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## Phase 1 Mains Replacement Project RFP Addendum #1

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**Project Description:**

RFP to provide the installation of approximately 5.2 miles of water main, abandonment of existing water mains scheduled for replacement, replacement of damaged service laterals, reconnection of acceptable service laterals, installation of water meters, installation and testing of backflow prevention devices, reconnection to customer plumbing, installation of fire hydrants, site and road restoration and related work items, fittings, etc. to meet the scope outlined in the project documents.

**For:**

Paradise Irrigation District

6332 Clark Rd  
Paradise CA 95969

**Proposals Due:**

1:00 pm, Wednesday, June 28, 2023

**Addendum #1 contains the following:**

1. Mandatory Prebid Meeting Agenda and Sign In Sheet
2. RFP Questions and Answers through the Pre-bid
3. Revisions to Specifications
4. Revised Drawing Set – with stamps and signatures

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APPROVED: \_\_\_\_\_



**COLLEEN BOAK, PE**  
Project Engineer

[colleenb@wwengineers.com](mailto:colleenb@wwengineers.com)

**DATE ISSUED:** June 2, 2023

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## Mandatory Prebid Meeting Agenda and Sign-In Sheet

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1. **Mandatory Prebid Meeting Agenda and Sign in Sheet** – See attached



## Paradise Irrigation District – Phase 1 Mains Replacement Project PREBID Meeting Agenda

<b>Date:</b>	Thursday, June 1, 2023	
<b>Time:</b>	11:00 AM	
<b>Location:</b>	Paradise Irrigation District Office – Board Room 6332 Clark Rd, Paradise, CA 95969	
<b>Meeting:</b>	Mandatory PREBID Meeting – Phase 2 Mains Replacement Project	
<b>Representatives:</b>	<b>Paradise Irrigation District (PID)</b> Blaine Allen, District Engineer Jeff Hill, Field Operations Superintendent Pete Grout, Assistant Superintendent Trent Flaherty, Field Supervisor Erica Freimuth, Recovery Project Coordinator	<b>Water Works Engineers (WWE)</b> Sami Kader, PE Kristina Alacon, PE
<b>Item No.</b>	<b>Description</b>	
<b>1.0</b>	<b>INTRODUCTION AND OVERVIEW</b> <b>A.</b> Meeting Purpose: <u>MANDATORY</u> PREBID MEETING FOR PARADISE IRRIGATION DISTRICT PHASE 1 MAINS REPLACEMENT PROJECT – installation of approximately 5.2 miles of water main, abandonment of existing water mains scheduled for replacement, replacement of damaged service laterals, reconnection of acceptable service laterals, installation of water meters, installation and testing of backflow prevention devices, reconnection to customer plumbing, installation of fire hydrants, site and road restoration and related work items, fittings, etc to meet the scope outlined in the project documents. Work is to be conducted throughout the PID service area in support of the rebuilding and recovery efforts following the 2018 Camp Fire. <b>B.</b> Sign In Sheet – All must sign in with Company Name and Contact Information <b>C.</b> Introduction of PID and WWE staff	
<b>2.0</b>	<b>REQUEST FOR PROPOSALS</b> <b>A.</b> Project was published on May 19, 2023 <b>B.</b> State Revolving Fund and FEMA Funding Requirements do apply <b>C.</b> DBE Requirements, Prevailing Wage, other administrative requirements outlined in the project front end documents. <b>D.</b> <u>Bids are due Wednesday, June 28, 2023 by 1pm</u> <b>E.</b> Bid Documents are available through: <ol style="list-style-type: none"> <li>1. PID website: <a href="https://pidwater.com/rfp">https://pidwater.com/rfp</a></li> <li>2. CIPList.com</li> <li>3. Local builders exchange website</li> <li>4. WWE (Contact Colleen Boak <a href="mailto:colleenb@wwEngineers.com">colleenb@wwEngineers.com</a>)</li> </ol>	

	<p><b>F.</b> Content of the PREBID Meeting is meant to be helpful but does not supersede the Bid Documents. Bidders must rely on published Addenda for official answers to questions.</p> <p><b>G.</b> All questions asked at the PREBID Meeting will be recorded and posted in an Addendum.</p>
<b>3.0</b>	<p><b>PROJECT OVERVIEW</b></p> <p><b>A.</b> Replacement of 5.2 miles of water main, replacement/reconnection of service laterals, installation of meters and hydrants, and installation and testing of backflow devices. Work will take place throughout the District service area work locations are as shown on Drawings..</p> <p><b>B.</b> 420 calendar day contract</p> <ol style="list-style-type: none"> <li>Mains are to be replaced in the priority order given in the specifications (see TABLE 01130-A) but is subject to change as directed by the District.</li> <li>After NTP, detailed information for Bid Items 10-17 will be provided by Engineer. Updates are expected to be provided per District direction throughout project duration, as related work by others is ongoing.</li> <li>Contractor should expect that work by others, including other PID contractors, PID Operations staff, and other utility work may impact Contractor's work sequence and ability to carry out the priority order. Contractor will work with District and Engineer, as necessary, to adapt to changes in the priority order and continue to work towards project completion.</li> </ol> <p><b>C.</b> Public Notification – Contractor will be responsible for making two rounds of public notifications</p> <p><b>D.</b> Meters, MIUs, and associated equipment will be purchased by the Contractor from Zenner USA and installed where assigned. Contractor personnel must be trained by Zenner USA personnel to install equipment according to manufacturer recommendations.</p> <p><b>E.</b> Documentation of work completed at each site will be highly important. Contractor shall be responsible for the minimum data collection outlined in the project document. This data will be turned over to PID for their use as well as provide support for progress payments.</p> <p><b>F.</b> It is the Contractor's responsibility to coordinate with other utility work occurring in town parallel to this project. Existing utilities are not shown on plans due to the ongoing relocation/installation efforts of other utilities. All existing PID utilities shown based on pre-fire map records – map records were not survey-grade accurate.</p> <p><b>G.</b> Weekly progress meetings will be held to coordinate progress and discuss upcoming locations. It's expected that the Contractor's leadership, public notification staff, and site assessment staff participate in these weekly meetings. Meetings may be held remotely or on site at the direction of the Engineer.</p> <p><b>H.</b> Laydown/storage space will not be provided by PID – Contractor must make their own local arrangements.</p>

	<ul style="list-style-type: none"> <li>I. HOUSEKEEPING is a critical component of this project. Sites shall be left in as good or better condition as they were found. The residents of Paradise are still working through recovery from the 2018 Camp Fire and care must be taken to avoid negatively impacting their private property.</li> <li>J. Property markers should be protected in place where possible and must be replaced where they are removed or damaged.</li> <li>K. There will not be a job walk included as part of today's meeting, but it is strongly recommended that prospective bidders visit the various project sites and satisfy themselves to the condition of the sites and familiarize themselves with the nature of recovery work taking place throughout town.</li> </ul>
4.0	<p><b>BID ITEMS/SCOPE</b></p> <p>Work items for each of the main segments will vary. Quantities tables are provided in the Drawings on each plan sheet to inform Contractor of the type of work that each main segment will entail. Quantities may be approximate on plan sheets and the quantities listed on the Bid Schedule shall take precedence in Contractor's preparation of bids.</p> <p><b><u>GENERAL WORK ITEMS</u></b></p> <p><b>A. Project Mobilization and Demobilization</b></p> <ul style="list-style-type: none"> <li>1. This includes general Project mobilization and demobilization as well as mobilization to each assigned work location.</li> </ul> <p><b>B. Project Traffic Control</b></p> <ul style="list-style-type: none"> <li>1. This will vary depending on the main segment. Contractor must comply with all applicable safety regulations and MUTCD standards.</li> <li>2. Coordinate as necessary with other recovery related activities happening in an area (debris removal, etc).</li> <li>3. At no point may both lanes of a roadway be closed to traffic without an approved detour plan coordinated and reviewed by the Town of Paradise.</li> <li>4. Traffic control and roadway conditions will be subject to an encroachment permit with the Town of Paradise and subject to regular inspection by Public Works staff.</li> </ul> <p><b>C. Public Notification</b></p> <ul style="list-style-type: none"> <li>1. Contractor shall be responsible for public notification at each assigned work site in two rounds</li> <li>2. Two-week notice – phone/message contact as well as physical notice posted at the site. This contact shall inform the customer of the proposed week work will take place at their site and that an outage of water service will take place.</li> <li>3. 48-hour notice – phone/message contact as well as physical notice posted at the site. This contact shall inform the customer of the proposed date/time window work will take place at their site and that an outage of water service will take place.</li> <li>4. Contact information shall be provided by the District for each address after NTP.</li> </ul>

	<ol style="list-style-type: none"> <li>5. Contractor shall maintain daily a log of notification activities available to the Engineer and District.</li> <li>6. Wording of physical notices will be provided by the District. District reserves the right to update this content.</li> </ol> <p>Renotification to accommodate schedule changes shall be the responsibility of the Contractor.</p> <p><b><u>SITE SPECIFIC WORK ITEMS</u></b></p> <p>Contractor is responsible for field assessment, locating existing infrastructure, Underground Service Alert.</p> <p><b>A. Water Mains</b></p> <ol style="list-style-type: none"> <li>1. <b>Excavation</b> – Care must be taken when potholing to avoid damage to pipes.</li> <li>2. <b>Abandonment</b> – Existing watermains are to be abandoned in place by filling with sand and/or capping. Mains may be demolished as needed to facilitate installation of new water main. .</li> <li>3. <b>Installation</b> – 4” to 16” C900 PVC <ol style="list-style-type: none"> <li>a. Pressure testing and disinfection</li> <li>b. Each tie-in was developed with district operations staff and was designed in a manner to minimize impacts to water service. Contractor shall coordinate with District and Engineer on sequence of work for each main segment. Contractor shall also be responsible for notifying District in advance of work in accordance with the project documents for tie-ins so that District staff may facilitate shut down of existing facilities.</li> <li>c. ADDENDA: Language of Measurement and Payment for Bid Items 32a through 32aw will be updated for clarity. Cost for each tie-in is to include the cost of valves and fittings as shown on the Tie-In details.</li> </ol> </li> <li>4. <b>Valves</b> – Refer to the Valve Schedule <ol style="list-style-type: none"> <li>a. Gate Valves</li> <li>b. Blow Off Valves</li> <li>c. Combination Air Release Vacuum Assembly</li> </ol> </li> </ol> <p><b>B. Service Laterals</b></p> <ol style="list-style-type: none"> <li>1. <b>Abandon Existing Laterals</b> – Where new laterals are to be installed the existing lateral shall be abandoned with the existing main.</li> <li>2. <b>Reconnection of Existing Laterals</b> – Reconnect acceptable service laterals to the new main. Conditions of acceptable service laterals are as described in the Summary of Work 01110.</li> <li>3. <b>Installation of New Service Laterals</b> - Install new HDPE service lateral pipe in 1”, 1.5”, or 2” size as directed for each site. <ul style="list-style-type: none"> <li>• Service laterals will be installed as either singles or doubles which include a wye and two termination points for adjacent meters.</li> <li>• Install service laterals per the Standard Details.</li> </ul> </li> </ol> <p><b>C. Meters</b></p> <ol style="list-style-type: none"> <li>1. <b>Install Meter Boxes</b> - Install meter box in accordance with PID Standard Details with grade sloped to drain a minimum of 6” in all directions around</li> </ol>
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	<p>the box and the angle stop at a relative depth and spacing allowing for proper installation of the meter within the box as well as proper function of the valve.</p> <p><b>2. Install Meter and Meter Interface Unit (MIU)</b> - Install Meter, MIU, and all required valves, fittings, and components along with any related work necessary to meet the DISTRICT's Standard Details and manufacturer recommendations for the meter and MIU.</p> <ol style="list-style-type: none"> <li>Meter size shall be assigned for each address by the ENGINEER.</li> <li>Contractor shall be responsible for the purchase of meters, MIUs, and related accessories from Zenner USA. Contractor staff must be trained by Zenner USA in the install of this equipment. Pricing for training and required handheld units for programming is included in the project documents.</li> <li>Work includes demolition of existing meter boxes and/or meters and equipment as necessary.</li> </ol> <p><b>D. Install Backflow Preventer Assembly</b></p> <ol style="list-style-type: none"> <li><b>Reconfigured Backflow Devices</b> – Backflow prevention assemblies will be reconfigured in the field by the Contractor to match the District standard and reinstalled. Galvanized components will be salvaged and returned to the District.</li> <li><b>New Backflow Devices</b> – Contractor shall install a new backflow preventer device according to the Standard Details.</li> <li><b>Repair Backflow Devices</b> – Contractor may encounter backflow prevention devices that require repair, location of these is not known and will be determined by Contractor and Inspector in the field.</li> <li>All backflows shall be tested after installation by a CA-NV AWWA certified tester. Test results shall be documented in the work record as well as on a blue tag attached to the device.</li> <li>All backflows will receive a new frost bag. Frost bags already present on IWS devices which are still serviceable will be returned to the District.</li> </ol> <p><b>E. Connect to Customer Plumbing</b></p> <ol style="list-style-type: none"> <li>If a customer is tied into active water service before work begins, the Contractor shall reconnect to the customer's underground plumbing and reestablish active water service at the completion of work.</li> <li>Connections will vary as a result of varying customer plumbing materials, configuration, and pipe sizes.</li> </ol> <p><b>F. Hydrants</b></p> <ol style="list-style-type: none"> <li><b>Install New Hydrant Assembly</b> – Contractor shall install a new hydrant per PID standard detail PID-03 with 6" gate valves and 6" C900 laterals. See Hydrant schedule.</li> <li><b>Reuse Hydrant Head</b> – Some hydrant heads have been identified for reuse by the Paradise Fire Department. See Hydrant schedule.</li> <li>Breakaway valves are to be evaluated in the field and reused at the District's discretion.</li> </ol>
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	<p><b>G. Surface Restoration</b></p> <ol style="list-style-type: none"> <li><b>Asphalt Restoration</b> - CONTRACTOR shall saw cut and repair or replace asphalt as necessary in accordance with Town of Paradise Standard Details included in the project documents. Arterial roadways in the Town of Paradise require two 3" lifts of asphalt, all other surface streets require a single 3" lift.</li> <li><b>Asphalt Base (AB) Roadway Restoration</b> - Contractor shall remove and replace gravel or asphalt base (AB) in unpaved roadways or driveways as necessary.</li> <li><b>Concrete Restoration</b> - Contractor shall saw cut and replace any concrete disturbed, damaged, or removed in order to facilitate the installation of service laterals, meters, or backflows. Concrete shall be replaced in accordance with the Town of Paradise Standard Details included in the Contract Documents.</li> <li><b>Surface Restoration for Hydrants</b> - Surface restoration for hydrant assemblies is to be measured and quantified separately on payment applications.</li> </ol>
5.0	<p><b>COMMUNICATION</b></p> <ol style="list-style-type: none"> <li>Water Works Engineers (Colleen Boak) will be the primary point of contact for work planning, execution, contract matters on behalf of the District.</li> <li>Water Works Engineers Inspectors will be full time on site, with input from PID Operations Staff.</li> <li>All work shall be inspected prior to closeout or covering. Of particular importance will be connections at mains, tracer wire installation on laterals, meter and backflow installations and customer tie ins.</li> <li>Termination points for service laterals (meter locations) shall be assessed and determined by the Contractor, according to District criteria.</li> <li>Notification of the need for Engineer or District support shall be timely. No work shall take place until direction is given.</li> <li>Contractor is responsible for obtaining meters, MIUs, and related equipment from Zenner USA, storing and installing the equipment in accordance with manufacturer recommendations.</li> <li>PID will be conducting general outreach to the community but the Contractor will be responsible for timely and accurate customer notifications.</li> </ol>
6.0	<p><b>TARGET SCHEDULE</b></p> <ol style="list-style-type: none"> <li>Sealed Bids for construction services for the Phase 1 Main Replacement Project addressed to Paradise Irrigation District, 6332 Clark Road, Paradise, CA 95969 will be received until <b>1:00 p.m., local time, on Wednesday, June 28, 2023</b>. Any Bids received after the specified time will not be considered. Bids will then be publicly opened and read at 6332 Clark Road.</li> <li>PID Board Approval – <b>July/August 2023</b></li> </ol>

	<b>C. Notice to Proceed – September 2023</b> <b>D. Beginning of Services – October 2023</b> <b>E. Project Completion – end of 2024</b>
<b>7.0</b>	<b>QUESTIONS?</b>



MANDATORY PRE-BID MEETING SIGN IN SHEET

THURSDAY, JUNE 1, 2023

NAME	COMPANY	PHONE	EMAIL
Kristina Alacon	Waterworks Engineers	(916) 743-8414	kristinaA@wwengineers.com
Dylan Ennis	Ranger Pipelines	415-822-3700	estimating@rangerpipelines.com
Amen Kanda	Walsh Construction	(925) 375-0827	akanda@walshgroup.com
David Solis Reyes	Walsh Constiuction	(559) 216-2537	dsolisreyes@walshgroup.com
Brian Gutzwiller-Phillips	West Valley Construction Company	(408) 761-3964	bphillips@WVCC.com
Peter Giordano	West Valley Construction Company	530-229-4873	pgiordano@wvcc.com
Joshua Nehme	Steve P. Rados Inc	916-475-1654	ncbids@rados.com
Jake Vossler	Teichert Construction	916-757-6400	estimating@teichert.com
CHRIS STURGEON	OPERATING ENGINEERS	916-956-0782	CSturgeon@OES.ORG
SPENCER MENDEZ	RCI	(530) 682-0368	SPENCERM@RCIGE.COM
Philip Tuma	Visioni Brothers, Inc	(530) 517-1020	Philip.Tuma@visionibrothers.com
Brendan Johnston	Mountain Cascade Inc	(925) 373-8370	estimating@mountaincascade.com
Rick Tokos	T&S Construction	(916) 767-9929	RickT@916pipe.com



## RFP Questions and Answers

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- 1. To provide a responsible bid the contractor will need to know what type of soil is to be excavated at each location of work. Can a geotechnical soils report be provided?**

*Answer: A geotechnical investigation was not performed.*

- 2. Is excavation in solid rock expected and how will the contractor be compensated for rock excavation?**

*Answer: Solid rock is not expected, and the Contractor should submit their bid as such.*

- 3. Will the district consider adding a supplemental bid item for rock excavation?**

*Answer: Should rock be encountered, this will be addressed as a change order at the time of construction.*

- 4. Can the Bid Tab Data be provided for the previous Meter Installation and Service Lateral Replacement Phase 3 Project?**

*Answer: The Bid Tab Data from the previous Meter Installation and Service Lateral Replacement Phase 3 Project was made public. The Contractor can contact the District for this information.*

- 5. Please confirm the primary contact person for this project?**

*Answer: WWE Contact: Colleen Boak; colleenb@wwengineers.com*

- 6. Is there an Engineer's estimate on the Paradise Mains Replacement – Phase 1 project?**

*Answer: The Engineer's estimate is \$45,000,000 per the advertisement to bid.*

- 7. How will the Mains Replacement Project and the Meter Installation and Service Lateral Replacement Phase 3 Project be coordinated where they overlap?**

*Answer: The Contractor will be expected to coordinate with the Engineer and MISLR Phase 3 Project contractor where scope may overlap. Any overlap will be managed via change order as necessary to achieve coordinated work.*

- 8. Plan sheet 21 is labeled C-21 and should be C-12 per index**

*Answer: This has been changed in the Revised Bid Set.*

- 9. Specs appear to be missing Section 00322, 00323, 00329**

*Answer: The following sections were renumbered:*

*00322 DBE SUBCONTRACTOR PERFORMANCE FORM → 00830B*

*00323 DBE SUBCONTRACTOR UTILIZATION FORM → 00830C*

*00329 DRUG-FREE WORKPLACE CERTIFICATION → See attached*

- 10. Specs Section 00321.10, 15100 PSDS HDPE, 02080 HS section numbers mismatched to table of contents**

*Answer: The following sections were renumbered:*

*00321.10 AMERICAN IRON AND STEEL ACKNOWLEDGEMENT → 00330*

*15100 PSDS HDPE → No known issue*

02080 HS → No such section

**11. Specs Section 00605 has incorrect section number in title**

*Answer: There are MBE/WBE outreach requirements included in the documents. Please pay specific attention to the Division 00 specifications for relevant requirements.*

**12. Can you confirm that the Engineers Estimate for the above named project (Mains Replacement Project)? Per the Advertisement to bid it says "\$45,000,000"**

*Answer: Yes – \$45,000,000 is the Engineer's Estimate for the Paradise Irrigation District Phase 1 Mains Replacement Project.*

**13. Can the bid be pushed by 2 weeks?**

*Answer: It depends on the nature of the questions received.*

**14. Are there any DBE goals or just outreach requirements?**

*Answer: There are no goals, just outreach requirements.*

## Revisions to Specifications

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### 1. Revise text of Specification Section 01200, 1.3 GGG per the following:

GGG. Item 32, Construct and Install Tie-Ins: CONTRACTOR shall construct and install tie-ins for each of the tie-in details listed below and included in the Drawings. Each separate tie-in is an individual bid item. Each item shall include all required labor equipment and material costs for excavation; furnishing of materials shown on the tie-in details, including fittings and valves; necessary labor equipment and materials to complete tie-ins within the agreed upon time, not to exceed the hours of one working day; notification requirements; and flushing of all existing water mains that were shut down for the tie-in, not just the new main installed. This item shall not include costs of furnishing or installing C900 pipe under Items 6a-6f. A list of all gate valves, including tie-in valves, is provide in Section 15200 VS Valve Schedule. or gate valves under items 7a-7e

### 2. See attached Specification Section 00329 Drug-Free Workplace Certification

**DRUG-FREE WORKPLACE CERTIFICATION**

STD. 21 (REV. 12-93)

(Required to Accompany Bid)

**CERTIFICATION**

*I, the official named below, hereby swear that I am duly authorized legally to bind the contractor or grant recipient to the certification described below. I am fully aware that this certification, executed on the date below, is made under penalty of perjury under the laws of the State of California.*

CONTRACTOR/BIDDER FIRM NAME	FEDERAL ID NUMBER
BY (Authorized Signature) 	DATE EXECUTED
PRINTED NAME AND TITLE OF PERSON SIGNING	TELEPHONE NUMBER (Include Area Code) (      )
TITLE	
CONTRACTOR/BIDDER FIRM'S MAILING ADDRESS	

The contractor or grant recipient named above hereby certifies compliance with Government Code Section 8355 in matters relating to providing a drug-free workplace. The above named contractor or grant recipient will:

1. Publish a statement notifying employees that unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance is prohibited and specifying actions to be taken against employees for violations, as required by Government Code Section 8355(a).
2. Establish a Drug-Free Awareness Program as required by Government Code Section 8355(b), to inform employees about all of the following:
  - (a) The dangers of drug abuse in the workplace,
  - (b) The person's or organization's policy of maintaining a drug-free workplace,
  - (c) Any available counseling, rehabilitation and employee assistance programs, and
  - (d) Penalties that may be imposed upon employees for drug abuse violations.
3. Provide as required by Government Code Section 8355(c), that every employee who works on the proposed contract or grant:
  - (a) Will receive a copy of the company's drug-free workplace policy statement, and
  - (b) Will agree to abide by the terms of the company's statement as a condition of employment on the contract or grant.
4. At the election of the contractor or grantee, from and after the "Date Executed" and until \_\_\_\_\_<sup>(DATE)</sup> (NOT TO EXCEED 36 MONTHS), the state will regard this certificate as valid for all contracts or grants entered into between the contractor or grantee and this state agency without requiring the contractor or grantee to provide a new and individual certificate for each contract or grant. If the contractor or grantee elects to fill in the blank date, then the terms and conditions of this certificate shall have the same force, meaning, effect and enforceability as if a certificate were separately, specifically, and individually provided for each contract or grant between the contractor or grantee and this state agency.

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## Revisions to Drawings

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1. **Revised Drawing Set** – See attached



DRAWINGS MUST BE PRINTED AND  
VIEWED IN COLOR FOR CLARITY

PARADISE IRRIGATION DISTRICT

PLANS FOR THE CONSTRUCTION OF:

PHASE 1 MAINS REPLACEMENT PROJECT

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PARADISE IRRIGATION DISTRICT STAFF

DISTRICT MANAGER - TOM LANDO  
ASSISTANT DISTRICT MANAGER - MICKEY RICH  
DISTRICT ENGINEER - BLAINE ALLEN  
DISTRIBUTION SUPERINTENDENT - JEFF HILL  
DISTRIBUTION ASSISTANT SUPERINTENDENT - PETE GROUT  
DISTRIBUTION UTILITY SUPERVISOR - TRENT FLAHERTY

WATER WORKS ENGINEERS STAFF

PROGRAM MANAGER - SAMI KADER, PE  
PROJECT MANAGER - COLLEEN BOAK, PE  
DESIGN ENGINEER - KRISTINA ALACON, PE

GENERAL SCOPE OF WORK

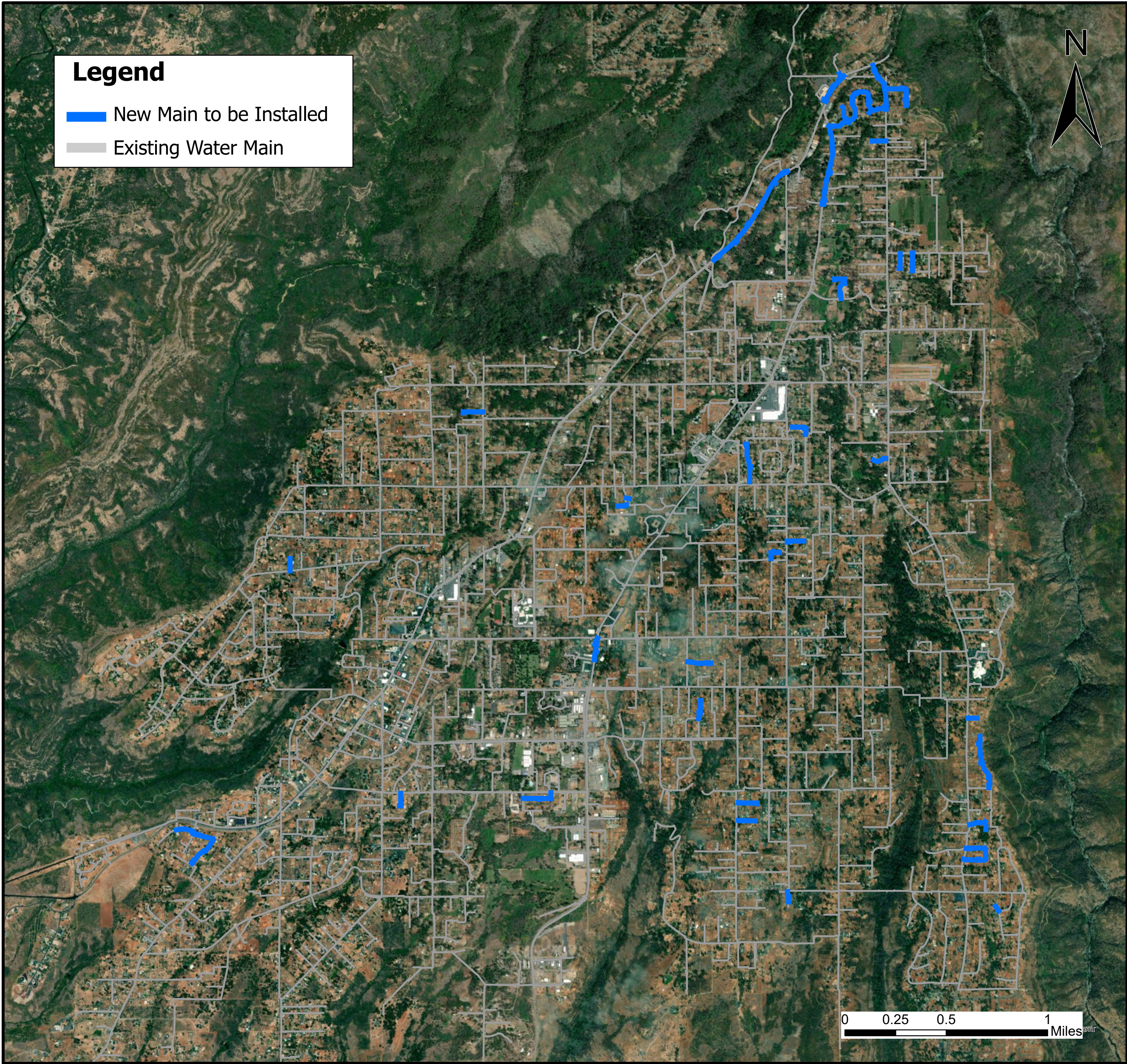
PROJECT INCLUDES ALL LABOR, MATERIALS, SERVICES, AND EQUIPMENT NECESSARY TO INSTALL NEW C900 PIPE, INCLUDING ALL VALVES AND APPURTENANCES; INSTALLATION OF NEW SERVICES AND RECONNECTION OF EXISTING SERVICES, INCLUDING RECONNECTION TO METERS OR INSTALLATION OF METERS AND BACKFLOW PREVENTION DEVICES; ABANDONMENT OF EXISTING WATER MAINS; COMPLETE RESTORATION OF ALL SITES, RETURNING ALL DISTURBED AREAS AND SURFACES BACK TO ORIGINAL CONDITIONS; AND TRAFFIC CONTROL AND SITE MAINTENANCE DURING CONSTRUCTION.



FOR INFORMATION REGARDING  
THIS PROJECT CONTACT:

COLLEEN BOAK, PE  
COLLEENB@WWENGINEERS.COM

BID DOCUMENTS



LOCATION MAP  
NOT TO SCALE



REVISIONS			
NO.	BY	DATE	REMARKS

DESIGNED: E. DIEGO  
DRAWN: E. MA  
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PARADISE IRRIGATION DISTRICT  
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PHONE: (530) 877-4971

MAINS REPLACEMENT PROJECT PHASE 1  
COVER SHEET

DATE 4/24/2023  
DWG G-1 SHEET 1 OF 56



GENERAL NOTES

1) SPECIFIC NOTES AND DETAILS ON THE DRAWINGS SHALL TAKE PRECEDENCE OVER THESE GENERAL NOTES IN CASE OF CONFLICT.

2) A PRECONSTRUCTION CONFERENCE MEETING SHALL BE HELD PRIOR TO CONSTRUCTION, SEE SPECIFICATIONS FOR COORDINATION AND MEETING REQUIREMENTS.

3) INSPECTION BY THE DISTRICT OR DISTRICT'S REPRESENTATIVE (ENGINEER OR INSPECTOR) OF ALL WORK PERFORMED IS REQUIRED. THE CONTRACTOR SHALL COORDINATE WITH ENGINEER & PROVIDE ADVANCE NOTICE FOR ALL INSPECTION NEEDS, PER PROJECT SPECIFICATIONS. THE CONTRACTOR MUST SECURE APPROVAL FROM THE INSPECTOR PRIOR TO BACKFILLING OR COVERING ANY NEW FACILITIES.

4) ALL WORK SHALL BE DONE IN ACCORDANCE WITH THESE PLANS, THE PROJECT SPECIFICATIONS, THE PARADISE IRRIGATION DISTRICT STANDARD SPECIFICATIONS, THE SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREENBOOK) 2021 EDITION, AND THE LATEST EDITION OF THE BUTTE COUNTY PUBLIC WORKS IMPROVEMENT STANDARDS. ANY CHANGE OR REVISIONS THERETO SHALL BE APPROVED BY THE DISTRICT AND ENGINEER PRIOR TO ANY REQUEST FOR INSPECTION. ORDER OF PRECEDENCE IS AS LISTED. DEVIATION FROM THESE PLANS WITHOUT THE PRIOR WRITTEN CONSENT MAY BE CAUSE FOR THE WORK TO BE UNACCEPTABLE. THE CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY SHOULD ANY FIELD CONDITIONS BE ENCOUNTERED THAT VARY FROM THE INFORMATION PROVIDED IN THE CONTRACT DOCUMENTS.

5) CONTRACTOR AGREES THAT THEY SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, AND THAT THE REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD PARADISE IRRIGATION DISTRICT AND ENGINEER HARMLESS FROM ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE DISTRICT OR THE ENGINEER.

6) LOCATION AND ELEVATION OF IMPROVEMENTS INCLUDED IN OR TO BE MET BY WORK OF THIS CONTRACT SHALL BE CONFIRMED BY FIELD MEASUREMENTS BY THE CONTRACTOR PRIOR TO CONSTRUCTION OF THE NEW WORK. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS PRIOR TO STARTING WORK, AND SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES AND SHALL HAVE THEM RESOLVED PRIOR TO CONTINUING WORK. THE CONTRACTOR SHALL REQUEST A CLARIFICATION OF ANY CONDITIONS WHICH ARE IN CONFLICT WITH THE CONTRACT DOCUMENTS PRIOR TO CONSTRUCTION OF THE ADJOINING PORTION OF THE WORK.

7) EXISTING MAINS, METERS, VALVES, SERVICE LATERALS, AND HYDRANTS SHOWN ON THESE PLANS ARE APPROXIMATE AND FOR INFORMATIONAL PURPOSES ONLY. CONTRACTOR TO VERIFY LOCATION OF ALL EXISTING INFRASTRUCTURE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL OTHER EXISTING UTILITIES.

8) THE EXISTENCE AND LOCATION OF EXISTING UNDERGROUND FACILITIES SHOWN ON THESE PLANS ARE APPROXIMATE AND WERE OBTAINED BY A SEARCH OF AVAILABLE PRE-FIRE MAP RECORDS, MAP RECORDS WERE NOT SURVEY-GRADE ACCURATE . NO SURVEY WAS CONDUCTED AND NO OTHER UTILITIES ARE MAPPED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE AND/OR VERIFY THE LOCATION OF ALL EXISTING UTILITIES OR STRUCTURES PRIOR TO CONSTRUCTION. THE CONTRACTOR IS REQUIRED TO TAKE PRE-CAUTIONARY MEASURES TO PROTECT AND MAINTAIN ALL UTILITIES. IF AN UNDERGROUND UTILITY IS DAMAGED, THE CONTRACTOR SHALL IMMEDIATELY CONTACT UTILITY OWNER AND THE UNDERGROUND SERVICE ALERT LOCATING SERVICE TO ARRANGE FOR REPAIRS. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS TO REPAIR THE DAMAGE CAUSED TO UTILITIES DURING CONSTRUCTION.

9) THE CONTRACTOR SHALL VERIFY THE EXISTENCE AND LOCATION OF ALL UTILITIES BEFORE COMMENCING WORK. NOTICE OF THE PROPOSED WORK SHALL BE GIVEN TO THE FOLLOWING AGENCIES AT LEAST TWO (2) WORKING DAYS PRIOR TO EXCAVATION. THE CONTRACTOR SHALL REQUEST MARKOUT OF UNDERGROUND UTILITIES BY CALLING THE BELOW LISTED REGIONAL NOTIFICATION CENTER FOR AN INQUIRY IDENTIFICATION NUMBER:

DIG ALERT	(800) 422-4133
PARADISE IRRIGATION DISTRICT	(530) 877-4971
TOWN OF PARADISE	(530) 872-6291
COMCAST	(323) 342-5552
PG&E	(877) 743-7782
PACIFIC BELL	(510) 645-2929

10) CONTACTING DIGALERT DOES NOT RELIEVE THE CONTRACTOR OF CONTACTING ALL OWNERS TO REPAIR THE DAMAGE CAUSED TO UNDERGROUND UTILITIES DURING CONSTRUCTION.

11) APPROVAL OF THESE PLANS BY THE PARADISE IRRIGATION DISTRICT DOES NOT CONSTITUTE A REPRESENTATION AS TO THE ACCURACY OF THE LOCATION OR OF THE EXISTENCE OR NON-EXISTENCE OF ANY UNDERGROUND UTILITY PIPE OR STRUCTURE WITHIN THE LIMITS OF THE PROJECT. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR THE PROTECTION OF ALL UTILITIES WITHIN THE LIMITS OF THE PROJECT.

12) THE CONTRACTOR SHALL SUBMIT TRAFFIC CONTROL PLANS PREPARED BY A LICENSED TRAFFIC ENGINEER OR A QUALIFIED TRAFFIC CONTROL CONTRACTOR TO THE DISTRICT AND THE TOWN OF PARADISE AND OBTAIN TOWN OF PARADISE RIGHT-OF-WAY PERMIT FOR ALL WORK. SAID PERMITS SHALL BECOME PART OF THIS CONTRACT. PLAN SHALL IMPLEMENT TRAFFIC CONTROL IN THE PUBLIC RIGHT OF WAY THAT CONFORMS AT MINIMUM WITH CURRENT EDITION MUTCD, MUTCD CALIFORNIA SUPPLEMENTAL REQUIREMENTS, SECTION 12 OF CALTRANS STANDARD SPECIFICATIONS, AND CA ADA REQUIREMENTS.

13) THE CONTRACTOR SHALL SUBMIT THE PROPOSED CONSTRUCTION SCHEDULE FOR ALL WORK TO BE PERFORMED UNDER THIS CONTRACT TO THE ENGINEER FOR APPROVAL, PER REQUIREMENTS IN THE SPECIFICATIONS. PROPOSED SCHEDULE SHALL BE IN WRITING AND SHALL IDENTIFY DAYS AND HOURS OF CONSTRUCTION, AND COORDINATION REQUIREMENTS FOR ALL AFFECTED PUBLIC AGENCIES AND PRIVATE COMPANIES THAT HAVE FACILITIES WITHIN THE WORK AREA. ANY MODIFICATIONS TO THE APPROVED SCHEDULE SHALL BE SUBMITTED TO THE ENGINEER, PER THE SPECIFICATIONS.

14) THE CONTRACTOR SHALL OBTAIN AND HAVE AVAILABLE ON THE JOB SITE COPIES OF APPLICABLE STANDARDS SHOWN ON THESE PLANS AND SPECIFICATIONS AND BE FAMILIAR WITH THE REQUIREMENTS. CONTRACTOR SHALL HAVE A RESPONSIBLE PARTY WITH THE AUTHORITY TO REPRESENT AND ACT FOR THE CONTRACTOR ON THE JOB SITE DURING ALL WORKING HOURS.

15) PRIVATE AND PUBLIC PROPERTY SHALL BE PROTECTED DURING THE CONSTRUCTION AND, IF DAMAGED DURING THE EXECUTION OF WORK, SHALL BE REPLACED AND/OR RESTORED TO MATCH EXISTING CONDITIONS OR UPDATED STANDARDS IF REQUIRED BY OWNER. CONTRACTOR SHALL DOCUMENT EXISTING CONDITIONS OF ALL WORK AREAS BY TAKING PRE-CONSTRUCTION PHOTOGRAPHS.

16) NO TREES, VEGETATION, OR IMPROVEMENTS (INCLUDING FENCING) SHALL BE REMOVED WITHOUT THE PRIOR WRITTEN CONSENT AND APPROVAL OF THE DISTRICT. VEGETATION AND IMPROVEMENTS WHICH ARE DESIGNATED TO BE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR, UNLESS OTHERWISE DIRECTED BY THE DISTRICT.

PID NOTES

1) TRENCH BACKFILL SHALL CONFORM TO THE PROVISIONS IN SECTION, 02300 – EARTHWORK, OF THE SPECIFICATIONS AND STANDARD DETAILS.

2) CONTRACTOR SHALL BEAR THE COST OF ALL SOIL DENSITY TESTING REQUIRED BY DISTRICT.

3) TRENCHING SHEETING, SHORING, AND BRACING SHALL BE INSTALLED FOR ANY TRENCH FIVE FEET OR MORE IN DEPTH, OR AS REQUIRED BY CONTRACT SPECIFICATIONS. SHORING SHALL CONFORM TO THE LATEST EDITION OF THE STATE DIVISION OF INDUSTRIAL SAFETY CONSTRUCTION SAFETY ORDERS, SECTION 1539-1542, PURSUANT TO STATE ASSEMBLY BILL NO. 150 AND CAL OSHA STANDARDS.

4) POLE BRACING MAY BE NECESSARY WHEN TRENCHING IN THE VICINITY OF EXISTING UTILITY POLES.

5) IT IS THE CONTRACTOR'S RESPOSIBILITY TO MAINATIN ALL PUBLIC STREETS AND PRIVATE ROADWAYS IN A CLEAN AND SAFE CONDITION. ALL VEHICLES SHALL BE CLEAN PRIOR TO EXISTING THE CONSTRUCTION ZONE. IF DIRT OR DEBRIS IS TRACKED OR SPILLED IT SHALL BE CONTRACTOR'S RESPONSIBILITY TO REMOVE IMMEDIATELY.

6) CONTRACTOR SHALL CONSTRUCT AND INSTALL SERVICES IN CONFORMANCE WITH PROJECT DRAWINGS AND SPECIFICATIONS, AND SHALL SUPPLY ALL NECESSARY MATERIALS AND LABOR, WITH THE EXCEPTION OF WATER METERS SUPPLIED BY THE DISTRICT.

7) WATER SERVICE INTERRUPTIONS FOR INSTALLATION OF NEW SERVICES OR RECONNECTION OF EXISTING SERVICES SHALL BE IN ACCORDANCE WITH THE PROVISIONS STATED IN SECTION 01130 – SPECIAL PROJECT CONSTRAINTS. CONTRACTOR SHALL PERFORM WORK IN A MANNER THAT MINIMIZES SERVICE INTERRUPTIONS.

8) CONTRACTOR SHALL PERFORM WORK IN A MANNER THAT MINIMIZES DISTRURBANCES AND DAMAGE TO CUSTOMER PROPERTY. CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING OR REPAIRING LANDSCAPING, HARDSCAPING, ETC. TO SAME AS OR BETTER CONDITIONS.

9) IT SHALL BE CONTRACTOR'S RESPONSIBILITY TO DOCUMENT PRE AND POST CONSTRUCTION CONDITION OF ALL AREAS THAT WILL BE DISTURBED OR IMPACTED DURING CONSTRUCTION ACTIVITIES; INCLUDING BUT NOT LIMITED TO AREAS WHERE INFRASTRUCTURE WILL BE INSTALLED, EQUIPMENT OR MATERIALS WILL BE STAGED, FLUSHING WATER WILL BE DISCHARGED, AND TRAVELLED WAY OF ANY CONTRACTOR VEHICLES NOT IN THE PUBLIC RIGHT OF WAY. DOCUMENTATION MAY CONSIST OF TIME-STAMPED PHOTOS AND/OR VIDEOS. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING DOCUMENTATION AND MUST PROVIDE PHOTO OR VIDEO DOCUMENTATION AT ENGINEER OR DISTRICT'S REQUEST. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY CLAIMS FOR DAMAGE RECEIVED BY PID, WHERE THE POST-CONSTRUCTION CONDITION DOES NOT MATCH PRE-CONSTRUCTION CONDITION. CLAIMS MAY BE EVALUATED BY PID MANAGEMENT, PID ENGINEERING DEPARTMENT, PID'S ATTORNEYS, OR ANY COMBINATION THEREOF. IN THE ABSENCE OF ADEQUATE PHOTO OR VIDEO DOCUMENTATION TO ASSESS THE CLAIM, CONTRACTOR MAY BE HELD FINANCIALLY RESPONSIBLE AT PID'S DISCRETION.

10) THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING IMPROVEMENTS INCLUDING BUT NOT LIMITED TO CURBS, GUTTERS, SIDEWALKS, SIGNS, AND PAVEMENT DURING CONSTRUCTION. ALL SUCH IMPROVEMENTS DAMAGED DURING CONSTRUCTION SHALL BE REPLACED TO ORIGINAL CONDITION OR BETTER AT THE CONTRACTOR'S EXPENSE.

11) THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING MONUMENTS OR SURVEY MARKERS DURING CONSTRUCTION. CONTRACTOR SHALL IDENTIFY ANY MONUMENT OR SURVEY MARKER WHICH CONFLICTS WITH CONSTRUCTION ACTIVITIES TO THE INSPECTOR IN THE FIELD. CONTRACTOR SHALL BE RESPOSIBLE FOR BEARING ANY COSTS ASSOCIATED WITH MONUMENTS OR MARKERS DESTROYED DURING CONSTRUCTION.

12) ALL PIPELINE CONSTRUCTION SHALL BE INSPECTED BY PARADISE IRRIGATION DISTRICT (PID OR DISTRICT) OR DISTRICT’S REPRESENTATIVE AND SHALL CONFORM TO PROJECT DRAWINGS AND SPECIFICATIONS. BID DOCUMENTS, INCLUDING A COMPLETE DRAWING SET, ARE AVAILABLE AT CIPLIST.COM. ANY PIPING APPURTENANCES COVERED BEFORE INSPECTION AND APPROVAL SHALL BE UNCOVERED FOR INSPECTION AT CONTRACTOR'S EXPENSE.

13) NEW INFRASTRUCTURE SHALL NOT BE PUT IN SERVICE UNTIL IT HAS BEEN INSPECTED, TESTED, AND APPROVED. EXISTING WATER SYSTEM SHALL REMAIN OPERATIONAL UNTIL ALL SERVICES, FIRE HYDRANTS, AND CONNECTIONS TO THE EXISTING WATER MAINS HAVE BEEN COMPLETED, UNLESS OTHERWISE DIRECTED BY ENGINEER OR PID.

14) EXISTING PID VALVES ARE TO BE OPERATED BY PID PERSONNEL ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING ENGINEER AND PID IN ADVANCE, PER SPECIFICATIONS, TO HAVE DISTRICT STAFF PRESENT FOR OPERATION OF VALVES.

15) TAPS AND TIE-INS ON EXISTING WATER MAINS ARE ONLY TO BE CONSTRUCTED WITH DISTRICT OR DISTRICT’S REPRESENTATIVE PRESENT. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADVANCE NOTICE TO ENGINEER AND DISTRICT, PER SPECIFICATIONS. CONTRACTOR SHALL MAKE ALL EFFORTS TO MINIMIZE THE DURATION AND EXTENT OF SERVICE INTERRUPTIONS. CONTRACTOR SHALL NOT SUSPEND WORK FOR THE DAY UNTIL WATER SERVICE IS RESTORED TO ALL AFFECTED CUSTOMERS.

16) CONTRACTOR SHALL PROVIDE DISTRICT AT LEAST 72-HOURS’ NOTICE PRIOR TO EACH SCHEDULED SHUTDOWN FOR CONSTRUCTION OF TIE-INS AND WATER SERVICE CHANGE OVERS. CONTRCATOR SHALL BE RESPONSIBLE FOR HANGING DOOR HANGERS IN ADVANCE OF SERVICE INTERRUPTION, PER SPECIFICATIONS.

17) IN THE EVENT OF AN EMERGENCY WATER OUTAGE, CONTRACTOR IS TO NOTIFY ENGINEER IMMEDIATELY. CONTRACTOR SHALL TAKE STEPS TO PROTECT SURROUNDING PROPERTIES FROM DAMAGE.

18) MAIN FILLING, FLUSHING, AND PRESSURE TESTING SHALL BE PERFORMED BY CONTRACTOR AND OBSERVED BY DISTRICT OR DISTRICT’S REPRESENTATIVE.

19) BACTERIOLOGIAL SAMPLING AND TESTING WILL BE PERFORMED BY PID. IF A SAMPLE TESTS PRESENT FOR ANY INDICATOR BACTERIA, CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING AND CORRECTING THE SOURCE OF CONTAMINATION. THE COST OF ADDITIONAL SAMPLING AND TESTING SHALL BE RESPONSIBILITY OF THE CONTRACTOR.

20) POSITIVE ISOLATION OF THE PROPOSED WATER MAIN AND THE EXISTING WATER MAIN IS REQUIRED UNTIL THE NEW WATER MAIN HAS BEEN DISINFECTED, FLUSHED, AND PASSED BACTERIOLOGICAL TESTING AND PRESSURE AND LEAKAGE TESTING. WHERE ISOLATION IS PROVIDED BY A VALVE, THE NEW WATER MAIN MUST PASS BACTERIOLOGICAL TESTING PRIOR TO PRESSURE TESTING. WHERE THE WATER MAIN IS CONSTRUCTED COMPLETELY DETACHED FROM THE EXISTING DISTRIBUTION SYSTEM, PRESSURE TESTING MAY BE CONDUCTED PRIOR TO BACTERIOLOGICAL TESTING.

21) CONTRACTOR SHALL FIELD VERIFY EXISTING MAIN SIZE, MATERIAL, AND LOCATION PRIOR TO CONSTRUCTION OF TAPS AND TIE-INS.

22) CONTRACTOR SHALL ABANDON EXISTING MAIN LINE COMPONENTS IDENTIFIED FOR ABANDONMENT BY THESE DRAWINGS FOLLOWING COMPLETION OF TIE-INS AND ACCEPTANCE BY ENGINEER.

23) MINIMUM DEPTH OF COVER SHALL BE 36 INCHES EXCEPT AS OTHERWISE INDICATED ON DRAWINGS, SPECIFICATIONS, OR DIRECTED BY ENGINEER.

24) NEW WATER MAIN SHALL BE C900 PVC PIPE, PRESSURE CLASS 150, EXCEPT WHERE OTHERWISE NOTED IN DRAWINGS.

26) THRUST BLOCKS MUST CURE A MINIMUM OF 48 HOURS BEFORE BEING SUBJECTED TO SYSTEM PRESSURE.



06-02-23

REGISTERED PROFESSIONAL ENGINEER

KRISTINA P. ALACON

No. C70952

CIVIL

STATE OF CALIFORNIA

REVISIONS			
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MAINS REPLACEMENT PROJECT PHASE 1

GENERAL NOTES

DATE 4/9/2023

DWG G-2 SHEET 2 OF 56

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ABBREVIATIONS

ABBREVIATION	DEFINITION
A.B. OR AB	AGGREGATE BASE
A.C. OR AC	ASPHALT CONCRETE
ADPT	ADAPTER
AIR VAC	COMBINATION AIR RELEASE AND VACCUM RELIEF VALVE
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
APPROX	APPROXIMATELY
ASSY	ASSEMBLY
ASTM	AMERICAN SOCIETY OF TESTING MATERIALS
AVE	AVENUE
AWG	AMERICAN WIRE GAUGE
AWWA	AMERICAN WATER WORKS ASSOCIATION
BAV	BALL VALVE
BF	BACKFLOW
CA-NV AWWA	CALIFORNIA NEVADA AMERICAN WATER WORKS ASSOCIATION
CARV	COMBINATION AIR RELEASE AND VACCUM RELIEF VALVE
CIR	CIRCLE
CML	CEMENT MORTAR LINED
COMP	COMPRESSION
CT	COURT
CTS	COPPER TUBING SIZE
CU	COPPER
D OR DIA	DIAMETER
DEG	DEGREE
DEMO	DEMOLISH
D.I.	DUCTILE IRON
DIP	DUCTILE IRON PIPE
DISTRICT	DISTRICT
DR	DIMENSION RATION
DTL	DETAIL
DWG	DRAWING
EL	ELEVATION
ELL	ELBOW
EP	EDGE OF PAVEMENT
EX	EXISTING
FC	FLEXIBLE COUPLING
FCA	FLANGED COUPLING ADAPTER
F.I.P OR FIP	FEMALE IRON PIPE THREAD
FLG	FLANGE
FT	FEET
GALV	GALVANIZED
HDPE	HIGH DENISTY POLYETHYLENE
HMA	HOT MIZ ASPHALT
HORIZ.	HORIZONTAL
VERT.	VERTICAL
HRS	HOURS
IN	INCH
LF	LINEAR FOOT
LN	LANE
MAX	MAXIMUM
M.I.P. OR MIP	MALE IRON PIPE THREAD
MI	MILE OR MILES
MIL	MILLIMETER
MIN	MINIMUM

ABBREVIATION	DEFINITION
MIN	MINIMUM
MIU	METER INTERFACE UNIT
MJ	MECHANICAL JOINT
MNR	MANOR
NO.	NUMBER
NPT	NATIONAL PIPE THREAD
NTS OR N.T.S.	NOT TO SCALE
OD	OUTER DIAMETER
PID	PARADISE IRRIGATION DISTRICT
PL	PLACE
PRV	PRESSURE REGULATING VALVE
PSF	POUND PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PV	POLYVINYL
RD	ROAD
REF	REFERENCE
REQD	REQUIRED
RFCA	RESTRAINED FLANGED COUPLING ADAPTER
RMJ	RESTRAINED MECHANICAL JOINT
RP	REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION DEVICE
S	SOUTH
S.S. OR SS	STAINLESS STEEL
SD	STANDARD
SDR	STANDARD DIMENSION RATIO
SLR	SERVICE LATERAL REPLACEMENT
STD	STANDARD
STL	STEEL
TB	THRUST BLOCK
TOP	TOWN OF PARADISE
TOWN	TOWN OF PARADISE
TYP	TYPICAL
UF	UNDERGROUND FEEDER
VAR	VARIES OR VARIOUS
VERT.	VERTICAL
W	WATER
W/	WITH
WWE	WATER WORKS ENGINEERS
ZATM	ZONE A TRANSMISSION MAIN



**WATERWORKS**  
ENGINEERS



06-02-23

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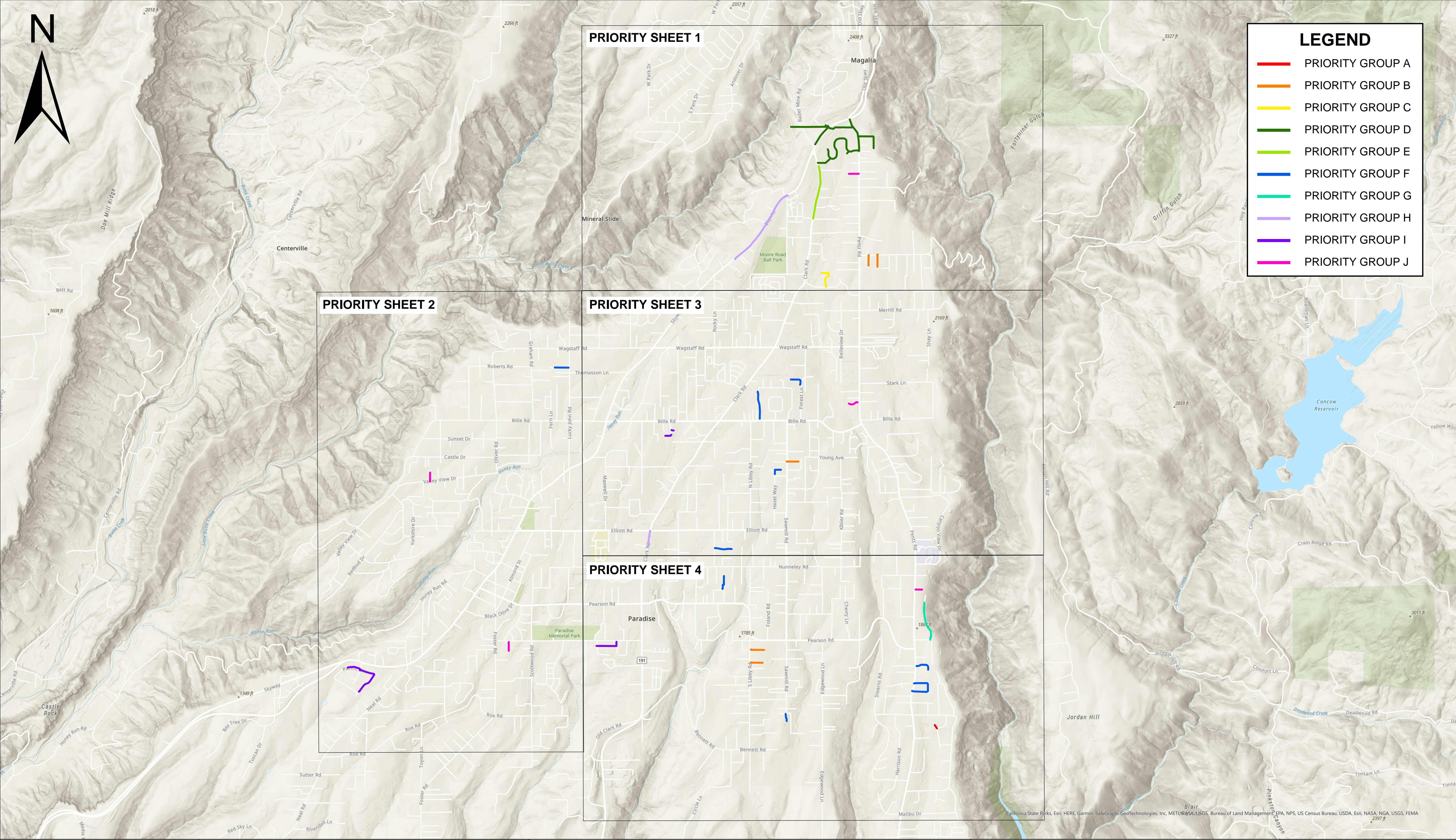
MAINS REPLACEMENT PROJECT PHASE 1


ABBREVIATIONS

DATE 4/9/2023


DWG G-3 SHEET 3 OF 56







**WATERWORKS**  
ENGINEERS



REGISTERED PROFESSIONAL ENGINEER  
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06-02-23

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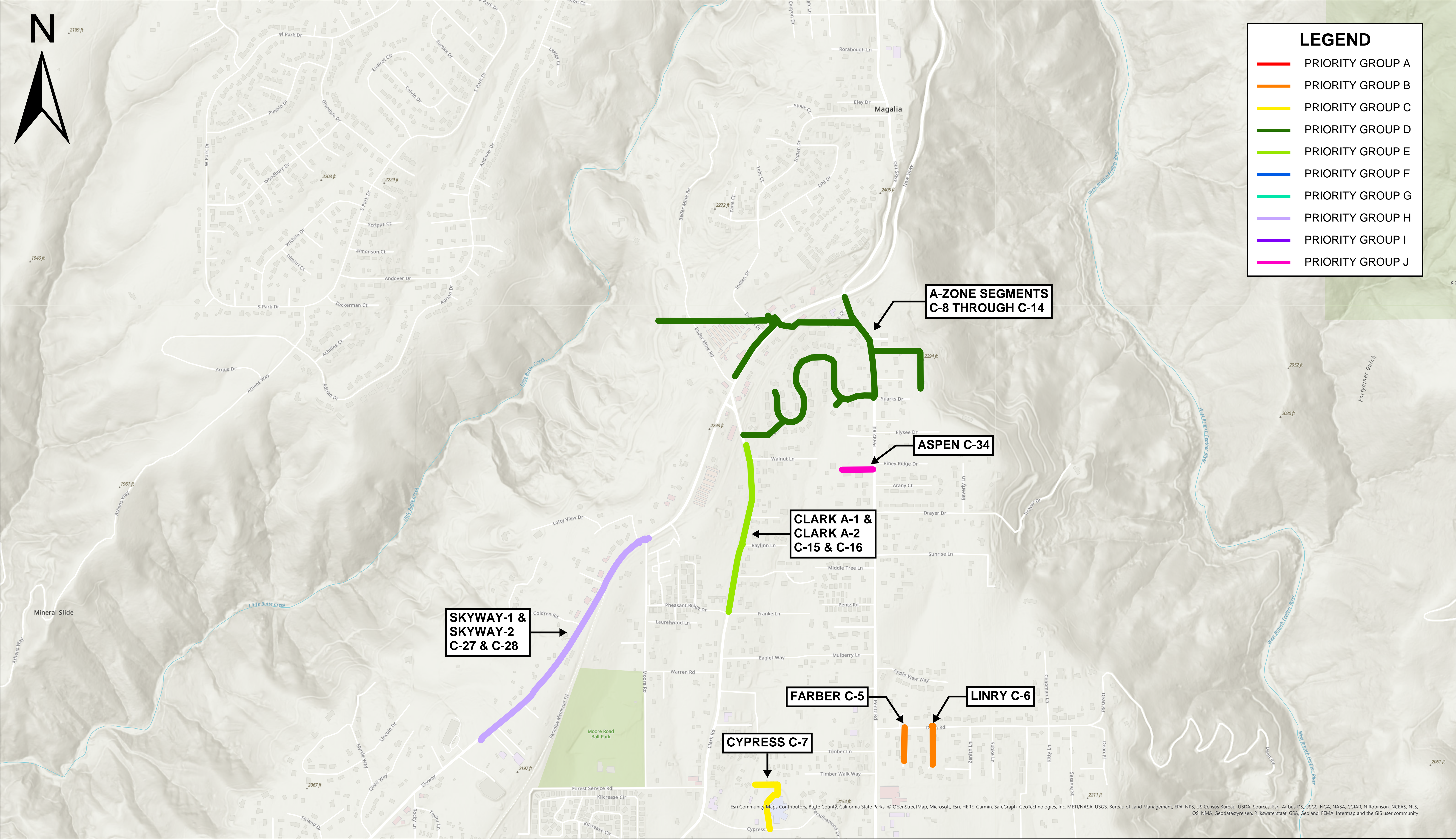
**MAINS REPLACEMENT PROJECT PHASE 1**

