICLE 4 – SITE AND OTHER AREAS; EXISTING SITE CONDITIONS; EXAMINATION OF SITE; OWNER'S SAFETY PROGRAM; OTHER WORK AT THE SITE

4.01 *Site and Other Areas*

- A. The Site is identified in the Bidding Documents. By definition, the Site includes rights-of-way, easements, and other lands furnished by Owner for the use of the Contractor. Any additional lands required for temporary construction facilities, construction equipment, or storage of

materials and equipment, and any access needed for such additional lands, are to be obtained and paid for by Contractor.

- B. See Section 01140 - Work Restrictions, for constraints on site access, sequencing and scheduling of work.

4.02 *Existing Site Conditions*

A. Subsurface and Physical Conditions; Hazardous Environmental Conditions

1. The Supplementary Conditions identify:

- a. those reports known to Owner of explorations and tests of subsurface conditions at or adjacent to the Site.
- b. those drawings known to Owner of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities).
- c. reports and drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site.
- d. Technical Data contained in such reports and drawings.

2. Owner will make copies of reports and drawings referenced above available to any Bidder on request. These reports and drawings are not part of the Contract Documents, but the Technical Data contained therein upon whose accuracy Bidder is entitled to rely, as provided in the General Conditions, has been identified and established in the Supplementary Conditions. Bidder is responsible for any interpretation or conclusion Bidder draws from any Technical Data or any other data, interpretations, opinions, or information contained in such reports or shown or indicated in such drawings.

3. If the Supplementary Conditions do not identify Technical Data, the default definition of Technical Data set forth in Article 1 of the General Conditions will apply.

B. Underground Facilities: Information and data shown or indicated in the Bidding Documents with respect to existing Underground Facilities at or adjacent to the Site are set forth in the Contract Documents and are based upon information and data furnished to Owner and Engineer by owners of such Underground Facilities, including Owner, or others.

C. Adequacy of Data: Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders with respect to subsurface conditions, other physical conditions, and Underground Facilities, and possible changes in the Bidding Documents due to differing or unanticipated subsurface or physical conditions appear in Paragraphs 5.03, 5.04, and 5.05 of the General Conditions. Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders with respect to a Hazardous Environmental Condition at the Site, if any, and possible changes in the Contract Documents due to any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in the Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work, appear in Paragraph 5.06 of the General Conditions.

4.03 *Site Visit and Testing by Bidders*

- A. It is mandatory for bidders to perform at least one site visit to MCWD's Reservoir 2 to be considered a responsive bidder.

1. MCWD will host Reservoir 2 site visits for perspective bidders immediately after the pre-bid meeting, at 2:00 PM local time on Wednesday, March 4, 2020, or by appointment. Contact Don Wilcox at (831) 883-5935 for arranging a site visit by appointment.
- B. Bidder is not required to conduct any subsurface testing, or exhaustive investigations of Site conditions.
- C. On request, and to the extent Owner has control over the Site, and schedule permitting, the Owner will provide Bidder access to the Site to conduct such additional examinations, investigations, explorations, tests, and studies as Bidder deems necessary for preparing and submitting a successful Bid. Owner will not have any obligation to grant such access if doing so is not practical because of existing operations, security or safety concerns, or restraints on Owner's authority regarding the Site.
- D. Bidder shall comply with all applicable Laws and Regulations regarding excavation and location of utilities, obtain all permits, and comply with all terms and conditions established by Owner or by property owners or other entities controlling the Site with respect to schedule, access, existing operations, security, liability insurance, and applicable safety programs.
- E. Bidder shall fill all holes and clean up and restore the Site to its former condition upon completion of such explorations, investigations, tests, and studies.

4.04 *Owner's Safety Program*

- A. Site visits and work at the Site may be governed by an Owner safety program. As the General Conditions indicate, if an Owner safety program exists, it will be noted in the Supplementary Conditions.

4.05 *Other Work at the Site*

- A. Reference is made to Article 8 of the Supplementary Conditions for the identification of the general nature of other work of which Owner is aware (if any) that is to be performed at the Site by Owner or others (such as utilities and other prime contractors) and relates to the Work contemplated by these Bidding Documents. If Owner is party to a written contract for such other work, then on request, Owner will provide to each Bidder access to examine such contracts (other than portions thereof related to price and other confidential matters), if any.

ARTICLE 5 – BIDDER'S REPRESENTATIONS

5.01 It is the responsibility of each Bidder before submitting a Bid to:

- A. examine and carefully study the Bidding Documents, and any data and reference items identified in the Bidding Documents;
- B. visit the Site, conduct a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and satisfy itself as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work;
- C. become familiar with and satisfy itself as to all Laws and Regulations that may affect cost, progress, and performance of the Work;
- D. carefully study all: (1) reports of explorations and tests of subsurface conditions at or adjacent to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions,

- especially with respect to Technical Data in such reports and drawings, and (2) reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings;
- E. consider the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and the Site-related reports and drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder; and (3) Bidder's safety precautions and programs;
 - F. agree, based on the information and observations referred to in the preceding paragraph, that at the time of submitting its Bid no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of its Bid for performance of the Work at the price bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents;
 - G. become aware of the general nature of the work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents;
 - H. promptly give Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder discovers in the Bidding Documents and confirm that the written resolution thereof by Engineer is acceptable to Bidder;
 - I. determine that the Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance and furnishing of the Work; and
 - J. agree that the submission of a Bid will constitute an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article, that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

ARTICLE 6 – PRE-BID CONFERENCE

- 6.01 A mandatory pre-Bid conference will be held at the time and location stated in the invitation or advertisement to bid. Representatives of Owner and Engineer will be present to discuss the Project. Bidders are encouraged to attend and participate in the conference. Engineer will transmit to all prospective Bidders of record such Addenda as Engineer considers necessary in response to questions arising at the conference. Oral statements may not be relied upon and will not be binding or legally effective.

ARTICLE 7 – INTERPRETATIONS AND ADDENDA

- 7.01 All questions about the meaning or intent of the Bidding Documents are to be submitted to Owner in writing as stated in the invitation or advertisement to bid. Questions must be received by 5:00 p.m. local time on **TuesdayFriday, March-April 103, 2020**. Questions received after this date may not be answered. Interpretations or clarifications considered necessary by Engineer in response to such questions will be issued by Addenda and posted by the Issuing Office online at

www.mcwd.org. Only questions answered by Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.

7.02 Addenda may be issued to clarify, correct, supplement, or change the Bidding Documents.

ARTICLE 8 – BID SECURITY

8.01 A Bid must be accompanied by Bid security made payable to Owner in an amount of 10% (ten percent) of Bidder's maximum Bid price (determined by adding the base bid and all alternates) and in the form of a certified check, bank money order, or a Bid bond (on the form included in the Bidding Documents) issued by a surety meeting the requirements of Paragraphs 6.01 and 6.02 of the General Conditions.

8.02 The Bid security of the apparent Successful Bidder will be retained until Owner awards the contract to such Bidder, and such Bidder has executed the Contract Documents, furnished the required contract security, and met the other conditions of the Notice of Award, whereupon the Bid security will be released. If the Successful Bidder fails to execute and deliver the Contract Documents and furnish the required contract security within 15 calendar days after the Notice of Award, Owner may consider Bidder to be in default, annul the Notice of Award, and the Bid security of that Bidder will be forfeited. Such forfeiture shall be Owner's exclusive remedy if Bidder defaults.

8.03 The Bid security of other Bidders that Owner believes to have a reasonable chance of receiving the award may be retained by Owner until the earlier of seven calendar days after the Effective Date of the Contract or 90 calendar days after the Bid opening, whereupon Bid security furnished by such Bidders will be released.

8.04 Bid security of other Bidders that Owner believes do not have a reasonable chance of receiving the award will be released within seven calendar days after the Bid opening.

ARTICLE 9 – CONTRACT TIMES

9.01 The number of calendar days within which, or the dates by which, the Work is to be substantially completed, and completed and ready for final payment, are set forth in the Agreement.

ARTICLE 10 – LIQUIDATED DAMAGES

10.01 Provisions for liquidated damages, if any, for failure to timely attain a Milestone, Substantial Completion, or completion of the Work in readiness for final payment, are set forth in the Agreement.

ARTICLE 11 – SUBSTITUTE AND "OR-EQUAL" ITEMS

11.01 The Contract for the Work, as awarded, will be on the basis of materials and equipment specified or described in the Bidding Documents, and those "or-equal" or substitute materials and equipment subsequently approved by Engineer prior to the submittal of Bids and identified by Addendum. No item of material or equipment will be considered by Engineer as an "or-equal" or substitute unless written request for approval has been submitted by Bidder and has been received by Engineer at least 15 calendar days prior to the date for receipt of Bids. Each such request shall comply with the requirements of Paragraphs 7.04 and 7.05 of the General Conditions. The burden of proof of the merit of the proposed item is upon Bidder. Engineer's

decision of approval or disapproval of a proposed item will be final. If Engineer approves any such proposed item, such approval will be set forth in an Addendum issued to all prospective Bidders. Bidders shall not rely upon approvals made in any other manner.

- 11.02 All prices that Bidder sets forth in its Bid shall be based on the presumption that the Contractor will furnish the materials and equipment specified or described in the Bidding Documents, as supplemented by Addenda. Any assumptions regarding the possibility of post-Bid approvals of "or-equal" or substitution requests are made at Bidder's sole risk.

ARTICLE 12 – SUBCONTRACTORS, SUPPLIERS, AND OTHERS

- 12.01 A Bidder shall be prepared to retain specific Subcontractors, Suppliers, or other individuals or entities for the performance of the Work if required by the Bidding Documents (most commonly in the Specifications) to do so. If a prospective Bidder objects to retaining any such Subcontractor, Supplier, or other individual or entity, and the concern is not relieved by an Addendum, then the prospective Bidder should refrain from submitting a Bid.

- 12.02 Subsequent to the submittal of the Bid, Owner may not require the Successful Bidder or Contractor to retain any Subcontractor, Supplier, or other individual or entity against which Contractor has reasonable objection.

- 12.03 The apparent Successful Bidder, and any other Bidder so requested, shall within three business days after Bid opening, submit to Owner qualifications information for the Subcontractors or Suppliers proposed for the following portions of the Work: Paving and Guided Auger Boring.

If requested by Owner, such list shall be accompanied by an experience statement with pertinent information regarding similar projects and other evidence of qualification for each such Subcontractor, Supplier, or other individual or entity. If Owner or Engineer, after due investigation, has reasonable objection to any proposed Subcontractor, Supplier, individual, or entity, Owner may, before the Notice of Award is given, request apparent Successful Bidder to submit an acceptable substitute, in which case apparent Successful Bidder shall submit a substitute, Bidder's Bid price will be increased (or decreased) by the difference in cost occasioned by such substitution, and Owner may consider such price adjustment in evaluating Bids and making the Contract award.

- 12.04 If apparent Successful Bidder declines to make any such substitution, Owner may award the Contract to the next lowest Bidder that proposes to use acceptable Subcontractors, Suppliers, or other individuals or entities. Declining to make requested substitutions will not constitute grounds for forfeiture of the Bid security of any Bidder. Any Subcontractor, Supplier, individual, or entity so listed and against which Owner or Engineer makes no written objection prior to the giving of the Notice of Award will be deemed acceptable to Owner and Engineer subject to subsequent revocation of such acceptance as provided in Paragraph 7.06 of the General Conditions.

ARTICLE 13 – PREPARATION OF BID

- 13.01 The Bid Form is included with the Bidding Documents.

A. All blanks on the Bid Form shall be completed in ink and the Bid Form signed in ink. Erasures or alterations shall be initialed in ink by the person signing the Bid Form. A Bid price shall be indicated for each section, Bid item, alternate, adjustment unit price item, and unit price item listed therein.

- B. If the Bid Form expressly indicates that submitting pricing on a specific alternate item is optional, and Bidder elects to not furnish pricing for such optional alternate item, then Bidder may enter the words “No Bid” or “Not Applicable.”
- 13.02 A Bid by a corporation shall be executed in the corporate name by a corporate officer (whose title must appear under the signature), accompanied by evidence of authority to sign. The corporate address and state of incorporation shall be shown.
- 13.03 A Bid by a partnership shall be executed in the partnership name and signed by a partner (whose title must appear under the signature), accompanied by evidence of authority to sign. The partnership’s address for receiving notices shall be shown.
- 13.04 A Bid by a limited liability company shall be executed in the name of the firm by a member or other authorized person and accompanied by evidence of authority to sign. The state of formation of the firm and the firm’s address for receiving notices shall be shown.
- 13.05 A Bid by an individual shall show the Bidder’s name and address for receiving notices.
- 13.06 A Bid by a joint venture shall be executed by an authorized representative of each joint venturer in the manner indicated on the Bid Form. The joint venture’s address for receiving notices shall be shown.
- 13.07 All names shall be printed in ink below the signatures.
- 13.08 The Bid shall contain an acknowledgment of receipt of all Addenda, the numbers of which shall be filled in on the Bid Form.
- 13.09 Postal and e-mail addresses and telephone number for communications regarding the Bid shall be shown.
- 13.10 The Bid shall contain evidence of Bidder’s authority and qualification to do business in the state where the Project is located, or Bidder shall covenant in writing to obtain such authority and qualification prior to award of the Contract and attach such covenant to the Bid. Bidder’s state contractor license number, if any, shall also be shown on the Bid Form.

ARTICLE 14 – BASIS OF BID

14.01 *Unit Price*

- A. Bidders shall submit a Bid on a unit price basis for each item of Work listed in the unit price section of the Bid Form.
- B. The “Bid Price” (sometimes referred to as the extended price) for each unit price Bid item will be the product of the “Estimated Quantity” (which Owner or its representative has set forth in the Bid Form) for the item and the corresponding “Bid Unit Price” offered by the Bidder. The total of all unit price Bid items will be the sum of these “Bid Prices”; such total will be used by Owner for Bid comparison purposes. Bid Alternates will not be used for Bid comparison purposes. The final quantities and Contract Price will be determined in accordance with Paragraph 13.03 of the General Conditions.
- C. Discrepancies between the multiplication of units of Work and unit prices will be resolved in favor of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum.

14.02 Allowances

- A. For cash allowances the Bid price shall include such amounts as the Bidder deems proper for Contractor's overhead, costs, profit, and other expenses on account of cash allowances, if any, named in the Contract Documents, in accordance with Paragraph 13.02.B of the General Conditions.
- B. If the Owner includes reimbursement allowances, the allowance value will be pre-entered in the Bid Form.

ARTICLE 15 – SUBMITTAL OF BID

- 15.01 With each copy of the Bidding Documents, a Bidder is furnished one separate unbound copy of the Bid Form, and, if required, the Bid Bond Form. The unbound copy of the Bid Form is to be completed and submitted with the Bid security and the other documents required to be submitted under the terms of Article 7 of the Bid Form.
- 15.02 A Bid shall be received no later than the date and time prescribed and at the place indicated in the advertisement or invitation to bid and shall be enclosed in a plainly marked package with the Project title (and, if applicable, the designated portion of the Project for which the Bid is submitted), the name and address of Bidder, and shall be accompanied by the Bid security and other required documents. If a Bid is sent by mail or other delivery system, the sealed envelope containing the Bid shall be enclosed in a separate package plainly marked on the outside with the notation "BID ENCLOSED." A mailed Bid shall be addressed to Marina Coast Water District, 11 Reservation Road, Marina, CA 93933, ATTN: District Engineer.
- 15.03 Bids received after the date and time prescribed for the opening of bids, or not submitted at the correct location or in the designated manner, will not be accepted and will be returned to the Bidder unopened.

ARTICLE 16 – MODIFICATION AND WITHDRAWAL OF BID

- 16.01 A Bid may be withdrawn by an appropriate document duly executed in the same manner that a Bid must be executed and delivered to the place where Bids are to be submitted prior to the date and time for the opening of Bids. Upon receipt of such notice, the unopened Bid will be returned to the Bidder.
- 16.02 If a Bidder wishes to modify its Bid prior to Bid opening, Bidder must withdraw its initial Bid in the manner specified in Paragraph 16.01 and submit a new Bid prior to the date and time for the opening of Bids.
- 16.03 If within 24 hours after Bids are opened any Bidder files a duly signed written notice with Owner and promptly thereafter demonstrates to the reasonable satisfaction of Owner that there was a material and substantial mistake in the preparation of its Bid, that Bidder may withdraw its Bid, and the Bid security will be returned. Thereafter, if the Work is rebid, that Bidder will be disqualified from further bidding on the Work.

ARTICLE 17 – OPENING OF BIDS

- 17.01 Bids will be opened at the time and place indicated in the advertisement or invitation to bid and, unless obviously non-responsive, read aloud publicly. An abstract of the amounts of the base Bids and major alternates, if any, will be made available to Bidders after the opening of Bids.

ARTICLE 18 – BIDS TO REMAIN SUBJECT TO ACCEPTANCE

18.01 All Bids will remain subject to acceptance for the period of time stated in the Bid Form, but Owner may, in its sole discretion, release any Bid and return the Bid security prior to the end of this period.

ARTICLE 19 – EVALUATION OF BIDS AND AWARD OF CONTRACT

19.01 Owner reserves the right to reject any or all Bids, including without limitation, nonconforming, nonresponsive, unbalanced, or conditional Bids. Owner will reject the Bid of any Bidder that Owner finds, after reasonable inquiry and evaluation, to not be responsible. If Bidder purports to add terms or conditions to its Bid, takes exception to any provision of the Bidding Documents, or attempts to alter the contents of the Contract Documents for purposes of the Bid, then the Owner will reject the Bid as nonresponsive; provided that Owner also reserves the right to waive all minor informalities not involving price, time, or changes in the Work.

19.02 If Owner awards the contract for the Work, such award shall be to the responsible Bidder submitting the lowest responsive Bid.

19.03 Evaluation of Bids

- A. In evaluating Bids, Owner will consider whether or not the Bids comply with the prescribed requirements, and such alternates, unit prices, and other data, as may be requested in the Bid Form or prior to the Notice of Award.
- B. In evaluating whether a Bidder is responsible, Owner will consider the qualifications of the Bidder and may consider the qualifications and experience of Subcontractors and Suppliers proposed for those portions of the Work for which the identity of Subcontractors and Suppliers must be submitted as provided in the Bidding Documents.
- C. Owner may conduct such investigations as Owner deems necessary to establish the responsibility, qualifications, and financial ability of Bidders and any proposed Subcontractors or Suppliers.

ARTICLE 20 – BONDS AND INSURANCE

20.01 Article 6 of the General Conditions, as may be modified by the Supplementary Conditions, sets forth Owner's requirements as to performance and payment bonds and insurance. When the Successful Bidder delivers the Agreement (executed by Successful Bidder) to Owner, it shall be accompanied by required bonds and insurance documentation.

ARTICLE 21 – SIGNING OF AGREEMENT

21.01 When Owner issues a Notice of Award to the Successful Bidder, it shall be accompanied by the unexecuted counterparts of the Agreement along with the other Contract Documents as identified in the Agreement. Within 10 calendar days thereafter, Successful Bidder shall execute and deliver the required number of counterparts of the Agreement (and any bonds and insurance documentation required to be delivered by the Contract Documents) to Owner. Within ten calendar days thereafter, Owner shall deliver one fully executed counterpart of the Agreement to Successful Bidder, together with printed and electronic copies of the Contract Documents as stated in Paragraph 2.02 of the General Conditions.

ARTICLE 22 – SALES AND USE TAXES (NOT USED)

ARTICLE 23 – RETAINAGE

23.01 Provisions concerning Contractor's rights to deposit securities in lieu of retainage are set forth in the Supplemental Conditions.

ARTICLE 24 – PREVAILING WAGE

24.01 The Work is subject to California State prevailing wage requirements as set forth in the Supplementary Conditions, and Federal (Davis-Bacon Act) prevailing wage requirements as set forth in Section 00 73 50, State Revolving Fund and Proposition 1 Funding Requirements^{AD1}

ARTICLE 25 – DISADVANTAGED BUSINESS ENTERPRISES

25.01 Bidders must document a Good Faith Effort to hire Disadvantaged Business Enterprises (DBE) for this project, per the requirements set forth in Section 00 73 50, State Revolving Fund and Proposition 1 Funding Requirements.

25.02 A DBE minimum participation goal has not been established for this project.

ARTICLE 26 – DISQUALIFIED BUSINESSES

26.01 State and Federally Disqualified Business are prohibited from participating in this project, as set forth in Section 00 73 50, State Revolving Fund and Proposition I Funding Requirements.

END OF DOCUMENT

BID FORM

**CIP # RW-0174, REGIONAL URBAN WATER MANAGEMENT PROJECT
RECYCLED WATER DISTRIBUTION MAINS PROJECT**

TABLE OF CONTENTS

	Page
ARTICLE 1 – Bid Recipient	1
ARTICLE 2 – Bidder’s Acknowledgements.....	1
ARTICLE 3 – Bidder’s Representations	1
ARTICLE 4 – Bidder’s Certification.....	2
ARTICLE 5 – Basis of Bid	3
ARTICLE 6 – Time of Completion.....	7
ARTICLE 7 – Attachments to this Bid.....	8
ARTICLE 8 – Defined Terms	8
ARTICLE 9 – Bid Submittal	8

ARTICLE 1 – BID RECIPIENT

1.01 This Bid is submitted to:

Marina Coast Water District

11 Reservation Road

Marina, CA 93933

ATTN: District Engineer

1.02 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

ARTICLE 2 – BIDDER’S ACKNOWLEDGEMENTS

2.01 Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for 90 calendar after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

ARTICLE 3 – BIDDER’S REPRESENTATIONS

3.01 In submitting this Bid, Bidder represents that:

A. Bidder has examined and carefully studied the Bidding Documents, and any data and reference items identified in the Bidding Documents, and hereby acknowledges receipt of the following Addenda:

<u>Addendum No.</u>	<u>Addendum, Date</u>
_____	_____
_____	_____
_____	_____
_____	_____

B. Bidder has visited the Site, conducted a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and satisfied itself as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.

C. Bidder is familiar with and has satisfied itself as to all Laws and Regulations that may affect cost, progress, and performance of the Work.

D. Bidder has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or adjacent to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings, and (2) reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings.

- E. Bidder has considered the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and any Site-related reports and drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder; and (3) Bidder's safety precautions and programs.
- F. Bidder agrees, based on the information and observations referred to in the preceding paragraph, that no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this Bid for performance of the Work at the price bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents.
- G. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.
- H. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and confirms that the written resolution thereof by Engineer is acceptable to Bidder.
- I. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance and furnishing of the Work.
- J. The submission of this Bid constitutes an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article, and that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

ARTICLE 4 – BIDDER'S CERTIFICATION

4.01 Bidder certifies that:

- A. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation;
- B. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid;
- C. Bidder has not solicited or induced any individual or entity to refrain from bidding; and
- D. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 4.01.D:
 - 1. "corrupt practice" means the offering, giving, receiving, or soliciting of any thing of value likely to influence the action of a public official in the bidding process;
 - 2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;

3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels; and
4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the e execution of the Contract.

ARTICLE 5 – BASIS OF BID

- 5.01 Bidder will complete the Work in accordance with the Contract Documents for the following price(s):

Item No.	Description	Unit	Estimated Quantity	Bid Unit Price	Bid Price
1	Mobilization and Demobilization (Shall not exceed 5% of Total of All Unit Price Bid Items)	LS	1		
2	Sheeting, shoring, and bracing, or equivalent method for the protection of life and limb in trenches and open excavation, pursuant to California Labor Code §6707 and Section 02260.	LS	1		
3	Stormwater Pollution Prevention	LS	1		
4	Traffic Management	LS	1		
5	Locating and Verifying Concealed existing Utilities per Section 01350	LS	1		
6	Blow-off Assemblies	EA	21		
7	Combination Air/Vacuum Valves	EA	19		
8	8" Isolation Valves (Gate)	EA	17		
9	12" Isolation Valves (Gate)	EA	10		
10	Beach Road: 8-inch Pipeline (Ductile Iron)	LF	164		
11	Beach Road: Pressure Reducing Station	LS	1		
12	Beach Road: 8-inch Pipeline (PVC)	LF	3,790		
13	Beach Road: Slurry Seal	SY	11,273		
14	Beach Road: Pavement Striping	LS	1		
15	Potable Water Pipeline: Beach Road from Del Monte Blvd to De Forest Rd (PVC)	LF	2,748		
16	Potable Water Pipeline: Beach Road Blow-off Assemblies	EA	4		
17	Potable Water Pipeline: Beach Road Combination Air/Vacuum Valves	EA	4		
18	Potable Water Pipeline: Beach Road 12" Isolation Valves (Gate)	EA	5		
19	Potable Water Pipeline: From Reservoir 2 to Crescent Ave (PVC)	LF	518		
20	Potable Water Pipeline: Reservoir 2 to Crescent Ave Blow-off Assemblies	EA	1		

Item No.	Description	Unit	Estimated Quantity	Bid Unit Price	Bid Price
21	Potable Water Pipeline: Reservoir 2 to Crescent Ave Combination Air/Vacuum Valves	EA	1		
22	Potable Water Pipeline: Reservoir 2 to Crescent Ave 12" Isolation Valves (Gate)	EA	4		
23	Carmel Avenue: 8-inch Pipeline (Ductile Iron)	LF	120		
24	Carmel Avenue: Pressure Reducing Station	LS	1		
25	Carmel Avenue: 8-inch Pipeline (PVC)	LF	2,615		
26	Carmel Avenue: Slurry Seal	SY	13,753		
27	Carmel Avenue: Pavement Striping	LS	1		
28	Marina Heights Drive: 16-inch Pipeline (Ductile Iron)	LF	240		
29	Marina Heights Drive: Pressure Reducing Station	LS	1		
30	Marina Heights Drive: Slurry Seal	SY	553		
31	Marina Heights Drive: Pavement Striping	LS	1		
32	Abrams Drive North of Imjim Parkway: 12-inch Pipeline (DIP)	LF	953		
33	Abrams Drive North of Imjim Parkway: Slurry Seal	SY	4,469		
34	Abrams Drive North of Imjim Parkway: Pavement Striping	LS	1		
35	Pressure Test and Disinfect Existing Pipeline in UCMBEST Property	LS	1		
36	Blanco Road: 12-inch Pipeline (PVC)	LF	584		
37	Allowance for sensitive plant species restoration on Blanco Road	ALW	1	\$20,000.00	\$20,000.00
38	Blanco Road: Launching Shaft for Guided Auger Boring Installation	LS	1		
39	Blanco Road: Guided Auger Boring Casing Pipeline Installation	LF	418		
40	Blanco Road: Guided Auger Boring Carrier Pipeline Installation (PVC)	LF	418		
41	Reservation Road: Receiving Shaft for Guided Auger Boring Installation	LS	1		
42	Reservation Road: 12-inch Pipeline (PVC)	LF	5,163		

Item No.	Description	Unit	Estimated Quantity	Bid Unit Price	Bid Price
43	Reservation Road: 2.5-inch Grind and Inlay	SY	8,402		
44	Reservation Road: Pavement Striping	LS	1		
45	9th Street: 8-inch Pipeline (Ductile Iron)	LF	78		
46	9th Street: Pressure Reducing Station	LS	1		
47	9th Street: 8-inch Pipeline (PVC)	LF	975		
48	9th Street: Slurry Seal	SY	3,136		
49	9th Street: Pavement Striping	LS	1		
50	Coe Avenue: 8-inch Pipeline (Ductile Iron)	LF	2,043		
51	Coe Avenue: Pressure Reducing Station	LS	1		
52	Coe Avenue: 8-inch Pipeline (PVC)	LF	1,127		
53	Coe Avenue: Slurry Seal	SY	12,560		
54	Coe Avenue: Pavement Striping	LS	1		
<u>55</u>	<u>Patton Parkway Turnout: Pressure Reducing Station</u>	<u>LS</u>	<u>1</u>		
<u>56</u>	<u>5th Street Turnout: Pressure Reducing Station</u>	<u>LS</u>	<u>1</u>		
<u>57</u>	<u>5th Street Turnout (2): Pressure Reducing Station</u>	<u>LS</u>	<u>1</u>		
<u>58</u>	<u>5th Street Turnout (3): Pressure Reducing Station</u>	<u>LS</u>	<u>1</u>		
<u>59</u>	<u>Engineer Lane Turnout: Pressure Reducing Station</u>	<u>LS</u>	<u>1</u>		
<u>60</u>	<u>General Jim Moore Boulevard Turnout: Pressure Reducing Station</u>	<u>LS</u>	<u>1</u>		
<u>6155</u>	Reimbursement Allowance for City of Marina Encroachment Permit Fee	ALW	1	\$70,000.00	\$70,000.00
<u>6256</u>	Reimbursement Allowance for Monterey County Encroachment Permit Fee	ALW	1	\$20,000.00	\$20,000.00
<u>6357</u>	Reimbursement Allowance for City of Seaside Encroachment Permit Fee	ALW	1	\$15,000.00	\$15,000.00
<u>6458</u>	Reimbursement Allowance for Business Licenses from Cities and County	ALW	1	\$25,000.00	\$25,000.00
<u>6559</u>	Potential Installation of 1-inch Service per Detail W-1	EA	2		
<u>6660</u>	Potential Installation of 4-inch Service	EA	2		

Item No.	Description	Unit	Estimated Quantity	Bid Unit Price	Bid Price
6761	Contingency Allowance for Unknown Utility Conflicts	ALW	1	\$50,000.00	\$50,000.00
6862	All work required to be completed for the project that is not included in the previous bid items	LS	1		
Total of All Unit Price Bid Items (in numbers): \$					
Total of All Unit Price Bid Items (in words):					

ALW = Allowance, LF = Linear Feet, LS = Lump Sum, SY = Square Yards

Bidder acknowledges that (1) each Bid Unit Price includes an amount considered by Bidder to be adequate to cover Contractor's overhead and profit for each separately identified item, and (2) estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all unit price Bid items will be based on actual quantities, determined as provided in the Contract Documents.

5.02 Bid Alternatives

- A. Bidder offers to make, at the bid alternate prices following, the changes in the Work covered by the Unit Prices that are specified in the bid alternates priced below.
- B. It is understood that:
 1. All bid alternate prices must be filled in.
 2. The acceptance or rejection of any or all of these bid alternates is at the option of the Owner.
 3. Acceptance or rejection of bid alternates will not necessarily be made on the basis of price alone.
 4. The acceptance or rejection of one or more bid alternates will not affect the Lump Sum Bid Price, nor other conditions of this Bid, nor the price of other accepted bid alternates.
 5. The addition or deduction shown herein for each bid alternate is the net addition or net deduction that is to be applied to the Lump Sum Bid Price of the undersigned if the bid alternate is accepted by Owner.
 6. The Contract Price shall be the net amount determined by applying the bid alternate prices of all accepted bid alternates to the Total Unit Price Bid.

ARTICLE 6 – TIME OF COMPLETION

- 6.01 Bidder agrees that the Work will be substantially complete and will be completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions on or before the dates or within the number of calendar days indicated in the Agreement.

6.02 Bidder accepts the provisions of the Agreement as to liquidated damages.

ARTICLE 7 – ATTACHMENTS TO THIS BID

7.01 The items listed in Document 00 43 93, Bid Submittal checklist, are submitted with and made a condition of this Bid.

ARTICLE 8 – DEFINED TERMS

8.01 The terms used in this Bid with initial capital letters have the meanings stated in the Instructions to Bidders, the General Conditions, and the Supplementary Conditions.

ARTICLE 9 – BID SUBMITTAL

BIDDER: *[Indicate correct name of bidding entity]*

By:

[Signature]

[Printed name]

(If Bidder is a corporation, a limited liability company, a partnership, or a joint venture, attach evidence of authority to sign.)

Attest:

[Signature]

[Printed name]

Title:

Submittal Date:

Address for giving notices:

Telephone Number:

Fax Number:

Contact Name and e-mail address:

Bidder's License No.:

(where applicable)

BID BOND

Any singular reference to Bidder, Surety, Owner or other party shall be considered plural where applicable.

BIDDER (*Name and Address*):

SURETY (*Name, and Address of Principal Place of Business*):

OWNER (*Name and Address*):

Marina Coast Water District
11 Reservation Road
Marina, CA 93933

BID

Bid Due Date: ~~MARCH 25~~ APRIL 16, 2020

Description: CIP # RW-0174, REGIONAL URBAN WATER AUGMENTATION PROJECT
RECYCLED WATER DISTRIBUTION PIPELINES
MARINA COAST WATER DISTRICT

BOND

Bond Number:

Date:

Penal sum _____ \$ _____
(10% (ten percent) of the Total Bid Value, in Words) (Figures)

Surety and Bidder, intending to be legally bound hereby, subject to the terms set forth below, do each cause this Bid Bond to be duly executed by an authorized officer, agent, or representative.

BIDDER

SURETY

(Seal)

(Seal)

Bidder's Name and Corporate Seal

Surety's Name and Corporate Seal

By:

Signature

By:

Signature (Attach Power of Attorney)

Print Name

Print Name

Title

Title

Attest:

Signature

Attest:

Signature

Title

Title

Note: Addresses are to be used for giving any required notice.

Provide execution by any additional parties, such as joint venturers, if necessary.

1. Bidder and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to pay to Owner upon default of Bidder the penal sum set forth on the face of this Bond. Payment of the penal sum is the extent of Bidder's and Surety's liability. Recovery of such penal sum under the terms of this Bond shall be Owner's sole and exclusive remedy upon default of Bidder.
2. Default of Bidder shall occur upon the failure of Bidder to deliver within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents.
3. This obligation shall be null and void if:
 - 3.1 Owner accepts Bidder's Bid and Bidder delivers within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents, or
 - 3.2 All Bids are rejected by Owner, or
 - 3.3 Owner fails to issue a Notice of Award to Bidder within the time specified in the Bidding Documents (or any extension thereof agreed to in writing by Bidder and, if applicable, consented to by Surety when required by Paragraph 5 hereof).
4. Payment under this Bond will be due and payable upon default of Bidder and within 30 calendar days after receipt by Bidder and Surety of written notice of default from Owner, which notice will be given with reasonable promptness, identifying this Bond and the Project and including a statement of the amount due.
5. Surety waives notice of any and all defenses based on or arising out of any time extension to issue Notice of Award agreed to in writing by Owner and Bidder, provided that the total time for issuing Notice of Award including extensions shall not in the aggregate exceed 120 calendar days from the Bid due date without Surety's written consent.
6. No suit or action shall be commenced under this Bond prior to 30 calendar days after the notice of default required in Paragraph 4 above is received by Bidder and Surety and in no case later than one year after the Bid due date.
7. Any suit or action under this Bond shall be commenced only in a court of competent jurisdiction located in the state in which the Project is located.
8. Notices required hereunder shall be in writing and sent to Bidder and Surety at their respective addresses shown on the face of this Bond. Such notices may be sent by personal delivery, commercial courier, or by United States Registered or Certified Mail, return receipt requested, postage pre-paid, and shall be deemed to be effective upon receipt by the party concerned.
9. Surety shall cause to be attached to this Bond a current and effective Power of Attorney evidencing the authority of the officer, agent, or representative who executed this Bond on behalf of Surety to execute, seal, and deliver such Bond and bind the Surety thereby.
10. This Bond is intended to conform to all applicable statutory requirements. Any applicable requirement of any applicable statute that has been omitted from this Bond shall be deemed to be included herein as if set forth at length. If any provision of this Bond conflicts with any applicable statute, then the provision of said statute shall govern and the remainder of this Bond that is not in conflict therewith shall continue in full force and effect.
11. The term "Bid" as used herein includes a Bid, offer, or proposal as applicable.

AGREEMENT
BETWEEN MARINA COAST WATER DISTRICT
AND _____
FOR THE
REGIONAL URBAN WATER AUGMENTATION PROJECT
RECYCLED WATER DISTRIBUTION PIPELINES
CIP# RW-0174

THIS AGREEMENT is by and between Marina Coast Water District (“Owner”) and _____ (“Contractor”).

Owner and Contractor hereby agree as follows:

ARTICLE 1 – WORK

1.01 Contractor shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows:

The Project consists of constructing approximately 5 miles of 8-inch diameter to 16-inch diameter ductile iron and polyvinyl chloride recycled water and potable water pipeline in paved and non-paved roadways and easements, connecting to existing pipelines, pipeline valves and appurtenances, a guided auger bore trenchless roadway crossing, five pressure reducing stations, and roadway paving for a complete in-place operational system.

ARTICLE 2 – THE PROJECT

2.01 The Project, of which the Work under the Contract Documents is a part, is generally described as follows: CIP # RW-0174, REGIONAL URBAN WATER AUGMENTATION PROJECT RECYCLED WATER DISTRIBUTION PIPELINES.

ARTICLE 3 – ENGINEER

3.01 The part of the Project that pertains to the Work has been designed by Carollo Engineers, Inc., 2795 Mitchell Drive, Walnut Creek, CA 94598.

3.02 The Owner has retained Carollo Engineers (“Engineer”) to act as Owner’s representative, assume all duties and responsibilities, and have the rights and authority assigned to Engineer in the Contract Documents in connection with the completion of the Work in accordance with the Contract Documents.

ARTICLE 4 – CONTRACT TIMES

4.01 *Time of the Essence*

A. All time limits for Milestones, if any, Substantial Completion, and completion and readiness for final payment as stated in the Contract Documents are of the essence of the Contract.

4.02 Contract Times: Days

- A. The Work will be substantially completed within 270 calendar days after the date when the Contract Times commence to run as provided in Paragraph 4.01 of the General Conditions, and completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions within 305 calendar days after the date when the Contract Times commence to run.

4.03 Liquidated Damages

- A. Contractor and Owner recognize that time is of the essence as stated in Paragraph 4.01 above and that Owner will suffer financial and other losses if the Work is not completed and Milestones not achieved within the times specified in Paragraph 4.02 above, plus any extensions thereof allowed in accordance with the Contract. The parties also recognize the delays, expense, and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by Owner if the Work is not completed on time. Accordingly, instead of requiring any such proof, Owner and Contractor agree that as liquidated damages for delay (but not as a penalty):
1. Abrams Drive: Contractor shall pay Owner \$1,500 for each calendar day (or partial calendar day) after the required completion date in Section 01140 until the Work along Abrams Drive is substantially complete.
 2. Marina Heights Drive: Contractor shall pay Owner \$1,500 for each calendar day (or partial calendar day) after the required completion date in Section 01140 until the Work in the road of Marina Heights Drive is substantially complete. Work outside the road (such as the pressure reducing station beyond the road curb) is not subject to this liquidated damage.
 3. Beach Road, Carmel Avenue and Coe Avenue: Contractor shall pay Owner \$1,500 for each calendar day (or partial calendar day) Work is done in Beach Road, Carmel Avenue and Coe Avenue on days before or after the schools summer break period defined in Section 01140.
 4. Blanco Road and Reservation Road Intersection Receiving Shaft: Contractor shall pay Owner \$500 for each calendar day (or partial calendar day) the receiving shaft is not restored and temporary paved beyond the allowable duration specified in Section 02261.
 5. Trench Plates: Contractor shall pay Owner \$500 per 20 linear feet of steel plating for each night that steel plating, in excess of 20 linear feet, is left in the public right-of-way.
 6. Substantial Completion: Contractor shall pay Owner \$5,000 for each day that expires after the time (as duly adjusted pursuant to the Contract) specified in Paragraph 4.02.A above for Substantial Completion until the Work is substantially complete.
 7. Completion of Remaining Work: After Substantial Completion, if Contractor shall neglect, refuse, or fail to complete the remaining Work within the Contract Times (as duly adjusted pursuant to the Contract) for completion and readiness for final payment, Contractor shall pay Owner \$5,000 for each day that expires after such time until the Work is completed and ready for final payment.

