CITY OF WESTMORLAND

DWR/SCDR GRANT #4600015451
WATER DISTRIBUTION PIPING
REPLACEMENT PROJECT
BID No. 2025-01
Date: April 4, 2025

ADDENDUM NO. 1

The bidders are advised that the Contract Documents, Specifications, and Plans for the above referenced project are hereby amended per the statements in this Addendum.

1. Change in Contract Document Bid Form.
The listing of various bid items has changed. The bidders are hereby notified to replace the Bid Form, as attached to this addendum, as **"Addendum No. 1 - Attachment A"**.

2. As noted in the Title Sheet, the Contractor shall be responsible to contract with a Surveyor to conduct the monument preservation research and survey of the project. The cost of monument preservation shall be included in the mobilization bid item cost.

The County of Imperial Department of Public Works' County Surveyor requires the preservation of monuments. The Contractor is responsible to provide the survey scope of work as required of the Monument Preservation Report - Pre-construction form (MPR-01) and the Monument Preservation Report - Post-construction form (MPR-02). The MPR-01 and MPR-02 are attached as "**Addendum No. 1 – Attachment B**".

The MPR-01 scope of work is to be conducted, submitted and approved by County Surveyor prior to the commencement of any construction activities at the project site.

3. Plan Sheets 1 through 7 have been revised to illustrate changes in the Design Plans. The design plans are attached as **"Addendum No. 1 – Attachment C".**

Plan Sheets 3 and 5 are for future projects. The bidder shall not include these plans as part of their bid.

4. The domestic (USA) manufacturer requirement for pipe fittings and valves as written in the Specifications of the Design Plans shall not apply. There is no specific requirement for the Contractor to abide by the Buy American or purchase of domestic (USA) manufacturers for this project.

5. The cost for the geotechnical testing requirement of pipeline trench backfill and asphalt concrete compaction testing of the pipeline is to be omitted from the Contractors responsibility. The cost of the geotechnical testing will be contracted by the City's construction management consultant for the Project.

6. The Contractor shall be responsible for the construction staking of the new pipeline. The construction staking shall be included in the cost for the mobilization bid item.

7. The Contractor shall be responsible to perform excavation and exposure (pothole) of existing utilities that cross the proposed water pipeline. The horizontal and vertical locations of existing utilities are to be identified and marked on the as-bult set of plans. The cost of the pothole scope of work shall be included in the pipeline bid item cost.

There are six (6) known existing sanitary sewer services that cross the new water pipeline along 7th Street between G Street and F Street. These services lines are not illustrated on the Design Plans.

There are two (2) known existing sanitary sewer services that cross the new water pipeline along 7th Street between G Street and Center Street. These services lines are not illustrated on the Design Plans.

There are three (3) known existing sanitary sewer services that cross the new water pipeline along G Street between 5th Street and 6th Street. These services lines are not illustrated on the Design Plans.

8. The existing Fire Hydrants are to remain in place. New pipeline connections are to be made to the existing Fire Hydrants. The new pipeline connections are to be paid as part of the water pipeline bid item and valve bid item. The cutting and connection of the new pipeline connection is to be paid as per the Restore the existing Fire Hydrant bid item. This is typical of three (3) Fire Hydrants.

9. Regarding Pipe trench backfill:

The asphalt concrete pavement section shall be 4 inches of ½-inch hot mix asphalt concrete over 9 inches of class 2 aggregate base.

The area of pipeline trench along 7th Street between H Street and J Street shall not be paved with asphalt concrete pavement. Such trench section is to be backfilled with class 2 aggregate base up to the top of the adjacent pavement surface. Where the new pipeline trench is located outside of asphalt pavement, native soil shall be used to backfill to the top of the adjacent native surface.

10. The awarded bidder (Contractor) and its Subcontractor(s) are to obtain City Business Licenses prior to the issuance of the Notice To Proceed.