PRIORITY OVERVIEW

DATE 4/24/2023

DWG G-4 SHEET 4 OF 56





LEGEND

PRIORITY GROUP A

PRIORITY GROUP B

PRIORITY GROUP C

PRIORITY GROUP D

PRIORITY GROUP E

PRIORITY GROUP F

PRIORITY GROUP G

PRIORITY GROUP H

PRIORITY GROUP I

PRIORITY GROUP J

REGISTERED PROFESSIONAL ENGINEER

KRISTINA P. ALACON

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06-02-23

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MAINS REPLACEMENT PROJECT PHASE 1

PRIORITY SHEET 1

DATE

4/24/2023

DWG

G-5

SHEET

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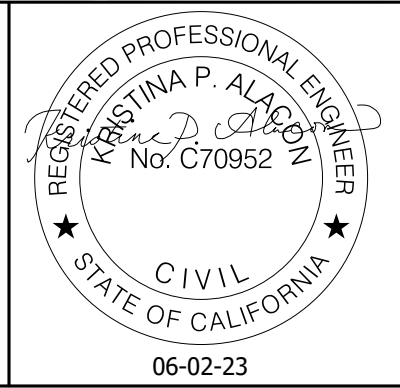
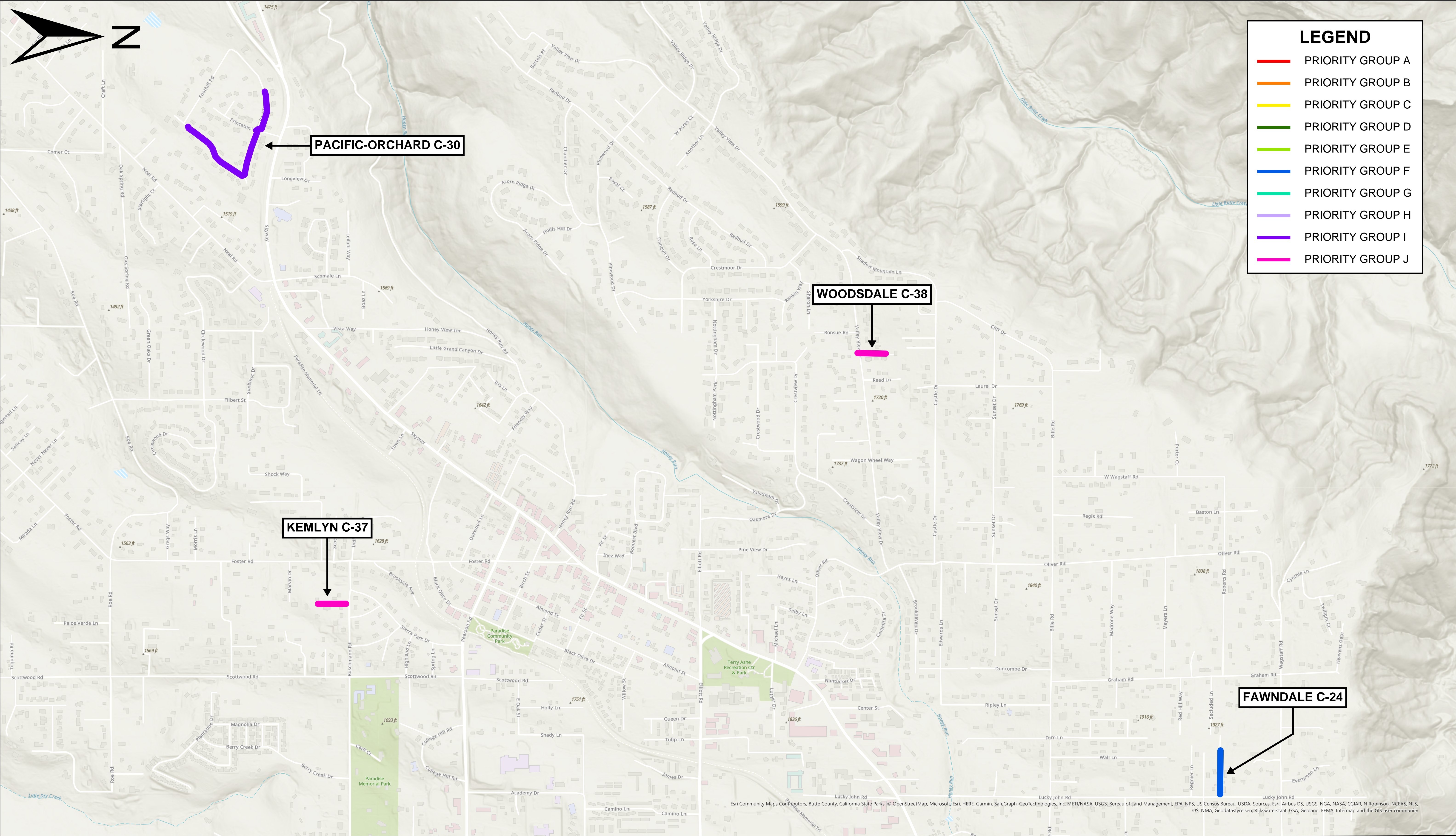
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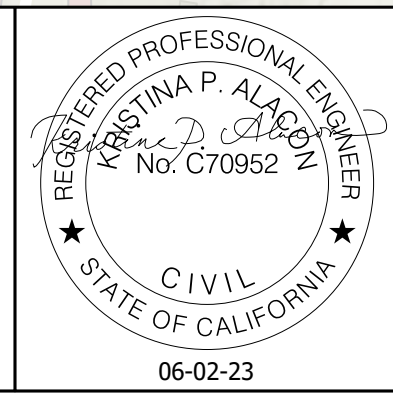
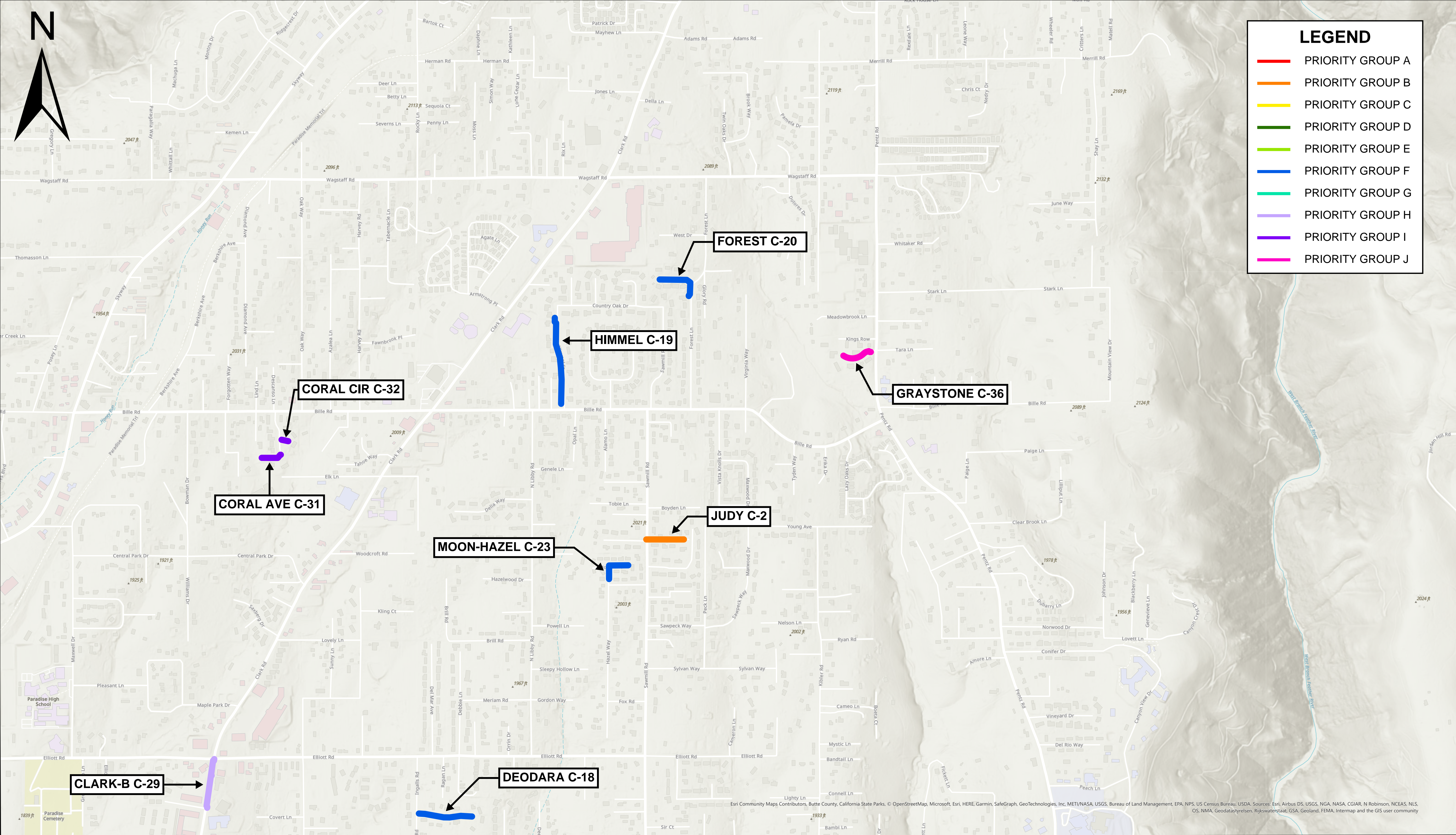
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**MAINS REPLACEMENT PROJECT PHASE 1**  
**PRIORITY SHEET 2**

DATE 4/24/2023  
DWG G-6 SHEET 6 OF 56





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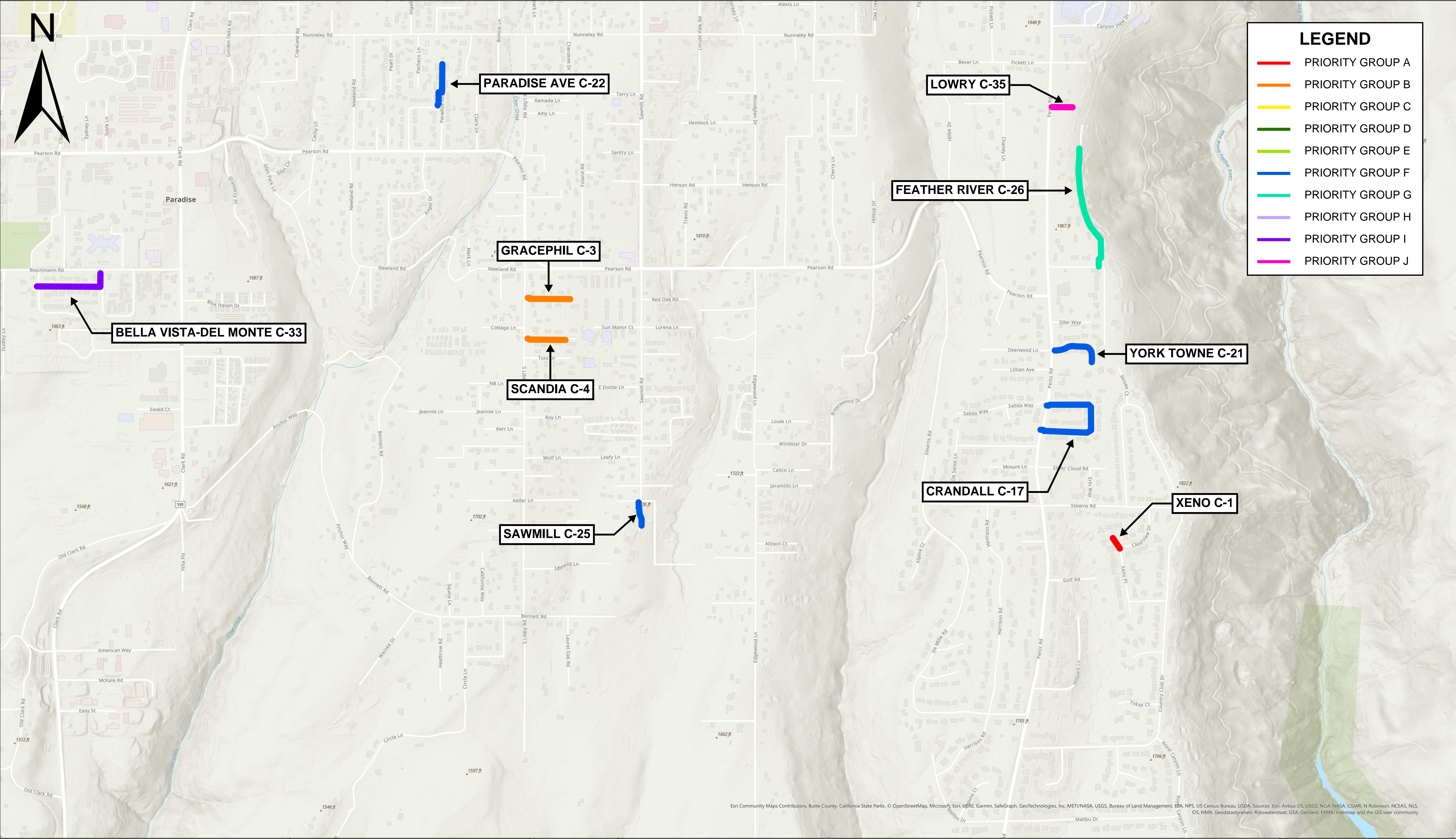
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**MAINS REPLACEMENT PROJECT PHASE 1**  
PRIORITY SHEET 3

DATE 4/9/2023  
DWG G-7 SHEET 7 OF 56





REVISIONS			
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MAINS REPLACEMENT PROJECT PHASE 1  
PRIORITY SHEET 4

DATE 4/9/2023  
DWG G-8 SHEET 8 OF 56






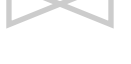





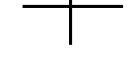




















LEGEND


Plan Sheet Symbols

	New water main
	Existing water main to be abandoned or demolished
	Existing water main
	New service connection
	Existing service connection to be replaced or reconnected
	Existing service connection
	New gate valve
	Existing gate valve to be abandoned or demolished
	Existing gate valve
	Existing butterfly valve to be abandoned
	Existing butterfly valve
	New or salvaged 6" hydrant
	Existing 6" hydrant to be removed
	Existing 6" hydrant
	Existing 4" hydrant to be removed
	Existing 4" hydrant
	New CARV assembly
	Existing CARV assembly to be replaced or demolished
	Existing CARV
	New blow off valve assembly
	Existing blow off valve assembly to be replaced or demolished
	Existing blow off valve assembly
	Existing dunker valve to be demolished
	Existing dunker valve
	Meter to be installed or reconnected
	Meter to be relocated
	Existing meter
	Thrust block
	Parcel

Tie-In Details Symbols

	New water main
	Existing water main to be abandoned or demolished
	Existing water main
	New gate valve
	Existing gate valve to be abandoned or demolished
	Existing gate valve
	Existing butterfly valve to be abandoned
	Existing butterfly valve
	New or salvaged 6" hydrant
	Existing hydrant to be removed
	Existing hydrant
	New CARV assembly
	Existing CARV assembly to be replaced or demolished
	Existing CARV
	New blow off valve assembly
	Existing blow off valve assembly to be replaced or demolished
	Existing blow off valve assembly
	Existing dunker valve to be demolished
	Existing dunker valve
	Install thrust block
	Install reducer
	Install coupling
	Install DIP tee
	Install cap/ plug for valve
	Install cap/ plug for abandoned pipe
	Install solid sleeve
	Install DIP 45 degree elbow
	Install DIP 90 degree elbow turned down
	Install DIP tee branch turned down with 90 degree elbow
	Parcel

BID DOCUMENTS



REGISTERED PROFESSIONAL ENGINEER  
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No. C70952  
CIVIL  
STATE OF CALIFORNIA  
06-02-23

REVISIONS			
NO.	BY	DATE	REMARKS

DESIGNED: E. DIEGO

DRAWN: E. MA

CHECKED: K. ALACON

APPROVED: S. KADER

PARADISE IRRIGATION DISTRICT

6332 CLARK ROAD, PARADISE, CA 95969

PHONE: (530) 877-4971

**MAINS REPLACEMENT PROJECT PHASE 1**

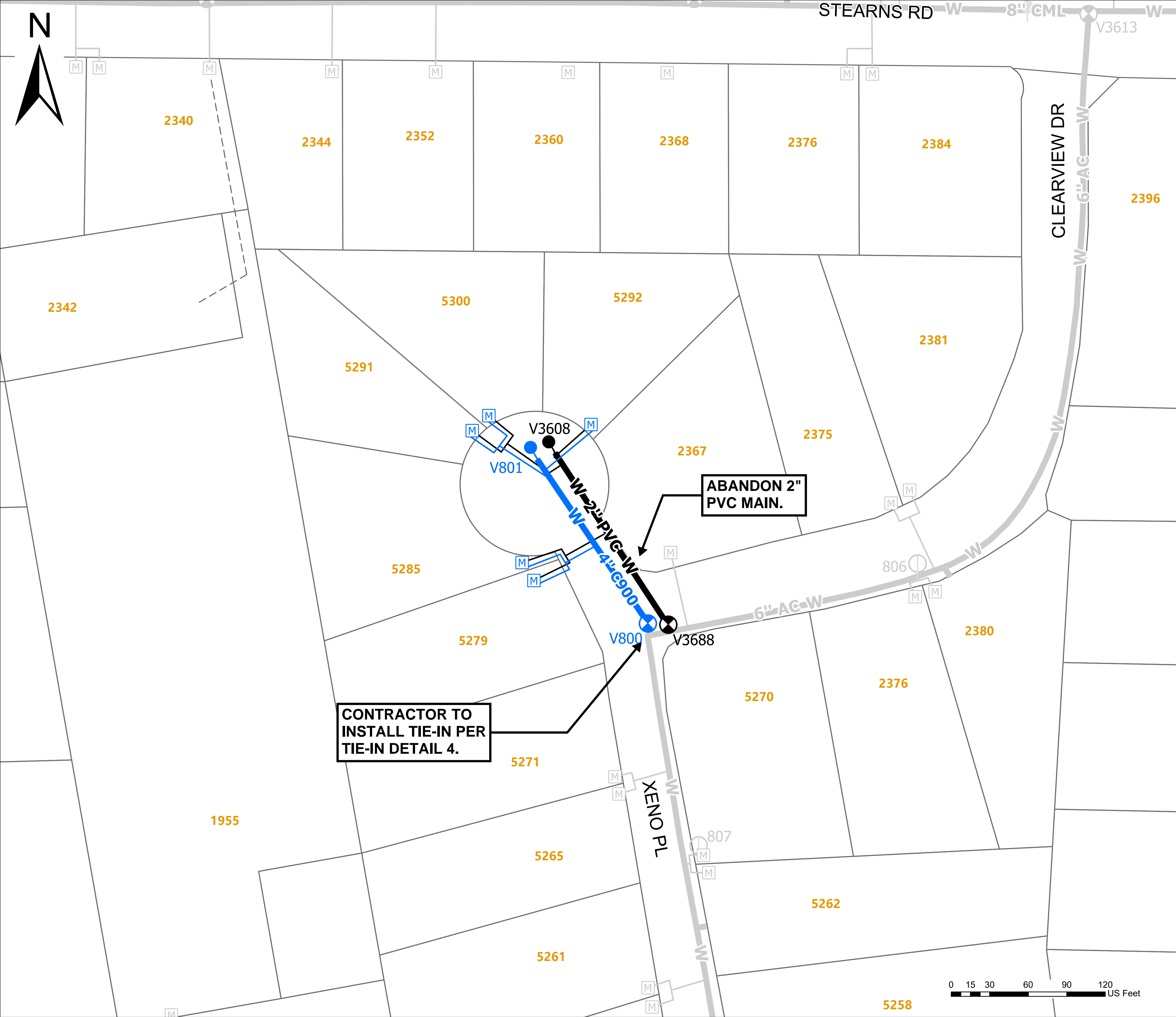
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DATE 4/24/2023

DWG G-9 SHEET 9 OF 56

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Quantities			
Item No.	Description	Unit	Quantity
5a	Abandon Water Main <8" Diameter	LF	150
6a	Install 4" C900 PVC Water Main	LF	143
8	Install Blow Off Assembly	EA	1
10a	Install 1" HDPE Service Lateral	LF	75
11a	Reconnect 3/4" and 1" Service Lateral	EA	2
12a	Furnish and Install 3/4"-1" Meter Box	EA	3
13a	Furnish and Install 3/4" Meter	EA	3
15a	Install 1" Backflow Preventer	EA	3
17	Test Backflow Preventer	EA	5
18	Reconnect Customer Plumbing	LF	15
20a	Excavation and Backfill <5ft Depth	LF	228
21	Asphalt Restoration - General	SF	2,528
23	Unpaved Restoration - General	SF	171
32a	Construct and Intsall Tie-In - Xeno DTL 4	EA	1

Note: Detailed information related to bid items 10-17 is to be provided at time of construction.

- WORK DESCRIPTION
1.

WORK FOR THIS MAIN SEGMENT SHALL BE COMPLETED AS PRIORITY GROUP A, PER SPECIFICATION SECTION 01130.
2.

NEW 4-INCH C900 MAIN SHALL BE INSTALLED A MINIMUM DISTANCE OF 3 FEET AND A MAXIMUM DISTANCE OF 5 FEET WEST OF EXISTING 2-INCH PVC MAIN.
3.

INSTALL BLOWOFF AT END OF MAIN SEGMENT AS SHOWN, PER PID-01 STD DETAIL.
4.

INSTALL OR RECONNECT SERVICES AS SUMMARIZED IN QUANTITIES TABLE.
5.

CONTRACTOR TO CONNECT TO EXISTING 6-INCH AC WATER MAIN AND INSTALL NEW 4-INCH C900 MAIN PER TIE-IN DETAIL 4.
6.

INSTALL THRUST BLOCKS AS SHOWN HEREIN, ON DETAIL 4, AND AS REQUIRED PER PID STD DETAIL PID-02.
7.

CAP AND ABANDON EXISTING 2" PVC, PER SPECIFCATION SECTION 02220.
8.

SURFACE RESTORATION WILL CONSIST OF ASPHALT RESTORATION AND MAY ALSO INCLUDE RESTORATION OF CONCRETE DRIVEWAYS, GRAVEL AREAS, AND LANDSCAPED AREAS.

- NOTES
1.

XENO PL AND CLEARVIEW DR ARE OWNDED AND MAINTAINED BY THE TOP. CONTRACTOR SHALL REFER TO TOP STANDARD DETAIL TB2 FOR LIMITS OF ASPHALT RESTORATION.
2.

CONTRACTOR SHALL BE RESPONSIBLE FOR PROPERLY DISPOSING OF ANY DEMOLISHED ASBESTOS CEMENT PIPE, PER SPECIFICATION 02220 DEMOLITION.

REGISTERED PROFESSIONAL ENGINEER  
KRISTINA P. ALACON  
No. C70952  
CIVIL  
STATE OF CALIFORNIA  
06-02-23

REVISIONS			
NO.	BY	DATE	REMARKS

DESIGNED:

E. DIEGO

DRAWN:

E. MA

CHECKED:

K. ALACON

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S. KADER

PARADISE IRRIGATION DISTRICT

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MAINS REPLACEMENT PROJECT PHASE 1

PROJECT SEGMENT # XENO

DATE

4/9/2023

DWG

C-1

SHEET

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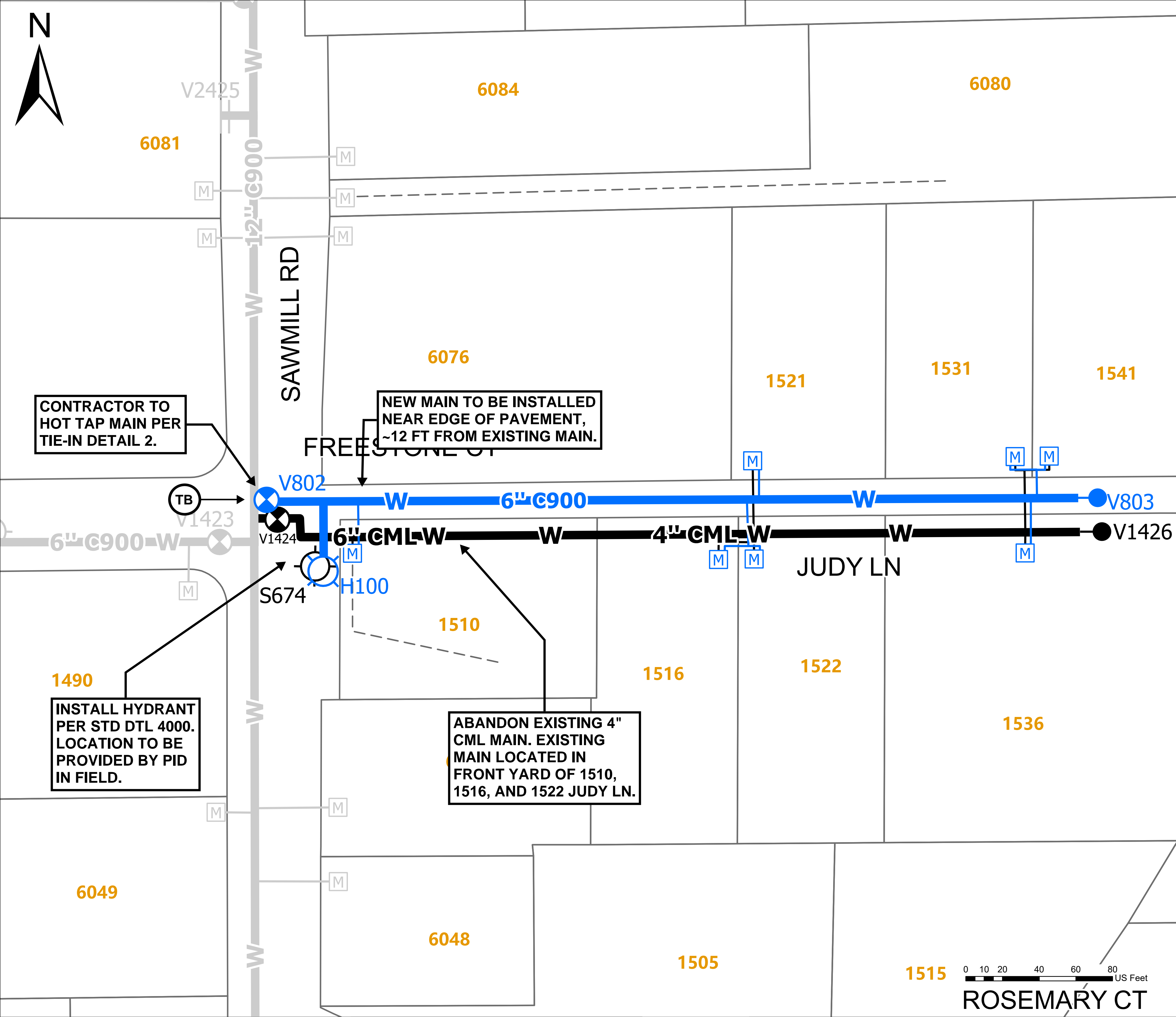
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Quantities			
Item No.	Description	Unit	Quantity
5a	Abandon Water Main <8" Diameter	LF	454
6b	Install 6" C900 PVC Water Main	LF	458
8	Install Blow Off Assembly	EA	1
10a	Install 1" HDPE Service Lateral	LF	25
11a	Reconnect 3/4" and 1" Service Lateral	EA	6
12a	Furnish and Install 3/4"-1" Meter Box	EA	1
13a	Furnish and Install 3/4" Meter	EA	1
15a	Install 1" Backflow Preventer	EA	1
17	Test Backflow Preventer	EA	6
18	Reconnect Customer Plumbing	LF	5
20a	Excavation and Backfill <5ft Depth	LF	513
21	Asphalt Restoration - General	SF	3,310
23	Unpaved Restoration - General	SF	385
24	Remove and Demolish Fire Hydrant	EA	1
26	Install Hydrant Assembly with Salvaged Hydrant Head	EA	1
28	Excavation and Backfill - Hydrant Assemblies	LF	16
29	Asphalt Restoration for Hydrant Assemblies	SF	73
30	Concrete Restoration - Hydrant Assemblies	SF	8
31	Unpaved Restoration - Hydrant Assemblies	SF	12
32b	Construct and Install Tie-In - Judy DTL 2	EA	1


Note: Detailed information related to bid items 10-17 is to be provided at time of construction.

WORK DESCRIPTION


1. WORK FOR THIS MAIN SEGMENT SHALL BE COMPLETED AS PRIORITY GROUP B, PER SPECIFICATION SECTION 01130.
2. NEW 6-INCH C900 MAIN SHALL BE INSTALLED WITHIN 3FT OF EDGE OF PAVEMENT ON SOUTH SIDE OF JUDY LN.
3. INSTALL HYDRANT PER HYDRANT SCHEDULE, SPECIFICATION SECTION 15200 HS.
4. INSTALL BLOWOFF AS SHOWN AND PER PID-01 DETAIL.
5. INSTALL OR RECONNECT SERVICES AS SUMMARIZED IN QUANTITIES TABLE.
6. CONTRACTOR TO CONNECT TO EXISTING 12-INCH C900 WATER MAIN AND INSTALL NEW 6-INCH C900 MAIN PER TIE-IN DETAIL 2.
7. INSTALL THRUST BLOCKS AS SHOWN ON DETAIL 2 AND PER PID STD DETAIL PID-02.
8. CAP AND ABANDON EXISTING 4" CML, PER SPECIFCATION SECTION 02220.
9. SURFACE RESTORATION WILL CONSIST OF ASPHALT RESTORATION AND MAY ALSO INCLUDE RESTORATION OF CONCRETE DRIVEWAYS, GRAVEL AREAS, AND LANDSCAPED AREAS.
10. WORK MAY REQUIRE REPAIR OF RESIDENTIAL FENCES.

NOTES

1. JUDY LN IS PRIVATELY OWNED; HOWEVER, CONTRACTOR SHALL AT A MINIMUM FOLLOW TOP STANDARD DETAILS TB1 AND TB2 FOR TRENCH BACKFILL AND LIMITS OF ASPHALT RESTORATION.
2. SAWMILL RD IS OWNED BYTHE TOP AND IS PLANNED TO BE REPAVED IN 2023. CONTRACTOR SHALL RESTORE ASPHALT ON BOTH LANES OF SAWMILL EXTENDING FULL WIDTH OF JUDY LN AND RESTRIPE ANY IMPACTED STRIPING.
3. CONTRACTOR SHALL SUBMIT TO TOP SCHEDULE FOR TRAFFIC CONTROL ON SAWMILL RD IN ADVANCE OF WORK.



**WATERWORKS**  
ENGINEERS



06-02-23


REVISIONS			
NO.	BY	DATE	REMARKS

DESIGNED: E. DIEGO

DRAWN: E. MA

CHECKED: K. ALACON

APPROVED: S. KADER



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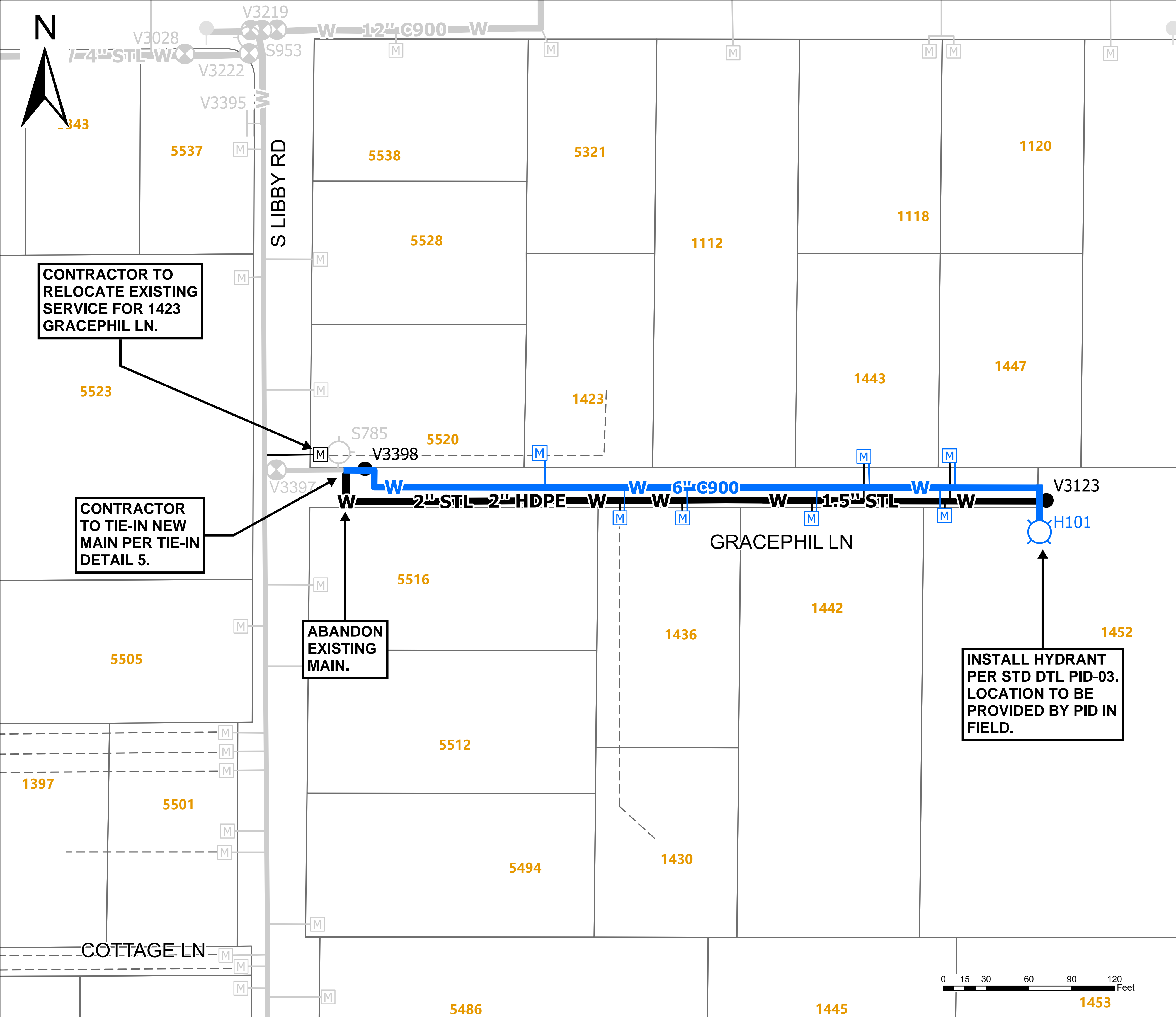
**MAINS REPLACEMENT PROJECT PHASE 1**

PROJECT SEGMENT # JUDY

DATE 4/9/2023

DWG C-2 SHEET 11 OF 56





Quantities			
Item No.	Description	Unit	Quantity
5a	Abandon Water Main <8" Diameter	LF	758
6b	Install 6" C900 PVC Water Main	LF	517
10a	Install 1" HDPE Service Lateral	LF	100
11a	Reconnect 3/4" and 1" Service Lateral	EA	3
12a	Furnish and Install 3/4"-1" Meter Box	EA	3
13a	Furnish and Install 3/4" Meter	EA	2
13b	Furnish and Install 1" Meter	EA	1
14a	Reset 3/4"-1" Meter and Meter Box	EA	1
15a	Install 1" Backflow Preventer	EA	3
17	Test Backflow Preventer	EA	5
18	Reconnect Customer Plumbing	LF	15
20a	Excavation and Backfill <5ft Depth	LF	632
21	Asphalt Restoration - General	SF	5,688
23	Unpaved Restoration - General	SF	474
25	Install New Fire Hydrant Assembly	EA	1
28	Excavation and Backfill - Hydrant Assemblies	LF	12
29	Asphalt Restoration for Hydrant Assemblies	SF	55
30	Concrete Restoration - Hydrant Assemblies	SF	8
31	Unpaved Restoration - Hydrant Assemblies	SF	9
32c	Construct and Install Tie-In - Gracephil DTL 5	EA	1

Note: Detailed information related to bid items 10-17 is to be provided at time of construction.

WORK DESCRIPTION

- 1. WORK FOR THIS MAIN SEGMENT SHALL BE COMPLETED AS PRIORITY GROUP B, PER SPECIFICATION SECTION 01130.
- 2. NEW 6-INCH C900 MAIN SHALL BE INSTALLED A MINIMUM OF 3 FEET AND MAXIMUM OF 5 FEET NORTH OF EXISTING MAIN.
- 3. STEEL MAIN (NOT SHOWN/UNKNOWN LOCATION) HAS BEEN ABANDONED IN PLACE BY PID. IF CONFLICT OCCURS, CONTRACTOR TO INFORM ENGINEER.
- 4. INSTALL HYDRANT PER HYDRANT SCHEDULE, SPECIFICATION SECTION 15200 HS.
- 5. INSTALL OR RECONNECT SERVICES AS SUMMARIZED IN QUANTITIES TABLE.
- 6. CONTRACTOR TO CONNECT TO EXISTING MAIN PER TIE-IN DETAIL 5.
- 7. INSTALL THRUST BLOCKS AS SHOWN ON DETAIL 5 AND PER PID STD DETAIL PID-02.
- 8. CAP AND ABANDON EXISTING 2" AND 1.5" MAIN, PER SPECIFICATION SECTION 02220.
- 9. SURFACE RESTORATION WILL CONSIST OF ASPHALT AND GRAVEL RESTORATION AND MAY ALSO INCLUDE RESTORATION OF CONCRETE DRIVEWAYS AND LANDSCAPED AREAS.

NOTES

- 1. GRACEPHIL LN IS PRIVATELY OWNED; HOWEVER, CONTRACTOR SHALL AT A MINIMUM FOLLOW TOP STANDARD DETAILS TB1 AND TB2 FOR TRENCH BACKFILL AND LIMITS OF ASPHALT RESTORATION ON GRACEPHIL LN.
- 2. S LIBBY RD IS OWNED BY THE TOP AND IS SCHEDULED TO BE REPAVED IN 2023. INSTALLATION OF THE NEW MAIN ON GRACEPHIL LN SHALL NOT EXTEND INTO ROADWAY OF S LIBBY RD. IF ANY AREA OF PAVEMENT ON S LIBBY RD IS DISTURBED, CONTRACTOR SHALL RESTORE ASPHALT ON S LIBBY RD FOR BOTH LANES EXTENDING THE FULL WIDTH OF GRACEPHIL LN AND RESTRIPE ANY IMPACTED STRIPING.
- 3. CONTRACTOR SHALL SUBMIT TO TOP SCHEDULE FOR ANY TRAFFIC CONTROL IMPACTING SOUTH LIBBY RD IN ADVANCE OF WORK.

REGISTERED PROFESSIONAL ENGINEER  
KRISTINA P. ALACON  
No. C70952  
CIVIL  
STATE OF CALIFORNIA  
06-02-23

REVISIONS			
NO.	BY	DATE	REMARKS

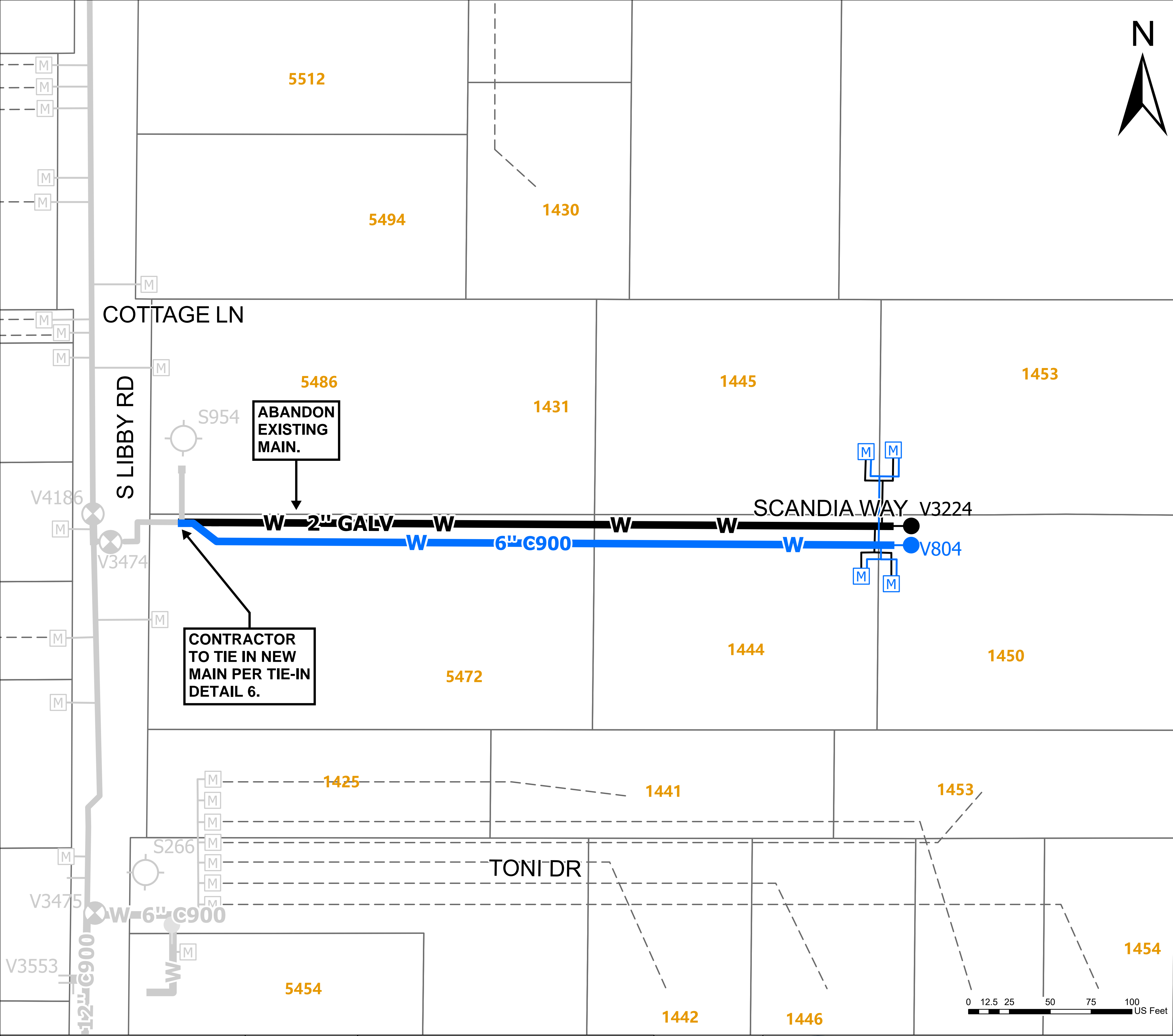
DESIGNED: E. DIEGO  
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MAINS REPLACEMENT PROJECT PHASE 1  
PROJECT SEGMENT # GRACEPHIL

DATE 4/9/2023  
DWG C-3 SHEET 12 OF 56





Quantities			
Item No.	Description	Unit	Quantity
5a	Abandon Water Main <8" Diameter	LF	433
6b	Install 6" C900 PVC Water Main	LF	437
8	Install Blow Off Assembly	EA	1
10a	Install 1" HDPE Service Lateral	LF	75
11a	Reconnect 3/4" and 1" Service Lateral	EA	1
12a	Furnish and Install 3/4"-1" Meter Box	EA	3
13a	Furnish and Install 3/4" Meter	EA	3
15a	Install 1" Backflow Preventer	EA	3
17	Test Backflow Preventer	EA	3
18	Reconnect Customer Plumbing	LF	15
20a	Excavation and Backfill <5ft Depth	LF	517
21	Asphalt Restoration - General	SF	2,329
23	Unpaved Restoration - General	SF	388
32d	Construct and Install Tie-In - Scandia DTL 6	EA	1
Note: Detailed information related to bid items 10-17 is to be provided at time of construction.			

WORK DESCRIPTION

1. WORK FOR THIS MAIN SEGMENT SHALL BE COMPLETED AS PRIORITY GROUP B, PER SPECIFICATION SECTION 01130.
2. NEW 6-INCH C900 MAIN SHALL BE INSTALLED A MINIMUM OF 3 FEET AND MAXIMUM OF 5 FEET SOUTH OF EXISTING MAIN.
3. INSTALL BLOW OFF AT END OF MAIN SEGMENT, AS SHOWN, PER PID-01 STD DETAIL.
4. INSTALL OR RECONNECT SERVICES AS SUMMARIZED IN QUANTITIES TABLE.
5. CONTRACTOR TO CONNECT TO EXISTING MAIN PER TIE-IN DETAIL 6.
6. INSTALL THRUST BLOCKS AS SHOWN ON DETAIL 6 AND PER PID STD DETAIL PID-02.
7. CAP AND ABANDON EXISTING 2" GLAVANIZED STEEL MAIN, PER SPECIFCATION SECTION 02220.
8. SURFACE RESTORATION WILL CONSIST OF ASPHALT RESTORATION AND MAY ALSO INCLUDE RESTORATION OF CONCRETE DRIVEWAYS, GRAVEL AREAS, AND LANDSCAPED AREAS. WHERE LIMITS OF ASPHALT RESTORATION ARE UNCLEAR CONTRACTOR TO REFER TO ENGINEER OR PID.

NOTES

1. SCANDIA WY IS PRIVATELY OWNED; HOWEVER, CONTRACTOR SHALL AT A MINIMUM FOLLOW TOP STANDARD DETAILS TB1 AND TB2 FOR TRENCH BACKFILL AND LIMITS OF ASPHALT RESTORATION ON SCANDIA WY.
2. S LIBBY RD IS OWNED BY THE TOP AND IS SCHEDULED TO BE REPAVED IN 2023. INSTALLATION OF THE NEW MAIN ON SCANDIA WY SHALL NOT EXTEND INTO ROADWAY OF S LIBBY RD. IF ANY AREA OF PAVEMENT ON S LIBBY RD IS DISTURBED CONTRACTOR SHALL RESTORE ASPHALT ON S LIBBY RD FOR BOTH LANES EXTENDING 10FT ON BOTH SIDES OF TRENCH CENTER LINE.
3. CONTRACTOR TO RESTRIPE ANY IMPAPCTED STRIPING.
4. CONTRACTOR SHALL SUBMIT TO TOP SCHEDULE FOR ANY TRAFFIC CONTROL IMPACTING SOUTH LIBBY RD IN ADVANCE OF WORK.



**WATERWORKS**  
ENGINEERS



06-02-23

REVISIONS			
NO.	BY	DATE	REMARKS

DESIGNED: E. DIEGO  
DRAWN: E. MA  
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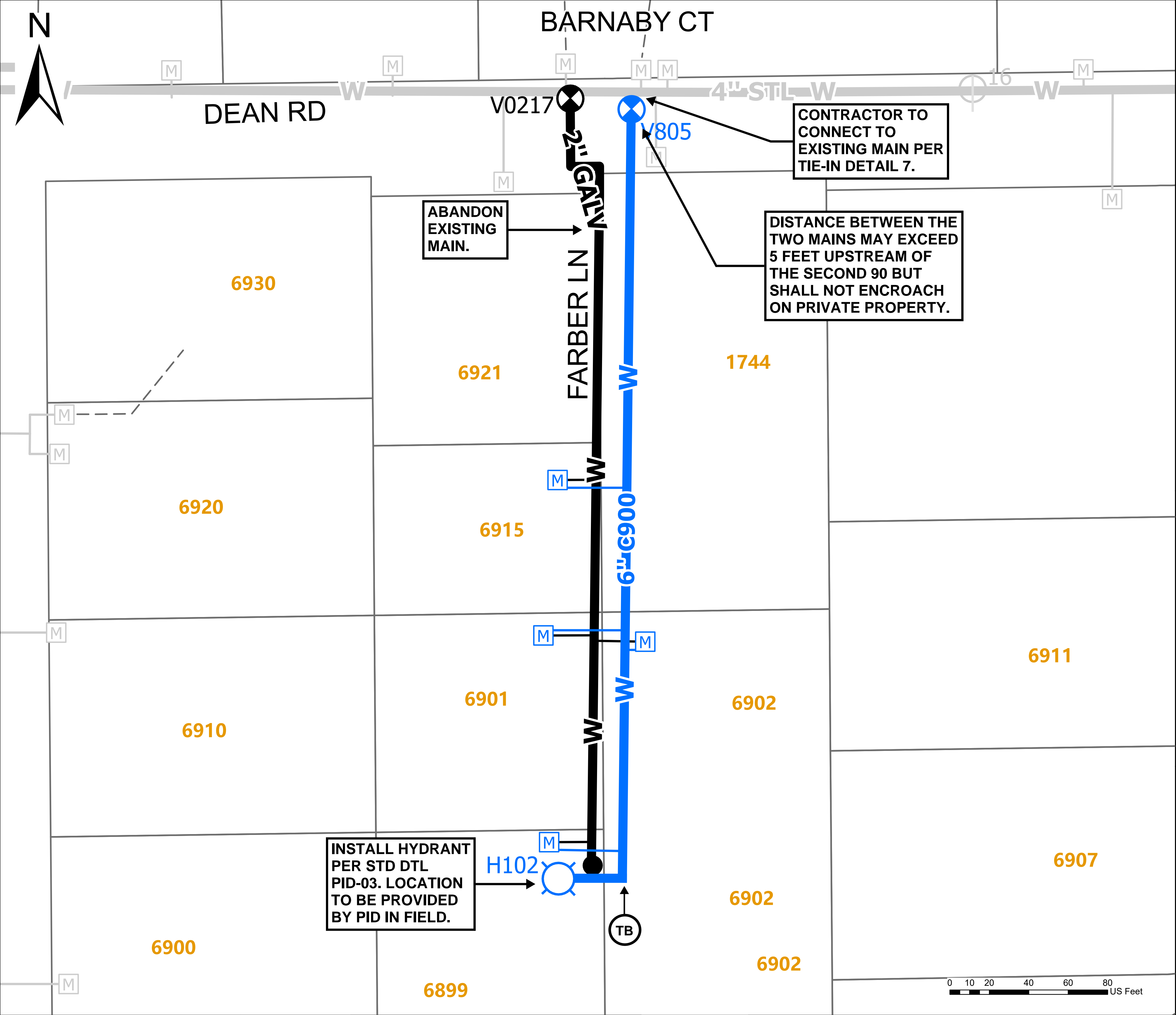


**PARADISE IRRIGATION DISTRICT**  
6332 CLARK ROAD, PARADISE, CA 95969  
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**MAINS REPLACEMENT PROJECT PHASE 1**  
PROJECT SEGMENT # SCANDIA

DATE 4/9/2023  
DWG C-4 SHEET 13 OF 56





Quantities			
Item No.	Description	Unit	Quantity
5a	Abandon Water Main <8" Diameter	LF	390
6b	Install 6" C900 PVC Water Main	LF	405
10a	Install 1" HDPE Service Lateral	LF	100
12a	Furnish and Install 3/4"-1" Meter Box	EA	4
13a	Furnish and Install 3/4" Meter	EA	2
13b	Furnish and Install 1" Meter	EA	2
15a	Install 1" Backflow Preventer	EA	4
17	Test Backflow Preventer	EA	4
18	Reconnect Customer Plumbing	LF	20
20a	Excavation and Backfill <5ft Depth	LF	505
21	Asphalt Restoration - General	SF	2,688
23	Unpaved Restoration - General	SF	378
25	Install New Fire Hydrant Assembly	EA	1
28	Excavation and Backfill - Hydrant Assemblies	LF	13
29	Asphalt Restoration for Hydrant Assemblies	SF	60
30	Concrete Restoration - Hydrant Assemblies	SF	8
31	Unpaved Restoration - Hydrant Assemblies	SF	10
32e	Construct and Install Tie-In - Farber DTL 7	EA	1
Note: Detailed information related to bid items 10-17 is to be provided at time of construction.			

WORK DESCRIPTION

1.

WORK FOR THIS MAIN SEGMENT SHALL BE COMPLETED AS PRIORITY GROUP B, PER SPECIFICATION SECTION 01130.

2.

NEW 6-INCH C900 MAIN SHALL BE INSTALLED A MINIMUM OF 3 FEET AND MAXIMUM OF 5 FEET EAST OF EXISTING MAIN, EXCEPT WHERE OTHERWISE NOTED.

3.

INSTALL HYDRANT PER HYDRANT SCHEDULE, SPECIFICATION SECTION 15200 HS.

4.

INSTALL OR RECONNECT SERVICES AS SUMMARIZED IN QUANTITIES TABLE.

5.

CONTRACTOR TO CONNECT TO EXISTING MAIN PER TIE-IN DETAIL 7.

6.

INSTALL THRUST BLOCKS AS SHOWN HEREIN, ON DETAIL 7, AND PER PID STD DETAIL PID-02.

7.

CAP AND ABANDON EXISTING 2" GLAVANIZED STEEL MAIN, PER SPECIFCATION SECTION 02220.

8.

SURFACE RESTORATION WILL CONSIST OF ASPHALT RESTORATION AND MAY ALSO INCLUDE RESTORATION OF CONCRETE DRIVEWAYS, GRAVEL AREAS, AND LANDSCAPED AREAS. SEE NOTES (BELOW) FOR MORE DETAIL ON SURFACE RESTORATION.

NOTES

1.

FARBER LN IS PRIVATELY OWNED. CONTRACTOR SHALL AT A MINIMUM FOLLOW TOP STANDARD DETAILS TB1 AND TB2 FOR TRENCH BACKFILL AND LIMITS OF ASPHALT RESTORATION ON FARBER LN.

2.

DEAN RD IS OWNED BY THE TOP AND IS SCHEDULED TO BE REPAVED IN 2023. CONTRACTOR SHALL RESTORE ASPHALT ON DEAN RD FOR BOTH LANES EXTENDING THE FULL WIDTH OF FARBER LN. CONTRACTOR SHALL ALSO RESTORE THE SHOULDER ON DEAN RD NORTH OF FARBER LN WHERE TRENCHED, LIMITS PER STANDARD DETAIL TB2. CONTRACTOR TO RESTRIPE ANY IMPACTED STRIPING ON DEAN RD AND FARBER LN.

REGISTERED PROFESSIONAL ENGINEER

KRISTINA P. ALACON

No. C70952

CIVIL

STATE OF CALIFORNIA

06-02-23

REVISIONS

NO.	BY	DATE	REMARKS

DESIGNED: E. DIEGO

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MAINS REPLACEMENT PROJECT PHASE 1

PROJECT SEGMENT # FARBER

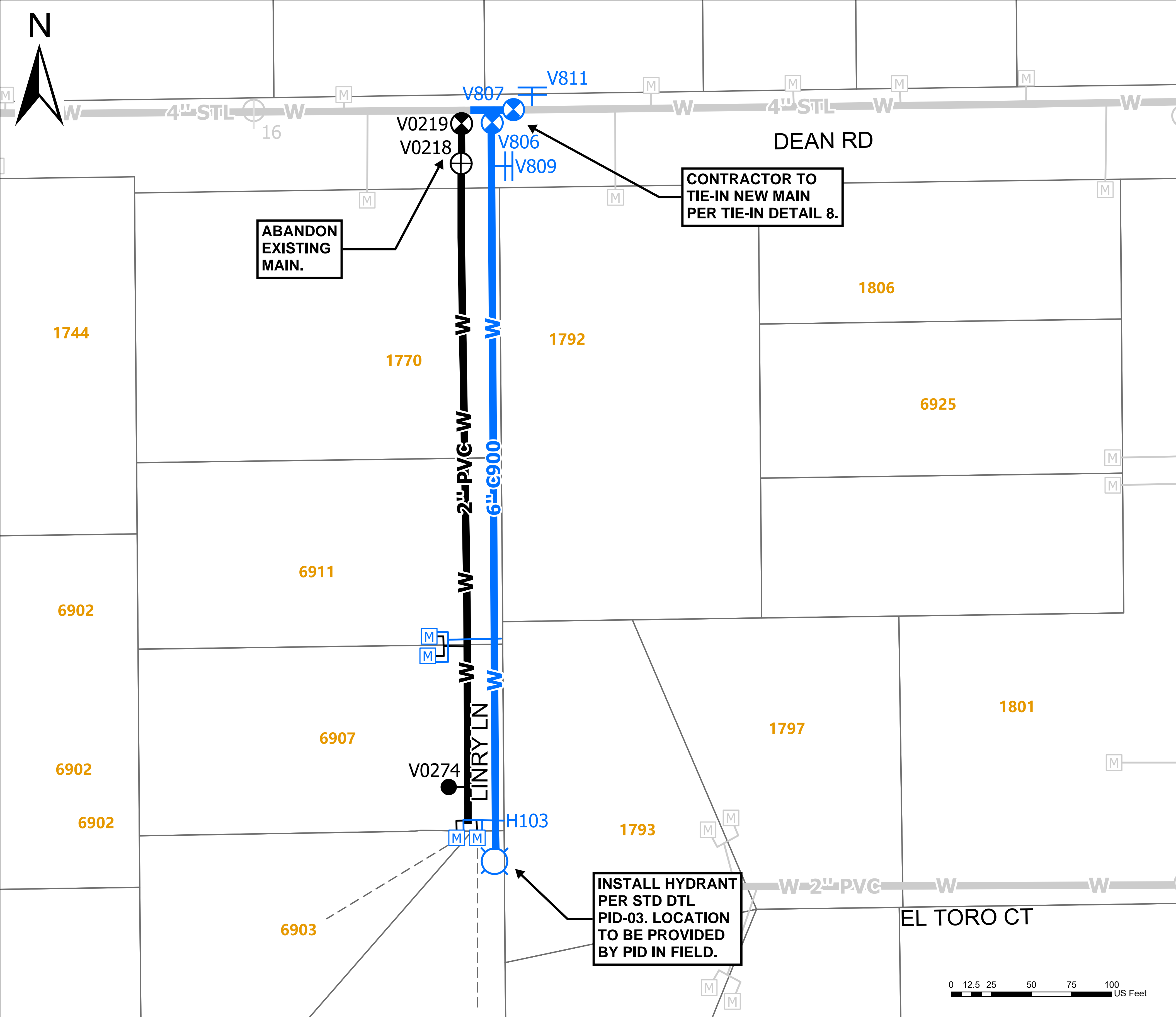
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DWG C-5 SHEET 14 OF 56

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Quantities			
Item No.	Description	Unit	Quantity
5a	Abandon Water Main <8" Diameter	LF	417
6a	Install 4" C900 PVC Water Main	LF	18
6b	Install 6" C900 PVC Water Main	LF	450
9	Install Air Release and Vaccum Relief Valve Assembly	EA	2
10a	Install 1" HDPE Service Lateral	LF	25
11a	Reconnect 3/4" and 1" Service Lateral	EA	3
12a	Furnish and Install 3/4"-1" Meter Box	EA	1
13a	Furnish and Install 3/4" Meter	EA	1
15a	Install 1" Backflow Preventer	EA	1
17	Test Backflow Preventer	EA	4
18	Reconnect Customer Plumbing	LF	5
20a	Excavation and Backfill <5ft Depth	LF	508
21	Asphalt Restoration - General	SF	2,701
23	Unpaved Restoration - General	SF	381
25	Install New Fire Hydrant Assembly	EA	1
28	Excavation and Backfill - Hydrant Assemblies	LF	10
29	Asphalt Restoration for Hydrant Assemblies	SF	43
30	Concrete Restoration - Hydrant Assemblies	SF	8
31	Unpaved Restoration - Hydrant Assemblies	SF	7
32f	Construct and Install Tie-In - Linry DTL 8	EA	1

Note: Detailed information related to bid items 10-17 is to be provided at time of construction.