8. Liquidated damages for failing to timely attain Substantial Completion and final completion are not additive and will not be imposed concurrently.

ARTICLE 5 – CONTRACT PRICE

5.01 Owner shall pay Contractor for completion of the Work in accordance with the Contract Documents the amounts that follow, subject to adjustment under the Contract:

- A. For all Unit Price Work, an amount equal to the sum of the extended prices (established for each separately identified item of Unit Price Work by multiplying the unit price (adjusted for any math errors in the submitted bid form) times the actual quantity of that item):

Item No.	Description	Unit	Estimated Quantity	Bid Unit Price	Bid Price
1	Mobilization and Demobilization (Shall not exceed 5% of Total of All Unit Price Bid Items)	LS	1		
2	Sheeting, shoring, and bracing, or equivalent method for the protection of life and limb in trenches and open excavation, pursuant to California Labor Code §6707 and Section 02260.	LS	1		
3	Stormwater Pollution Prevention	LS	1		
4	Traffic Management	LS	1		
5	Locating and Verifying Concealed existing Utilities per Section 01350	LS	1		
6	Blow-off Assemblies	EA	21		
7	Combination Air/Vacuum Valves	EA	19		
8	8" Isolation Valves (Gate)	EA	17		
9	12" Isolation Valves (Gate)	EA	10		
10	Beach Road: 8-inch Pipeline (Ductile Iron)	LF	164		
11	Beach Road: Pressure Reducing Station	LS	1		
12	Beach Road: 8-inch Pipeline (PVC)	LF	3,790		
13	Beach Road: Slurry Seal	SY	11,273		
14	Beach Road: Pavement Striping	LS	1		
15	Potable Water Pipeline: Beach Road from Del Monte Blvd to De Forest Rd (PVC)	LF	2,748		
16	Potable Water Pipeline: Beach Road Blow-off Assemblies	EA	4		
17	Potable Water Pipeline: Beach Road Combination Air/Vacuum Valves	EA	4		

Item No.	Description	Unit	Estimated Quantity	Bid Unit Price	Bid Price
18	Potable Water Pipeline: Beach Road 12" Isolation Valves (Gate)	EA	5		
19	Potable Water Pipeline: From Reservoir 2 to Crescent Ave (PVC)	LF	518		
20	Potable Water Pipeline: Reservoir 2 to Crescent Ave Blow-off Assemblies	EA	1		
21	Potable Water Pipeline: Reservoir 2 to Crescent Ave Combination Air/Vacuum Valves	EA	1		
22	Potable Water Pipeline: Reservoir 2 to Crescent Ave 12" Isolation Valves (Gate)	EA	4		
23	Carmel Avenue: 8-inch Pipeline (Ductile Iron)	LF	120		
24	Carmel Avenue: Pressure Reducing Station	LS	1		
25	Carmel Avenue: 8-inch Pipeline (PVC)	LF	2,615		
26	Carmel Avenue: Slurry Seal	SY	13,753		
27	Carmel Avenue: Pavement Striping	LS	1		
28	Marina Heights Drive: 16-inch Pipeline (Ductile Iron)	LF	240		
29	Marina Heights Drive: Pressure Reducing Station	LS	1		
30	Marina Heights Drive: Slurry Seal	SY	553		
31	Marina Heights Drive: Pavement Striping	LS	1		
32	Abrams Drive North of Imjim Parkway: 12-inch Pipeline (DIP)	LF	953		
33	Abrams Drive North of Imjim Parkway: Slurry Seal	SY	4,469		
34	Abrams Drive North of Imjim Parkway: Pavement Striping	LS	1		
35	Pressure Test and Disinfect Existing Pipeline in UCMBEST Property	LS	1		
36	Blanco Road: 12-inch Pipeline (PVC)	LF	584		
37	Allowance for sensitive plant species restoration on Blanco Road	ALW	1	\$20,000.00	\$20,000.00
38	Blanco Road: Launching Shaft for Guided Auger Boring Installation	LS	1		
39	Blanco Road: Guided Auger Boring Casing Pipeline Installation	LF	418		
40	Blanco Road: Guided Auger Boring Carrier Pipeline Installation (PVC)	LF	418		

Item No.	Description	Unit	Estimated Quantity	Bid Unit Price	Bid Price
41	Reservation Road: Receiving Shaft for Guided Auger Boring Installation	LS	1		
42	Reservation Road: 12-inch Pipeline (PVC)	LF	5,163		
43	Reservation Road: 2.5-inch Grind and Inlay	SY	8,402		
44	Reservation Road: Pavement Striping	LS	1		
45	9th Street: 8-inch Pipeline (Ductile Iron)	LF	78		
46	9th Street: Pressure Reducing Station	LS	1		
47	9th Street: 8-inch Pipeline (PVC)	LF	975		
48	9th Street: Slurry Seal	SY	3,136		
49	9th Street: Pavement Striping	LS	1		
50	Coe Avenue: 8-inch Pipeline (Ductile Iron)	LF	2,043		
51	Coe Avenue: Pressure Reducing Station	LS	1		
52	Coe Avenue: 8-inch Pipeline (PVC)	LF	1,127		
53	Coe Avenue: Slurry Seal	SY	12,560		
54	Coe Avenue: Pavement Striping	LS	1		
<u>55</u>	<u>Patton Parkway Turnout: Pressure Reducing Station</u>	<u>LS</u>	<u>1</u>		
<u>56</u>	<u>5th Street Turnout: Pressure Reducing Station</u>	<u>LS</u>	<u>1</u>		
<u>57</u>	<u>5th Street Turnout (2): Pressure Reducing Station</u>	<u>LS</u>	<u>1</u>		
<u>58</u>	<u>5th Street Turnout (3): Pressure Reducing Station</u>	<u>LS</u>	<u>1</u>		
<u>59</u>	<u>Engineer Lane Turnout: Pressure Reducing Station</u>	<u>LS</u>	<u>1</u>		
<u>60</u>	<u>General Jim Moore Boulevard Turnout: Pressure Reducing Station</u>	<u>LS</u>	<u>1</u>		
<u>6155</u>	Reimbursement Allowance for City of Marina Encroachment Permit Fee	ALW	1	\$70,000.00	\$70,000.00
<u>6256</u>	Reimbursement Allowance for Monterey County Encroachment Permit Fee	ALW	1	\$20,000.00	\$20,000.00
<u>6357</u>	Reimbursement Allowance for City of Seaside Encroachment Permit Fee	ALW	1	\$15,000.00	\$15,000.00
<u>6458</u>	Reimbursement Allowance for Business Licenses from Cities and County	ALW	1	\$25,000.00	\$25,000.00

Item No.	Description	Unit	Estimated Quantity	Bid Unit Price	Bid Price
6559	Potential Installation of 1-inch Service per Detail W-1	EA	2		
6660	Potential Installation of 4-inch Service	EA	2		
6761	Contingency Allowance for Unknown Utility Conflicts	ALW	1	\$50,000.00	\$50,000.00
6862	All work required to be completed for the project that is not included in the previous bid items	LS	1		
Total of All Unit Price Bid Items (in numbers): \$					
Total of All Unit Price Bid Items (in words):					

ALW = Allowance, LF = Linear Feet, LS = Lump Sum, SY = Square Yards, EA = Each

The extended prices for Unit Price Work set forth as of the Effective Date of the Contract are based on estimated quantities. As provided in Paragraph 13.03 of the General Conditions, estimated quantities are not guaranteed, and determinations of actual quantities and classifications are to be made by Engineer.

5.02 Bid Alternatives

- A. Bidder offers to make, at the bid alternate prices following, the changes in the Work covered by the Unit Prices that are specified in the bid alternates priced below.
- B. It is understood that:
 1. All bid alternate prices must be filled in.
 2. The acceptance or rejection of any or all of these bid alternates is at the option of the Owner.
 3. Acceptance or rejection of bid alternates will not necessarily be made on the basis of price alone.
 4. The acceptance or rejection of one or more bid alternates will not affect the Lump Sum Bid Price, nor other conditions of this Bid, nor the price of other accepted bid alternates.
 5. The addition or deduction shown herein for each bid alternate is the net addition or net deduction that is to be applied to the Lump Sum Bid Price of the undersigned if the bid alternate is accepted by Owner.
 6. The Contract Price shall be the net amount determined by applying the bid alternate prices of all accepted bid alternates to the Total Unit Price Bid.

ARTICLE 6 – PAYMENT PROCEDURES**6.01** *Submittal and Processing of Payments*

- A. Contractor shall submit Applications for Payment in accordance with Article 15 of the General Conditions. Applications for Payment will be processed by Engineer as provided in the General Conditions.

6.02 *Progress Payments; Retainage*

- A. Owner shall make progress payments on account of the Contract Price on the basis of Contractor's Applications for Payment on or about the 30th day of each month during performance of the Work as provided in Paragraph 6.02.A.1 below, provided that such Applications for Payment have been submitted in a timely manner and otherwise meet the requirements of the Contract. All such payments will be measured by the Schedule of Values established as provided in the General Conditions (and in the case of Unit Price Work based on the number of units completed) or, in the event there is no Schedule of Values, as provided elsewhere in the Contract.

- 1. Prior to Substantial Completion, progress payments will be made in an amount equal to the percentage indicated below but, in each case, less the aggregate of payments previously made and less such amounts as Owner may withhold, including but not limited to liquidated damages, in accordance with the Contract

- a. 95 percent of Work completed (with the balance being retainage). If the Work has been 50 percent completed as determined by Engineer, and if the character and progress of the Work have been satisfactory to Owner and Engineer, then as long as the character and progress of the Work remain satisfactory to Owner and Engineer, there will be no additional retainage; and
- b. 0 percent of cost of materials and equipment not incorporated in the Work (with the balance being retainage).

- B. Upon Substantial Completion, Owner shall pay an amount sufficient to increase total payments to Contractor to 100 percent of the Work completed, less such amounts set off by Owner pursuant to Paragraph 15.01.E of the General Conditions, and less 200 percent of Engineer's estimate of the value of Work to be completed or corrected as shown on the punch list of items to be completed or corrected prior to final payment.

6.03 *Final Payment*

- A. Upon final completion and acceptance of the Work in accordance with Paragraph 15.06 of the General Conditions, Owner shall pay the remainder of the Contract Price as recommended by Engineer as provided in said Paragraph 15.06.

ARTICLE 7 – INTEREST

- 7.01 All amounts not paid when due shall bear interest at the legal rate unless otherwise specified according to California law.

ARTICLE 8 – CONTRACTOR’S REPRESENTATIONS

- 8.01 In order to induce Owner to enter into this Contract, Contractor makes the following representations:
- A. Contractor has examined and carefully studied the Contract Documents, and any data and reference items identified in the Contract Documents.
 - B. Contractor has visited the Site, conducted a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
 - C. Contractor is familiar with and is satisfied as to all Laws and Regulations that may affect cost, progress, and performance of the Work.
 - D. Contractor has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or adjacent to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings, and (2) reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings.
 - E. Contractor has considered the information known to Contractor itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Contract Documents; and the Site-related reports and drawings identified in the Contract Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor; and (3) Contractor’s safety precautions and programs.
 - F. Based on the information and observations referred to in the preceding paragraph, Contractor agrees that no further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract.
 - G. Contractor is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Contract Documents.
 - H. Contractor has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Contractor has discovered in the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.
 - I. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.
 - J. Contractor’s entry into this Contract constitutes an incontrovertible representation by Contractor that without exception all prices in the Agreement are premised upon performing and furnishing the Work required by the Contract Documents.

ARTICLE 9 – CONTRACT DOCUMENTS9.01 *Contents*

A. The Contract Documents consist of the following:

1. This Agreement.
2. Performance bond.
3. Payment bond.
4. General Conditions.
5. Supplementary Conditions.
6. Specifications as listed in the table of contents of the Project Manual.
7. Drawings (not attached but incorporated by reference) consisting of ~~6258~~ sheets with each sheet bearing the following general title: Regional Urban Water Augmentation Project Recycled Water Distribution Mains, Capital Improvement Program Potable Water Mains Beach Road, and Capital Improvement Program Potable Water Mains Reservoir 2 to Crescent Ave.
8. Typical Details listed or incorporated into the Project Manual.
9. Addenda (numbers 1 to X, inclusive).
10. Exhibits to this Agreement (enumerated as follows):
 - a. List of Project References (00 45 12)
 - b. Designation of Subcontractors (00 45 14)
 - c. List of Manufacturers (0045 16)
 - d. Designation of Insurance Agent or Broker (00 45 18)
 - e. Stop Notice Information (00 45 20)
 - f. Non-Collusion Declaration (00 45 22)
 - g. Prevailing Wage (00 45 24)
 - h. Public Works Contractor Registration Certification (00 45 26)
 - i. Local Hiring for Public Works (00 45 28)^{AD1}
 - j. Iran Contracting Act Certification (00 45 30)
 - k. American Iron and Steel Certification (00 45 32)
 - l. Anti-Lobbying Certification (00 45 34)
 - m. DBE Good Faith Efforts Verification (00 45 36)
 - n. Bidder's List (00 45 38)
 - o. State Revolving Fund and Proposition 1 Funding Requirements (00 73 50).
11. The following which may be delivered or issued on or after the Effective Date of the Contract and are not attached hereto:
 - a. Notice to Proceed.

- b. Work Change Directives.
 - c. Change Orders.
 - d. Field Orders.
12. The standard Plans and Specifications of the Marina Coast Water District, dated November 2007 (not attached but incorporated by reference).
- B. The documents listed in Paragraph 9.01.A are attached to this Agreement (except as expressly noted otherwise above).
 - C. There are no Contract Documents other than those listed above in this Article 9.
 - D. The Contract Documents may only be amended, modified, or supplemented as provided in the General Conditions.

ARTICLE 10 – MISCELLANEOUS

10.01 *Terms*

- A. Terms used in this Agreement will have the meanings stated in the General Conditions and the Supplementary Conditions.

10.02 *Assignment of Contract*

- A. Unless expressly agreed to elsewhere in the Contract, no assignment by a party hereto of any rights under or interests in the Contract will be binding on another party hereto without the written consent of the party sought to be bound; and, specifically but without limitation, money that may become due and money that is due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.

10.03 *Successors and Assigns*

- A. Owner and Contractor each binds itself, its successors, assigns, and legal representatives to the other party hereto, its successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

10.04 *Severability*

- A. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon Owner and Contractor, who agree that the Contract Documents shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

10.05 *Contractor's Certifications*

- A. Contractor certifies that it has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for or in executing the Contract. For the purposes of this Paragraph 10.05:

1. "corrupt practice" means the offering, giving, receiving, or soliciting of any thing of value likely to influence the action of a public official in the bidding process or in the Contract execution;
 2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process or the execution of the Contract to the detriment of Owner, (b) to establish Bid or Contract prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;
 3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish Bid prices at artificial, non-competitive levels; and
 4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.
- 10.06 In accordance with Section 1775, California Labor Code, Contractor shall forfeit to Owner, as a penalty, not more than \$50 for each calendar day, or portion thereof, for each worker paid, either by Contractor or any subcontractor, less than the prevailing rates as determined by the Director of California Department of Industrial Relations for the Work.
- 10.07 In the performance of the Work, a day's work shall be 8 hours of labor in any workday and 40 hours in any work week and any other work as required by Section 510, California Labor Code, and Contractor shall further conform to the requirements of Section 1813, California Labor Code, or forfeit to Owner, as a penalty, the sum of \$25 for each worker employed in the execution of the Work by Contractor or any subcontractor, for each day during which any worker is required or permitted to labor more than 8 hours in any workday or more than 40 hours in any 1 calendar week in violation of Section 510.
- 10.08 Contractor shall carry workers' compensation insurance and require subcontractors to carry workers' compensation insurance as required by Section 3700, California Labor Code.
- 10.09 Pursuant to California Labor Code Section 6705, excavation of any trench or trenches 5 feet or more in depth, involving estimated expenditures in excess of \$25,000 shall require, in advance of excavation, a detailed plan showing the design of shoring, bracing, sloping or other provisions to be made for worker protection prepared by a registered civil or structural engineer.
- 10.10 *Contractor registration:*
- A. Project is subject to compliance monitoring and enforcement by the California Department of Industrial Relations (DIR).
- 10.11 Pursuant to Section 1770 et seq., California Labor Code, the successful Bidder shall pay not less than the prevailing rate of per diem wages as determined by the Director of California Department of Industrial Relations. A copy of such prevailing rate is on file at the offices of the Owner, which copy will be made available for examination during business hours to any party on request.
- 10.12 Contractor, by signing this Agreement, certifies the following: "I am aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the Work of this Contract."

10.13 Nothing in this Agreement shall prevent Contractor or any Subcontractor from employing properly registered apprentices in the execution of the Agreement. Contractor shall have responsibility for compliance with California Labor Code Section 1777.5 for all apprenticeable occupations.

10.14 *Other Provisions*

- A. Owner stipulates that the General Conditions that are made a part of this Contract are the EJCDC® C-700, Standard General Conditions for the Construction Contract, published by the Engineers Joint Contract Documents Committee®, with modifications made solely in the Supplementary Conditions.
- B. Since this Project is funded in whole or in part with SRF funds, the work must also comply with the minimum rates for wages for laborers and mechanics as determined by the Secretary of Labor in accordance with the provisions of Davis-Bacon. As between the State and Federal rates, the higher of the two rates must be paid. Attention is directed to the SRF Funding Requirements section of the Contract Documents.

IN WITNESS WHEREOF, Owner and Contractor have signed this Agreement.

This Agreement will be effective on [redacted] (which is the Effective Date of the Contract).

OWNER:

CONTRACTOR:

By: _____

By: _____

Title: General Manager

Title: _____

(If Contractor is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.)

Attest: _____

Attest: _____

Title: _____

Title: _____

Address for giving notices:

Address for giving notices:

Marina Coast Water District

11 Reservation Road

Marina, CA 93933

License No.: _____

(where applicable)

SECTION 01270

UNIT PRICES

PART 1 GENERAL

1.01 SUMMARY

- A. Section includes: Procedures for measurement and payment of Work performed on a unit price basis.
- B. Related documents:
 - 1. Document 00 41 00 - Bid Form.

1.02 MEASUREMENT OF QUANTITIES

- A. Work paid at a unit price times number of units measured will be measured by Engineer in accordance with United States Standard Measures:
 - 1. 1 ton shall consist of 2,000 pounds avoirdupois.
- B. Provide and pay for accurate scales:
 - 1. Use platform scales of sufficient size and capacity to permit the entire vehicle or combination of vehicles to rest on the scale platform while being weighed.
 - 2. Combination vehicles may be weighed as separate units provided they are disconnected while being weighed.
 - 3. Have scales inspected and certified as often as necessary to ascertain accuracy.
 - 4. Furnish weigh slips and daily summary weigh sheets to Engineer.
- C. When material is shipped by rail, certified car weights will be acceptable, provided that not more than the actual weight of material will be paid, without consideration of minimum car weight used for assessing freight tariff:
 - 1. Car weight will not be acceptable for materials passing through mixing plants.
- D. Daily, or at shorter intervals when necessary to ensure accuracy, weigh empty trucks used to haul material paid by weight:
 - 1. Provide such trucks with plainly, unique, permanent, legible, identification marks.
- E. Reinforcing steel, steel shapes, castings, and similar items paid by weight will be measured by handbook weights for the type and quantity indicated for the Work.

1.03 PAY ITEMS

- A. General: Pay items following are included in Document 00 41 00 - Bid Form.

- B. Schedule of Unit Price Bid Items:
1. Bid Item 1: Mobilization and Demobilization (Shall not exceed 5 percent of the Total of All Unit Price Bid Items):
 - a. Bid Item Description: Work in this bid item generally includes all materials, labor, equipment, and other activities required for mobilization and demobilization, complete as specified, including, but not limited to, surveying to establish preconstruction conditions, preconstruction photographs and videos, cost of obtaining and complying with all necessary permits not obtained by the District or in other Bid Items, cost for complying with all conditions set by all of the required permits, move in of equipment, tools, supplies, materials, and manpower to the jobsite, move out and cleanup of job site after the project is complete and accepted by the District.
 - b. Measurement: Measurement for this bid item is by Lump Sum.
 - c. Payment: Payment for this bid item will be made for actual work completed in proportion to the total value of work for this bid item. A maximum of 50 percent will be paid after satisfactory mobilization. The balance will be paid after satisfactory demobilization.
 2. Bid Item 2: Sheeting, Shoring, and Bracing:
 - a. Bid Item Description: Work in this bid item generally includes all materials, labor, equipment, and other activities required for sheeting, shoring, and bracing and all other actives required to provide all temporary sheeting, shoring, and bracing for excavations and grading required per the Contract Documents including, but not limited to, engineering, permits, materials, tools, labor, and equipment necessary to performing the Work.
 - b. Measurement: Measurement for this bid item is by Lump Sum.
 - c. Payment: Payment for this bid item will be made for actual work completed in proportion to the total value of work for this bid item.
 3. Bid Item 3: Stormwater Pollution Prevention:
 - a. Bid Item Description: Work in this bid item generally includes all materials, labor, equipment, and other activities required to comply with all regulatory requirements and install and maintain stormwater pollution prevention facilities, comply with Section 01355A - Stormwater Pollution Prevention and all other associated work (excluding items included in other bid items) per the Contract Documents.
 - b. Measurement: Measurement for this bid item is by Lump Sum.
 - c. Payment: Payment for this bid item will be made for actual work completed in proportion to the total value of work for this bid item.
 4. Bid Item 4: Traffic Management:
 - a. Bid Item Description: Work in this bid item generally includes all materials, labor, equipment, and other activities required to furnish and install a complete traffic management system including but not limited to temporary striping, signage, delineators, K-rails, cones, labor, flagmen, temporary fence, and equipment necessary for traffic control and all other associated work (excluding items included in other bid items) per the Contract Documents.
 - b. Measurement: Measurement for this bid item is by Lump Sum.
 - c. Payment: Payment for this bid item will be made for actual work completed in proportion to the total value of work for this bid item.

5. Bid Item 5: Locating and Verifying Concealed existing Utilities per Section 01350:
 - a. Bid Item Description: Work in this bid item generally includes all materials, labor, equipment, and other activities required to locate and pothole existing utility crossings and nearby adjacent utilities per Section 01350 - Special Procedures and perform closed circuit television inspection of storm drain crossings per Section 01140 - Work Restrictions and all other associated work (excluding items included in other bid items) per the Contract Documents.
 - b. Measurement: Measurement for this bid item is by Lump Sum.
 - c. Payment: Payment for this bid item will be made for actual work completed in proportion to the total value of work for this bid item.
6. Bid Item 6: Blow-off Assemblies:
 - a. Bid Item Description: Work in this bid item generally includes all materials, labor, equipment, and other activities required to furnish and install blow-off valves and assemblies including, but not limited to, trenching, earthwork, valve, piping, fittings, valve boxes, all labor, materials, tools and equipment in performing all Work (excluding items included in other bid items) per the Contract Documents.
 - b. Measurement: Measurement for this bid item is by Each.
 - c. Payment: Payment for this bid item will be made at the Contract unit prices for the quantities determined as specified.
7. Bid Item 7: Combination Air/Vacuum Valves:
 - a. Bid Item Description: Work in this bid item generally includes all materials, labor, equipment, and other activities required to furnish and install air valve assemblies including, but not limited to, earthwork, valve, piping, fittings, valve boxes, vent risers, and all other associated work (excluding items included in other bid items) necessary to install the pipe complete and in place per the Contract Documents.
 - b. Measurement: Measurement for this bid item is by Each.
 - c. Payment: Payment for this bid item will be made at the Contract unit prices for the quantities determined as specified.
8. Bid Item 8: 8-inch Isolation Valves (Gate):
 - a. Bid Item Description: Work in this bid item generally includes all materials, labor, equipment, and other activities required furnish and installing valves including, but not limited to, earthwork, valve, piping, fittings, valve boxes, and all other associated work (excluding items included in other bid items) necessary to install the pipe complete and in place per the Contract Documents.
 - b. Measurement: Measurement for this bid item is by Each.
 - c. Payment: Payment for this bid item will be made at the Contract unit prices for the quantities determined as specified.
9. Bid Item 9: 12-inch Isolation Valves (Gate):
 - a. Bid Item Description: Work in this bid item generally includes all materials, labor, equipment, and other activities required furnish and installing valves including, but not limited to, earthwork, valve, piping, fittings, valve boxes, and all other associated work (excluding items included in other bid items) necessary to install the pipe complete and in place per the Contract Documents.
 - b. Measurement: Measurement for this bid item is by Each.
 - c. Payment: Payment for this bid item will be made at the Contract unit prices for the quantities determined as specified.

10. Bid Item 10: Beach Road: 8-inch Pipeline (Ductile Iron):
 - a. Bid Item Description: Work in this bid item generally includes installation of the pipeline and includes excavation, disposal of debris, protection and restoration of existing improvements such as utility crossings, furnishing and installing pipeline, trench bedding, backfill, compaction, disposal of excess soil, compaction, specified testing procedures, temporary and permanent surface restoration and temporary and permanent paving and all other associated work (excluding items included in other bid items) necessary to install the pipe complete and in place per the Contract Documents.
 - b. Measurement: Measurement for this bid item is by Linear Foot.
 - c. Payment: Payment for this bid item will be made at the Contract unit prices for the quantities determined as specified.
11. Bid Item 11: Beach Road: Pressure Reducing Station:
 - a. Bid Item Description: Work in this bid item generally includes all materials, labor, equipment, and other activities required to furnish and install a complete pressure reducing station including the excavation, grading, subgrade installation, mechanical piping, concrete pad, and all work (excluding items included in other bid items) for the pressure reducing station including all civil, structural, mechanical, and other work required per the Contract Documents.
 - b. Measurement: Measurement for this bid item is by Lump Sum.
 - c. Payment: Payment for this bid item will be made for actual work completed in proportion to the total value of work for this bid item.
12. Bid Item 12: Beach Road: 8-inch Pipeline (PVC):
 - a. Bid Item Description: Work in this bid item generally includes installation of the pipeline and includes excavation, disposal of debris, protection and restoration of existing improvements such as utility crossings, furnishing and installing pipeline, trench bedding, backfill, compaction, disposal of excess soil, compaction, specified testing procedures, temporary and permanent surface restoration and temporary and permanent paving, and all other associated work (excluding items included in other bid items) necessary to install the pipe complete and in place per the Contract Documents.
 - b. Measurement: Measurement for this bid item is by Linear Foot.
 - c. Payment: Payment for this bid item will be made at the Contract unit prices for the quantities determined as specified.
13. Bid Item 13: Beach Road: Slurry Seal:
 - a. Bid Item Description: Work in this bid item generally includes all materials, labor, equipment, and other activities required to furnish and install a complete slurry seal pavement treatment where shown on the drawings, including removal of pavement markings all labor, materials, tools and equipment in performing all Work (excluding items included in other bid items) required per the Contract Documents.
 - b. Measurement: Measurement for this bid item is by Square Yard.
 - c. Payment: Payment for this bid item will be made for actual work completed in proportion to the total value of work for this bid item.

14. Bid Item 14: Beach Road: Pavement Striping:
 - a. Bid Item Description: Work in this bid item generally includes all materials, labor, equipment, developing a striping plan and obtaining approval of the plan, and other activities required to furnish and install a complete striping system on the road where striping was removed, damaged, or otherwise impacted by work, and all work (excluding items included in other bid items) required per the Contract Documents.
 - b. Measurement: Measurement for this bid item is by Lump Sum.
 - c. Payment: Payment for this bid item will be made for actual work completed in proportion to the total value of work for this bid item.
15. Bid Item 15: Potable Water Pipeline: Beach Road from Del Monte Blvd to De Forest Rd (PVC):
 - a. Bid Item Description: Work in this bid item generally includes installation of the pipeline and includes mobilization / demobilization, excavation, disposal of debris, protection and restoration of existing improvements such as utility crossings, furnishing and installing pipeline, trench bedding, backfill, compaction, disposal of excess soil, compaction, specified testing procedures, temporary and permanent surface restoration and temporary and permanent paving, and all other associated work (excluding items included in other bid items) necessary to install the pipe complete and in place per the Contract Documents. This work is being funded from a separate funding source, so cost for this bid item shall include any mobilization or other costs required to complete this work.
 - b. Measurement: Measurement for this bid item is by Linear Foot.
 - c. Payment: Payment for this bid item will be made at the Contract unit prices for the quantities determined as specified.
16. Bid Item 16: Potable Water Pipeline: Beach Road Blow-off Assemblies:
 - a. Bid Item Description: Work in this bid item generally includes all materials, labor, equipment, and other activities required to furnish and install blow-off valves and assemblies including, but not limited to, trenching, earthwork, valve, piping, fittings, valve boxes, all labor, materials, tools and equipment in performing all Work (excluding items included in other bid items) per the Contract Documents.
 - b. Measurement: Measurement for this bid item is by Each.
 - c. Payment: Payment for this bid item will be made at the Contract unit prices for the quantities determined as specified.
17. Bid Item 17: Potable Water Pipeline: Beach Road Combination Air/Vacuum Valves:
 - a. Bid Item Description: Work in this bid item generally includes all materials, labor, equipment, and other activities required to furnish and install air valve assemblies including, but not limited to, earthwork, valve, piping, fittings, valve boxes, vent risers, and all other associated work (excluding items included in other bid items) necessary to install the pipe complete and in place per the Contract Documents.
 - b. Measurement: Measurement for this bid item is by Each.
 - c. Payment: Payment for this bid item will be made at the Contract unit prices for the quantities determined as specified.

18. Bid Item 18: Potable Water Pipeline: Beach Road 12-inch Isolation Valves (Gate):
 - a. Bid Item Description: Work in this bid item generally includes all materials, labor, equipment, and other activities required furnish and installing valves including, but not limited to, earthwork, valve, piping, fittings, valve boxes, and all other associated work (excluding items included in other bid items) necessary to install the pipe complete and in place per the Contract Documents.
 - b. Measurement: Measurement for this bid item is by Each.
 - c. Payment: Payment for this bid item will be made at the Contract unit prices for the quantities determined as specified.
19. Bid Item 19: Potable Water Pipeline: From Reservoir 2 to Crescent Ave (PVC):
 - a. Bid Item Description: Work in this bid item generally includes installation of the pipeline and includes all mobilization / demobilization, excavation, disposal of debris, protection and restoration of existing improvements such as utility crossings, furnishing and installing pipeline, trench bedding, backfill, compaction, disposal of excess soil, compaction, specified testing procedures, temporary and permanent surface restoration and temporary and permanent paving, and all other associated work (excluding items included in other bid items) necessary to install the pipe complete and in place per the Contract Documents. This work is being funded from a separate funding source, so cost for this bid item shall include any mobilization or other costs required to complete this work.
 - b. Measurement: Measurement for this bid item is by Linear Foot.
 - c. Payment: Payment for this bid item will be made at the Contract unit prices for the quantities determined as specified.
20. Bid Item 20: Potable Water Pipeline: Reservoir 2 to Crescent Ave Blow-off Assemblies:
 - a. Bid Item Description: Work in this bid item generally includes all materials, labor, equipment, and other activities required to furnish and install blow-off valves and assemblies including, but not limited to, trenching, earthwork, valve, piping, fittings, valve boxes, all labor, materials, tools and equipment in performing all Work (excluding items included in other bid items) per the Contract Documents.
 - b. Measurement: Measurement for this bid item is by Each.
 - c. Payment: Payment for this bid item will be made at the Contract unit prices for the quantities determined as specified.
21. Bid Item 21: Potable Water Pipeline: Reservoir 2 to Crescent Ave Combination Air/Vacuum Valves:
 - a. Bid Item Description: Work in this bid item generally includes all materials, labor, equipment, and other activities required to furnish and install air valve assemblies including, but not limited to, earthwork, valve, piping, fittings, valve boxes, vent risers, and all other associated work (excluding items included in other bid items) necessary to install the pipe complete and in place per the Contract Documents.
 - b. Measurement: Measurement for this bid item is by Each.
 - c. Payment: Payment for this bid item will be made at the Contract unit prices for the quantities determined as specified.

22. Bid Item 22: Potable Water Pipeline: Reservoir 2 to Crescent Ave 12-inch Isolation Valves (Gate):
 - a. Bid Item Description: Work in this bid item generally includes all materials, labor, equipment, and other activities required furnish and installing valves including, but not limited to, earthwork, valve, piping, fittings, valve boxes, and all other associated work (excluding items included in other bid items) necessary to install the pipe complete and in place per the Contract Documents.
 - b. Measurement: Measurement for this bid item is by Each.
 - c. Payment: Payment for this bid item will be made at the Contract unit prices for the quantities determined as specified.
23. Bid Item 23: Carmel Avenue: 8-inch Pipeline (Ductile Iron):
 - a. Bid Item Description: Work in this bid item generally includes installation of the pipeline and includes excavation, disposal of debris, protection and restoration of existing improvements such as utility crossings, furnishing and installing pipeline, trench bedding, backfill, compaction, disposal of excess soil, compaction, specified testing procedures, temporary and permanent surface restoration and temporary and permanent paving, and all other associated work (excluding items included in other bid items) necessary to install the pipe complete and in place per the Contract Documents.
 - b. Measurement: Measurement for this bid item is by Linear Foot.
 - c. Payment: Payment for this bid item will be made at the Contract unit prices for the quantities determined as specified.
24. Bid Item 24: Carmel Avenue: Pressure Reducing Station:
 - a. Bid Item Description: Work in this bid item generally includes all materials, labor, equipment, and other activities required to furnish and install a complete pressure reducing station including the excavation, grading, subgrade installation, pressure reducing vault, future flow meter vault, above ground air valve, mechanical piping, concrete pad, and all work (excluding items included in other bid items) for the pressure reducing station including all civil, structural, mechanical, and other work required per the Contract Documents.
 - b. Measurement: Measurement for this bid item is by Lump Sum.
 - c. Payment: Payment for this bid item will be made for actual work completed in proportion to the total value of work for this bid item.
25. Bid Item 25: Carmel Avenue: 8-inch Pipeline (PVC):
 - a. Bid Item Description: Work in this bid item generally includes installation of the pipeline and includes excavation, disposal of debris, protection and restoration of existing improvements such as utility crossings, furnishing and installing pipeline, trench bedding, backfill, compaction, disposal of excess soil, compaction, specified testing procedures, temporary and permanent surface restoration and temporary and permanent paving, and all other associated work (excluding items included in other bid items) necessary to install the pipe complete and in place per the Contract Documents.
 - b. Measurement: Measurement for this bid item is by Linear Foot.
 - c. Payment: Payment for this bid item will be made at the Contract unit prices for the quantities determined as specified.

26. Bid Item 26: Carmel Avenue: Slurry Seal:
 - a. Bid Item Description: Work in this bid item generally includes all materials, labor, equipment, and other activities required to furnish and install a complete slurry seal pavement treatment where shown on the drawings, including removal of pavement markings all labor, materials, tools and equipment in performing all Work (excluding items included in other bid items) required per the Contract Documents.
 - b. Measurement: Measurement for this bid item is by Square Yard.
 - c. Payment: Payment for this bid item will be made for actual work completed in proportion to the total value of work for this bid item.
27. Bid Item 27: Carmel Avenue: Pavement Striping:
 - a. Bid Item Description: Work in this bid item generally includes all materials, labor, equipment, developing a striping plan and obtaining approval of the plan, and other activities required to furnish and install a complete striping system on the road where striping was removed, damaged, or otherwise impacted by work, and all work (excluding items included in other bid items) required per the Contract Documents.
 - b. Measurement: Measurement for this bid item is by Lump Sum.
 - c. Payment: Payment for this bid item will be made for actual work completed in proportion to the total value of work for this bid item.
28. Bid Item 28: Marina Heights Drive: 16-inch Pipeline (Ductile Iron):
 - a. Bid Item Description: Work in this bid item generally includes installation of the pipeline and includes excavation, disposal of debris, protection and restoration of existing improvements such as utility crossings, furnishing and installing pipeline, trench bedding, backfill, compaction, disposal of excess soil, compaction, specified testing procedures, temporary and permanent surface restoration and temporary and permanent paving, and all other associated work (excluding items included in other bid items) necessary to install the pipe complete and in place per the Contract Documents.
 - b. Measurement: Measurement for this bid item is by Linear Foot.
 - c. Payment: Payment for this bid item will be made at the Contract unit prices for the quantities determined as specified.
29. Bid Item 29: Marina Heights Drive: Pressure Reducing Station:
 - a. Bid Item Description: Work in this bid item generally includes all materials, labor, equipment, and other activities required to furnish and install a complete pressure reducing station including the excavation, grading, subgrade installation, pressure reducing vault, future flow meter vault, above ground air valve, mechanical piping, concrete pad, and all work (excluding items included in other bid items) for the pressure reducing station including all civil, structural, mechanical, and other work required per the Contract Documents.
 - b. Measurement: Measurement for this bid item is by Lump Sum.
 - c. Payment: Payment for this bid item will be made for actual work completed in proportion to the total value of work for this bid item.
30. Bid Item 30: Marina Heights Drive: Slurry Seal:
 - a. Bid Item Description: Work in this bid item generally includes all materials, labor, equipment, and other activities required to furnish and install a complete slurry seal pavement treatment where shown on the drawings, including removal of pavement markings all labor, materials, tools and equipment in performing all Work (excluding items included in other bid items) required per the Contract Documents.

- b. Measurement: Measurement for this bid item is by Square Yard.
 - c. Payment: Payment for this bid item will be made for actual work completed in proportion to the total value of work for this bid item.
31. Bid Item 31: Marina Heights Drive: Pavement Striping:
- a. Bid Item Description: Work in this bid item generally includes all materials, labor, equipment, developing a striping plan and obtaining approval of the plan, and other activities required to furnish and install a complete striping system on the road where striping was removed, damaged, or otherwise impacted by work, and all work (excluding items included in other bid items) required per the Contract Documents.
 - b. Measurement: Measurement for this bid item is by Lump Sum.
 - c. Payment: Payment for this bid item will be made for actual work completed in proportion to the total value of work for this bid item.
32. Bid Item 32: Abrams Drive North of Imjim Parkway: 12-inch Pipeline (DIP):
- a. Bid Item Description: Work in this bid item generally includes installation of the pipeline and includes excavation, disposal of debris, protection and restoration of existing improvements such as utility crossings, furnishing and installing pipeline, trench bedding, backfill, compaction, disposal of excess soil, compaction, specified testing procedures, temporary and permanent surface restoration and temporary and permanent paving, and all other associated work (excluding items included in other bid items) necessary to install the pipe complete and in place per the Contract Documents.
 - b. Measurement: Measurement for this bid item is by Linear Foot.
 - c. Payment: Payment for this bid item will be made at the Contract unit prices for the quantities determined as specified.
33. Bid Item 33: Abrams Drive North of Imjim Parkway: Slurry Seal:
- a. Bid Item Description: Work in this bid item generally includes all materials, labor, equipment, and other activities required to furnish and install a complete slurry seal pavement treatment where shown on the drawings, including removal of pavement markings all labor, materials, tools and equipment in performing all Work (excluding items included in other bid items) required per the Contract Documents.
 - b. Measurement: Measurement for this bid item is by Square Yard.
 - c. Payment: Payment for this bid item will be made for actual work completed in proportion to the total value of work for this bid item.
34. Bid Item 34: Abrams Drive North of Imjim Parkway: Pavement Striping:
- a. Bid Item Description: Work in this bid item generally includes all materials, labor, equipment, developing a striping plan and obtaining approval of the plan, and other activities required to furnish and install a complete striping system on the road where striping was removed, damaged, or otherwise impacted by work, and all work (excluding items included in other bid items) required per the Contract Documents.
 - b. Measurement: Measurement for this bid item is by Lump Sum.
 - c. Payment: Payment for this bid item will be made for actual work completed in proportion to the total value of work for this bid item.