11. The location of blow-off valves (stub-out blowoff) illustrated on the Design Plans are illustrated for the Contractor to use for pressure testing and disinfection testing. The Contractor shall install blow-off valves as required for each section of pipeline that is constructed and tested. After testing, each blow-off valve is to be capped. The cost for installation and cap of the blow blow-off valves is to be included in the pipeline bid item cost.

12. Since the funding for the project is limited, the following prioritization of piping segments shall be used for construction contract purposes. The sequence of the pipeline construction is to be prioritized in the following order.

a. N. H St. from 7th Street to 8th Street (approx. 750’ of 8” pipe)

b. W. 7th Street from H Street to I Street plus the tie-in to I Street (approx. 340’ of 8” pipe and 80’ of 6” pipe)

c. W. 7th Street from F Street to G½ Street and re-connect 2 fire hydrants (approx. 660’ of 8” pipe and 60’ of 6” pipe)

d. W. 7th Street from Center Street to F Street (approx. 440’ of 8” pipe)

e. N. G Street from 5th Street to 6th Street plus wharfhead tie-in (approx. 550’ of 6” pipe)

f. W. 7th Street from I Street to J Street (approx. 340’ of 8” pipe)

13. The City of Westmorland will not provide a staging area for the Contractor. The Contractor is to obtain their own staging area.

14. The Contractor is to remove and dispose of the excavated native soil from the project site. The City of Westmorland will not receive any of the native soil.

15. The pressure testing, chlorination and bacteriological testing services are the responsibility of the Contractor. The cost for such tests are to be included in the pipeline bid item cost.

END OF ADDENDUM NO. 1

Prepared by:

Date: April 4, 2025.

Juny Marmolejo, P.E.
Project Engineer
The Holt Group, Inc.

Addendum No. 01 Acknowledgement

The Bidder is responsible for advising any and all subcontractors and suppliers of this addendum. Each bidder must acknowledge receipt of this addendum in the noted space below and where indicated in the Bid Form. This sheet of the addendum is to be signed by the Bidder and submitted with the Bid.

Print or Type Bidder's Name: _____

Print or Type Authorized Name: _____

Authorized Signature of Bidder: _____

Date Signed: _____

Addendum No. 1 – Attachment A

CITY OF WESTMORLAND

PROPOSAL BID SHEET FOR

WESTMORLAND DWR/SCDR GRANT #4600015451

WATER DISTRIBUTION PIPING REPLACEMENT PROJECT

BID NO. 2025-01

Item No.	Description	Units	Estimated Quantity	Unit Price	Amount
	DEMOLITION				
1	Remove and Dispose/Recycle Existing AC Pavement and PCC Concrete.	L.S.	1	$ -	$ -
2	Remove/Dispose Existing Water Valves, abandon and cap Piping as indicated or needed. Maintain water service except for short outages.	L.S.	1	$ -	$ -
				Demolition SUBTOTAL	$ -
	CONSTRUCTION				
1	Install 8-inch Resilient Wedge Gate Valve (including fittings, piping, and thrust blocks)	EA	7	$ -	$ -
2	Install 6-inch Resilient Wedge Gate Valves (including fittings, piping, and thrust blocks)	EA	8	$ -	$ -
3	Restore service to existing Fire Hydrants (including tee fitting at main, other fittings including transition coupling to existing pipeline, trenching, and trench backfill)	EA	3	$ -	$ -
4	Adjust Water Valve Covers to Grade (including risers, covers, and native material or A.C. as indicated/needed)	EA	20	$ -	$ -
5	Install 8-inch C900 PVC water pipe (complete with fittings, concrete thrust blocks, trenching, trench backfill, and pothole) on 7th St. from Center St. to J St. and on N. H St. from 7th St. to 8th St.	LF	2600	$ -	$ -
6	Install 6-inch C900 PVC water pipe (complete with fittings, concrete thrust blocks, trenching, trench backfill, and pothole) where shown on Plans	LF	220	$ -	$ -
7	Restore Residential Service Laterals	EA	22	$ -	$ -
8	AC paving/trench repair as shown in trench paving detail in plans	SF	4600	$ -	$ -
9	Traffic control, Sweeping/cleaning, and Notification of water outage	LS	1	$ -	$ -
10	Mobilization/demobilization, Replacing Pavement Markings, Install Project Sign, Monument Preservation, and Construction Staking	LS	1	$ -	$ -
11	Bonds and Insurance	LS	1	$ -	$ -
				Construction SUBTOTAL	$ -
				Based Bid Construction and Demolition - TOTAL	$ -
	Additive Bid Item				
A	Install 6-inch C900 PVC water pipe (complete with fittings, concrete thrust blocks, trenching, and trench backfill) [G St. 5th to 6th]	LF	550	$ -	$ -
				Additive Bid Construction - TOTAL	$ -