WORK DESCRIPTION

- 1. WORK FOR THIS MAIN SEGMENT SHALL BE COMPLETED AS PRIORITY GROUP B, PER SPECIFICATION SECTION 01130.
- 2. NEW 6-INCH C900 MAIN SHALL BE INSTALLED A MINIMUM OF 3 FEET AND MAXIMUM OF 5 FEET EAST OF EXISTING MAIN.
- 3. INSTALL HYDRANT PER HYDRANT SCHEDULE, SPECIFICATION SECTION 15200 HS.
- 4. INSTALL COMBINATION AIR RELEASE VALVES AS SHOWN, PER PID-10 STD DETAIL.
- 5. INSTALL OR RECONNECT SERVICES AS SUMMARIZED IN QUANTITIES TABLE.
- 6. CONTRACTOR TO CONNECT TO EXISTING MAIN PER TIE-IN DETAIL 8.
- 7. INSTALL THRUST BLOCKS AS SHOWN ON DETAIL 8 AND PER PID STD DETAIL PID-02.
- 8. CAP AND ABANDON EXISTING 2" PVC MAIN, PER SPECIFCATION SECTION 02220.
- 9. SURFACE RESTORATION WILL CONSIST OF ASPHALT RESTORATION AND MAY ALSO INCLUDE RESTORATION OF CONCRETE DRIVEWAYS, GRAVEL AREAS, AND LANDSCAPED AREAS. SEE NOTES (BELOW) FOR MORE DETAIL ON SURFACE RESTORATION.

NOTES

- 1. LINRY LN IS PRIVATELY OWNED; HOWEVER, CONTRACTOR SHALL AT A MINIMUM FOLLOW TOP STANDARD DETAILS TB1 AND TB2 FOR TRENCH BACKFILL AND LIMITS OF ASPHALT RESTORATION ON LINRY LN.
- 2. DEAN RD IS OWNED BY THE TOP AND IS SCHEDULED TO BE REPAVED IN 2023. CONTRACTOR SHALL RESTORE ASPHALT ON DEAN RD FOR BOTH LANES EXTENDING THE FULL WIDTH OF LINRY LN. CONTRACTOR SHALL RESTORE THE SHOULDER ON DEAN RD NORTH OF LINRY LN WHERE TRENCHED, LIMITS PER STANDARD DETAIL TB2. CONTRACTOR TO RESTRIPE ANY IMPACTED STRIPING ON DEAN RD AND LINRY LN.
- 3. CONTRACTOR SHALL RESTORE CURB TO SAME AS OR BETTER CONDITION PER BUTTE COUNTY STANDARD DETAIL S-2.

REGISTERED PROFESSIONAL ENGINEER  
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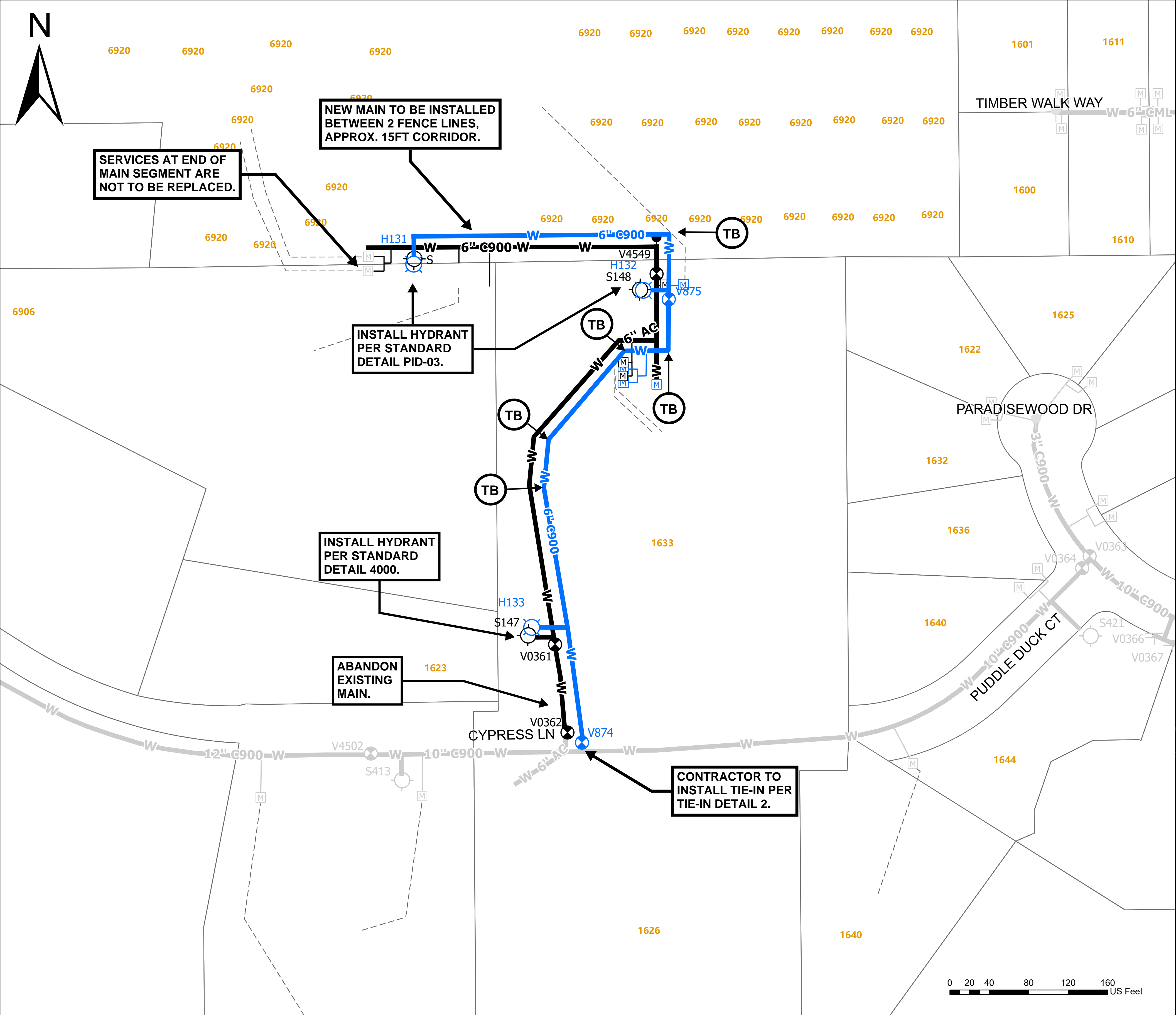
DESIGNED: E. DIEGO  
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MAINS REPLACEMENT PROJECT PHASE 1  
PROJECT SEGMENT # LINRY

DATE 4/9/2023  
DWG C-6 SHEET 15 OF 56





Quantities			
Item No.	Description	Unit	Quantity
5a	Abandon Water Main <8" Diameter	LF	898
6b	Install 6" C900 PVC Water Main	LF	901
7b	Install 6" Gate Valve	EA	1
10a	Install 1" HDPE Service Lateral	LF	25
10b	Install 1.5" HDPE Service Lateral	LF	75
10c	Install 2" HDPE Service Lateral	LF	50
12a	Furnish and Install 3/4"-1" Meter Box	EA	1
12b	Furnish and Install 1.5"-2" Meter Box	EA	5
13a	Furnish and Install 3/4" Meter	EA	1
13c	Furnish and Install 1.5" Meter	EA	3
13d	Furnish and Install 2" Meter	EA	2
15a	Install 1" Backflow Preventer	EA	1
15b	Install 1.5" Backflow Preventer	EA	3
15c	Install 2" Backflow Preventer	EA	2
17	Test Backflow Preventer	EA	6
18	Reconnect Customer Plumbing	LF	30
20a	Excavation and Backfill <5ft Depth	LF	1,051
21	Asphalt Restoration - General	SF	4,729
23	Unpaved Restoration - General	SF	788
24	Remove and Demolish Fire Hydrant	EA	3
25	Install New Fire Hydrant Assembly	EA	2
26	Install Hydrant Assembly with Salvaged Hydrant Head	EA	1
28	Excavation and Backfill - Hydrant Assemblies	LF	34
29	Asphalt Restoration for Hydrant Assemblies	SF	152
30	Concrete Restoration - Hydrant Assemblies	SF	8
31	Unpaved Restoration - Hydrant Assemblies	SF	25
Note: Detailed information related to bid items 10-17 is to be provided at time of construction.			

- WORK DESCRIPTION
1.

WORK FOR THIS MAIN SEGMENT SHALL BE COMPLETED AS PRIORITY GROUP C, PER SPECIFICATION SECTION 01130.
2.

NEW 6-INCH C900 MAIN SHALL BE INSTALLED AS SHOWN, REFER TO ENGINEER IN FIELD AS NEEDED FOR LOCATION.
3.

INSTALL HYDRANTS PER HYDRANT SCHEDULE, SPECIFICATION SECTION 15200 HS.
4.

INSTALL OR RECONNECT SERVICES AS SUMMARIZED IN QUANTITIES TABLE, LOCATIONS TO BE DETERMINED BY PID IN FIELD.
5.

CONTRACTOR TO CONNECT TO EXISTING MAIN PER TIE-IN DETAIL 2.
6.

INSTALL THRUST BLOCKS AS SHOWN HEREIN, ON TIE-IN DETAIL 2, AND PER PID STANDARD DETAIL PID-02.
7.

CONTRACTOR SHALL CAP, FILL, AND ABANDON EXISTING MAIN, PER SPECIFCATION SECTION 02220.
8.

SURFACE RESTORATION WILL CONSIST OF ASPHALT RESTORATION AND MAY ALSO INCLUDE RESTORATION OF CURBS, CONCRETE DRIVEWAYS, GRAVEL AREAS, AND LANDSCAPED AREAS.

- NOTES
1.

CYPRESS LN IS PRIVATELY OWNED; HOWEVER CONTRACTOR SHALL AT A MINIMUM FOLLOW TOP STANDARD DETAILS TB1 AND TB2 FOR TRENCH BACKFILL AND LIMITS OF ASPHALT RESTORATION.
2.

EXISTING 6" MAIN ON CYPRESS LN IS NOT CURRENTLY IN SERVICE. CONTRACTOR SHALL RESTORE CURB TO SAME AS OR BETTER CONDITION, PER BUTTE COUNTY STANDARD DETAIL S-2.



WATERWORKS

ENGINEERS

REGISTERED PROFESSIONAL ENGINEER

KRISTINA P. ALACON

No. C70952

CIVIL

STATE OF CALIFORNIA

06-02-23

REVISIONS

NO.	BY	DATE	REMARKS

DESIGNED:

E. DIEGO

DRAWN:

E. MA

CHECKED:

K. ALACON

APPROVED:

S. KADER



PARADISE IRRIGATION DISTRICT

6332 CLARK ROAD, PARADISE, CA 95969

PHONE: (530) 877-4971

MAINS REPLACEMENT PROJECT PHASE 1

PROJECT SEGMENT # CYPRESS

DATE

4/9/2023

DWG

C-7

SHEET

16

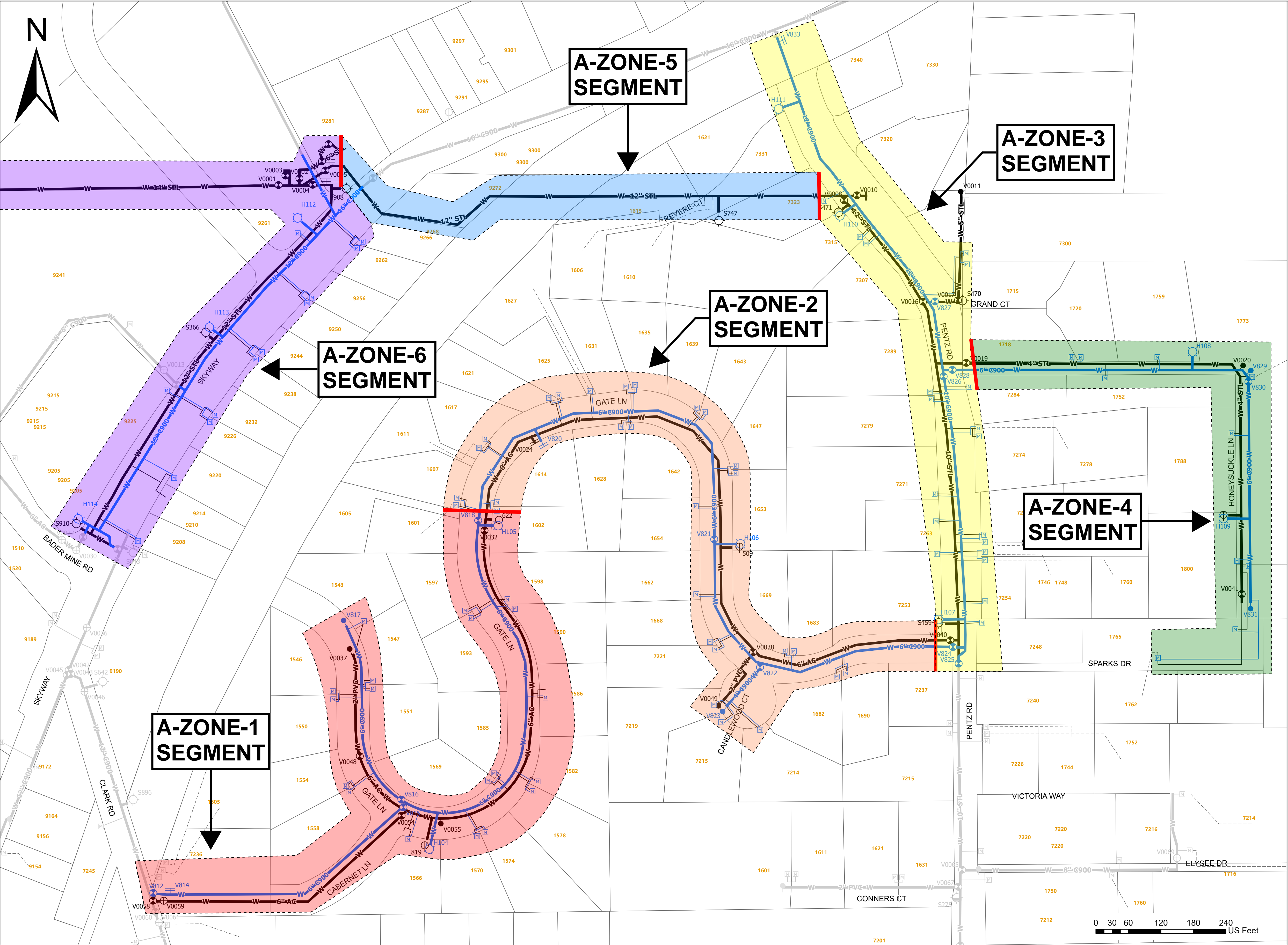
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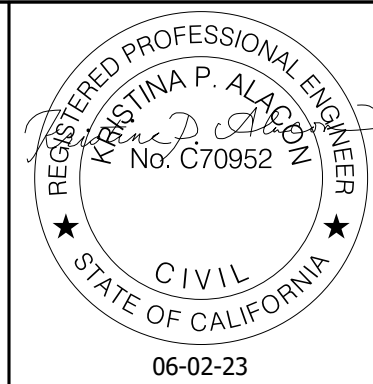
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## NOTES

1. THIS SHEET IS INTENDED TO PROVIDE AN OVERVIEW OF THE A-ZONE SEGMENTS AND HOW THE DIFFERENT SEGMENTS ARE CONNECTED. SHEETS C-9 THROUGH C-14 ARE TO BE REFERENCED FOR ADDITIONAL INFORMATION.
2. WORK FOR ALL A-ZONE SEGMENTS SHALL BE COMPLETED AS PRIORITY GROUP D, PER SPECIFICATION SECTION 01130.
3. WORK IN ALL A-ZONE SEGMENTS MUST BE COMPLETED PRIOR TO MOVING ON TO A DIFFERENT PRIORITY GROUP.
4. THE A-ZONE MAIN SEGMENTS SCHEDULED FOR REPLACEMENT INCLUDE REPLACING OR TIEING INTO CRITICAL TRANSMISSION MAINS. EXISTING MAINS BEING REPLACED ARE NOT TO BE PUT OUT OF SERVICE WITHOUT PRIOR APPROVAL AND COORDINATION WITH PID AND ENGINEER.
5. SEQUENCE OF WORK FOR A-ZONE SEGMENTS IS TO BE DISCUSSED AND COORDINATED WITH PID AND ENGINEER IN ADVANCE OF WORK.
6. WORK SHALL BE COMPLETED IN A MANNER THAT MINIMIZES THE NUMBER AND DURATION OF WATER OUTAGES AS WELL AS TRAFFIC IMPACTS TO THE COMMUNITY.
7. GENERAL SEQUENCE OF WORK WILL REQUIRE CONTRACTOR TO START WITH HOT TAPPING EXISTING 12" C900 MAIN ON CLARK RD AT INTERSECTION OF CABERNET LN AND BEGIN INSTALLATION OF THE WATER MAIN FROM THAT POINT. CONTRACTOR MAY UTILIZE IN-LINE ISOLATION VALVES TO PUT THE NEW WATER MAIN INTO SERVICE AT INTERMEDIATE POINTS ALONG THE MAIN SEGMENT. HOWEVER, ALL PIPE AND SERVICE LATERALS MUST BE INSPECTED AND MEET DISINFECTION, PRESSURE, AND LEAK TEST REQUIREMENTS BEFORE POTABLE WATER MAY BE DELIVERED TO CUSTOMERS.
8. CONTRACTOR MAY SUBMIT TO PID AND ENGINEER A DIFFERENT PLAN FOR SEQUENCE OF WORK FOR THEIR CONSIDERATION; HOWEVER, THIS WILL ONLY BE APPROVED AT THEIR DISCRETION.
9. WORK FOR INSTALLATION OF THE 16" TRANSMISSION MAIN ON SKYWAY WILL BE UNDERWAY AT THE TIME OF CONSTRUCTION OF THE WORK DESCRIBED HEREIN. CONTRACTOR WILL PARTICIPATE IN COORDINATION EFFORTS BETWEEN PROJECTS, FACILITATED BY THE DISTRICT AND ENGINEER, PER SPECIFICATION SECTION 01110 SUMMARY OF WORK.
10. THE A-ZONE-6 SEGMENT INCLUDES ABANDONMENT OF 1,240 LF OF 14" DIAMETER PIPE. THE FULL EXTENT OF THE PIPE TO BE ABANDONED IS NOT DISPLAYED ON THIS SHEET OR C-16. FOR ADDITIONAL INFORMATION CONTACT ENGINEER.



REVISIONS			
NO.	BY	DATE	REMARKS

DESIGNED: E. DIEGO  
DRAWN: E. MA  
CHECKED: K. ALACON  
APPROVED: S. KADER

### PARADISE IRRIGATION DISTRICT

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PHONE: (530) 877-4971

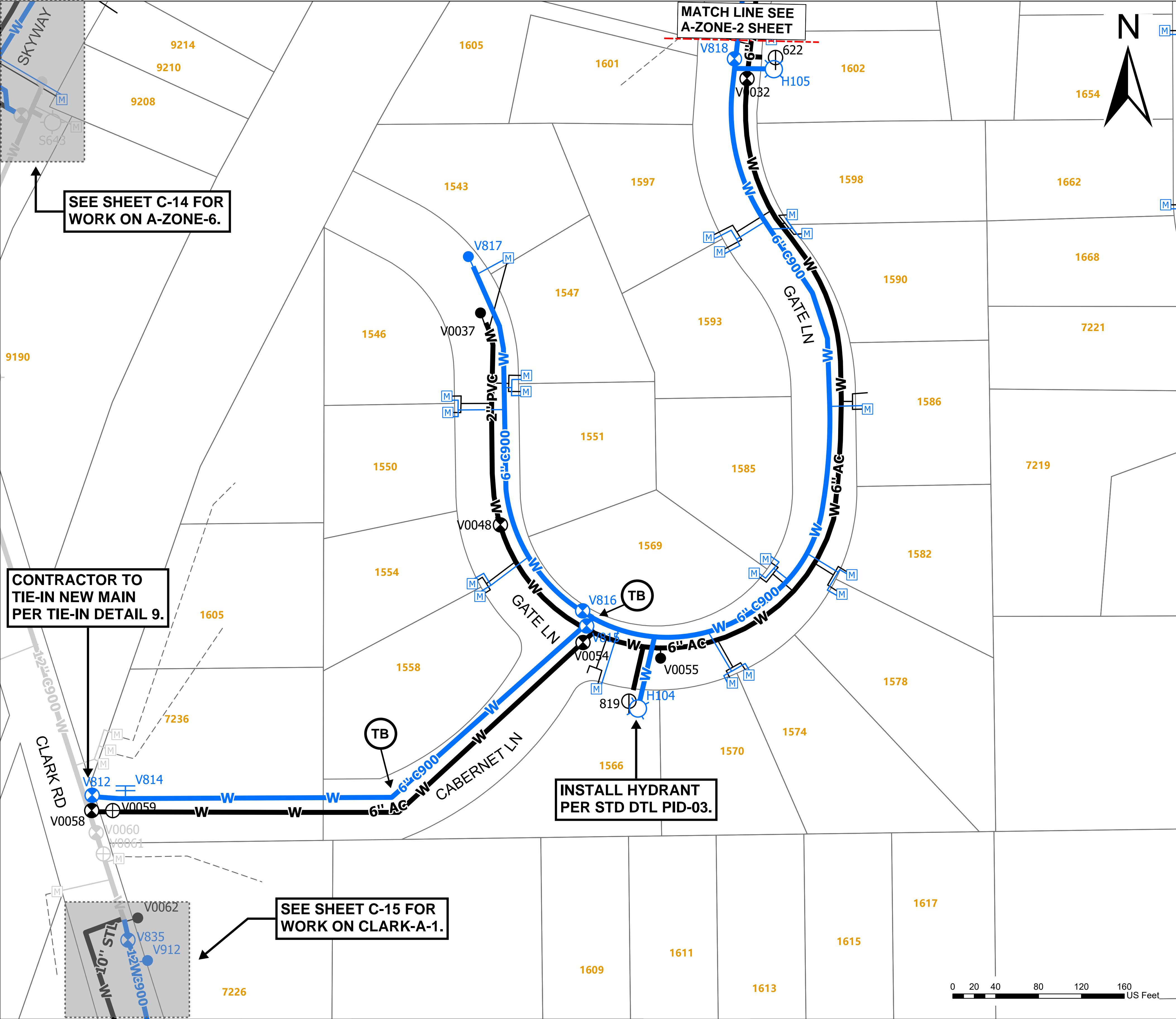
### MAINS REPLACEMENT PROJECT PHASE 1

PROJECT SEGMENT # A-Zone-Overview

DATE 4/9/2023

DWG C-8 SHEET 17 OF 56





Quantities			
Item No.	Description	Unit	Quantity
5a	Abandon Water Main <8" Diameter	LF	1,603
6b	Install 6" C900 PVC Water Main	LF	1,684
7b	Install 6" Gate Valve	EA	3
8	Install Blow Off Assembly	EA	1
9	Install Air Release and Vaccum Relief Valve Assembly	EA	1
10a	Install 1" HDPE Service Lateral	LF	100
11a	Reconnect 3/4" and 1" Service Lateral	EA	15
12a	Furnish and Install 3/4"-1" Meter Box	EA	4
13a	Furnish and Install 3/4" Meter	EA	4
15a	Install 1" Backflow Preventer	EA	4
17	Test Backflow Preventer	EA	15
18	Reconnect Customer Plumbing	LF	20
20a	Excavation and Backfill <5ft Depth	LF	1,859
21	Asphalt Restoration - General	SF	8,365
23	Unpaved Restoration - General	SF	1,394
24	Remove and Demolish Fire Hydrant	EA	2
25	Install New Fire Hydrant Assembly	EA	2
28	Excavation and Backfill - Hydrant Assemblies	LF	49
29	Asphalt Restoration for Hydrant Assemblies	SF	219
30	Concrete Restoration - Hydrant Assemblies	SF	8
31	Unpaved Restoration - Hydrant Assemblies	SF	36
32h	Construct and Install Tie-In - Clark/ Cabernet DTL 9	EA	1

Note: Detailed information related to bid items 10-17 is to be provided at time of construction.

WORK DESCRIPTION

- WORK FOR ALL A-ZONE MAIN SEGMENTS SHALL BE COMPLETED AS PRIORITY GROUP D, PER SPECIFICATION SECTION 01130. SEQUENCE OF WORK FOR ALL A-ZONE SEGMENTS SHALL BE COORDINATED WITH PID AND ENGINEER.
- NEW 6-INCH C900 MAIN SHALL BE INSTALLED A MINIMUM OF 3 FEET AND MAXIMUM OF 5 FEET FROM EXISTING MAIN TOWARDS CENTERLINE OF ROAD.
- INSTALL HYDRANTS PER HYDRANT SCHEDULE, SPECIFICATION SECTION 15200 HS.
- INSTALL COMBINATION AIR RELEASE VALVES AS SHOWN, PER PID-10 STD DETAIL.
- INSTALL OR RECONNECT SERVICES AS SUMMARIZED IN QUANTITIES TABLE.
- CONTRACTOR TO CONNECT TO EXISTING MAIN PER TIE-IN DETAIL 9.
- INSTALL THRUST BLOCKS AS SHOWN HEREIN, ON DETAIL 8, AND PER PID STANDARD DETAIL PID-02.
- ABANDON EXISTING 2" PVC AND 6"AC MAINS, PER SPECIFCATION SECTION 02220.
- SURFACE RESTORATION WILL CONSIST OF ASPHALT AND GRAVEL RESTORATION AND MAY ALSO INCLUDE RESTORATION OF CONCRETE DRIVEWAYS AND LANDSCAPED AREAS. SEE NOTES BELOW FOR MORE DETAIL ON RESTORATION.

NOTES

- GATE LN, CABERNET LN, AND CLARK RD ARE OWNED AND MAINTAINED BY THE TOP. CONTRACTOR SHALL REFER TO TOP STANDARD DETAIL TB2 FOR LIMITS OF ASPHALT RESTORATION.
- THE EXISTING MAIN ON GATE LN IS IN SOME AREAS LOCATED IN THE SHOULDER. CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING SHOULDER AND DRAINAGE DITCH.
- CONTRACTOR SHALL SUBMIT TO TOP SCHEDULE FOR TRAFFIC CONTROL FOR CLARK RD, GATE LN, AND CABERNET LN IN ADVANCE.
- CONTRACTOR SHALL RESTORE CURBS AND SIDEWALKS PER BUTTE COUNTY STANDARD DETAILS S-1 AND S-2.
- CONTRACTOR SHALL COORDINATE ABANDONMENT OF EXISTING MAINS WITH PID AND ENGINEER IN ADVANCE.

REGISTERED PROFESSIONAL ENGINEER  
KRISTINA P. ALACON  
No. C70952  
CIVIL  
STATE OF CALIFORNIA  
06-02-23

REVISIONS			
NO.	BY	DATE	REMARKS

DESIGNED: E. DIEGO  
DRAWN: E. MA  
CHECKED: K. ALACON  
APPROVED: S. KADER

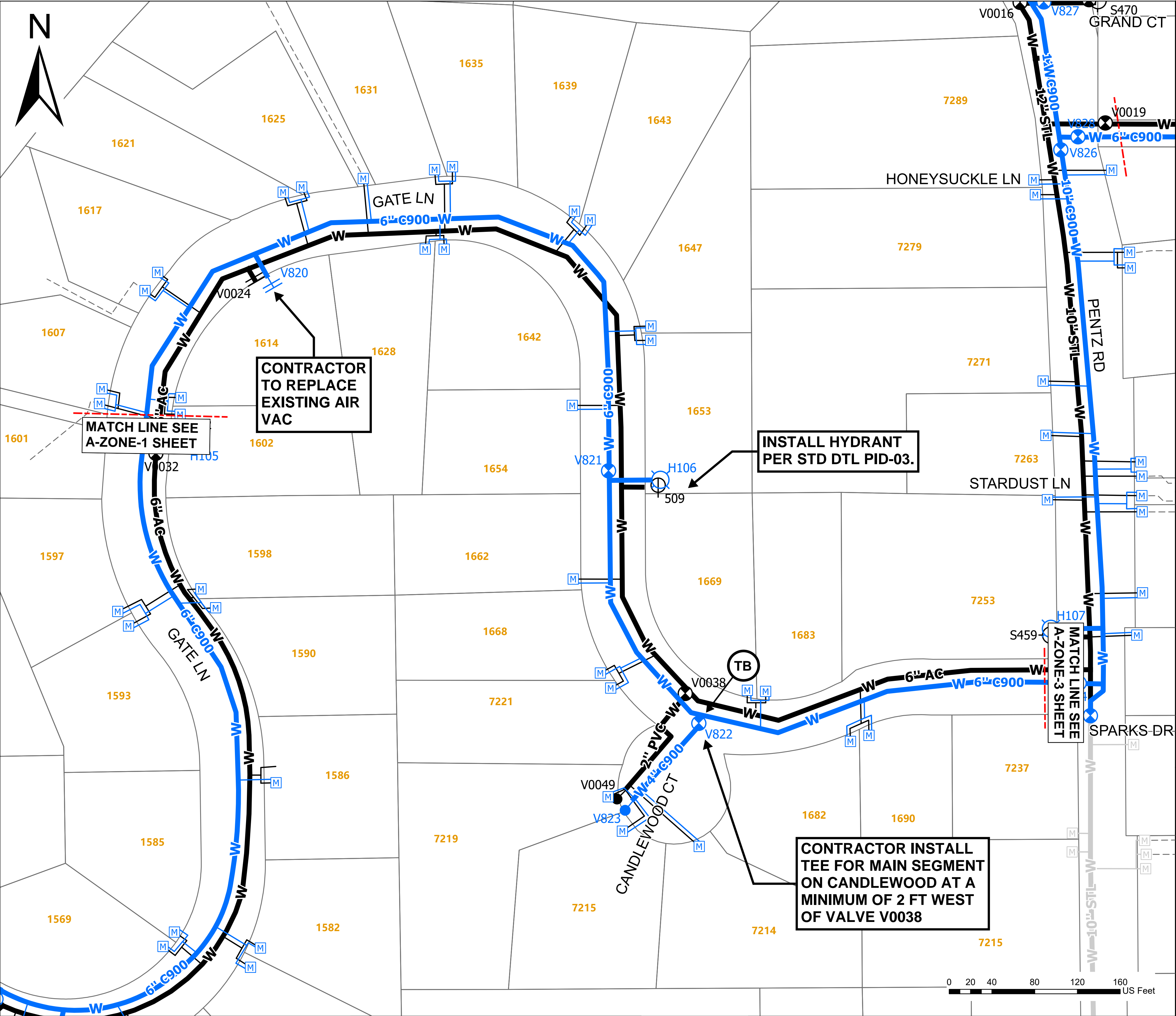
PARADISE IRRIGATION DISTRICT

6332 CLARK ROAD, PARADISE, CA 95969  
PHONE: (530) 877-4971

MAINS REPLACEMENT PROJECT PHASE 1  
PROJECT SEGMENT # A-ZONE-1

DATE 4/9/2023  
DWG C-9 SHEET 18 OF 56





Quantities			
Item No.	Description	Unit	Quantity
5a	Abandon Water Main <8" Diameter	LF	1,451
6a	Install 4" C900 PVC Water Main	LF	87
6b	Install 6" C900 PVC Water Main	LF	1,411
7a	Install 4" Gate Valve	EA	1
7b	Install 6" Gate Valve	EA	1
8	Install Blow Off Assembly	EA	1
9	Install Air Release and Vaccum Relief Valve Assembly	EA	1
10a	Install 1" HDPE Service Lateral	LF	225
11a	Reconnect 3/4" and 1" Service Lateral	EA	19
12a	Furnish and Install 3/4"-1" Meter Box	EA	9
13a	Furnish and Install 3/4" Meter	EA	8
14a	Reset 3/4"-1" Meter and Meter Box	EA	1
15a	Install 1" Backflow Preventer	EA	8
16a	Reconfigure 1" Backflow Preventer	EA	1
17	Test Backflow Preventer	EA	18
18	Reconnect Customer Plumbing	LF	40
20a	Excavation and Backfill <5ft Depth	LF	1,818
21	Asphalt Restoration - General	SF	8,181
23	Unpaved Restoration - General	SF	1,364
24	Remove and Demolish Fire Hydrant	EA	1
25	Install New Fire Hydrant Assembly	EA	1
28	Excavation and Backfill - Hydrant Assemblies	LF	22
29	Asphalt Restoration for Hydrant Assemblies	SF	98
30	Concrete Restoration - Hydrant Assemblies	SF	8
31	Unpaved Restoration - Hydrant Assemblies	SF	16
Note: Detailed information related to bid items 10-17 is to be provided at time of construction.			

WORK DESCRIPTION

- 1. WORK FOR ALL A-ZONE MAIN SEGMENTS SHALL BE COMPLETED AS PRIORITY GROUP D, PER SPECIFICATION SECTION 01130. SEQUENCE OF WORK FOR ALL A-ZONE SEGMENTS SHALL BE COORDINATED WITH PID AND ENGINEER.
- 2. NEW 6-INCH AND 4" C900 MAINS SHALL BE INSTALLED A MINIMUM OF 3 FEET AND MAXIMUM OF 5 FEET FROM EXISTING MAIN TOWARDS CENTERLINE OF ROAD.
- 3. INSTALL HYDRANT PER HYDRANT SCHEDULE, SPECIFICATION SECTION 15200 HS.
- 4. INSTALL COMBINATION AIR RELEASE VALVES AS SHOWN, PER PID-10 STD DETAIL.
- 5. INSTALL BLOW OFF ASSEMBLIES AS SHOWN, PER PID-01 STD DETAIL.
- 6. INSTALL OR RECONNECT SERVICES AS SUMMARIZED IN QUANTITIES TABLE.
- 7. INSTALL THRUST BLOCKS AS SHOWN HEREIN AND PER PID STANDARD DTL PID-02.
- 8. ABANDON EXISTING 2" PVC AND 6"AC MAINS, PER SPECIFCATION SECTION 02220.
- 9. SURFACE RESTORATION WILL CONSIST OF ASPHALT AND GRAVEL RESTORATION AND MAY ALSO INCLUDE RESTORATION OF CONCRETE DRIVEWAYS AND LANDSCAPED AREAS. SEE NOTES BELOW FOR MORE DETAIL ON RESTORATION.

NOTES

- 1. GATE LN, CANDLEWOOD CT, AND PENTZ ARE OWNED AND MAINTAINED BY THE TOP. CONTRACTOR SHALL REFER TO TOP STANDARD DETAIL TB2 FOR LIMITS OF ASPHALT RESTORATION.
- 2. THE EXISTING MAIN ON GATE LN IS IN SOME AREAS LOCATED IN THE SHOULDER. CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING SHOULDER AND DRAINAGE DITCH.
- 3. CONTRACTOR SHALL SUBMIT TO TOP SCHEDULE FOR TRAFFIC CONTROL IN ADVANCE OF WORK.
- 4. CONTRACTOR SHALL RESTORE CURBS AND SIDEWALKS PER BUTTE COUNTY STANDARD DETAILS S-1 AND S-2.
- 5. CONTRACTOR SHALL COORDINATE ABANDONMENT OF EXISTING MAINS WITH PID AND ENGINEER IN ADVANCE.

REGISTERED PROFESSIONAL ENGINEER  
KRISTINA P. ALACON  
No. C70952  
CIVIL  
STATE OF CALIFORNIA  
06-02-23

REVISIONS			
NO.	BY	DATE	REMARKS

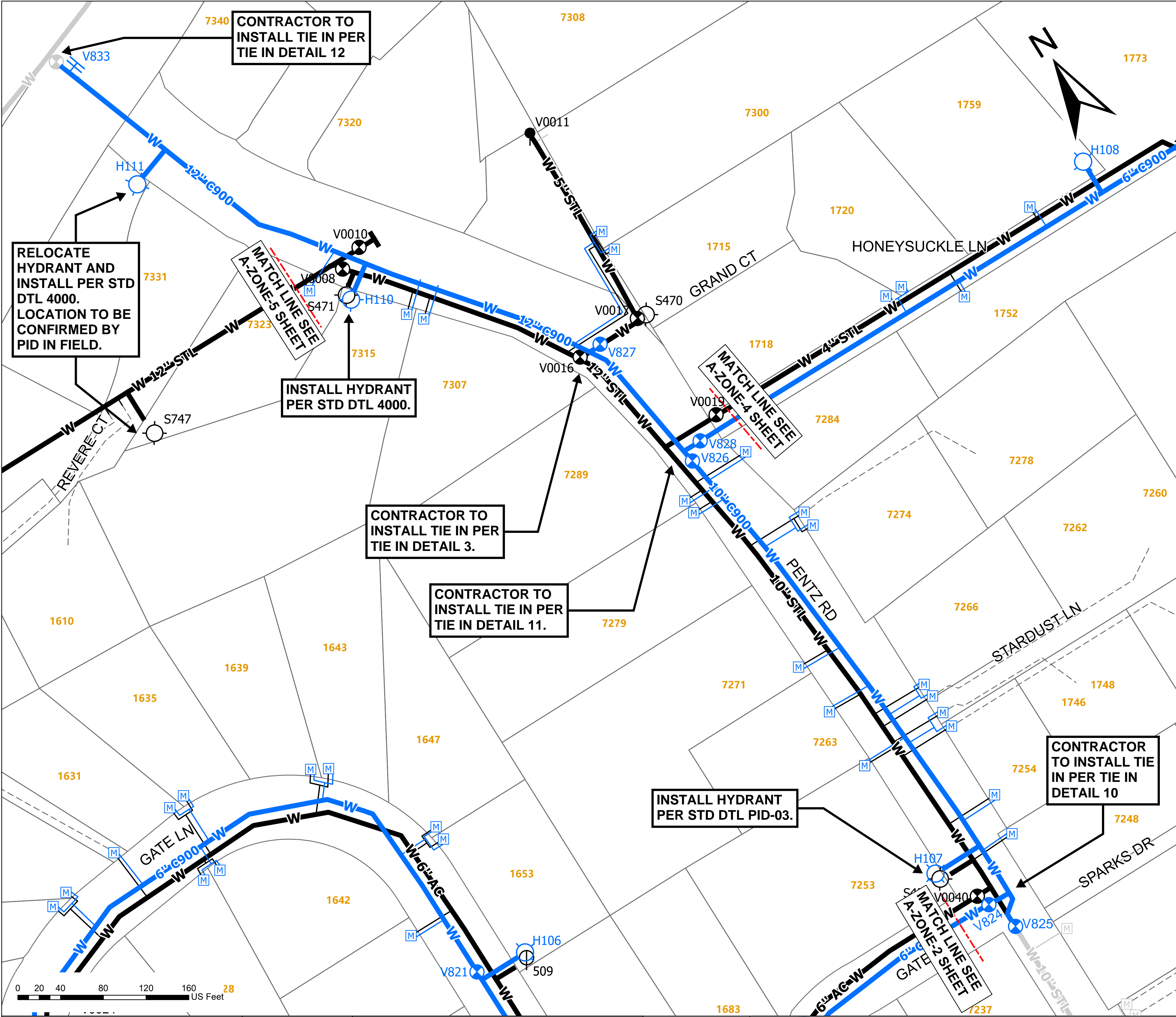
DESIGNED: E. DIEGO  
DRAWN: E. MA  
CHECKED: K. ALACON  
APPROVED: S. KADER

PARADISE IRRIGATION DISTRICT  
6332 CLARK ROAD, PARADISE, CA 95969  
PHONE: (530) 877-4971

DATE 4/9/2023  
DWG C-10 SHEET 19 OF 56

MAINS REPLACEMENT PROJECT PHASE 1  
PROJECT SEGMENT # A-ZONE-2





Quantities			
Item No.	Description	Unit	Quantity
5a	Abandon Water Main <8" Diameter	LF	304
5c	Abandon 10" Water Main	LF	534
5d	Abandon 12" Water Main	LF	432
6b	Install 6" C900 PVC Water Main	LF	129
6d	Install 10" C900 PVC Water Main	LF	528
6e	Install 12" C900 PVC Water Main	LF	704
9	Install Air Release and Vacuum Relief Valve Assembly	EA	1
10a	Install 1" HDPE Service Lateral	LF	200
11a	Reconnect 3/4" and 1" Service Lateral	EA	11
12a	Furnish and Install 3/4"-1" Meter Box	EA	8
13a	Furnish and Install 3/4" Meter	EA	6
13b	Furnish and Install 1" Meter	EA	1
14a	Reset 3/4"-1" Meter and Meter Box	EA	1
15a	Install 1" Backflow Preventer	EA	7
16a	Reconfigure 1" Backflow Preventer	EA	1
17	Test Backflow Preventer	EA	14
18	Reconnect Customer Plumbing	LF	35
20a	Excavation and Backfill <5ft Depth	LF	1,616
21	Asphalt Restoration - General	SF	7,274
23	Unpaved Restoration - General	SF	1,212
24	Remove and Demolish Fire Hydrant	EA	3
25	Install New Fire Hydrant Assembly	EA	1
26	Install Hydrant Assembly with Salvaged Hydrant Head	EA	2
28	Excavation and Backfill - Hydrant Assemblies	LF	57
29	Asphalt Restoration for Hydrant Assemblies	SF	255
30	Concrete Restoration - Hydrant Assemblies	SF	8
31	Unpaved Restoration - Hydrant Assemblies	SF	42
32i	Construct and Install Tie-In - Gate/ Pentz DTL 10	EA	1
32j	Construct and Install Tie-In - Honeysuckle DTL 11	EA	1
32k	Construct and Install Tie-In - Pentz/Grand DTL 3	EA	1
32l	Construct and Install Tie-In - Pentz/ ZATM DTL 12	EA	1
Note: Detailed information related to bid items 10-17 is to be provided at time of construction.			

WORK DESCRIPTION

1. WORK FOR ALL A-ZONE MAIN SEGMENTS SHALL BE COMPLETED AS PRIORITY GROUP D, PER SPECIFICATION SECTION 01130. SEQUENCE OF WORK FOR ALL A-ZONE SEGMENTS SHALL BE COORDINATED WITH PID AND ENGINEER.
2. NEW 10" MAIN SHALL BE INSTALLED IN SOUTHBOUND LANE OF PENTZ RD.
3. INSTALL HYDRANTS PER HYDRANT SCHEDULE, SPECIFICATION SECTION 15200 HS. HYDRANT HEAD ON REVERE CT IS TO BE SALVAGED AND RELOCATED.
4. INSTALL COMBINATION AIR RELEASE VALVES AS SHOWN, PER PID-10 STD DETAIL.
5. INSTALL OR RECONNECT SERVICES AS SUMMARIZED IN QUANTITIES TABLE.
6. INSTALL THRUST BLOCKS AS SHOWN ON TIE-IN DETAILS AND PER PID STANDARD DTL PID-02.
7. ABANDON EXISTING 10" AND 12" STEEL MAINS, PER SPECIFCATION SECTION 02220.
8. SURFACE RESTORATION WILL CONSIST OF ASPHALT AND GRAVEL RESTORATION AND MAY ALSO INCLUDE RESTORATION OF CONCRETE DRIVEWAYS AND LANDSCAPED AREAS. SEE NOTES BELOW FOR MORE DETAIL ON RESTORATION.

NOTES

1. GATE LN, CANDLEWOOD CT, AND PENTZ RD ARE OWNED AND MAINTAINED BY THE TOP. CONTRACTOR SHALL REFER TO TOP STANDARD DETAIL TB2 FOR LIMITS OF ASPHALT RESTORATION.
2. THE EXISTING MAIN IS IN SOME AREAS LOCATED IN THE SHOULDER. CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING SHOULDER AND DRAINAGE DITCH.
3. CONTRACTOR SHALL SUBMIT TO TOP SCHEDULE FOR TRAFFIC CONTROL IN ADVANCE OF WORK.
4. CONTRACTOR SHALL RESTORE CURBS AND SIDEWALKS PER BUTTE COUNTY STANDARD DETAILS S-1 AND S-2.
5. CONTRACTOR SHALL COORDINATE ABANDONMENT OF EXISTING MAINS WITH PID AND ENGINEER IN ADVANCE.



**WATERWORKS**  
ENGINEERS



06-02-23

REVISIONS			
NO.	BY	DATE	REMARKS

DESIGNED: E. DIEGO  
DRAWN: E. MA  
CHECKED: K. ALACON  
APPROVED: S. KADER

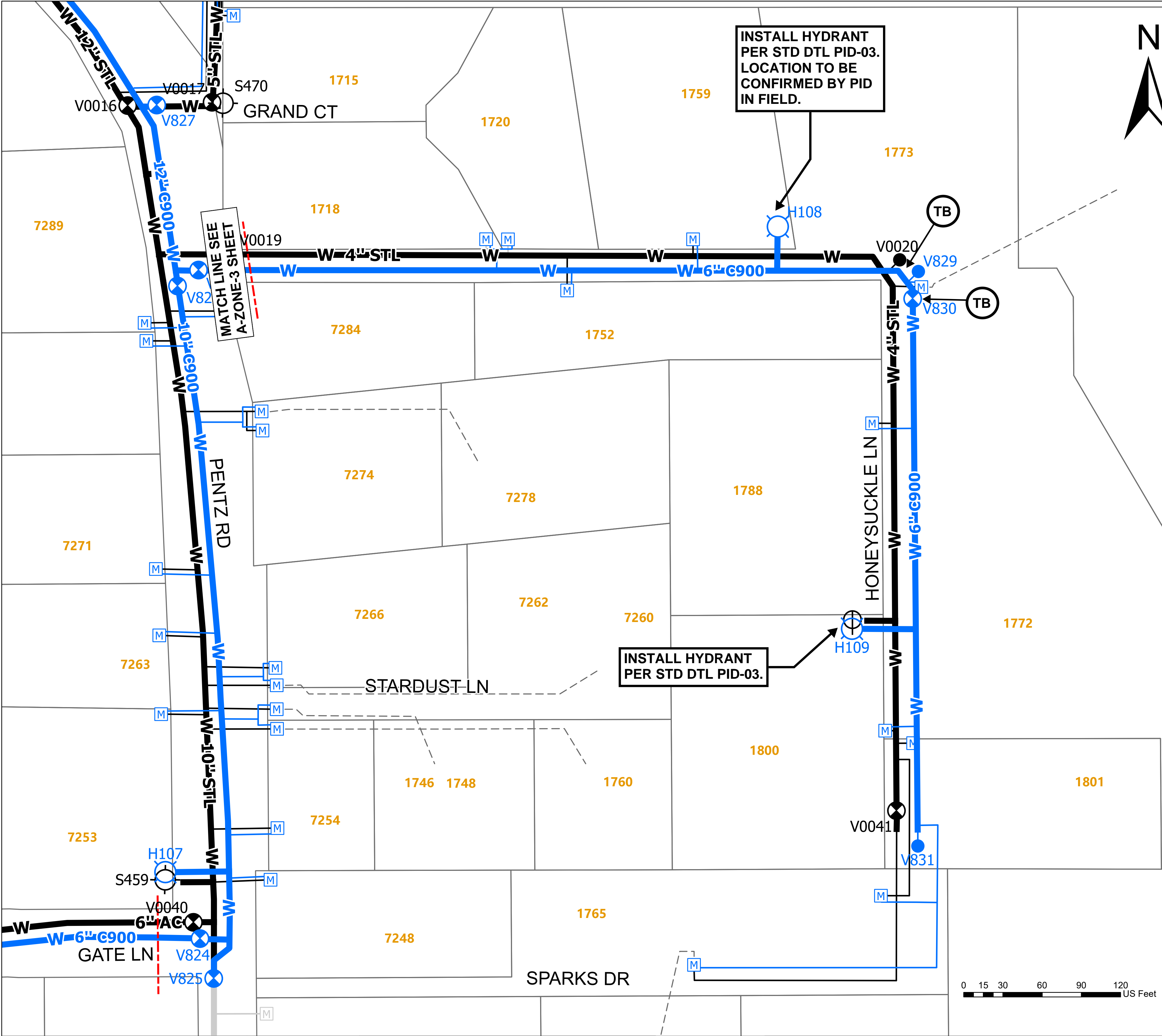


**PARADISE IRRIGATION DISTRICT**  
6332 CLARK ROAD, PARADISE, CA 95969  
PHONE: (530) 877-4971

**MAINS REPLACEMENT PROJECT PHASE 1**  
PROJECT SEGMENT # A-ZONE-3

DATE 4/9/2023  
DWG C-11 SHEET 20 OF 56





Quantities			
Item No.	Description	Unit	Quantity
5a	Abandon Water Main <8" Diameter	LF	975
6b	Install 6" C900 PVC Water Main	LF	1,019
7b	Install 6" Gate Valve	EA	1
8	Install Blow Off Assembly	EA	2
10a	Install 1" HDPE Service Lateral	LF	175
11a	Reconnect 3/4" and 1" Service Lateral	EA	2
11c	Reconnect 2" Service Lateral	EA	1
12a	Furnish and Install 3/4"-1" Meter Box	EA	7
13a	Furnish and Install 3/4" Meter	EA	7
15a	Install 1" Backflow Preventer	EA	6
17	Test Backflow Preventer	EA	8
18	Reconnect Customer Plumbing	LF	35
20a	Excavation and Backfill <5ft Depth	LF	1,209
21	Asphalt Restoration - General	SF	5,438
23	Unpaved Restoration - General	SF	906
24	Remove and Demolish Fire Hydrant	EA	1
25	Install New Fire Hydrant Assembly	EA	2
28	Excavation and Backfill - Hydrant Assemblies	LF	35
29	Asphalt Restoration for Hydrant Assemblies	SF	158
30	Concrete Restoration - Hydrant Assemblies	SF	8
31	Unpaved Restoration - Hydrant Assemblies	SF	26

Note: Detailed information related to bid items 10-17 is to be provided at time of construction.

WORK DESCRIPTION

- 1. WORK FOR ALL A-ZONE MAIN SEGMENTS SHALL BE COMPLETED AS PRIORITY GROUP D, PER SPECIFICATION SECTION 01130. SEQUENCE OF WORK FOR ALL A-ZONE SEGMENTS SHALL BE COORDINATED WITH PID AND ENGINEER.
- 2. NEW 6-INCH MAIN SHALL BE INSTALLED A MINIMUM OF 3 FEET AND MAXIMUM OF 5 FEET FROM EXISTING MAIN TOWARDS CENTERLINE OF ROAD.
- 3. INSTALL HYDRANTS PER HYDRANT SCHEDULE, SPECIFICATION SECTION 15200 HS.
- 4. INSTALL BLOW OFF VALVES SHOWN, PER STANDARD DETAILS 5000 AND PID-01.
- 5. INSTALL OR RECONNECT SERVICES AS SUMMARIZED IN QUANTITIES TABLE.
- 6. INSTALL THRUST BLOCKS AS SHOWN HEREIN, ON TIE-IN DETAIL 11, AND PER PID STANDARD DTL PID-02.
- 7. ABANDON EXISTING 4" MAIN, PER SPECIFCATION SECTION 02220.
- 8. SURFACE RESTORATION WILL CONSIST OF ASPHALT AND GRAVEL RESTORATION AND MAY ALSO INCLUDE RESTORATION OF CONCRETE DRIVEWAYS AND LANDSCAPED AREAS.

NOTES

- 1. HONEYCUKLE LN IS PRIVATELY OWNED; HOWEVER, CONTRACTOR SHALL AT A MINIMUM FOLLOW TOP STANDARD DETAILS TB1 AND TB2 FOR TRENCH BACKFILL AND LIMITS OF ASPHALT RESTORATION.
- 2. PENTZ RD IS OWNED BY TOP. CONTRACTOR SHALL REFER TO TOP STANDARD DETAIL TB2 FOR LIMITS OF ASPHALT RESTORATION ON PENTZ RD.
- 3. CONTRACTOR SHALL SUBMIT TO TOP SCHEDULE FOR TRAFFIC CONTROL ON PENTZ RD IN ADVANCE OF WORK.
- 4. CONTRACTOR SHALL COORDINATE ABANDONMENT OF EXISTING MAINS WITH PID AND ENGINEER IN ADVANCE.

WATERWORKS  
ENGINEERS

REGISTERED PROFESSIONAL ENGINEER  
KRISTINA P. ALACON  
No. C70952  
CIVIL  
STATE OF CALIFORNIA  
06-02-23

REVISIONS			
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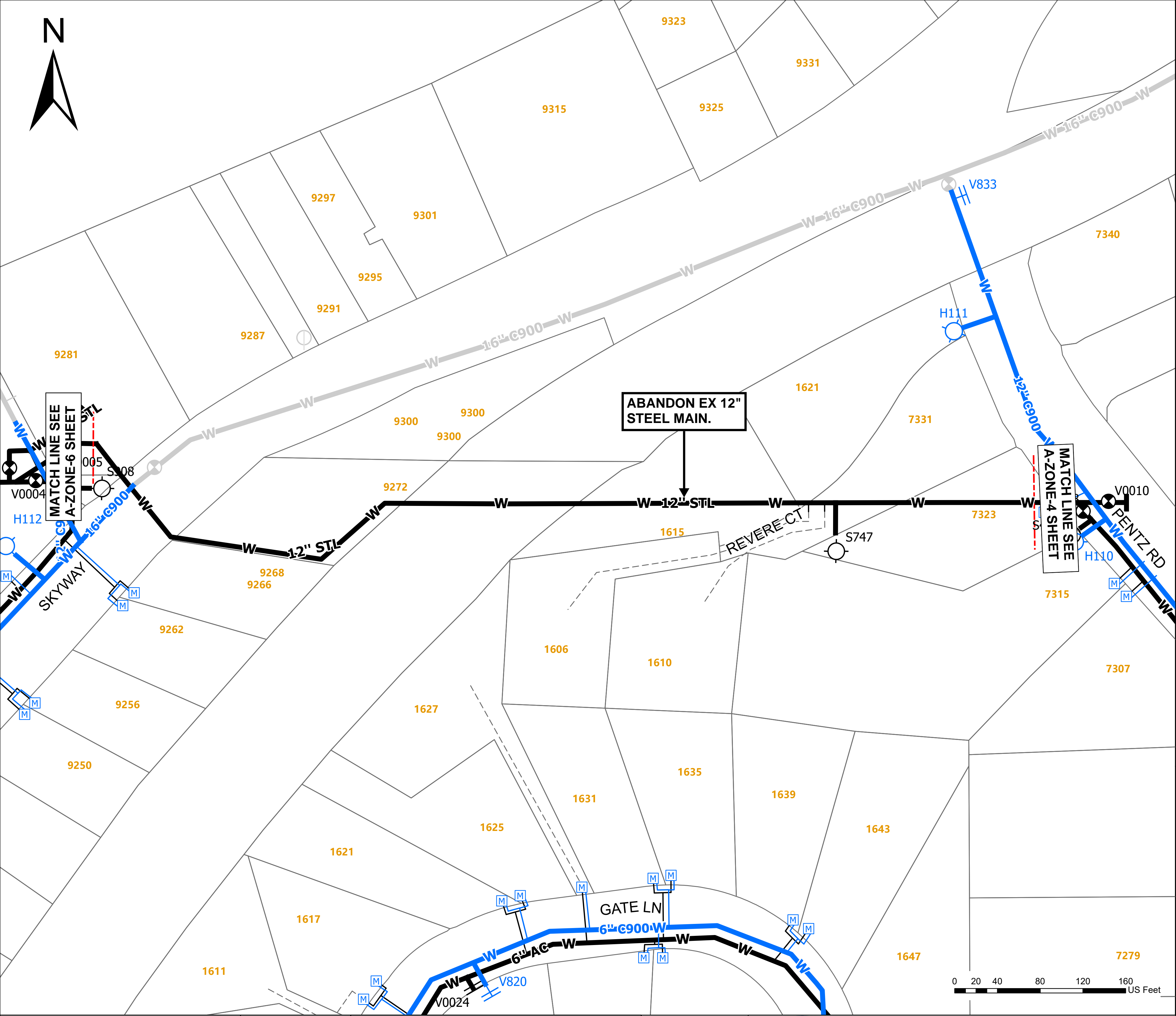
DESIGNED: E. DIEGO  
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APPROVED: S. KADER

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6332 CLARK ROAD, PARADISE, CA 95969  
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MAINS REPLACEMENT PROJECT PHASE 1  
PROJECT SEGMENT # A-ZONE-4

DATE 4/9/2023  
DWG C-12 SHEET 21 OF 56





Quantities			
Item No.	Description	Unit	Quantity
5a	Abandon Water Main <8" Diameter	LF	28
5d	Abandon 12" Water Main	LF	1,007

WORK DESCRIPTION

- 1. WORK FOR ALL A-ZONE MAIN SEGMENTS SHALL BE COMPLETED AS PRIORITY GROUP D, PER SPECIFICATION SECTION 01130. SEQUENCE OF WORK FOR ALL A-ZONE SEGMENTS SHALL BE COORDINATED WITH PID AND ENGINEER.
- 2. HYDRANT HEAD S747 TO BE SALVAGED AND RELOCATED, REFER TO SHEET C-11 AND HYDRANT SCHEDULE SPECIFICATION SECTION 15200 HS.
- 3. ABANDON EXISTING 12" MAIN FROM PENTZ RD TO SKYWAY, PER SPECIFCATION SECTION 02220.
- 4. SURFACE RESTORATION WILL CONSIST OF UNPAVED SURFACE RESTORATION AND MAY ALSO INCLUDE ASPHALT, GRAVEL, AND LANDSCAPE RESTORATION.

NOTES

- 1. THE EXISTING 12" MAIN IN SOME AREAS IS LOCATED ON RESIDENTIAL PROPERTIES, WHERE EXCAVATION IS REQUIRED OR SURFACE IS DISTURBED CONTRACTOR SHALL AT A MINIMUM FOLLOW TOP STANDARD DETAILS TB1 AND TB2.
- 2. THE EXISTING 12" MAIN ALSO CROSSES A TRAILWAY OWNED BY THE TOP. CONTRACTOR SHALL COORDINATE WITH TOP AND PID IN ADVANCE OF ALL WORK OR STAGING OF EQUIPMENT ON THE TRAILWAY.
- 3. PENTZ RD AND SKYWAY ARE OWNED BY THE TOP. CONTRACTOR SHALL REFER TO TOP STANDARD DETAIL TB2 FOR LIMITS OF ASPHALT RESTORATION.
- 4. CONTRACTOR SHALL SUBMIT TO TOP SCHEDULE FOR TRAFFIC CONTROL.
- 5. CONTRACTOR SHALL RESTORE CURBS AND SIDEWALKS PER BUTTE COUNTY STANDARD DETAILS S-1 AND S-2.