35. Bid Item 35: Pressure Test and Disinfect Existing Pipeline in UCMBEST Property:
- a. Bid Item Description: Work in this bid item generally includes all materials, labor, equipment, developing a plan to pressure test and disinfect the existing recycled water facilities in UCMBEST property (as shown in the Appendix) including assuming not less than 5 days for a crew to physically locate and perform general cleaning and routine maintenance on and repair of all appurtenances (air valves, blow-offs, etc.) to ensure they are operational, flushing the entire existing system to remove any sediment buildup with the existing pipelines, pressure testing and disinfecting the system prior to connecting to it at Blanco Road.
 - b. Measurement: Measurement for this bid item is by Lump Sum.
 - c. Payment: Payment for this bid item will be made for actual work completed in proportion to the total value of work for this bid item.
36. Bid Item 36: Blanco Road: 12-inch Pipeline (PVC):
- a. Bid Item Description: Work in this bid item generally includes installation of the pipeline and includes excavation, disposal of debris, protection and restoration of existing improvements such as utility crossings, furnishing and installing pipeline, trench bedding, backfill, compaction, disposal of excess soil, compaction, specified testing procedures, temporary and permanent surface restoration and temporary and permanent paving, and all other associated work (excluding items included in other bid items) necessary to install the pipe complete and in place per the Contract Documents.
 - b. Measurement: Measurement for this bid item is by Linear Foot.
 - c. Payment: Payment for this bid item will be made at the Contract unit prices for the quantities determined as specified.
37. Bid Item 37: Allowance for sensitive plant species restoration on Blanco Road:
- a. Bid Item Description: A preconstruction survey for sensitive plant species identified Monterey Spineflower west of Blanco road, in the pipeline alignment from Research Drive to Reservation Road. MCWD will hire a biologist to develop a Rare Plant Restoration Plan, which is anticipated to generally consist of requirements to separately excavate, store, and re-place soil where the Monterey Spineflower was growing and temporarily provide water to help re-establish growth. Since the Restoration Plan has not yet been completed and the requirements defined, this allowance is a placeholder for that work.
 - b. Measurement: Measurement for this bid item is a defined allowance.
 - c. Payment: Payment for this bid item will be made based on actual costs of sensitive plant species restoration. Payment will only be made if specifically authorized in writing by the Construction Manager in advance of the work taking place.
38. Bid Item 38: Blanco Road: Launching Shaft for Guided Auger Boring Installation:
- a. Bid Item Description: Work in this bid item generally includes all materials, labor, equipment, and other activities required to install the launching shaft, as required, for the guided auger boring installation, including but not limited to designing and installing the shaft, groundwater dewatering, excavation material processing and disposal, restoration of existing improvements such as vegetation, and shaft restoration including, bedding, backfill, disposal of excess soil, specified testing procedures,

- and all other associated work (excluding items included in other bid items) per the Contract Documents.
- b. Measurement: Measurement for this bid item is by Lump Sum.
 - c. Payment: Payment for this bid item will be made for actual work completed in proportion to the total value of work for this bid item.
39. Bid Item 39: Blanco Road: Guided Auger Boring Casing Pipeline Installation:
- a. Bid Item Description: Work in this bid item generally includes all materials, labor, equipment, and other activities required to set up the guided auger boring installation, boring the casing pipe, grouting the annular space outside the casing pipe, and ancillary operations, including but not limited to obtaining and boring with guided auger boring machine, head recovery, excavation material processing, grouting, and disposal of boring of debris, specified testing procedures, and all other associated work (excluding items included in other bid items) per the Contract Documents.
 - b. Measurement: Measurement for this bid item is by Linear Foot.
 - c. Payment: Payment for this bid item will be made at the Contract unit prices for the quantities determined as specified.
40. Bid Item 40: Blanco Road: Guided Auger Boring Carrier Pipeline Installation (PVC):
- a. Bid Item Description: Work in this bid item generally includes all materials, labor, equipment, and other activities required to set up the carrier pipeline installation within the bored casing, installing runners on the carrier pipe, installing the carrier pipe, grouting the annular space between the carrier and the casing pipe, installing end seals, and ancillary operations, including but not limited to and disposal of debris, specified testing procedures, and all other associated work (excluding items included in other bid items) per the Contract Documents.
 - b. Measurement: Measurement for this bid item is by Linear Foot.
 - c. Payment: Payment for this bid item will be made at the Contract unit prices for the quantities determined as specified.
41. Bid Item 41: Reservation Road: Receiving Shaft for Guided Auger Boring Installation:
- a. Bid Item Description: Work in this bid item generally includes all materials, labor, equipment, and other activities required to install the receiving shaft, as required, for the guided auger boring installation, including but not limited to designing and installing the shaft, groundwater dewatering, excavation material processing and disposal, restoration of existing improvements such as vegetation, and shaft restoration including, bedding, backfill, disposal of excess soil, specified testing procedures, and all other associated work (excluding items included in other bid items) per the Contract Documents.
 - b. Measurement: Measurement for this bid item is by Lump Sum.
 - c. Payment: Payment for this bid item will be made for actual work completed in proportion to the total value of work for this bid item.
42. Bid Item 42: Reservation Road: 12-inch Pipeline (PVC):
- a. Bid Item Description: Work in this bid item generally includes installation of the pipeline and includes excavation, disposal of debris, protection and restoration of existing improvements such as utility crossings, furnishing and installing pipeline, trench bedding, backfill, compaction, disposal of excess soil, compaction, specified testing procedures, temporary and permanent surface restoration and temporary and permanent paving, and all other associated work (excluding items included in other bid items)

- necessary to install the pipe complete and in place per the Contract Documents.
- b. Measurement: Measurement for this bid item is by Linear Foot.
 - c. Payment: Payment for this bid item will be made at the Contract unit prices for the quantities determined as specified.
43. Bid Item 43: Reservation Road: 2.5-inch Grind and Inlay:
- a. Bid Item Description: Work in this bid item generally includes all materials, labor, equipment, and other activities required to furnish and install a complete asphalt pavement grind and inlay where shown on the drawings, including removal of pavement markings, wedge grinds, conform grinds, asphalt concrete, ensuring existing utility valve cans and monuments are flush with grade, all labor, materials, tools and equipment in performing all Work (excluding items included in other bid items) required per the Contract Documents.
 - b. Measurement: Measurement for this bid item is by Square Yard.
 - c. Payment: Payment for this bid item will be made for actual work completed in proportion to the total value of work for this bid item.
44. Bid Item 44: Reservation Road: Pavement Striping:
- a. Bid Item Description: Work in this bid item generally includes all materials, labor, equipment, developing a striping plan and obtaining approval of the plan, and other activities required to furnish and install a complete striping system on the road where striping was removed, damaged, or otherwise impacted by work, and all work (excluding items included in other bid items) required per the Contract Documents.
 - b. Measurement: Measurement for this bid item is by Lump Sum.
 - c. Payment: Payment for this bid item will be made for actual work completed in proportion to the total value of work for this bid item.
45. Bid Item 45: 9th Street: 8-inch Pipeline (Ductile Iron):
- a. Bid Item Description: Work in this bid item generally includes installation of the pipeline and includes excavation, disposal of debris, protection and restoration of existing improvements such as utility crossings, furnishing and installing pipeline, trench bedding, backfill, compaction, disposal of excess soil, compaction, specified testing procedures, temporary and permanent surface restoration and temporary and permanent paving, and all other associated work (excluding items included in other bid items) necessary to install the pipe complete and in place per the Contract Documents.
 - b. Measurement: Measurement for this bid item is by Linear Foot.
 - c. Payment: Payment for this bid item will be made at the Contract unit prices for the quantities determined as specified.
46. Bid Item 46: 9th Street: Pressure Reducing Station:
- a. Bid Item Description: Work in this bid item generally includes all materials, labor, equipment, and other activities required to furnish and install a complete pressure reducing station including the excavation, grading, subgrade installation, pressure reducing vault, future flow meter vault, above ground air valve, mechanical piping, concrete pad, and all work (excluding items included in other bid items) for the pressure reducing station including all civil, structural, mechanical, and other work required per the Contract Documents.
 - b. Measurement: Measurement for this bid item is by Lump Sum.
 - c. Payment: Payment for this bid item will be made for actual work completed in proportion to the total value of work for this bid item.

47. Bid Item 47: 9th Street: 8-inch Pipeline (PVC):
 - a. Bid Item Description: Work in this bid item generally includes installation of the pipeline and includes excavation, disposal of debris, protection and restoration of existing improvements such as utility crossings, furnishing and installing pipeline, trench bedding, backfill, compaction, disposal of excess soil, compaction, specified testing procedures, temporary and permanent surface restoration and temporary and permanent paving, and all other associated work (excluding items included in other bid items) necessary to install the pipe complete and in place per the Contract Documents.
 - b. Measurement: Measurement for this bid item is by Linear Foot.
 - c. Payment: Payment for this bid item will be made at the Contract unit prices for the quantities determined as specified.
48. Bid Item 48: 9th Street: Slurry Seal:
 - a. Bid Item Description: Work in this bid item generally includes all materials, labor, equipment, and other activities required to furnish and install a complete slurry seal pavement treatment where shown on the drawings, including removal of pavement markings all labor, materials, tools and equipment in performing all Work (excluding items included in other bid items) required per the Contract Documents.
 - b. Measurement: Measurement for this bid item is by Square Yard.
 - c. Payment: Payment for this bid item will be made for actual work completed in proportion to the total value of work for this bid item.
49. Bid Item 49: 9th Street: Pavement Striping:
 - a. Bid Item Description: Work in this bid item generally includes all materials, labor, equipment, developing a striping plan and obtaining approval of the plan, and other activities required to furnish and install a complete striping system on the road where striping was removed, damaged, or otherwise impacted by work, and all work (excluding items included in other bid items) required per the Contract Documents.
 - b. Measurement: Measurement for this bid item is by Lump Sum.
 - c. Payment: Payment for this bid item will be made for actual work completed in proportion to the total value of work for this bid item.
50. Bid Item 50: Coe Avenue: 8-inch Pipeline (Ductile Iron):
 - a. Bid Item Description: Work in this bid item generally includes installation of the pipeline and includes excavation, disposal of debris, protection and restoration of existing improvements such as utility crossings, furnishing and installing pipeline, trench bedding, backfill, compaction, disposal of excess soil, compaction, specified testing procedures, temporary and permanent surface restoration and temporary and permanent paving, and all other associated work (excluding items included in other bid items) necessary to install the pipe complete and in place per the Contract Documents.
 - b. Measurement: Measurement for this bid item is by Linear Foot.
 - c. Payment: Payment for this bid item will be made at the Contract unit prices for the quantities determined as specified.

51. Bid Item 51: Coe Avenue: Pressure Reducing Station:
 - a. Bid Item Description: Work in this bid item generally includes all materials, labor, equipment, and other activities required to furnish and install a complete pressure reducing station including the excavation, grading, subgrade installation, pressure reducing vault, future flow meter vault, above ground air valve, mechanical piping, concrete pad, and all work (excluding items included in other bid items) for the pressure reducing station including all civil, structural, mechanical, and other work required per the Contract Documents.
 - b. Measurement: Measurement for this bid item is by Lump Sum.
 - c. Payment: Payment for this bid item will be made for actual work completed in proportion to the total value of work for this bid item.
52. Bid Item 52: Coe Avenue: 8-inch Pipeline (PVC):
 - a. Bid Item Description: Work in this bid item generally includes installation of the pipeline and includes excavation, disposal of debris, protection and restoration of existing improvements such as utility crossings, furnishing and installing pipeline, trench bedding, backfill, compaction, disposal of excess soil, compaction, specified testing procedures, temporary and permanent surface restoration and temporary and permanent paving, and all other associated work (excluding items included in other bid items) necessary to install the pipe complete and in place per the Contract Documents.
 - b. Measurement: Measurement for this bid item is by Linear Foot.
 - c. Payment: Payment for this bid item will be made at the Contract unit prices for the quantities determined as specified.
53. Bid Item 53: Coe Avenue: Slurry Seal:
 - a. Bid Item Description: Work in this bid item generally includes all materials, labor, equipment, and other activities required to furnish and install a complete slurry seal pavement treatment where shown on the drawings, including removal of pavement markings all labor, materials, tools and equipment in performing all Work (excluding items included in other bid items) required per the Contract Documents.
 - b. Measurement: Measurement for this bid item is by Square Yard.
 - c. Payment: Payment for this bid item will be made for actual work completed in proportion to the total value of work for this bid item.
54. Bid Item 54: Coe Avenue: Pavement Striping:
 - a. Bid Item Description: Work in this bid item generally includes all materials, labor, equipment, developing a striping plan and obtaining approval of the plan, and other activities required to furnish and install a complete striping system on the road where striping was removed, damaged, or otherwise impacted by work, and all work (excluding items included in other bid items) required per the Contract Documents.
 - b. Measurement: Measurement for this bid item is by Lump Sum.
 - c. Payment: Payment for this bid item will be made for actual work completed in proportion to the total value of work for this bid item.
55. Bid Item 55: Patton Parkway Turnout: Pressure Reducing Station:
 - a. Bid Item Description: Work in this bid item generally includes all materials, labor, equipment, and other activities required to furnish and install a complete pressure reducing station including the excavation, grading, subgrade installation, pressure reducing valve, backflow preventer, valves and appurtenances, mechanical piping, concrete pad, and all work (excluding items included in other bid items) for the pressure reducing

- station including all civil, structural, mechanical, and other work required per the Contract Documents. The tie-in is approximately located at STA 212+31 on Drawing C-21, included in the Appendices.
- b. Measurement: Measurement for this bid item is by Lump Sum.
 - c. Payment: Payment for this bid item will be made for actual work completed in proportion to the total value of work for this bid item.
56. Bid Item 56: 5th Street Turnout: Pressure Reducing Station:
- a. Bid Item Description: Work in this bid item generally includes all materials, labor, equipment, and other activities required to furnish and install a complete pressure reducing station including the excavation, grading, subgrade installation, pressure reducing valve, backflow preventer, valves and appurtenances, mechanical piping, concrete pad, and all work (excluding items included in other bid items) for the pressure reducing station including all civil, structural, mechanical, and other work required per the Contract Documents. The tie-in is approximately located at STA 267+96 on Drawing C-26, included in the Appendices.
 - b. Measurement: Measurement for this bid item is by Lump Sum.
 - c. Payment: Payment for this bid item will be made for actual work completed in proportion to the total value of work for this bid item.
57. Bid Item 57: 5th Street Turnout (2): Pressure Reducing Station:
- a. Bid Item Description: Work in this bid item generally includes all materials, labor, equipment, and other activities required to furnish and install a complete pressure reducing station including the excavation, grading, subgrade installation, pressure reducing valve, backflow preventer, valves and appurtenances, mechanical piping, concrete pad, and all work (excluding items included in other bid items) for the pressure reducing station including all civil, structural, mechanical, and other work required per the Contract Documents. The tie-in is approximately located at STA 273+10 on Drawing C-27, included in the Appendices.
 - b. Measurement: Measurement for this bid item is by Lump Sum.
 - c. Payment: Payment for this bid item will be made for actual work completed in proportion to the total value of work for this bid item.
58. Bid Item 58: 5th Street Turnout (3): Pressure Reducing Station:
- a. Bid Item Description: Work in this bid item generally includes all materials, labor, equipment, and other activities required to furnish and install a complete pressure reducing station including the excavation, grading, subgrade installation, pressure reducing valve, backflow preventer, valves and appurtenances, mechanical piping, concrete pad, and all work (excluding items included in other bid items) for the pressure reducing station including all civil, structural, mechanical, and other work required per the Contract Documents. The tie-in is approximately located at STA 283+41 on Drawing C-28, included in the Appendices.
 - b. Measurement: Measurement for this bid item is by Lump Sum.
 - c. Payment: Payment for this bid item will be made for actual work completed in proportion to the total value of work for this bid item.
59. Bid Item 59: Engineer Lane Turnout: Pressure Reducing Station:
- a. Bid Item Description: Work in this bid item generally includes all materials, labor, equipment, and other activities required to furnish and install a complete pressure reducing station including the excavation, grading, subgrade installation, pressure reducing valve, backflow preventer, valves and appurtenances, mechanical piping, concrete pad, and all work (excluding items included in other bid items) for the pressure reducing

station including all civil, structural, mechanical, and other work required per the Contract Documents. The tie-in is approximately located at STA 321+48 on Drawing C-32, included in the Appendices.

b. Measurement: Measurement for this bid item is by Lump Sum.

c. Payment: Payment for this bid item will be made for actual work completed in proportion to the total value of work for this bid item.

60. Bid Item 60: General Jim Moore Boulevard Turnout: Pressure Reducing Station:

a. Bid Item Description: Work in this bid item generally includes all materials, labor, equipment, and other activities required to furnish and install a complete pressure reducing station including the excavation, grading, subgrade installation, pressure reducing valve, backflow preventer, valves and appurtenances, mechanical piping, concrete pad, and all work (excluding items included in other bid items) for the pressure reducing station including all civil, structural, mechanical, and other work required per the Contract Documents. The tie-in is approximately located at STA 344+27 on Drawing C-34, included in the Appendices.

b. Measurement: Measurement for this bid item is by Lump Sum.

c. Payment: Payment for this bid item will be made for actual work completed in proportion to the total value of work for this bid item.

55-61. Bid Item ~~6155~~: Reimbursement Allowance for City of Marina

Encroachment Permit Fee:

a. Bid Item Description: This bid item is an allowance for the encroachment permit fee.

b. Measurement: Measurement for this bid item is a defined allowance.

c. Payment: Payment for this bid item will be for actual cost paid for the encroachment permit. Markups, contingencies, labor, and/or any other costs shall not be included.

56-62. Bid Item ~~6256~~: Reimbursement Allowance for Monterey County

Encroachment Permit Fee:

a. Bid Item Description: This bid item is an allowance for the encroachment permit fee.

b. Measurement: Measurement for this bid item is a defined allowance.

c. Payment: Payment for this bid item will be for actual cost paid for the encroachment permit. Markups, contingencies, labor, and/or any other costs shall not be included.

57-63. Bid Item ~~6357~~: Reimbursement Allowance for City of Seaside

Encroachment Permit Fee:

a. Bid Item Description: This bid item is an allowance for the encroachment permit fee.

b. Measurement: Measurement for this bid item is a defined allowance.

c. Payment: Payment for this bid item will be for actual cost paid for the encroachment permit. Markups, contingencies, labor, and/or any other costs shall not be included.

58-64. Bid Item ~~6458~~: Reimbursement Allowance for Business License Fees from Cities and County:

a. Bid Item Description: This bid item is an allowance for business license fees from the City of Marina, City of Seaside, and County of Monterey.

b. Measurement: Measurement for this bid item is a defined allowance.

c. Payment: Payment for this bid item will be for actual cost paid for the business license. Markups, contingencies, labor, and/or any other costs shall not be included.

- 59-65. Bid Item ~~6559~~: Potential Installation of 1-inch Service per Detail W-1:
- a. Bid Item Description: Work in this bid item generally includes excavation, disposal of debris, protection and restoration of existing improvements such as utility crossings, furnishing and installing pipeline, trench bedding, backfill, compaction, disposal of excess soil, compaction, specified testing procedures, temporary and permanent surface restoration and temporary and permanent paving, and all other associated work (excluding items included in other bid items) necessary to install a recycled water service installation per MCWD Detail W-1. MCWD may elect to install 1-inch services that have not yet been identified. For bidding purposes, Contractor shall assume the service is from an 8-inch diameter recycled water main and the back of curb is 40 feet from the recycled water main.
 - b. Measurement: Measurement for this bid item is by Each.
 - c. Payment: Payment for this bid item will be made at the Contract unit prices for the quantities determined as specified.
- 60-66. Bid Item ~~6660~~: Potential Installation of 4-inch Service:
- a. Bid Item Description: Work in this bid item generally includes excavation, disposal of debris, protection and restoration of existing improvements such as utility crossings, furnishing and installing pipeline, trench bedding, backfill, compaction, disposal of excess soil, compaction, specified testing procedures, temporary and permanent surface restoration and temporary and permanent paving, and all other associated work (excluding items included in other bid items) necessary to install a recycled water service installation per MCWD Detail W-1. MCWD may elect to install 4-inch services that have not yet been identified. For bidding purposes, Contractor shall assume the service includes an 8-inch by 4-inch mechanical joint tee with restrained retainer glands, 4-inch gate valve, 40 feet of 4-inch diameter DR14 C900 PVC pipeline and a 4-inch mechanical joint cap.
 - b. Measurement: Measurement for this bid item is by Each.
 - c. Payment: Payment for this bid item will be made at the Contract unit prices for the quantities determined as specified.
- 61-67. Bid Item ~~6764~~: Contingency Allowance for Unknown Utility Conflicts:
- a. Bid Item Description: This bid item is an allowance for work associated with mitigating the impacts of an unknown utility, such as lowering the pipeline to avoid a conflict with the unknown utility.
 - b. Measurement: Measurement for this bid item is by Lump Sum.
 - c. Payment: Payment for this bid item will be made based on actual costs of mitigating the impacts of an unknown utility, and shall be tracked on a time and material basis. Payment will only be made if specifically authorized in writing by the Construction Manager in advance of the work taking place.
- 62-68. Bid Item ~~6862~~: All work required to be completed for the project that is not included in the previous bid items:
- a. Bid Item Description: Work in this bid item generally includes all work needed to complete the project that is not specifically included in other Bid Items. This bid item is intended to provide a location for miscellaneous work required to complete the project that is not covered by any other bid item.
 - b. Measurement: Measurement for this bid item is by Lump Sum.
 - c. Payment: Payment for this bid item will be made for actual work completed in proportion to the total value of work for this bid item.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

END OF SECTION

SECTION 15211

DUCTILE IRON PIPE: AWWA C151

PART 1 GENERAL

1.01 SUMMARY

- A. Section includes: Ductile iron pipe, joints, fittings, gaskets, and pipe linings and coatings.

1.02 REFERENCES

- A. American Society of Mechanical Engineers (ASME):
 - 1. B16.1 - Gray Iron Pipe Flanges and Flanged Fittings: Classes 25, 125, and 250.
- B. American Water Works Association (AWWA):
 - 1. C104 - Standard for Cement-Mortar Lining for Ductile-Iron Pipe and Fittings.
 - 2. C110 - Standard for Ductile-Iron and Gray-Iron Fittings.
 - 3. C111 - Standard for Rubber-Gasket Joints for Ductile-Iron Pressure Pipe and Fittings.
 - 4. C115 - Flanged Ductile Iron Pipe with Ductile-Iron or Gray-Iron Threaded Flanges.
 - 5. C150 - Standard for Thickness Design of Ductile-Iron Pipe.
 - 6. C151 - Standard for Ductile-Iron Pipe, Centrifugally Cast.
 - 7. C153 - Standard for Ductile-Iron Compact Fittings for Water Service.
 - 8. C600 - Installation of Ductile Iron Water Mains and Their Appurtenances.
 - 9. C606 - Standard for Grooved and Shouldered Joints.
- C. American Welding Society (AWS):
 - 1. D11.2 - Guide for Welding Iron Castings.
- D. ASTM International (ASTM):
 - 1. A47 - Standard Specifications for Ferritic Malleable Iron Castings.
 - 2. A183 - Standard Specifications for Carbon Steel Track Bolts and Nuts.
 - 3. A536 - Standard Specifications for Ductile Iron Castings.
 - 4. C283 - Standard Test Methods for Resistance of Porcelain Enamelled Utensils to Boiling Acid.
 - 5. D792 - Standard Test Methods for Density and Specific Gravity (Relative Density) of Plastics by Displacement.
- E. Ductile Iron Pipe Research Association (DIPRA):
 - 1. Thrust Restraint Design Manual.
- F. NACE International (NACE):
 - 1. SP0188 - Discontinuity (Holiday) Testing of New Protective Coatings on Conductive Substrates.

- G. National Association of Pipe Fabricators, Inc. (NAPF):
 - 1. 500-03 - Surface Preparation Standard for Ductile Iron Pipe and Fittings in Exposed Locations Receiving Special External Coatings and/or Special Internal Linings.
- H. Society for Protective Coatings (SSPC):
 - 1. PA-2 - Measurement of Dry Coating Thickness With Magnetic Gages.

1.03 SYSTEM DESCRIPTION

- A. Thrust restraint system design:
 - 1. The pipe shall be restrained at all locations.

1.04 SUBMITTALS

- A. Submit as specified in Section 01330 - Submittal Procedures.
- B. Product data: As specified in Section 15052 - Common Work Results for General Piping.
- C. Shop drawings:
 - 1. Photographs, drawings, and descriptions of fittings, gaskets, couplings, grooving of pipe and fittings, pipe linings, and coatings.
- D. Manufacturer's statement:
 - 1. Manufacturer shall provide a sworn statement that the materials provided complies with the requirements and standards of these specifications. The statement shall also confirm that the inspection and specified tests have been made and that the results thereof comply with the requirements and standards of this specification.
- E. Manufacturer's test reports:
 - 1. On regular measurements of zinc coating masses that are required by ISO 8179 Part 4.4.
 - 2. Include Coating Manufacturer's Technical Representative's reports.

1.05 QUALITY ASSURANCE

- A. Pre-installation meeting:
 - 1. Arrange for pipeline manufacturer's representative to provide instruction to pipeline installation crew members who have not previously installed integrally restrained push-on joints.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Block piping and associated fittings for shipment to prevent damage to coatings and linings.
- B. Carefully handle piping and associated fittings during loading, unloading, and installation:
 - 1. Do not drop piping material from cars or trucks.
 - 2. Lower piping by mechanical means.
 - 3. Do not drop or pound pipe to fit grade.

- C. Protect gaskets from long-term exposure to sunlight.
- D. Store piping, fittings, and other accessories such that they do not accumulate and hold rainwater, dirt, and debris.

PART 2 PRODUCTS

2.01 MANUFACTURED UNITS

- A. Ductile iron piping:
 - 1. Manufacturers meeting qualifications as specified in this Section.
 - 2. Typical type:
 - a. In accordance with AWWA C150 and AWWA C151.
 - b. Pressure class 350 pounds per square inch.
 - c. Manufactured from greater than 90 percent recycled material.
 - 3. Type with screw-on flanges:
 - a. In accordance with AWWA C115 with minimum special thickness Class 53 wall thickness as required for screw-on flanges.
- B. Joints:
 - 1. Flanged joints:
 - a. Screw-on flanges: Comply with the diameter, thickness, drilling, and other characteristics in accordance with ASME B16.1. In addition, comply with the following requirements:
 - 1) Ductile iron.
 - 2) Long hub, threaded, and specially designed for ductile iron pipe.
 - 3) After attaching to pipe, machine flange face to make pipe end and flange even and perpendicular to the axis of the pipe.
 - b. Bolt holes on flanges: 2-holed and aligned at both ends of pipe.
 - c. Cap screw or stud bolt holes: Tapped.
 - d. Bolts and nuts: As specified in Section 15052 - Common Work Results for General Piping.
 - e. Gaskets: Standard styrene butadiene copolymer (SBR) rated to 350 pounds per square inch.
 - f. Flanged unit connections: Flanged to grooved joint adapters or a long enough spool with one end flanged and the other end grooved to prevent interference with the operation of adjacent valves, pumps, or other items.
 - 2. Mechanical joints: In accordance with AWWA C111.
 - 3. Push-on rubber gasket joints: In accordance with AWWA C111.
 - 4. Mechanical wedge action joint restraints:
 - a. Manufacturers, one of the following, or equal rated at least 350 pounds per square inch working pressure:
 - 1) EBAA Iron, Inc., Megalug® Series 1100.
 - 2) Star Pipe Products, Split Stargrip Series 3000.
 - 3) Sigma Corp., One-Lok Model SLDE.
 - ~~1) EBAA Iron, Inc., Megalug Series 1100TDM.~~
 - ~~2) Star Pipe Products, Tandem Stargrip Series 3000T.~~
 - b. Materials:
 - 1) Gland body: Ductile iron in accordance with ASTM A536.
 - 2) Wedges and wedge actuating components: Ductile iron in accordance with ASTM A536.

- a) Wedges shall be heat treated to a minimum of 370 BHN.
 - 3) Actuating bolts and nuts: Ductile iron in accordance with ASTM A536:
 - a) Provide torque-limiting twist off components to ensure proper installation.
 - c. Coatings:
 - 1) Provide manufacturer applied coating system.
 - 2) Manufacturers: One of the following or equal:
 - a) EBAA Iron Inc., Mega-Bond.
 - b) Star Pipe Products, Star-Bond.
 - c) Sigma Corp., Corrsafe™ Electro-deposition coating.
 - d. Working pressure:
 - 1) Shall include a minimum safety factor of 2:1.
 - 2) 350 pounds per square inch.
 - e. Restraint shall consist of multiple gripping wedges incorporated into a follower gland meeting the requirements of AWWA C111.
 - f. Restraint shall allow post assembly angular deflection that is a minimum of 50 percent of the angular deflection allowed by the mechanical joint.
 - g. Restraint must be in accordance with applicable requirements of AWWA C110 and AWWA C111 for mechanical joints.
5. Integrally restrained push-on joints:
- a. Application:
 - 1) Where designation restrained push-on is specified in the Piping Schedule provided in Section 15052 - Common Work Results for General Piping, supply a restrained push-on joint piping system, which includes restrained push-on joints where necessary based upon thrust calculations.
 - 2) Standard push-on rubber gasket joints as specified above can be used where thrust calculations demonstrate restraint is not required.
 - b. Design:
 - 1) Restrained push-on joints of the configuration which utilizes a gripping or friction force for restraint will not be acceptable.
 - 2) Suitable for the following working pressures:
 - a) 350 pounds per square inch gauge.
 - c. Manufacturers: One of the following or equal:
 - 1) U.S. Pipe, TR Flex:
 - a) Local Representative: Collin Bryant (530) 521-8081.
 - 2) McWane Ductile, TR Flex:
 - a) Local Representative: John Johnson (951)813-9589.
 - 3) American Cast Iron Pipe Co., Flex Ring or Lok-Ring:
 - a) Local Representative: Rosemary Smud (678) 770-6575.
 - d. Limit buried joints to the manufacturer's published allowable angular joint deflection for purposes of pipeline alignment and elimination of fittings.

C. Fittings:

- 1. Ductile iron in accordance with AWWA C110.
- 2. Joint type: Same as that of the associated piping as specified in Section 15052 - Common Work Results for General Piping.
- 3. Plain end-to-flanged joint connectors using setscrews are not acceptable.
- 4. Where fittings are located adjacent to other fittings or valves, the connection shall be a flange by flange connection.

- D. Pipe and Fitting linings:
 - 1. Cement-mortar lining:
 - a. In accordance with AWWA C104, apply cement-mortar on clean bare metal surfaces. Extend to faces of flanges, ends of spigots, and shoulders of hubs.
 - b. Minimum lining thickness: Standard in accordance with AWWA C104.
 - c. Type of cement: Type II.
 - 2. Asphaltic seal coat:
 - a. Apply over cement mortar linings and to outside surface of pipes that will not receive another coating. Apply in accordance with AWWA C151.
- E. Pipe coatings:
 - 1. Zinc coating:
 - a. The exterior shall be coated with a layer of arc-sprayed zinc per ISO 8179.
 - b. The mean mass of zinc based coating measured in accordance with ISO 8179 shall not be less than 200g/m² of pipe surface area with a local minimum of 180 g/m².
 - c. Manufacturer shall carry out regular measurements of zinc coating masses in accordance with ISO 8179.
 - d. Pipe markings shall include the word "zinc" or a similar designation clearly identifying the pipe has a zinc coating.
 - 2. Topcoat:
 - a. The finishing layer shall be bituminous paint compatible with the zinc based layer. The mean dry film thickness shall be per AWWA C151.
- F. Fitting coatings:
 - 1. Zinc coating:
 - a. The exterior shall be coated with a zinc rich paint conforming to 8179- 2. Dry film thickness shall be as recommended by the paint manufacturer, but not less than 2.0 mils.
 - b. Fitting markings shall include the word "zinc".
 - 2. Topcoat: Same as Pipe coatings.

2.02 POLYETHYLENE ENCASEMENT

- A. Do not encase in polyethylene.

PART 3 EXECUTION

3.01 INSTALLATION

- A. General:
 - 1. Install ductile iron piping in accordance with AWWA C600, modified as specified in Section 15052 - Common Work Results for General Piping.
 - 2. For underground piping, the trenching, backfill, and compaction: As specified in Section 02318 - Trenching.
- B. Joints:
 - 1. Install types of joints as specified in the piping schedule provided in Section 15052 - Common Work Results for General Piping.
 - 2. Mechanical joints are not acceptable in above ground applications.

3.02 FIELD QUALITY CONTROL

- A. Testing ductile iron piping:
 - 1. Test as specified in Section 15052 - Common Work Results for General Piping and Section 15956 - Piping Systems Testing.
 - 2. Do not test sections longer than 1/2 mile in total pipe length.

- B. Repair damaged pipe and fitting coating in accordance with ISO 8179:
 - 1. Zinc rich paint shall conform to ISO 8179 - 2, or per Manufacturer's recommended zinc rich paint if the Contractor can demonstrate a field applied coating that conform to ISO 8179 - 2 is not available.

- C. Repair damaged cement mortar lining to match quality, thickness, and bonding of original lining in accordance with AWWA C104:
 - 1. When lining cannot be repaired or repairs are defective, replace defective piping with undamaged piping.

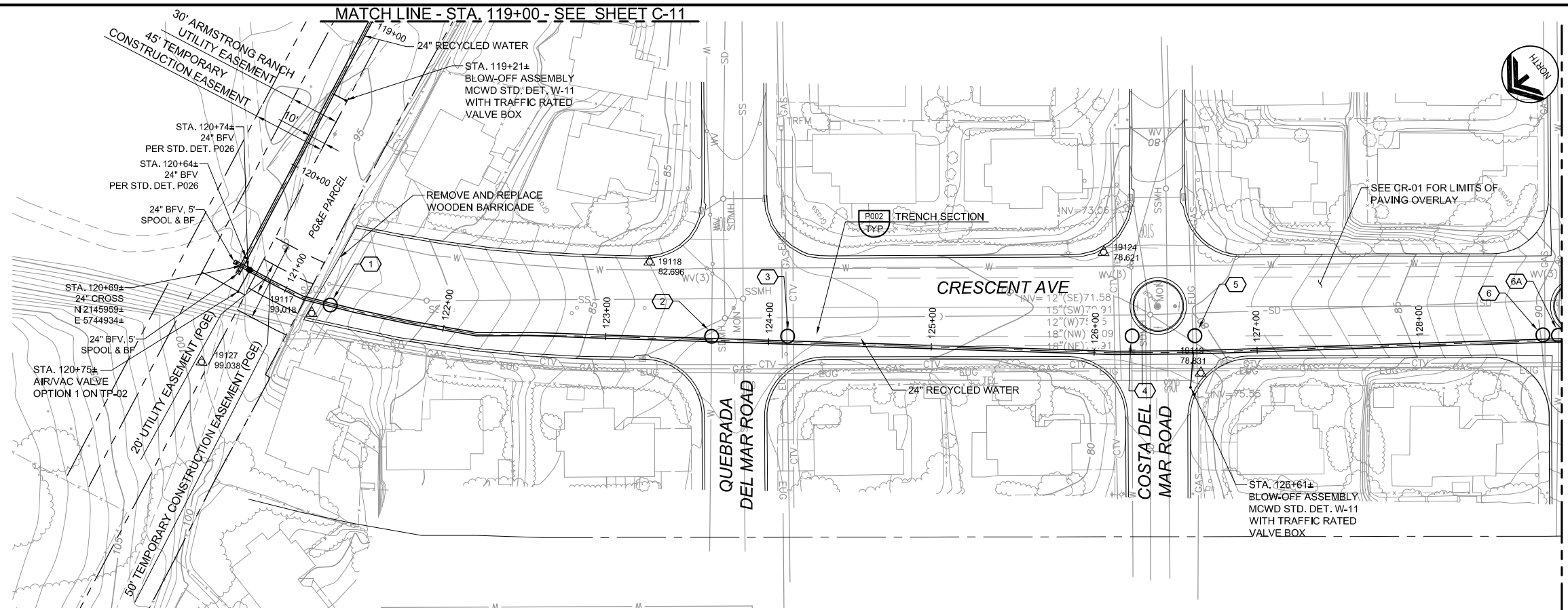
3.03 SPARE PARTS

- A. Spare Pipe:
 - 1. Supply and deliver one (1) standard length piece of ductile iron pipe with associated gasket materials of each diameter used on the project to the Owner's corporation yard. Coordinate delivery time and location with Owner.