NOTE: ***THE QUANTITIES ILLUSTRATED ARE APPROXIMATE. THE ENGINEER WILL NOT ASSUME RESPONSIBILITY FOR THE QUANTITIES ILLUSTRATED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH THE QUANTITIES.***

TOTAL AMOUNT OF BASE BID (NUMBERS)

_____

TOTAL AMOUNT OF BASE BID (WORDS)

_____

TOTAL AMOUNT OF BASE BID PLUS ADDITIVE (NUMBERS)

_____

TOTAL AMOUNT OF BASE BID PLUS ADDITIVE (WORDS)

_____

Note: The estimated quantities listed in the Proposal Bid Sheet(s) are supplied to give an indication of the general scope of the work, but the accuracy of these figures is not guaranteed and the bidder shall make his own estimates from the drawings. In case of a variation between the unit price and the totals shown by the bidder, the unit price will be considered to be the bid.

_____

Bidder's Name and Telephone Number

Addenda No(s) received

_____

PROPOSAL

IN WITNESS WHEREOF, BIDDER executes and submits this proposal with the names, titles, hands, and seals of all forenamed principals this_____ day of _____, 2025.

Bidder:_____

By:_____

Title:_____

Subscribed and sworn to this _____ day of _____, 2025.

NOTARY PUBLIC_____

AGENCY acknowledges this proposal was received and opened at the time and in the place specified, and that it was accompanied by the required guarantee in the amount of ten percent (10%) of the total bid.

By:_____

Title:_____

Addendum No. 1 – Attachment B

County of Imperial Department of Public Works 155 S 11th Street El Centro, CA 92243 (442) 265-1818	**Monument Preservation Report** **PRE-CONSTRUCTION**	FORM MPR-01 April 2021

County of Imperial Permit Number/Project Name _____

PRIOR TO PERMIT ISSUANCE, THE PERMITTEE SHALL RETAIN THE SERVICE OF A PROFESSIONAL LAND SURVEYOR (OR CIVIL ENGINEER AUTHORIZED TO PRACTICE LAND SURVEYING) WHO WILL BE RESPONSIBLE FOR MONUMENT PRESERVATION AND WHO SHALL PROVIDE A CORNER RECORD (OR RECORD OF SURVEY) TO THE COUNTY SURVEYOR AS REQUIRED BY THE PROFESSIONAL LAND SURVEYORS' ACT, IF APPLICABLE. THE PERMITTEE IS RESPONSIBLE FOR THE COST OF RESTORING, OR REPLACING ALL SURVEY MONUMENTS THAT ARE DISTURBED, OR DESTROYED BY CONSTRUCTION.

(REFERENCE SECTION 8771 OF THE CALIFORNIA BUSINESS AND PROFESSIONS CODE)

********* <u>THIS FORM TO BE COMPLETED BY A PERSON AUTHORIZED TO PRACTICE LAND SURVEYING</u> *********

☐ THE TYPE OF CONSTRUCTION PROPOSED WILL NOT AFFECT ANY SURVEY MONUMENTS.
(This box is checked for projects that are proposing <u>no</u> demolition, trenching, excavation, surfacing, etc.)