**WATERWORKS**  
ENGINEERS



06-02-23

REVISIONS			
NO.	BY	DATE	REMARKS

DESIGNED: E. DIEGO

DRAWN: E. MA

CHECKED: K. ALACON

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PARADISE IRRIGATION DISTRICT

6332 CLARK ROAD, PARADISE, CA 95969

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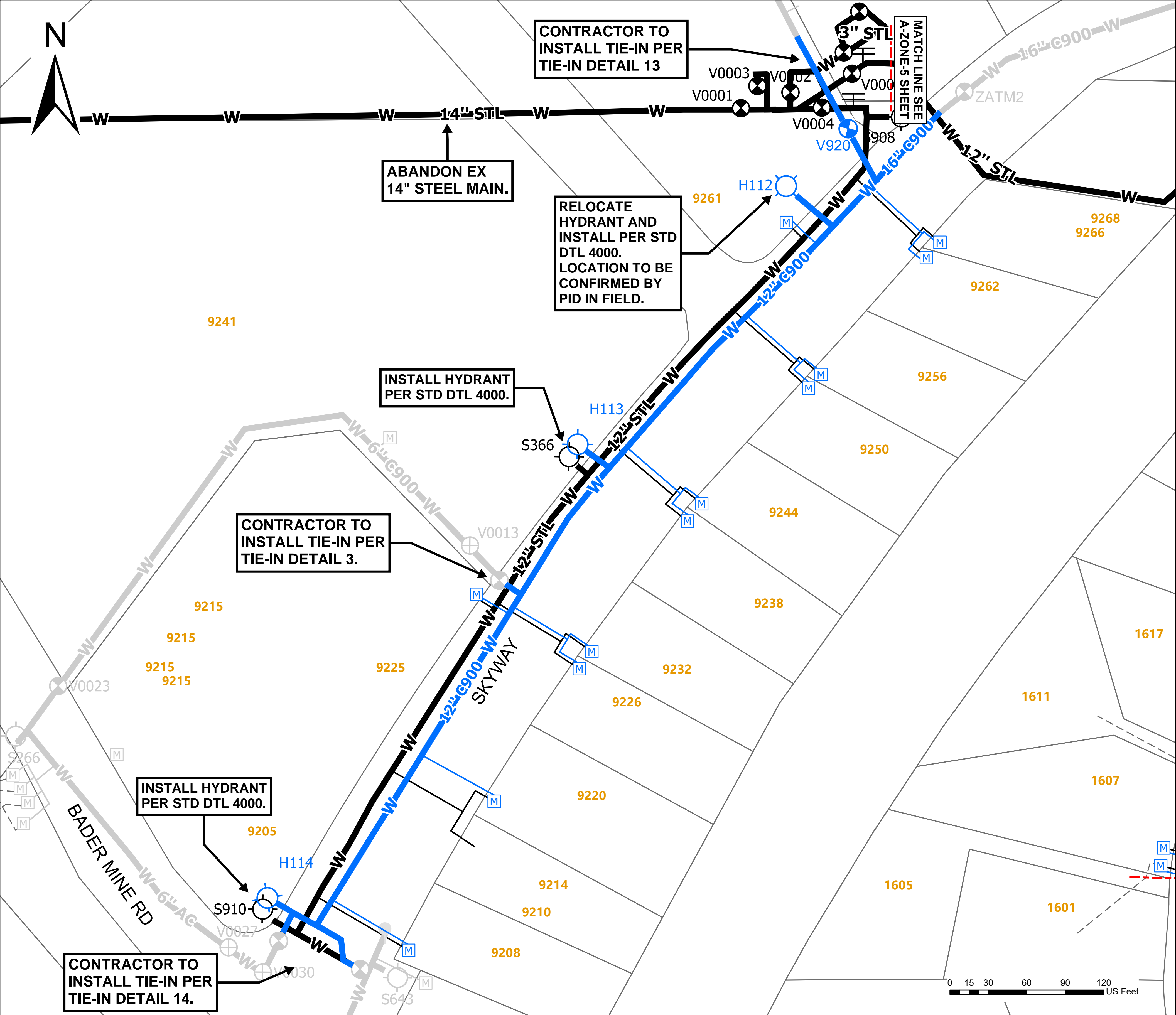
MAINS REPLACEMENT PROJECT PHASE 1

PROJECT SEGMENT # A-ZONE-5

DATE 4/9/2023

DWG C-13 SHEET 22 OF 56





Quantities			
Item No.	Description	Unit	Quantity
5a	Abandon Water Main <8" Diameter	LF	253
5d	Abandon 12" Water Main	LF	1,021
5e	Abandon 14" Water Main	LF	1,237
6b	Install 6" C900 PVC Water Main	LF	48
6e	Install 12" C900 PVC Water Main	LF	967
6f	Install 16" C900 PVC Water Main	LF	71
10a	Install 1" HDPE Service Lateral	LF	225
11a	Reconnect 3/4" and 1" Service Lateral	EA	3
12a	Furnish and Install 3/4"-1" Meter Box	EA	9
13a	Furnish and Install 3/4" Meter	EA	9
15a	Install 1" Backflow Preventer	EA	9
17	Test Backflow Preventer	EA	9
18	Reconnect Customer Plumbing	LF	45
20a	Excavation and Backfill <5ft Depth	LF	1,327
21	Asphalt Restoration - General	SF	5,970
23	Unpaved Restoration - General	SF	995
24	Remove and Demolish Fire Hydrant	EA	3
25	Install New Fire Hydrant Assembly	EA	1
26	Install Hydrant Assembly with Salvaged Hydrant Head	EA	2
28	Excavation and Backfill - Hydrant Assemblies	LF	40
29	Asphalt Restoration for Hydrant Assemblies	SF	181
30	Concrete Restoration - Hydrant Assemblies	SF	8
31	Unpaved Restoration - Hydrant Assemblies	SF	30
32m	Construct and Install Tie-In - Skyway/ A-Tank DTL 13	EA	1
32n	Construct and Intsall Tie-In - Skyway/ Bader Mine North DTL 3	EA	1
32o	Construct and Install Tie-In - Skyway/ Bader Mine South DTL 14	EA	1

Note: Detailed information related to bid items 10-17 is to be provided at time of construction.

- ### WORK DESCRIPTION
- WORK FOR ALL A-ZONE MAIN SEGMENTS SHALL BE COMPLETED AS PRIORITY GROUP D, PER SPECIFICATION SECTION 01130. SEQUENCE OF WORK FOR ALL A-ZONE SEGMENTS SHALL BE COORDINATED WITH PID AND ENGINEER.
  - NEW 12" MAIN SHALL BE INSTALLED IN A MINIMUM OF 3 FEET AND MAXIMUM OF 5 FEET FROM EXISTING TOWARDS CENTERLINE OF ROAD ON SKYWAY.
  - INSTALL HYDRANTS PER HYDRANT SCHEDULE, SPECIFICATION SECTION 15200 HS.
  - INSTALL OR RECONNECT SERVICES AS SUMMARIZED IN QUANTITIES TABLE.
  - INSTALL THRUST BLOCKS AS SHOWN ON TIE-IN DETAILS AND PER STANDARD DTL PID-02.
  - ABANDON EXISTING 12" AND 14" MAINS, PER SPECIFCATION SECTION 02220.
  - SURFACE RESTORATION WILL CONSIST OF ASPHALT AND WILL ALSO INCLUDE RESTORATION OF CONCRETE SIDEWALKS, GRAVEL AREAS, AND LANDSCAPED AREAS. SEE NOTES BELOW FOR MORE DETAIL ON SURFACE RESTORATION.

- ### NOTES
- CONTRACTOR SHALL COORDINATE ABANDONMENT OF EXISTING MAINS AND TIE-INS WITH PID AND ENGINEER IN ADVANCE OF WORK.
  - WORK FOR TIE-IN DETAIL 13 WILL IMPACT A PID WATER STORAGE TANK AND WORK TAKING PLACE BY OTHER PID CONTRACTORS. CONTRACTOR SHALL COORDINATE WITH PID, ENGINEER, AND OTHERS, PER SPECIFICATION 01110 SUMMARY OF WORK.
  - THE EXISTING 12" MAIN ALONG SKYWAY IS LOCATED ON THE SOUTHBOUND SHOULDER AND IN CONCRETE SIDEWALKS IN SOME AREAS. CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING SHOULDER AND SIDEWALKS.
  - CONTRACTOR SHALL SUBMIT TO TOP SCHEDULE FOR TRAFFIC CONTROL ON SKYWAY IN ADVANCE OF WORK.
  - CONTRACTOR SHALL RESTORE CURBS AND SIDEWALKS PER BUTTE COUNTY STANDARD DETAILS S-1 AND S-2.



**WATERWORKS**  
ENGINEERS



REGISTERED PROFESSIONAL ENGINEER  
KRISTINA P. ALACON  
No. C70952  
CIVIL  
STATE OF CALIFORNIA  
06-02-23

REVISIONS			
NO.	BY	DATE	REMARKS

DESIGNED: E. DIEGO  
DRAWN: E. MA  
CHECKED: K. ALACON  
APPROVED: S. KADER

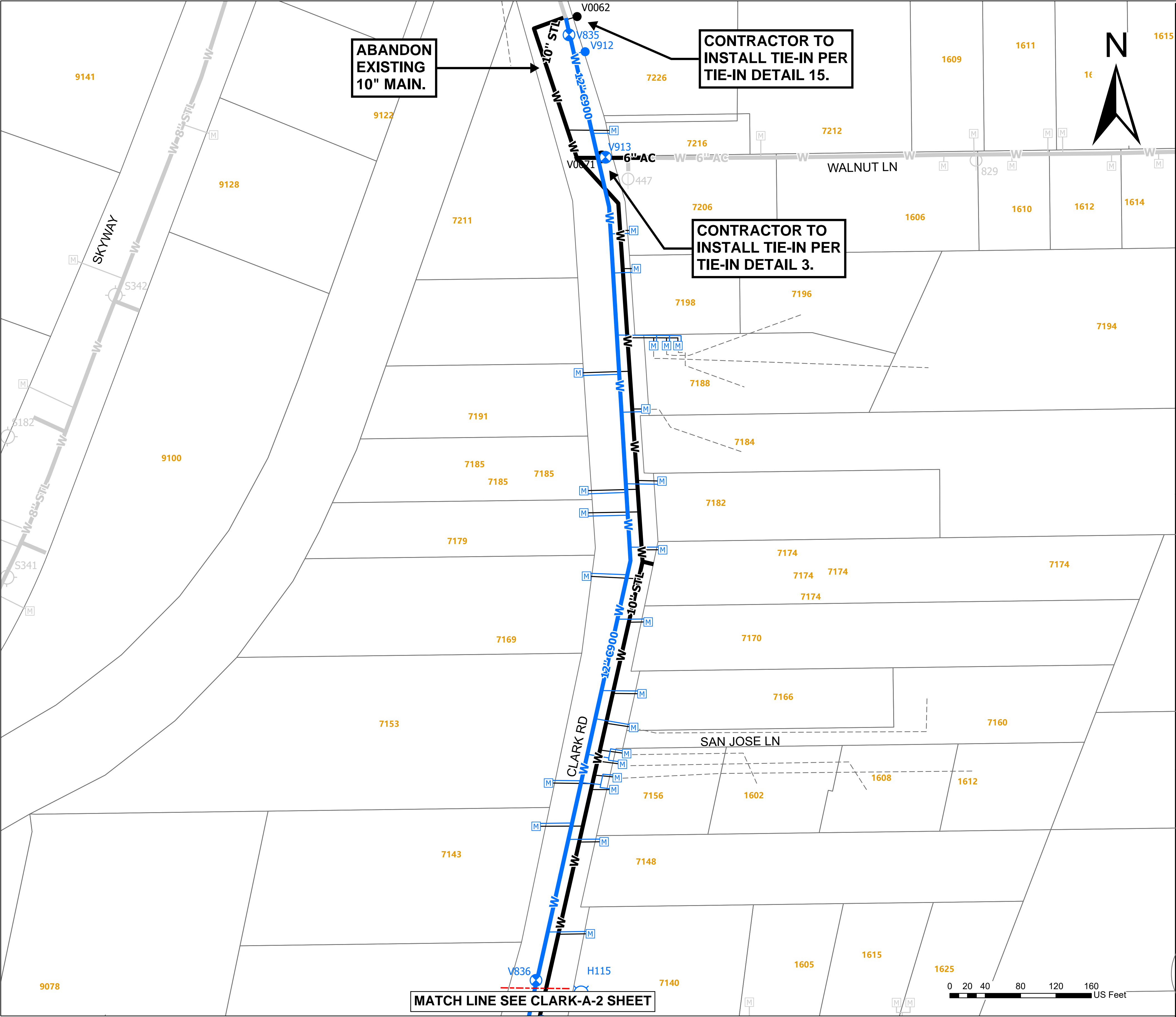


PARADISE IRRIGATION DISTRICT  
6332 CLARK ROAD, PARADISE, CA 95969  
PHONE: (530) 877-4971

**MAINS REPLACEMENT PROJECT PHASE 1**  
PROJECT SEGMENT # A-ZONE-6

DATE 4/9/2023  
DWG C-14 SHEET 23 OF 56





Quantities			
Item No.	Description	Unit	Quantity
5a	Abandon Water Main <8" Diameter	LF	85
5c	Abandon 10" Water Main	LF	1,177
6e	Install 12" C900 PVC Water Main	LF	1,102
7e	Install 12" Gate Valve	EA	1
8	Install Blow Off Assembly	EA	1
10a	Install 1" HDPE Service Lateral	LF	200
11a	Reconnect 3/4" and 1" Service Lateral	EA	16
12a	Furnish and Install 3/4"-1" Meter Box	EA	9
13a	Furnish and Install 3/4" Meter	EA	8
13b	Furnish and Install 1" Meter	EA	1
15a	Install 1" Backflow Preventer	EA	8
17	Test Backflow Preventer	EA	15
18	Reconnect Customer Plumbing	LF	45
20a	Excavation and Backfill <5ft Depth	LF	1,382
21	Asphalt Restoration - General	SF	6,217
23	Unpaved Restoration - General	SF	1,036
32p	Construct and Install Tie-In - Clark-A1 DTL 15	EA	1
32q	Construct and Install Tie-In - Clark/ Walnut DTL 3	EA	1
Note: Detailed information related to bid items 10-17 is to be provided at time of construction.			

- WORK DESCRIPTION
1.

WORK FOR BOTH CLARK-A SEGMENTS SHALL BE COMPLETED AS PRIORITY GROUP E, PER SPECIFICATION SECTION 01130. SEQUENCE OF WORK SHALL BE COORDINATED WITH PID AND ENGINEER.
2.

NEW 12-INCH C900 MAIN SHALL BE INSTALLED A MINIMUM OF 3 FEET AND MAXIMUM OF 5 FEET FROM EXISTING MAIN TOWARDS CENTERLINE OF ROAD.
3.

INSTALL BLOW OFF VALVE, PER STANDARD DETAIL 5000.
4.

INSTALL OR RECONNECT SERVICES AS SUMMARIZED IN QUANTITIES TABLE.
5.

CONTRACTOR TO CONNECT TO EXISTING MAINS PER-TIE IN DETAILS 3 AND 15.
6.

INSTALL THRUST BLOCKS AS SHOWN ON TIE-IN DETAILS AND PER STD DTL PID-02.
7.

ABANDON EXISTING 10" MAIN, PER SPECIFCATION SECTION 02220.
8.

SURFACE RESTORATION WILL CONSIST OF ASPHALT AND GRAVEL RESTORATION AND MAY ALSO INCLUDE RESTORATION OF CONCRETE DRIVEWAYS AND LANDSCAPED AREAS.

- NOTES
1.


CLARK RD IS OWNED AND MAINTAINED BY THE TOP. CONTRACTOR SHALL REFER TO TOP STANDARD DETAIL TB2 FOR LIMITS OF ASPHALT RESTORATION.
2.

CONTRACTOR SHALL SUBMIT TO TOP SCHEDULE FOR TRAFFIC CONTROL IN ADVANCE OF WORK.
3.

WALNUT LN AND SAN JOSE LN ARE PRIVATELY OWNED; HOWEVER, CONTRACTOR SHALL AT A MINIMUM FOLLOW TOP STANDARD DETAILS TB1 AND TB2 FOR TRENCH BACKFILL AND LIMITS OF ASPHALT RESTORATION.
4.

CONTRACTOR SHALL RESTORE CURBS AND SIDEWALKS PER BUTTE COUNTY STANDARD DETAILS S-1 AND S-2.
5.

CONTRACTOR SHALL ENSURE RE-STABILIZATION OF SLOPE ON EAST SIDE OF CLARK RD FOR ANY AREAS IMPACTED BY CONSTRUCTION ACTIVITIES, INCLUDING APPROPRIATE FILL MATERIAL AND COMPACTION.



WATERWORKS

ENGINEERS

REGISTERED PROFESSIONAL ENGINEER

KRISTINA P. ALACON

No. C70952

CIVIL

STATE OF CALIFORNIA

06-02-23

REVISIONS

NO.	BY	DATE	REMARKS

DESIGNED:

E. DIEGO

DRAWN:

E. MA

CHECKED:

K. ALACON

APPROVED:

S. KADER



PARADISE IRRIGATION DISTRICT

6332 CLARK ROAD, PARADISE, CA 95969

PHONE: (530) 877-4971

MAINS REPLACEMENT PROJECT PHASE 1

PROJECT SEGMENT # CLARK-A-1

DATE

4/9/2023

DWG

C-15

SHEET

24

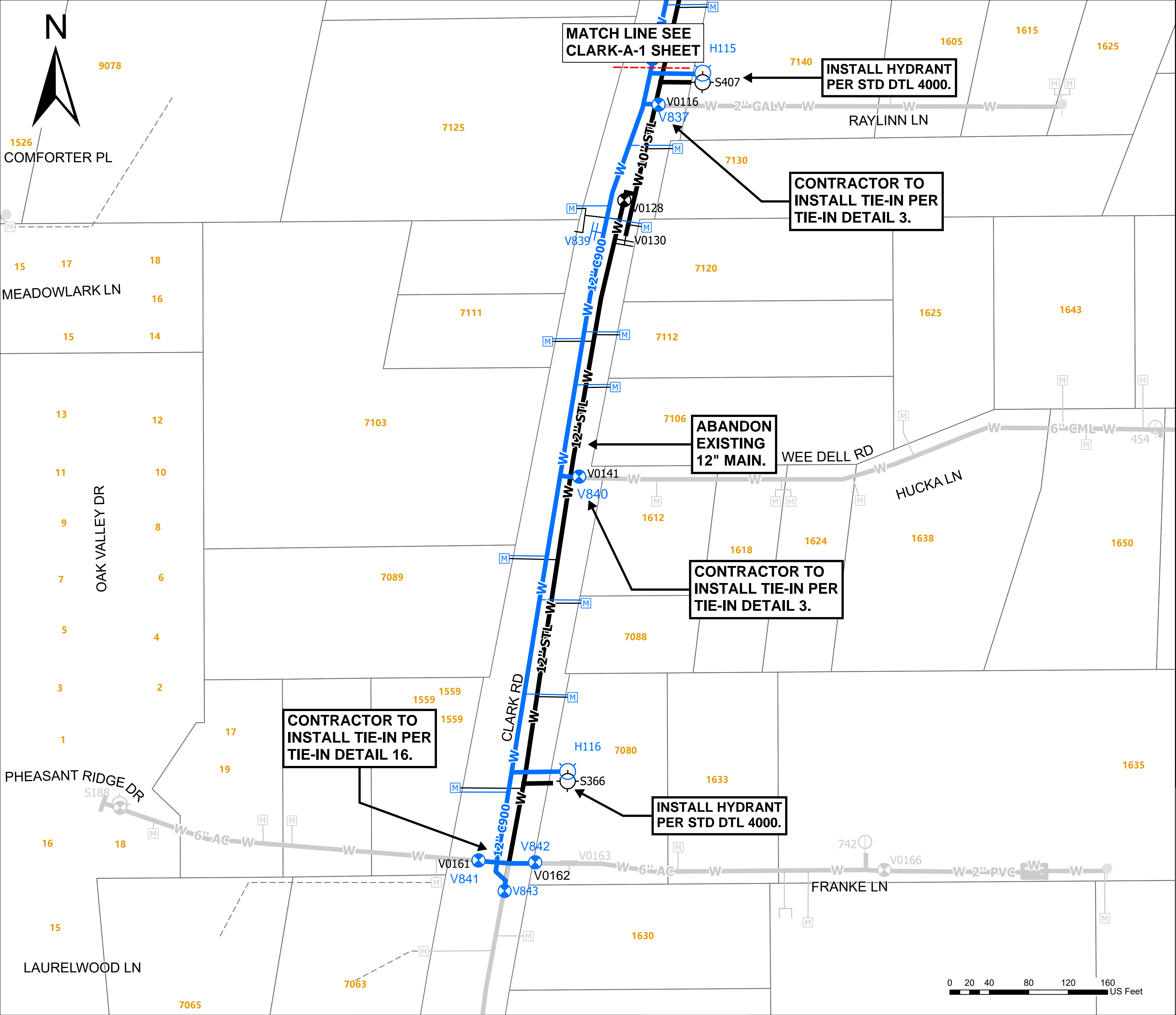
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Quantities			
Item No.	Description	Unit	Quantity
5a	Abandon Water Main <8" Diameter	LF	101
5b	Abandon 8" Water Main	LF	41
5c	Abandon 10" Water Main	LF	126
5d	Abandon 12" Water Main	LF	702
6a	Install 4" C900 PVC Water Main	LF	7
6b	Install 6" C900 PVC Water Main	LF	144
6e	Install 12" C900 PVC Water Main	LF	859
9	Install Air Release and Vaccum Relief Valve Assembly	EA	1
10a	Install 1" HDPE Service Lateral	LF	225
11a	Reconnect 3/4" and 1" Service Lateral	EA	1
12a	Furnish and Install 3/4"-1" Meter Box	EA	9
13a	Furnish and Install 3/4" Meter	EA	7
13b	Furnish and Install 1" Meter	EA	1
14a	Reset 3/4"-1" Meter and Meter Box	EA	1
15a	Install 1" Backflow Preventer	EA	8
16a	Reconfigure 1" Backflow Preventer	EA	1
17	Test Backflow Preventer	EA	10
18	Reconnect Customer Plumbing	LF	40
20a	Excavation and Backfill <5ft Depth	LF	1,240
21	Asphalt Restoration - General	SF	5,582
23	Unpaved Restoration - General	SF	930
24	Remove and Demolish Fire Hydrant	EA	2
26	Install Hydrant Assembly with Salvaged Hydrant Head	EA	2
28	Excavation and Backfill - Hydrant Assemblies	LF	52
29	Asphalt Restoration for Hydrant Assemblies	SF	233
30	Concrete Restoration - Hydrant Assemblies	SF	8
31	Unpaved Restoration - Hydrant Assemblies	SF	39
32r	Construct and Install Tie-In - Clark/ Raylinn DTL 3	EA	1
32s	Construct and Install Tie-In - Clark/ Wee Dell DTL 3	EA	1
32t	Construct and Install Tie-In - Clark-A2 DTL 16	EA	1
Note: Detailed information related to bid items 10-17 is to be provided at time of construction.			

- WORK DESCRIPTION
1.

WORK FOR BOTH CLARK-A SEGMENTS SHALL BE COMPLETED AS PRIORITY GROUP E, PER SPECIFICATION SECTION 01130. SEQUENCE OF WORK SHALL BE COORDINATED WITH PID AND ENGINEER.
2.

NEW 12-INCH C900 MAIN SHALL BE INSTALLED A MINIMUM OF 3 FEET AND MAXIMUM OF 5 FEET FROM EXISTING MAIN TOWARDS CENTERLINE OF ROAD.
3.

INSTALL HYDRANTS PER HYDRANT SCHEDULE, SPECIFICATION SECTION 15200 HS.
4.

INSTALL OR RECONNECT SERVICES AS SUMMARIZED IN QUANTITIES TABLE.
5.

CONTRACTOR TO CONNECT TO EXISTING MAINS PER-TIE IN DETAILS 3 AND 16.
6.

INSTALL THRUST BLOCKS AS SHOWN ON TIE-IN DETAILS AND PER STD DTL PID-02.
7.

ABANDON EXISTING 10" AND 12" MAINS, PER SPECIFICATION SECTION 02220.
8.

SURFACE RESTORATION WILL CONSIST OF ASPHALT AND GRAVEL RESTORATION AND MAY ALSO INCLUDE RESTORATION OF CONCRETE DRIVEWAYS, SIDEWALKS, CURBS, AND LANDSCAPED AREAS.

- NOTES
1.

CLARK RD IS OWNED AND MAINTAINED BY THE TOP. CONTRACTOR SHALL REFER TO TOP STANDARD DETAIL TB2 FOR LIMITS OF ASPHALT RESTORATION.
2.

CONTRACTOR SHALL SUBMIT TO TOP SCHEDULE FOR TRAFFIC CONTROL IN ADVANCE OF WORK.
3.

RAYLINN LN, FRANKIE LN, PHEASANT RIDGE, AND WEE DELL RD ARE PRIVATELY OWNED; HOWEVER, CONTRACTOR SHALL AT A MINIMUM FOLLOW TOP STANDARD DETAILS TB1 AND TB2 FOR TRENCH BACKFILL AND LIMITS OF ASPHALT RESTORATION.
4.

CONTRACTOR SHALL RESTORE CURBS AND SIDEWALKS PER BUTTE COUNTY STANDARD DETAILS S-1 AND S-2.
5.

CONTRACTOR SHALL ENSURE RE-STABILIZATION OF SLOPE ON EAST SIDE OF CLARK RD FOR ANY AREAS IMPACTED BY CONSTRUCTION ACTIVITIES, INCLUDING APPROPRIATE FILL MATERIAL AND COMPACTION.

REGISTERED PROFESSIONAL ENGINEER

KRISTINA P. ALACON

No. C70952

CIVIL

STATE OF CALIFORNIA

06-02-23

REVISIONS

NO.	BY	DATE	REMARKS

DESIGNED: E. DIEGO

DRAWN: E. MA

CHECKED: K. ALACON

APPROVED: S. KADER

PARADISE IRRIGATION DISTRICT

6332 CLARK ROAD, PARADISE, CA 95969

PHONE: (530) 877-4971

MAINS REPLACEMENT PROJECT PHASE 1

PROJECT SEGMENT # CLARK-A-2

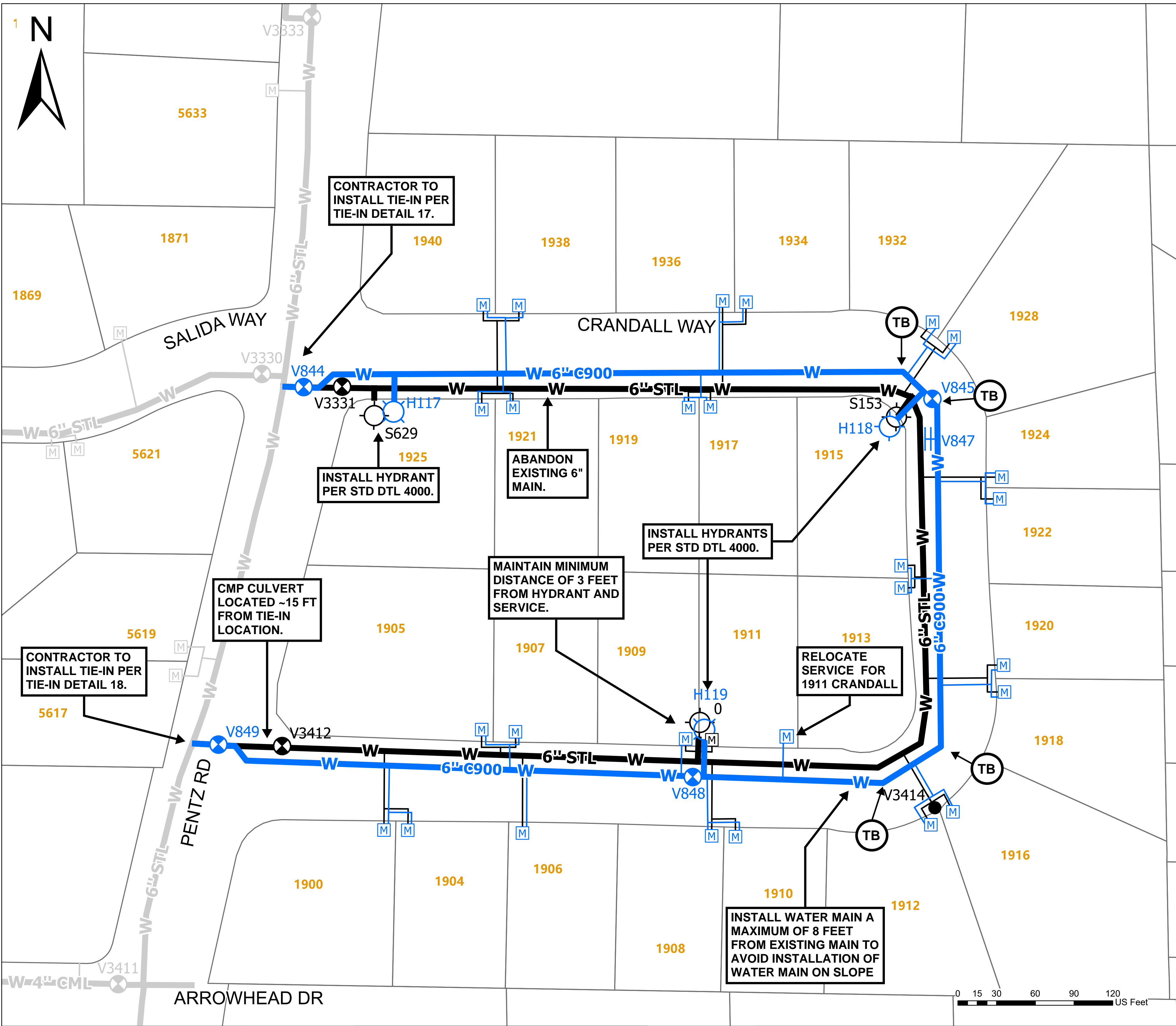
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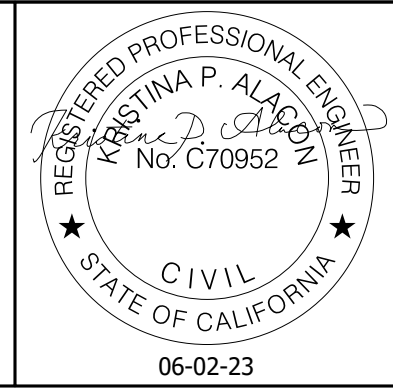

Quantities			
Item No.	Description	Unit	Quantity
5a	Abandon Water Main <8" Diameter	LF	1,343
6b	Install 6" C900 PVC Water Main	LF	1,448
7b	Install 6" Gate Valve	EA	2
9	Install Air Release and Vacuum Relief Valve Assembly	EA	1
10a	Install 1" HDPE Service Lateral	LF	275
11a	Reconnect 3/4" and 1" Service Lateral	EA	16
12a	Furnish and Install 3/4"-1" Meter Box	EA	10
13a	Furnish and Install 3/4" Meter	EA	10
14a	Reset 3/4"-1" Meter and Meter Box	EA	1
15a	Install 1" Backflow Preventer	EA	10
17	Test Backflow Preventer	EA	22
18	Reconnect Customer Plumbing	LF	50
20a	Excavation and Backfill <5ft Depth	LF	1,803
21	Asphalt Restoration - General	SF	8,112
23	Unpaved Restoration - General	SF	1,352
24	Remove and Demolish Fire Hydrant	EA	3
26	Install Hydrant Assembly with Salvaged Hydrant Head	EA	3
28	Excavation and Backfill - Hydrant Assemblies	LF	43
29	Asphalt Restoration for Hydrant Assemblies	SF	193
30	Concrete Restoration - Hydrant Assemblies	SF	8
31	Unpaved Restoration - Hydrant Assemblies	SF	32
32u	Construct and Install Tie-In - Crandall North DTL 17	EA	1
32v	Construct and Install Tie-In - Crandall South DTL 18	EA	1
Note: Detailed information related to bid items 10-17 is to be provided at time of construction.			

WORK DESCRIPTION

1. WORK FOR THIS MAIN SEGMENT SHALL BE COMPLETED AS PRIORITY GROUP F, PER SPECIFICATION SECTION 01130.
2. NEW 6-INCH C900 MAIN SHALL BE INSTALLED A MINIMUM OF 3 FEET AND MAXIMUM OF 5 FEET FROM EXISTING MAIN, TOWARDS CENTERLINE OF ROAD, EXCEPT WHERE OTHERWISE NOTED.
3. INSTALL HYDRANTS PER HYDRANT SCHEDULE, SPECIFICATION SECTION 15200 HS.
4. INSTALL OR RECONNECT SERVICES AS SUMMARIZED IN QUANTITIES TABLE.
5. CONTRACTOR TO TIE-IN TO EXISTING 6" MAIN PER TIE-IN DETAILS 17 AND 18.
6. INSTALL THRUST BLOCKS AS SHOWN HEREIN, ON TIE-IN DETAILS, AND PER PID STD DETAIL PID-02.
7. ABANDON EXISTING 6" MAIN, PER SPECIFICATION SECTION 02220.
8. SURFACE RESTORATION WILL CONSIST OF ASPHALT RESTORATION AND MAY ALSO INCLUDE RESTORATION OF CONCRETE DRIVEWAYS, GRAVEL AREAS, AND LANDSCAPED AREAS.
9. WORK MAY REQUIRE REPAIR OF RESIDENTIAL FENCES.


NOTES

1. CRANDALL WAY AND PENTZ RD ARE OWNED BY THE TOP. CONTRACTOR SHALL FOLLOW TOP STANDARD DETAIL TB2 FOR LIMITS OF ASPHALT RESTORATION.
2. CONTRACTOR SHALL SUBMIT TO TOP SCHEDULE FOR TRAFFIC CONTROL IN ADVANCE OF WORK.
3. CONTRACTOR SHALL ENSURE ADEQUATE RE-STABILIZATION OF SLOPE ON CRANDALL WAY, INCLUDING APPROPRIATE FILL MATERAIL AND COMPACTION.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING CMP CULVERT IN PLACE OR RESTORING TO SAME AS OR BETTER CONDITIONS.



REVISIONS			
NO.	BY	DATE	REMARKS

DESIGNED: E. DIEGO  
DRAWN: E. MA  
CHECKED: K. ALACON  
APPROVED: S. KADER



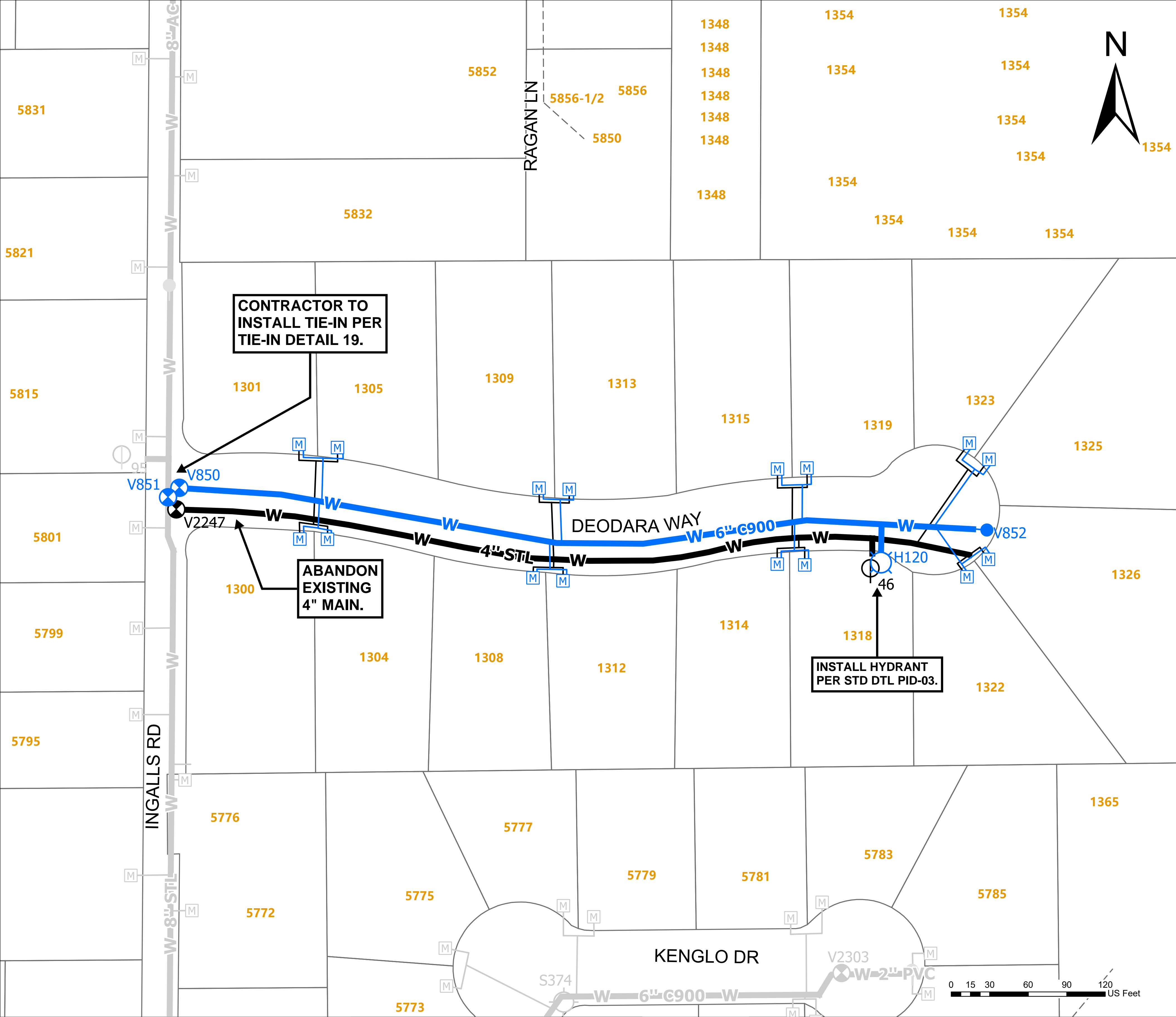
PARADISE IRRIGATION DISTRICT

6332 CLARK ROAD, PARADISE, CA 95969  
PHONE: (530) 877-4971

MAINS REPLACEMENT PROJECT PHASE 1  
PROJECT SEGMENT # CRANDALL

DATE 4/9/2023  
DWG C-17 SHEET 26 OF 56





Quantities			
Item No.	Description	Unit	Quantity
5a	Abandon Water Main <8" Diameter	LF	627
6b	Install 6" C900 PVC Water Main	LF	633
8	Install Blow Off Assembly	EA	1
10a	Install 1" HDPE Service Lateral	LF	75
11a	Reconnect 3/4" and 1" Service Lateral	EA	13
12a	Furnish and Install 3/4"-1" Meter Box	EA	3
13a	Furnish and Install 3/4" Meter	EA	3
15a	Install 1" Backflow Preventer	EA	3
17	Test Backflow Preventer	EA	9
18	Reconnect Customer Plumbing	LF	15
20a	Excavation and Backfill <5ft Depth	LF	773
21	Asphalt Restoration - General	SF	3,479
23	Unpaved Restoration - General	SF	580
24	Remove and Demolish Fire Hydrant	EA	1
25	Install New Fire Hydrant Assembly	EA	1
28	Excavation and Backfill - Hydrant Assemblies	LF	11
29	Asphalt Restoration for Hydrant Assemblies	SF	50
30	Concrete Restoration - Hydrant Assemblies	SF	8
31	Unpaved Restoration - Hydrant Assemblies	SF	8
32w	Construct and Install Tie-In - Deodara DTL 19	EA	1

Note: Detailed information related to bid items 10-17 is to be provided at time of construction.

## WORK DESCRIPTION

- WORK FOR THIS MAIN SEGMENT SHALL BE COMPLETED AS PRIORITY GROUP F, PER SPECIFICATION SECTION 01130.
- NEW 6-INCH C900 MAIN SHALL BE INSTALLED A MINIMUM OF 3 FEET AND MAXIMUM OF 5 FEET NORTH OF EXISTING MAIN.
- INSTALL HYDRANT PER HYDRANT SCHEDULE, SPECIFICATION SECTION 15200 HS.
- INSTALL BLOW OFF VALVE SHOWN, PER PID-01 STD DETAIL.
- INSTALL OR RECONNECT SERVICES AS SUMMARIZED IN QUANTITIES TABLE.
- CONTRACTOR TO CONNECT TO EXISTING MAIN PER TIE-IN DETAIL 19.
- INSTALL THRUST BLOCKS AS SHOWN ON TIE-IN DETAIL 19 AND PER STANDARD DETAIL PID-02.
- CAP AND ABANDON EXISTING 4" STEEL MAIN, PER SPECIFICATION SECTION 02220.
- SURFACE RESTORATION WILL CONSIST OF ASPHALT RESTORATION AND MAY ALSO INCLUDE RESTORATION OF CURBS, CONCRETE DRIVEWAYS, GRAVEL AREAS, AND LANDSCAPED AREAS.

## NOTES

- DEODARA WAY AND INGALLS RD ARE OWNED BY THE TOP. CONTRACTOR SHALL REFER TO TOP STANDARD DETAIL TB2 FOR LIMITS OF ASPHALT RESTORATION.
- CONTRACTOR SHALL RESTORE CURB TO SAME AS OR BETTER CONDITION PER BUTTE COUNTY STANDARD DETAIL S-2.

REVISIONS			
NO.	BY	DATE	REMARKS

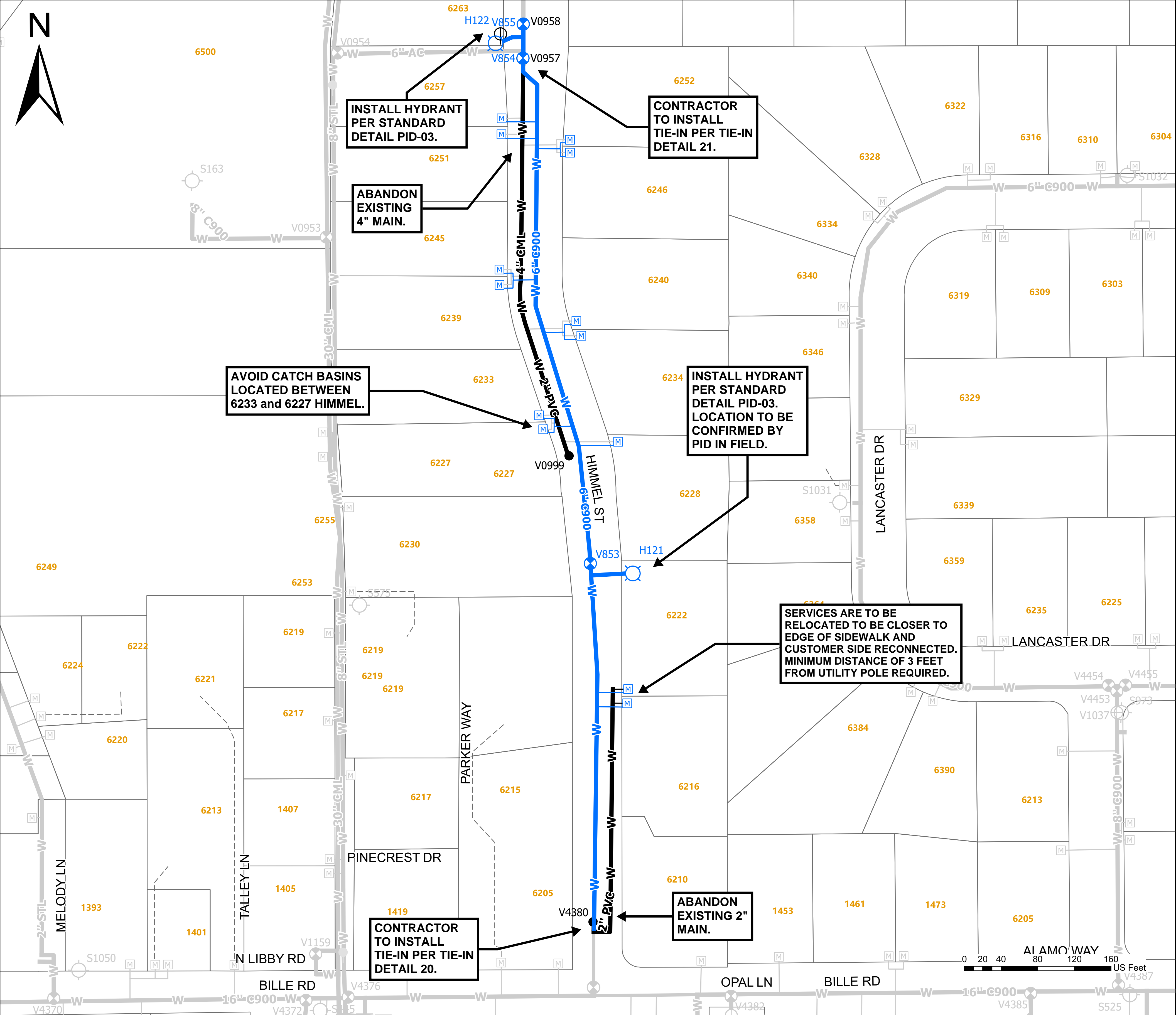
DESIGNED: E. DIEGO  
DRAWN: E. MA  
CHECKED: K. ALACON  
APPROVED: S. KADER

PARADISE IRRIGATION DISTRICT  
6332 CLARK ROAD, PARADISE, CA 95969  
PHONE: (530) 877-4971

MAINS REPLACEMENT PROJECT PHASE 1  
PROJECT SEGMENT # DEODARA

DATE 4/9/2023  
DWG C-18 SHEET 27 OF 56





Quantities			
Item No.	Description	Unit	Quantity
5a	Abandon Water Main <8" Diameter	LF	754
6b	Install 6" C900 PVC Water Main	LF	1,037
7b	Install 6" Gate Valve	EA	1
10a	Install 1" HDPE Service Lateral	LF	125
11a	Reconnect 3/4" and 1" Service Lateral	EA	8
12a	Furnish and Install 3/4"-1" Meter Box	EA	5
13a	Furnish and Install 3/4" Meter	EA	3
13b	Furnish and Install 1" Meter	EA	1
14a	Reset 3/4"-1" Meter and Meter Box	EA	1
15a	Install 1" Backflow Preventer	EA	4
16a	Reconfigure 1" Backflow Preventer	EA	1
17	Test Backflow Preventer	EA	9
18	Reconnect Customer Plumbing	LF	20
20a	Excavation and Backfill <5ft Depth	LF	1,202
21	Asphalt Restoration - General	SF	5,407
23	Unpaved Restoration - General	SF	901
24	Remove and Demolish Fire Hydrant	EA	1
25	Install New Fire Hydrant Assembly	EA	2
28	Excavation and Backfill - Hydrant Assemblies	LF	33
29	Asphalt Restoration for Hydrant Assemblies	SF	147
30	Concrete Restoration - Hydrant Assemblies	SF	8
31	Unpaved Restoration - Hydrant Assemblies	SF	25
32x	Construct and Install Tie-In - Himmel South DTL 20	EA	1
32y	Construct and Install Tie-In - Himmel North DTL 21	EA	1

Note: Detailed information related to bid items 10-17 is to be provided at time of construction.

- ### WORK DESCRIPTION
- WORK FOR THIS MAIN SEGMENT SHALL BE COMPLETED AS PRIORITY GROUP F, PER SPECIFICATION SECTION 01130.
  - NEW 6-INCH C900 MAIN SHALL BE INSTALLED A MINIMUM OF 3 FEET AND MAXIMUM OF 5 FEET FROM EXISTING MAINS TOWARDS CENTERLINE OF ROAD. MAIN SHALL NOT BE INSTALLED IN THE SIDEWALK.
  - INSTALL HYDRANTS PER HYDRANT SCHEDULE, SPECIFICATION SECTION 15200 HS.
  - INSTALL OR RECONNECT SERVICES AS SUMMARIZED IN QUANTITIES TABLE.
  - CONTRACTOR TO CONNECT TO EXISTING MAINS PER TIE-IN DETAILS 20 AND 21.
  - INSTALL THRUST BLOCKS AS SHOWN ON TIE-IN DETAILS AND PER STD DTL PID-02.
  - CAP AND ABANDON EXISTING 4" STEEL MAIN, PER SPECIFCATION SECTION 02220.
  - SURFACE RESTORATION WILL CONSIST OF ASPHALT RESTORATION AND MAY ALSO INCLUDE RESTORATION OF CURBS, CONCRETE DRIVEWAYS, GRAVEL AREAS, AND LANDSCAPED AREAS.

- ### NOTES
- HIMMEL ST IS OWNED BY THE TOP. CONTRACTOR SHALL REFER TO TOP STANDARD DETAIL TB2 FOR LIMITS OF ASPHALT RESTORATION.
  - BILLE RD IS OWNED BY THE TOP AND IS SCHEDULED TO BE REPAVED IN 2023. INSTALLATION OF THE NEW MAIN ON HIMMEL SHALL NOT EXTEND INTO ROADWAY OF BILLE RD. IF ANY AREA OF PAVEMENT ON BILLE RD IS DISTURBED, CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING ASPHALT ON BILLE RD FOR BOTH LANES EXTENDING THE FULL WIDTH OF HIMMEL AND RESTRIPE ANY IMPACTED STRIPING.
  - CONTRACTOR SHALL RESTORE CURB TO SAME AS OR BETTER CONDITION PER BUTTE COUNTY STANDARD DETAIL S-2.
  - CONTRACTOR SHALL SUBMIT TO TOP SCHEDULE FOR TRAFFIC CONTROL IN ADVANCE OF WORK.

REVISIONS			
NO.	BY	DATE	REMARKS

DESIGNED: E. DIEGO  
DRAWN: E. MA  
CHECKED: K. ALACON  
APPROVED: S. KADER

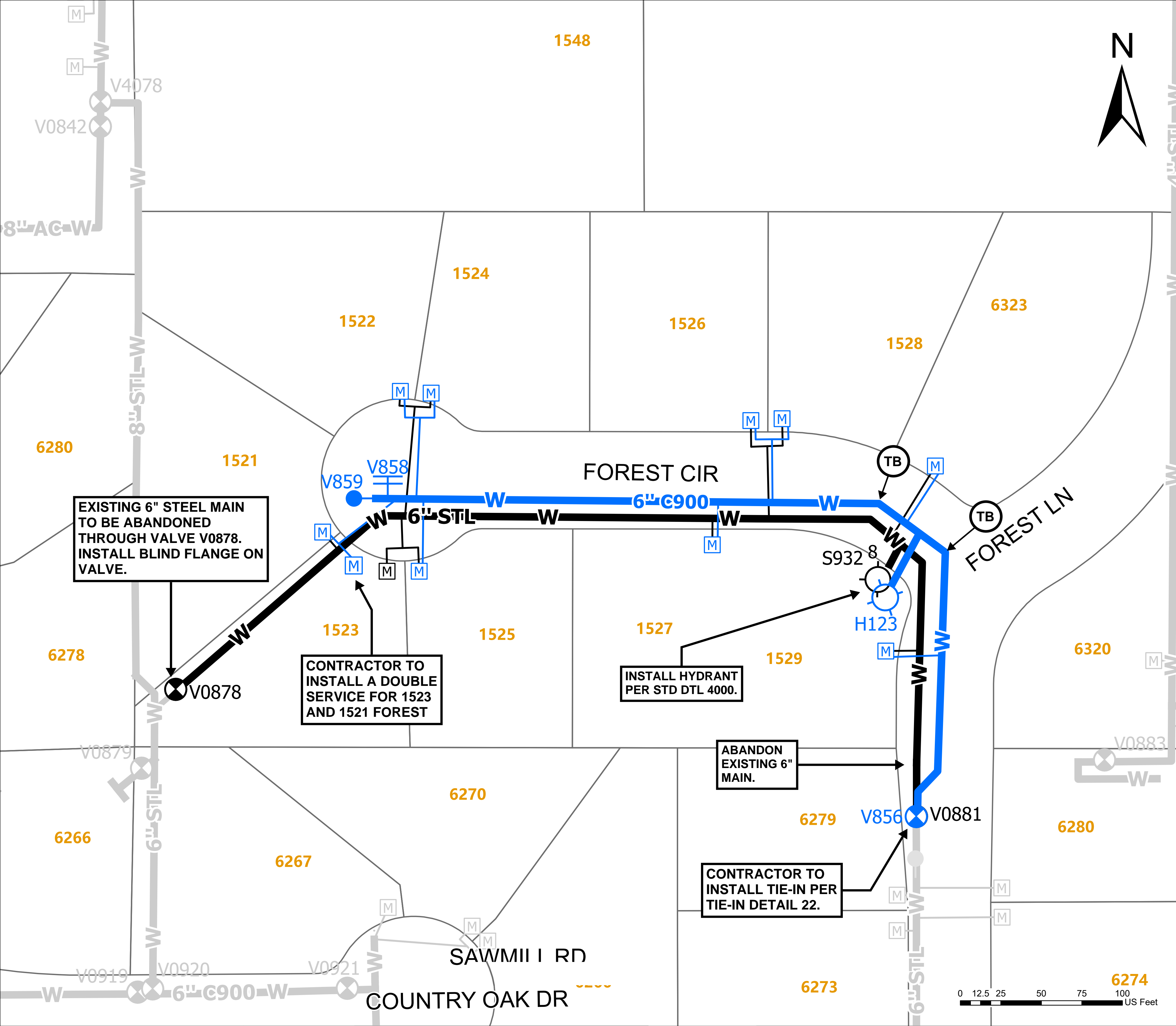
PARADISE IRRIGATION DISTRICT

6332 CLARK ROAD, PARADISE, CA 95969  
PHONE: (530) 877-4971

MAINS REPLACEMENT PROJECT PHASE 1  
PROJECT SEGMENT # HIMMEL

DATE 4/9/2023  
DWG C-19 SHEET 28 OF 56





Quantities			
Item No.	Description	Unit	Quantity
5a	Abandon Water Main <8" Diameter	LF	673
6b	Install 6" C900 PVC Water Main	LF	554
8	Install Blow Off Assembly	EA	1
9	Install Air Release and Vacuum Relief Valve Assembly	EA	1
10a	Install 1" HDPE Service Lateral	LF	100
11a	Reconnect 3/4" and 1" Service Lateral	EA	6
12a	Furnish and Install 3/4"-1" Meter Box	EA	3
13a	Furnish and Install 3/4" Meter	EA	3
14a	Reset 3/4"-1" Meter and Meter Box	EA	1
15a	Install 1" Backflow Preventer	EA	2
17	Test Backflow Preventer	EA	5
18	Reconnect Customer Plumbing	LF	15
20a	Excavation and Backfill <5ft Depth	LF	684
21	Asphalt Restoration - General	SF	3,077
23	Unpaved Restoration - General	SF	513
24	Remove and Demolish Fire Hydrant	EA	1
26	Install Hydrant Assembly with Salvaged Hydrant Head	EA	1
28	Excavation and Backfill - Hydrant Assemblies	LF	20
29	Asphalt Restoration for Hydrant Assemblies	SF	90
30	Concrete Restoration - Hydrant Assemblies	SF	8
31	Unpaved Restoration - Hydrant Assemblies	SF	15
32z	Construct and Install Tie-In - Forest DTL 22	EA	1

Note: Detailed information related to bid items 10-17 is to be provided at time of construction.

WORK DESCRIPTION

- 1. WORK FOR THIS MAIN SEGMENT SHALL BE COMPLETED AS PRIORITY GROUP F, PER SPECIFICATION SECTION 01130.
- 2. NEW 6-INCH C900 MAIN SHALL BE INSTALLED A MINIMUM OF 3 FEET AND MAXIMUM OF 5 FEET FROM EXISTING MAIN TOWARDS CENTERLINE OF ROAD. MAIN SHALL NOT BE INSTALLED IN CURB.
- 3. INSTALL HYDRANT PER HYDRANT SCHEDULE, SPECIFICATION SECTION 15200 HS.
- 4. INSTALL AIR RELEASE VALVE SHOWN, PER STANDARD DETAIL PID-10.
- 5. INSTALL BLOW OFF VALVE SHOWN, PER STANDARD DETAIL PID-01.
- 6. INSTALL OR RECONNECT SERVICES AS SUMMARIZED IN QUANTITIES TABLE.
- 7. CONTRACTOR TO CONNECT TO EXISTING MAIN PER TIE-IN DETAIL 22.
- 8. INSTALL THRUST BLOCKS AS SHOWN HEREIN, ON TIE-IN DETAIL 22, AND PER STD DTL PID-02.
- 9. CAP AND ABANDON EXISTING 6" STEEL MAIN, PER SPECIFICATION SECTION 02220. SURFACE RESTORATION WILL CONSIST OF ASPHALT RESTORATION AND MAY ALSO INCLUDE RESTORATION OF CURBS, CONCRETE DRIVEWAYS, GRAVEL AREAS, AND LANDSCAPED AREAS.

NOTES

- 1. FOREST CIR AND FOREST LN ARE OWNED BY THE TOP. CONTRACTOR SHALL REFER TO TOP STANDARD DETAIL TB2 FOR LIMITS OF ASPHALT RESTORATION.
- 2. CONTRACTOR SHALL RESTORE CURB TO SAME AS OR BETTER CONDITION PER BUTTE COUNTY STANDARD DETAIL S-2.
- 3. CONTRACTOR SHALL SUBMIT TO TOP SCHEDULE FOR TRAFFIC CONTROL IN ADVANCE OF WORK.

REGISTERED PROFESSIONAL ENGINEER  
KRISTINA P. ALACON  
No. C70952  
CIVIL  
STATE OF CALIFORNIA  
06-02-23

REVISIONS			
NO.	BY	DATE	REMARKS

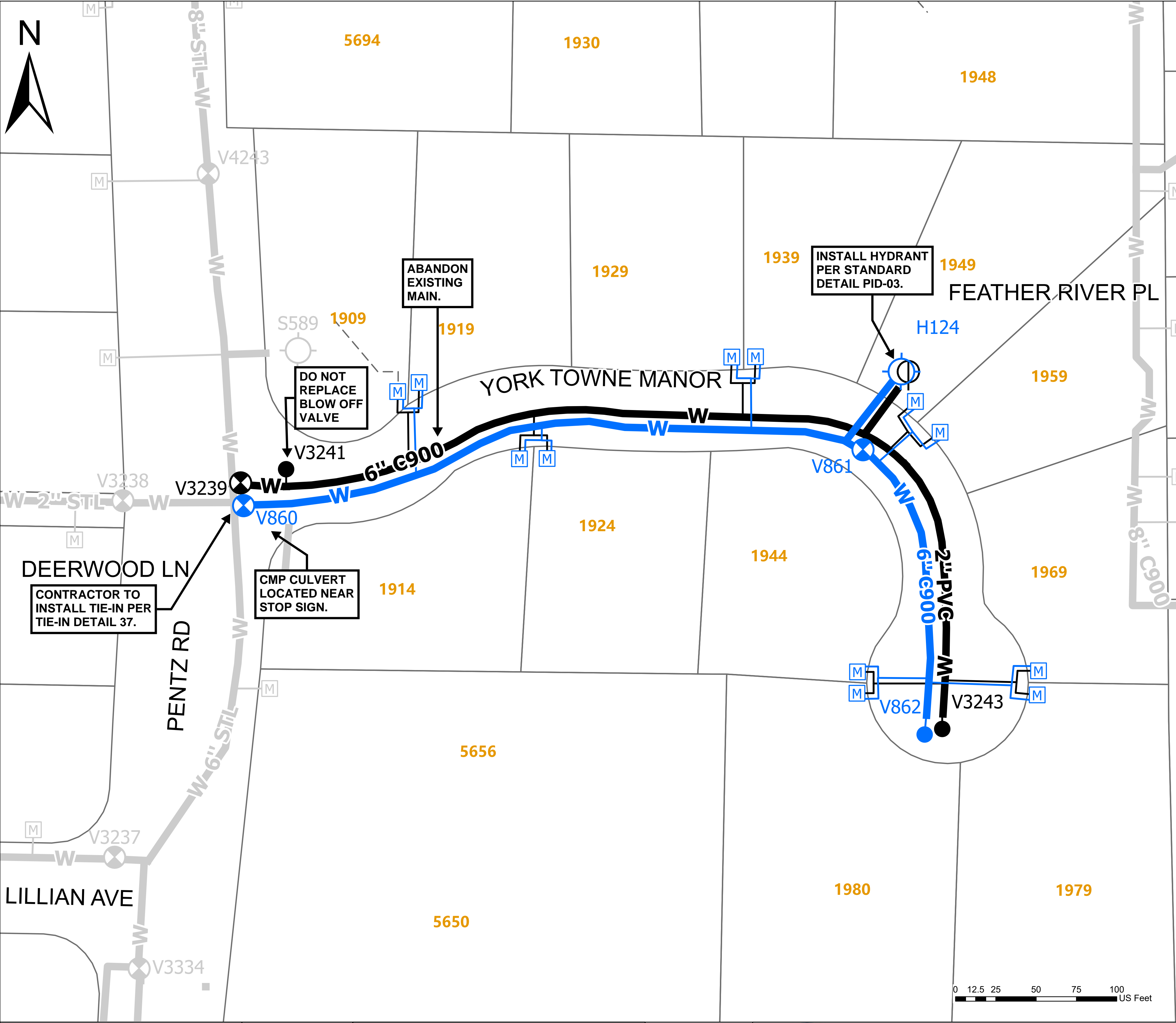
DESIGNED: E. DIEGO  
DRAWN: E. MA  
CHECKED: K. ALACON  
APPROVED: S. KADER

PARADISE IRRIGATION DISTRICT  
6332 CLARK ROAD, PARADISE, CA 95969  
PHONE: (530) 877-4971

MAINS REPLACEMENT PROJECT PHASE 1  
PROJECT SEGMENT # FOREST

DATE 4/9/2023  
DWG C-20 SHEET 29 OF 56





Quantities			
Item No.	Description	Unit	Quantity
5a	Abandon Water Main <8" Diameter	LF	628
6b	Install 6" C900 PVC Water Main	LF	616
7b	Install 6" Gate Valve	EA	1
8	Install Blow Off Assembly	EA	1
10a	Install 1" HDPE Service Lateral	LF	50
11a	Reconnect 3/4" and 1" Service Lateral	EA	10
12a	Furnish and Install 3/4"-1" Meter Box	EA	3
13a	Furnish and Install 3/4" Meter	EA	3
15a	Install 1" Backflow Preventer	EA	2
17	Test Backflow Preventer	EA	9
18	Reconnect Customer Plumbing	LF	15
20a	Excavation and Backfill <5ft Depth	LF	716
21	Asphalt Restoration - General	SF	3,224
23	Unpaved Restoration - General	SF	537
24	Remove and Demolish Fire Hydrant	EA	1
25	Install New Fire Hydrant Assembly	EA	1
28	Excavation and Backfill - Hydrant Assemblies	LF	26
29	Asphalt Restoration for Hydrant Assemblies	SF	118
30	Concrete Restoration - Hydrant Assemblies	SF	8
31	Unpaved Restoration - Hydrant Assemblies	SF	20
32aa	Construct and Install Tie-In - York Towne DTL 37	EA	1

Note: Detailed information related to bid items 10-17 is to be provided at time of construction.