END OF SECTION

APPENDIX F

**MCWD RUWAP RECYCLED WATER PIPELINE
AND BLACKHORSE RESERVOIR -
AS-BUILT DRAWINGS**



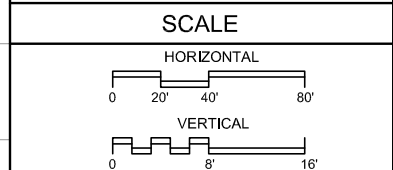
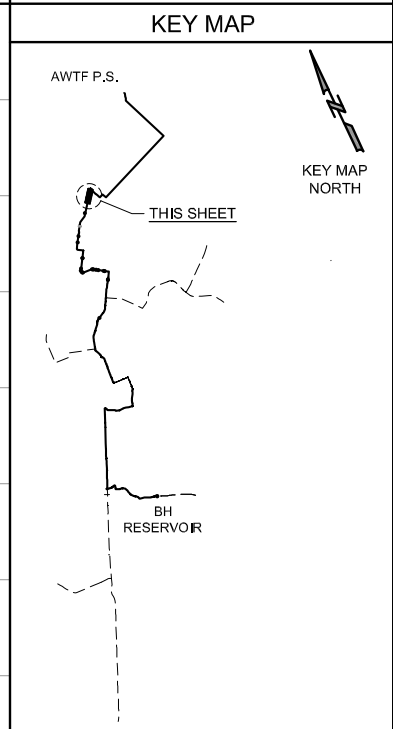
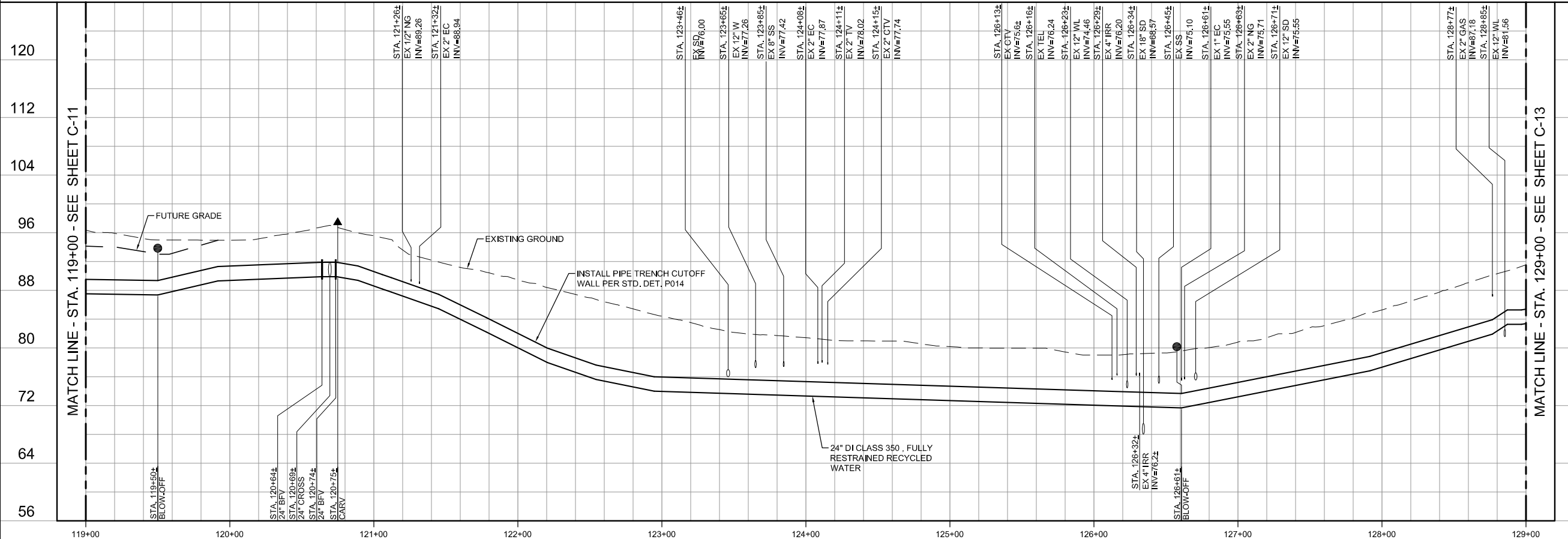
- GENERAL NOTES**
- CONSTRUCT PIPELINE WITH A MINIMUM 4' OF COVER UNLESS SHOWN OTHERWISE IN THE PROFILE TO AVOID EXISTING UTILITIES OR ACCOMMODATE FUTURE GRADES.
 - ANY CONSTRUCTION ACTIVITIES WHICH IMPACT PARKWAYS SHALL BE CONDUCTED TO MINIMIZE DISTURBANCE TO ADJACENT PROPERTY OWNERS. ANY AREAS IMPACTED SHALL BE PHOTOGRAPHED PRIOR TO CONSTRUCTION, AND RESTORED TO THEIR PRE-CONSTRUCTION CONDITION PRIOR TO CONTRACTOR DEMOBILIZATION.

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PROJECT MANAGER

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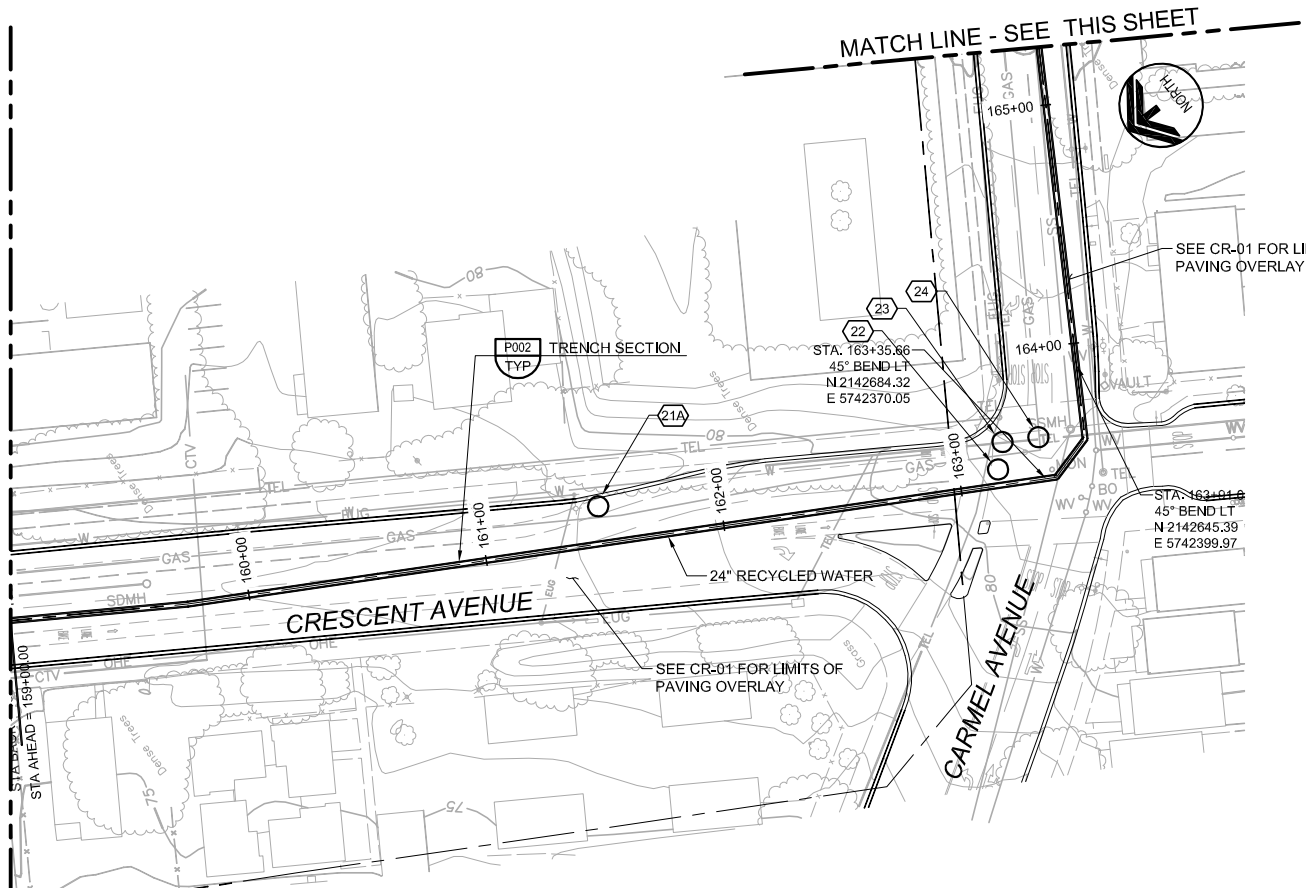
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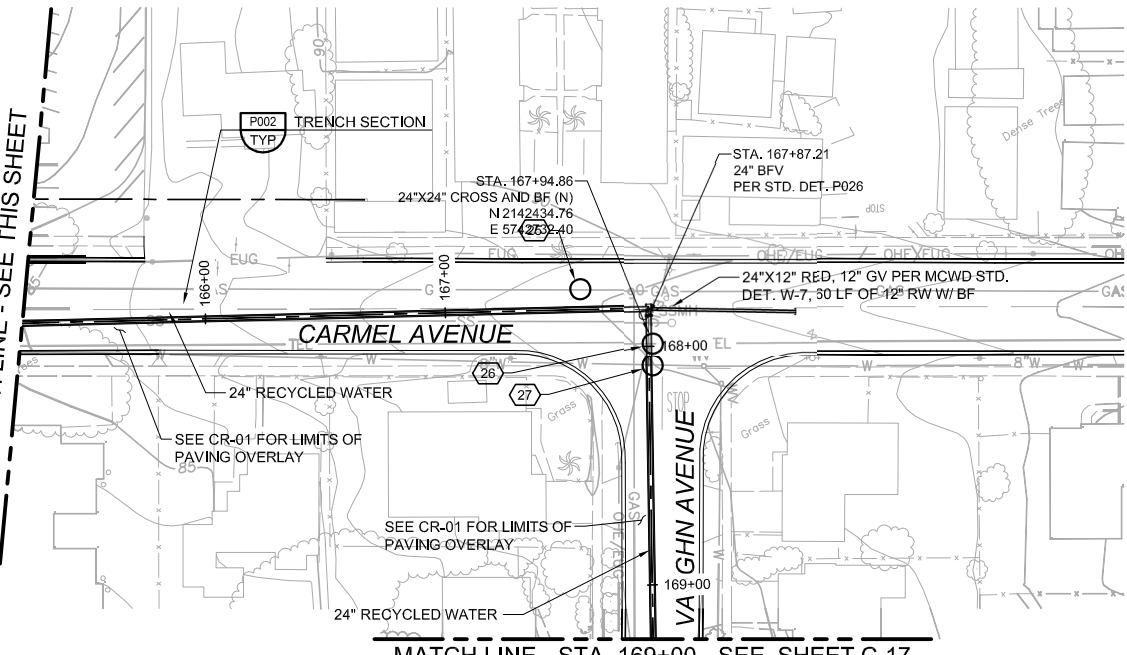
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MATCH LINE - SEE THIS SHEET



MATCH LINE - STA. 169+00 - SEE SHEET C-17

- GENERAL NOTES**
- CONSTRUCT PIPELINE WITH A MINIMUM 4' OF COVER UNLESS SHOWN OTHERWISE IN THE PROFILE TO AVOID EXISTING UTILITIES OR ACCOMMODATE FUTURE GRADES.
 - ANY CONSTRUCTION ACTIVITIES WHICH IMPACT PARKWAYS SHALL BE CONDUCTED TO MINIMIZE DISTURBANCE TO ADJACENT PROPERTY OWNERS. ANY AREAS IMPACTED SHALL BE PHOTOGRAPHED PRIOR TO CONSTRUCTION, AND RESTORED TO THEIR PRE-CONSTRUCTION CONDITION PRIOR TO CONTRACTOR DEMOBILIZATION.

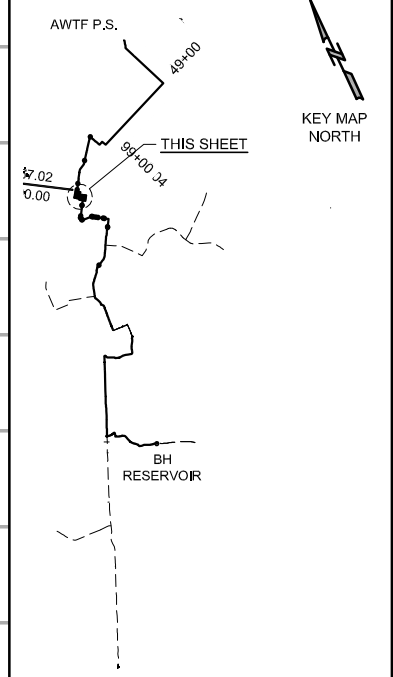
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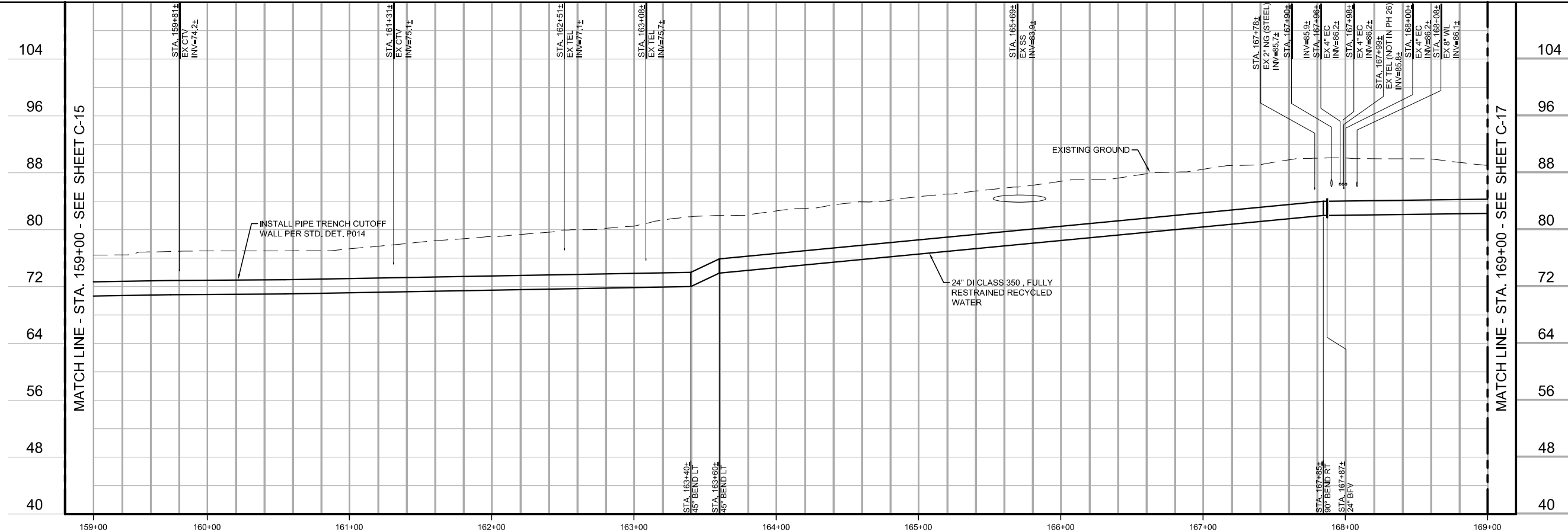
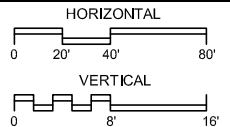
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KEY MAP



SCALE



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Marina Coast Water District

REGIONAL URBAN WATER AUGMENTATION PROJECT

RECYCLED WATER PIPELINE

CIVIL

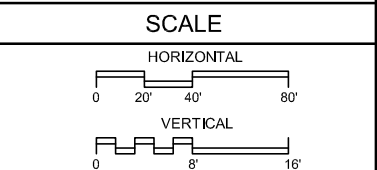
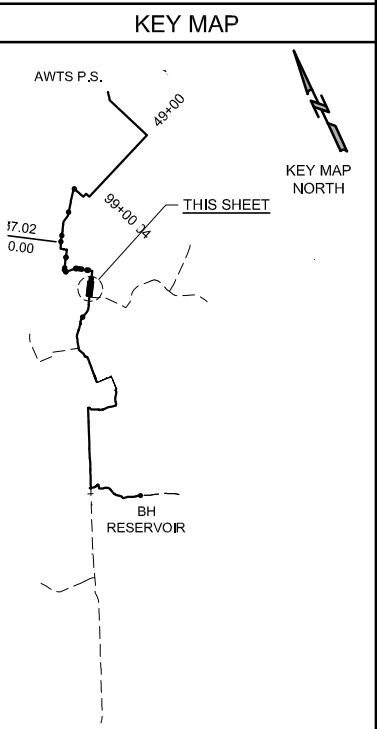
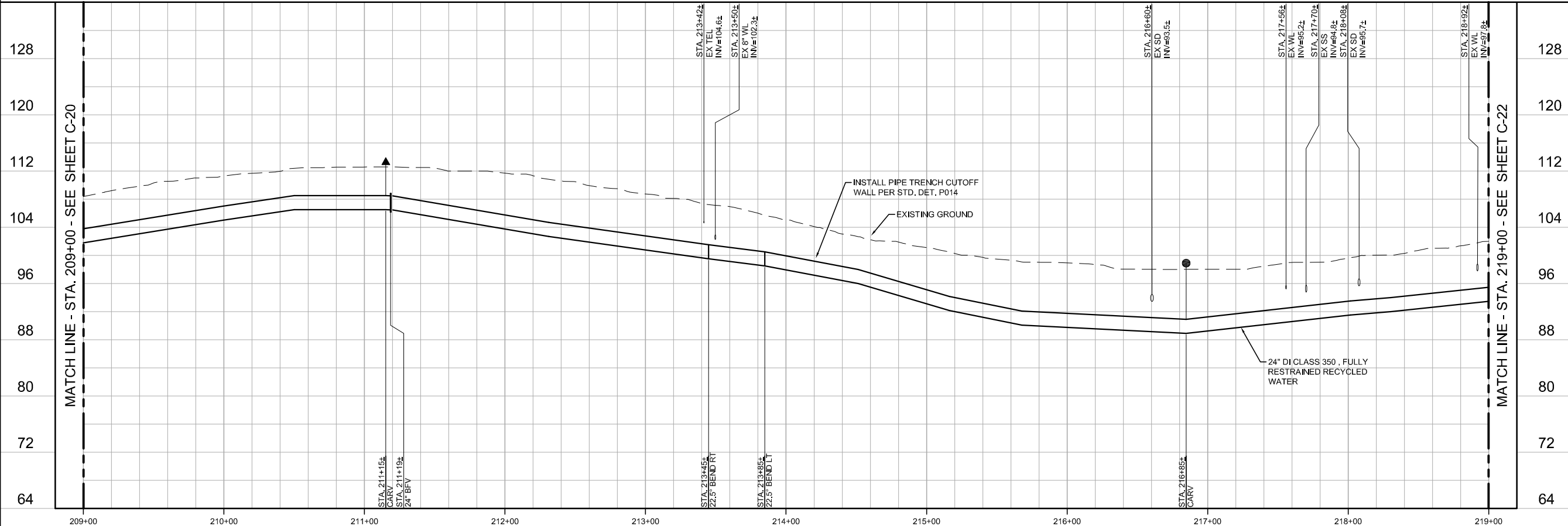
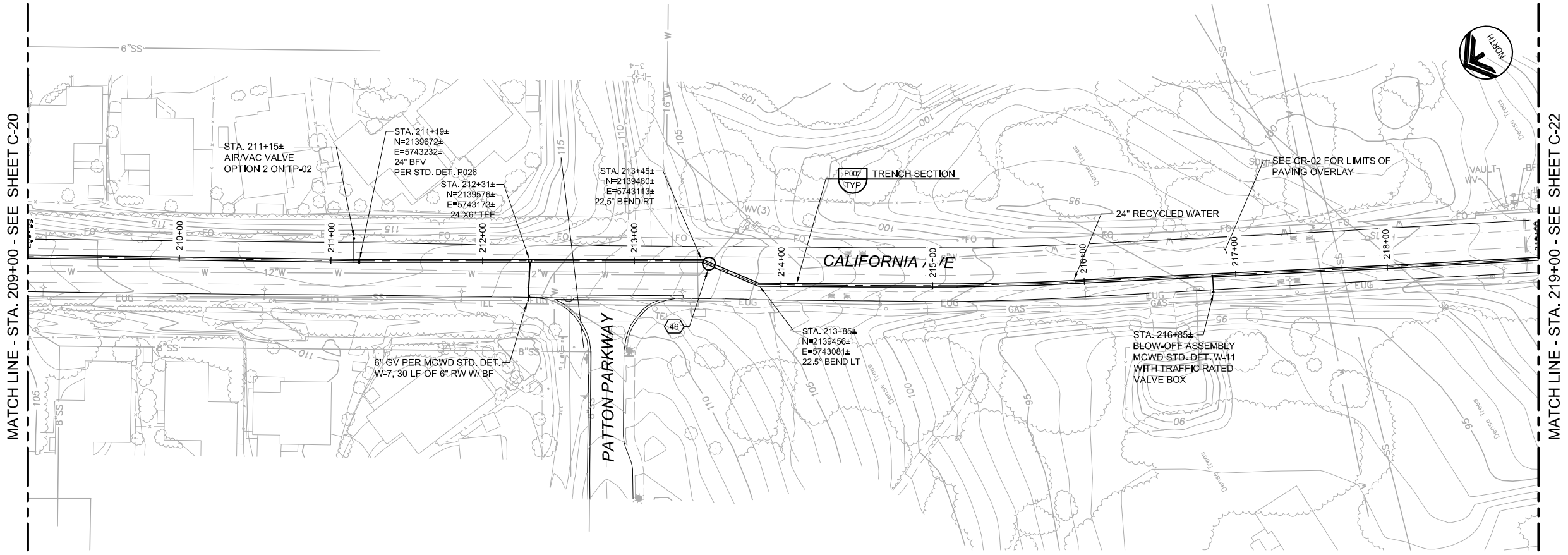
PLAN AND PROFILE

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GENERAL NOTES

1. CONSTRUCT PIPELINE WITH A MINIMUM 4' OF COVER UNLESS SHOWN OTHERWISE IN THE PROFILE TO AVOID EXISTING UTILITIES OR ACCOMMODATE FUTURE GRADES.
2. LOCATION OF EX 2" W SHOWN IS APPROX. CONTRACTOR SHALL FIELD VERIFY LOCATION AND SIZE PRIOR TO START OF CONSTRUCTION.
3. ANY CONSTRUCTION ACTIVITIES WHICH IMPACT PARKWAYS SHALL BE CONDUCTED TO MINIMIZE DISTURBANCE TO ADJACENT PROPERTY OWNERS. ANY AREAS IMPACTED SHALL BE PHOTOGRAPHED PRIOR TO CONSTRUCTION, AND RESTORED TO THEIR PRE-CONSTRUCTION CONDITION PRIOR TO CONTRACTOR DEMOBILIZATION.



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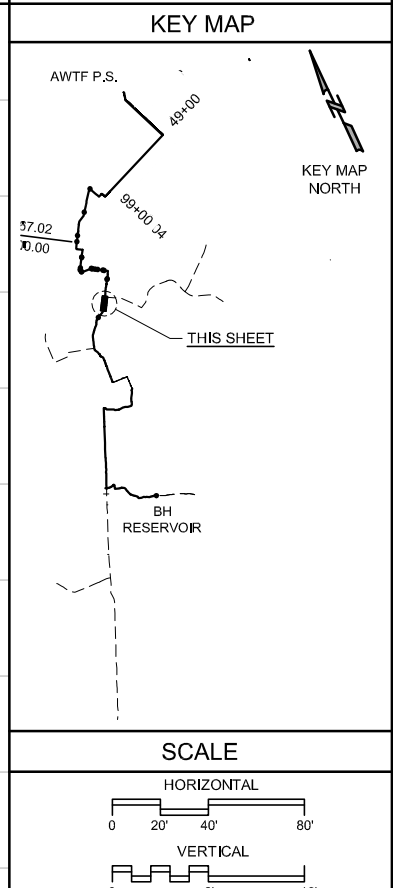
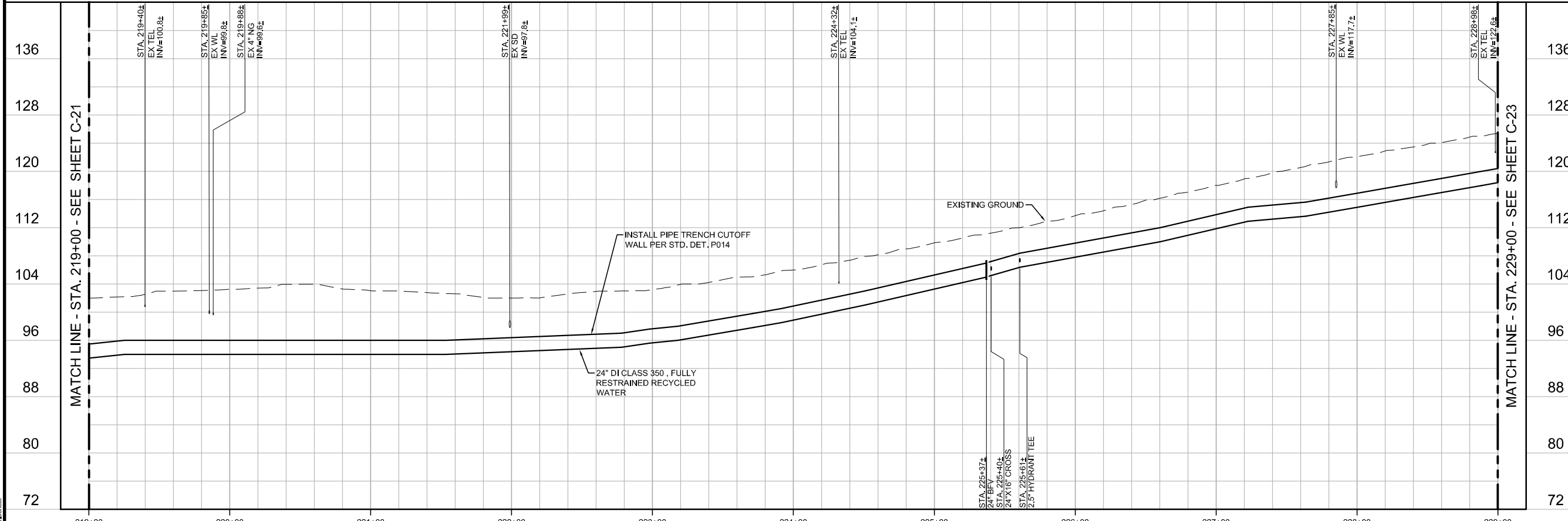
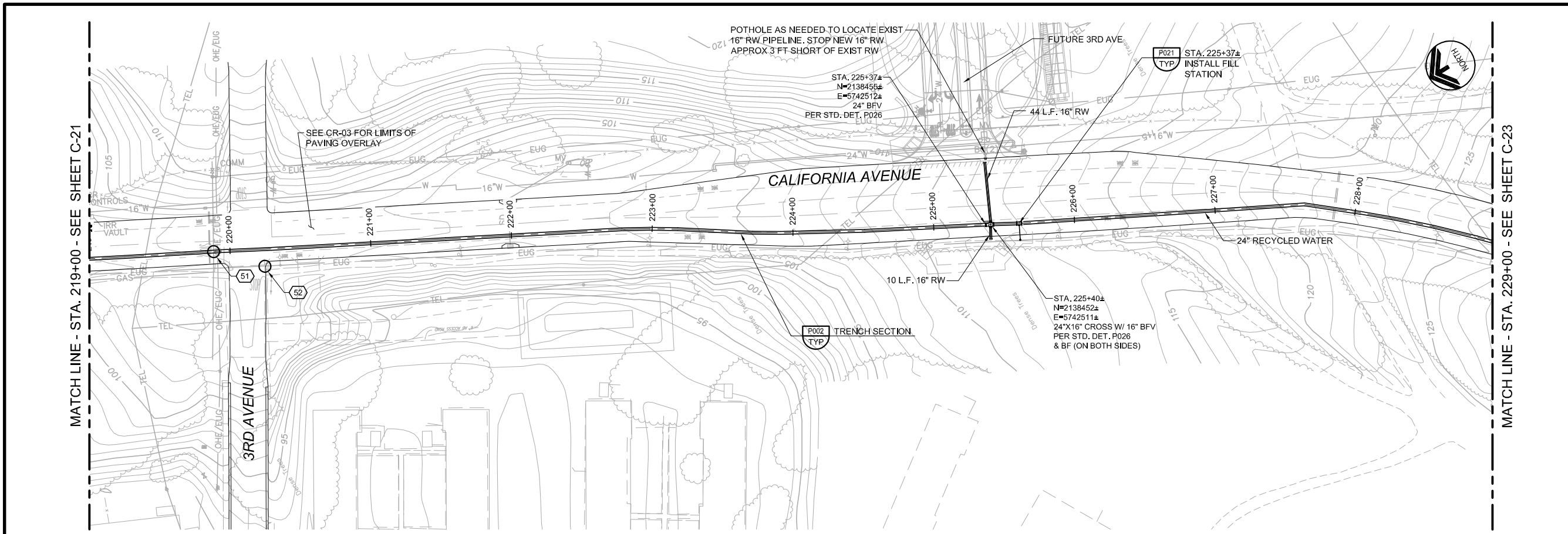
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 RECYCLED WATER PIPELINE
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GENERAL NOTES

1. CONSTRUCT PIPELINE WITH A MINIMUM 4' OF COVER UNLESS SHOWN OTHERWISE IN THE PROFILE TO AVOID EXISTING UTILITIES OR ACCOMMODATE FUTURE GRADES.
2. ANY CONSTRUCTION ACTIVITIES WHICH IMPACT PARKWAYS SHALL BE CONDUCTED TO MINIMIZE DISTURBANCE TO ADJACENT PROPERTY OWNERS. ANY AREAS IMPACTED SHALL BE PHOTOGRAPHED PRIOR TO CONSTRUCTION, AND RESTORED TO THEIR PRE-CONSTRUCTION CONDITION PRIOR TO CONTRACTOR DEMOBILIZATION.



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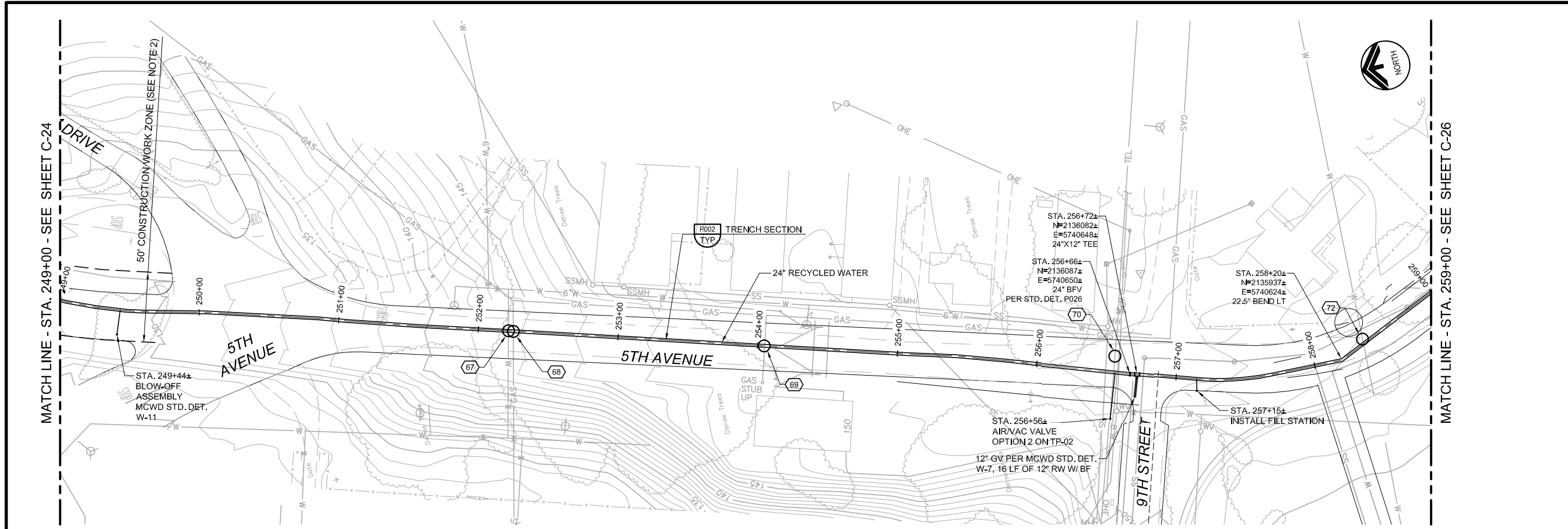
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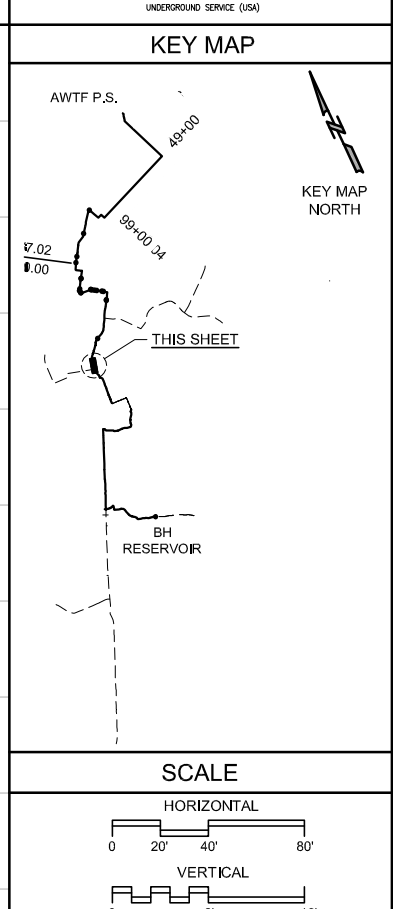
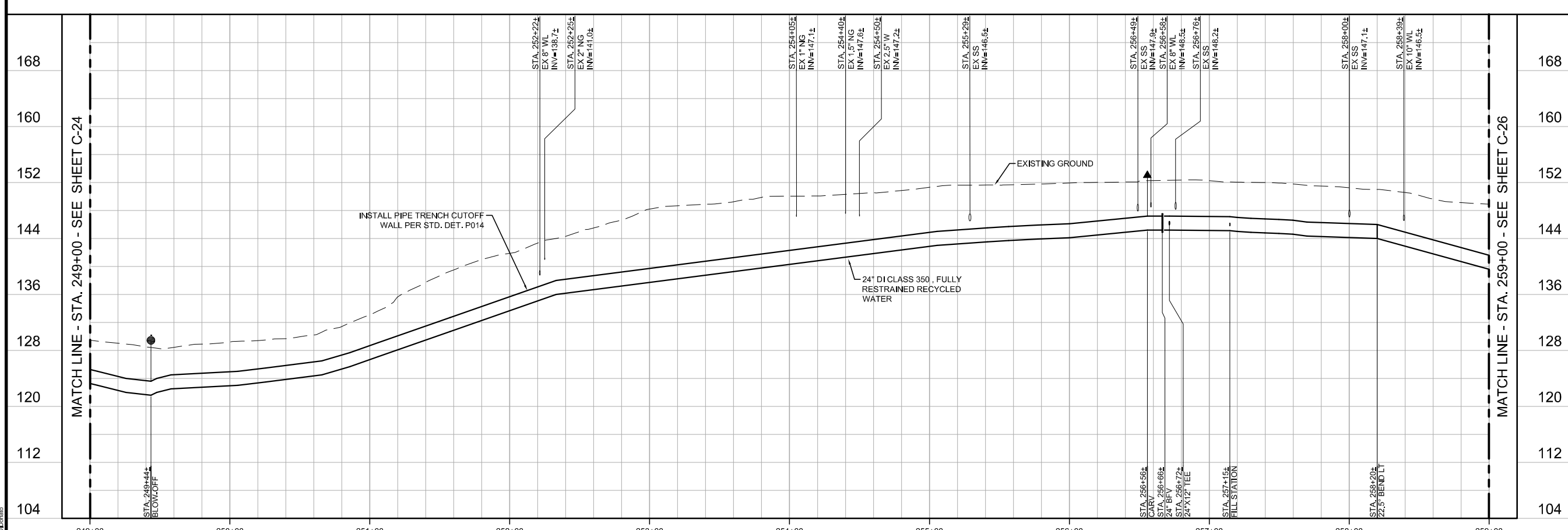
- ### GENERAL NOTES
- CONSTRUCT PIPELINE WITH A MINIMUM 4' OF COVER UNLESS SHOWN OTHERWISE IN THE PROFILE TO AVOID EXISTING UTILITIES OR ACCOMMODATE FUTURE GRADES.
 - PIPELINE INSTALLATION IN OFF-ROAD AREAS BETWEEN STA. 241+13.18 AND 249+74.78 SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF MARINA ENCROACHMENT PERMIT CONDITIONS. THE CONTRACTOR IS RESTRICTED TO A 50 FOOT WORK ZONE CENTERED ON THE PIPELINE.
 - ANY CONSTRUCTION ACTIVITIES WHICH IMPACT PARKWAYS SHALL BE CONDUCTED TO MINIMIZE DISTURBANCE TO ADJACENT PROPERTY OWNERS. ANY AREAS IMPACTED SHALL BE PHOTOGRAPHED PRIOR TO CONSTRUCTION, AND RESTORED TO THEIR PRE-CONSTRUCTION CONDITION PRIOR TO CONTRACTOR DEMOBILIZATION.