_____
NAME P.L.S./R.C.E. SIGNATURE DATE (SEAL)

☐ THE TYPE OF CONSTRUCTION MAY AFFECT SURVEY MONUMENTS.
(This box is checked for projects that are proposing demolition, trenching, excavation, surfacing, etc.)

<u>I HAVE INSPECTED THE SITE(S) AND:</u> (check all that apply) DATE OF INSPECTION: _____

☐ MONUMENT(S) AND/OR CORNER ACCESSORY(IES) WERE FOUND WITHIN THE LIMITS OF WORK WHICH I DETERMINED MAY BE DISTURBED OR DESTROYED. **(A corner record or record of survey is required.)** The found monument(s) and/or corner accessory(ies) were referenced and pre-construction corner record(s) (or record(s) of survey) showing the references has been filed with the County Surveyor for the project site(s). The filed corner record(s) (or record(s) of survey) is attached hereto. Also attached, (if not documented on the corner record(s) (or record(s) of survey)) is a sketch/diagram showing locations of monuments that were searched for and not found. I have placed "S.N.F." on the sketch/diagram for each monument and/or corner accessory that was not found. Photos may also be included.

☐ NO MONUMENT(S) AND/OR CORNER ACCESSORY(IES) WERE FOUND WITHIN THE LIMITS OF WORK. **(No corner record or record of survey is required.)** Attached is a sketch/diagram showing the limits of work and its relationship to the locations of any monument and/or corner accessory searched for and not found. I have placed "S.N.F." on the sketch/diagram for each monument and/or corner accessory not found. Photos may also be included.

☐ MONUMENT(S) AND/OR CORNER ACCESSORY(IES) WERE FOUND OUTSIDE THE LIMITS OF WORK WHICH I DETERMINED WILL REMAIN PROTECTED IN PLACE. **(No corner record or record of survey is required.)** Attached is a sketch/diagram of the work limits and its relationship to the found monuments. Photos may also be included.

☐ MONUMENT(S) AND/OR CORNER ACCESSORY(IES) WERE FOUND WITHIN THE LIMITS OF WORK WHICH I DETERMINED MAY BE DISTURBED OR DESTROYED, HOWEVER AN EXISTING CORNER RECORD (OR RECORD OF SURVEY) WHICH SHOWS SUFFICIENT REFERENCES HAS ALREADY BEEN FILED AND THERE IS NO DISCREPANCY ON THE FILED CORNER RECORD (OR RECORD OF SURVEY).

SOURCE(S) OF SURVEY DATA CONSULTED: (Final Maps, Parcel Maps, Records of Survey, private field notes, etc.)

FILED CORNER RECORD#_____ OR FILED RECORD OF SURVEY#_____

_____
NAME P.L.S./R.C.E. SIGNATURE DATE (SEAL)

County of Imperial
Department of Public Works
155 S 11th Street
El Centro, CA 92243
(442) 265-1818

Monument Preservation Report

POST-CONSTRUCTION

FORM
MPR-02
April 2021

County of Imperial Permit Number/Project Name _____

PRIOR TO ISSUING A NOTICE OF COMPLETION FOR PERMITTED CONSTRUCTION, THE PERMITTEE SHALL RETAIN THE SERVICE OF A PROFESSIONAL LAND SURVEYOR (OR CIVIL ENGINEER AUTHORIZED TO PRACTICE LAND SURVEYING) WHO WILL BE RESPONSIBLE FOR MONUMENT RESTORATION AND WHO SHALL PROVIDE A CORNER RECORD (OR RECORD OF SURVEY) TO THE COUNTY SURVEYOR AS REQUIRED BY THE PROFESSIONAL LAND SURVEYORS' ACT, IF APPLICABLE. THE PERMITTEE IS RESPONSIBLE FOR THE COST OF RESTORING, OR REPLACING ALL SURVEY MONUMENTS THAT ARE DISTURBED, OR DESTROYED BY CONSTRUCTION.