WORK DESCRIPTION

1. WORK FOR THIS MAIN SEGMENT SHALL BE COMPLETED AS PRIORITY GROUP F, PER SPECIFICATION SECTION 01130.
2. NEW 6-INCH C900 MAIN SHALL BE INSTALLED A MINIMUM OF 3 FEET AND MAXIMUM OF 5 FEET FROM EXISTING MAIN.
3. INSTALL BLOW OFF VALVE SHOWN, PER STANDARD DETAIL PID-01.
4. INSTALL HYDRANT PER HYDRANT SCHEDULE, SPECIFICATION SECTION 15200 HS.
5. INSTALL OR RECONNECT SERVICES AS SUMMARIZED IN QUANTITIES TABLE.
6. CONTRACTOR TO CONNECT TO EXISTING MAIN PER TIE-IN DETAIL 37.
7. INSTALL THRUST BLOCKS AS SHOWN ON TIE-IN DETAIL AND PER STD DTL PID-02.
8. CAP AND ABANDON EXISTING MAIN, PER SPECIFICATION SECTION 02220.
9. SURFACE RESTORATION WILL CONSIST OF ASPHALT RESTORATION AND MAY ALSO INCLUDE RESTORATION OF CURBS, CONCRETE DRIVEWAYS, GRAVEL AREAS, AND LANDSCAPED AREAS.

NOTES

1. YORK TOWNE AND PENTZ RD ARE OWNED BY TOP. CONTRACTOR SHALL REFER TO TOP STANDARD DETAIL TB2 FOR LIMITS OF ASPHALT RESTORATION.
2. CONTRACTOR SHALL SUBMIT TO TOP SCHEDULE FOR TRAFFIC CONTROL IN ADVANCE OF WORK.
3. CONTRACTOR SHALL RESTORE CURB TO SAME AS OR BETTER CONDITION PER BUTTE COUNTY STANDARD DETAIL S-2.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING CMP CULVERT IN PLACE OR RESTORING TO SAME AS OR BETTER CONDITIONS.



**WATERWORKS**  
ENGINEERS



06-02-23

REVISIONS			
NO.	BY	DATE	REMARKS

DESIGNED: E. DIEGO

DRAWN: E. MA

CHECKED: K. ALACON

APPROVED: S. KADER

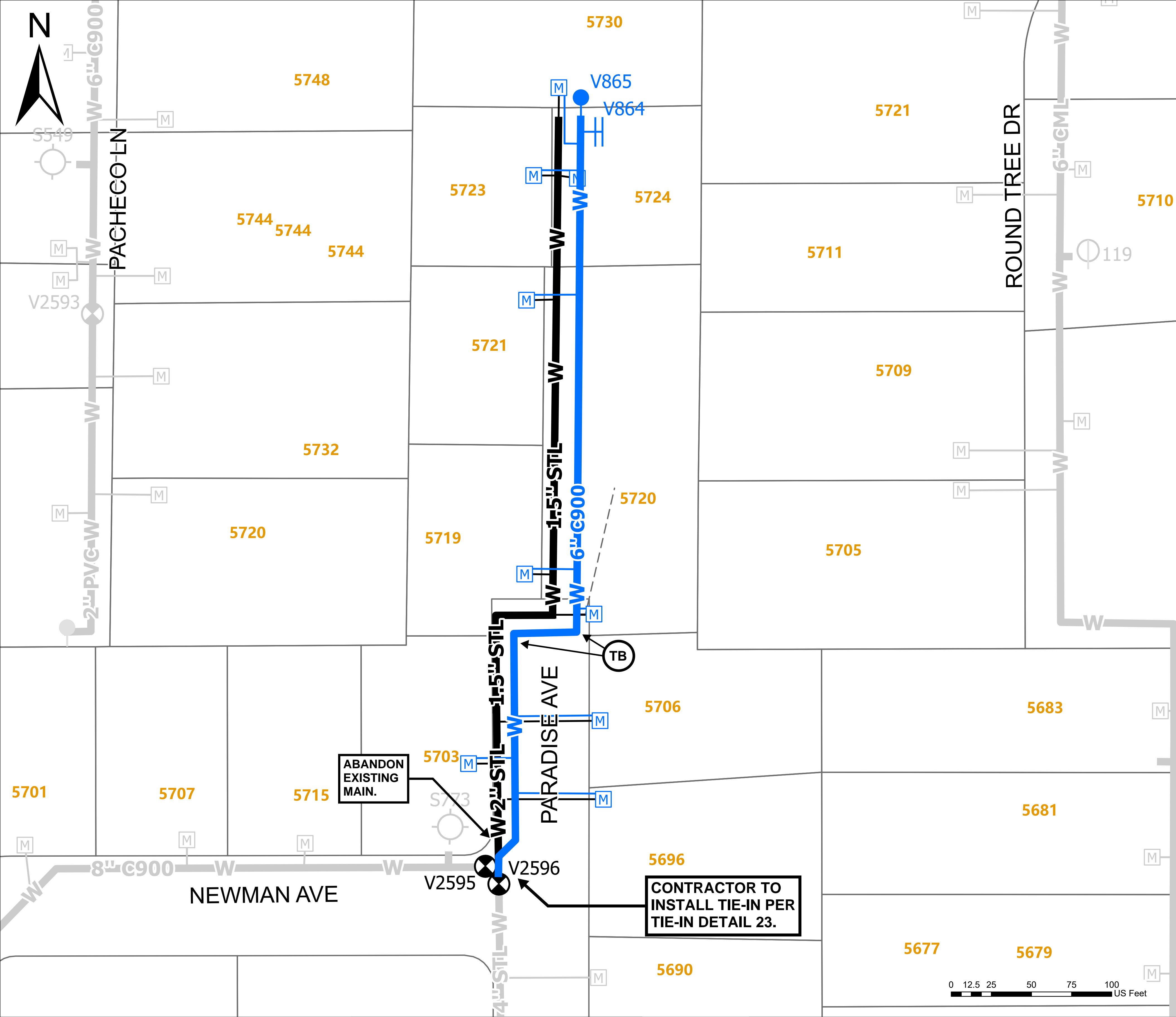


**PARADISE IRRIGATION DISTRICT**  
6332 CLARK ROAD, PARADISE, CA 95969  
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**MAINS REPLACEMENT PROJECT PHASE 1**  
PROJECT SEGMENT # YORK TOWNE

DATE 4/9/2023  
DWG C-21 SHEET 30 OF 56





Quantities			
Item No.	Description	Unit	Quantity
5a	Abandon Water Main <8" Diameter	LF	501
6b	Install 6" C900 PVC Water Main	LF	512
8	Install Blow Off Assembly	EA	1
9	Install Air Release and Vaccum Relief Valve Assembly	EA	1
10a	Install 1" HDPE Service Lateral	LF	100
11a	Reconnect 3/4" and 1" Service Lateral	EA	5
12a	Furnish and Install 3/4"-1" Meter Box	EA	4
13a	Furnish and Install 3/4" Meter	EA	4
15a	Install 1" Backflow Preventer	EA	3
17	Test Backflow Preventer	EA	8
18	Reconnect Customer Plumbing	LF	20
20a	Excavation and Backfill <5ft Depth	LF	637
21	Asphalt Restoration - General	SF	2,867
23	Unpaved Restoration - General	SF	478
32ab	Construct and Install Tie-In - Paradise Ave DTL 23	EA	1
Note: Detailed information related to bid items 10-17 is to be provided at time of construction.			

WORK DESCRIPTION

- 1. WORK FOR THIS MAIN SEGMENT SHALL BE COMPLETED AS PRIORITY GROUP F, PER SPECIFICATION SECTION 01130.
- 2. NEW 6-INCH C900 MAIN SHALL BE INSTALLED A MINIMUM OF 3 FEET FROM EXISTING MAIN TOWARDS CENTERLINE OF ROAD.
- 3. INSTALL AIR RELEASE VALVE SHOWN, PER STANDARD DETAIL PID-10.
- 4. INSTALL BLOW OFF VALVE SHOWN, PER STANDARD DETAIL PID-01.
- 5. INSTALL OR RECONNECT SERVICES AS SUMMARIZED IN QUANTITIES TABLE.
- 6. CONTRACTOR TO CONNECT TO EXISTING MAIN PER TIE-IN DETAIL 23.
- 7. INSTALL THRUST BLOCKS AS SHOWN HEREIN, ON TIE-IN DETAIL 23, AND PER STANDARD DETAIL PID-02.
- 8. CAP AND ABANDON EXISTING MAIN, PER SPECIFICATION SECTION 02220.
- 9. SURFACE RESTORATION WILL CONSIST OF ASPHALT AND GRAVEL RESTORATION AND MAY ALSO INCLUDE RESTORATION OF CURBS, CONCRETE DRIVEWAYS, AND LANDSCAPED AREAS.

NOTES

- 1. PARADISE AVE IS PRIVATELY OWNED AND NOT MAINTAINED BY THE TOP; HOWEVER, CONTRACTOR SHALL AT A MINIMUM FOLLOW TOP STANDARD DETAILS TB1 AND TB2 FOR TRENCH BACKFILL AND LIMITS OF ASPHALT RESTORATION.
- 2. NEWMAN AVE IS OWNED BY THE TOP. CONTRACTOR SHALL REFER TO TOP STANDARD DETAIL TB2 FOR LIMITS OF ASPHALT RESTORATION.
- 3. CONTRACTOR SHALL SUBMIT TO TOP SCHEDULE FOR TRAFFIC CONTROL ON NEWMAN AVE IN ADVANCE OF WORK.
- 4. SERVICES FOR PARCELS ON WEST SIDE OF PARADISE AVE MAY BE LOCTAED BEHIND FENCES; CONTRACTOR SHALL RELOCATE SERVICES AT PID'S DIRECTION IN FIELD.

REGISTERED PROFESSIONAL ENGINEER  
KRISTINA P. ALACON  
No. C70952  
CIVIL  
STATE OF CALIFORNIA  
06-02-23

REVISIONS			
NO.	BY	DATE	REMARKS

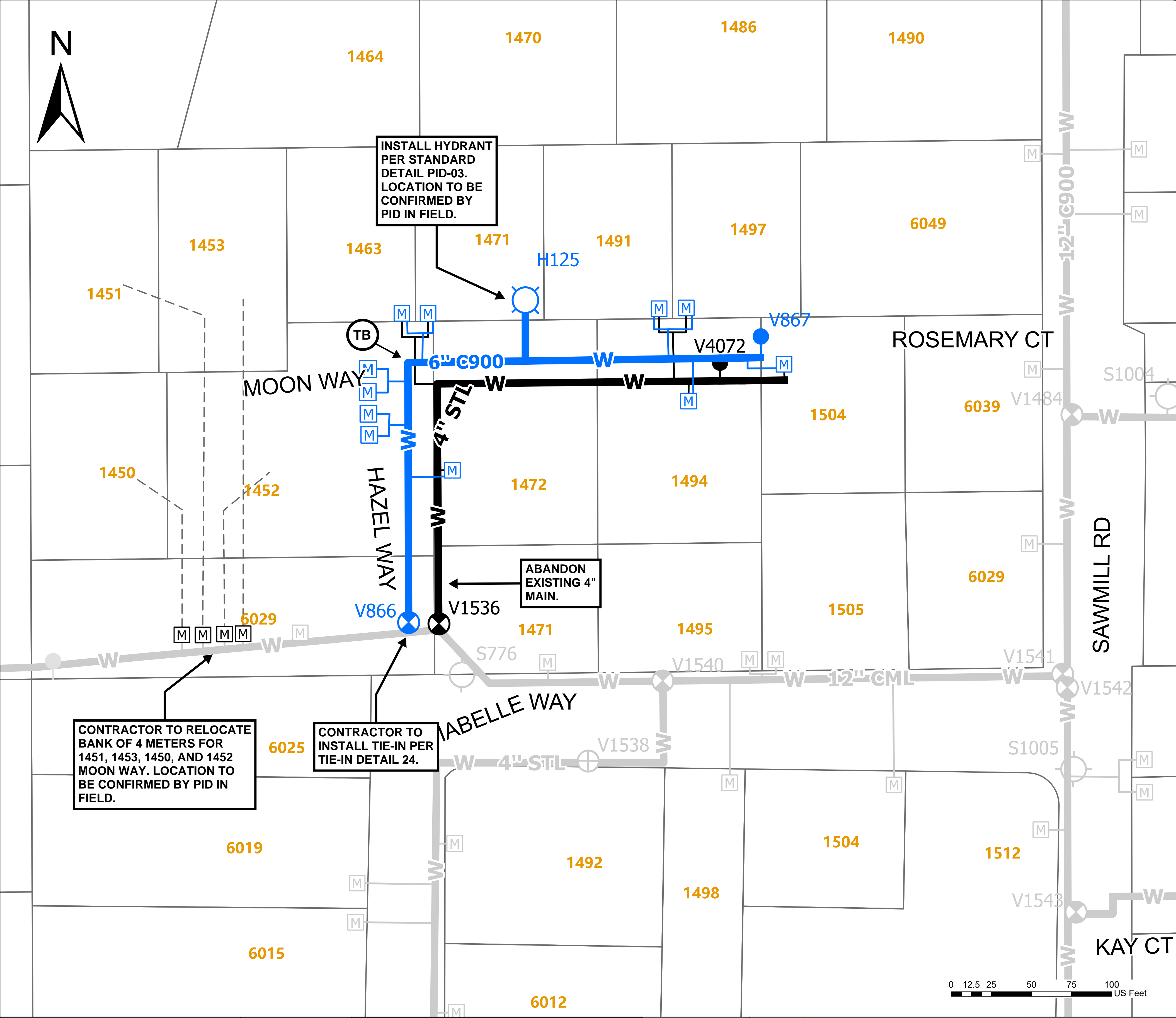
DESIGNED: E. DIEGO  
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CHECKED: K. ALACON  
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MAINS REPLACEMENT PROJECT PHASE 1  
PROJECT SEGMENT # PARADISE

DATE 4/9/2023  
DWG C-22 SHEET 31 OF 56





Quantities			
Item No.	Description	Unit	Quantity
5a	Abandon Water Main <8" Diameter	LF	361
6b	Install 6" C900 PVC Water Main	LF	400
8	Install Blow Off Assembly	EA	1
10a	Install 1" HDPE Service Lateral	LF	175
11a	Reconnect 3/4" and 1" Service Lateral	EA	4
12a	Furnish and Install 3/4"-1" Meter Box	EA	5
13a	Furnish and Install 3/4" Meter	EA	5
14a	Reset 3/4"-1" Meter and Meter Box	EA	2
15a	Install 1" Backflow Preventer	EA	5
17	Test Backflow Preventer	EA	10
18	Reconnect Customer Plumbing	LF	25
20a	Excavation and Backfill <5ft Depth	LF	595
21	Asphalt Restoration - General	SF	2,677
23	Unpaved Restoration - General	SF	446
25	Install New Fire Hydrant Assembly	EA	1
28	Excavation and Backfill - Hydrant Assemblies	LF	15
29	Asphalt Restoration for Hydrant Assemblies	SF	68
30	Concrete Restoration - Hydrant Assemblies	SF	8
31	Unpaved Restoration - Hydrant Assemblies	SF	11
32ac	Construct and Install Tie-In - Moon-Hazel DTL 24	EA	1

Note: Detailed information related to bid items 10-17 is to be provided at time of construction.

- WORK DESCRIPTION**
1. WORK FOR THIS MAIN SEGMENT SHALL BE COMPLETED AS PRIORITY GROUP F, PER SPECIFICATION SECTION 01130.
  2. NEW 6-INCH C900 MAIN SHALL BE INSTALLED A MINIMUM OF 3 FEET AND MAXIMUM OF 5 FEET FROM EXISTING MAIN TOWARDS CENETERLINE OF ROAD.
  3. INSTALL BLOW OFF VALVE SHOWN, PER STANDARD DETAIL PID-01.
  4. INSTALL HYDRANT PER HYDRANT SCHEDULE, SPECIFICATION SECTION 15200 HS
  5. INSTALL OR RECONNECT SERVICES AS SUMMARIZED IN QUANTITIES TABLE.
  6. CONTRACTOR TO CONNECT TO EXISTING MAIN PER TIE-IN DETAIL 24.
  7. INSTALL THRUST BLOCKS AS SHOWN HEREIN, ON TIE-IN DETAIL 24, AND PER STD DTL PID-02.
  8. CAP AND ABANDON EXISTING 4" MAIN, PER SPECIFCATION SECTION 02220.
  9. SURFACE RESTORATION WILL CONSIST OF ASPHALT RESTORATION AND MAY ALSO INCLUDE RESTORATION OF CURBS, CONCRETE DRIVEWAYS, GRAVEL AREAS, AND LANDSCAPED AREAS.

- NOTES**
1. HAZEL WAY AND MABELLE WAY ARE OWNED BY THE TOP. CONTRACTOR SHALL REFER TO TOP STANDARD DETAIL TB2 FOR LIMITS OF ASPHALT RESTORATION.
  2. MOON WAY IS PRIVATELY OWNED; HOWEVER, CONTRACTOR SHALL AT A MINIMUM FOLLOW TOP STANDARD DETAILS TB1 AND TB2 FOR TRENCH BACKFILL AND LIMITS OF ASPHALT RESTORATION.
  3. NEWMAN AVE IS OWNED BY THE TOP. CONTRACTOR SHALL REFER TO TOP STANDARD DETAIL TB2 FOR LIMITS OF ASPHALT RESTORATION.
  4. CONTRACTOR SHALL SUBMIT TO TOP SCHEDULE FOR TRAFFIC CONTROL IN ADVANCE OF WORK.

**WATERWORKS**  
ENGINEERS

REVISIONS			
NO.	BY	DATE	REMARKS

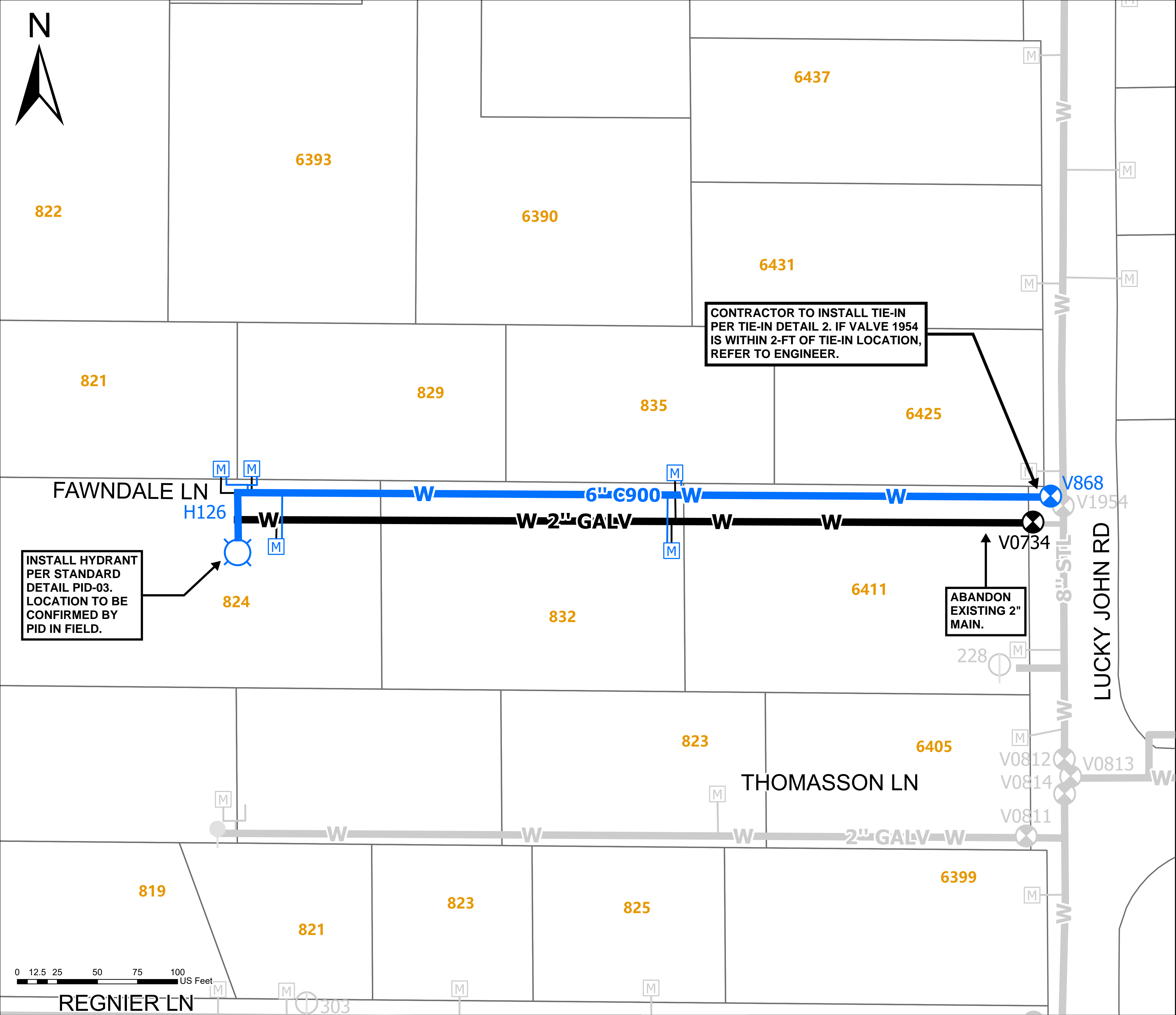
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APPROVED: S. KADER

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**MAINS REPLACEMENT PROJECT PHASE 1**  
PROJECT SEGMENT # MOON-HAZEL

DATE 4/9/2023  
DWG C-23 SHEET 32 OF 56





Quantities			
Item No.	Description	Unit	Quantity
5a	Abandon Water Main <8" Diameter	LF	488
6b	Install 6" C900 PVC Water Main	LF	527
10a	Install 1" HDPE Service Lateral	LF	125
12a	Furnish and Install 3/4"-1" Meter Box	EA	5
13a	Furnish and Install 3/4" Meter	EA	5
15a	Install 1" Backflow Preventer	EA	5
17	Test Backflow Preventer	EA	5
18	Reconnect Customer Plumbing	LF	25
20a	Excavation and Backfill <5ft Depth	LF	652
21	Asphalt Restoration - General	SF	2,935
23	Unpaved Restoration - General	SF	489
25	Install New Fire Hydrant Assembly	EA	1
28	Excavation and Backfill - Hydrant Assemblies	LF	16
29	Asphalt Restoration for Hydrant Assemblies	SF	71
30	Concrete Restoration - Hydrant Assemblies	SF	8
31	Unpaved Restoration - Hydrant Assemblies	SF	12
32ad	Construct and Install Tie-In - Fawndale DTL 2	EA	1
Note: Detailed information related to bid items 10-17 is to be provided at time of construction.			

**WORK DESCRIPTION**

1. WORK FOR THIS MAIN SEGMENT SHALL BE COMPLETED AS PRIORITY GROUP F, PER SPECIFICATION SECTION 01130.

2. NEW 6-INCH C900 MAIN SHALL BE INSTALLED A MINIMUM OF 3 FEET AND MAXIMUM OF 5 FEET NORTH OF EXISTING MAIN.

3. INSTALL HYDRANT PER HYDRANT SCHEDULE, SPECIFICATION SECTION 15200 HS.

4. INSTALL OR RECONNECT SERVICES AS SUMMARIZED IN QUANTITIES TABLE.

5. CONTRACTOR TO CONNECT TO EXISTING MAIN PER TIE-IN DETAIL 2.

6. INSTALL THRUST BLOCKS AS SHOWN ON TIE-IN DETAIL 2 AND PER PID STANDARD DETAIL PID-02.

7. CAP AND ABANDON EXISTING 4" STEEL MAIN, PER SPECIFCATION SECTION 02220.

8. SURFACE RESTORATION WILL CONSIST OF ASPHALT RESTORATION AND MAY ALSO INCLUDE RESTORATION OF CURBS, CONCRETE DRIVEWAYS, GRAVEL AREAS, AND LANDSCAPED AREAS.

**NOTES**

1. FAWNDALE LN IS PRIVATELY OWNED; HOWEVER CONTRACTOR SHALL AT A MINIMUM FOLLOW TOP STANDARD DETAILS TB1 AND TB2 FOR TRENCH BACKFILL AND LIMITS OF ASPHALT RESTORATION.

2. LUCKY JOHN RD IS OWNED BY THE TOP. CONTRACTOR SHALL REFER TO TOP STANDARD DETAIL TB2 FOR LIMITS OF ASPHALT RESTORATION.

3. CONTRACTOR SHALL SUBMIT TO TOP SCHEDULE FOR TRAFFIC CONTROL IN ADVANCE OF WORK.

REGISTERED PROFESSIONAL ENGINEER  
KRISTINA P. ALACON  
No. C70952  
CIVIL  
STATE OF CALIFORNIA  
06-02-23

REVISIONS			
NO.	BY	DATE	REMARKS

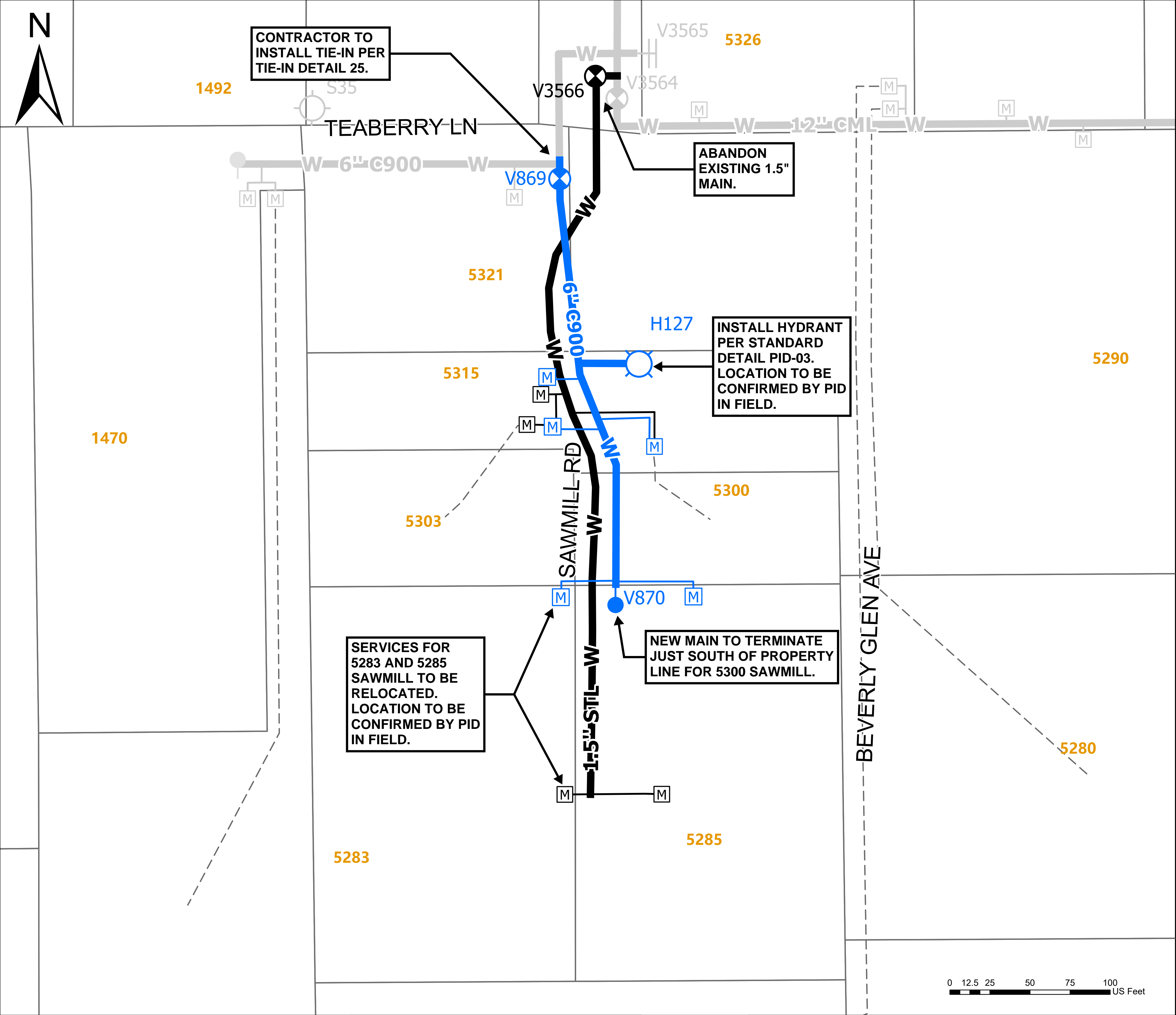
DESIGNED: E. DIEGO  
DRAWN: E. MA  
CHECKED: K. ALACON  
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6332 CLARK ROAD, PARADISE, CA 95969  
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MAINS REPLACEMENT PROJECT PHASE 1  
PROJECT SEGMENT # FAWNDALE

DATE 4/9/2023  
DWG C-24 SHEET 33 OF 56





Quantities			
Item No.	Description	Unit	Quantity
5a	Abandon Water Main <8" Diameter	LF	461
6b	Install 6" C900 PVC Water Main	LF	296
8	Install Blow Off Assembly	EA	1
10a	Install 1" HDPE Service Lateral	LF	125
12a	Furnish and Install 3/4"-1" Meter Box	EA	5
13a	Furnish and Install 3/4" Meter	EA	5
15a	Install 1" Backflow Preventer	EA	5
17	Test Backflow Preventer	EA	5
18	Reconnect Customer Plumbing	LF	25
20a	Excavation and Backfill <5ft Depth	LF	421
21	Asphalt Restoration - General	SF	1,893
23	Unpaved Restoration - General	SF	316
25	Install New Fire Hydrant Assembly	EA	1
28	Excavation and Backfill - Hydrant Assemblies	LF	15
29	Asphalt Restoration for Hydrant Assemblies	SF	70
30	Concrete Restoration - Hydrant Assemblies	SF	8
31	Unpaved Restoration - Hydrant Assemblies	SF	12
32ae	Construct and Install Tie-In - Sawmill DTL 25	EA	1
Note: Detailed information related to bid items 10-17 is to be provided at time of construction.			

**WORK DESCRIPTION**

1.

WORK FOR THIS MAIN SEGMENT SHALL BE COMPLETED AS PRIORITY GROUP F, PER SPECIFICATION SECTION 01130.

2.

NEW 6-INCH C900 MAIN SHALL BE INSTALLED A MINIMUM OF 3 FEET AND MAXIMUM OF 5 FEET EAST FROM EXISTING MAIN.

3.

INSTALL BLOW OFF VALVE SHOWN, PER STANDARD DETAIL PID-01.

4.

INSTALL HYDRANT PER HYDRANT SCHEDULE, SPECIFICATION SECTION 15200 HS

5.

INSTALL OR RECONNECT SERVICES AS SUMMARIZED IN QUANTITIES TABLE.

6.

CONTRACTOR TO CONNECT TO EXISTING MAIN PER TIE-IN DETAIL 25.

7.

INSTALL THRUST BLOCKS AS SHOWN ON TIE-IN DETAIL 25 AND PER STD DTL PID-02.

8.

CAP AND ABANDON EXISTING 1.5" MAIN, PER SPECIFCATION SECTION 02220.

9.

SURFACE RESTORATION WILL CONSIST OF ASPHALT AND GRAVEL RESTORATION AND MAY ALSO INCLUDE RESTORATION OF CONCRETE DRIVEWAYS AND LANDSCAPED AREAS.

- NOTES**
1.

SAWMILL RD NORTH OF INTERSECTION OF BEVERLY GLEN AVE AND SAWMILL RD IS OWNED BY THE TOP. CONTRACTOR SHALL REFER TO TOP STANDARD DETAIL TB2 FOR LIMITS OF ASPHALT RESTORATION.
2.

SAWMILL RD SOUTH OF INTERSECTION OF BEVERLY GLEN AVE AND SAWMILL RD IS PRIVATELY OWNED; HOWEVER, CONTRACTOR SHALL AT A MINIMUM FOLLOW TOP STANDARD DETAILS TB1 AND TB2 FOR TRENCH BACKFILL AND LIMITS OF ASPHALT RESTORATION.
3.

CONTRACTOR SHALL SUBMIT TO TOP SCHEDULE FOR TRAFFIC CONTROL ON SAWMILL IN ADVANCE OF WORK.
4.

CONTRACTOR SHALL NOT USE ROADWAY OR SHOULDER OF BEVERLY GLEN AVE FOR STAGING OF VEHICLES AND EQUIPMENT OR TO TURN VEHICLES AROUND.



**WATERWORKS**  
ENGINEERS



06-02-23

REVISIONS			
NO.	BY	DATE	REMARKS

DESIGNED: E. DIEGO

DRAWN: E. MA

CHECKED: K. ALACON

APPROVED: S. KADER

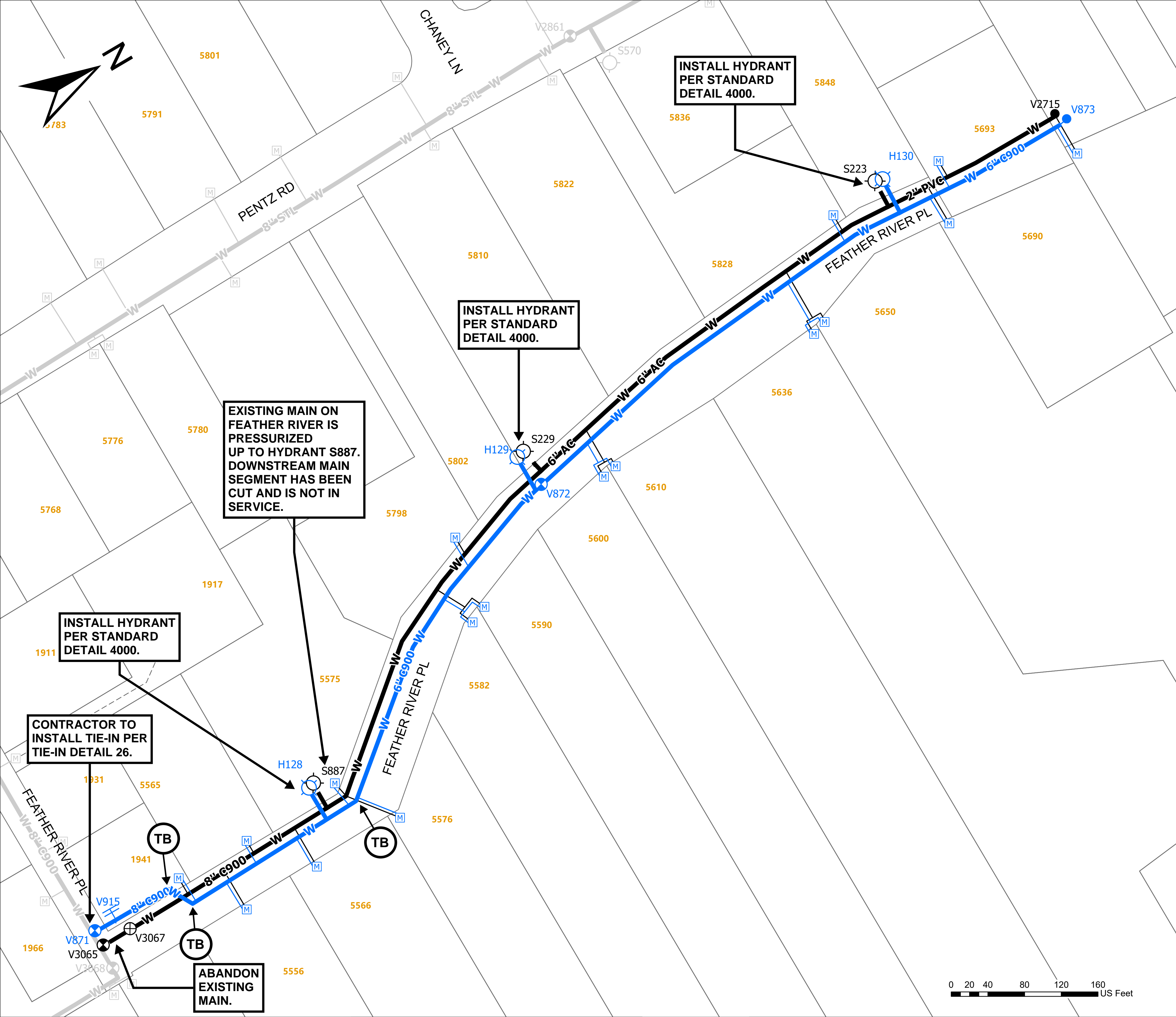


**PARADISE IRRIGATION DISTRICT**  
6332 CLARK ROAD, PARADISE, CA 95969  
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**MAINS REPLACEMENT PROJECT PHASE 1**  
PROJECT SEGMENT # SAWMILL

DATE 4/9/2023  
DWG C-25 SHEET 34 OF 56







Quantities			
Item No.	Description	Unit	Quantity
5a	Abandon Water Main <8" Diameter	LF	1,112
5b	Abandon 8" Water Main	LF	321
6b	Install 6" C900 PVC Water Main	LF	1,231
6c	Install 8" C900 PVC Water Main	LF	283
7b	Install 6" Gate Valve	EA	1
8	Install Blow Off Assembly	EA	1
9	Install Air Release and Vaccum Relief Valve Assembly	EA	1
10a	Install 1" HDPE Service Lateral	LF	275
11a	Reconnect 3/4" and 1" Service Lateral	EA	6
12a	Furnish and Install 3/4"-1" Meter Box	EA	11
13a	Furnish and Install 3/4" Meter	EA	10
13b	Furnish and Install 1" Meter	EA	1
15a	Install 1" Backflow Preventer	EA	11
16a	Reconfigure 1" Backflow Preventer	EA	1
17	Test Backflow Preventer	EA	17
18	Reconnect Customer Plumbing	LF	55
20a	Excavation and Backfill <5ft Depth	LF	1,819
21	Asphalt Restoration - General	SF	8,187
23	Unpaved Restoration - General	SF	1,364
24	Remove and Demolish Fire Hydrant	EA	3
26	Install Hydrant Assembly with Salvaged Hydrant Head	EA	3
28	Excavation and Backfill - Hydrant Assemblies	LF	55
29	Asphalt Restoration for Hydrant Assemblies	SF	247
30	Concrete Restoration - Hydrant Assemblies	SF	8
31	Unpaved Restoration - Hydrant Assemblies	SF	41
32af	Construct and Install Tie-In - Feather River DTL 26	EA	1

Note: Detailed information related to bid items 10-17 is to be provided at time of construction.

- WORK DESCRIPTION**
1. WORK FOR THIS MAIN SEGMENT SHALL BE COMPLETED AS PRIORITY GROUP G, PER SPECIFICATION SECTION 01130.
  2. NEW 8-INCH AND 6-INCH C900 MAIN SHALL BE INSTALLED A MINIMUM OF 3 FEET AND MAXIMUM OF 5 FEET FROM EXISTING MAIN TOWARDS CENTERLINE OF ROAD.
  3. INSTALL HYDRANTS PER HYDRANT SCHEDULE, SPECIFICATION SECTION 15200 HS.
  4. INSTALL AIR RELEASE VALVE SHOWN, PER STANDARD DETAIL PID-10.
  5. INSTALL BLOW OFF VALVE SHOWN, PER STANDARD DETAIL PID-01.
  6. INSTALL OR RECONNECT SERVICES AS SUMMARIZED IN QUANTITIES TABLE.
  7. CONTRACTOR TO CONNECT TO EXISTING MAIN PER TIE-IN DETAIL 26.
  8. INSTALL THRUST BLOCKS AS SHOWN HEREIN, ON TIE-IN DETAIL 22, AND PER STD DTL PID-02.
  9. CONTRACTOR TO CAP, FILL AND ABANDON EXISTING 8-INCH, 6-INCH, AND 2-INCH MAIN SEGMENTS, PER SPECIFCATION SECTION 02220.
  10. SURFACE RESTORATION WILL CONSIST OF ASPHALT RESTORATION AND MAY ALSO INCLUDE RESTORATION OF CURBS, CONCRETE DRIVEWAYS, GRAVEL AREAS, AND LANDSCAPED AREAS.

- NOTES**
1. FEATHER RIVER PL IS PRIVATELY OWNED; HOWEVER, CONTRACTOR SHALL AT A MINIMUM FOLLOW TOP STANDARD DETAILS TB1 AND TB2 FOR TRENCH BACKFILL AND LIMITS OF ASPHALT RESTORATION.
  2. CONTRACTOR SHAL SUBMIT TO PID AND ENGINNER SCHEDULE FOR TRAFFIC CONTROL IN ADAVANCE OF WORK.




REVISIONS			
NO.	BY	DATE	REMARKS

DESIGNED: E. DIEGO

DRAWN: E. MA

CHECKED: K. ALACON

APPROVED: S. KADER



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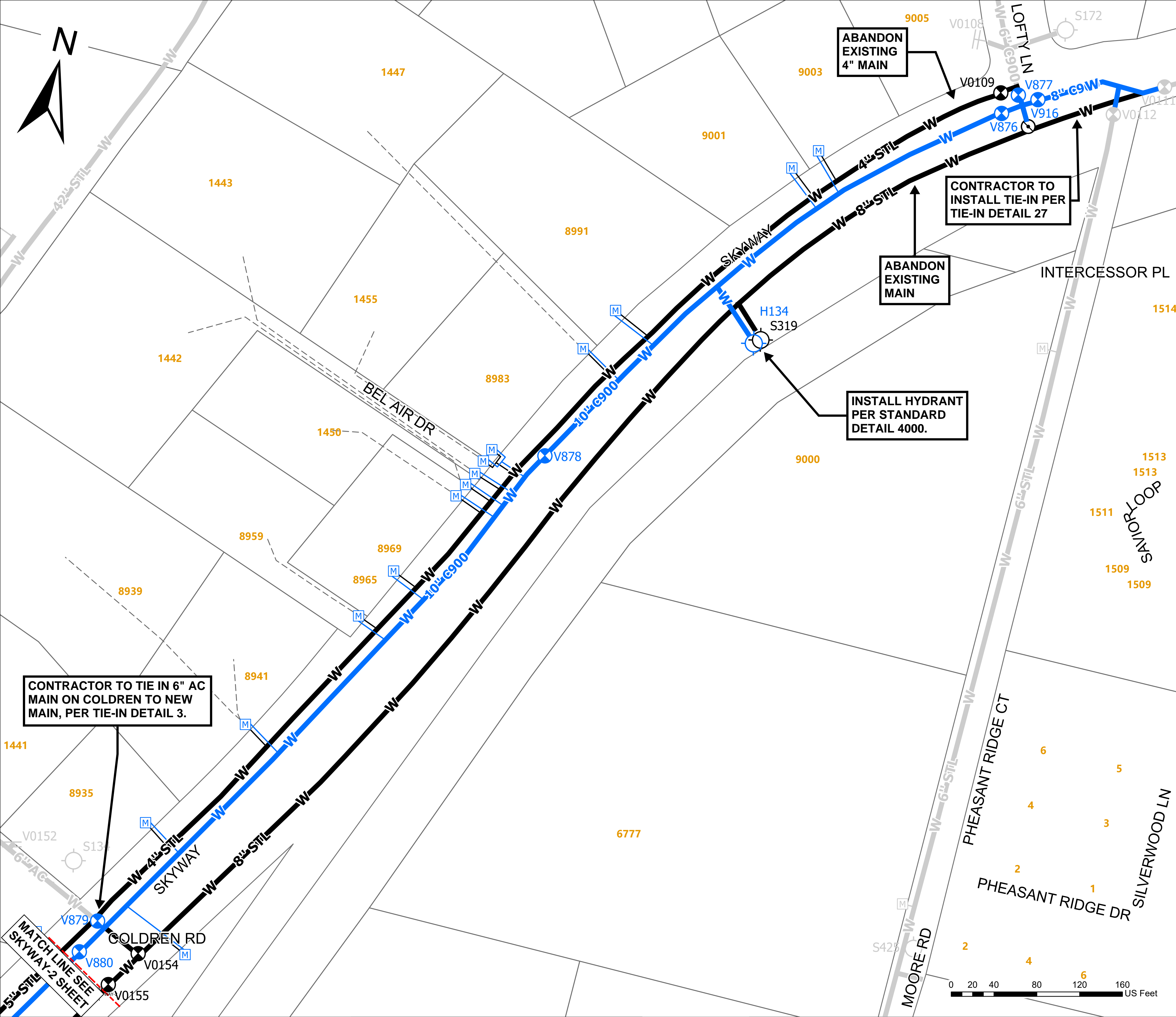
MAINS REPLACEMENT PROJECT PHASE 1

PROJECT SEGMENT # FEATHER RIVER

DATE 4/9/2023

DWG C-26 SHEET 35 OF 56





Quantities			
Item No.	Description	Unit	Quantity
5a	Abandon Water Main <8" Diameter	LF	1,338
5b	Abandon 8" Water Main	LF	1,297
6b	Install 6" C900 PVC Water Main	LF	53
6c	Install 8" C900 PVC Water Main	LF	186
6d	Install 10" C900 PVC Water Main	LF	1,162
7d	Install 10" Gate Valve	EA	2
10a	Install 1" HDPE Service Lateral	LF	175
11a	Reconnect 3/4" and 1" Service Lateral	EA	7
12a	Furnish and Install 3/4"-1" Meter Box	EA	7
13a	Furnish and Install 3/4" Meter	EA	6
13b	Furnish and Install 1" Meter	EA	1
15a	Install 1" Backflow Preventer	EA	6
16a	Reconfigure 1" Backflow Preventer	EA	1
17	Test Backflow Preventer	EA	12
18	Reconnect Customer Plumbing	LF	35
20a	Excavation and Backfill <5ft Depth	LF	1,611
21	Asphalt Restoration - General	SF	7,250
23	Unpaved Restoration - General	SF	1,208
24	Remove and Demolish Fire Hydrant	EA	1
26	Install Hydrant Assembly with Salvaged Hydrant Head	EA	1
28	Excavation and Backfill - Hydrant Assemblies	LF	31
29	Asphalt Restoration for Hydrant Assemblies	SF	141
30	Concrete Restoration - Hydrant Assemblies	SF	8
31	Unpaved Restoration - Hydrant Assemblies	SF	23
32ag	Construct and Install Tie-In - Skyway-1 DTL 27	EA	1
32ah	Construct and Install Tie-In - Skyway/ Coldren DTL 3	EA	1
Note: Detailed information related to bid items 10-17 is to be provided at time of construction.			

WORK DESCRIPTION

- 1. WORK FOR THIS MAIN SEGMENT SHALL BE COMPLETED AS PRIORITY GROUP H, PER SPECIFICATION SECTION 01130. SEQUENCE OF WORK FOR SKYWAY-1 AND SKYWAY-2 IS TO BE COORDINATED WITH PID AND ENGINEER IN ADVANCE.
- 2. NEW 10-INCH C900 MAIN SHALL BE INSTALLED IN SOUTHBOUND LANE OF SKYWAY.
- 3. INSTALL HYDRANTS PER HYDRANT SCHEDULE, SPECIFICATION SECTION 15200 HS.
- 4. INSTALL OR RECONNECT SERVICES AS SUMMARIZED IN QUANTITIES TABLE.
- 5. CONTRACTOR TO TIE-IN 10" MAIN PER TIE-IN DETAILS 3 AND 28.
- 6. INSTALL THRUST BLOCKS AS SHOWN ON TIE-IN DETAILS AND PER STD DTL PID-02.
- 7. CAP FILL AND ABANDON EXISTING MAINS, PER SPECIFICATION SECTION 02220.
- 8. EXISTING MAINS ARE NOT TO BE ABANDONED UNTIL ALL SERVICES ARE COMPLETE AND TIED INTO NEW 10" MAIN.
- 9. SURFACE RESTORATION WILL CONSIST OF ASPHALT RESTORATION AND MAY ALSO INCLUDE RESTORATION OF DRIVEWAYS, GRAVEL AREAS, SIDEWALKS, CURBS, AND LANDSCAPED AREAS.

NOTES

- 1. SKYWAY IS OWNED BY THE TOP. CONTRACTOR SHALL FOLLOW TOP STANDARD DETAIL TB2 FOR LIMITS OF ASPHALT RESTORATION.
- 2. CONTRACTOR SHALL SUBMIT TO TOP SCHEDULE FOR TRAFFIC CONTROL IN ADVANCE OF WORK.
- 3. CONTRACTOR SHALL RESTORE CURBS AND SIDEWALKS PER BUTTE COUNTY STANDARD DETAILS S-1 AND S-2.
- 4. WATER MAIN AND SERVICES ON THE WEST SIDE OF SKYWAY ARE TO BE INSTALLED FIRST. SERVICES ON THE EAST SIDE OF SKYWAY ARE TO BE INSTALLED AFTER WORK ON THE SOUTHBOUND LANE OF SKYWAY IS SUFFICIENTLY COMPLETE TO ALLOW TRAFFIC THROUGH.

REGISTERED PROFESSIONAL ENGINEER  
KRISTINA P. ALACON  
No. C70952  
CIVIL  
STATE OF CALIFORNIA  
06-02-23

REVISIONS			
NO.	BY	DATE	REMARKS

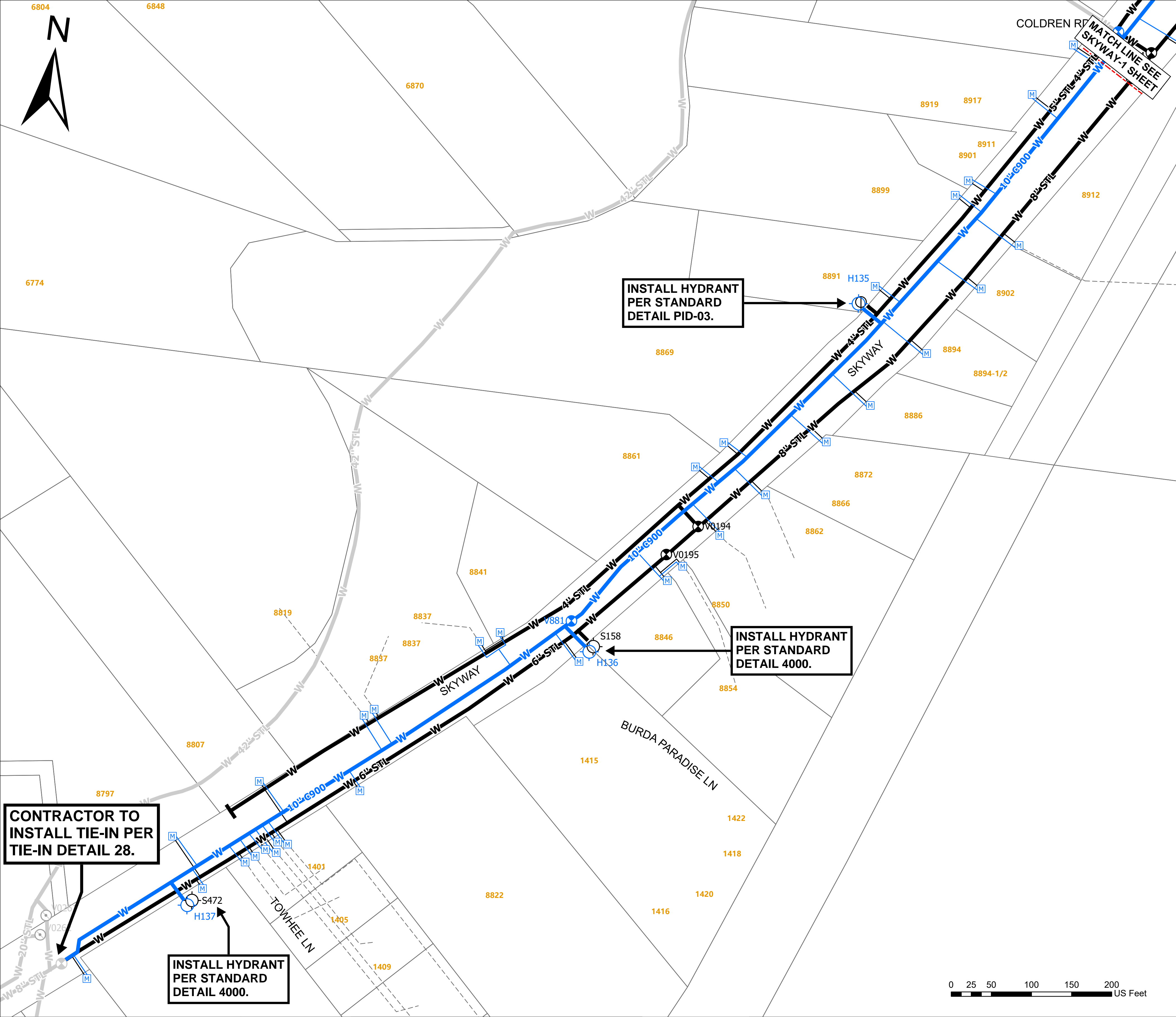
DESIGNED: E. DIEGO  
DRAWN: E. MA  
CHECKED: K. ALACON  
APPROVED: S. KADER

PARADISE IRRIGATION DISTRICT  
6332 CLARK ROAD, PARADISE, CA 95969  
PHONE: (530) 877-4971

MAINS REPLACEMENT PROJECT PHASE 1  
PROJECT SEGMENT # SKYWAY-1

DATE 4/9/2023  
DWG C-27 SHEET 36 OF 56






Quantities			
Item No.	Description	Unit	Quantity
5a	Abandon Water Main <8" Diameter	LF	2,444
5b	Abandon 8" Water Main	LF	785
6b	Install 6" C900 PVC Water Main	LF	83
6d	Install 10" C900 PVC Water Main	LF	1,733
7d	Install 10" Gate Valve	EA	1
10a	Install 1" HDPE Service Lateral	LF	450
10b	Install 1.5" HDPE Service Lateral	LF	25
11a	Reconnect 3/4" and 1" Service Lateral	EA	12
11b	Reconnect 1.5" Service Lateral	EA	1
12a	Furnish and Install 3/4"-1" Meter Box	EA	19
12b	Furnish and Install 1.5"-2" Meter Box	EA	1
13a	Furnish and Install 3/4" Meter	EA	13
13b	Furnish and Install 1" Meter	EA	6
13c	Furnish and Install 1.5" Meter	EA	1
15a	Install 1" Backflow Preventer	EA	18
15b	Install 1.5" Backflow Preventer	EA	1
17	Test Backflow Preventer	EA	28
18	Reconnect Customer Plumbing	LF	100
20a	Excavation and Backfill <5ft Depth	LF	2,356
21	Asphalt Restoration - General	SF	10,601
23	Unpaved Restoration - General	SF	1,767
24	Remove and Demolish Fire Hydrant	EA	3
25	Install New Fire Hydrant Assembly	EA	1
26	Install Hydrant Assembly with Salvaged Hydrant Head	EA	2
28	Excavation and Backfill - Hydrant Assemblies	LF	49
29	Asphalt Restoration for Hydrant Assemblies	SF	223
30	Concrete Restoration - Hydrant Assemblies	SF	8
31	Unpaved Restoration - Hydrant Assemblies	SF	37
32ai	Construct and Install Tie-In - Skyway-2 DTL 28	EA	1
Note: Detailed information related to bid items 10-17 is to be provided at time of construction.			

WORK DESCRIPTION


1. WORK FOR THIS MAIN SEGMENT SHALL BE COMPLETED AS PRIORITY GROUP H, PER SPECIFICATION SECTION 01130. SEQUENCE OF WORK FOR SKYWAY-2 AND SKYWAY-1 IS TO BE COORDINATED WITH PID AND ENGINEER IN ADVANCE.
2. NEW 10-INCH C900 MAIN SHALL BE INSTALLED IN SOUTHBOUND LANE OF SKYWAY.
3. INSTALL HYDRANTS PER HYDRANT SCHEDULE, SPECIFICATION SECTION 15200 HS.
4. INSTALL OR RECONNECT SERVICES AS SUMMARIZED IN QUANTITIES TABLE.
5. CONTRACTOR TO TIE-IN 10" MAIN PER TIE-IN DETAILS 3 AND 28.
6. INSTALL THRUST BLOCKS AS SHOWN ON TIE-IN DETAILS AND PER STD DTL PID-02.
7. CAP FILL AND ABANDON EXISTING MAINS, PER SPECIFICATION SECTION 02220.
8. EXISTING MAINS ARE NOT TO BE ABANDONED UNTIL ALL SERVICES ARE COMPLETE AND TIED INTO NEW 10" MAIN.
9. SURFACE RESTORATION WILL CONSIST OF ASPHALT RESTORATION AND MAY ALSO INCLUDE RESTORATION OF DRIVEWAYS, GRAVEL AREAS, SIDEWALKS, CURBS, AND LANDSCAPED AREAS.

NOTES

1. SKYWAY IS OWNED BY THE TOP. CONTRACTOR SHALL FOLLOW TOP STANDARD DETAIL TB2 FOR LIMITS OF ASPHALT RESTORATION.
2. CONTRACTOR SHALL SUBMIT TO TOP SCHEDULE FOR TRAFFIC CONTROL IN ADVANCE OF WORK.
3. CONTRACTOR SHALL RESTORE CURBS AND SIDEWALKS PER BUTTE COUNTY STANDARD DETAILS S-1 AND S-2.
4. WATER MAIN AND SERVICES ON THE WEST SIDE OF SKYWAY ARE TO BE INSTALLED FIRST. SERVICES ON THE EAST SIDE OF SKYWAY ARE TO BE INSTALLED AFTER WORK ON THE SOUTHBOUND LANE OF SKYWAY IS SUFFICIENTLY COMPLETE TO ALLOW TRAFFIC THROUGH.