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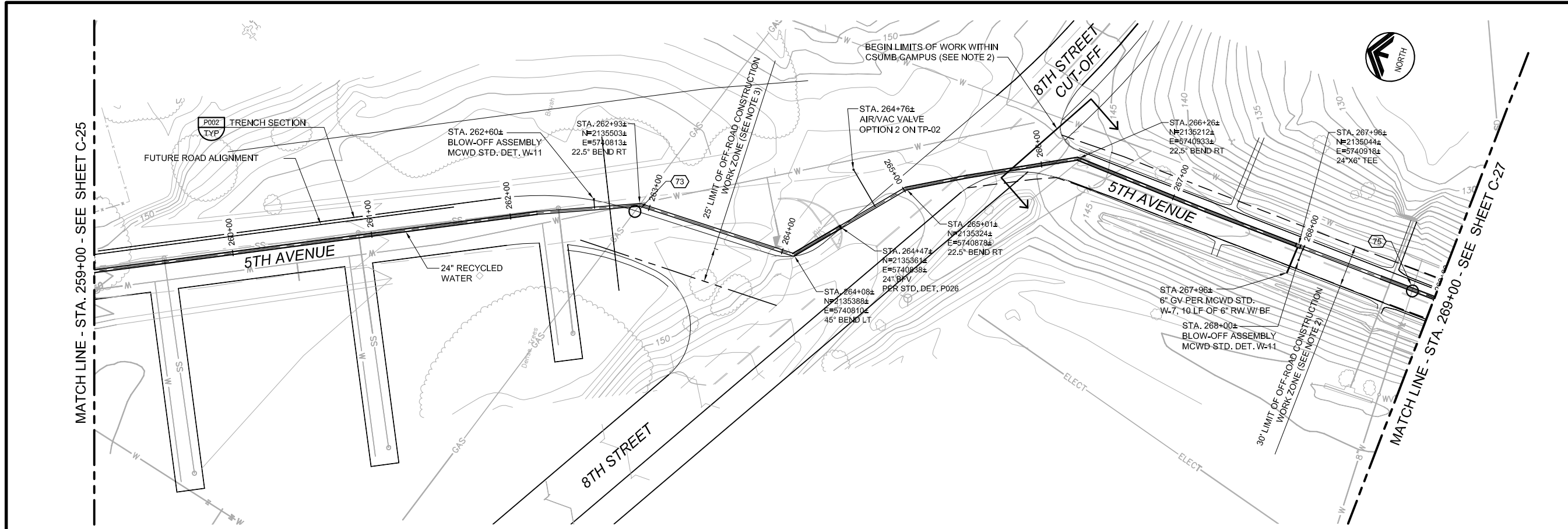
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	SHEET NO. 33 OF 93



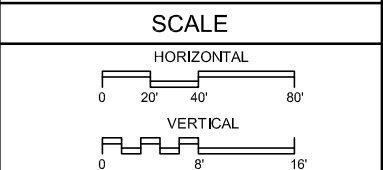
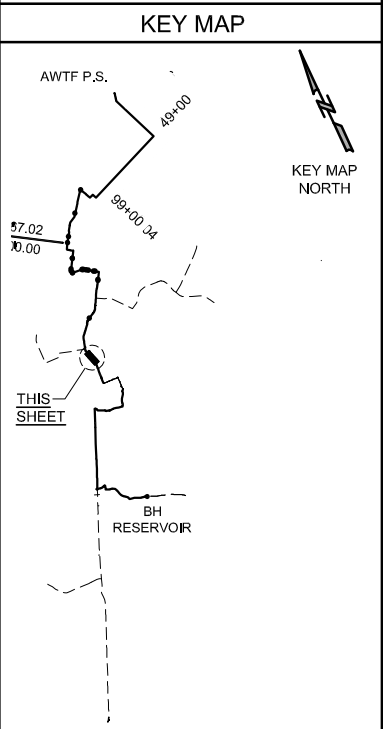
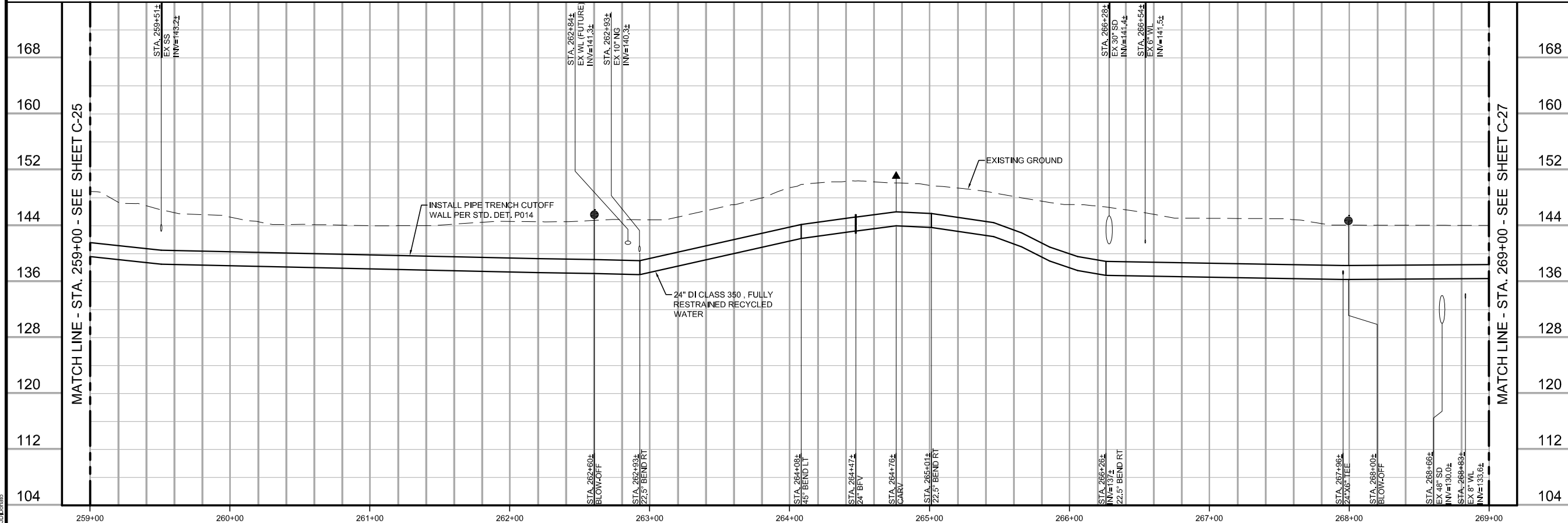
- ### GENERAL NOTES
- CONSTRUCT PIPELINE WITH A MINIMUM 4' OF COVER UNLESS SHOWN OTHERWISE IN THE PROFILE TO AVOID EXISTING UTILITIES OR ACCOMMODATE FUTURE GRADES.
 - CONSTRUCTION SHALL BE IN ACCORDANCE WITH CSUMB TEMPORARY CONSTRUCTION PERMIT FROM STA. 265+80± TO STA. 283+85±. ALLOWABLE CONSTRUCTION WORK ZONE IS FROM EDGE OF PAVEMENT TO EDGE OF PAVEMENT UNLESS OTHERWISE AUTHORIZED IN WRITING.
 - PIPELINE INSTALLATION IN OFF-ROAD AREA BETWEEN STA. 263+07± AND 264+52± SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF MARINA ENCROACHMENT PERMIT CONDITIONS. THE CONSTRUCTION WORK ZONE IS CONSTRAINED TO THE ROAD RIGHT-OF-WAY AND THE OFF-ROAD LIMIT SHOWN ON THE PLANS.
 - ANY CONSTRUCTION ACTIVITIES WHICH IMPACT PARKWAYS SHALL BE CONDUCTED TO MINIMIZE DISTURBANCE TO ADJACENT PROPERTY OWNERS. ANY AREAS IMPACTED SHALL BE PHOTOGRAPHED PRIOR TO CONSTRUCTION, AND RESTORED TO THEIR PRE-CONSTRUCTION CONDITION PRIOR TO CONTRACTOR DEMOBILIZATION.

AVOID CUTTING UNDERGROUND UTILITY LINES. IT'S COSTLY.

Call before you Dig

1-800-227-2800

UNDERGROUND SERVICE (USA)



REV	DATE	BY	DESCRIPTION

DESIGNED JPM	DISCIPLINE ENGINEER
DRAWN BH	
CHECKED AP	
DATE DECEMBER 2019	

PROJECT MANAGER
** ORIGINAL SEALED BY JONATHON P. MARSHALL 05/17 73265 **

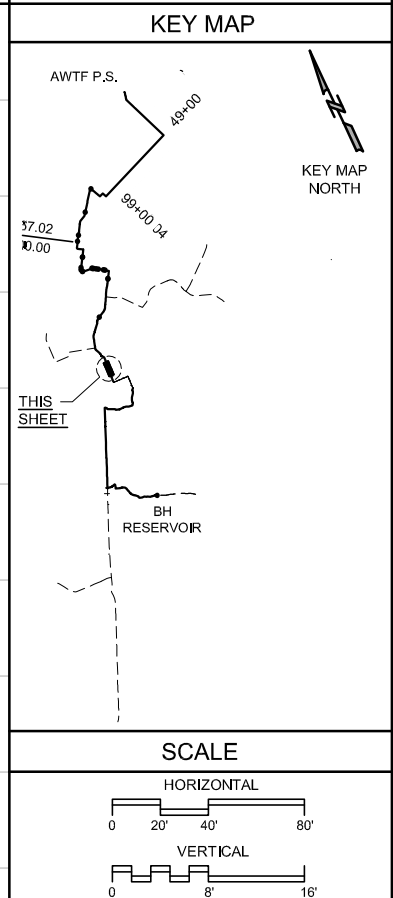
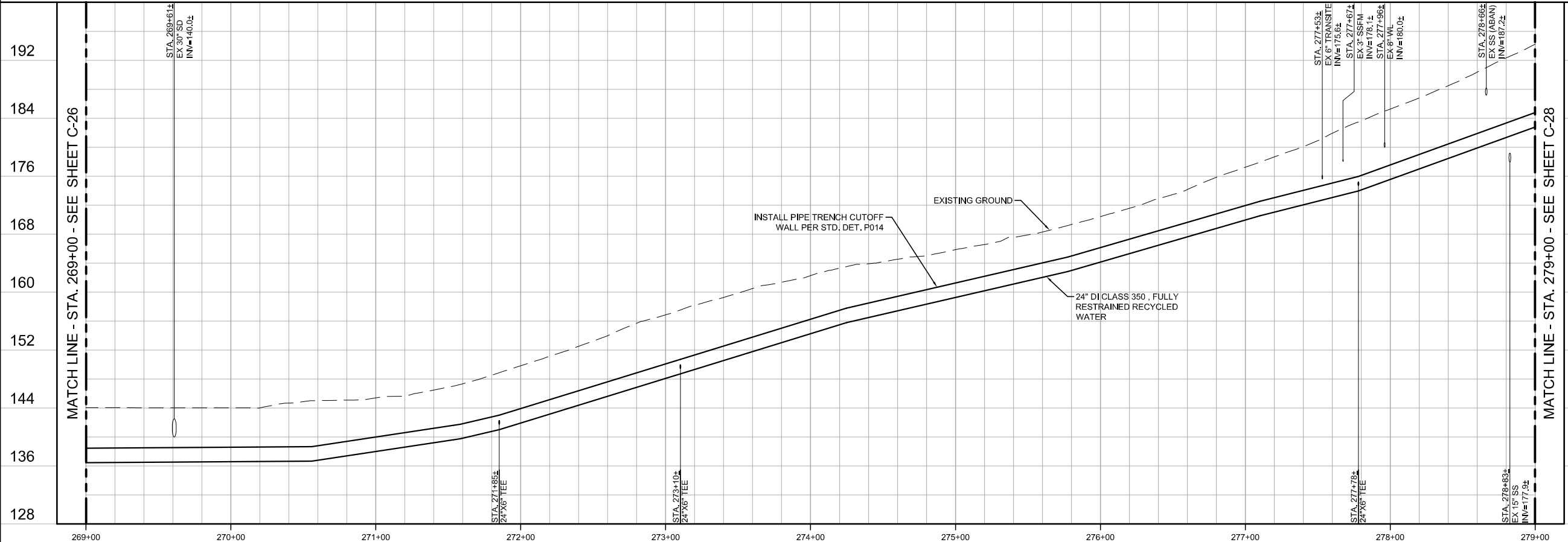
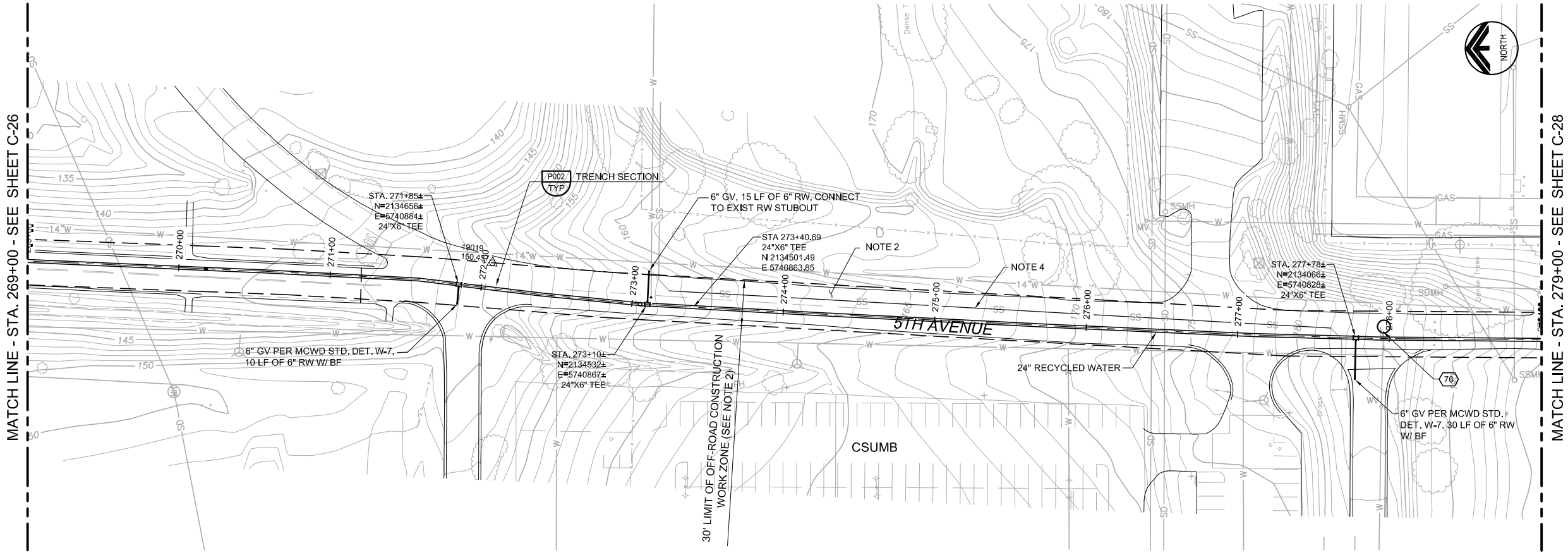


REGIONAL URBAN WATER AUGMENTATION PROJECT
RECYCLED WATER PIPELINE
CIVIL
PLAN AND PROFILE
STA. 259+00 TO STA. 269+00

VERIFY SCALES BAR IS ONE INCH ON ORIGINAL DRAWING	JOB NO. 7568A.10
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	DRAWING NO. C-26
	SHEET NO. 34 OF 93

GENERAL NOTES

1. CONSTRUCT PIPELINE WITH A MINIMUM 4' OF COVER UNLESS SHOWN OTHERWISE IN THE PROFILE TO AVOID EXISTING UTILITIES OR ACCOMMODATE FUTURE GRADES.
2. CONSTRUCTION SHALL BE IN ACCORDANCE WITH CSUMB TEMPORARY CONSTRUCTION PERMIT FROM STA. 265+80± TO STA. 283+85±. ALLOWABLE CONSTRUCTION WORK ZONE IS FROM EDGE OF PAVEMENT TO EDGE OF PAVEMENT UNLESS AUTHORIZED IN WRITING BY THE ENGINEER.
3. ANY CONSTRUCTION ACTIVITIES WHICH IMPACT PARKWAYS SHALL BE CONDUCTED TO MINIMIZE DISTURBANCE TO ADJACENT PROPERTY OWNERS. ANY AREAS IMPACTED SHALL BE PHOTOGRAPHED PRIOR TO CONSTRUCTION, AND RESTORED TO THEIR PRE-CONSTRUCTION CONDITION PRIOR TO CONTRACTOR DEMOBILIZATION.
4. 3" SSFM LOCATION AND DEPTH UNKNOWN, CONTRACTOR TO POT HOLE AND CONFIRM.



REV	DATE	BY	DESCRIPTION

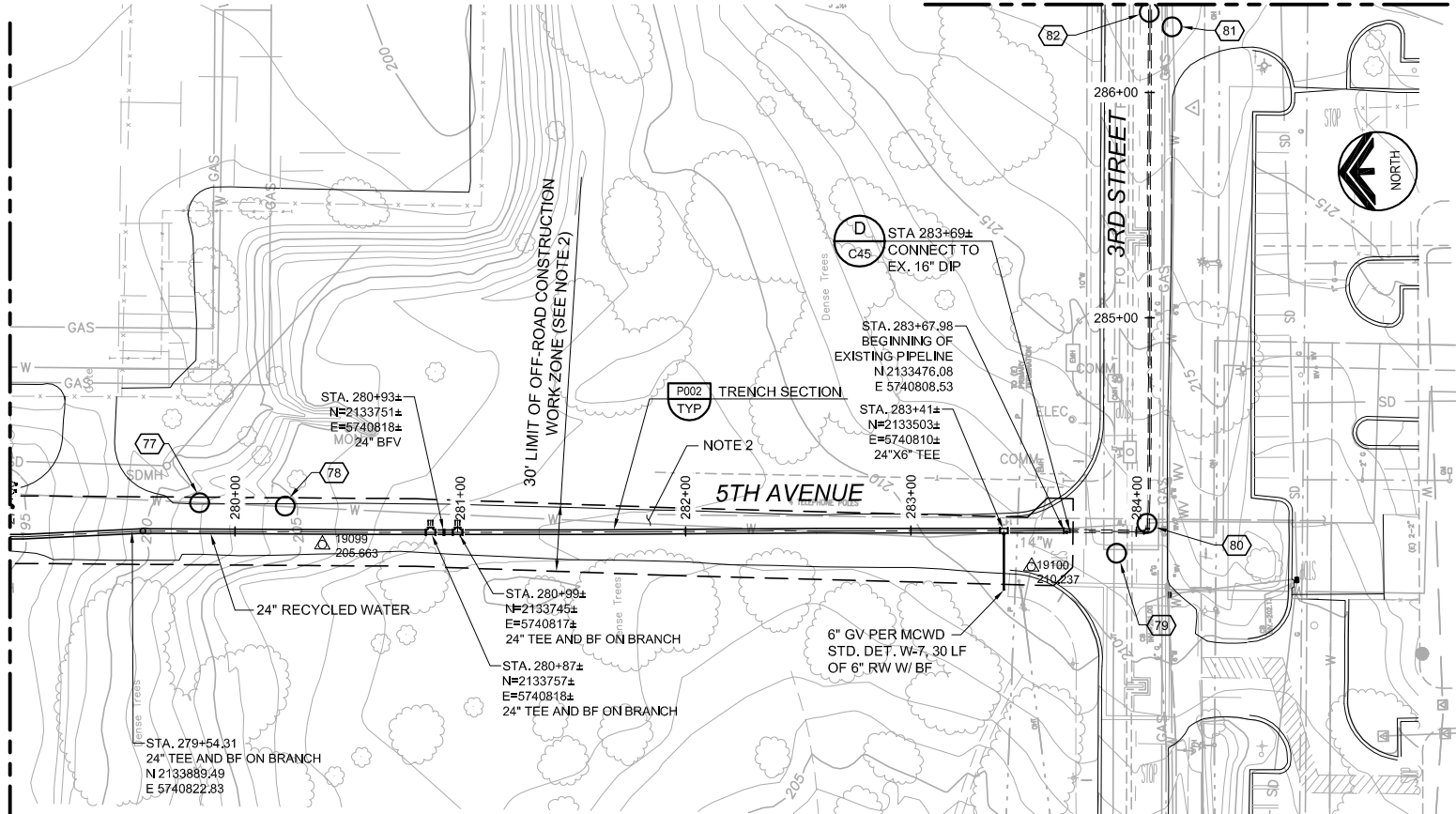
DESIGNED JPM	DISCIPLINE ENGINEER
DRAWN BHW	
CHECKED AP	
DATE DECEMBER 2019	
PROJECT MANAGER ** ORIGINAL SEALED BY JONATHAN P. MARSHALL 05/17 73265 **	PROJECT ENGINEER

Marina Coast Water District

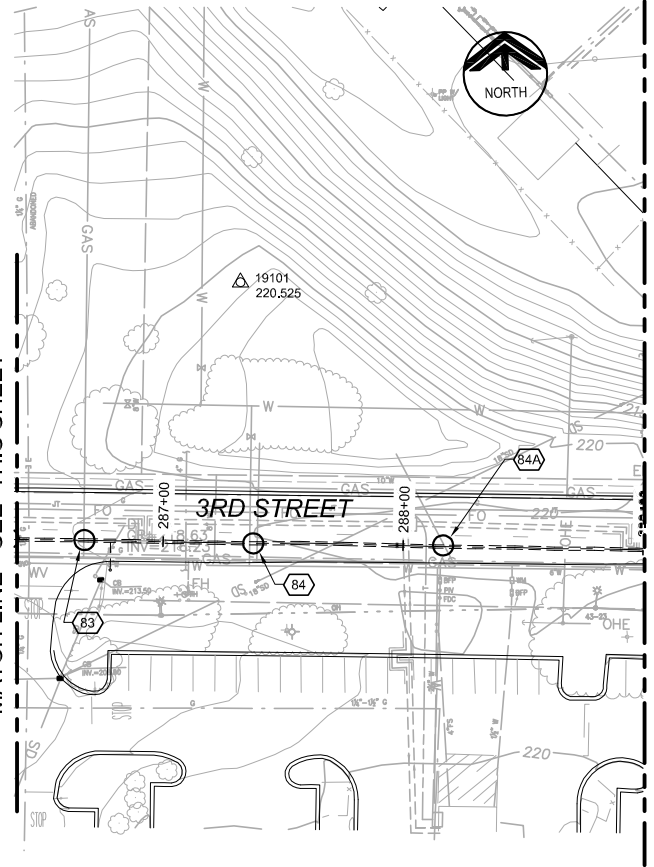
REGIONAL URBAN WATER AUGMENTATION PROJECT RECYCLED WATER PIPELINE CIVIL PLAN AND PROFILE STA. 269+00 TO STA. 279+00	VERIFY SCALES BAR IS ONE INCH ON ORIGINAL DRAWING 0 1" 16" IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	JOB NO. 7568A.10 DRAWING NO. C-27 SHEET NO. 35 OF 93
---	--	--

MATCH LINE - SEE THIS SHEET

MATCH LINE - STA. 279+00 - SEE SHEET C-27



MATCH LINE - SEE THIS SHEET



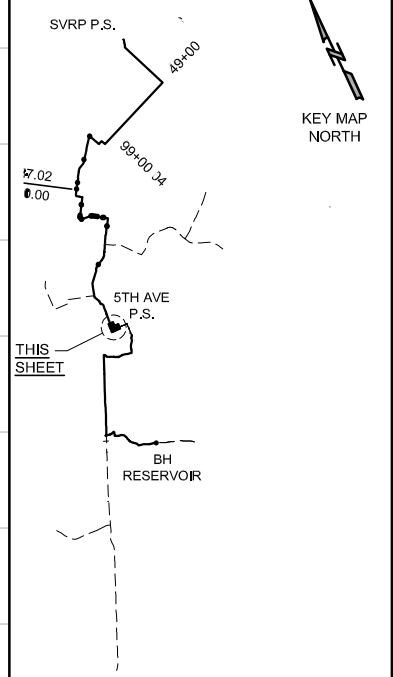
MATCH LINE - STA. 289+00 - SEE SHEET C-29

GENERAL NOTES

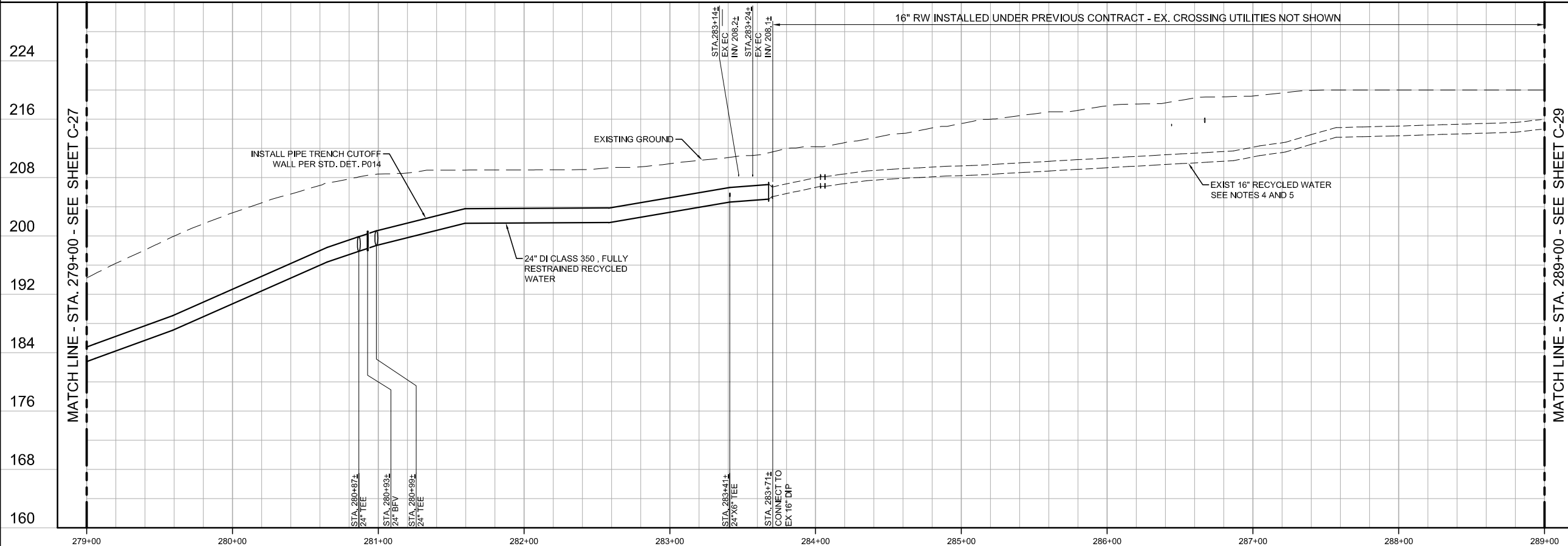
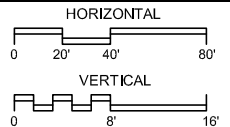
1. CONSTRUCT PIPELINE WITH A MINIMUM 4' OF COVER UNLESS SHOWN OTHERWISE IN THE PROFILE TO AVOID EXISTING UTILITIES OR ACCOMMODATE FUTURE GRADES.
2. CONSTRUCTION SHALL BE IN ACCORDANCE WITH CSUMB TEMPORARY CONSTRUCTION PERMIT FROM STA. 265+80± TO STA. 283+85±. ALLOWABLE CONSTRUCTION WORK ZONE IS FROM EDGE OF PAVEMENT TO EDGE OF PAVEMENT UNLESS AUTHORIZED IN WRITING BY THE ENGINEER.
3. ANY CONSTRUCTION ACTIVITIES WHICH IMPACT PARKWAYS SHALL BE CONDUCTED TO MINIMIZE DISTURBANCE TO ADJACENT PROPERTY OWNERS. ANY AREAS IMPACTED SHALL BE PHOTOGRAPHED PRIOR TO CONSTRUCTION, AND RESTORED TO THEIR PRE-CONSTRUCTION CONDITION PRIOR TO CONTRACTOR DEMOBILIZATION.
4. CONTRACTOR SHALL PRESSURE TEST THE EXISTING RECYCLED WATER MAIN.
5. TOPOGRAPHY SHOWN ABOVE EXISTING 16" RW MAIN MAY NOT MATCH EXISTING CONDITIONS. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS IMPACTING CONSTRUCTION.

AVOID CUTTING UNDERGROUND UTILITY LINES. IT'S COSTLY.
Call before you Dig
 1-800-227-2600
UNDERGROUND SERVICE (USA)

KEY MAP



SCALE



REV	DATE	BY	DESCRIPTION

DESIGNED JPM	DISCIPLINE ENGINEER
DRAWN BH	
CHECKED AP	
DATE DECEMBER 2019	

PROJECT MANAGER
 ** ORIGINAL SEALED BY JONATHAN P. MARSHALL 05/17 73265 **

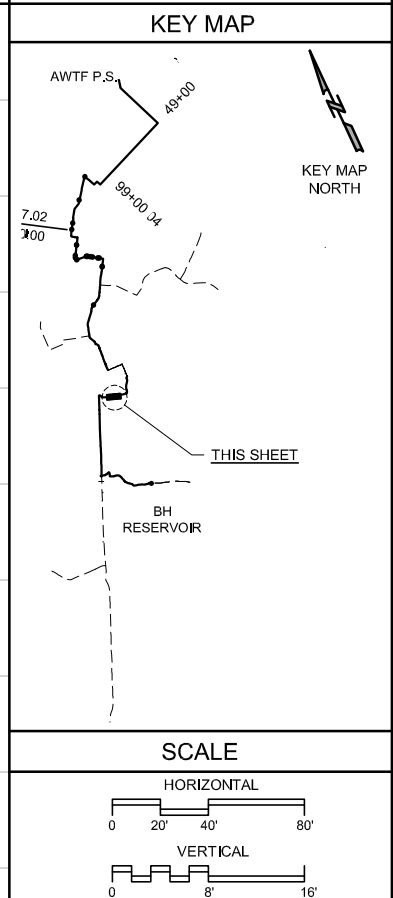
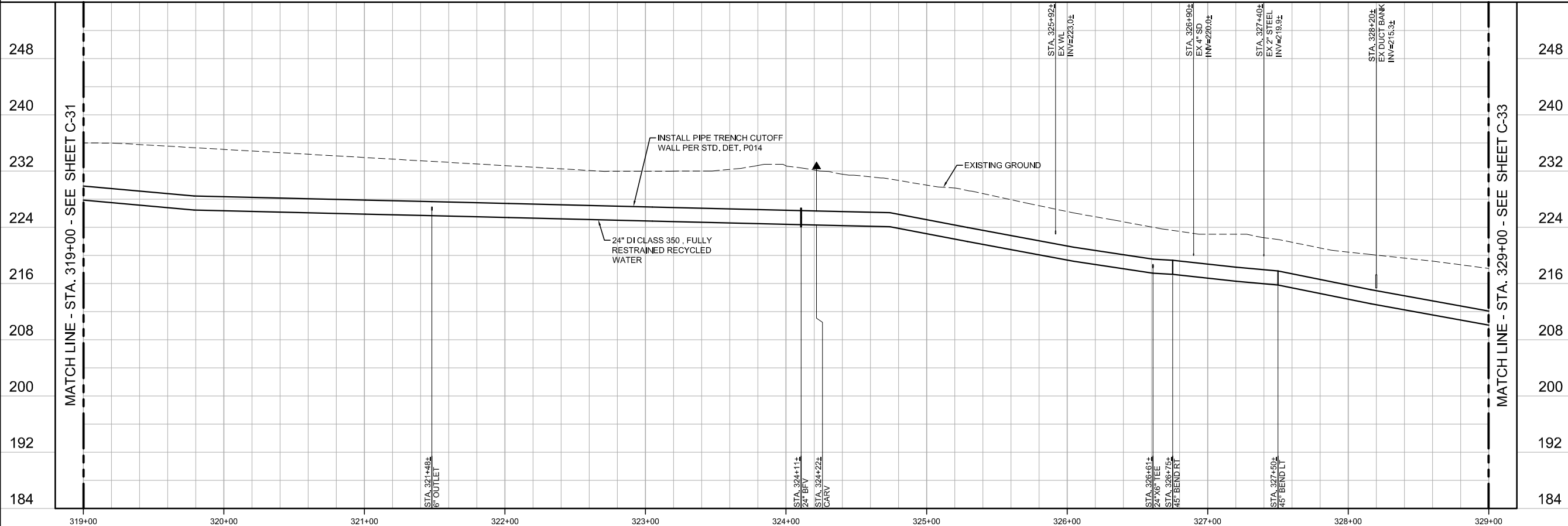
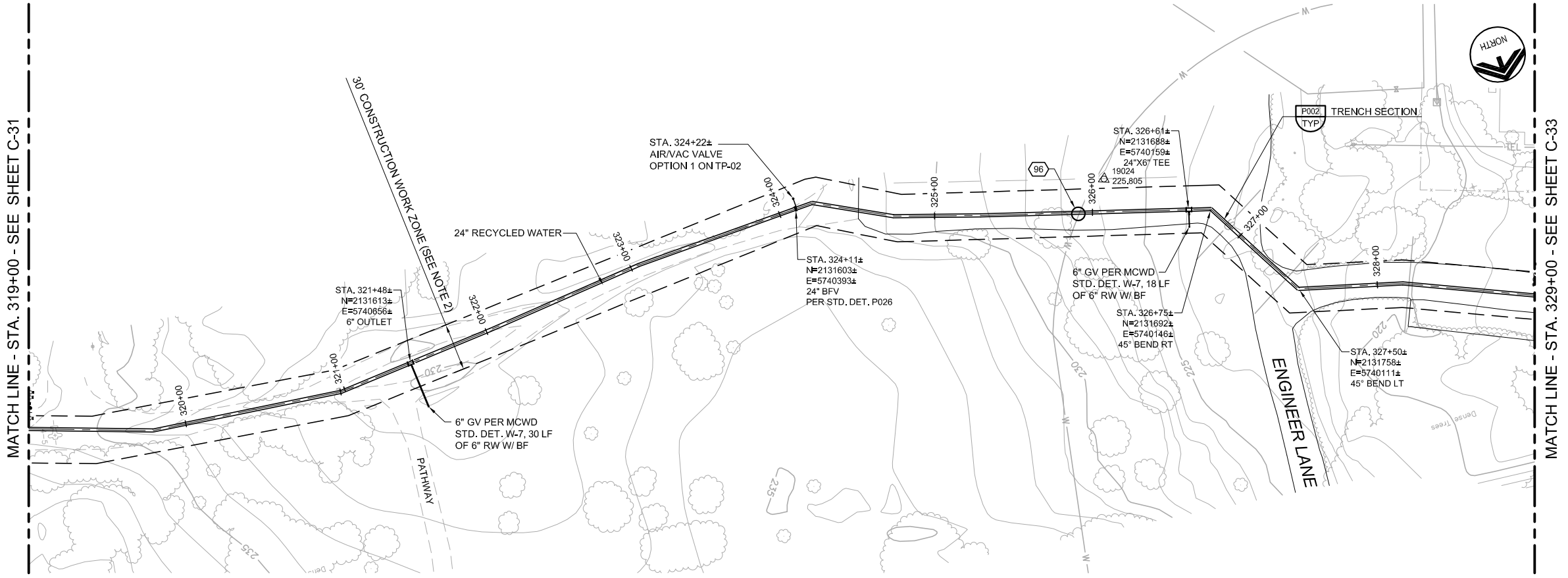


REGIONAL URBAN WATER AUGMENTATION PROJECT
 RECYCLED WATER PIPELINE
 CIVIL
 PLAN AND PROFILE
 STA. 279+00 TO STA. 289+00

VERIFY SCALES BAR IS ONE INCH ON ORIGINAL DRAWING 0 1" 16"	JOB NO. 7568A.10
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	DRAWING NO. C-28
	SHEET NO. 36 OF 93

GENERAL NOTES

1. CONSTRUCT PIPELINE WITH A MINIMUM 4' OF COVER UNLESS SHOWN OTHERWISE IN THE PROFILE TO AVOID EXISTING UTILITIES OR ACCOMMODATE FUTURE GRADES.
2. CONSTRUCTION SHALL BE IN ACCORDANCE WITH CSMUB TEMPORARY CONSTRUCTION PERMIT FROM STA. 303+14± TO STA. 347+31±.



REV	DATE	BY	DESCRIPTION

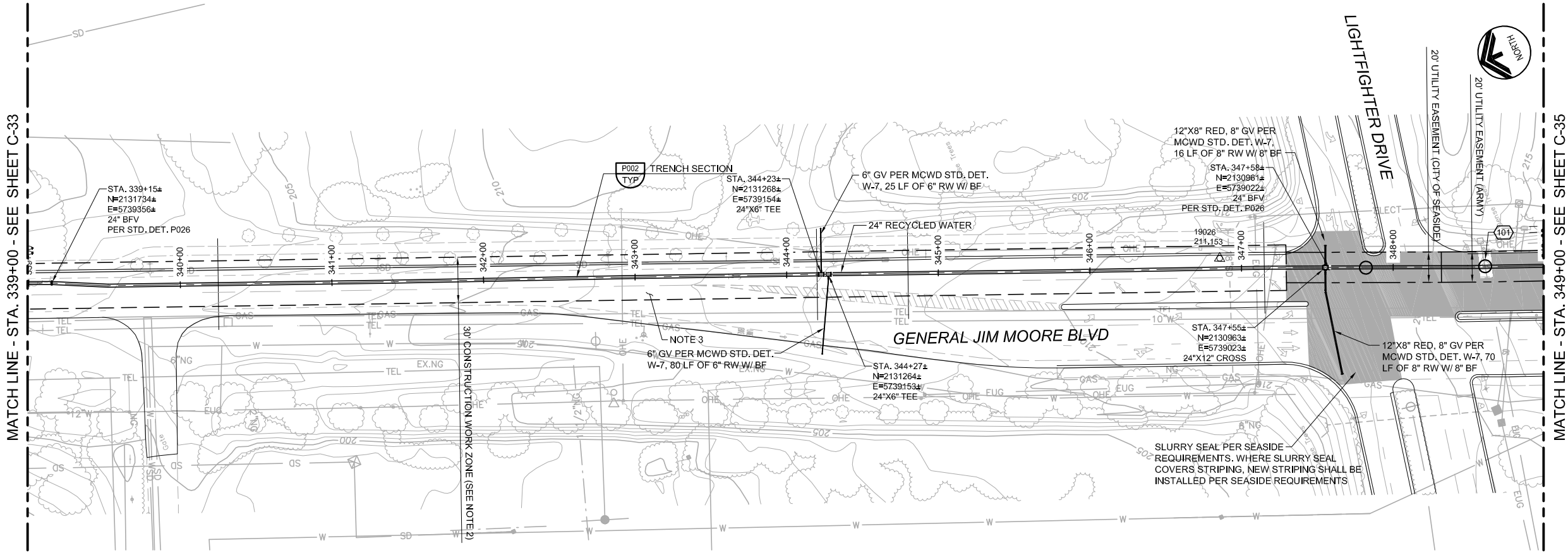
DESIGNED JPM	DISCIPLINE ENGINEER
DRAWN BH	
CHECKED AP	
DATE DECEMBER 2019	

PROJECT MANAGER
** ORIGINAL SEALED BY JONATHAN P. MARSHALL 05/17 73265 **

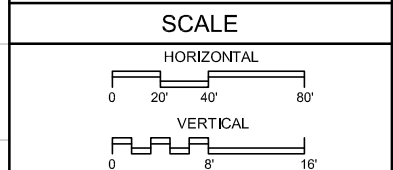
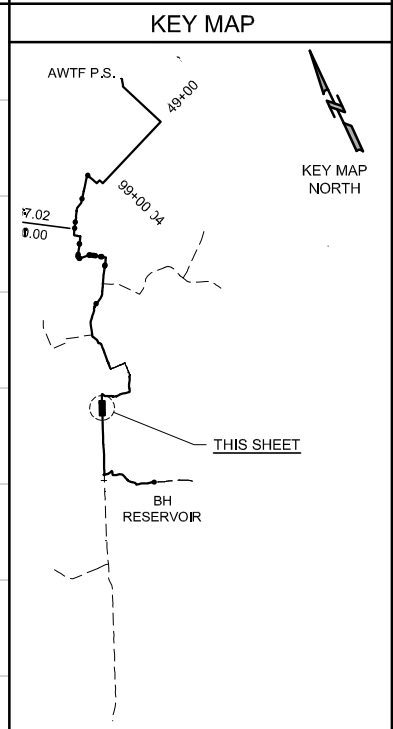
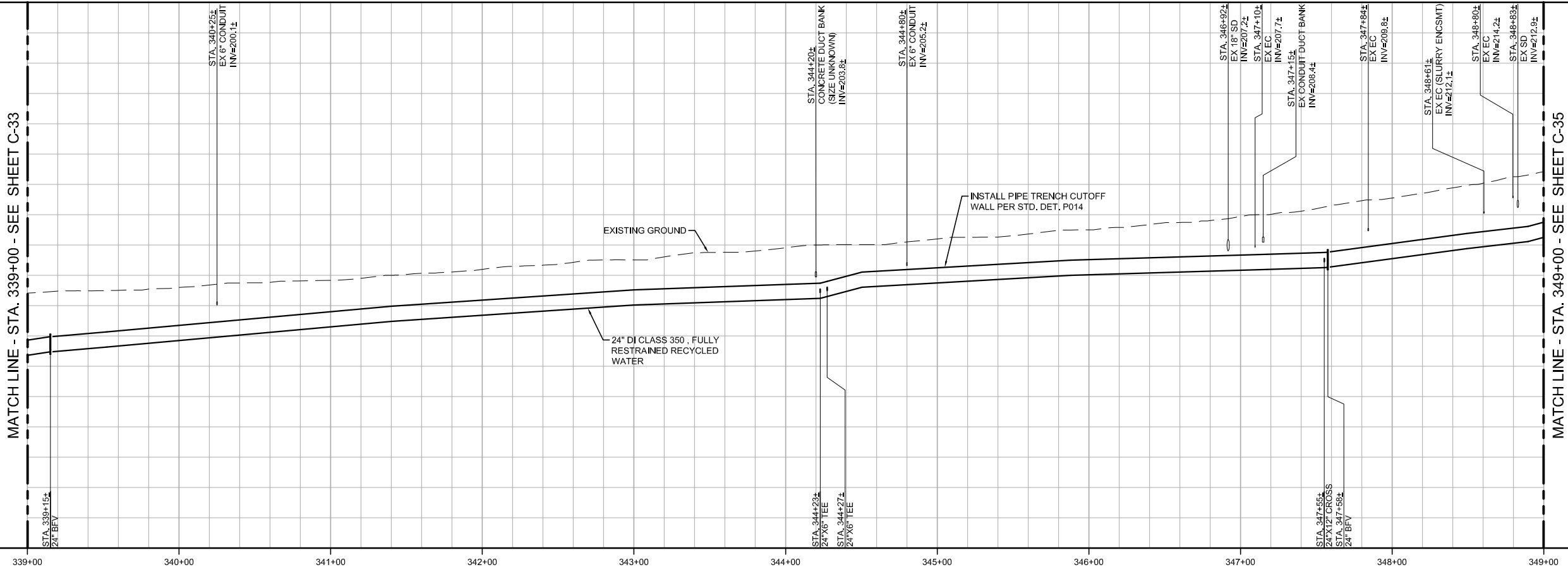


REGIONAL URBAN WATER AUGMENTATION PROJECT
RECYCLED WATER PIPELINE
CIVIL
PLAN AND PROFILE
STA. 319+00 TO STA. 329+00

VERIFY SCALES BAR IS ONE INCH ON ORIGINAL DRAWING	JOB NO. 7568A.10
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	DRAWING NO. C-32
	SHEET NO. 40 OF 93



- ### GENERAL NOTES
- CONSTRUCT PIPELINE WITH A MINIMUM 4' OF COVER UNLESS SHOWN OTHERWISE IN THE PROFILE TO AVOID EXISTING UTILITIES OR ACCOMMODATE FUTURE GRADES.
 - CONSTRUCTION SHALL BE IN ACCORDANCE WITH CSMUB TEMPORARY CONSTRUCTION PERMIT FROM STA. 303+14± TO STA. 347+31±.
 - ALLOWABLE CONSTRUCTION WORK ZONE FOR GENERAL JIM MOORE BLVD IS EDGE OF PAVEMENT TO CENTERLINE OF ROAD EXCEPT WHERE APPURTENANCES ARE REQUIRED OUTSIDE THESE LIMITS OR OTHERWISE AUTHORIZED BY THE ENGINEER.
 - TEMPORARY CONSTRUCTION EASEMENT LOCATED FROM STA. 347+30± TO STA. 389+56± SHALL BE FROM EDGE OF PAVEMENT TO MEDIAN IN NORTHBOUND LANES.



REV	DATE	BY	DESCRIPTION

DESIGNED JPM	DISCIPLINE ENGINEER
DRAWN BH	
CHECKED AP	
DATE DECEMBER 2019	

PROJECT MANAGER
** ORIGINAL SEALED BY JONATHON P. MARSHALL 05/17 73265 **

Marina Coast Water District

REGIONAL URBAN WATER AUGMENTATION PROJECT

RECYCLED WATER PIPELINE

CIVIL

PLAN AND PROFILE
STA. 339+00 TO STA. 349+00

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1" 1"

IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 7568A.10
DRAWING NO. C-34
SHEET NO. 42 OF 93

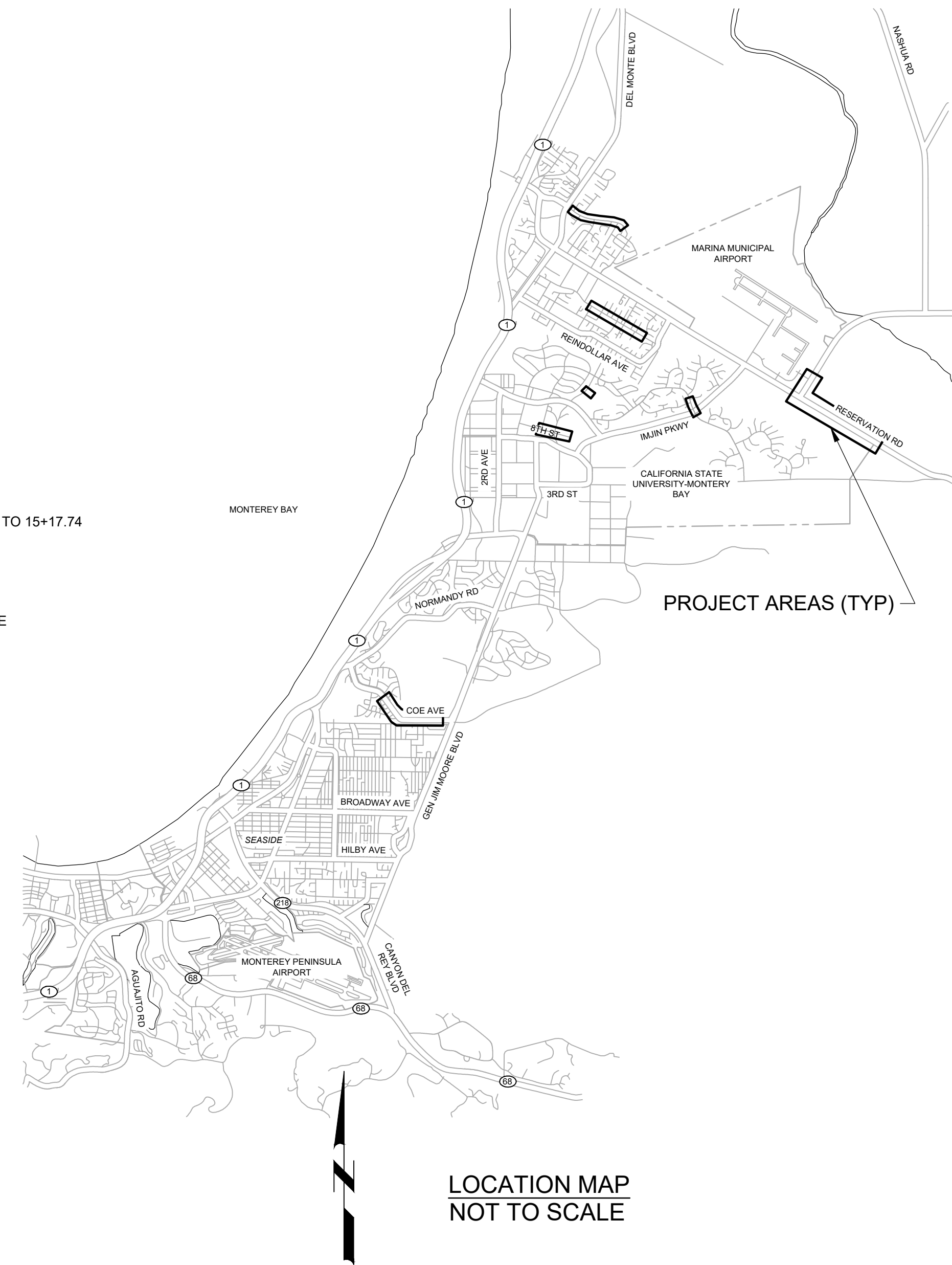
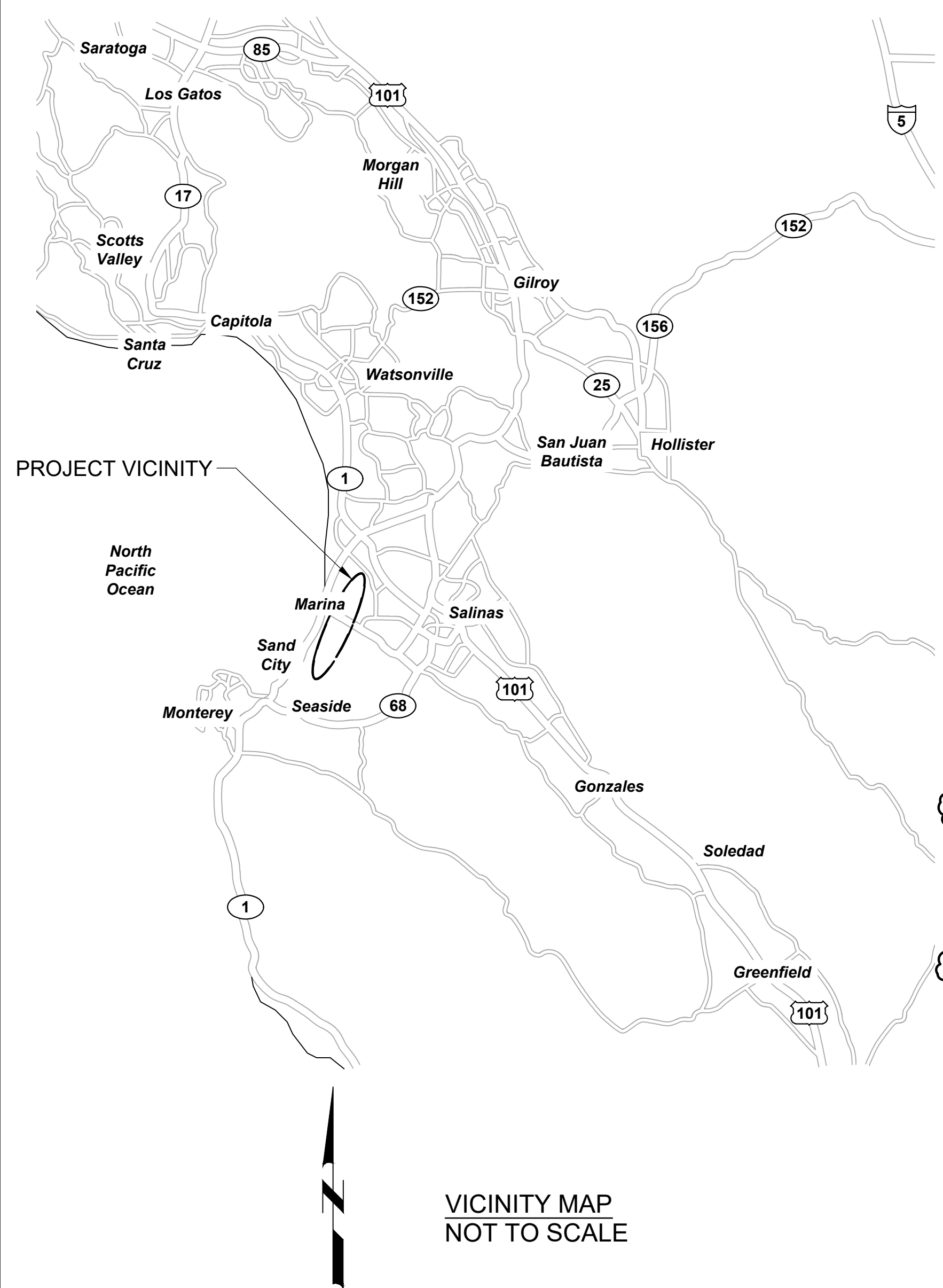
**MCWD RUWAP RE-BID ADDENDUM 3
DRAWINGS**

MARINA COAST WATER DISTRICT REGIONAL URBAN WATER AUGMENTATION PROJECT RECYCLED WATER DISTRIBUTION MAINS

CIP # RW-0174
VOLUME 2 OF 2

JANUARY 2020

DISTRIBUTION MAINS



SHT DWG	DESCRIPTION
GENERAL	
1 G01	COVER SHEET
2 G02	GENERAL NOTES, LEGENDS, AND SYMBOLS
3 G03	GENERAL CIVIL ABBREVIATIONS, LEGENDS AND SYMBOLS
4 G04	INDEX MAP
5 G05	SURVEY CONTROL POINTS TYPICAL
6 T01	AGENCY TYPICAL DETAILS - 1
7 T02	AGENCY TYPICAL DETAILS - 2
8 T03	AGENCY TYPICAL DETAILS - 3
9 TA01	ARCHITECTURAL TYPICAL DETAILS - 1
10 TC01	CIVIL TYPICAL DETAILS - 1
11 TP01	PIPING TYPICAL DETAILS - 1
12 TP02	PIPING TYPICAL DETAILS - 2
13 TS01	STRUCTURAL TYPICAL DETAILS - 1
14 TN01	INSTRUMENTATION TYPICAL DETAILS - 1
CIVIL	
15 CD01	YARD PIPING PLANS - 1
16 CD02	YARD PIPING PLANS - 2
17 CD03	YARD PIPING PLANS - 3
17A CD04	YARD PIPING PLANS - 4
17B CD05	YARD PIPING PLANS - 5
17C CD06	YARD PIPING PLANS - 6
STRUCTURAL AND MECHANICAL	
18 M01	BEACH RD PRESSURE REDUCING STATION
19 M02	CARMEL AVE PRESSURE REDUCING STATION
20 M03	MARINA HEIGHTS DR PRESSURE REDUCING STATION
21 M04	9TH ST PRESSURE REDUCING STATION
22 M05	COE AVE PRESSURE REDUCING STATION
22A M06	6"x3" PRESSURE REDUCING STATION
RECYCLED WATER PIPELINES	
23 P01	BEACH ROAD DISTRIBUTION MAIN - STA 10+00 TO 19+60
24 P02	BEACH ROAD DISTRIBUTION MAIN - STA 19+60 TO 29+60
25 P03	BEACH ROAD DISTRIBUTION MAIN - STA 29+60 TO 39+60
26 P04	BEACH ROAD DISTRIBUTION MAIN - STA 39+60 TO 49+83.40
27 P05	CARMEL AVENUE DISTRIBUTION MAIN - STA 10+00 TO 19+00
28 P06	CARMEL AVENUE DISTRIBUTION MAIN - STA 19+00 TO 29+00
29 P07	CARMEL AVENUE DISTRIBUTION MAIN - STA 29+00 TO 37+79.65
30 P08	MARINA HEIGHTS DR DISTRIBUTION MAIN STA 10+00 TO 12+87.13
31 P09	ABRAMS DRIVE DISTRIBUTION MAIN - STA 11+50 TO 19+00
32 P10	ABRAMS DRIVE DISTRIBUTION MAIN - STA 19+00 TO 21+03.06
33 P11	BLANCO RD & RESERVATION ROAD DISTRIBUTION MAIN - STA 10+00 TO 19+00
34 P12	BLANCO RD & RESERVATION ROAD DISTRIBUTION MAIN - STA 19+00 TO 29+00
35 P13	BLANCO RD & RESERVATION ROAD DISTRIBUTION MAIN - STA 29+00 TO 39+00
36 P14	BLANCO RD & RESERVATION ROAD DISTRIBUTION MAIN - STA 39+00 TO 49+00
37 P15	BLANCO RD & RESERVATION ROAD DISTRIBUTION MAIN - STA 49+00 TO 59+00
38 P16	BLANCO RD & RESERVATION ROAD DISTRIBUTION MAIN - STA 59+00 TO 69+00
39 P17	BLANCO RD & RESERVATION ROAD DISTRIBUTION MAIN - STA 69+00 TO 71+65.75
40 P18	9TH STREET DISTRIBUTION MAIN - STA 10+00 TO 19+00
41 P19	9TH STREET DISTRIBUTION MAIN - STA 19+00 TO 20+89.77
42 P20	COE AVENUE DISTRIBUTION MAIN - STA 10+00 TO 19+00
43 P21	COE AVENUE DISTRIBUTION MAIN - STA 19+00 TO 29+00
44 P22	COE AVENUE DISTRIBUTION MAIN - STA 29+00 TO 39+00
45 P23	COE AVENUE DISTRIBUTION MAIN - STA 39+00 TO 42+64.40

SHT DWG	DESCRIPTION
POTABLE WATER PIPELINES	
46 P24	BEACH RD WL DISTRIBUTION MAIN - STA 10+00 TO 19+00
47 P25	BEACH RD WL DISTRIBUTION MAIN - STA 19+00 TO 29+00
48 P26	BEACH RD WL DISTRIBUTION MAIN - STA 29+00 TO 37+47.90
49 P27	RESERVOIR 2 TO CRESCENT AVE CONNECTOR - STA 10+00 TO 15+17.74
PAVING	
50 C01	PAVING PLAN - BEACH ROAD 1
51 C02	PAVING PLAN - BEACH ROAD 2
52 C03	PAVING PLAN - CARMEL AVENUE
53 C04	PAVING PLAN - MARINA HEIGHTS DRIVE AND ABRAMS DRIVE
54 C05	PAVING PLAN - RESERVATION ROAD 1
55 C06	PAVING PLAN - RESERVATION ROAD 2
56 C07	PAVING PLAN - 9TH STREET
57 C08	PAVING PLAN - COE AVENUE 1
58 C09	PAVING PLAN - COE AVENUE 2

BID DOCUMENTS			
REV	DATE	BY	DESCRIPTION
1	3/19/20	JPM	CHANGED PER ADDENDUM NO. 3



APPROVED:

SEE BID DOCUMENTS FOR APPROVAL SIGNATURE

MICHAEL WEGLEY, PE
DISTRICT ENGINEER

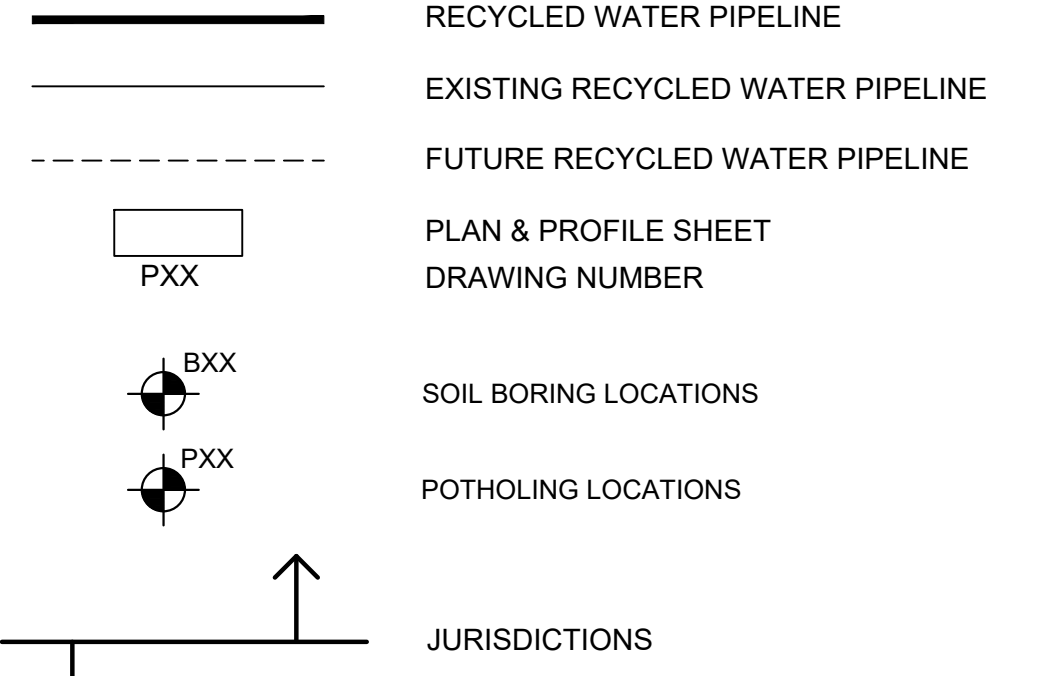
SUBMITTED:

Digitally signed by Jonathon P. Marshall
Contact Info: Carollo Engineers, Inc.
Date: 2020.03.19 16:51:05 -0800

JONATHON P. MARSHALL, P.E.
CAROLLO ENGINEERS
R.C.E. 73265

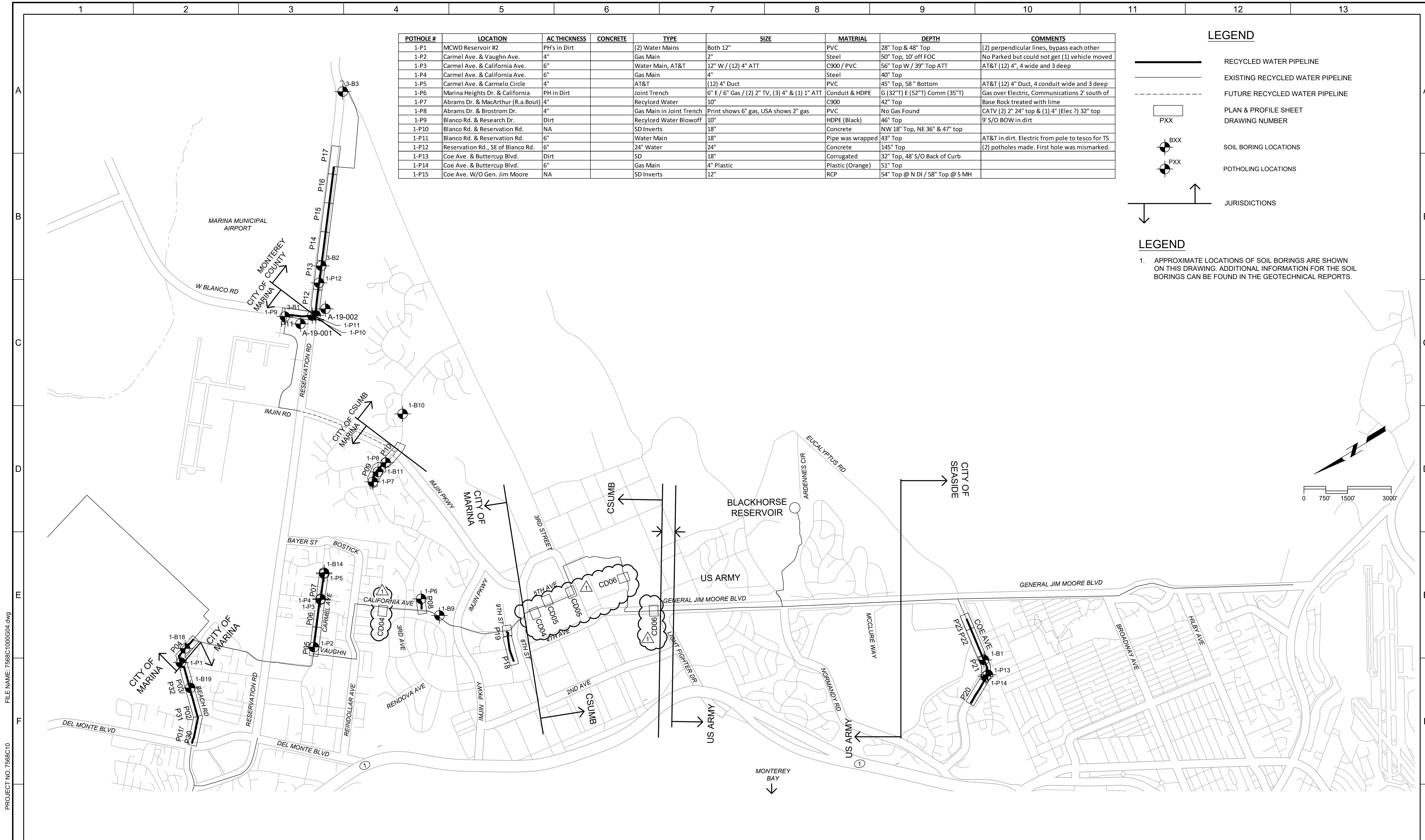
POTHOLE #	LOCATION	AC THICKNESS	CONCRETE	TYPE	SIZE	MATERIAL	DEPTH	COMMENTS
1-P1	MCWD Reservoir #2	PH's in Dirt		(2) Water Mains	Both 12"	PVC	28" Top & 48" Top	(2) perpendicular lines, bypass each other
1-P2	Carmel Ave. & Vaughn Ave.	4"		Gas Main	2"	Steel	50" Top, 10' off FOC	No Parked but could not get (1) vehicle moved
1-P3	Carmel Ave. & California Ave.	6"		Water Main, AT&T	12" W / (12) 4" ATT	C900 / PVC	56" Top W / 39" Top ATT	AT&T (12) 4", 4 wide and 3 deep
1-P4	Carmel Ave. & California Ave.	6"		Gas Main	4"	Steel	40" Top	
1-P5	Carmel Ave. & Carmelo Circle	4"		AT&T	(12) 4" Duct	PVC	45" Top, 58" Bottom	AT&T (12) 4" Duct, 4 conduit wide and 3 deep
1-P6	Marina Heights Dr. & California	PH in Dirt		Joint Trench	6" E / 6" Gas / (2) 2" TV, (3) 4" & (1) 1" ATT	Conduit & HDPE	G (32" T) E (52" T) Comm (35" T)	Gas over Electric, Communications 2' south of
1-P7	Abrams Dr. & MacArthur (R.a.Bout)	4"		Recycled Water	10"	C900	42" Top	Base Rock treated with lime
1-P8	Abrams Dr. & Brostrom Dr.	4"		Gas Main in Joint Trench	Print shows 6" gas, USA shows 2" gas	PVC	No Gas Found	CATV (2) 2" 24" top & (1) 4" (Elec ?) 32" top
1-P9	Blanco Rd. & Research Dr.	Dirt		Recycled Water Blowoff	10"	HDPE (Black)	46" Top	9' S/O BOW in dirt
1-P10	Blanco Rd. & Reservation Rd.	NA		SD Inverts	18"	Concrete	NW 18" Top, NE 36" & 47" top	
1-P11	Blanco Rd. & Reservation Rd.	6"		Water Main	18"	Pipe was wrapped	43" Top	AT&T in dirt. Electric from pole to tesco for TS
1-P12	Reservation Rd., SE of Blanco Rd.	6"		24" Water	24"	Concrete	145" Top	(2) potholes made. First hole was mismarked.
1-P13	Coe Ave. & Buttercup Blvd.	Dirt		SD	18"	Corrugated	32" Top, 48' S/O Back of Curb	
1-P14	Coe Ave. & Buttercup Blvd.	6"		Gas Main	4" Plastic	Plastic (Orange)	51" Top	
1-P15	Coe Ave. W/O Gen. Jim Moore	NA		SD Inverts	12"	RCP	54" Top @ N DI / 58" Top @ S MH	

LEGEND



LEGEND

- APPROXIMATE LOCATIONS OF SOIL BORINGS ARE SHOWN ON THIS DRAWING. ADDITIONAL INFORMATION FOR THE SOIL BORINGS CAN BE FOUND IN THE GEOTECHNICAL REPORTS.



PROJECT NO. 7568C10
 FILE NAME: 7568C1000G04.dwg
 LAST SAVED BY: bhawes

BID DOCUMENTS			
DESIGNED	JPM		
DRAWN	BH		
CHECKED			
DATE	JANUARY 2020		

REGISTERED PROFESSIONAL ENGINEER
 JONATHAN P. MARSHALL
 No. 73265
 CIVIL
 STATE OF CALIFORNIA

Digitally signed by Jonathan P. Marshall
 Contact info: Carollo Engineers, Inc.
 Date: 2020.03.19 16:51:06 -0800



Marina Coast Water District

REGIONAL URBAN WATER AUGMENTATION PROJECT
 RECYCLED WATER DISTRIBUTION MAINS
 CIVIL
 INDEX MAP

VERIFY SCALES	JOB NO. 7568C.10
BAR IS ONE INCH ON ORIGINAL DRAWING	DRAWING NO. G04
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	SHEET NO. 4 OF 62

Plot Date: 3/19/2020 9:40:06 AM

B

C

NOTES:

- FOR SEWER DEPTHS FROM MINIMUM COVER TO 6 FT. USE STANDARD WYE CONNECTION. FOR DEPTHS BELOW 6 FT. USE STANDARD TEE CONNECTION WITH SLOPING RISER AS SHOWN.
- WHEN SEWER IS AT MINIMUM DEPTH, HOLD SERVICE LINE TO MINIMUM SLOPE AND LESSEN COVER AT PROPERTY LINE.
- THE LOCATION OF ALL SEWER LATERALS SHALL BE MARKED WITH THE LETTER "S" ON FACE OF CURB OR BACK OF WALK.
- IF CONTRACTOR IS UNABLE TO MEET MINIMUM COVER REQUIREMENTS, DUCTILE IRON PIPE SHALL BE USED.
- ALL SERVICE TEES OR WYES SHALL BE MANUFACTURER'S STANDARD FITTINGS. ON SERVICE ADDITIONS, TAP-RITE OR SEWER SADDLE SHALL BE USED. NO PIPE BREAKING AND CONCRETE PATCHING WILL BE PERMITTED. NEATLY SNAPPED OR SAW CUT LENGTHS WILL BE ALLOWED.

MATERIALS

SANITARY SEWER PIPE MATERIAL	CUT-IN FITTING MATERIAL
PVC	PVC/DIP
DIP	DIP
VCP	PVC
CMLC	PVC

STANDARD WYE CUT-IN DETAIL

STANDARD TEE CUT-IN DETAIL

APPROVED BY DISTRICT ENGINEER: [Signature] MARINA COAST WATER DISTRICT STANDARD PLAN STANDARD S-6 SHEET 1 OF 1
DATE: 11/2007
LATERAL CONNECTION

MATERIALS

ITEM NO.	SIZE & DESCRIPTION*
1	DOUBLE STRAP IRON BODY SERVICE SADDLE 1" I.P. OUTLET (FOR DUCTILE IRON PIPE MAINS)
2	3/4" BRONZE CORPORATION STOP I.P. THREAD X COMPRESSION (FOR DUCTILE IRON PIPE MAIN)
3	1" METER SIZE COPPERSETER W/ 3/4" TO 1" METER SIZE MALE ADAPTOR (REQUIRED FOR 3/4" METERS), 15" HIGH, 1" INLET/OUTLET METERS)
4	1" COPPER OR POLYETHYLENE TUBING
5	METER BOX W/ CONCRETE LID CHRISTY BOX OR EQUAL
6	6" BASE OF 3/4" ROCK
7	ZINC ANODE AND LEAD WIRE. ANODE TO BE PLACED VERTICALLY OR HORIZONTALLY AT A MINIMUM SEPARATION OF 2 FEET FROM THE COPPER SERVICE. ANODE SHALL BE SIZED BASED ON METAL SURFACE AREA. ANODE SHALL BE BAGGED IN GYPSUM, BENTONITE AND SODIUM SULFATE.

DIALECTRICAL INSULATION FOR DIP MAINS

MATERIALS*:

- SERVICE SADDLE AND CORPORATION STOP
- BRONZE CORPORATION STOP MALE I.P. X F.I.P.
- NIPPLE MALE I.P. X MALE I.P., BRONZE
- DIELECTRIC UNION F.I.P. X SWEAT
- TYPE K COPPER SERVICE TUBING
- COMPRESSION ADAPTER

* SEE SPECIFICATIONS FOR APPROVED MANUFACTURERS & MODELS.

GRIND 2" "W" IN CURB FACE TO IDENTIFY POTABLE WATER SERVICE LOCATION OR 2" "RW" TO IDENTIFY RECLAIMED WATER SERVICE LOCATION

APPROVED BY DISTRICT ENGINEER: [Signature] MARINA COAST WATER DISTRICT STANDARD PLAN STANDARD W-1 SHEET 1 OF 1
DATE: 11/2007
1" WATER SERVICE INSTALLATION

LIST OF MATERIALS:

- BACKFLOW PREVENTION DEVICE SHALL BE INCLUDED IN THE CURRENT LIST OF APPROVED BACKFLOW PREVENTION ASSEMBLIES. FOUNDATION FOR CROSS-CONNECTION AND HYDRAULIC RESEARCH, UNIVERSITY OF SOUTHERN CALIFORNIA, SCHOOL OF ENGINEERING.
- PIPE SPOOL, TYPE "L" HARD COPPER, 3/4" THRU 2 1/2".
- IF NO METER EXISTS BEHIND THE ASSEMBLY, ADDITIONAL BALL VALVE SHALL BE INSTALLED AT THE INLET SIDE TO ALLOW FOR ASSEMBLY REPLACEMENT. BALL VALVE SHALL BE PER MCWD STD SPECIFICATION 15100 AND INSTALLED AS CLOSE TO MCWD WATER MAIN AS POSSIBLE, OR ON THE PROPERTY LINE OF THE PARCEL.
- PIPE UNION, BRASS OR COPPER, IF NEEDED.
- LOCKABLE STEEL CAGE ANCHORED A CONCRETE PAD.
- CONCRETE PAD, 4" THICK WITH #4@12" O.C./E.W.

GENERAL NOTES:

- BACKFLOW ASSEMBLIES MUST BE TESTED AT THE TIME OF INSTALLATION & ANNUALLY BY A CERTIFIED TESTER WHO IS RECOGNIZED BY MARINA COAST WATER DISTRICT.
- COPPER FITTINGS SHALL BE CONNECTED WITH LEAD FREE SOLDER JOINTS OR APPROVED EQUIVALENT.
- FINISHED GRADE UNDERNEATH THE BACKFLOW PREVENTER SHALL BE AT 90% COMPACTION.
- ALL NIPPLES TO BE COPPER OR BRASS.
- IN CERTAIN CASES, A PLUMBING PERMIT FROM YOUR LOCAL BUILDING DEPARTMENT MAY BE REQUIRED, PLEASE VERIFY ACCORDINGLY.
- BACKFLOW ASSEMBLY MUST BE WITHIN 2" OF THE OUTSIDE OF METER BOX.

APPROVED BY DISTRICT ENGINEER: [Signature] MARINA COAST WATER DISTRICT STANDARD PLAN STANDARD W-18A SHEET 1 OF 1
DATE: 04/2014
REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION 3/4-INCH THROUGH 2.5-INCH

FILE NAME: 7568C1000T02.dwg

PROJECT NO. 7568C10

LAST SAVED BY: bhawes

NOTES:

- SERVICE SADDLE SHALL NOT BE INSTALLED WITHIN 18" OF VALVE, COUPLING, JOINT OR FITTING. TAPPED COUPLINGS ARE NOT PERMITTED
- INSTALL CORPORATION STOP WITH KEY SIDEWAYS IN OPEN POSITION.
- SET TOP OF METER BOX FLUSH WITH SIDEWALK OR CURB AS SHOWN
- THE CORPORATION STOP TAP SHALL BE MADE AS SPECIFIED PER MANUFACTURER'S RECOMMENDATION.
- THE WATER SERVICE SHOULD EXTEND PERPENDICULAR TO THE CENTERLINE OF THE STREET FROM THE WATER MAIN TO THE METER STOP.
- METER BOX SHALL BE SET BEHIND SIDEWALK WHERE SIDEWALK IS ADJACENT TO CURB, OR IN PARKWAY BETWEEN CURB AND SIDEWALK.
- ALL SPLICES OF COPPER TUBING SHALL BE COMPRESSION CONNECTIONS.
- METER BOX LID FOR ALL RECYCLE WATER SERVICE SHALL BE PURPLE IN COLOR PER SPECIFICATIONS.
- COMPRESSION TYPE CORPORATION STOP AND ANGLE METER STOP MAY BE SUBSTITUTED FOR THE FEMALE IRON PIPE STYLE WITH MALE IRON BY SWEAT ADAPTERS AS SHOWN.
- ALL SWEAT JOINTS SHALL BE SILVER SOLDER (EXCEPT AS NOTED)
- A 1" BYPASS LINE WITH LOCKING CURB STOP MAY BE REQUIRED FOR INSTALLATIONS NEEDING CONTINUOUS SERVICE.
- ANODE LEAD WIRE SHALL BE CLAMPED TO COPPER TUBING. CLAMP SHALL BE DIRECT BURIAL TYPE OF RED BRASS WITH BRASS SCREWS AS MANUFACTURED BY DOTITE, OR APPROVED EQUAL.
- COPPERSETER SHALL BE CENTERED IN THE METER BOX. DISTANCE FROM THE CURB SHALL BE SPECIFIED IN CONTRACT DRAWINGS.
- WATER SERVICES SHALL NOT BE PERMITTED ON WATER MAINS LARGER THAN 10"
- ANODE(S) SHALL BE INSTALLED WHEN REQUIRED BY CORROSION STUDY REPORT (SEE MASTER PLAN REQUIREMENT IN DEVELOPMENT PROCEDURE SECTION 100).

MATERIALS

ITEM NO.	SIZE & DESCRIPTION*
1	DOUBLE STRAP IRON BODY SERVICE SADDLE 2" I.P. OUTLET (FOR DUCTILE IRON PIPE MAINS)
2	CAST BRONZE SERVICE SADDLE 2" I.P. OUTLET (FOR C900 PVC PIPE MAINS)
2A	2" BRONZE CORPORATION STOP MALE I.P. THREAD X F.I.P. (FOR DUCTILE IRON MAINS)
2B	2" BRONZE CORPORATION STOP MALE I.P. THREAD X COMPRESSION (FOR C900 PVC PIPE MAINS)
3	2" METER SIZE COPPERSETTERS, 15" HIGH
4	2" COPPER OR POLYETHYLENE TUBING
5	METER BOX W/ CONCRETE LID CHRISTY BOX OR EQUAL
6	6" BASE OF 3/4" ROCK
7	ZINC ANODE AND LEAD WIRE. ANODE IS TO BE PLACED VERTICALLY OR HORIZONTALLY AT A MINIMUM SEPARATION OF 2 FEET FROM THE COPPER SERVICE. ANODE SHALL BE SIZED BASED ON METAL SURFACE AREA. ANODE SHALL BE BAGGED IN GYPSUM, BENTONITE AND SODIUM SULFATE.

DIALECTRICAL INSULATION FOR DIP MAINS

MATERIALS*:

- SERVICE SADDLE AND CORPORATION STOP
- BRONZE CORPORATION STOP MALE I.P. X F.I.P.
- NIPPLE MALE I.P. X MALE I.P., BRONZE
- DIELECTRIC UNION F.I.P. X SWEAT
- TYPE K COPPER SERVICE TUBING
- COMPRESSION ADAPTER

*SEE SPECIFICATIONS FOR APPROVED MANUFACTURERS & MODELS.