**WATERWORKS**  
ENGINEERS



06-02-23

REVISIONS			
NO.	BY	DATE	REMARKS

DESIGNED: E. DIEGO  
DRAWN: E. MA  
CHECKED: K. ALACON  
APPROVED: S. KADER

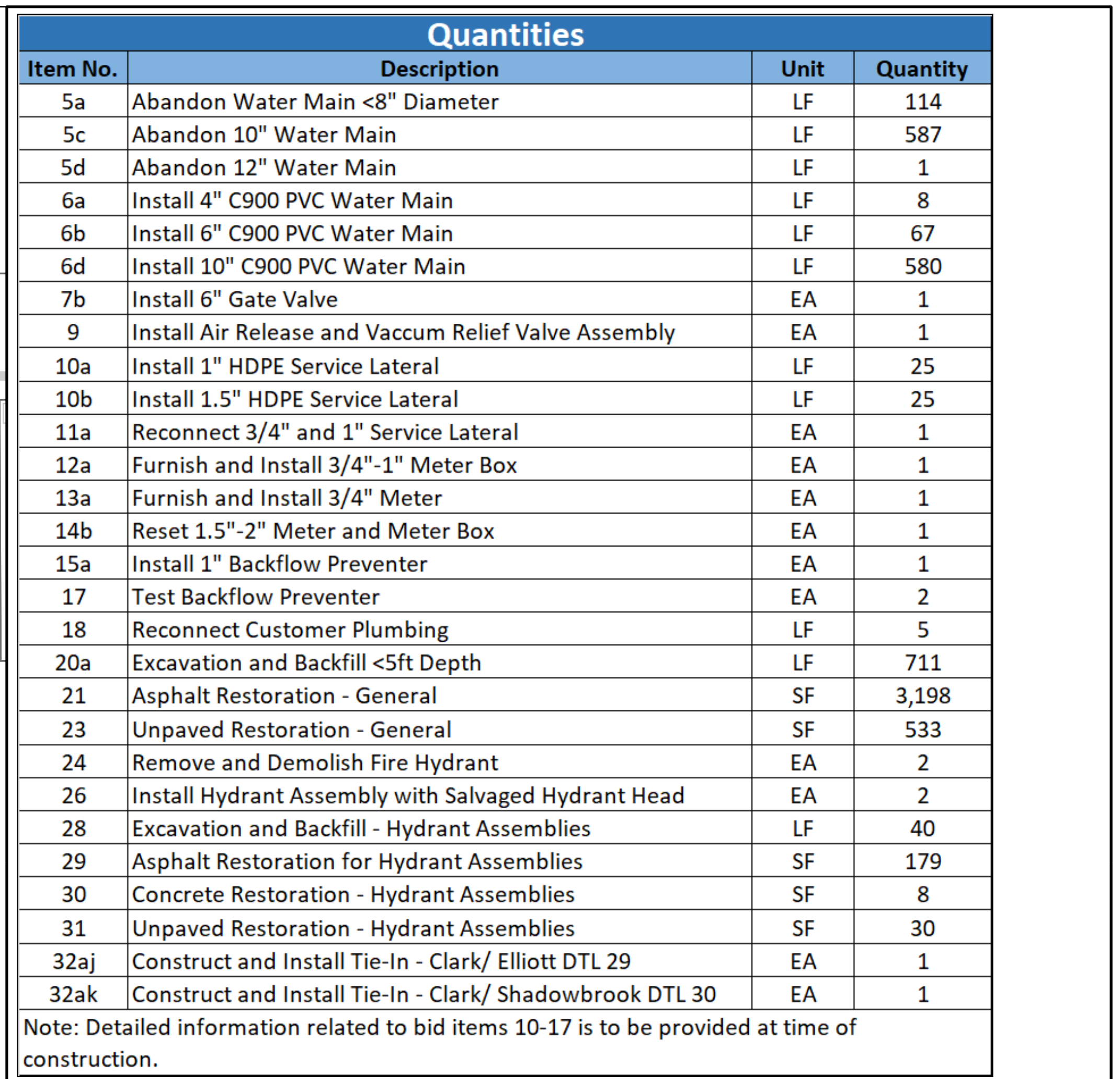


**PARADISE IRRIGATION DISTRICT**  
6332 CLARK ROAD, PARADISE, CA 95969  
PHONE: (530) 877-4971

**MAINS REPLACEMENT PROJECT PHASE 1**  
PROJECT SEGMENT # SKYWAY-2

DATE 4/9/2023  
DWG C-28 SHEET 37 OF 56



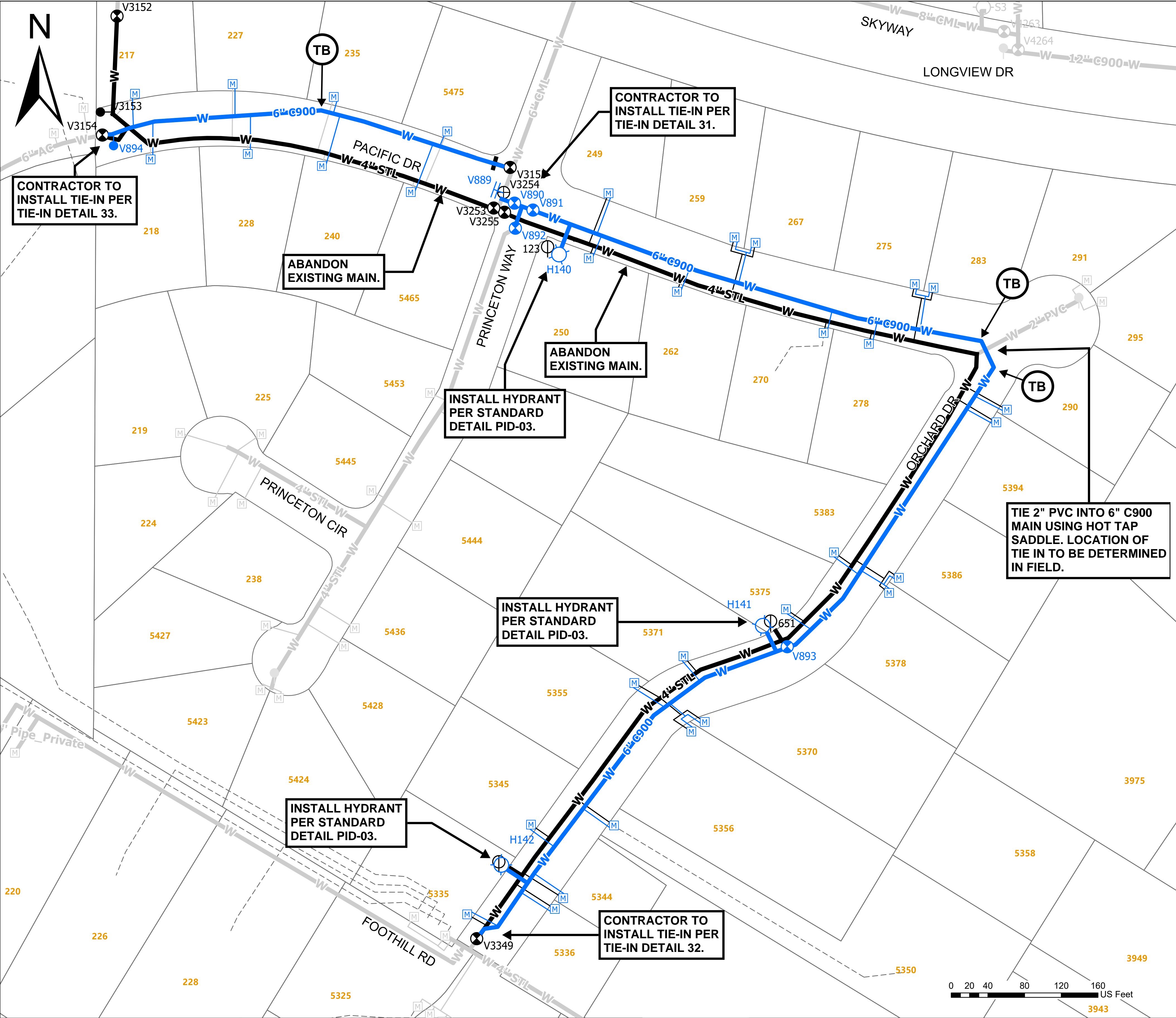


1. WORK FOR THIS MAIN SEGMENT SHALL BE COMPLETED AS PRIORITY GROUP H AND AS NIGHT WORK, PER SPECIFICATION SECTION 01130.
2. NEW 10-INCH C900 MAIN SHALL BE INSTALLED A MINIMUM OF 3 FEET AND MAXIMUM OF 5 FEET FROM EXISTING MAIN.
3. INSTALL HYDRANTS PER HYDRANT SCHEDULE, SPECIFICATION SECTION 15200 HS.
4. INSTALL COMBINATION AIR RELEASE VALVES AS SHOWN, PER PID-10 STD DETAIL.
5. INSTALL OR RECONNECT SERVICES AS SUMMARIZED IN QUANTITIES TABLE.
6. CONTRACTOR TO TIE-IN 10" MAIN PER TIE-IN DETAILS 29 AND 30.
7. INSTALL THRUST BLOCKS AS SHOWN HEREIN, ON TIE-IN DETAILS, AND PER PID STD DETAIL PID-02.
8. ABANDON EXISTING 10" MAIN, PER SPECIFICATION SECTION 02220.
9. SURFACE RESTORATION WILL CONSIST OF ASPHALT RESTORATION, CONCRETE SIDEWALKS, CURBS AND MAY ALSO INCLUDE RESTORATION OF DRIVEWAYS, GRAVEL AREAS, AND LANDSCAPED AREAS.

1. CLARK RD AND ELLIOTT RD ARE OWNED BY THE TOP. CONTRACTOR SHALL FOLLOW TOP STANDARD DETAIL TB2 FOR LIMITS OF ASPHALT RESTORATION.
2. CONTRACTOR SHALL SUBMIT TO TOP SCHEDULE FOR TRAFFIC CONTROL IN ADVANCE OF WORK.
3. CONTRACTOR SHALL RESTORE CURBS AND SIDEWALKS PER BUTTE COUNTY STANDARD DETAILS S-1 AND S-2.
4. CONTRACTOR SHALL MAKE ACCOMODATIONS FOR BUTTE REGIONAL TRANSIT PER, SPECIFICATION SECTION 01130.

<p><b>MAINS REPLACEMENT PROJECT PHASE 1</b></p> <p>PROJECT SEGMENT # CLARK-B</p>	<p>DATE <u>4/9/2023</u></p>
	<p>DWG <u>C-29</u> SHEET <u>38</u> OF <u>56</u></p>





Quantities			
Item No.	Description	Unit	Quantity
5a	Abandon Water Main <8" Diameter	LF	2,010
6a	Install 4" C900 PVC Water Main	LF	17
6b	Install 6" C900 PVC Water Main	LF	1,946
7b	Install 6" Gate Valve	EA	1
8	Install Blow Off Assembly	EA	1
9	Install Air Release and Vaccum Relief Valve Assembly	EA	1
10a	Install 1" HDPE Service Lateral	LF	300
11a	Reconnect 3/4" and 1" Service Lateral	EA	20
12a	Furnish and Install 3/4"-1" Meter Box	EA	12
13a	Furnish and Install 3/4" Meter	EA	11
13b	Furnish and Install 1" Meter	EA	1
15a	Install 1" Backflow Preventer	EA	13
17	Test Backflow Preventer	EA	31
18	Reconnect Customer Plumbing	LF	60
20a	Excavation and Backfill <5ft Depth	LF	2,362
21	Asphalt Restoration - General	SF	10,630
23	Unpaved Restoration - General	SF	1,772
24	Remove and Demolish Fire Hydrant	EA	3
25	Install New Fire Hydrant Assembly	EA	3
28	Excavation and Backfill - Hydrant Assemblies	LF	41
29	Asphalt Restoration for Hydrant Assemblies	SF	186
30	Concrete Restoration - Hydrant Assemblies	SF	8
31	Unpaved Restoration - Hydrant Assemblies	SF	31
32a	Construct and Install Tie-In - Pacific/ Princeton DTL 31	EA	1
32am	Construct and Install Tie-In - Orchard/ Foothill DTL 32	EA	1
32an	Construct and Install Tie-In - Pacific DTL 33	EA	1

Note: Detailed information related to bid items 10-17 is to be provided at time of construction.

WORK DESCRIPTION

1. WORK FOR THIS MAIN SEGMENT SHALL BE COMPLETED AS PRIORITY GROUP I, PER SPECIFICATION SECTION 01130.
2. NEW 6-INCH C900 MAIN SEGMENTS SHALL BE INSTALLED A MINIMUM OF 3 FEET AND MAXIMUM OF 5 FEET FROM EXISTING MAIN, TOWARDS CENTERLINE OF ROAD.
3. INSTALL HYDRANTS PER HYDRANT SCHEDULE, SPECIFICATION SECTION 15200 HS.
4. INSTALL BLOW OFF VALVE ASSEMBLY, PER STANDARD DETAIL 5000.
5. INSTALL OR RECONNECT SERVICES AS SUMMARIZED IN QUANTITIES TABLE.
6. CONTRACTOR TO TIE-IN TO EXISTING MAINS PER TIE-IN DETAILS 31, 32, AND 33.
7. INSTALL THRUST BLOCKS AS SHOWN HEREIN, AND PER TIE-IN DETAILS AND PID-02.
8. ABANDON EXISTING 4" MAIN, PER SPECIFICATION SECTION 02220.
9. SURFACE RESTORATION WILL CONSIST OF ASPHALT RESTORATION AND MAY ALSO INCLUDE RESTORATION OF CONCRETE DRIVEWAYS, GRAVEL AREAS, AND LANDSCAPED AREAS.
10. INLINE VALVES SHALL BE INSTALLED IN APPROXIMATE LOCATIONS SHOWN.
11. TIE-IN EXISTING 2" PVC MAIN WITH HOT TAP SADDLE.

NOTES

1. PACIFIC DR, ORCHARD WAY, AND PRINCETON WY ARE OWNED BY THE TOP. CONTRACTOR SHALL FOLLOW TOP STANDARD DETAIL TB2 FOR LIMITS OF ASPHALT RESTORATION.
2. CONTRACTOR SHALL SUBMIT TO TOP SCHEDULE FOR TRAFFIC CONTROL IN ADVANCE OF WORK.
3. CONTRACTOR SHALL COORDINATE ALL WATER OUTAGES AND TIE-INS WITH PID AND ENGINEER.

REGISTERED PROFESSIONAL ENGINEER  
KRISTINA P. ALACON  
No. C70952  
CIVIL  
STATE OF CALIFORNIA  
06-02-23

REVISIONS			
NO.	BY	DATE	REMARKS

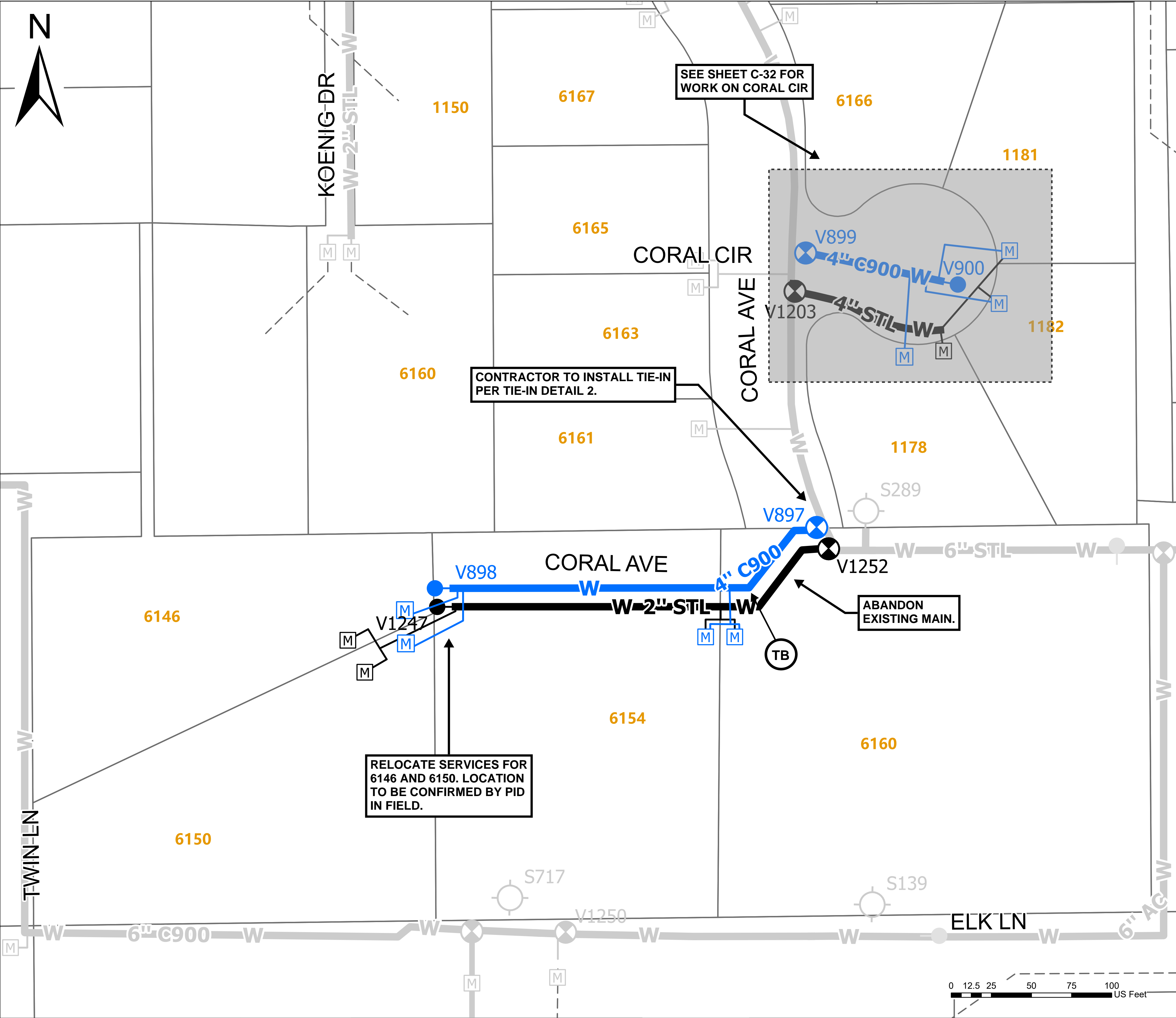
DESIGNED: E. DIEGO  
DRAWN: E. MA  
CHECKED: K. ALACON  
APPROVED: S. KADER

PARADISE IRRIGATION DISTRICT  
6332 CLARK ROAD, PARADISE, CA 95969  
PHONE: (530) 877-4971

MAINS REPLACEMENT PROJECT PHASE 1  
PROJECT SEGMENT # PACIFIC-ORCHARD

DATE 4/9/2023  
DWG C-30 SHEET 39 OF 56





Quantities			
Item No.	Description	Unit	Quantity
5a	Abandon Water Main <8" Diameter	LF	245
6a	Install 4" C900 PVC Water Main	LF	236
10a	Install 1" HDPE Service Lateral	LF	50
11a	Reconnect 3/4" and 1" Service Lateral	EA	2
12a	Furnish and Install 3/4"-1" Meter Box	EA	1
13a	Furnish and Install 3/4" Meter	EA	1
14a	Reset 3/4"-1" Meter and Meter Box	EA	1
15a	Install 1" Backflow Preventer	EA	1
17	Test Backflow Preventer	EA	4
18	Reconnect Customer Plumbing	LF	5
20a	Excavation and Backfill <5ft Depth	LF	296
21	Asphalt Restoration - General	SF	1,333
23	Unpaved Restoration - General	SF	222
32ao	Construct and Install Tie-In - Coral Ave DTL 2	EA	1
Note: Detailed information related to bid items 10-17 is to be provided at time of construction.			

WORK DESCRIPTION

1. WORK FOR THIS MAIN SEGMENT SHALL BE COMPLETED AS PRIORITY GROUP I, PER SPECIFICATION SECTION 01130.
2. NEW 4-INCH C900 MAIN SHALL BE INSTALLED A MINIMUM OF 3 FEET AND MAXIMUM OF 5 FEET NORTH OF EXISTING MAIN.
3. INSTALL BLOW OFF VALVE SHOWN, PER PID-01 STD DETAIL.
4. INSTALL OR RECONNECT SERVICES AS SUMMARIZED IN QUANTITIES TABLE.
5. CONTRACTOR TO CONNECT TO EXISTING MAIN PER TIE-IN DETAIL 2.
6. INSTALL THRUST BLOCKS AS SHOWN HEREIN, ON TIE-IN DETAIL 2, AND PER STANDARD DETAIL PID-02.
7. CAP AND ABANDON EXISTING 2" STEEL MAIN, PER SPECIFCATION SECTION 02220.
8. SURFACE RESTORATION WILL CONSIST OF ASPHALT RESTORATION AND MAY ALSO INCLUDE RESTORATION OF CURBS, CONCRETE DRIVEWAYS, GRAVEL AREAS, AND LANDSCAPED AREAS.

NOTES

1. CORAL AVE IS OWNED BY THE TOP. CONTRACTOR SHALL REFER TO TOP STANDARD DETAIL TB2 FOR LIMITS OF ASPHALT RESTORATION.
2. CONTRACTOR SHALL RESTORE CURB TO SAME AS OR BETTER CONDITION PER BUTTE COUNTY STANDARD DETAIL S-2.



**WATERWORKS**  
ENGINEERS



06-02-23

REVISIONS			
NO.	BY	DATE	REMARKS

DESIGNED: E. DIEGO

DRAWN: E. MA

CHECKED: K. ALACON

APPROVED: S. KADER

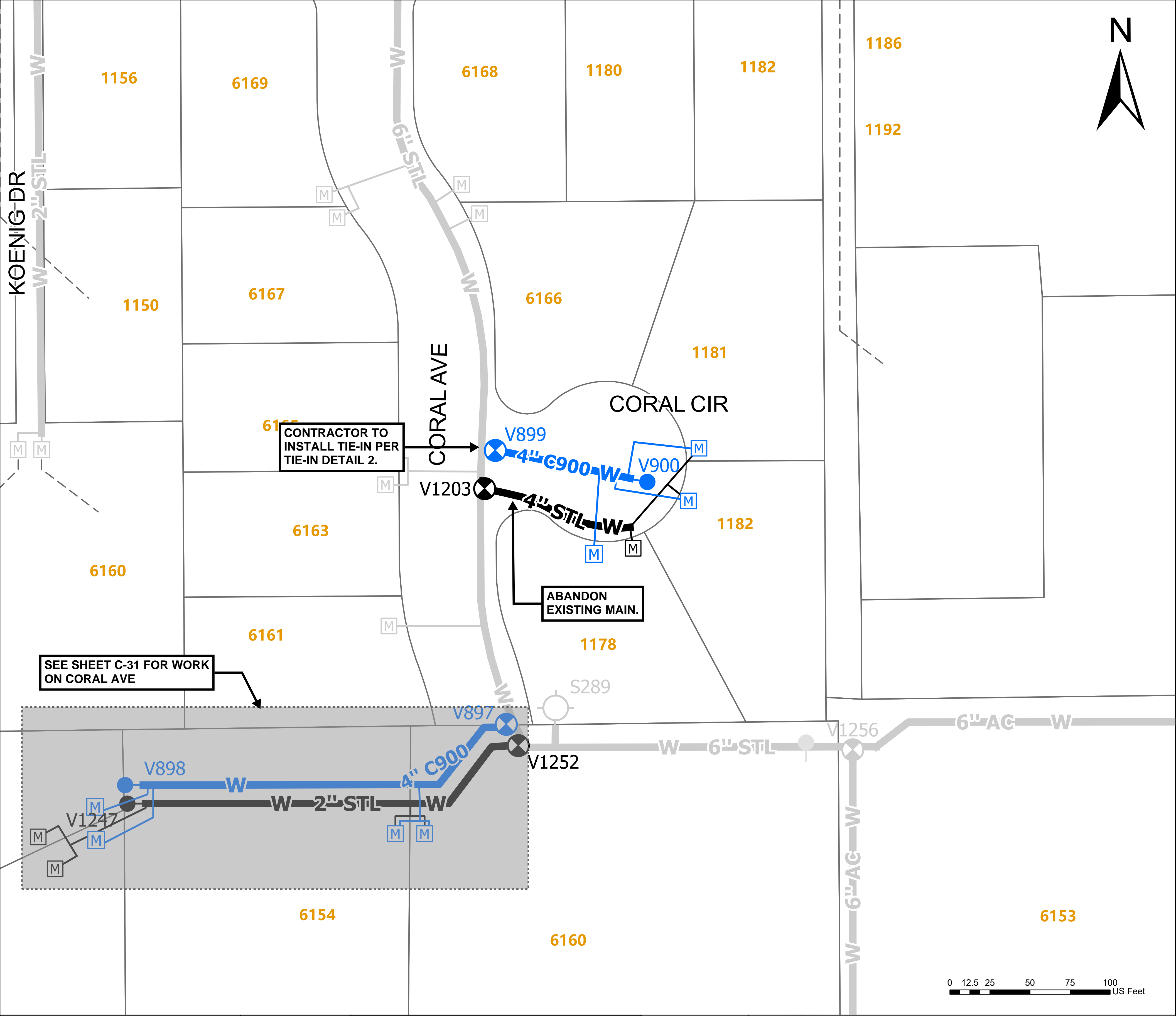


**PARADISE IRRIGATION DISTRICT**  
6332 CLARK ROAD, PARADISE, CA 95969  
PHONE: (530) 877-4971

**MAINS REPLACEMENT PROJECT PHASE 1**  
PROJECT SEGMENT # CORAL AVE

DATE 4/9/2023  
DWG C-31 SHEET 40 OF 56





Quantities			
Item No.	Description	Unit	Quantity
5a	Abandon Water Main <8" Diameter	LF	89
6a	Install 4" C900 PVC Water Main	LF	79
8	Install Blow Off Assembly	EA	1
10a	Install 1" HDPE Service Lateral	LF	25
11a	Reconnect 3/4" and 1" Service Lateral	EA	2
14a	Reset 3/4"-1" Meter and Meter Box	EA	1
17	Test Backflow Preventer	EA	2
20a	Excavation and Backfill <5ft Depth	LF	114
21	Asphalt Restoration - General	SF	511
23	Unpaved Restoration - General	SF	85
32ap	Construct and Install Tie-In - Coral Cir DTL 2	EA	1
Note: Detailed information related to bid items 10-17 is to be provided at time of construction.			

WORK DESCRIPTION

1.

WORK FOR THIS MAIN SEGMENT SHALL BE COMPLETED AS PRIORITY GROUP I, PER SPECIFICATION SECTION 01130.

2.

NEW 4-INCH C900 MAIN SHALL BE INSTALLED A MINIMUM OF 3 FEET AND MAXIMUM OF 5 FEET NORTH OF EXISTING MAIN.

3.

INSTALL BLOW OFF VALVE SHOWN, PER PID-01 STD DETAIL.

4.

INSTALL OR RECONNECT SERVICES AS SUMMARIZED IN QUANTITIES TABLE.

5.

SERVICES ARE TO BE RELOCATED AS NOTED (BELOW) WITH LOCATIONS TO BE CONFIRMED IN THE FIELD BY PID.

6.

CONTRACTOR TO CONNECT TO EXISTING MAIN PER TIE-IN DETAIL 2.

7.

INSTALL THRUST BLOCKS AS SHOWN ON TIE-IN DETAIL 2 AND PER STANDARD DETAIL PID-02.

8.

CAP AND ABANDON EXISTING 4" STEEL MAIN, PER SPECIFCATION SECTION 02220.

9.

SURFACE RESTORATION WILL CONSIST OF ASPHALT RESTORATION AND MAY ALSO INCLUDE RESTORATION OF CURBS, CONCRETE DRIVEWAYS, GRAVEL AREAS, AND LANDSCAPED AREAS.

- NOTES
1.

CORAL CIR IS OWNED BY THE TOP. CONTRACTOR SHALL REFER TO TOP STANDARD DETAIL TB2 FOR LIMITS OF ASPHALT RESTORATION.
2.

CONTRACTOR SHALL RESTORE CURB TO SAME AS OR BETTER CONDITION PER BUTTE COUNTY STANDARD DETAIL S-2.
3.

RELOCATE SERVICE FOR 1181 CORAL CIR TO ESTABLISH MINIMUM DISTANCE OF 5-FEET FROM UTILITY POLE.
4.

RELOCATE SERVICE FOR 1182 CORAL CIR TO ESTABLISH MINIMUM DISTANCE OF 5-FEET FROM CULVERT.
5.

CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING CMP CULVERT IN PLACE OR RESTORING CULVERT TO SAME AS OR BETTER CONDITION.
6.

RELOCATE SERVICE FOR 1178 CORAL CIR TO WEST SIDE OF DRIVEWAY.

REVISIONS			
NO.	BY	DATE	REMARKS

DESIGNED: E. DIEGO

DRAWN: E. MA

CHECKED: K. ALACON

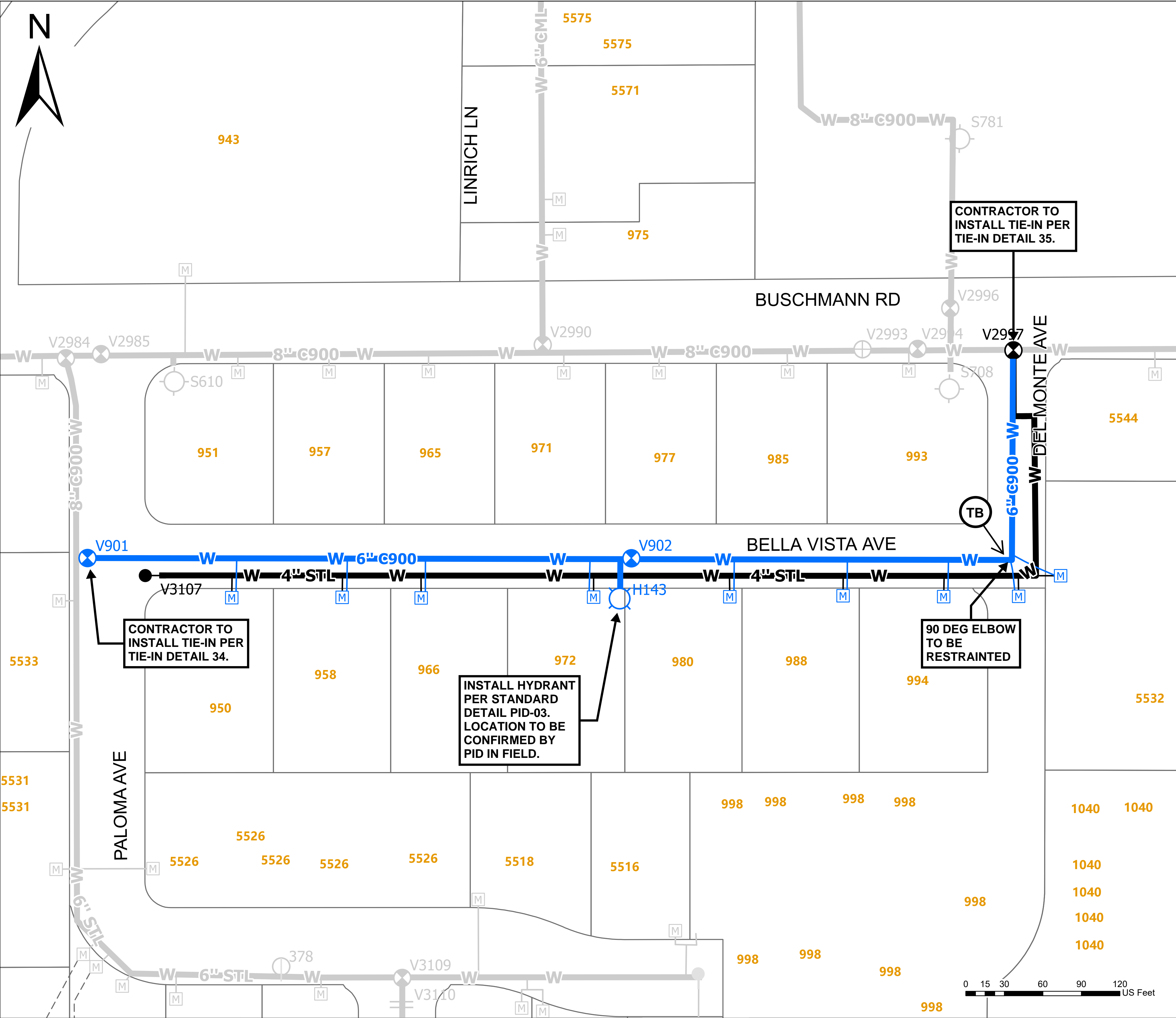
APPROVED: S. KADER

PARADISE IRRIGATION DISTRICT  
6332 CLARK ROAD, PARADISE, CA 95969  
PHONE: (530) 877-4971

MAINS REPLACEMENT PROJECT PHASE 1  
PROJECT SEGMENT # CORAL CIR

DATE 4/9/2023  
DWG C-32 SHEET 41 OF 56





Quantities			
Item No.	Description	Unit	Quantity
5a	Abandon Water Main <8" Diameter	LF	872
6b	Install 6" C900 PVC Water Main	LF	899
7b	Install 6" Gate Valve	EA	1
10a	Install 1" HDPE Service Lateral	LF	100
11a	Reconnect 3/4" and 1" Service Lateral	EA	4
11b	Reconnect 1.5" Service Lateral	EA	1
12a	Furnish and Install 3/4"-1" Meter Box	EA	4
13a	Furnish and Install 3/4" Meter	EA	4
15a	Install 1" Backflow Preventer	EA	4
17	Test Backflow Preventer	EA	5
18	Reconnect Customer Plumbing	LF	20
20a	Excavation and Backfill <5ft Depth	LF	1,024
21	Asphalt Restoration - General	SF	4,606
23	Unpaved Restoration - General	SF	768
24	Remove and Demolish Fire Hydrant	EA	1
25	Install New Fire Hydrant Assembly	EA	1
28	Excavation and Backfill - Hydrant Assemblies	LF	12
29	Asphalt Restoration for Hydrant Assemblies	SF	54
30	Concrete Restoration - Hydrant Assemblies	SF	8
31	Unpaved Restoration - Hydrant Assemblies	SF	9
32aq	Construct and Install Tie-In - Paloma/ Bella Vista DTL 34	EA	1
32ar	Construct and Install Tie-In - Del Monte/ Buschmann DTL 35	EA	1
Note: Detailed information related to bid items 10-17 is to be provided at time of construction.			

**WORK DESCRIPTION**

- WORK FOR THIS MAIN SEGMENT SHALL BE COMPLETED AS PRIORITY GROUP I, PER SPECIFICATION SECTION 01130.
- NEW 6-INCH C900 MAIN SEGMENTS SHALL BE INSTALLED A MINIMUM OF 3 FEET AND MAXIMUM OF 5 FEET FROM EXISTING MAIN, TOWARDS CENTERLINE OF ROAD.
- INSTALL HYDRANT PER HYDRANT SCHEDULE, SPECIFICATION SECTION 15200 HS.
- INSTALL OR RECONNECT SERVICES AS SUMMARIZED IN QUANTITIES TABLE.
- CONTRACTOR TO TIE-IN TO EXISTING MAINS PER TIE-IN DETAILS 34 AND 35.
- INSTALL THRUST BLOCKS AS SHOWN HEREIN, ON TIE-IN DETAILS, AND PER STANDARD DETAIL PID-02.
- ABANDON EXISTING 4" MAIN, PER SPECIFCATION SECTION 02220.
- SURFACE RESTORATION WILL CONSIST OF ASPHALT RESTORATION AND MAY ALSO INCLUDE RESTORATION OF CONCRETE DRIVEWAYS, GRAVEL AREAS, AND LANDSCAPED AREAS.
- INLINE VALVES SHALL BE INSTALLED IN APPROXIMATE LOCATIONS SHOWN.

**NOTES**

- PALOMA AVE, BELLA VISTA AVE, DEL MONTE AVE, AND BUSCHMANN ARE OWNED BY THE TOP. CONTRACTOR SHALL FOLLOW TOP STANDARD DETAIL TB2 FOR LIMITS OF ASPHALT RESTORATION.
- CONTRACTOR SHALL SUBMIT TO TOP SCHEDULE FOR TRAFFIC CONTROL IN ADVANCE OF WORK.
- CONTRACTOR SHALL COORDINATE ALL WATER OUTAGES AND TIE-INS WITH PID AND ENGINEER.



REVISIONS			
NO.	BY	DATE	REMARKS

DESIGNED: E. DIEGO  
DRAWN: E. MA  
CHECKED: K. ALACON  
APPROVED: S. KADER

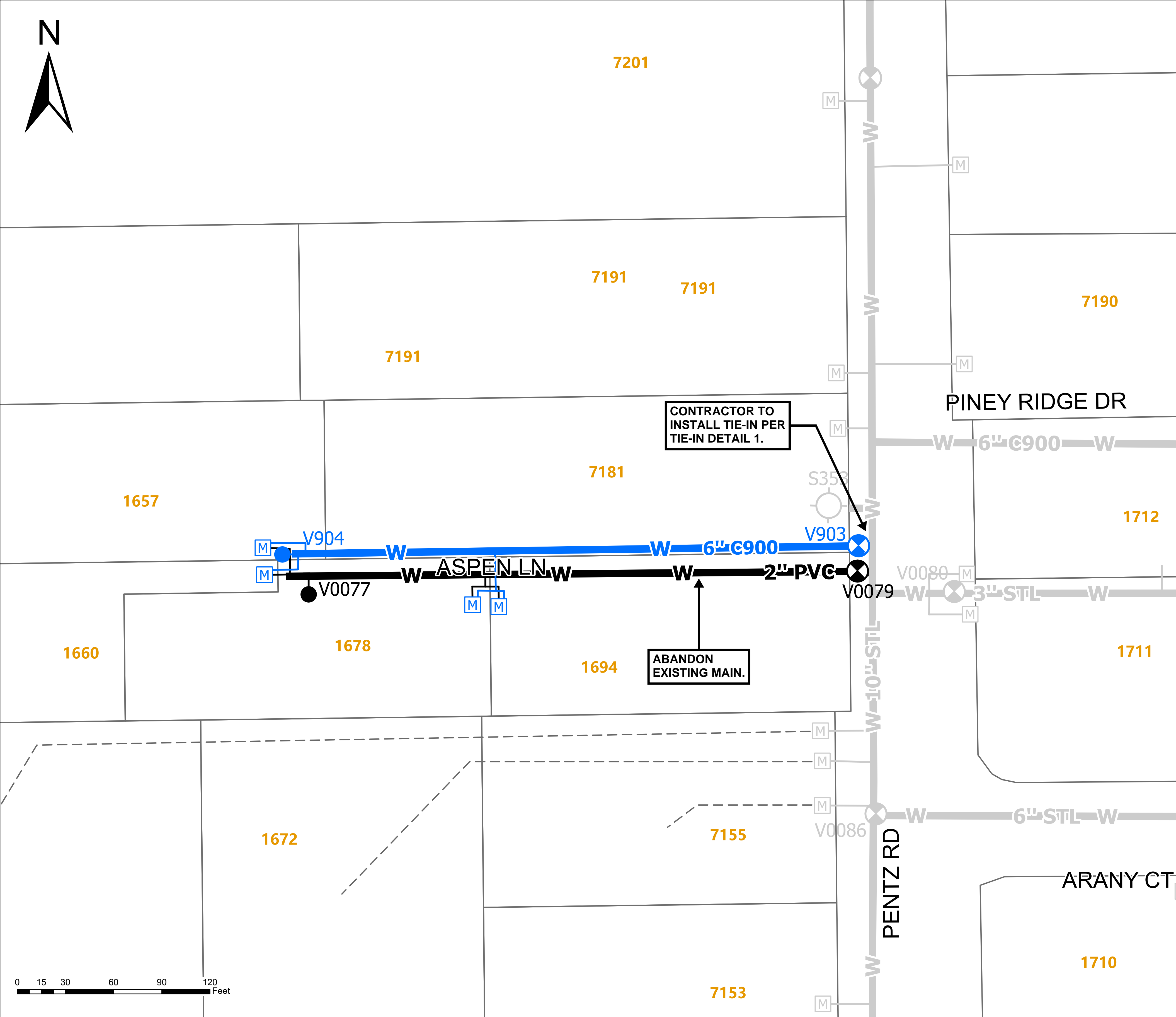


PARADISE IRRIGATION DISTRICT  
6332 CLARK ROAD, PARADISE, CA 95969  
PHONE: (530) 877-4971

DATE 4/9/2023  
DWG C-33 SHEET 42 OF 56

**MAINS REPLACEMENT PROJECT PHASE 1**  
PROJECT SEGMENT # BELLA VISTA/DEL MONTE





Quantities			
Item No.	Description	Unit	Quantity
5a	Abandon Water Main <8" Diameter	LF	346
6b	Install 6" C900 PVC Water Main	LF	355
8	Install Blow Off Assembly	EA	1
10a	Install 1" HDPE Service Lateral	LF	50
11a	Reconnect 3/4" and 1" Service Lateral	EA	2
12a	Furnish and Install 3/4"-1" Meter Box	EA	2
13a	Furnish and Install 3/4" Meter	EA	2
15a	Install 1" Backflow Preventer	EA	2
17	Test Backflow Preventer	EA	3
18	Reconnect Customer Plumbing	LF	10
20a	Excavation and Backfill <5ft Depth	LF	415
21	Asphalt Restoration - General	SF	1,869
23	Unpaved Restoration - General	SF	311
32as	Construct and Install Tie-In - Aspen DTL 1	EA	1

Note: Detailed information related to bid items 10-17 is to be provided at time of construction.

WORK DESCRIPTION

1. WORK FOR THIS MAIN SEGMENT SHALL BE COMPLETED AS PRIORITY GROUP J, PER SPECIFICATION SECTION 01130.
2. NEW 6-INCH C900 MAIN SHALL BE INSTALLED A MINIMUM DISTANCE OF 3 FEET AND A MAXIMUM DISTANCE OF 5 FEET NORTH OF EXISTING MAIN.
3. INSTALL BLOWOFF VALVE ASSEMBLY AT END OF MAIN SEGMENT AS SHOWN, PER PID-01 STANDARD DETAIL.
4. INSTALL OR RECONNECT SERVICES AS SUMMARIZED IN QUANTITIES TABLE.
5. CONTRACTOR TO CONNECT TO EXISTING MAIN PER TIE-IN DETAIL 1.
6. INSTALL THRUST BLOCKS AS SHOWN ON TIE-IN DETAIL 1 AND AS REQUIRED PER STANDARD DETAIL PID-02.
7. CAP AND ABANDON EXISTING 2-INCH MAIN, PER SPECIFCATION SECTION 02220.
8. SURFACE RESTORATION WILL CONSIST OF ASPHALT RESTORATION AND MAY ALSO INCLUDE RESTORATION OF CONCRETE DRIVEWAYS, GRAVEL AREAS, AND LANDSCAPED AREAS.

NOTES

1. ASPEN LN IS PRIVATELY OWNED; HOWEVER, CONTRACTOR SHALL AT MINIMUM FOLLOW TOP STANDARD DETAILS TB1 AND TB2 FOR TRENCH BACKFILL AND LIMITS OF ASPHALT RESTORATION.
2. PENTZ RD IS OWNED BY THE TOP. CONTRACTOR SHALL REFER TO TOP STANDARD DETAIL TB2 FOR LIMITS OF ASPHALT RESTORATION.
3. CONTRACTOR SHALL SUBMIT TO TOP SCHEDULE FOR TRAFFIC CONTROL ON PENTZ RD IN ADVANCE OF WORK.
4. TOP IS PLANNING TO INSTALL A STORM DRAIN AND BIKE PATH ON SOUTH BOUND LANE OF PENTZ RD, WITH CONSTRUCTION PLANNED TO BEGIN IN 2025. PID SHALL CONFIRM DEPTH OF NEW MAIN TO BE INSTALLED PRIOR TO CONSTRUCTION AND INSTALLATION OF TIE-IN TO MINIMIZE CONFLICT BETWEEN THE WATER MAIN AND PLANNED STORM DRAIN.



**WATERWORKS**  
ENGINEERS



06-02-23

REVISIONS			
NO.	BY	DATE	REMARKS

DESIGNED: E. DIEGO

DRAWN: E. MA

CHECKED: K. ALACON

APPROVED: S. KADER

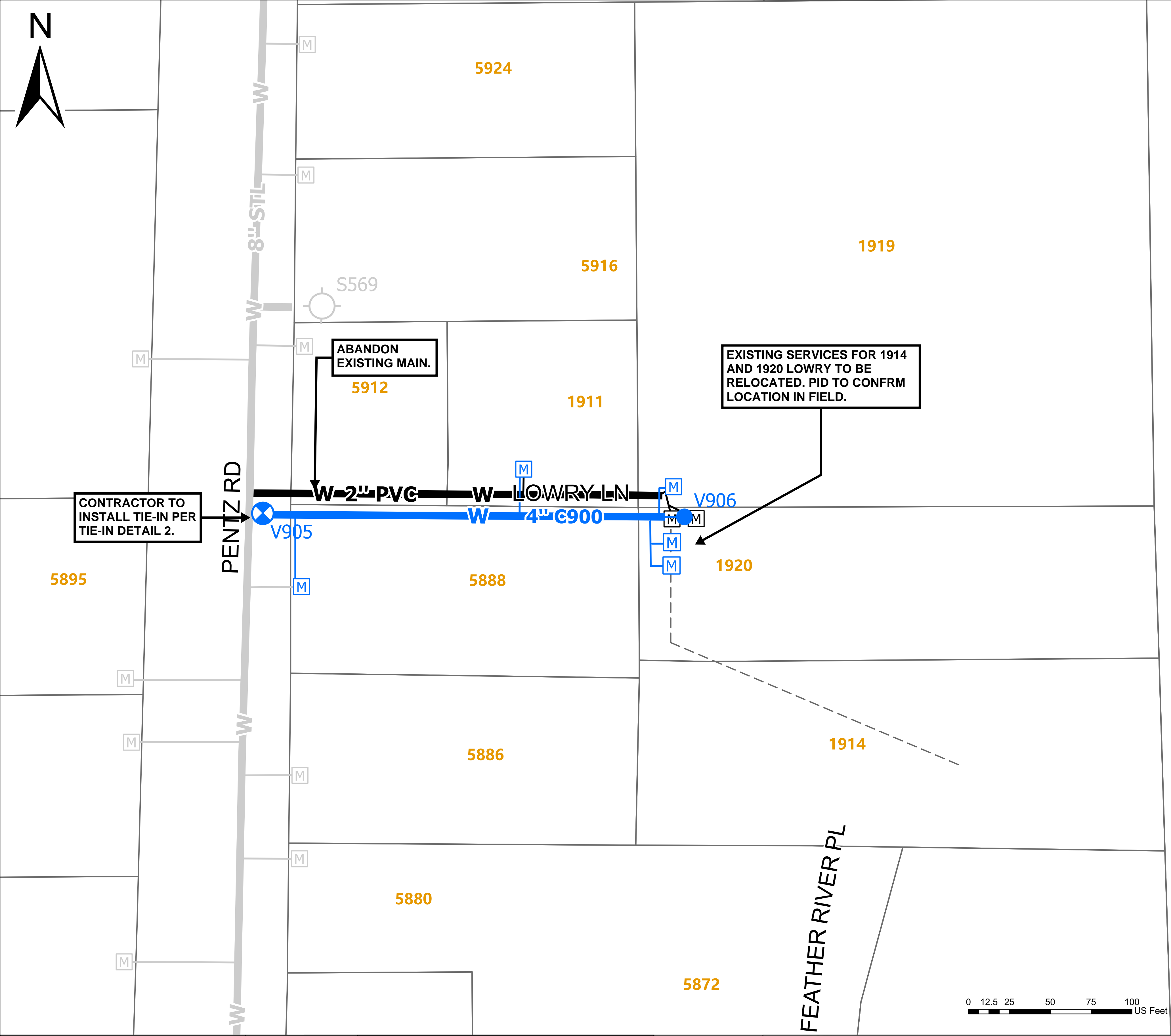


**PARADISE IRRIGATION DISTRICT**  
6332 CLARK ROAD, PARADISE, CA 95969  
PHONE: (530) 877-4971

**MAINS REPLACEMENT PROJECT PHASE 1**  
PROJECT SEGMENT # Aspen

DATE 4/9/2023  
DWG C-34 SHEET 43 OF 56





Quantities			
Item No.	Description	Unit	Quantity
5a	Abandon Water Main <8" Diameter	LF	250
6a	Install 4" C900 PVC Water Main	LF	237
8	Install Blow Off Assembly	EA	1
10a	Install 1" HDPE Service Lateral	LF	50
11a	Reconnect 3/4" and 1" Service Lateral	EA	3
12a	Furnish and Install 3/4"-1" Meter Box	EA	1
13a	Furnish and Install 3/4" Meter	EA	1
14a	Reset 3/4"-1" Meter and Meter Box	EA	1
15a	Install 1" Backflow Preventer	EA	1
17	Test Backflow Preventer	EA	4
18	Reconnect Customer Plumbing	LF	5
20a	Excavation and Backfill <5ft Depth	LF	302
21	Asphalt Restoration - General	SF	1,360
23	Unpaved Restoration - General	SF	227
32at	Construct and Install Tie-In Lowry DTL 2	EA	1
Note: Detailed information related to bid items 10-17 is to be provided at time of construction.			

WORK DESCRIPTION

- 1. WORK FOR THIS MAIN SEGMENT SHALL BE COMPLETED AS PRIORITY GROUP J, PER SPECIFICATION SECTION 01130.
- 2. NEW 4-INCH C900 MAIN SHALL BE INSTALLED A MINIMUM DISTANCE OF 3 FEET AND A MAXIMUM DISTANCE OF 5 FEET SOUTH OF EXISTING MAIN.
- 3. INSTALL BLOWOFF VALVE ASSEMBLY AT END OF MAIN SEGMENT AS SHOWN, PER PID-01 STANDARD DETAIL.
- 4. INSTALL OR RECONNECT SERVICES AS SUMMARIZED IN QUANTITIES TABLE.
- 5. CONTRACTOR TO CONNECT TO EXISTING MAIN PER TIE-IN DETAIL 1.
- 6. INSTALL THRUST BLOCKS AS SHOWN ON TIE-IN DETAIL 2 AND AS REQUIRED PER STANDARD DETAIL PID-02.
- 7. CAP AND ABANDON EXISTING 2-INCH MAIN, PER SPECIFCATION SECTION 02220.
- 8. SURFACE RESTORATION WILL CONSIST OF ASPHALT RESTORATION AND MAY ALSO INCLUDE RESTORATION OF CONCRETE DRIVEWAYS, GRAVEL AREAS, AND LANDSCAPED AREAS.

NOTES

- 1. LOWRY LN IS PRIVATELY OWNED; HOWEVER, CONTRACTOR SHALL AT MINIMUM FOLLOW TOP STANDARD DETAILS TB1 AND TB2 FOR TRENCH BACKFILL AND LIMITS OF ASPHALT RESTORATION.
- 2. PENTZ RD IS OWNED BY THE TOP. CONTRACTOR SHALL REFER TO TOP STANDARD DETAIL TB2 FOR LIMITS OF ASPHALT RESTORATION.
- 3. CONTRACTOR SHALL SUBMIT TO TOP SCHEDULE FOR TRAFFIC CONTROL ON PENTZ RD IN ADVANCE OF WORK.
- 4. EXISTING 2" PVC MAIN DOES NOT HAVE A SHUT OFF VALVE, PID TO INSTALL FULL ROUND CLAMP AFTER INSTALLATION OF NEW MAIN IS COMPLETE AND BEFORE ASPHALT RESTORATION.



**WATERWORKS**  
ENGINEERS



06-02-23

REVISIONS			
NO.	BY	DATE	REMARKS

DESIGNED: E. DIEGO

DRAWN: E. MA

CHECKED: K. ALACON

APPROVED: S. KADER

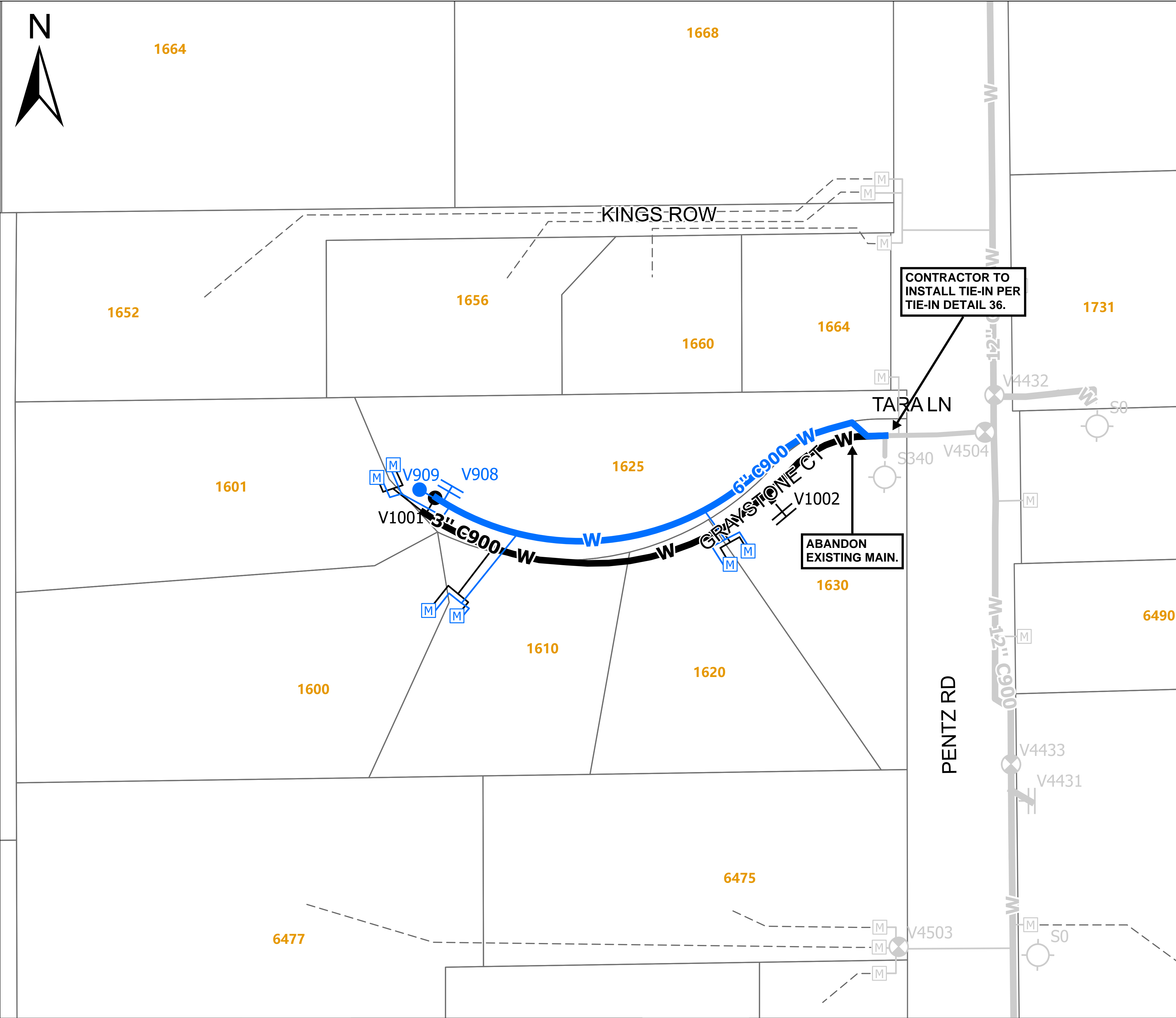


**PARADISE IRRIGATION DISTRICT**  
6332 CLARK ROAD, PARADISE, CA 95969  
PHONE: (530) 877-4971

**MAINS REPLACEMENT PROJECT PHASE 1**  
PROJECT SEGMENT # LOWRY

DATE 4/9/2023  
DWG C-35 SHEET 44 OF 56





Quantities			
Item No.	Description	Unit	Quantity
5a	Abandon Water Main <8" Diameter	LF	363
6b	Install 6" C900 PVC Water Main	LF	350
8	Install Blow Off Assembly	EA	1
9	Install Air Release and Vaccum Relief Valve Assembly	EA	1
10a	Install 1" HDPE Service Lateral	LF	25
11a	Reconnect 3/4" and 1" Service Lateral	EA	5
12a	Furnish and Install 3/4"-1" Meter Box	EA	1
13a	Furnish and Install 3/4" Meter	EA	1
15a	Install 1" Backflow Preventer	EA	1
17	Test Backflow Preventer	EA	6
18	Reconnect Customer Plumbing	LF	5
20a	Excavation and Backfill <5ft Depth	LF	400
21	Asphalt Restoration - General	SF	1,802
23	Unpaved Restoration - General	SF	300
32au	Construct and Install Tie-In - Graystone DTL 36	EA	1
Note: Detailed information related to bid items 10-17 is to be provided at time of construction.			

WORK DESCRIPTION

1. WORK FOR THIS MAIN SEGMENT SHALL BE COMPLETED AS PRIORITY GROUP J, PER SPECIFICATION SECTION 01130.
2. NEW 6-INCH C900 MAIN SHALL BE INSTALLED A MINIMUM OF 3 FEET AND MAXIMUM OF 5 FEET FROM EXISTING MAIN.
3. INSTALL COMBINATION AIR RELEASE VALVE AS SHOWN, PER PID-10 STD DETAIL.
4. INSTALL BLOW OFF VALVE AS SHOWN, PER PID-01 STANDARD DETAIL.
5. INSTALL OR RECONNECT SERVICES AS SUMMARIZED IN QUANTITIES TABLE.
6. CONTRACTOR TO TIE-IN NEW MAIN PER TIE-IN DETAIL 36.
7. INSTALL THRUST BLOCKS AS SHOWN ON TIE-IN DETAILS AND PER PID STD DETAIL PID-02.
8. ABANDON EXISTING 3" MAIN, PER SPECIFCATION SECTION 02220.
9. SURFACE RESTORATION WILL CONSIST OF ASPHALT RESTORATION, CONCRETE SIDEWALKS, CURBS AND MAY ALSO INCLUDE RESTORATION OF DRIVEWAYS, GRAVEL AREAS, AND LANDSCAPED AREAS.

NOTES

1. GRAYSTONE CT IS PRIVATELY OWNED; HOWEVER, CONTRACTOR SHALL AT A MINIMUM FOLLOW TOP STANDARD DETAILS TB1 AND TB2 FOR TRENCH BACKFILL AND LIMITS OF ASPHALT RESTORATION.
2. CONTRACTOR SHALL REFER TO TOP STANDARD DETAIL TB2 FOR LIMITS OF ASPHALT RESTORATION ON PENTZ RD, IF APPLICABLE.
3. CONTRACTOR SHALL SUBMIT TO PID AND ENGINEER SCHEDULE FOR TRAFFIC CONTROL IN ADVANCE OF WORK ON GRAYSTONE CT.
4. CONTRACTOR SHALL SUBMIT TO TOP SCHEDULE FOR ANY TRAFFIC CONTROL IMPACTING PENTZ RD IN ADVANCE OF WORK.
5. CONTRACTOR SHALL RESTORE CURBS AND SIDEWALKS PER BUTTE COUNTY STANDARD DETAILS S-1 AND S-2.