GRIND 2" "W" IN CURB FACE TO IDENTIFY POTABLE WATER SERVICE LOCATION OR 2" "RW" TO IDENTIFY RECLAIMED WATER SERVICE LOCATION

APPROVED BY DISTRICT ENGINEER: [Signature] MARINA COAST WATER DISTRICT STANDARD PLAN STANDARD W-2 SHEET 1 OF 1
DATE: 11/2007
2" WATER SERVICE INSTALLATION

NOTES:

- AIR TEST TAPPING SLEEVE PRIOR TO TAP
- COAT ALL TAPPING SLEEVE BOLTS WITH KOPPERS BITUMASTIC
- USE SHELL CUTTER ON ALL PVC TAPS

APPROVED BY DISTRICT ENGINEER: [Signature] MARINA COAST WATER DISTRICT STANDARD PLAN STANDARD W-6 SHEET 1 OF 1
DATE: 11/2007
CONNECTION TO EXISTING PIPE

REV	DATE	BY	DESCRIPTION
3/19/20	JPM		CHANGED PER ADDENDUM NO. 3

DESIGNED JPM
DRAWN TLR
CHECKED
DATE JANUARY 2020

REGISTERED PROFESSIONAL ENGINEER
JAVAYION P. MARSHALL
No. 73265
CIVIL
STATE OF CALIFORNIA

Digitally signed by Jonathan P. Marshall
Contact Info: Carollo Engineers
Date: 2020.03.19 15:51:06 -0800

carollo

MARINA COAST WATER DISTRICT

Marina Coast Water District

REGIONAL URBAN WATER AUGMENTATION PROJECT

RECYCLED WATER DISTRIBUTION MAINS

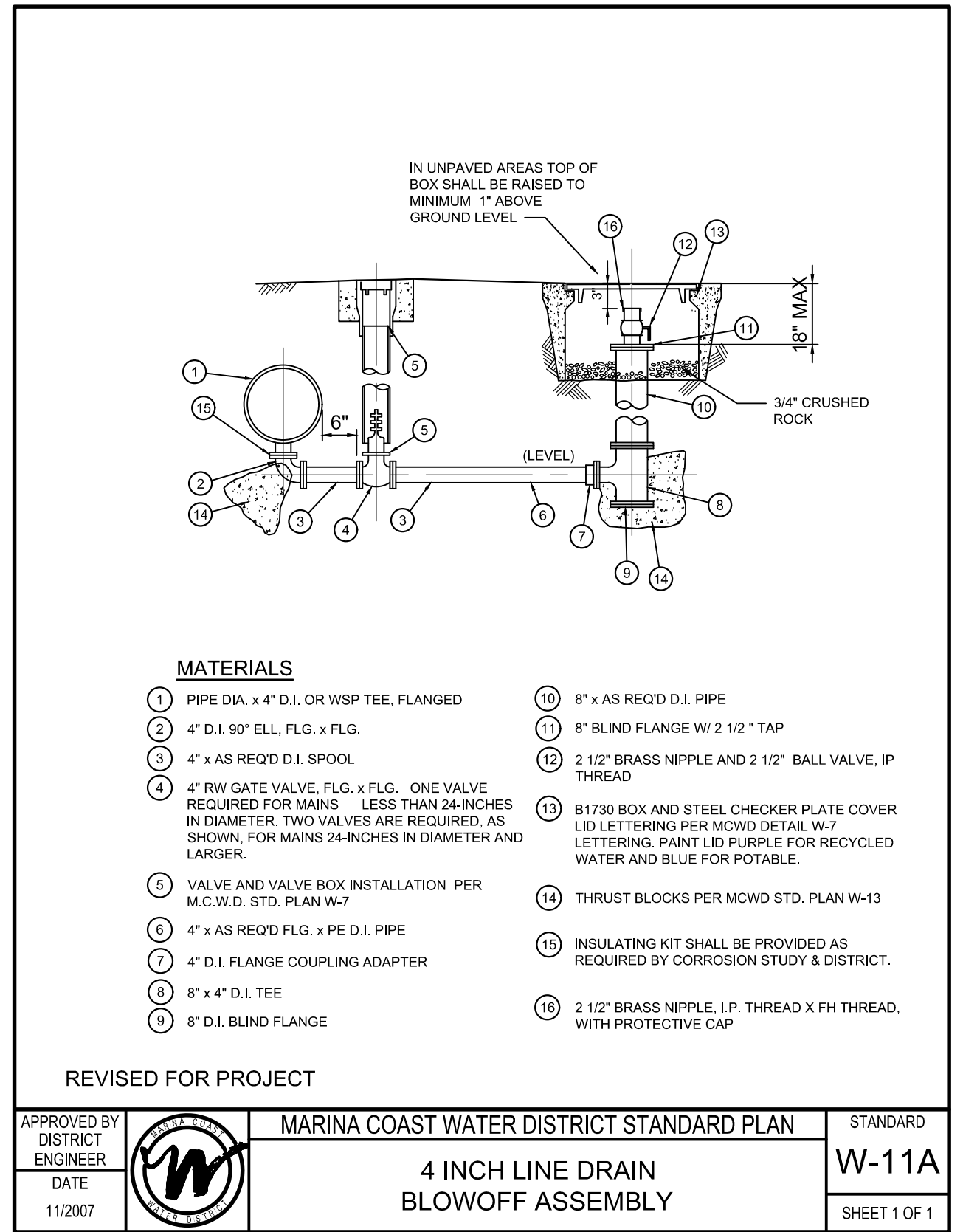
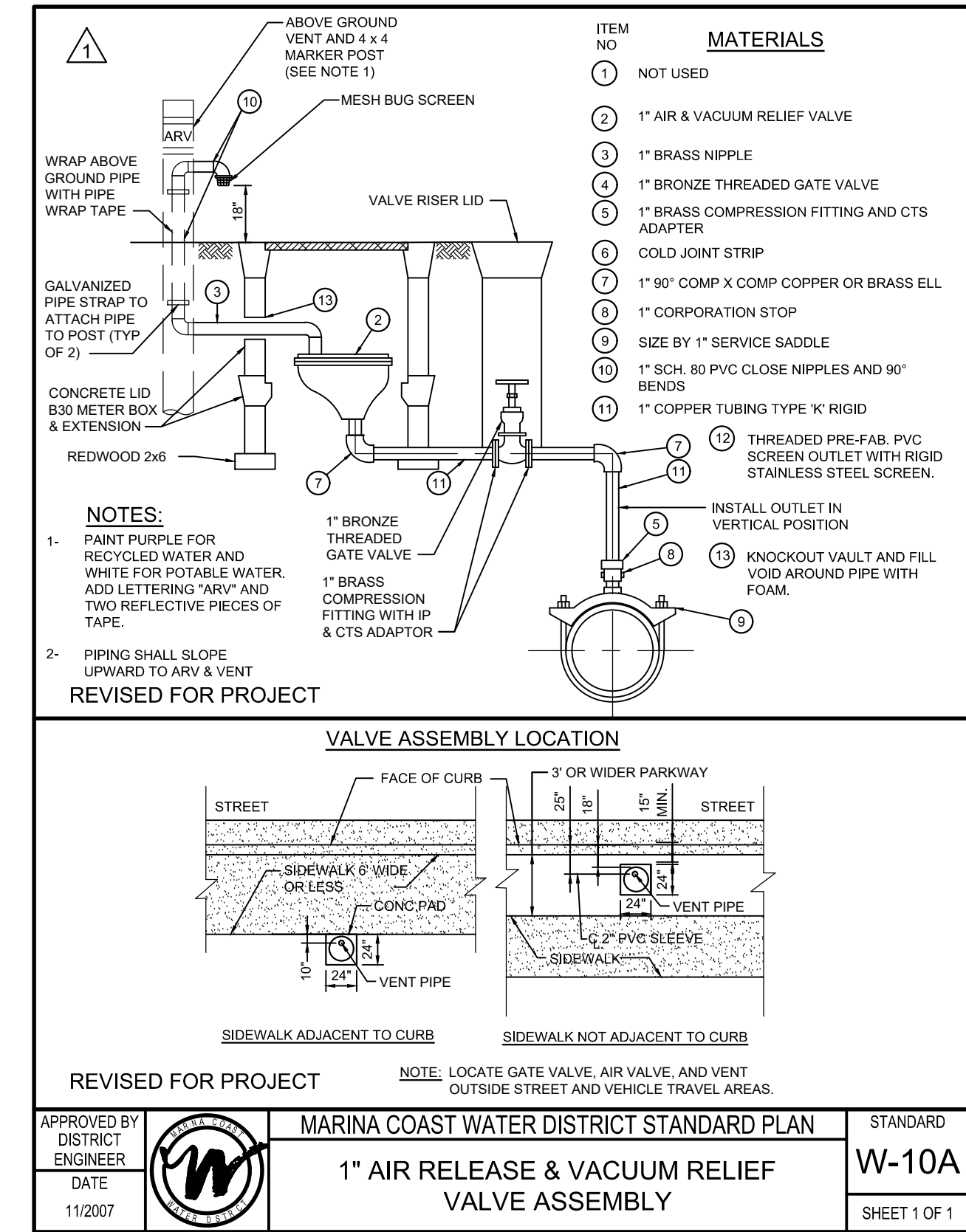
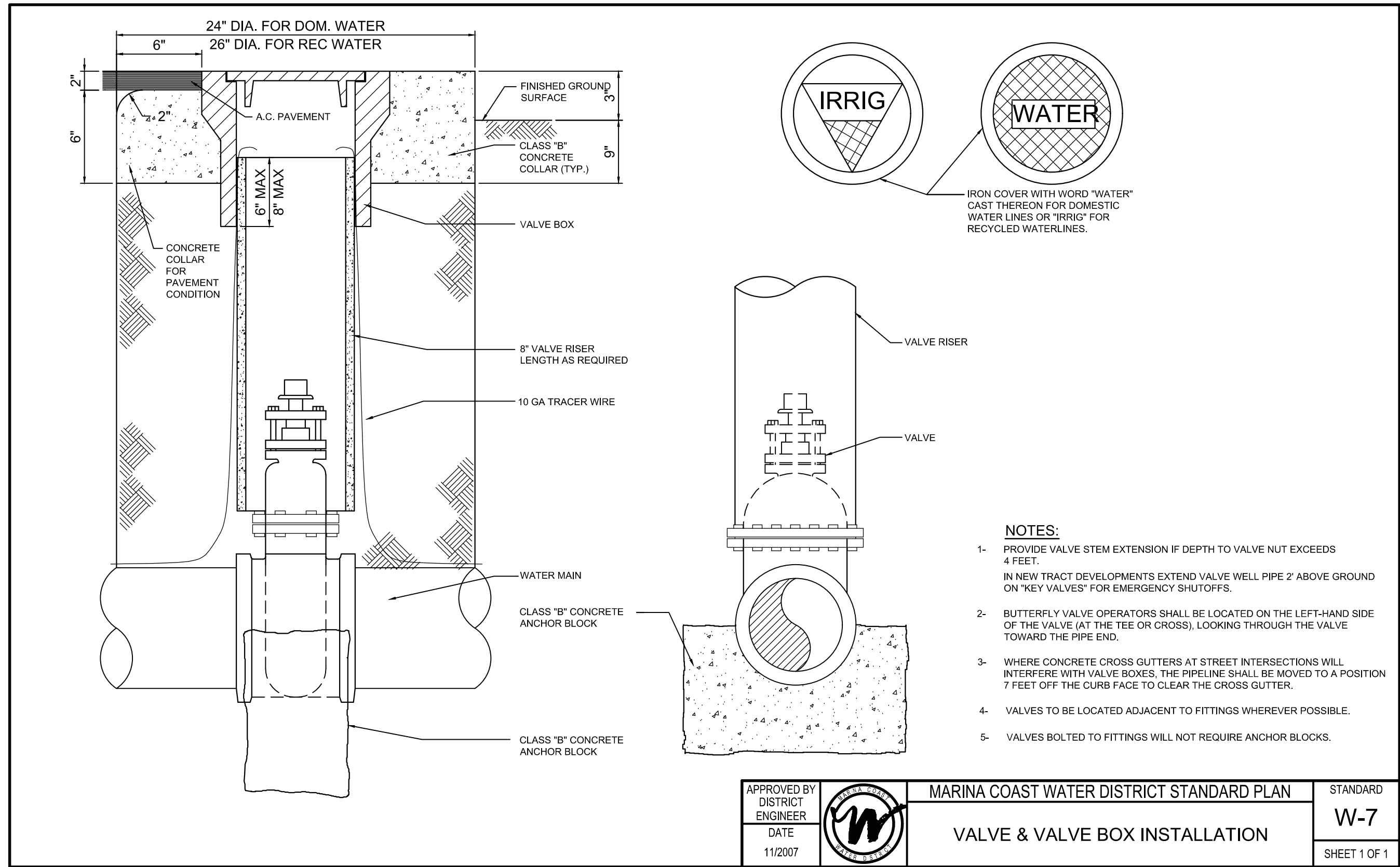
TYPICALS

AGENCY TYPICAL DETAILS - 2

VERIFY SCALES
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IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 7568C.10
DRAWING NO. T02
SHEET NO. 7 OF 62

Plot Date: 3/19/2020 1:54:36 PM



(A) NEW WATER MAINS AND NEW SUPPLY LINES SHALL NOT BE INSTALLED IN THE SAME TRENCH AS, AND SHALL BE AT LEAST 10 FEET HORIZONTALLY FROM AND ONE FOOT VERTICALLY ABOVE, ANY PARALLEL PIPELINE CONVEYING:

- (1) UNTREATED SEWAGE,
- (2) PRIMARY OR SECONDARY TREATED SEWAGE,
- (3) DISINFECTED SECONDARY-2.2 RECYCLED WATER (DEFINED IN SECTION 60301.220),
- (4) DISINFECTED SECONDARY-23 RECYCLED WATER (DEFINED IN SECTION 60301.225), AND
- (5) HAZARDOUS FLUIDS SUCH AS FUELS, INDUSTRIAL WASTES, AND WASTEWATER SLUDGE.

(B) NEW WATER MAINS AND NEW SUPPLY LINES SHALL BE INSTALLED AT LEAST 4 FEET HORIZONTALLY FROM, AND ONE FOOT VERTICALLY ABOVE, ANY PARALLEL PIPELINE CONVEYING:

- (1) DISINFECTED TERTIARY RECYCLED WATER (DEFINED IN SECTION 60301.230), AND
- (2) STORM DRAINAGE.

(C) NEW SUPPLY LINES CONVEYING RAW WATER TO BE TREATED FOR DRINKING PURPOSES SHALL BE INSTALLED AT LEAST 4 FEET HORIZONTALLY FROM, AND ONE FOOT VERTICALLY BELOW, ANY WATER MAIN.

(D) IF CROSSING A PIPELINE CONVEYING A FLUID LISTED IN SUBSECTION (A) OR (B), A NEW WATER MAIN SHALL BE CONSTRUCTED NO LESS THAN 45-DEGREES TO AND AT LEAST ONE FOOT ABOVE THAT PIPELINE. NO CONNECTION JOINTS SHALL BE MADE IN THE WATER MAIN WITHIN EIGHT HORIZONTAL FEET OF THE FLUID PIPELINE.

(E) THE VERTICAL SEPARATION SPECIFIED IN SUBSECTIONS (A), (B), AND (C) IS REQUIRED ONLY WHEN THE HORIZONTAL DISTANCE BETWEEN A WATER MAIN AND PIPELINE IS LESS THAN TEN FEET.

(F) NEW WATER MAINS SHALL NOT BE INSTALLED WITHIN 100 HORIZONTAL FEET OF THE NEAREST EDGE OF ANY SANITARY LANDFILL, WASTEWATER DISPOSAL POND, OR HAZARDOUS WASTE DISPOSAL SITE, OR WITHIN 25 HORIZONTAL FEET OF THE NEAREST EDGE OF ANY CESSPOOL, SEPTIC TANK, SEWAGE LEACH FIELD, SEEPAGE PIT, UNDERGROUND HAZARDOUS MATERIAL STORAGE TANK, OR GROUNDWATER RECHARGE PROJECT SITE.

(G) THE MINIMUM SEPARATION DISTANCES SET FORTH IN THIS SECTION SHALL BE MEASURED FROM THE NEAREST OUTSIDE EDGE OF EACH PIPE BARREL.

(H) WITH STATE BOARD APPROVAL, NEWLY INSTALLED WATER MAINS MAY BE EXEMPT FROM THE SEPARATION DISTANCES IN THIS SECTION, EXCEPT SUBSECTION (F), IF THE NEWLY INSTALLED MAIN IS:

- (1) LESS THAN 1320 LINEAR FEET,
- (2) REPLACING AN EXISTING MAIN, INSTALLED IN THE SAME LOCATION, AND HAS A DIAMETER NO GREATER THAN SIX INCHES MORE THAN THE DIAMETER OF THE MAIN IT IS REPLACING, AND
- (3) INSTALLED IN A MANNER THAT MINIMIZES THE POTENTIAL FOR CONTAMINATION, INCLUDING, BUT NOT LIMITED TO:

- (A) SLEEVING THE NEWLY INSTALLED MAIN, OR
- (B) UTILIZING UPGRADED PIPING MATERIAL.

WATER MAIN SEPARATION REQUIREMENTS

Water Boards

State Water Resources Control Board
Division of Drinking Water

December 14, 2017

Separation of Water Mains and Non-Potable Pipelines – Requests for Alternatives to the Waterworks Standards

Dear Public Water System Owners and Operators:

This letter supersedes prior guidance regarding the separation of water mains and non-potable pipelines, including Guidance Memo 2003-02, dated October 16, 2003. Guidance Memo 2003-02 and previous versions should be discarded.

The California Waterworks Standards (California Code of Regulations (CCR), Title 22, Division 4, Chapter 16, Section 64572) establish criteria for the separation of new water mains from non-potable pipelines. Public water systems should ensure that these distances are met, whenever feasible, for all new construction. The Division of Drinking Water (Division) recognizes that certain conditions may call for the installation of pipelines with less separation distance than what is required by the regulations. In these situations, the water system may propose an alternative pursuant to CCR, Title 22, Section 64551.100:

§64551.100. Waivers and Alternatives.

(a) A water system that proposes to use an alternative to a requirement in this chapter shall:

- (1) Demonstrate to the State Board that the proposed alternative would provide at least the same level of protection to public health; and
- (2) Obtain written approval from the State Board prior to implementation of the alternative.

In proposing an alternative to the Waterworks Standards, water systems should observe the following:

- The water system must accept responsibility for the adequacy of the proposed alternative. The Division may require a written statement, signed by the water system's management, certifying that the proposed alternative adequately protects public health.
- In most circumstances, the Division cannot offer technical assistance with pipeline or infrastructure design. The water system proposing an alternative must demonstrate adequate expertise on the part of its own personnel or its hired consultants.
- The water system should describe how the proposed alternative provides at least the same level of protection to public health as the minimum separation distances prescribed in the regulation.
- While exorbitant cost may present a hardship in meeting the regulatory separation requirements and can be considered, public health must be prioritized above construction costs in determining an acceptable alternative.

Felicia Mancini, Chief | Thomas Howland, Director of RCR

1001 I Street, Sacramento, CA 95814 | Mailing Address: P.O. Box 100, Sacramento, CA 95812-0100 | www.waterboards.ca.gov

WATER MAIN SEPARATION REQUIREMENTS

Public Water Systems -2- December 14, 2017

The Division has prepared an application checklist that may be used by water systems in proposing an alternative to the Waterworks Standards (Enclosure). The purpose of the checklist is to ensure that the Division has sufficient information to evaluate the proposal. **The water system may submit the information in a different format from the checklist, provided that the submittal provides adequate information.** The checklist may also be used to provide written certification that the proposed alternative adequately protects public health.

If you have any questions, please contact the Division office that oversees your water system.

Sincerely,

Darrin Polhemus
Darrin Polhemus, P.E.
Deputy Director
Division of Drinking Water

Enclosure: Waterworks Standards Main Separation Alternative Request Example Checklist

WATER MAIN SEPARATION REQUIREMENTS

REV		DATE	BY	DESCRIPTION
1		3/19/20	JPM	CHANGED PER ADDENDUM NO. 3

DESIGNED JPM
DRAWN TLR
CHECKED

DATE JANUARY 2020

REGISTERED PROFESSIONAL ENGINEER
JONATHAN P. MARSHALL
No. 73265
CIVIL
STATE OF CALIFORNIA

Digitally signed by Jonathan P. Marshall
Contact Info: Carollo Engineers, Inc.
Date: 2020.03.19 15:51:06 -0800

carollo

MARINA COAST WATER DISTRICT

Marina Coast Water District

REGIONAL URBAN WATER AUGMENTATION PROJECT

RECYCLED WATER DISTRIBUTION MAINS

TYPICALS

AGENCY TYPICAL DETAILS - 3

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JOB NO. 7568C.10
DRAWING NO. T03
SHEET NO. 8 OF 62

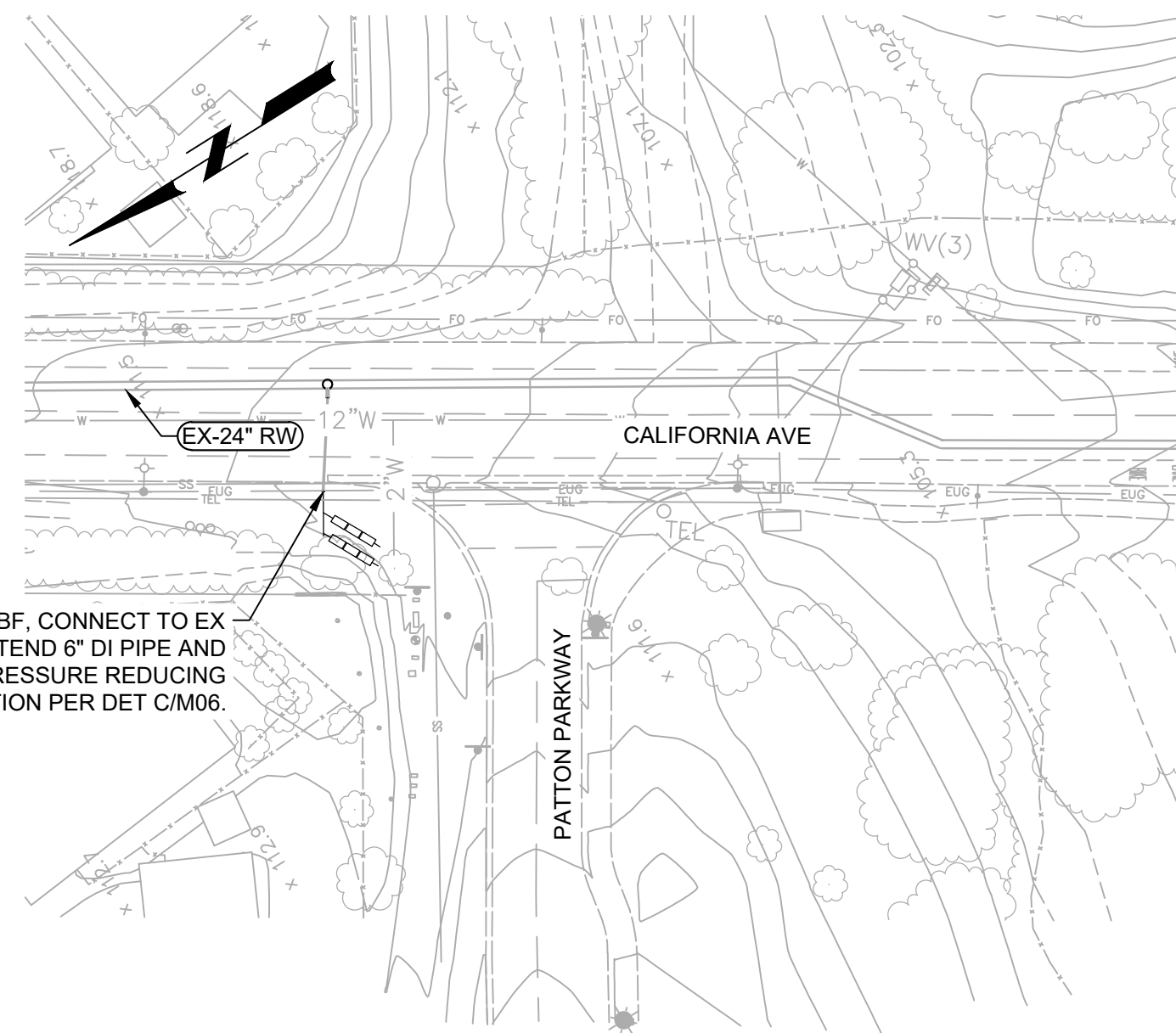
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Plot Date: 3/19/2020 9:00:05 AM

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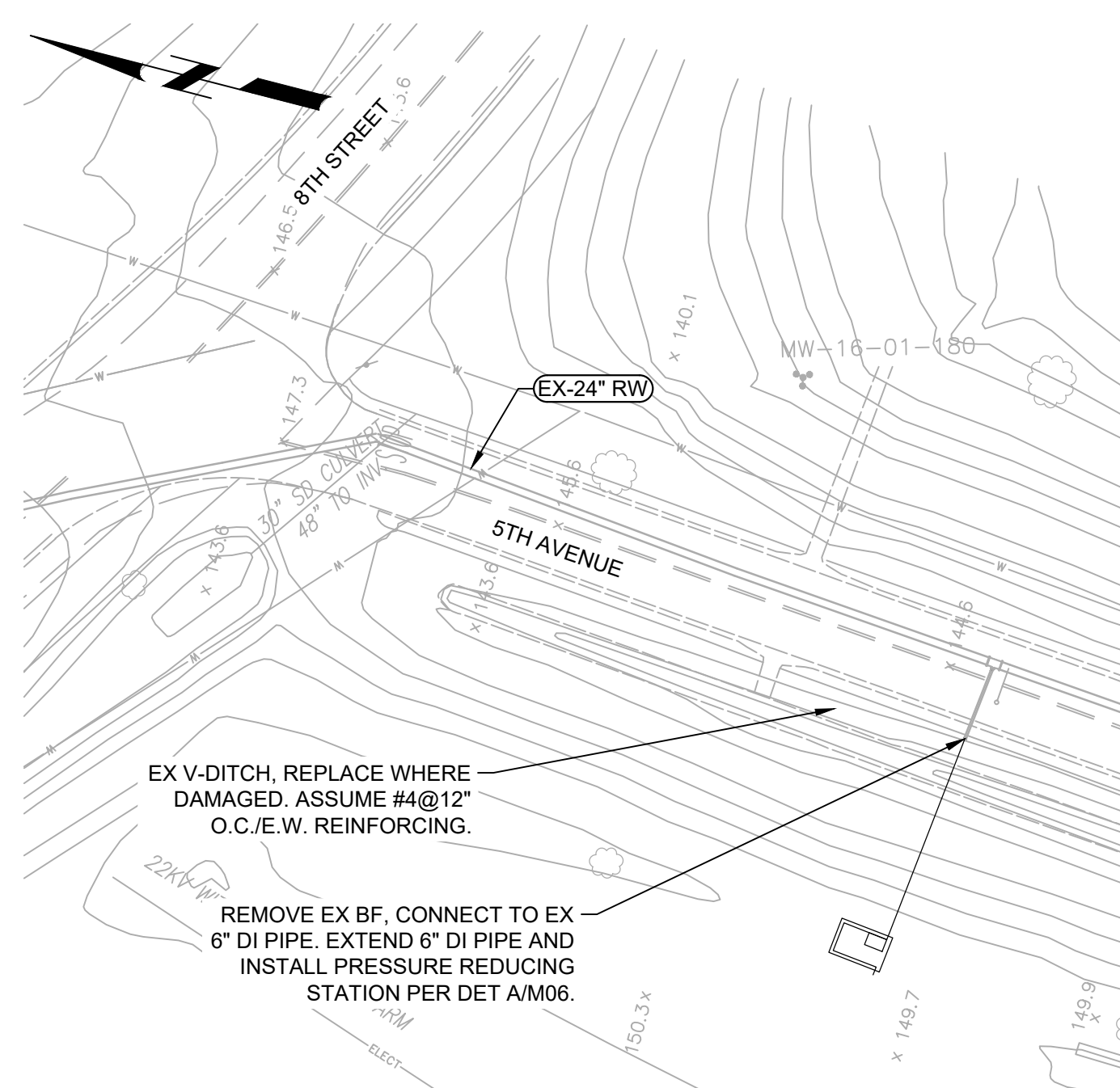
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GENERAL NOTES:

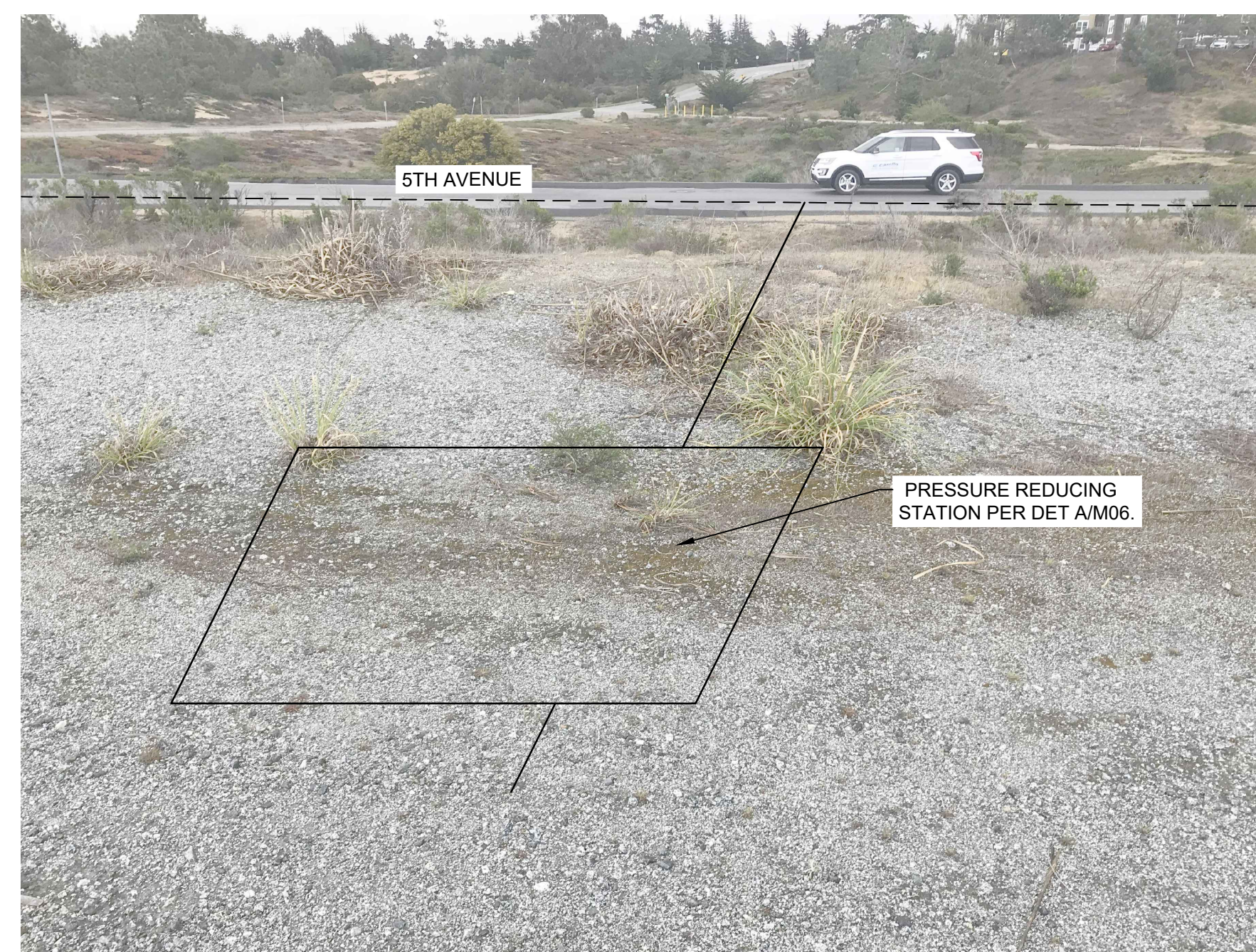
1. FIELD SURVEY AND MARK CORERS OF ALL VAULTS / CONCRETE PADS. CONFIRM WITH OWNER AND ENGINEER IN THE FIELD THE FINAL LOCATION OF THE STATIONS PRIOR TO INSTALLING STATIONS OR ADJACENT FACILITIES.
2. CONTRACTOR SHALL FIELD VERIFY LOCATION OF EXISTING TURNOUTS PRIOR TO CONSTRUCTION.
3. CONTRACTOR SHALL FIELD LOCATE ALL EXISTING UTILITIES ADJACENT TO THE PROPOSED IMPROVEMENTS PRIOR TO CONSTRUCTION IN ACCORDANCE WITH SPECIFICATION SECTION 01350. THE CONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEER OF ANY CONFLICTS AND PROPOSE REVISED LOCATIONS FOR IMPROVEMENTS FOR APPROVAL.
4. ANTICIPATE LOCAL IRRIGATION SYSTEM WILL NEED TO BE REMOVED/REPLACED.



Know what's below.
Call before you dig.



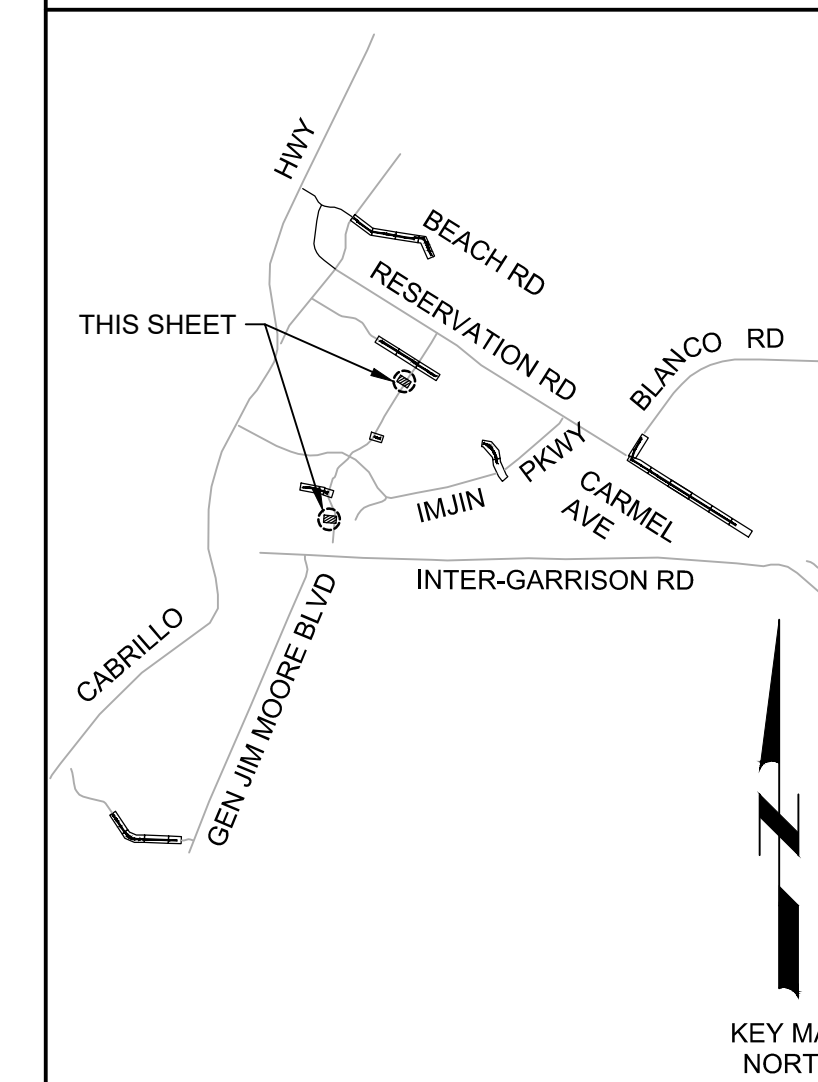
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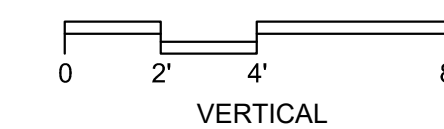
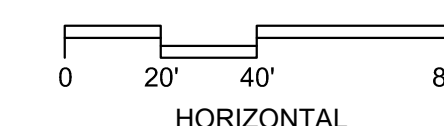
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B 5TH AVENUE TURNOUT
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KEY MAP



SCALE



BID DOCUMENTS

DESIGNED
JPM/KMM
 DRAWN
AL/BWH
 CHECKED
AP
 DATE
JANUARY 2020



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 Contact Info: Carollo Engineers, Inc.
 Date: 2020.03.19 16:51:06 -0800



Marina
Coast
Water
District

REGIONAL URBAN WATER AUGMENTATION PROJECT

RECYCLED WATER DISTRIBUTION MAINS

CIVIL DISTRIBUTION MAIN
YARD PIPING PLANS - 4

VERIFY SCALES

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DRAWING NO. CD04

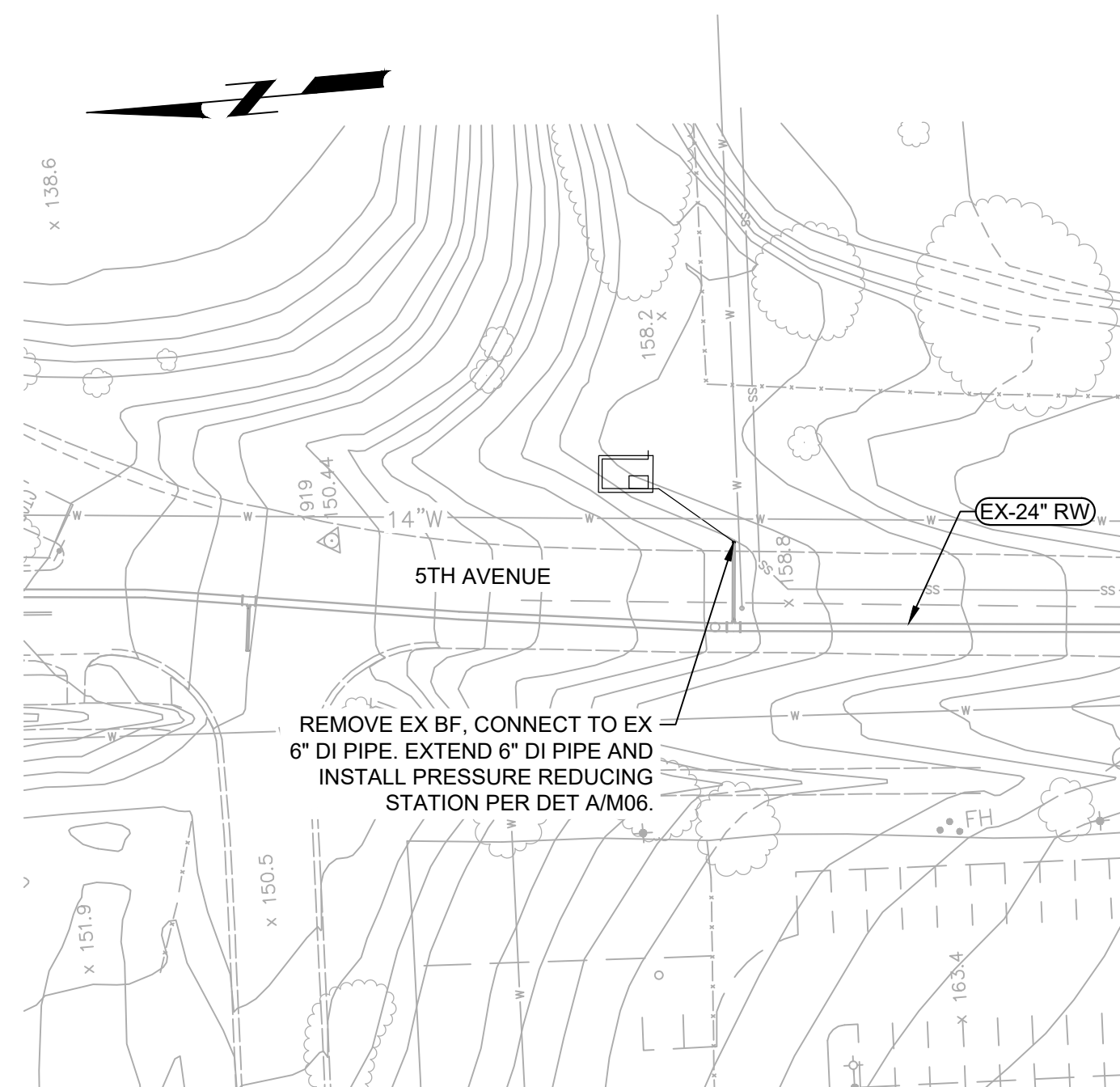
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PROJECT NO. 7568C10

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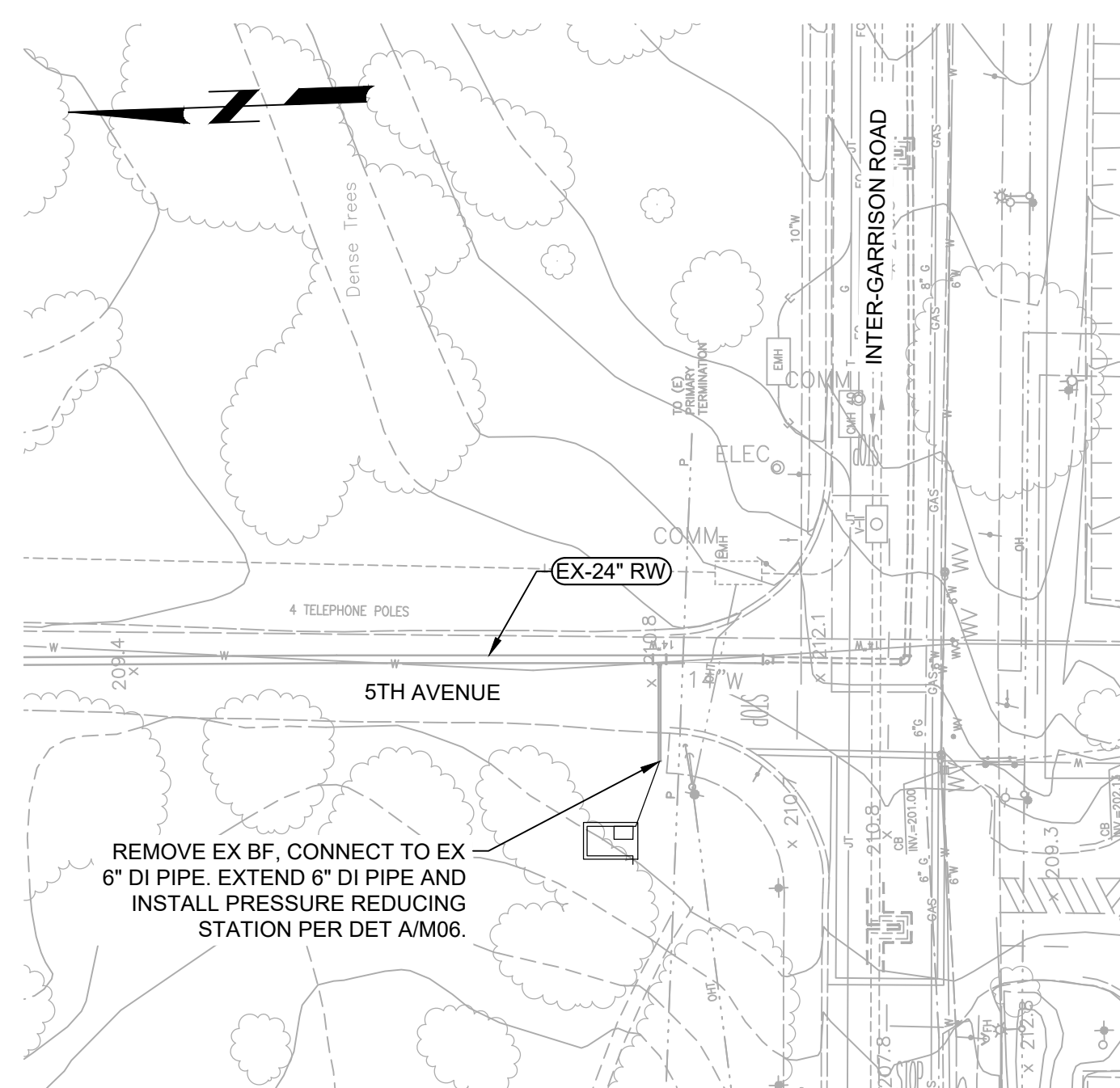
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GENERAL NOTES:

1. FIELD SURVEY AND MARK CORERS OF ALL VAULTS / CONCRETE PADS. CONFIRM WITH OWNER AND ENGINEER IN THE FIELD THE FINAL LOCATION OF THE STATIONS OR ADJACENT FACILITIES.
2. CONTRACTOR SHALL FIELD VERIFY LOCATION OF EXISTING TURNOUTS PRIOR TO CONSTRUCTION.
3. CONTRACTOR SHALL FIELD LOCATE ALL EXISTING UTILITIES ADJACENT TO THE PROPOSED IMPROVEMENTS PRIOR TO CONSTRUCTION IN ACCORDANCE WITH SPECIFICATION SECTION 01350. THE CONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEER OF ANY CONFLICTS AND PROPOSE REVISED LOCATIONS FOR IMPROVEMENTS FOR APPROVAL.
4. ANTICIPATE LOCAL IRRIGATION SYSTEM WILL NEED TO BE REMOVED/REPLACED.
5. ARBORISTS SHALL BE PRESENT FOR ALL WORK NEAR TREES PER SPECIFICATION SECTION 01562 IN AREAS WHERE THE ARBORIST DETERMINES THAT TREE ROOT EXCAVATION WILL DAMAGE NEARBY TREES.



Know what's below.
Call before you dig.



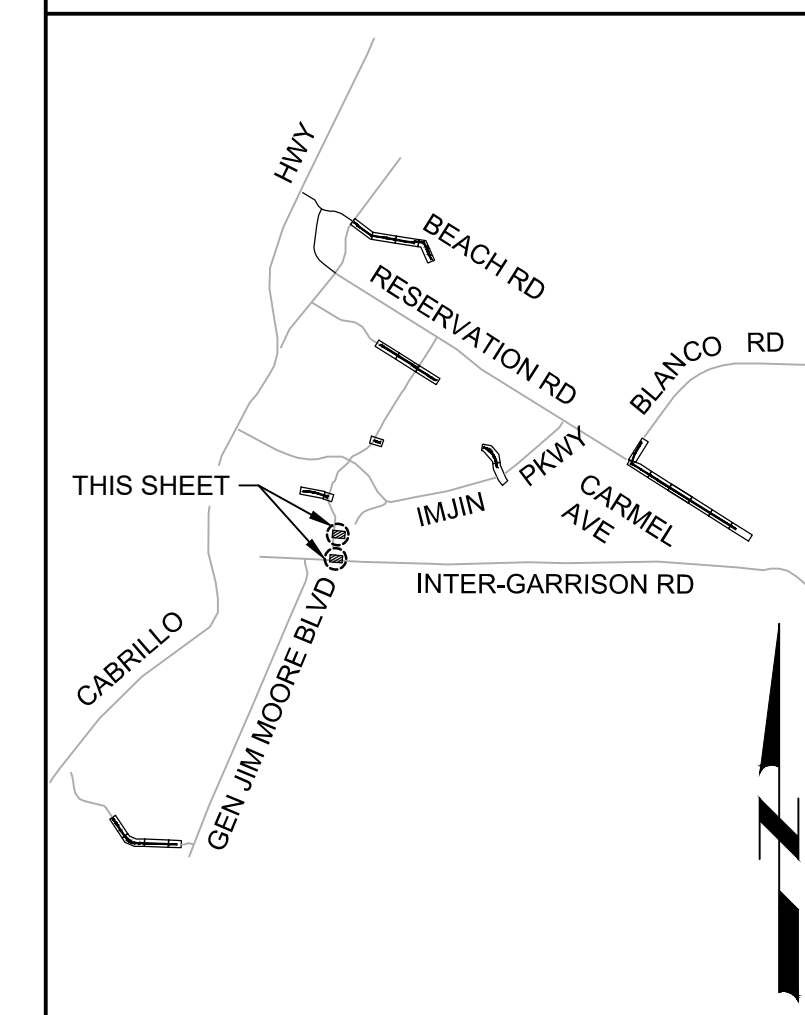
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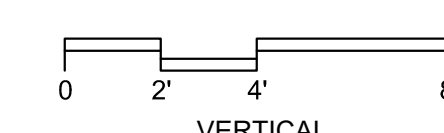
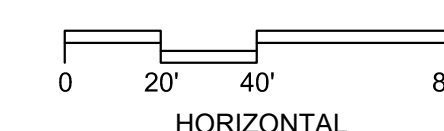
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KEY MAP



KEY MAP NORTH

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BID DOCUMENTS

DESIGNED
JPM/KMM
DRAWN
AL/BWH
CHECKED
AP
DATE
JANUARY 2020



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Contact Info: Carollo Engineers, Inc.
Date: 2020.03.19 16:51:06 -0800



Marina
Coast
Water
District

REGIONAL URBAN WATER AUGMENTATION PROJECT

RECYCLED WATER DISTRIBUTION MAINS

CIVIL DISTRIBUTION MAIN

YARD PIPING PLANS - 5

VERIFY SCALES

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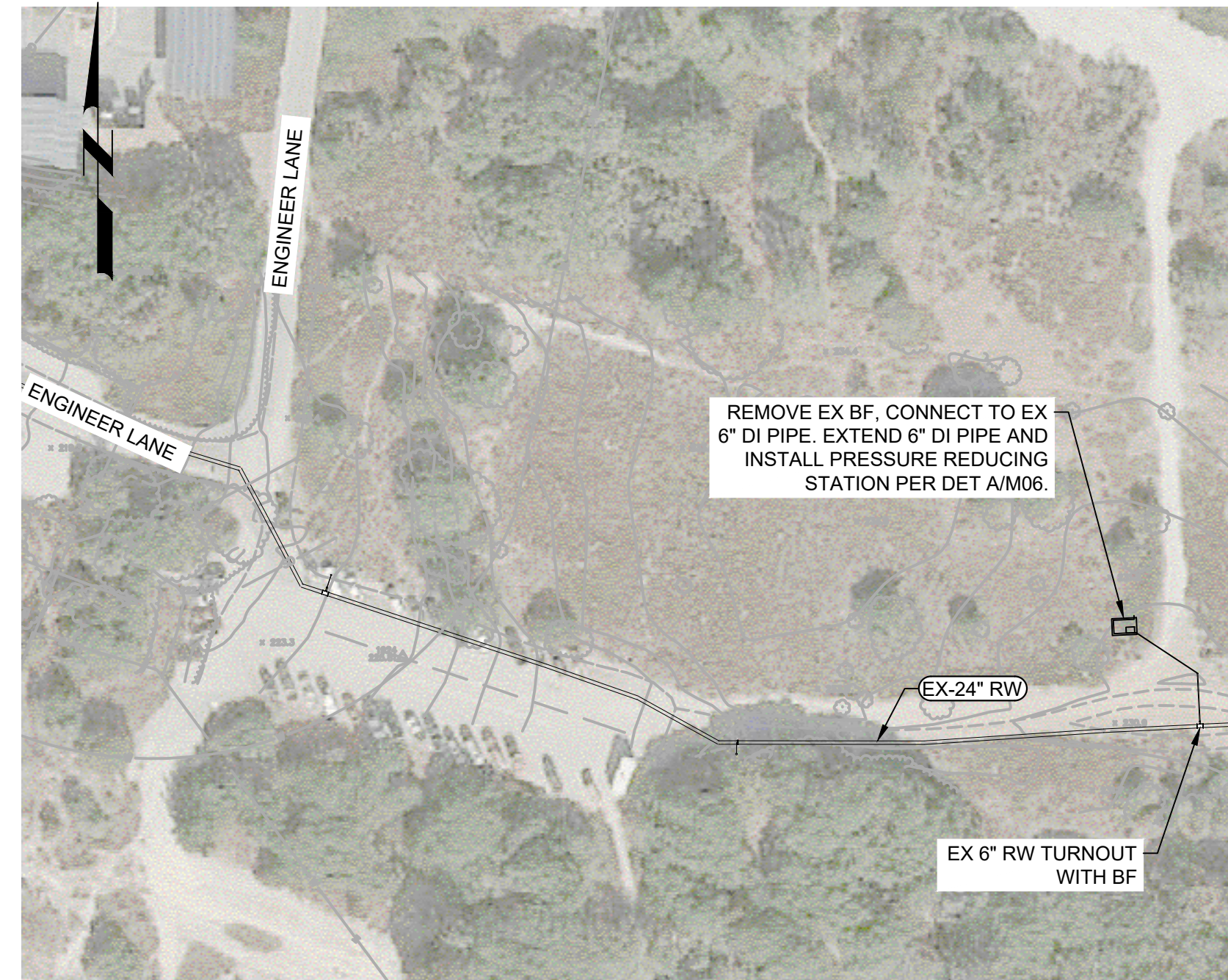
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7568C.10

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CD05

SHEET NO.

17B OF 62

Plot Date: 3/19/2020 1:49:05 PM



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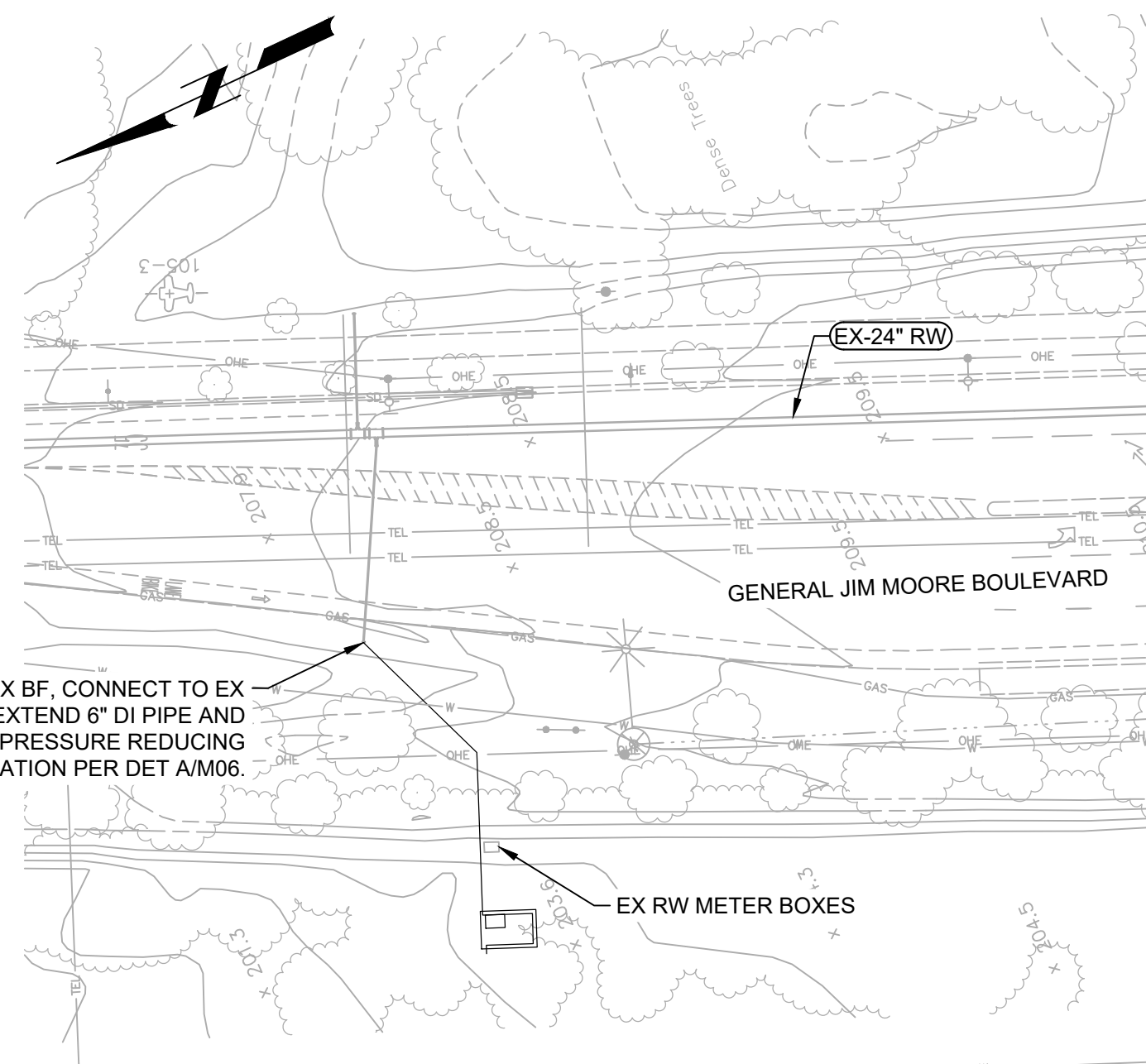
GENERAL NOTES:

1. FIELD SURVEY AND MARK CORERS OF ALL VAULTS / CONCRETE PADS. CONFIRM WITH OWNER AND ENGINEER IN THE FIELD THE FINAL LOCATION OF THE STATIONS PRIOR TO INSTALLING STATIONS OR ADJACENT FACILITIES.
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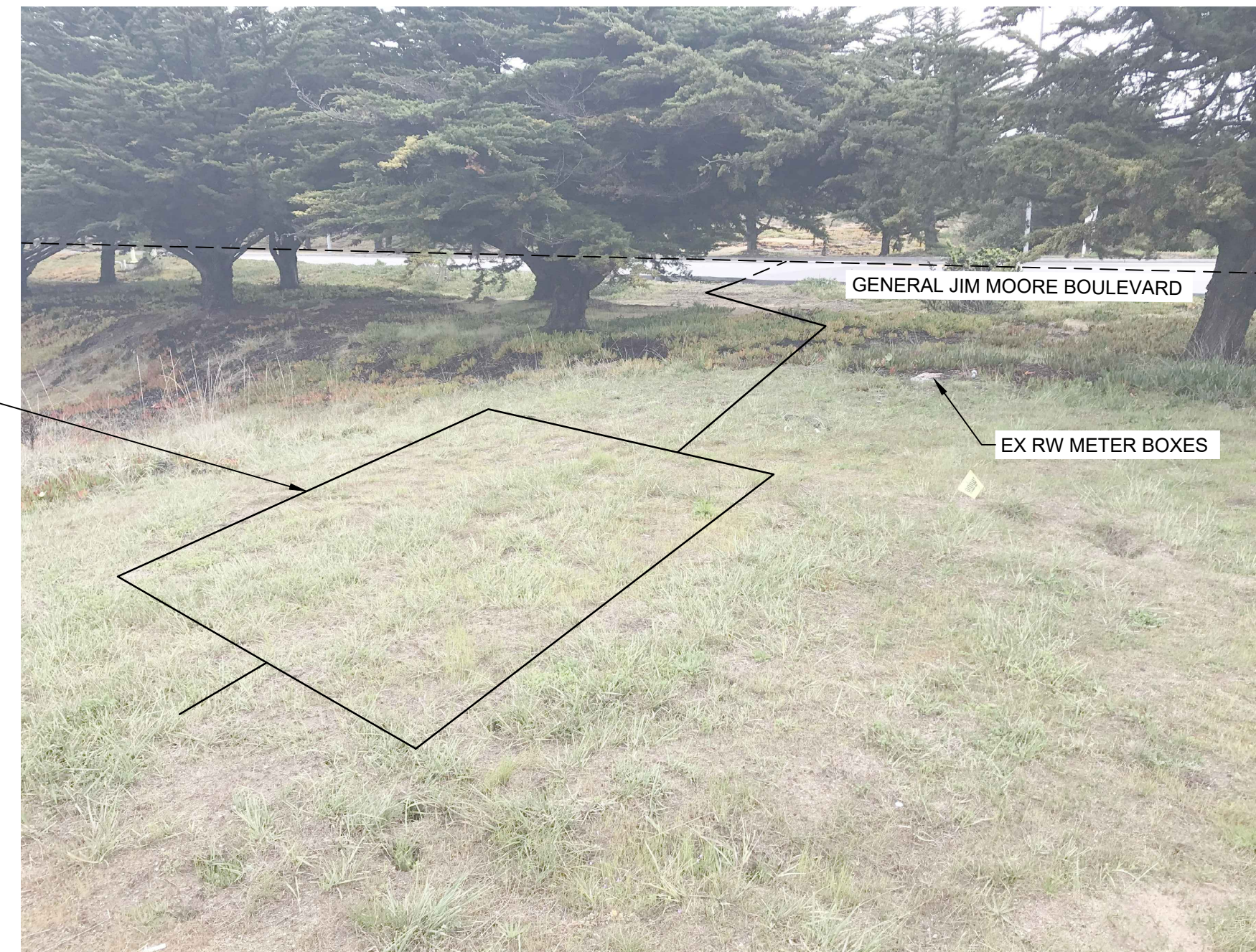
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Know what's below.
Call before you dig.

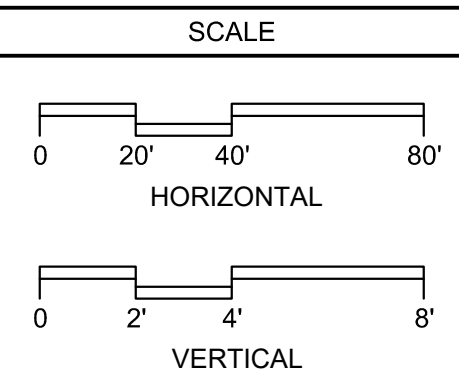
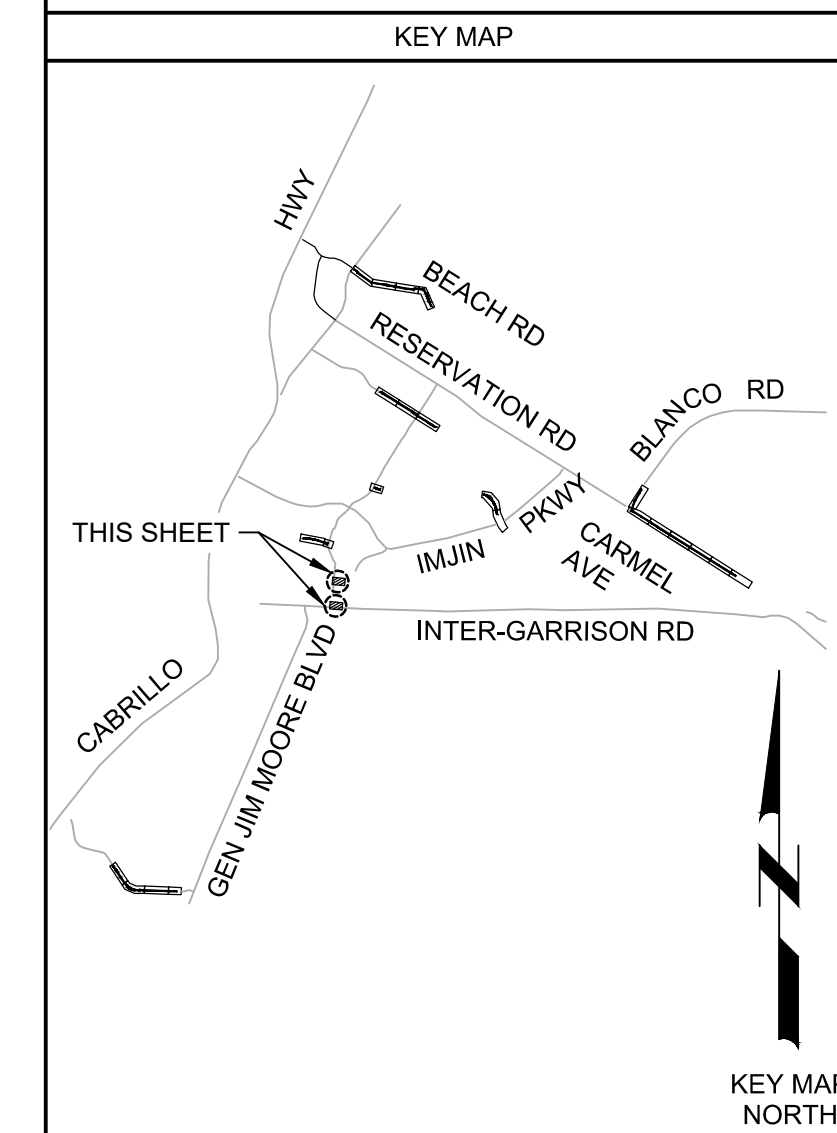


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FILE NAME: 7568C10CD06.dwg

PROJECT NO. 7568C10

LAST SAVED BY: bhwaves

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DATE	JANUARY 2020		
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Digitally signed by Jonathan P. Marshall
 Contact info: Carollo Engineers, Inc.
 Date: 2020.03.19 16:51:06 -0800

Marina Coast Water District

REGIONAL URBAN WATER AUGMENTATION PROJECT
 RECYCLED WATER DISTRIBUTION MAINS
 CIVIL DISTRIBUTION MAIN
YARD PIPING PLANS - 6

VERIFY SCALES
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 SHEET NO. 17C OF 62

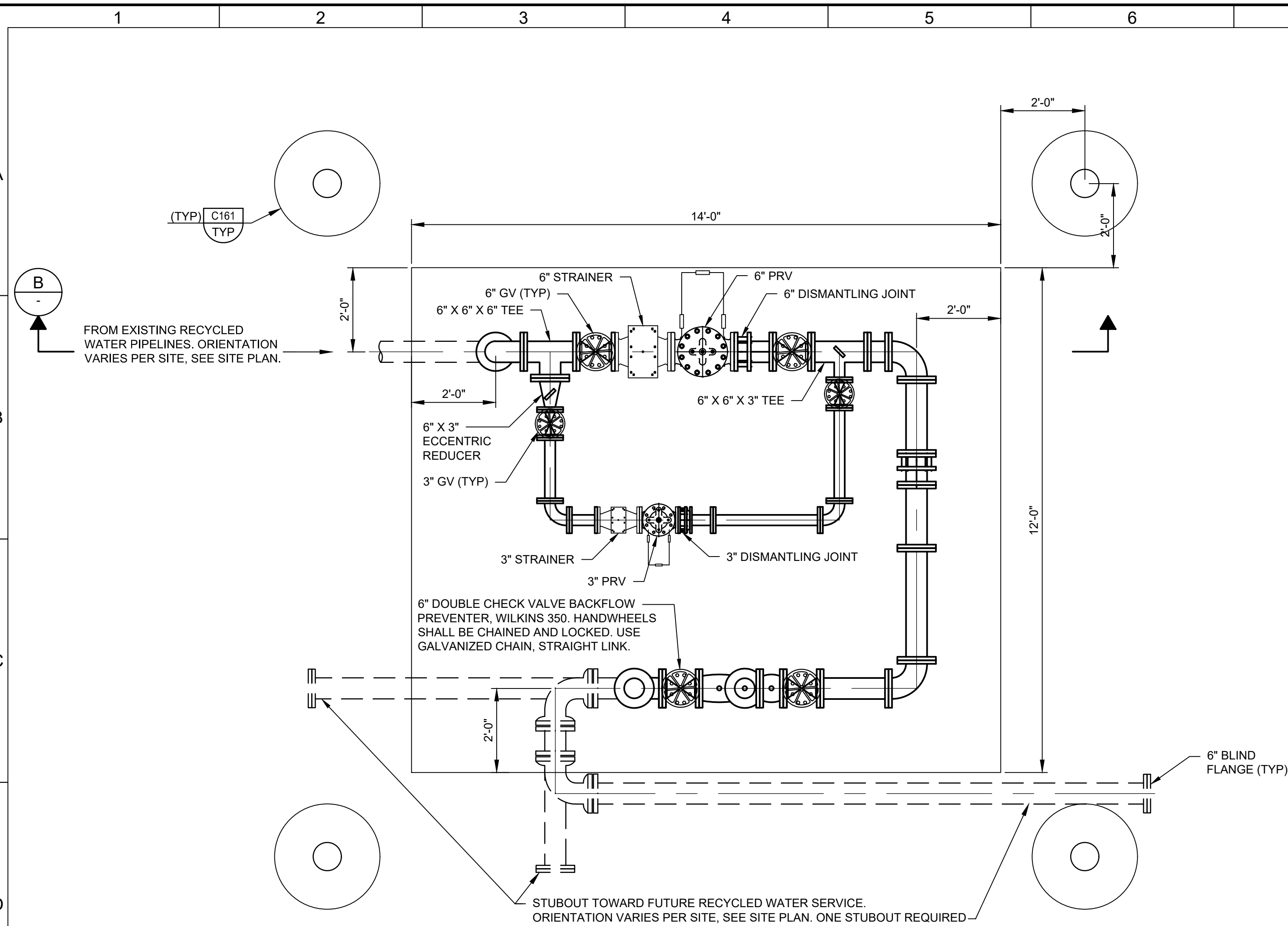
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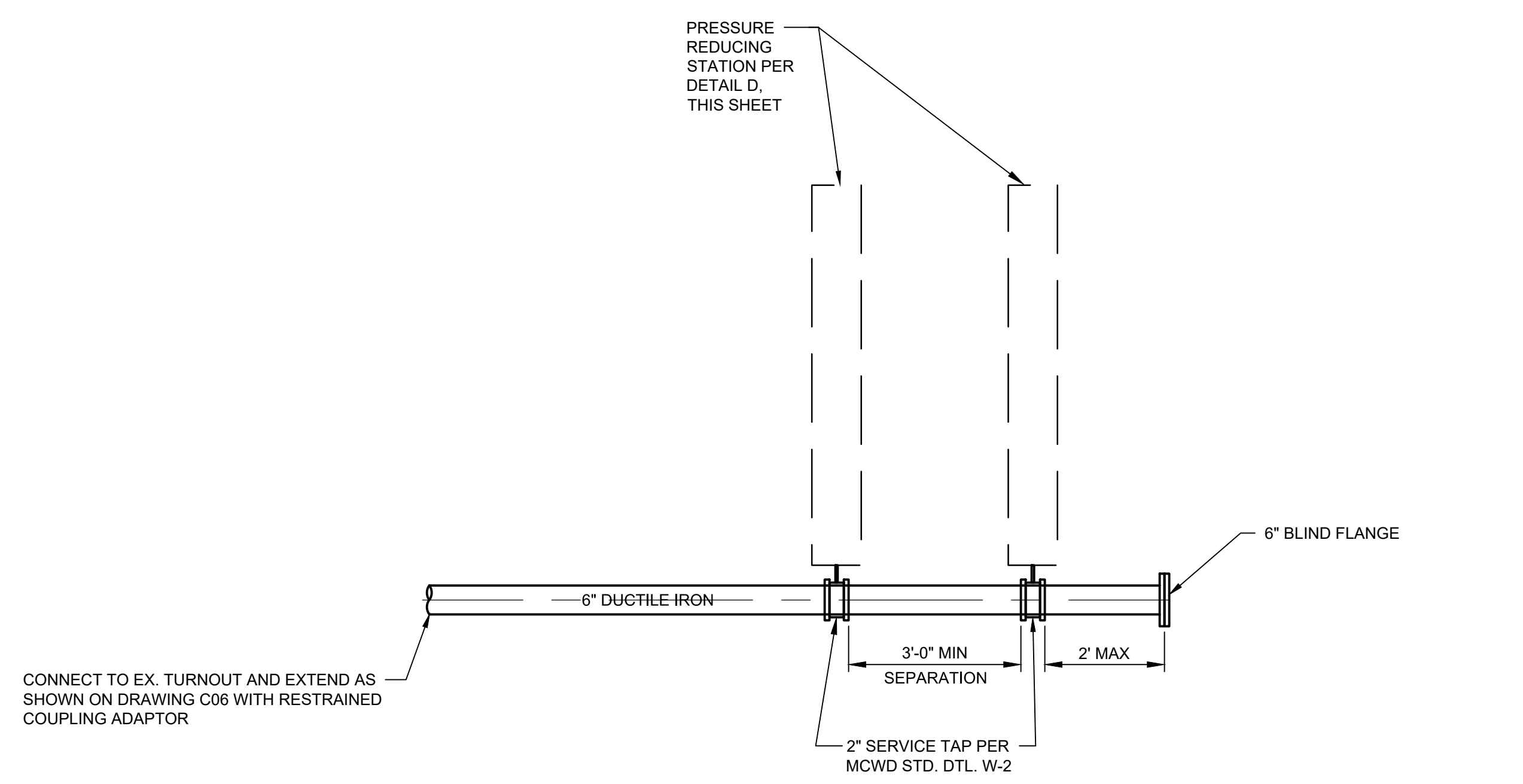
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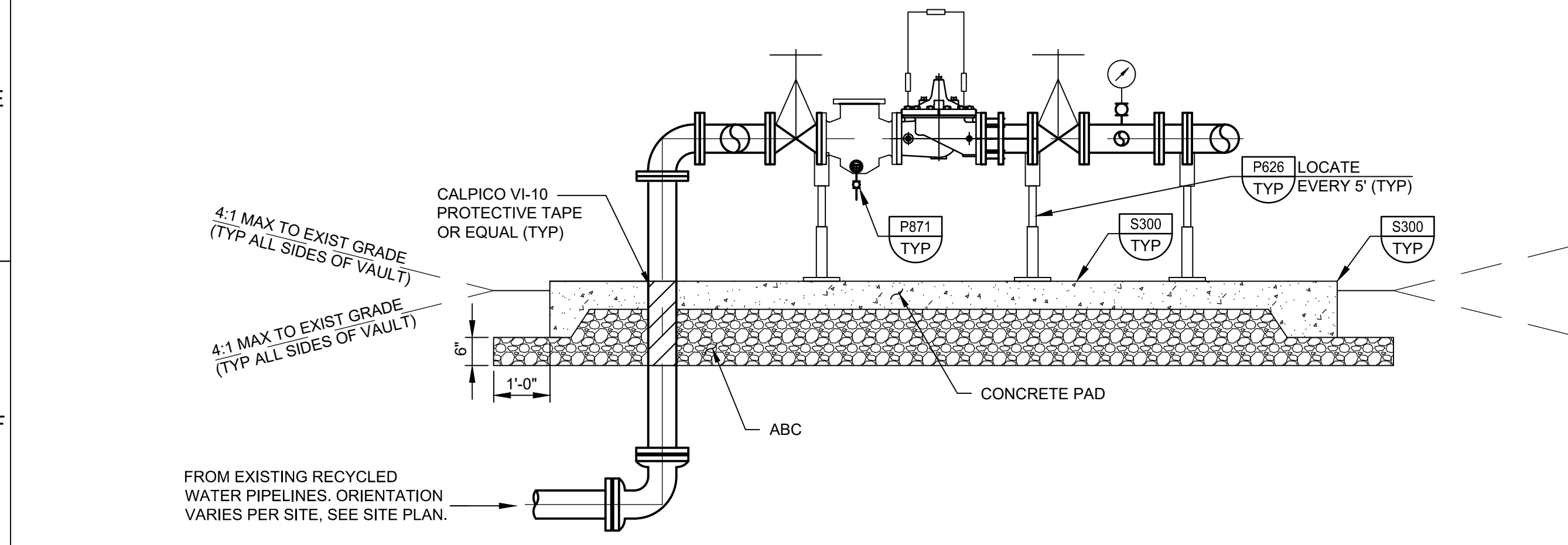
- GENERAL NOTES:**
- PRIOR TO PREPARING PAD CONTRACTOR SHALL FIELD LOCATE WITH PAINT ALL PIPING, VAULT, AND CONCRETE PAD LAYOUTS, INCLUDING DIMENSIONS, AND CONFIRM LOCATION WITH ENGINEER, CONSTRUCTION MANAGER, AND OWNER PRIOR TO INSTALLATION.



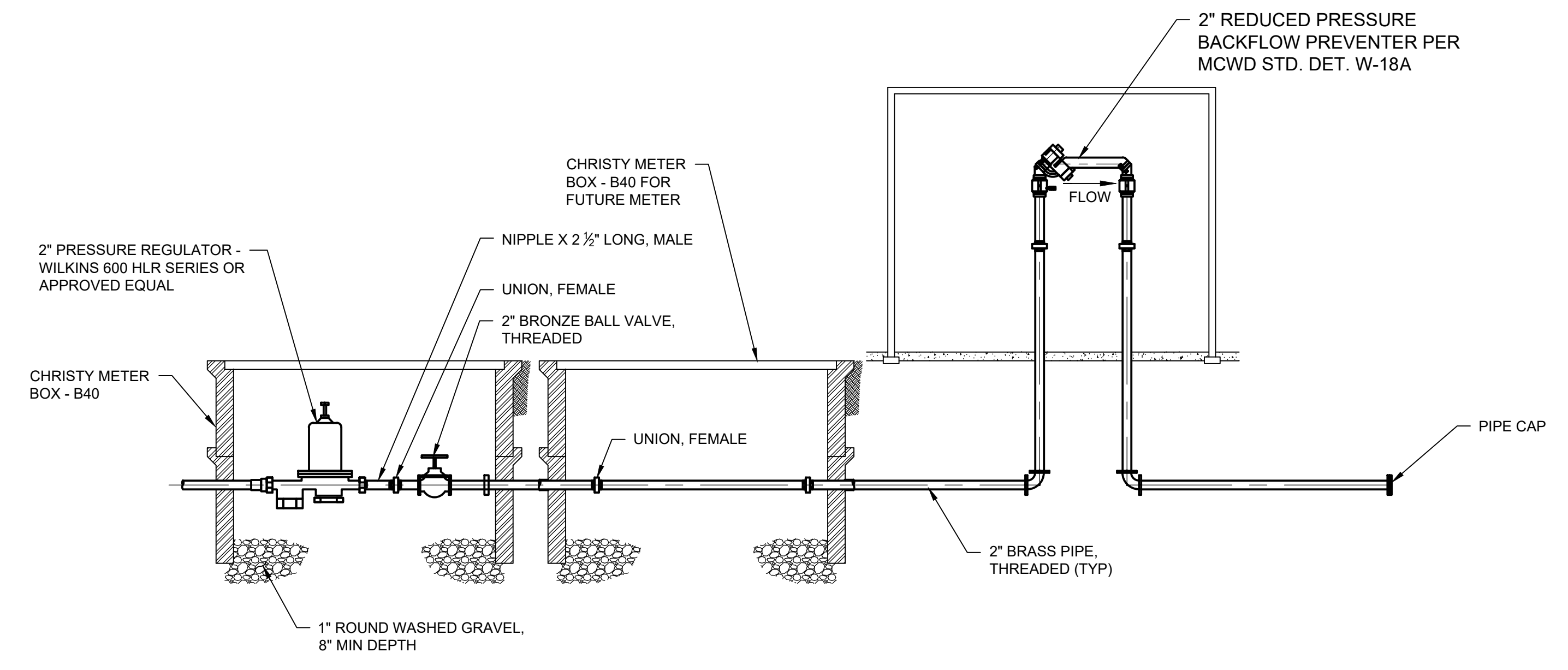
A 6" X 3" PRESSURE REDUCING STATION TOP PLAN
 SCALE: 1/2" = 1'-0"
 FILE: 7568C10M107



C 2" X 2" PRESSURE REDUCING STATION TOP PLAN
 SCALE: 1/2" = 1'-0"
 FILE: 7568C10M107



B 6" X 3" PRESSURE REDUCING STATION SECTION
 SCALE: 1/2" = 1'-0"
 FILE: 7568C10M107

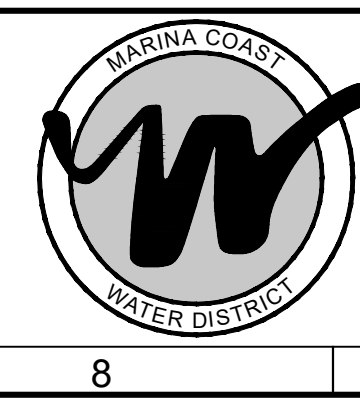


D 2" X 2" PRESSURE REDUCING STATION SECTION
 SCALE: 1/2" = 1'-0"
 FILE: 7568C10M107

BID DOCUMENTS			
DESIGNED	KM		
DRAWN	TUY		
CHECKED			
DATE	JANUARY 2020		
REV	DATE	BY	DESCRIPTION
	3/19/20	JPM	CHANGED PER ADDENDUM NO. 3

REGISTERED PROFESSIONAL ENGINEER
 JONATHAN P. MARSHALL
 No. 73265
 CIVIL
 STATE OF CALIFORNIA

Digitally signed by Jonathan P. Marshall
 Contact Info: Carollo Engineers, Inc.
 Date: 2020.03.19 16:51:06-0800



Marina Coast Water District

REGIONAL URBAN WATER AUGMENTATION PROJECT
 RECYCLED WATER DISTRIBUTION MAINS
 MECHANICAL
 TYPICAL PRESSURE REDUCING VALVE VAULTS

VERIFY SCALES	JOB NO. 7568C.10
BAR IS ONE INCH ON ORIGINAL DRAWING	DRAWING NO. M06
0 1"	SHEET NO. 23 OF 62
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	