REGISTERED PROFESSIONAL ENGINEER  
KRISTINA P. ALACON  
No. C70952  
CIVIL  
STATE OF CALIFORNIA  
06-02-23

REVISIONS			
NO.	BY	DATE	REMARKS

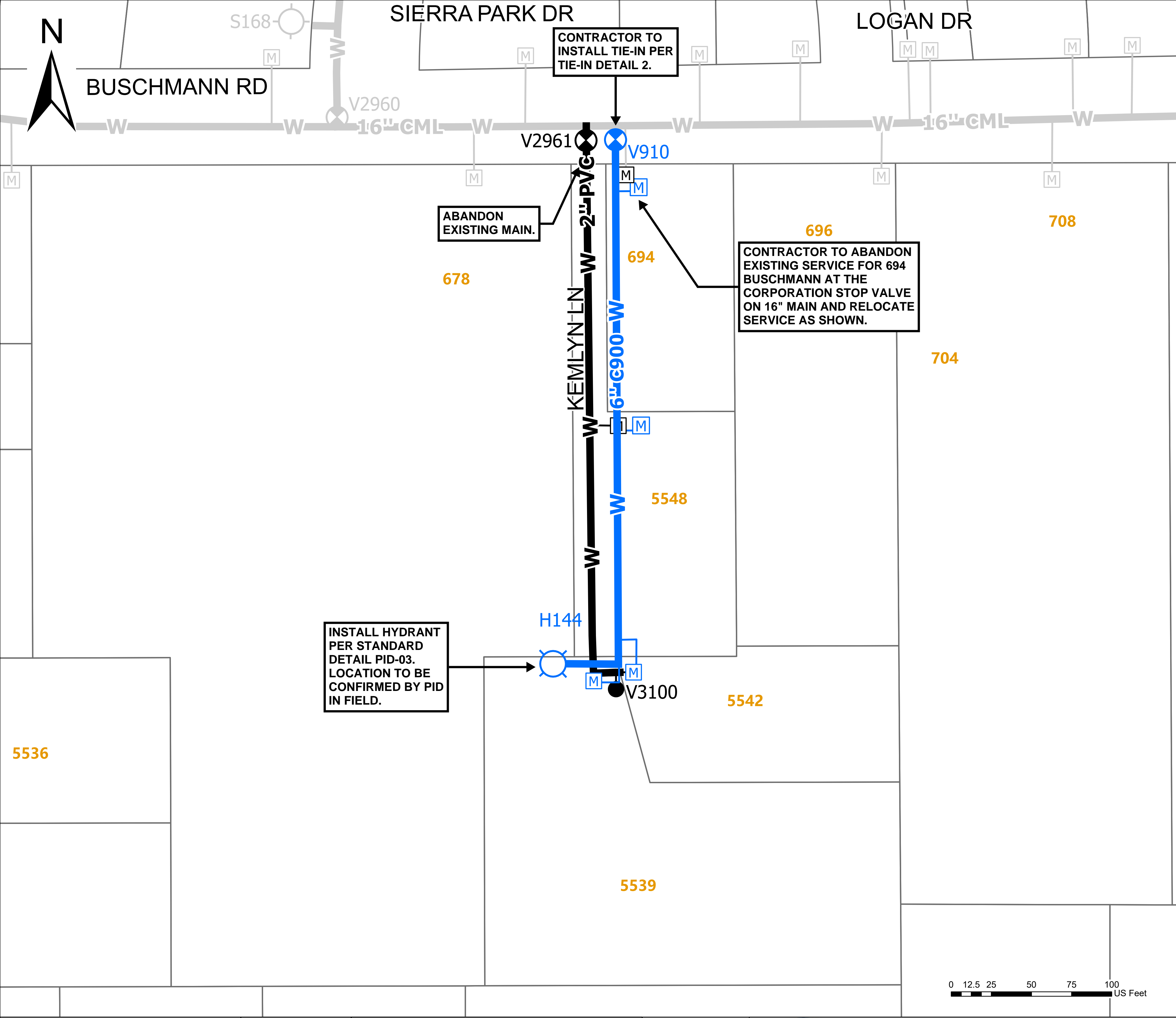
DESIGNED: E. DIEGO  
DRAWN: E. MA  
CHECKED: K. ALACON  
APPROVED: S. KADER

PARADISE IRRIGATION DISTRICT  
6332 CLARK ROAD, PARADISE, CA 95969  
PHONE: (530) 877-4971

MAINS REPLACEMENT PROJECT PHASE 1  
PROJECT SEGMENT # GRAYSTONE

DATE 4/9/2023  
DWG C-36 SHEET 45 OF 56





Quantities			
Item No.	Description	Unit	Quantity
5a	Abandon Water Main <8" Diameter	LF	341
6b	Install 6" C900 PVC Water Main	LF	350
10a	Install 1" HDPE Service Lateral	LF	75
11a	Reconnect 3/4" and 1" Service Lateral	EA	1
12a	Furnish and Install 3/4"-1" Meter Box	EA	1
13a	Furnish and Install 3/4" Meter	EA	1
14a	Reset 3/4"-1" Meter and Meter Box	EA	2
15a	Install 1" Backflow Preventer	EA	1
17	Test Backflow Preventer	EA	3
18	Reconnect Customer Plumbing	LF	5
20a	Excavation and Backfill <5ft Depth	LF	430
21	Asphalt Restoration - General	SF	6,445
23	Unpaved Restoration - General	SF	322
24	Remove and Demolish Fire Hydrant	EA	1
25	Install New Fire Hydrant Assembly	EA	1
28	Excavation and Backfill - Hydrant Assemblies	LF	18
29	Asphalt Restoration for Hydrant Assemblies	SF	81
30	Concrete Restoration - Hydrant Assemblies	SF	8
31	Unpaved Restoration - Hydrant Assemblies	SF	13
32av	Construct and Install Tie-In Kemlyn DTL 2	EA	1

Note: Detailed information related to bid items 10-17 is to be provided at time of construction.

WORK DESCRIPTION

- 1. WORK FOR THIS MAIN SEGMENT SHALL BE COMPLETED AS PRIORITY GROUP J, PER SPECIFICATION SECTION 01130.
- 2. NEW 6-INCH C900 MAIN SHALL BE INSTALLED A MINIMUM OF 3 FEET AND MAXIMUM OF 5 FEET EAST OF EXISTING MAIN.
- 3. INSTALL HYDRANT PER HYDRANT SCHEDULE, SPECIFICATION SECTION 15200 HS.
- 4. INSTALL OR RECONNECT SERVICES AS SUMMARIZED IN QUANTITIES TABLE.
- 5. CONTRACTOR TO CONNECT TO EXISTING MAIN PER TIE-IN DETAIL 2.
- 6. INSTALL THRUST BLOCKS AS SHOWN ON TIE-IN DETAIL 7 AND PER PID STANDARD DETAIL PID-02.
- 7. CAP AND ABANDON EXISTING 2" MAIN, PER SPECIFCATION SECTION 02220.
- 8. SURFACE RESTORATION WILL CONSIST OF ASPHALT RESTORATION AND MAY ALSO INCLUDE RESTORATION OF CONCRETE DRIVEWAYS, GRAVEL AREAS, AND LANDSCAPED AREAS. SEE NOTES (BELOW) FOR MORE DETAIL ON SURFACE RESTORATION.

NOTES

- 1. KEMLYN LN IS PRIVATELY OWNED; HOWEVER, CONTRACTOR SHALL AT A MINIMUM FOLLOW TOP STANDARD DETAILS TB1 AND TB2 FOR TRENCH BACKFILL.
- 2. CONTRACTOR SHALL REPAVE THE FULL WIDTH OF THE ROAD ON KEMLYN LN, INSTEAD OF THE TRENCH WIDTH.
- 3. BUSCHMANN RD IS OWNED BY THE TOP. CONTRACTOR SHALL FOLLOW TOP STANDARD DETAIL TB2 FOR LIMITS OF ASPHALT RESTORATION ON BUSCHMANN.
- 4. CONTRACTOR SHALL SUBMIT TO PID AND ENGINEER SCHEDULE FOR TRAFFIC CONTROL ON KEMLYN LN IN ADVANCE OF WORK.
- 5. CONTRACTOR SHALL SUBMIT TO TOP SCHEDULE FOR ANY TRAFFIC CONTROL IMPACTING BUSCHMANN RD IN ADVANCE OF WORK.



REVISIONS			
NO.	BY	DATE	REMARKS

DESIGNED: E. DIEGO  
DRAWN: E. MA  
CHECKED: K. ALACON  
APPROVED: S. KADER

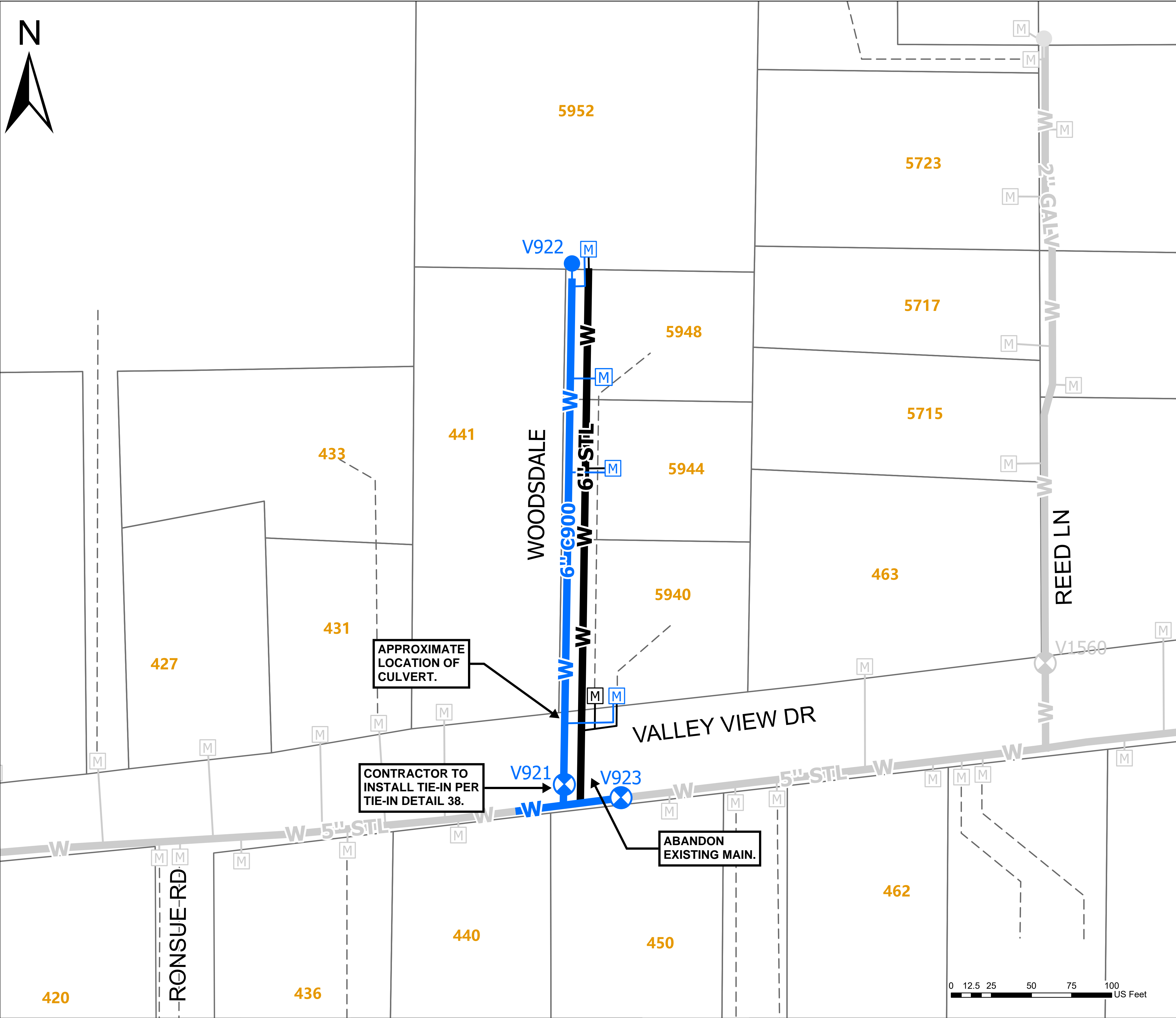


PARADISE IRRIGATION DISTRICT  
6332 CLARK ROAD, PARADISE, CA 95969  
PHONE: (530) 877-4971

MAINS REPLACEMENT PROJECT PHASE 1  
PROJECT SEGMENT # KEMLYN

DATE 4/9/2023  
DWG C-37 SHEET 46 OF 56





Quantities			
Item No.	Description	Unit	Quantity
5a	Abandon Water Main <8" Diameter	LF	332
6b	Install 6" C900 PVC Water Main	LF	330
8	Install Blow Off Assembly	EA	1
10a	Install 1" HDPE Service Lateral	LF	75
11a	Reconnect 3/4" and 1" Service Lateral	EA	1
12a	Furnish and Install 3/4"-1" Meter Box	EA	2
13a	Furnish and Install 3/4" Meter	EA	1
13b	Furnish and Install 1" Meter	EA	1
15a	Install 1" Backflow Preventer	EA	1
16a	Reconfigure 1" Backflow Preventer	EA	1
17	Test Backflow Preventer	EA	2
18	Reconnect Customer Plumbing	LF	10
20a	Excavation and Backfill <5ft Depth	LF	410
21	Asphalt Restoration - General	SF	1,802
23	Unpaved Restoration - General	SF	307
32aw	Construct and Install Tie-In Woodsdale DTL 38	EA	1
Note: Detailed information related to bid items 10-17 is to be provided at time of construction.			

WORK DESCRIPTION

- 1. WORK FOR THIS MAIN SEGMENT SHALL BE COMPLETED AS PRIORITY GROUP J, PER SPECIFICATION SECTION 01130.
- 2. NEW 6-INCH C900 MAIN SHALL BE INSTALLED A MINIMUM OF 3 FEET AND MAXIMUM OF 5 FEET FROM EXISTING MAIN.
- 3. INSTALL OR RECONNECT SERVICES AS SUMMARIZED IN QUANTITIES TABLE.
- 4. INSTALL BLOW OFF VALVE PER STANDARD DETAIL PID-01.
- 5. CONTRACTOR TO CONNECT TO EXISTING MAIN PER TIE-IN DETAIL 38.
- 6. INSTALL THRUST BLOCKS AS SHOWN ON TIE-IN DETAIL 38 AND PER STANDARD DETAIL PID-02.
- 7. CAP AND ABANDON EXISTING 2" MAIN, PER SPECIFCATION SECTION 02220.
- 8. SURFACE RESTORATION WILL CONSIST OF ASPHALT RESTORATION AND MAY ALSO INCLUDE RESTORATION OF CONCRETE DRIVEWAYS, GRAVEL AREAS, AND LANDSCAPED AREAS.

NOTES

- 1. WOODSDALE LN IS PRIVATELY OWNED; HOWEVER, CONTRACTOR SHALL AT A MINIMUM FOLLOW TOP STANDARD DETAILS TB1 AND TB2 FOR TRENCH BACKFILL.
- 2. VALLEY VIEW RD IS OWNED BY THE TOP. CONTRACTOR SHALL FOLLOW TOP STANDARD DETAIL TB2 FOR LIMITS OF ASPHALT RESTORATION ON VALLEY VIEW.
- 3. CONTRACTOR SHALL SUBMIT TO PID AND ENGINEER SCHEDULE FOR TRAFFIC CONTROL ON WOODSDALE LN IN ADVANCE OF WORK.
- 4. CONTRACTOR SHALL SUBMIT TO TOP SCHEDULE FOR ANY TRAFFIC CONTROL IMPACTING VALLEY VIEW RD IN ADVANCE OF WORK.
- 5. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING CULVERT IN PLACE OR RESTORING TO SAME AS OR BETTER CONDITIONS.



**WATERWORKS**  
ENGINEERS



REGISTERED PROFESSIONAL ENGINEER  
KRISTINA P. ALAGON  
No. C70952  
CIVIL  
STATE OF CALIFORNIA  
06-02-23

REVISIONS				DESIGNED: ED
NO.	BY	DATE	REMARKS	DRAWN: EM
				CHECKED: BLANK
				APPROVED: S. KADER

PARADISE IRRIGATION DISTRICT

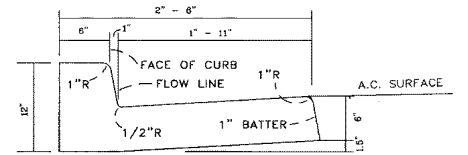
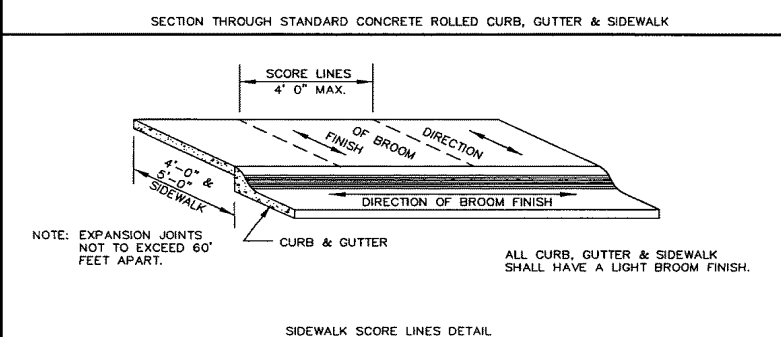
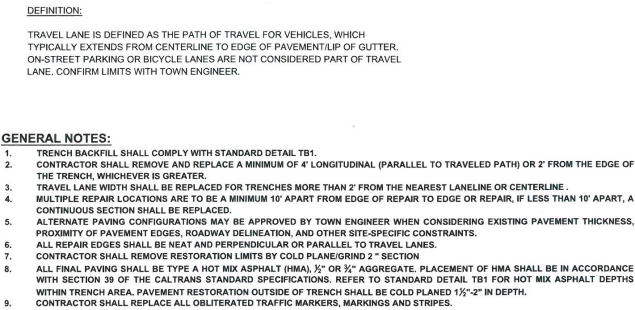
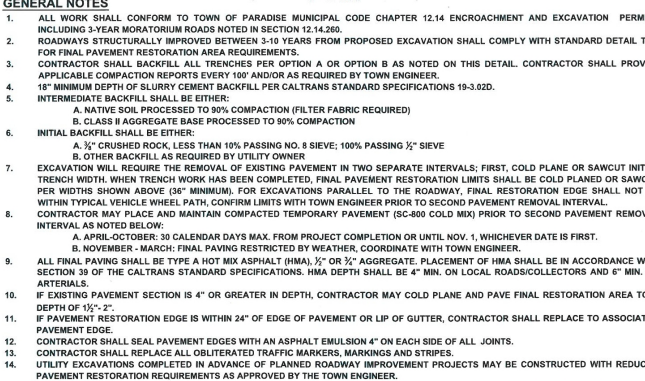
6332 CLARK ROAD, PARADISE, CA 95969  
PHONE: (530) 877-4971

MAINS REPLACEMENT PROJECT PHASE 1

PROJECT SEGMENT # WOODSDALE

DATE 4/24/2023  
DWG C-38 SHEET 47 OF 56



[illegible]

DESIGNED: E. DIEGO  
DRAWN: E. MA  
CHECKED: K. ALACON  
APPROVED: S. KADER



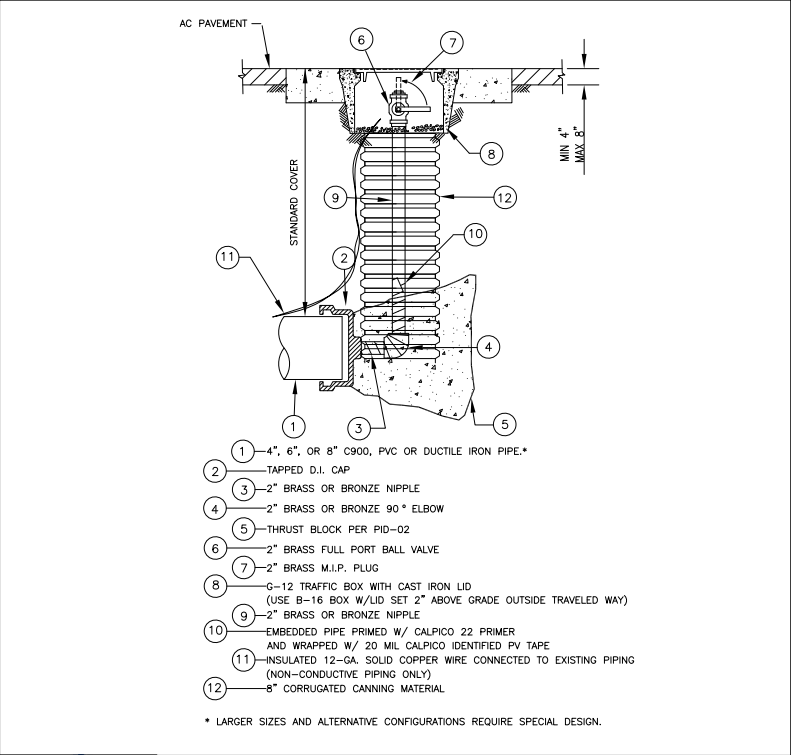
PARADISE IRRIGATION DISTRICT  
6332 CLARK ROAD, PARADISE, CA 95969  
PHONE: (530) 877-4971


**MAINS REPLACEMENT PROJECT PHASE 1**  
TOWN OF PARADISE AND BUTTE COUNTY  
STANDARD DETAILS

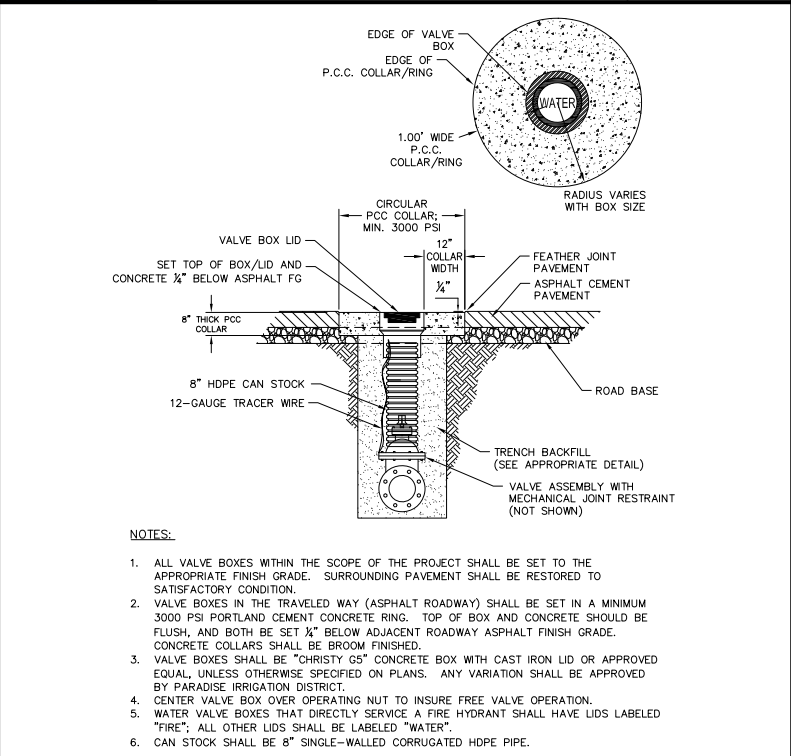
DATE 4/9/2023


DWG C-39 SHEET 48 OF 56





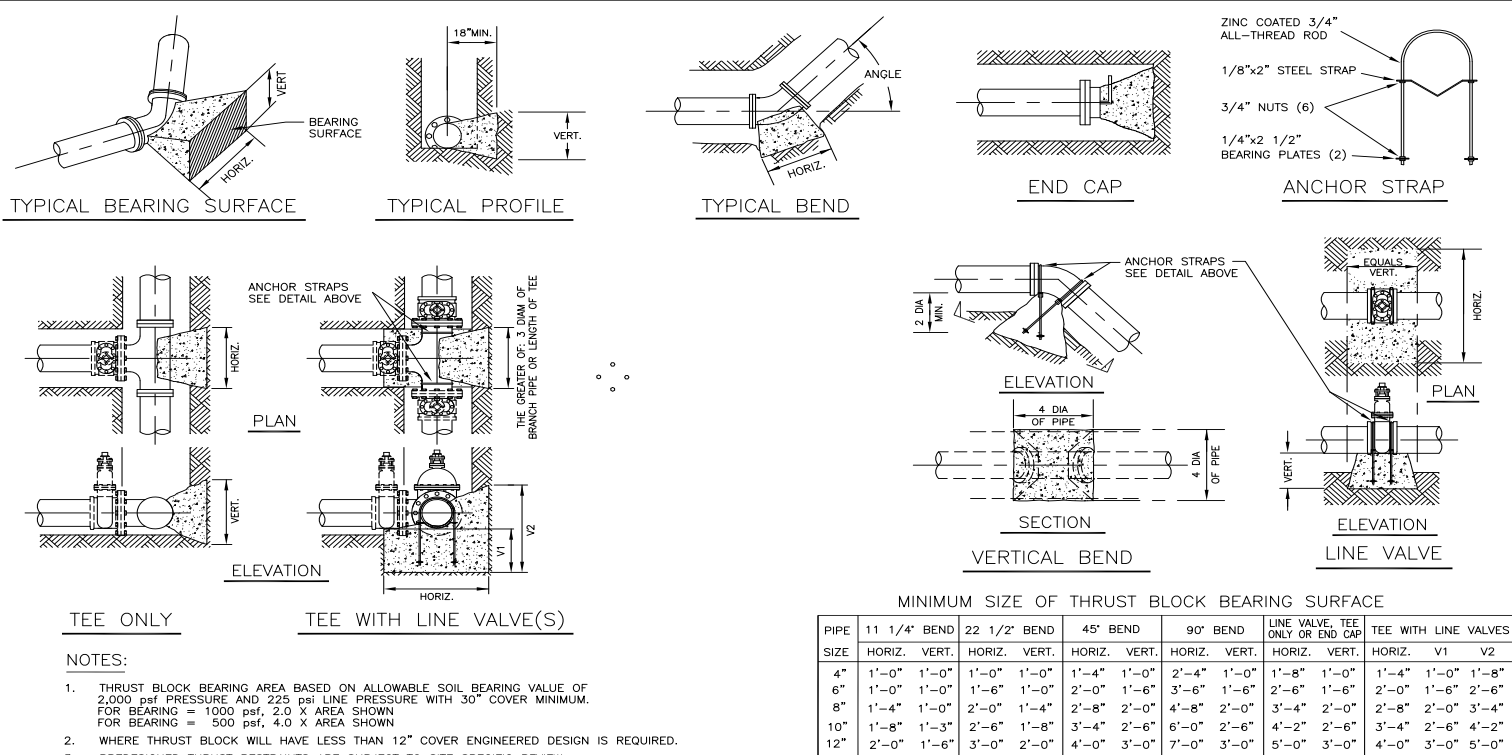
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	PERMANENT END OF LINE BLOW OFF	DRAWN BM CHECKED BA DATE FEBRUARY 2023 NO SCALE




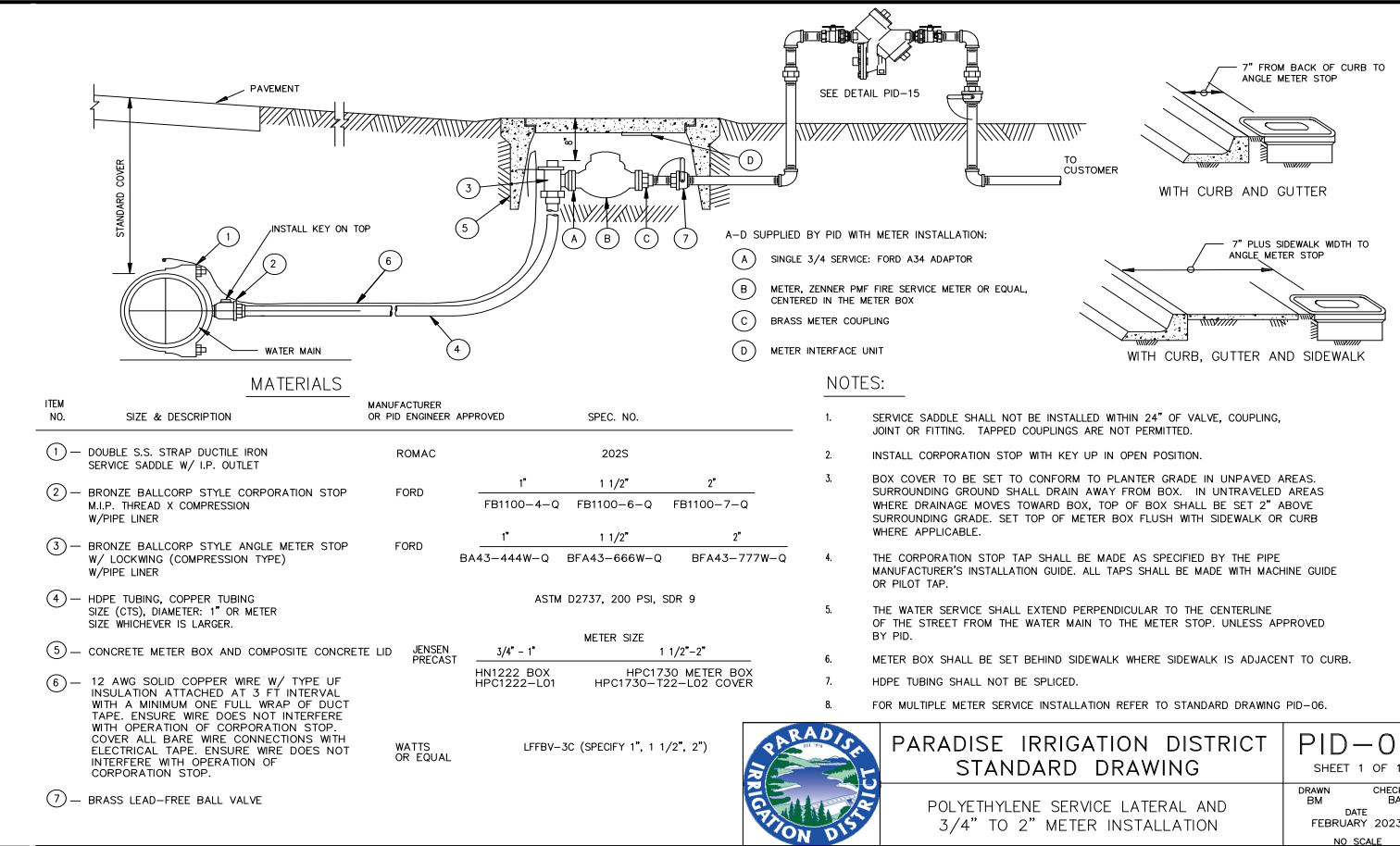
	PARADISE IRRIGATION DISTRICT STANDARD DRAWING	PID-04 SHEET 1 OF 1
	VALVE BOX DETAIL	DRAWN BM CHECKED BA DATE FEBRUARY 2023 NO SCALE

**WATERWORKS ENGINEERS**

REGISTERED PROFESSIONAL ENGINEER  
KARLINA P. ALONSO  
No. C70952  
CIVIL  
STATE OF CALIFORNIA  
06-02-23



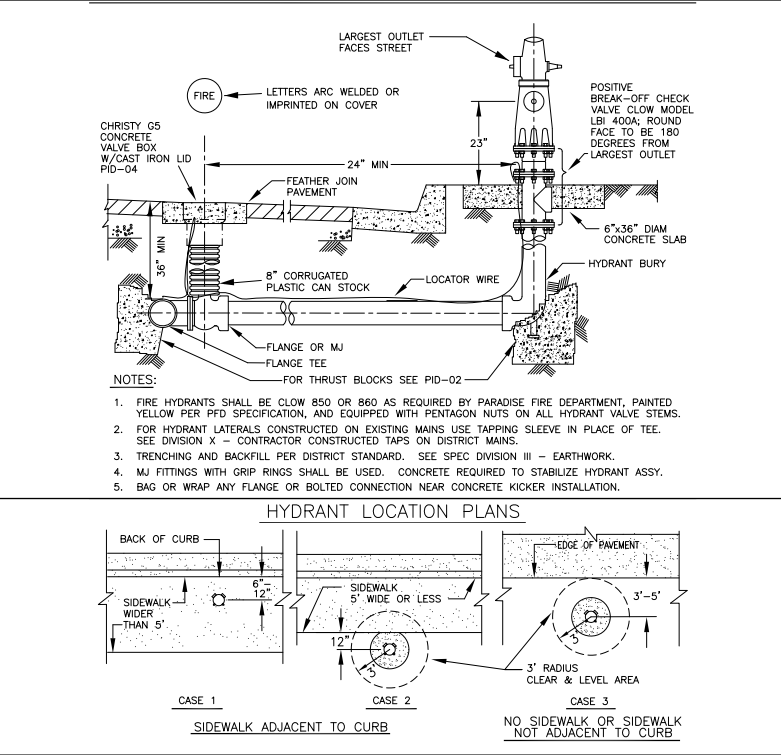
3.	PREDESIGNED THRUST RESTRAINTS ARE SUBJECT TO SITE SPECIFIC REVIEW.		PARADISE IRRIGATION DISTRICT STANDARD DRAWING	PID-01 SHEET 1 OF 1
4.	ALL THRUST BLOCKS SHALL BE CLASS "B" CONCRETE AND PLACED AGAINST UNDISTURBED SOIL. DESIGN ENGINEER SHALL DETERMINE SIZES NOT SHOWN.			
5.	REINFORCING STEEL SHALL CONFORM TO ASTM A15 AND A305 INTERMEDIATE GRADE.			
6.	CONCRETE SHALL NOT EXTEND ONTO FLANGE OR ADJOINING PIPE.			
7.	ANCHOR STRAPS SHALL EXTEND TO NO LESS THAN 3/4 THE DEPTH OF THE THRUST BLOCK. ANCHOR STRAPS SHALL BE EMBEDDED NOT LESS THAN 4" FROM EDGE OF THRUST BLOCK. ALL STRAPS SHALL BE BENT "SNUG TO FITTING. 1/8"x2" STRAP SHALL BE TIGHTENED TO HOLD ASSY. STRAIGHT.			
8.	CONCRETE SHALL ACHIEVE "SET" TO PID INSPECTOR'S SATISFACTION PRIOR TO PLACING BACKFILL.			
			THRUST BLOCK DETAILS	DRAWN: BM CHECKED: BA DATE: FEBRUARY 2023 NO SCALE




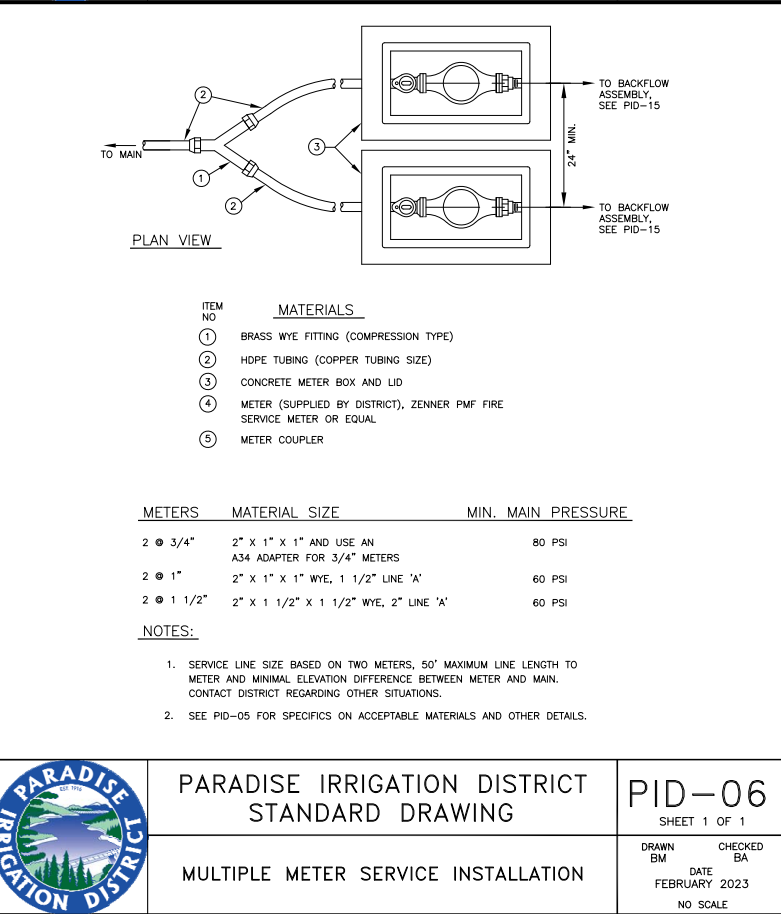
REVISIONS			
DATE	REMARKS	DESIGNED: <u>E. DIEGO</u>	
		DRAWN: <u>E. MA</u>	
		CHECKED: <u>K. ALACON</u>	
		APPROVED: <u>S. KADER</u>	

PARADISE IRRIGATION DISTRICT
6332 CLARK ROAD, PARADISE, CA 95969
PHONE: (530) 877-4971

MAINS REPAIR
PARADISE
SHEET



	PARADISE IRRIGATION DISTRICT STANDARD DRAWING		PID-03 SHEET 1 OF 1
	FIRE HYDRANT INSTALLATION		DRAWN BM
			CHECKED BA DATE FEBRUARY 2023 NO SCALE



	PARADISE IRRIGATION DISTRICT STANDARD DRAWING	PID-06 SHEET 1 OF 1			
			MULTIPLE METER SERVICE INSTALLATION		
			DRAWN: BM CHECKED: BA DATE: FEBRUARY 2023 NO SCALE		

REVISIONS			
NO.	BY	DATE	REMARKS

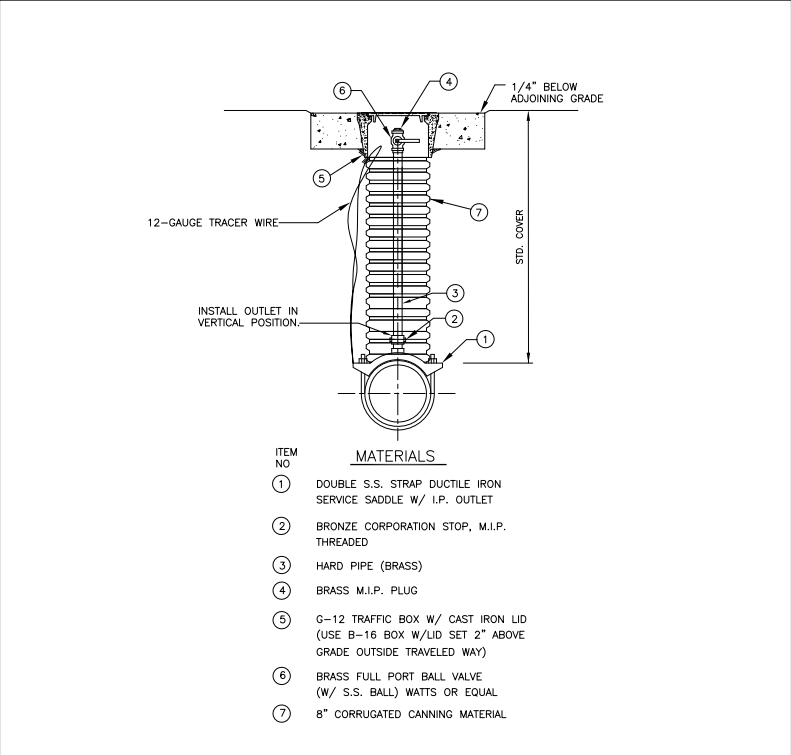
DESIGNED:	E. DIEGO
DRAWN:	E. MA
CHECKED:	K. ALACON
APPROVED:	S. KADER


**PARADISE IRRIGATION DISTRICT**  
6332 CLARK ROAD, PARADISE, CA 95969  
PHONE: (530) 877-4971

**MAINS REPLACEMENT PROJECT PHASE 1**  
PARADISE IRRIGATION DISTRICT  
STANDARD DETAILS

DATE: 4/9/2023  
DWG: C-40 SHEET 49 OF 56







PARADISE IRRIGATION DISTRICT  
STANDARD DRAWING

MANUAL AIR VALVE ASSEMBLY

PID-09

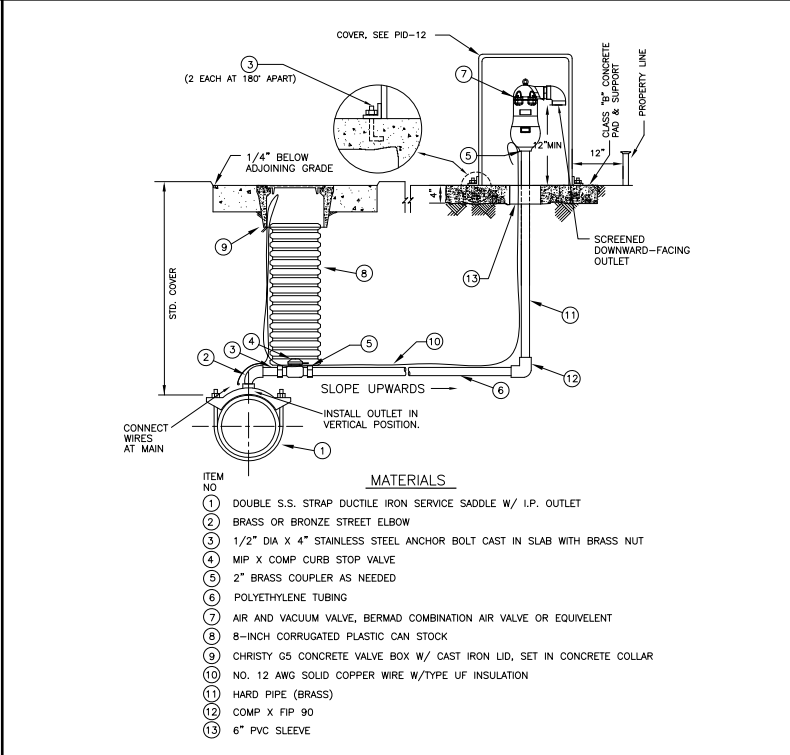
SHEET 1 OF 1


DRAWN  
BM

CHECKED  
BA

DATE  
FEBRUARY 2023

NO SCALE





PARADISE IRRIGATION DISTRICT  
STANDARD DRAWING

AIR RELEASE & VACUUM RELIEF  
VALVE ASSEMBLY

PID-10

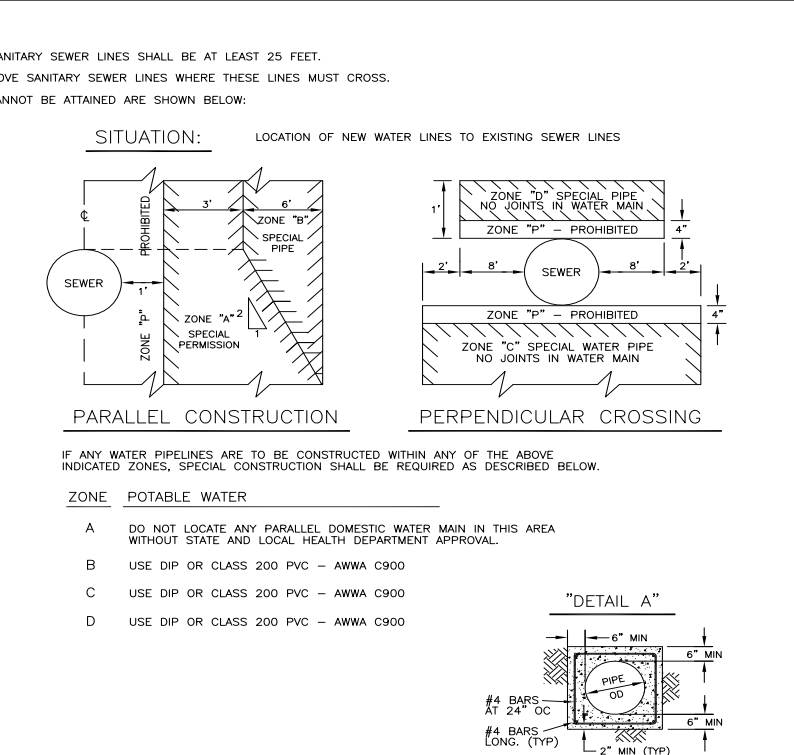
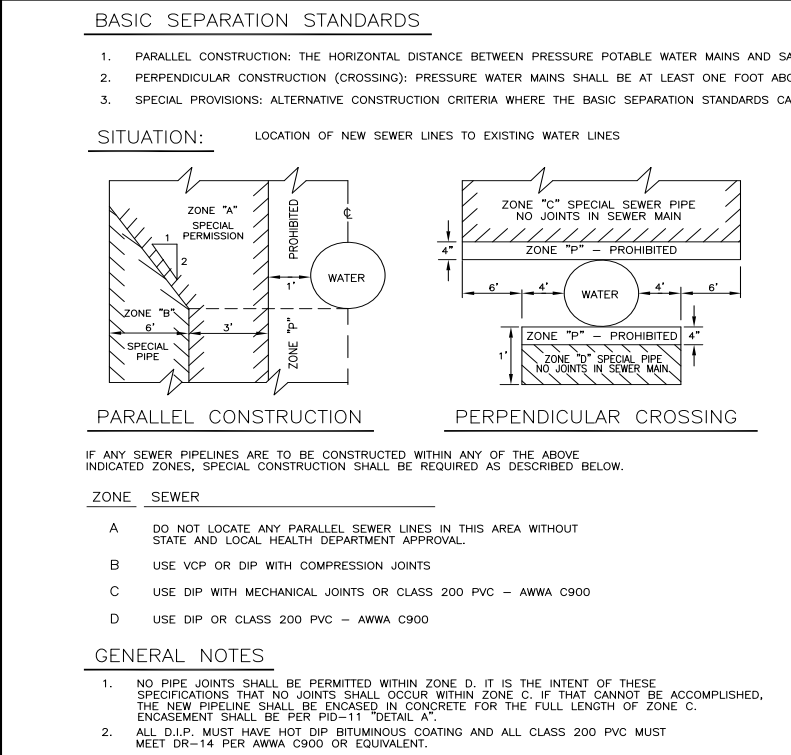
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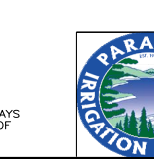
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CHECKED  
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DATE  
FEBRUARY 2023

NO SCALE





PARADISE IRRIGATION DISTRICT  
STANDARD DRAWING

STATE HEALTH DEPT. EXCEPTIONS TO BASIC  
SEPARATION STANDARDS FOR  
POTABLE WATER AND SEWER PIPELINES

PID-11

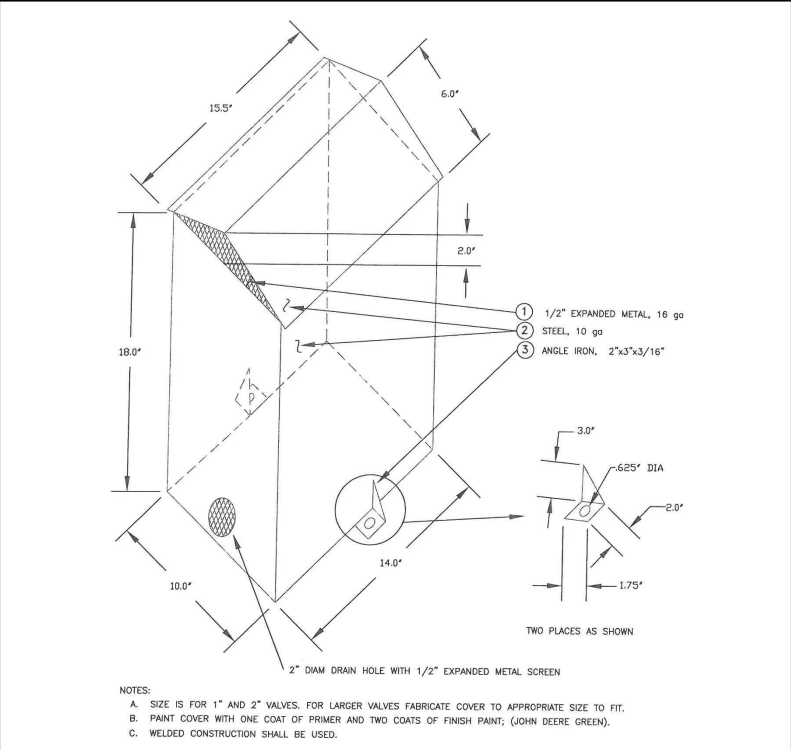
SHEET 1 OF 1


DRAWN  
BM

CHECKED  
BA

DATE  
FEBRUARY 2023

NO SCALE





PARADISE IRRIGATION DISTRICT  
STANDARD DRAWING

COVER  
AIR & VACUUM RELEASE VALVE

PID-12

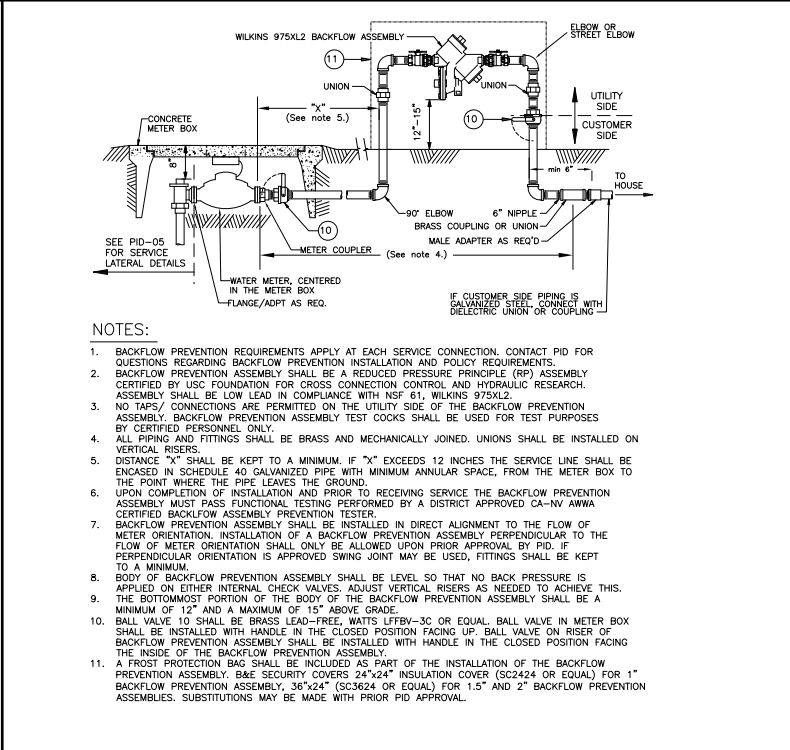
SHEET 1 OF 1


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CHECKED  
JP

DATE  
JULY 2004

NO SCALE





PARADISE IRRIGATION DISTRICT  
STANDARD DRAWING

RP INSTALLATION FOR DOMESTIC  
CONNECTIONS UP TO 2"  
(FOR DISTRICT OWNED BACKFLOW PREVENTION DEVICES)

PID-15

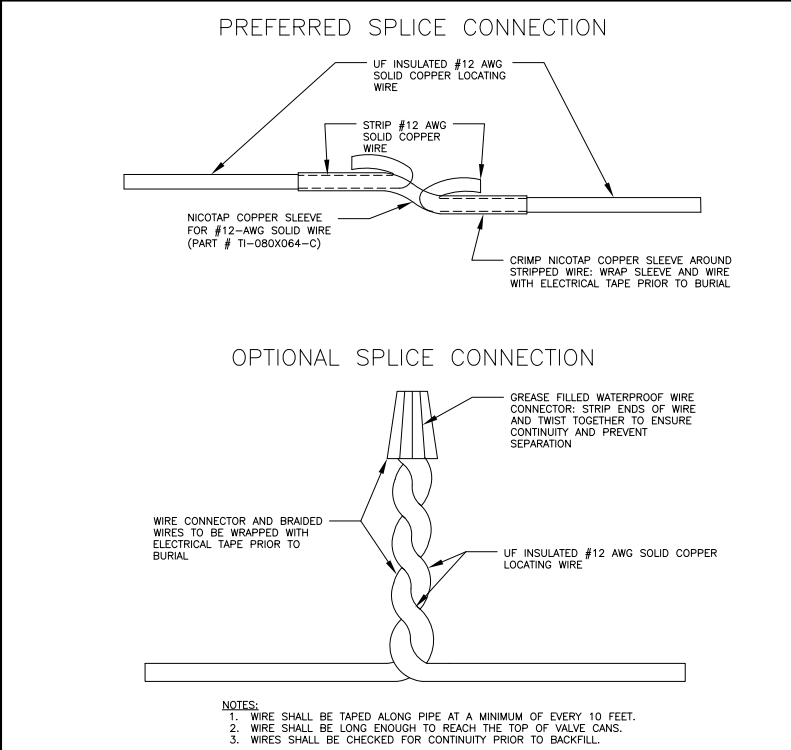
SHEET 1 OF 1


DRAWN  
BM

CHECKED  
BA

DATE  
FEBRUARY 2023

NO SCALE





PARADISE IRRIGATION DISTRICT  
STANDARD DRAWING

LOCATOR WIRE SPLICE DETAIL

PID-16

SHEET 1 OF 1

DRAWN  
BM

CHECKED  
BA

DATE  
APRIL 2023

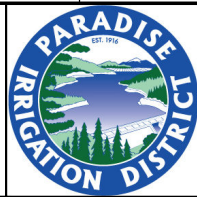
NO SCALE



REGISTERED PROFESSIONAL ENGINEER  
KARLINA P. ALACON  
No. C70952  
CIVIL  
STATE OF CALIFORNIA  
06-02-23

REVISIONS			
NO.	BY	DATE	REMARKS

DESIGNED: E. DIEGO  
DRAWN: E. MA  
CHECKED: K. ALACON  
APPROVED: S. KADER



PARADISE IRRIGATION DISTRICT

6332 CLARK ROAD, PARADISE, CA 95969  
PHONE: (530) 877-4971

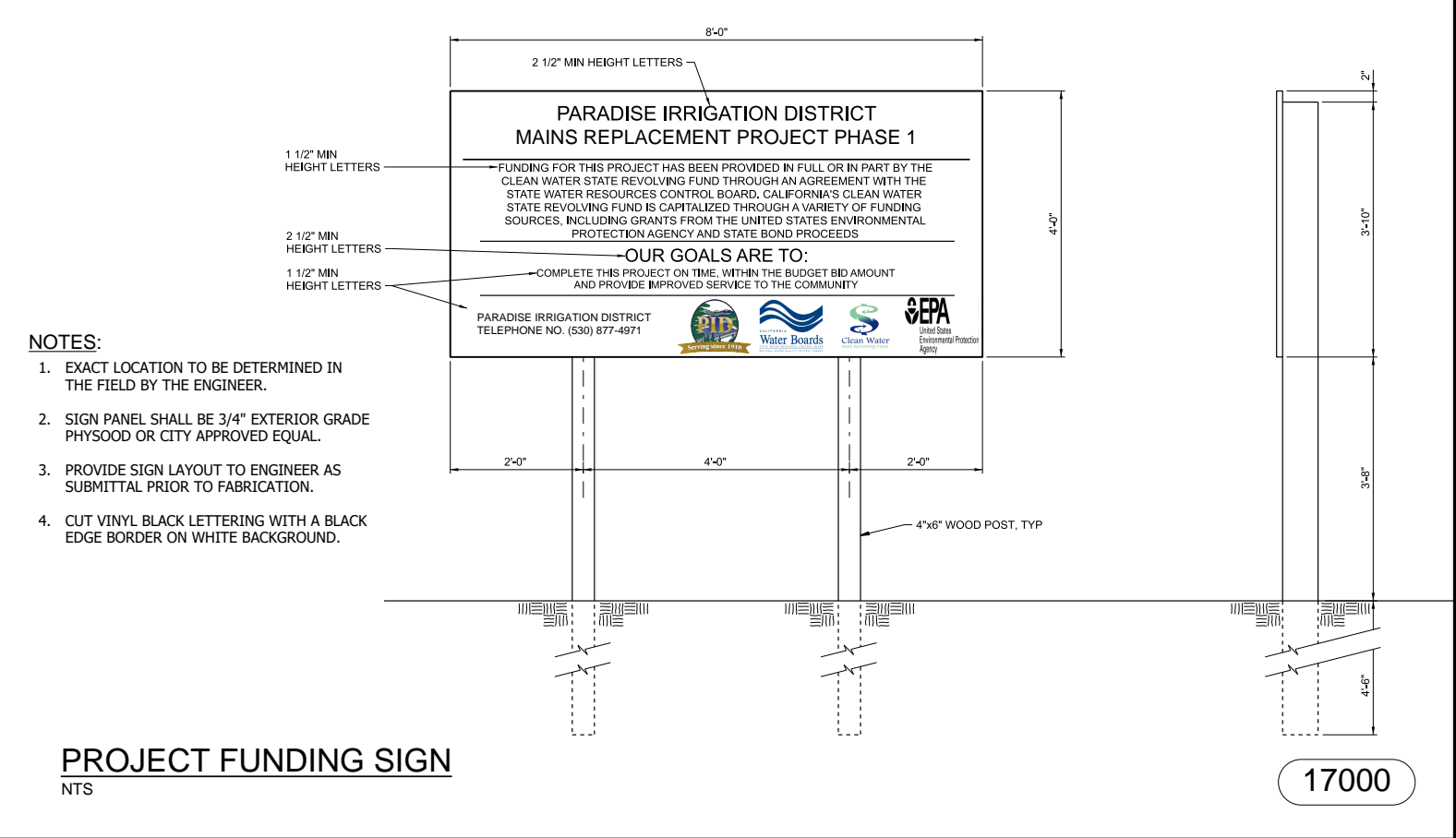
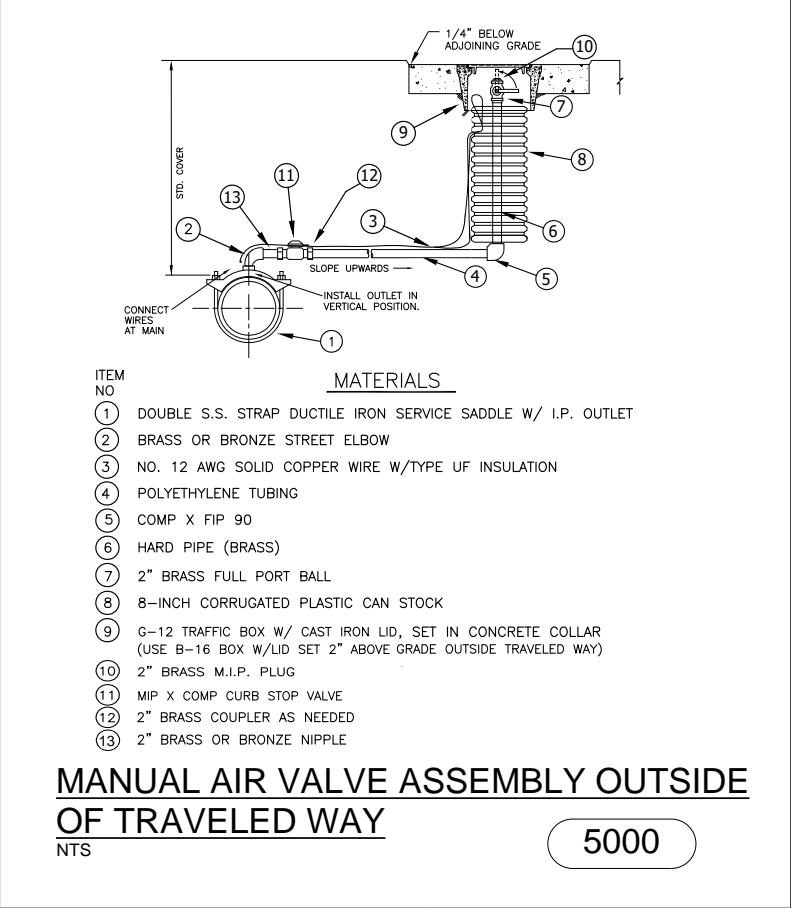
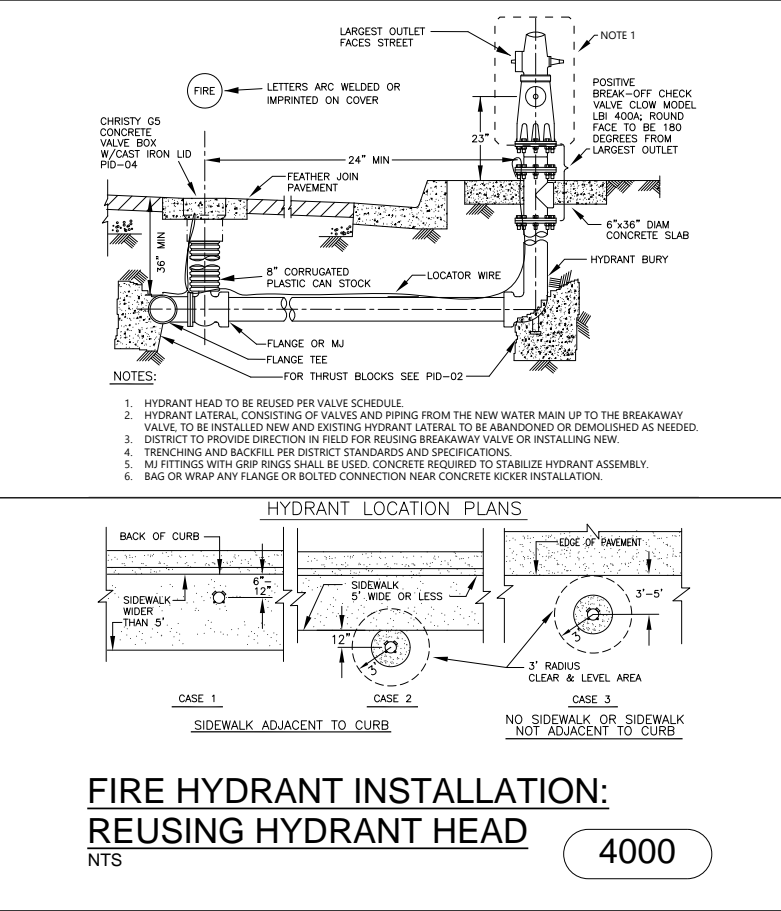
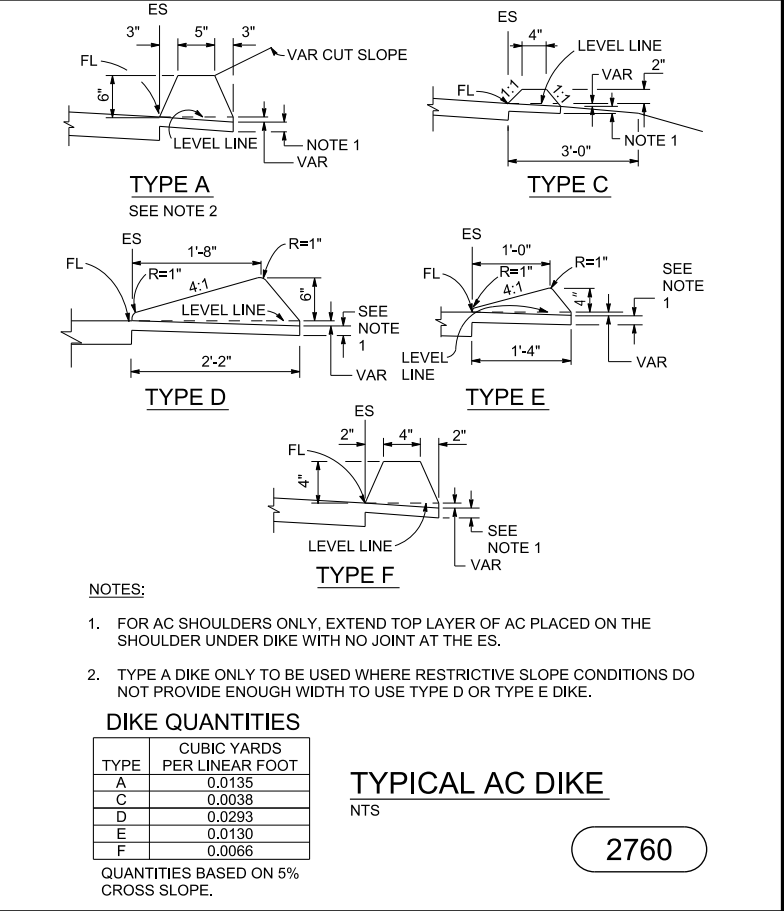
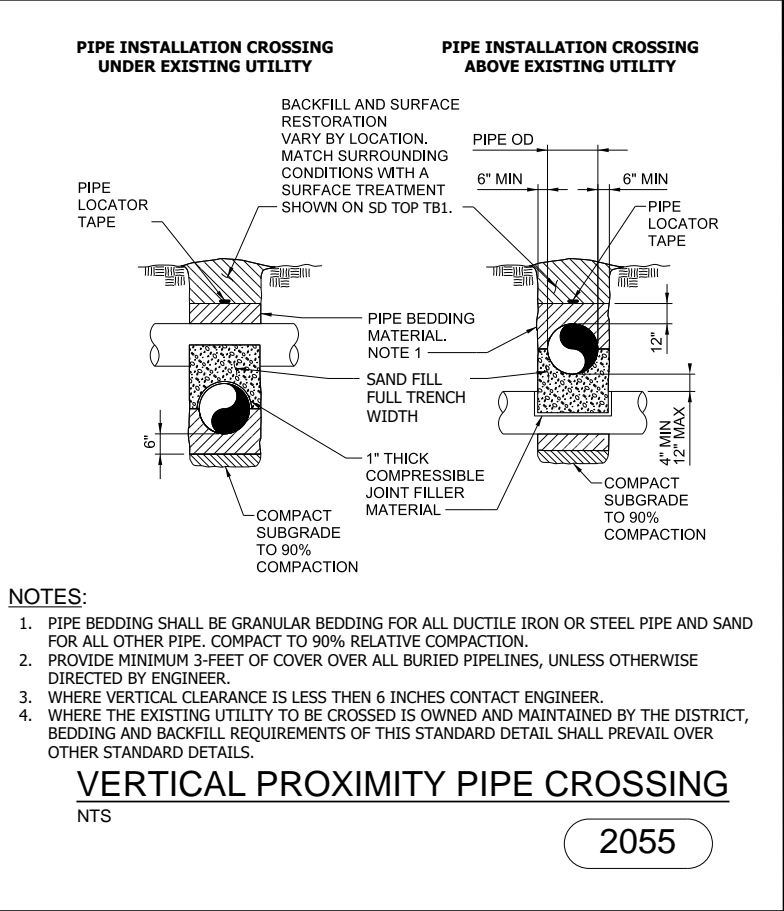
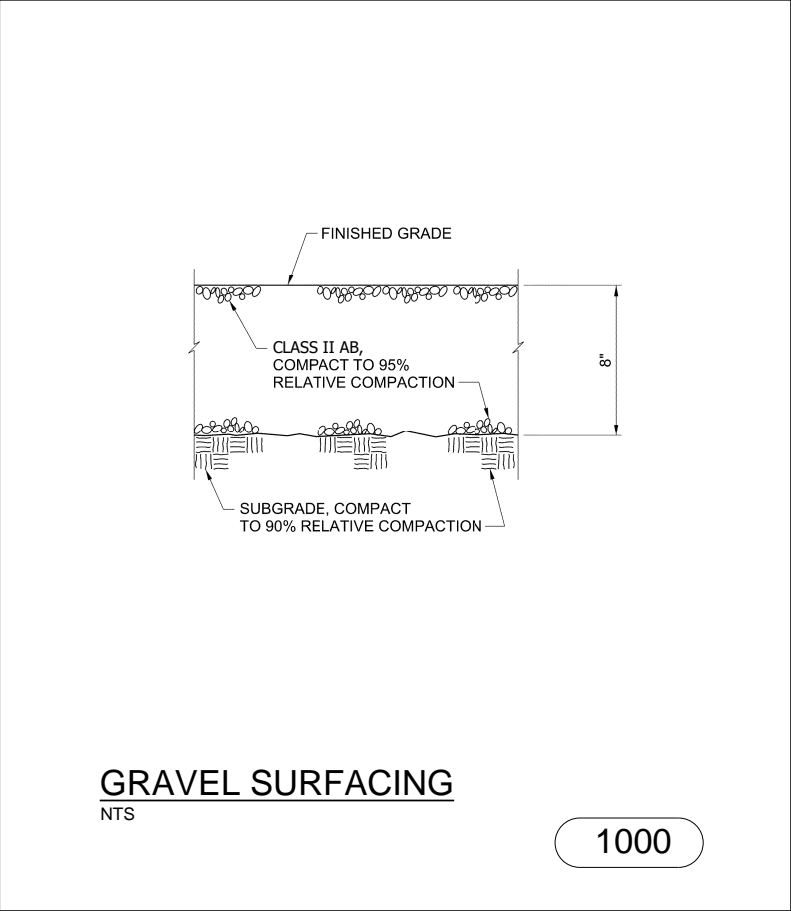
MAINS REPLACEMENT PROJECT PHASE 1

PARADISE IRRIGATION DISTRICT  
STANDARD DETAILS

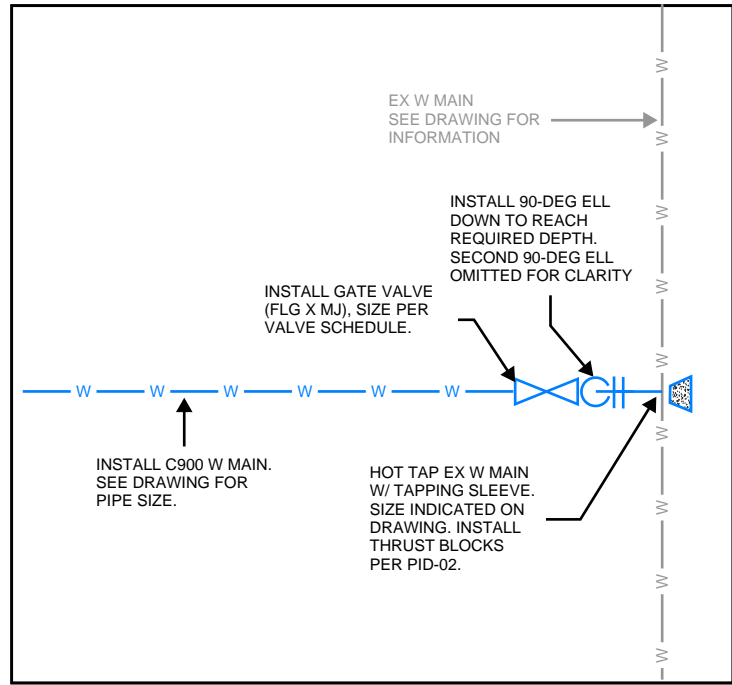
DATE 4/9/2023

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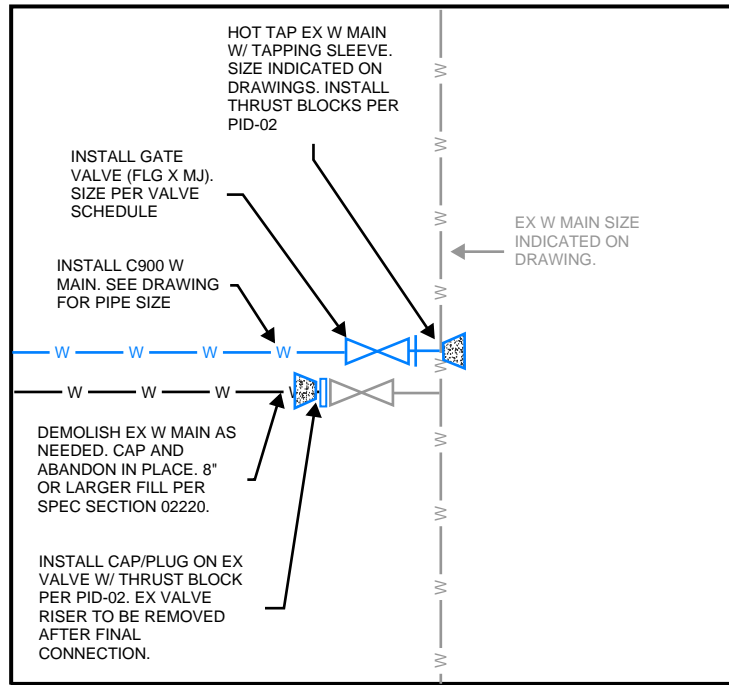




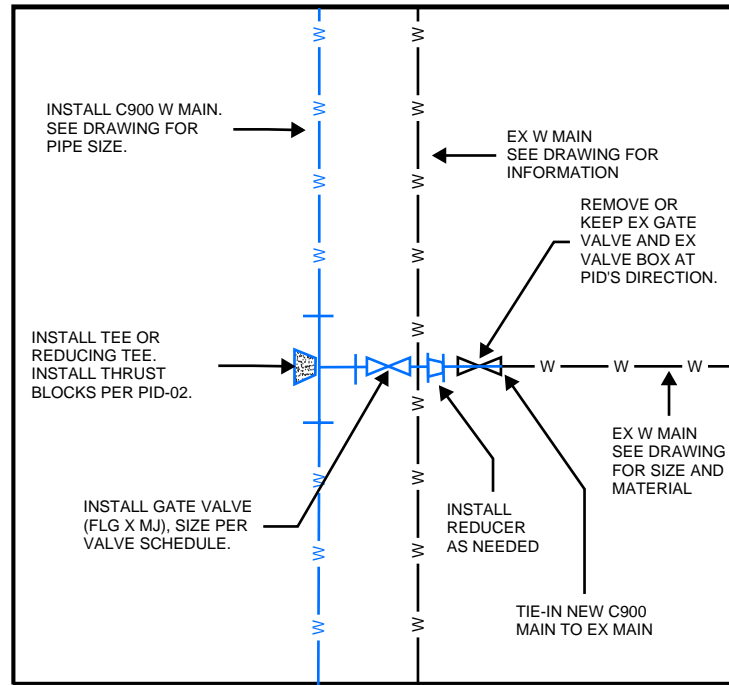




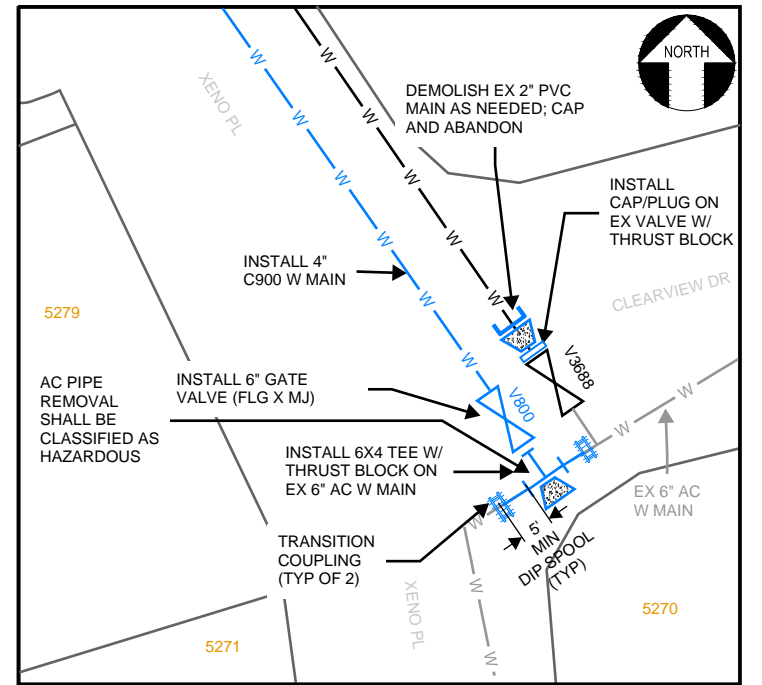
1 SHALLOW HOT TAP  
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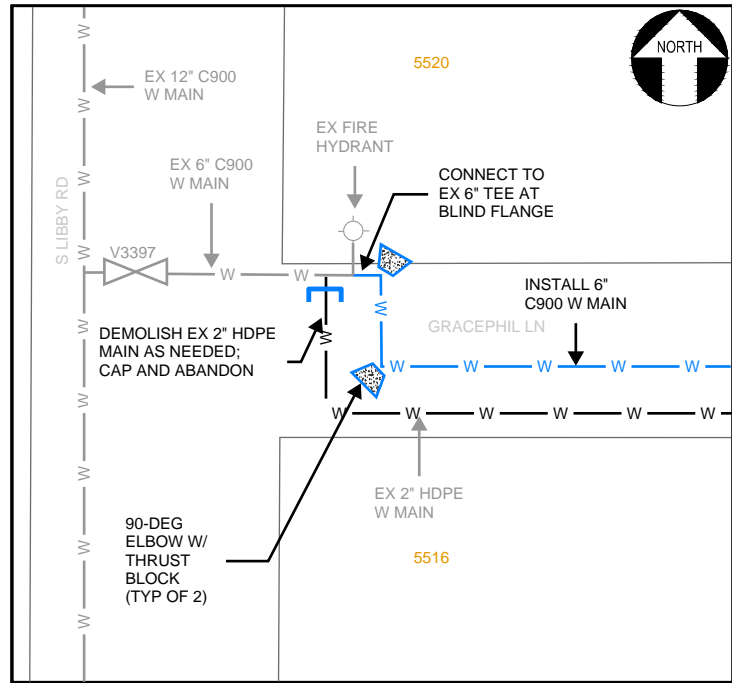
2 HOT TAP TIE IN  
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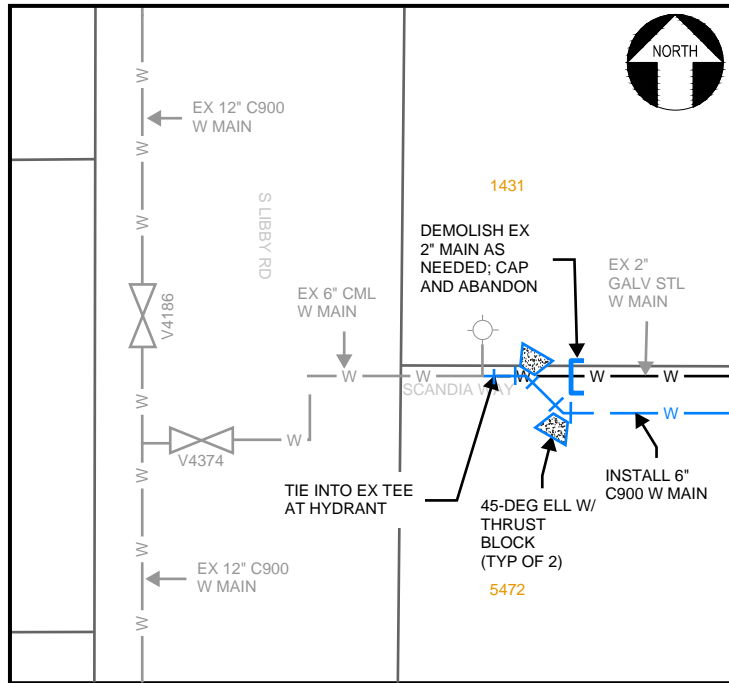
3 TIE-IN EXISTING MAINS  
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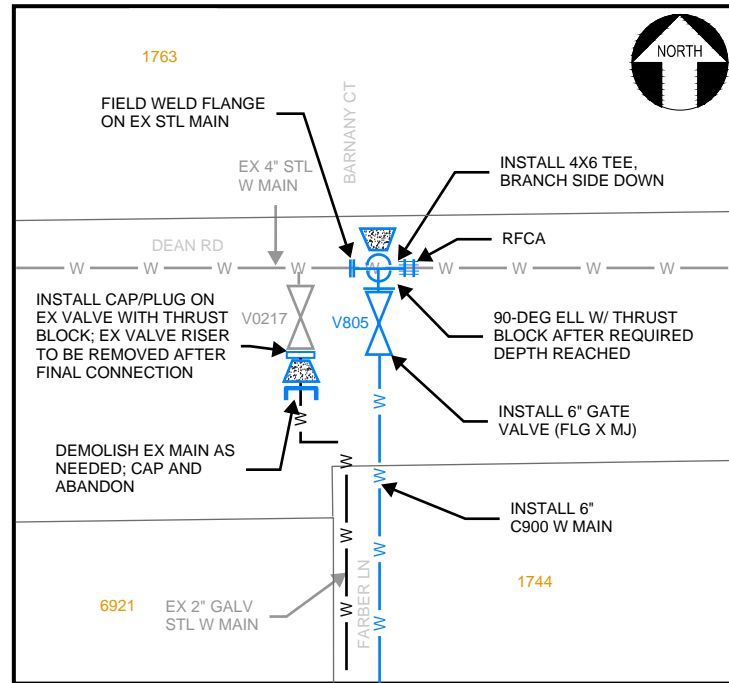
4 XENO  
C-1  
NTS



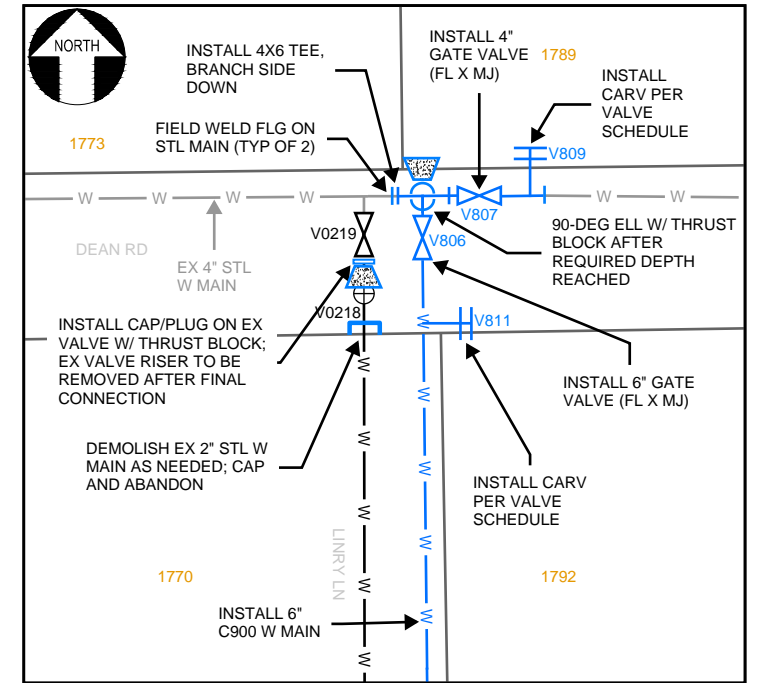
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6 SCANDIA  
C-4  
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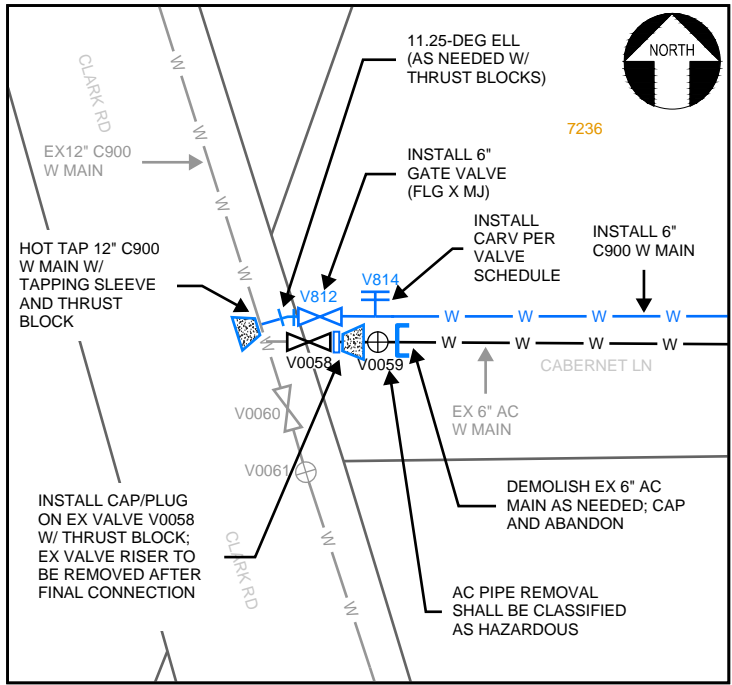


7 FARBER  
C-5  
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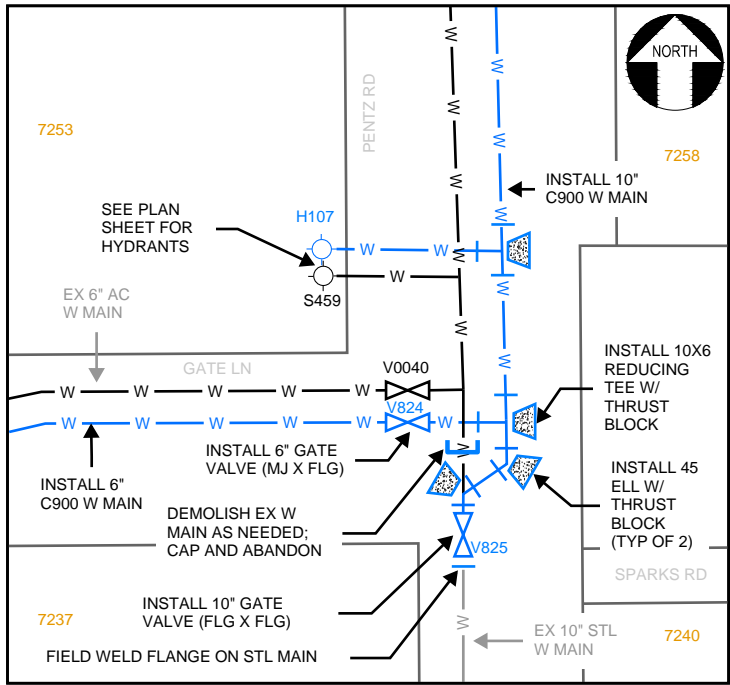


8 LINRY  
C-6  
NTS

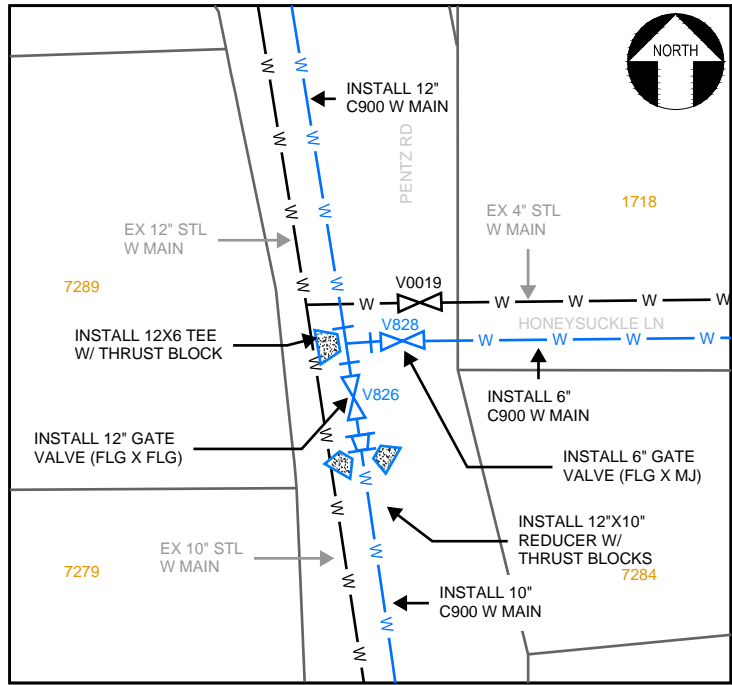




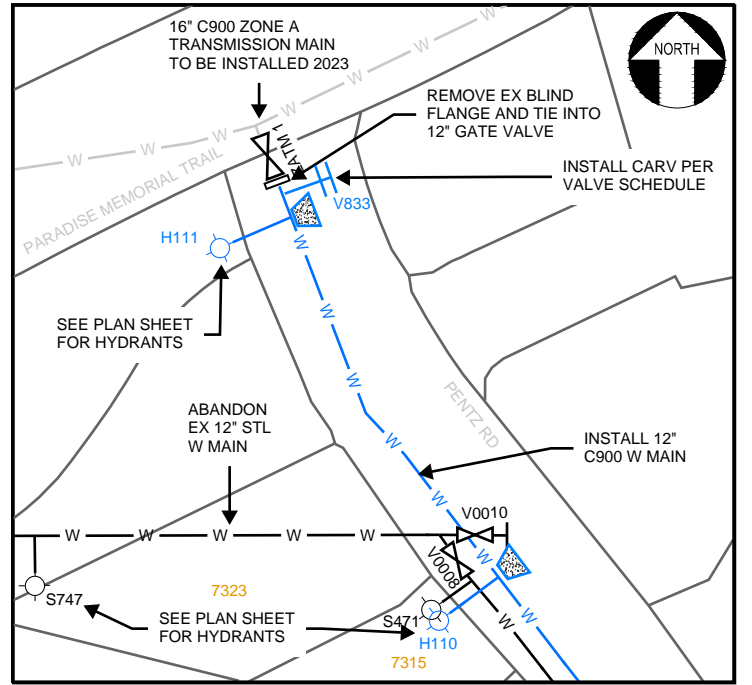
9 CLARK/ CABERNET  
C-9 NTS



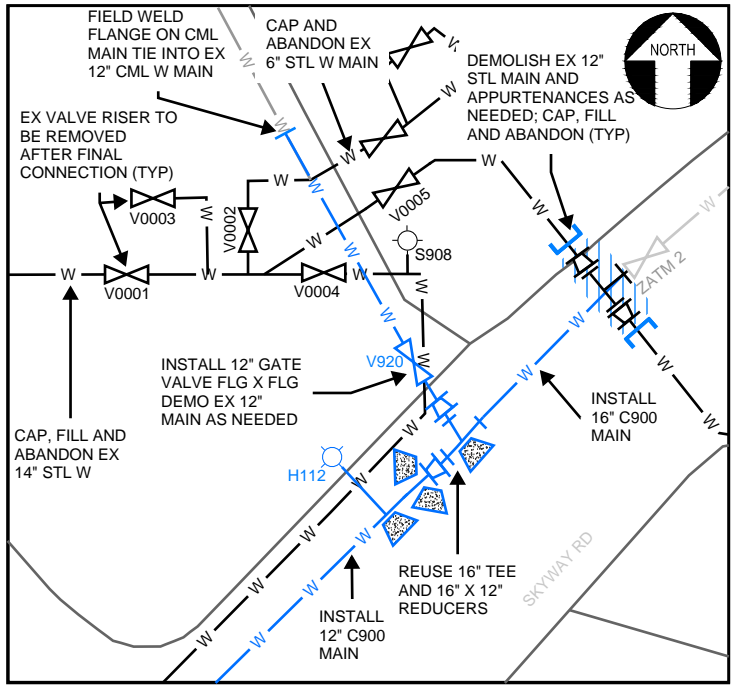
10 GATE/ PENTZ  
C-11 NTS



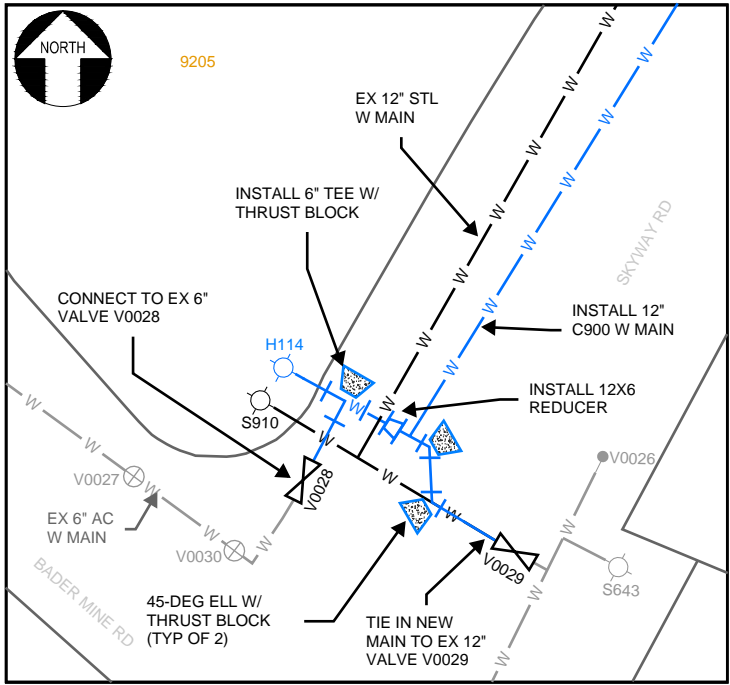
11 HONEYSUCKLE  
C-11 NTS



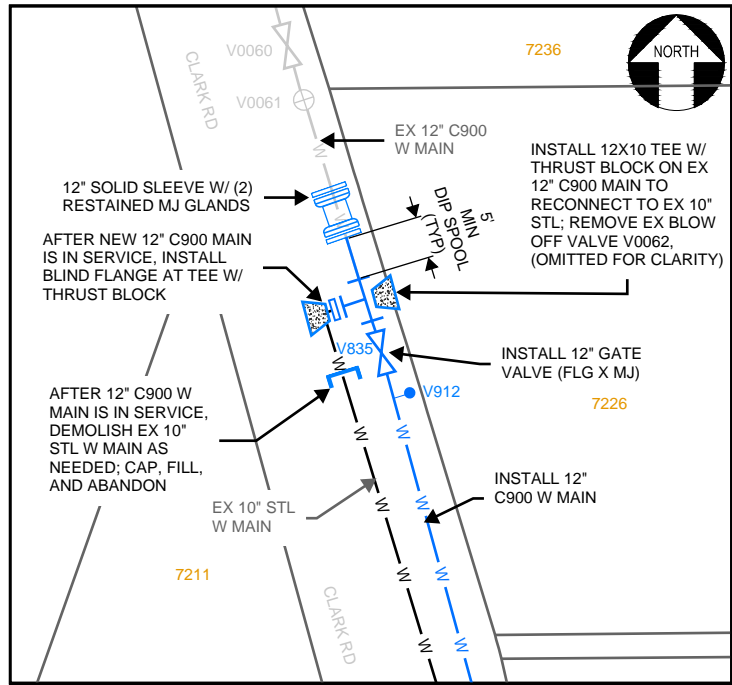
12 PENTZ/ ZATM  
C-11 NTS



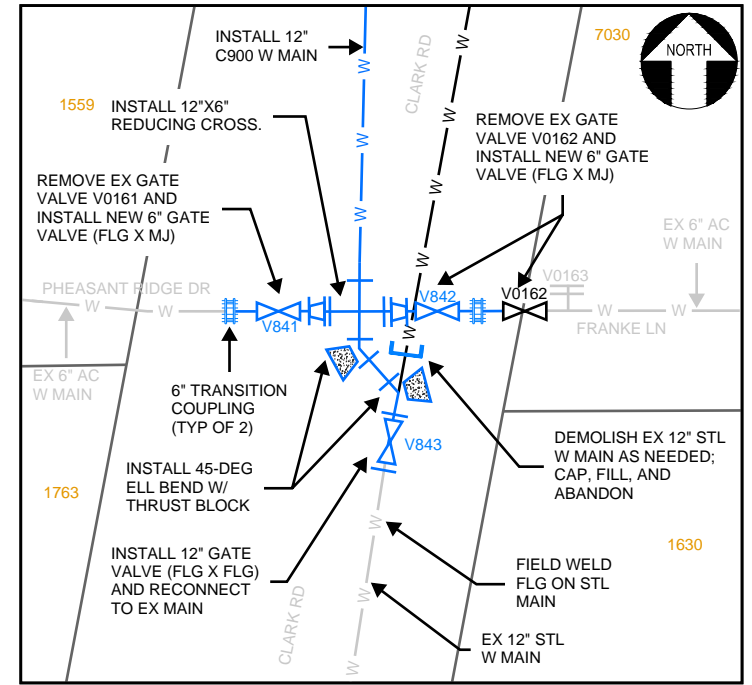
13 SKYWAY/ A-TANK  
C-14 NTS



14 SKYWAY/ BADER MINE SOUTH  
C-14 NTS

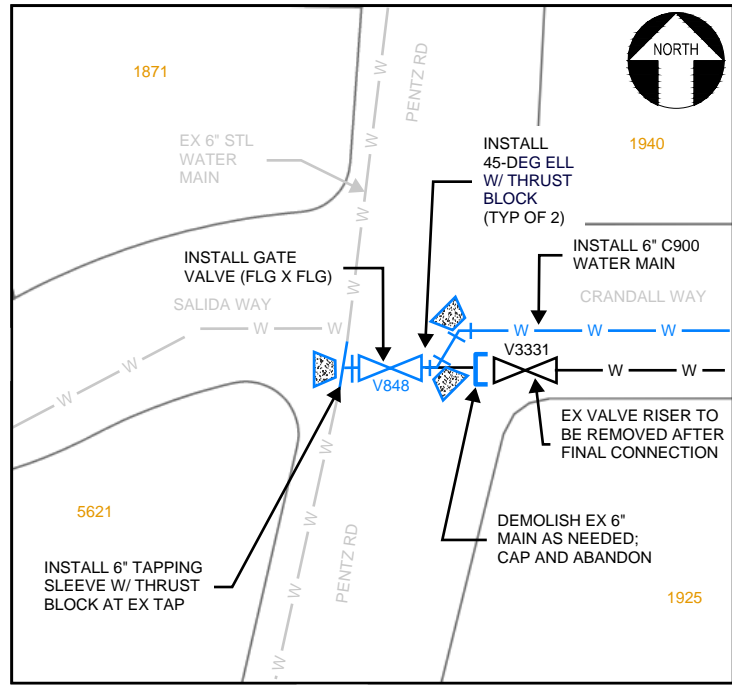


15 CLARK-A1  
C-15 NTS

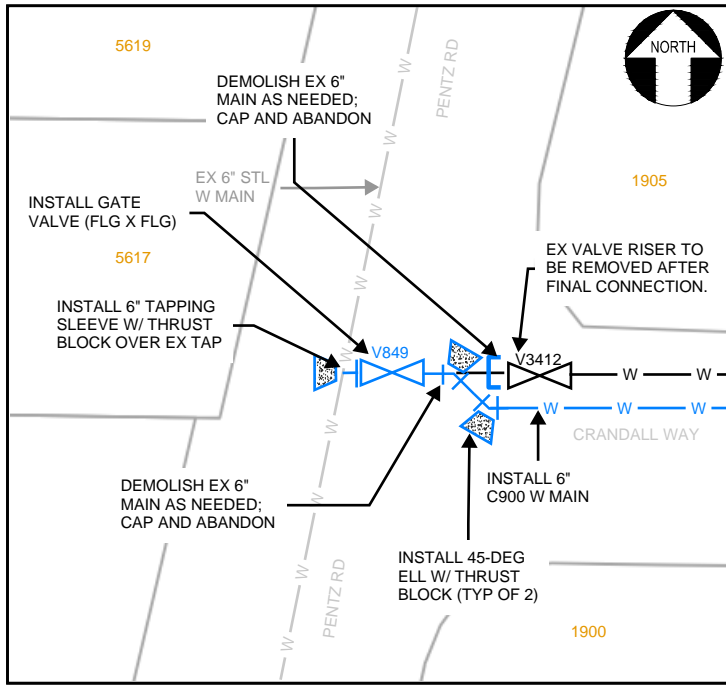


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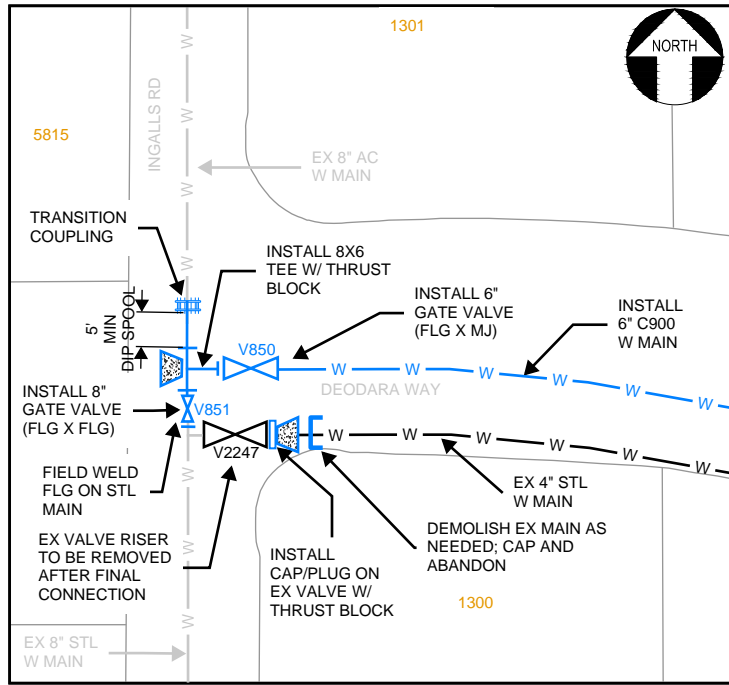




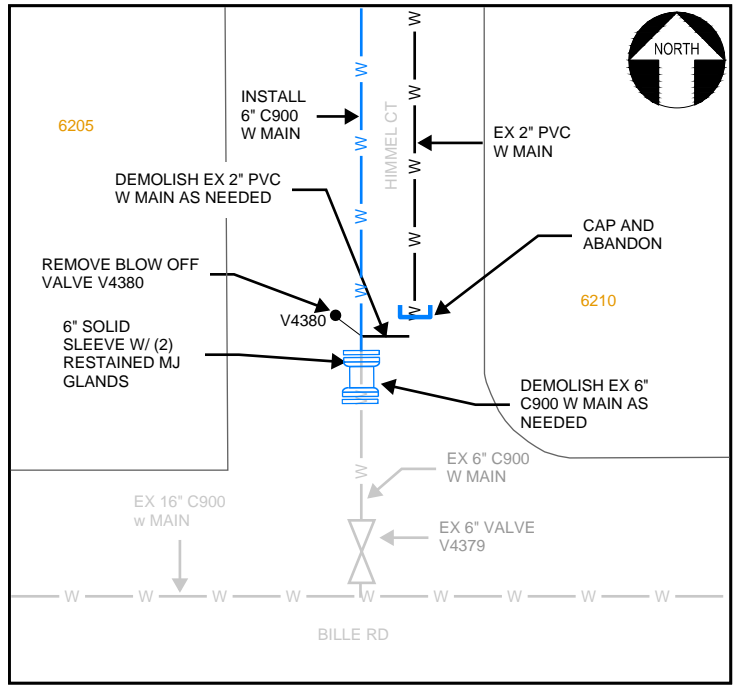
17 CRANDALL NORTH  
C-17 NTS



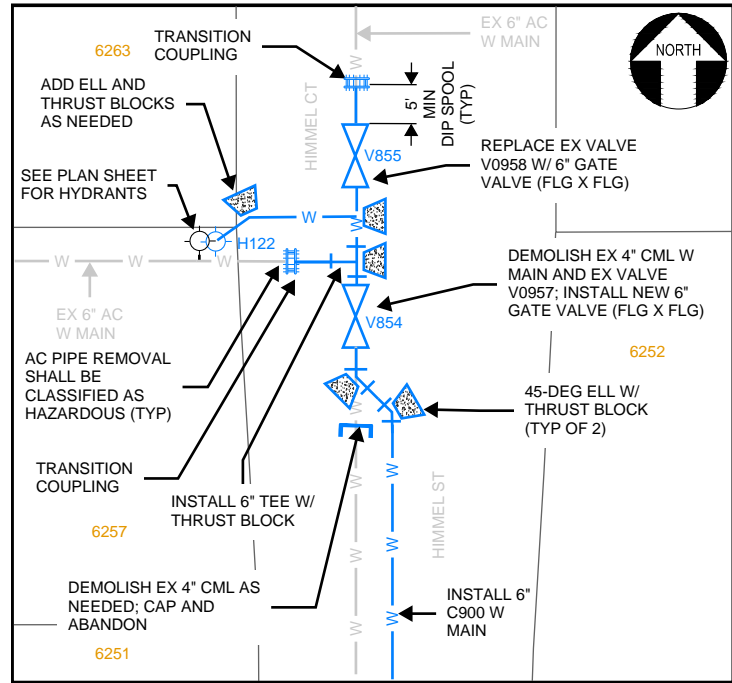
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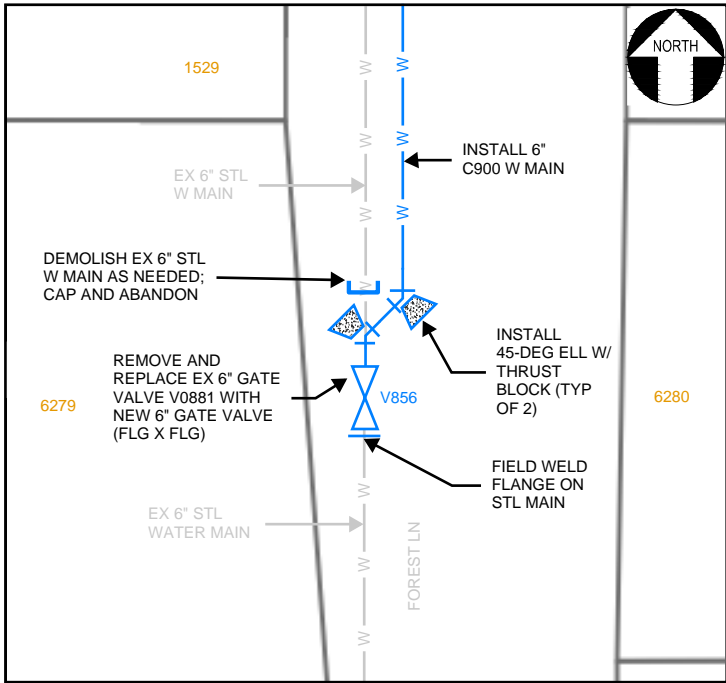
19 DEODARA  
C-18 NTS



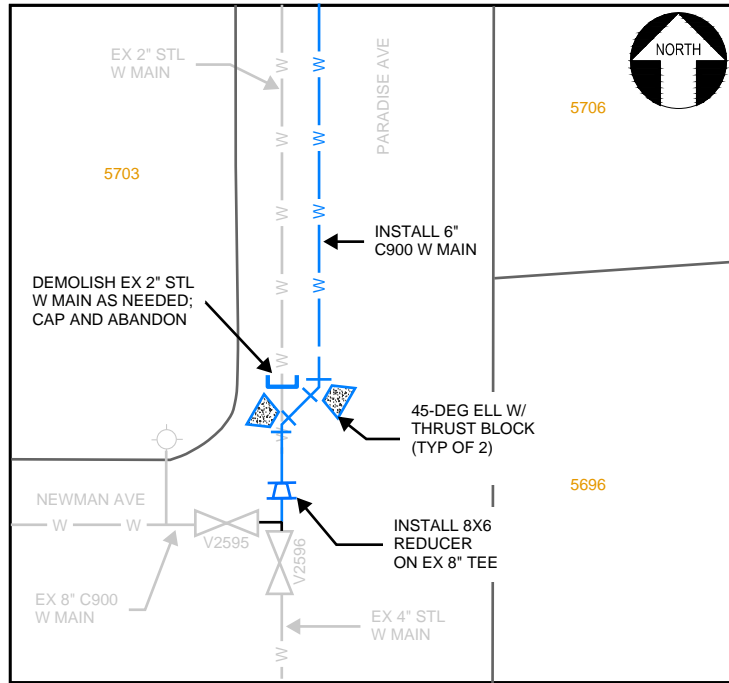
20 HIMMEL SOUTH  
C-19 NTS



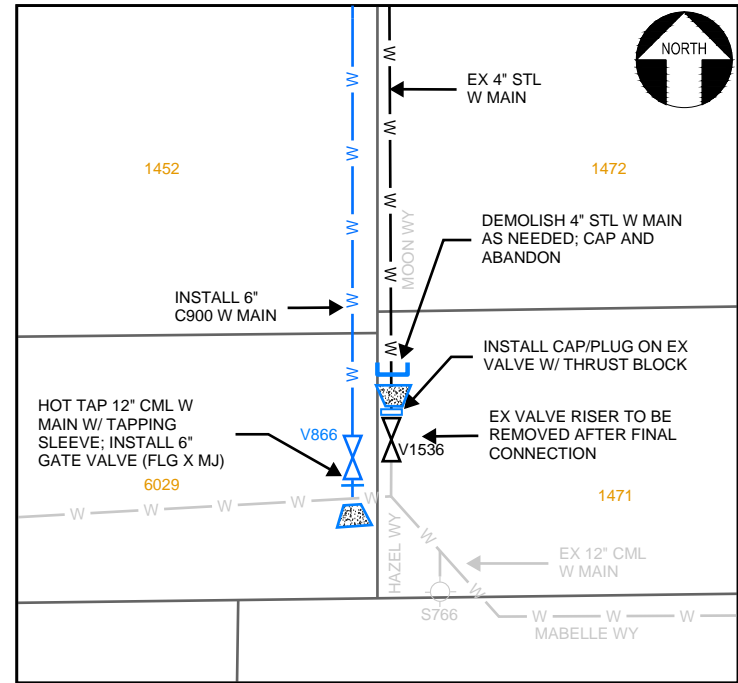
21 HIMMEL NORTH  
C-19 NTS



22 FOREST CIR  
C-20 NTS

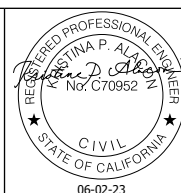
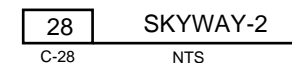
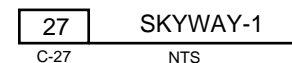
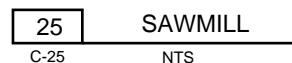


23 PARADISE AVE  
C-22 NTS



24 MOON-HAZEL  
C-23 NTS



[illegible]

DESIGNED: E. DIEGO  
DRAWN: E. MA  
CHECKED: K. ALACON  
APPROVED: S. KADER

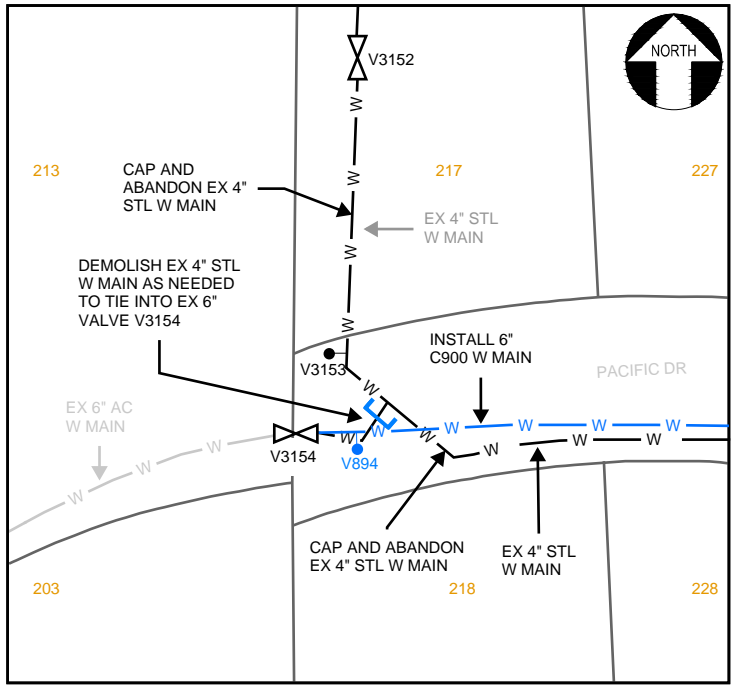
6332 CLARK ROAD, PARADISE, CA 95969  
PHONE: (530) 877-4971

**MAINS REPLACEMENT PROJECT PHASE 1**  
TIE-IN DETAILS 4

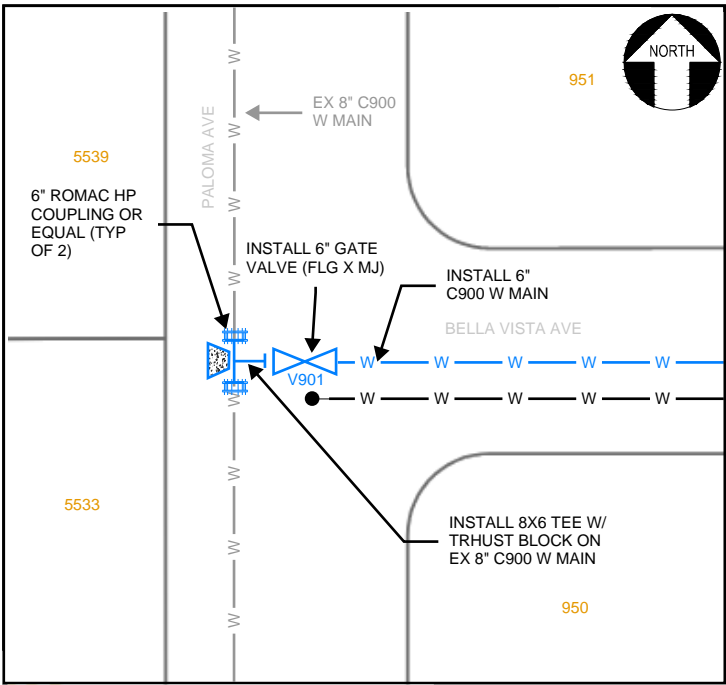
DATE 4/9/2023

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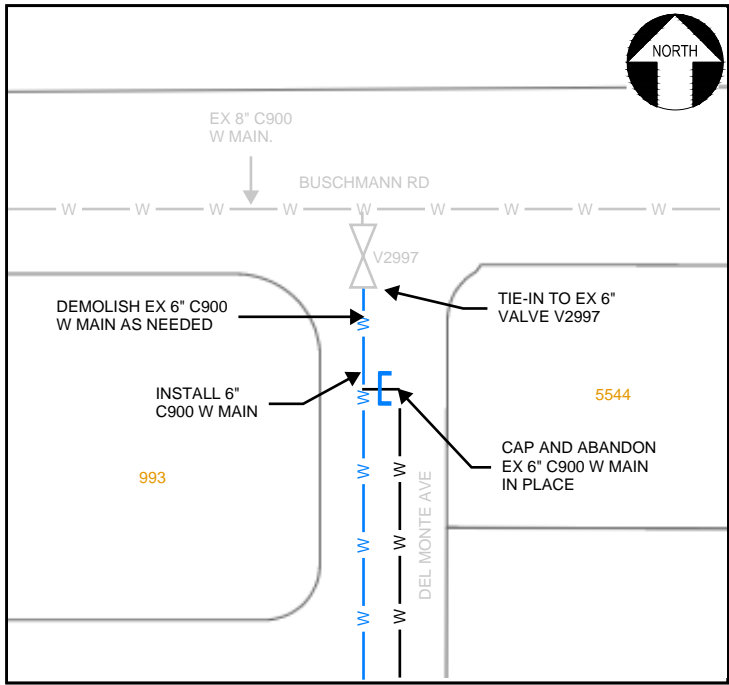




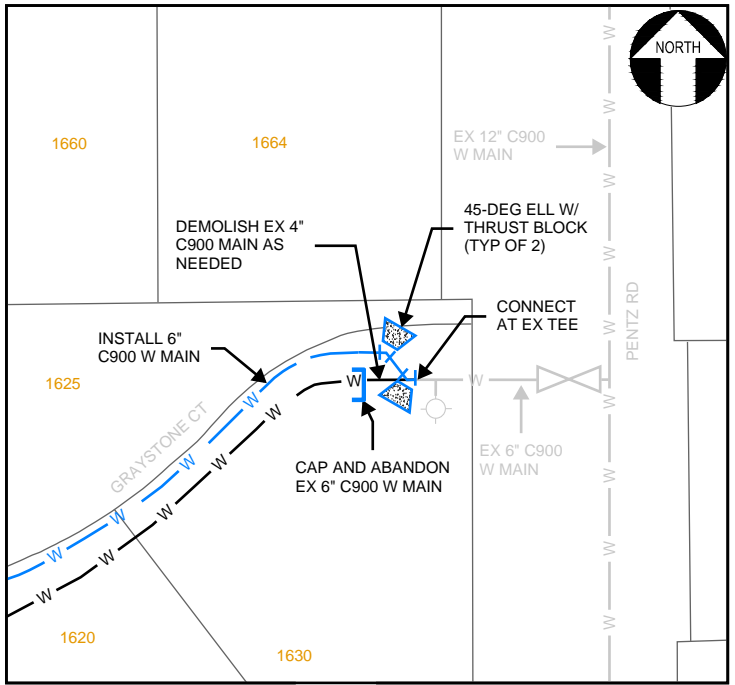
**33** PACIFIC  
C-30 NTS



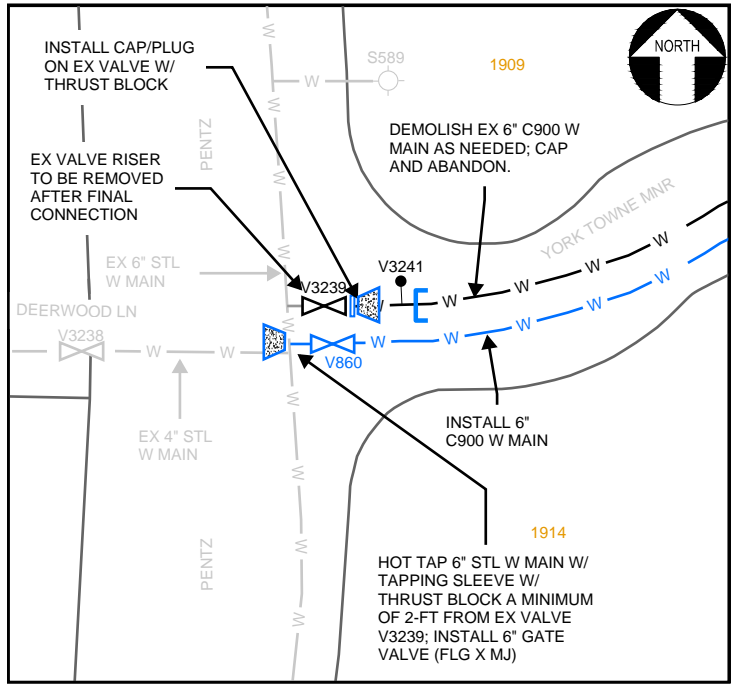
**34** PALOMA/ BELLA VISTA  
C-33 NTS



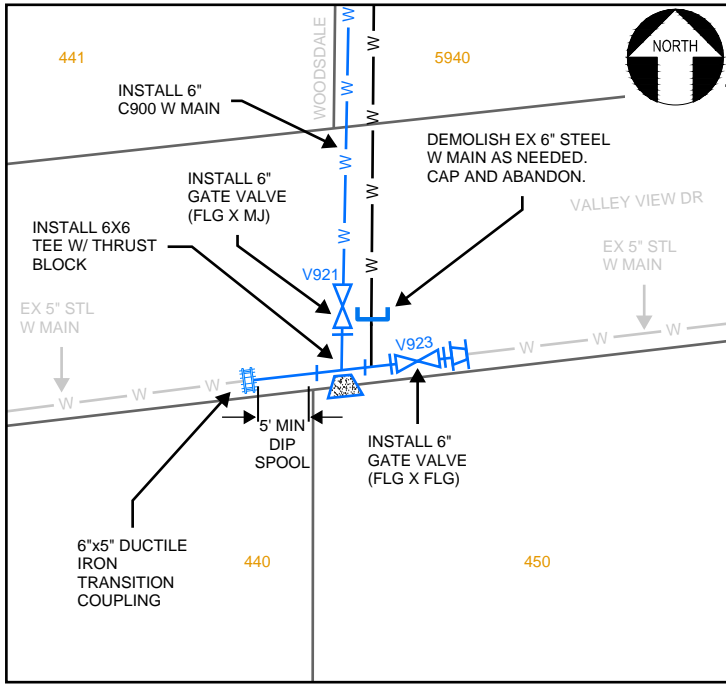
**35** DEL MONTE/ BUSCHMANN  
C-33 NTS



**36** GRAYSTONE  
C-36 NTS



**37** YORK TOWNE  
C-21 NTS



**38** WOODSDALE  
C-47 NTS