(REFERENCE SECTION 8771 OF THE CALIFORNIA BUSINESS AND PROFESSIONS CODE)

********* <u>THIS FORM TO BE COMPLETED BY A PERSON AUTHORIZED TO PRACTICE LAND SURVEYING</u> *********

☐ MONUMENTS AND/OR CORNER ACCESSORY(IES) WERE PROTECTED IN PLACE AND THE PERMITTED CONSTRUCTION DID NOT DISTURB OR DESTROY ANY SURVEY MONUMENTS AND/OR CORNER ACCESORY(IES).

_____

NAME P.L.S./R.C.E. SIGNATURE DATE (SEAL)

☐ MONUMENT(S) AND/OR CORNER ACCESSORY(IES) WERE DISTURBED AND/OR DESTROYED DURING THE PERMITTED CONSTRUCTION. A new monument(s) was set in the surface of the new construction or a witness monument(s) was set to perpetuate the original location of the disturbed or destroyed monument(s) and a post-construction corner record or a record of survey was filed in the office of the County Surveyor. (New corner accessory(ies) may also be required.)

FILED CORNER RECORD#_____ OR FILED RECORD OF SURVEY#_____

_____

NAME P.L.S./R.C.E. SIGNATURE DATE (SEAL)

Addendum No. 1 – Attachment C

DWR-SCDRP-WATER DISTRIBUTION PIPING REPLACEMENT

IN THE CITY OF WESTMORLAND, COUNTY OF IMPERIAL, STATE OF CALIFORNIA

GENERAL NOTES:

1. PROJECT WORK TO BE ACCOMPLISHED CONSISTS OF: SAWCUTTING AND REMOVAL OF EXISTING AC PAVEMENT AND BASE MATERIAL, RECYCLING THE MATERIAL OR HAULING TO A RECYCLER, ABANDON EXISTING WATER PIPING IN PLACE, INSTALL 8" DIA AND 6" DIA PVC PIPE C-900 COMPACTING THE BASE MATERIAL,
   PLACING NINE (9) INCHES OF CLASS 2 AGGREGATE BASE AND FOUR (4) INCHES OF 3/4 HOT MIX ASPHALT PAVEMENT, ADJUSTING THE PIPE RISER COVER TO GRADE.
2. CONTRACTOR WILL NOT STORE MATERIAL, EXCESS DIRT OR EQUIPMENT IN THE RIGHT-OF-WAY IN CASE OF MULTILANE HIGHWAYS. THE PAVEMENT SHALL BE KEPT FREE FROM ANY MUD OR EXCAVATION WASTE FROM TRUCKS OR OTHER EQUIPMENT. ON COMPLETION OF THE WORK ALL EXCESS MATERIAL SHALL BE REMOVED FROM THE RIGHT-OF-WAY.
3. CONTRACTOR SHALL PROVIDE ALL NECESSARY AND ADEQUATE SAFETY PRECAUTIONS SUCH AS SIGNS, FLAGS, LIGHT BARRICADES AND FLAG MEN AS REQUIRED BY THE LOCAL AUTHORITIES AND IN ACCORDANCE WITH THE CAMUTCD.
4. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR AND HOLD HARMLESS THE CITY OF WESTMORLAND, THE ENGINEER, AND THE OWNER FROM ANY CLAIMS FOR DAMAGE DONE TO EXISTING PRIVATE PROPERTY, PUBLIC UTILITIES, OR TO THE TRAVELING PUBLIC.
5. THE CONTRACTOR SHALL TAKE ALL AVAILABLE PRECAUTIONS TO CONTROL DUST. THE CONTRACTOR TO COMPLY WITH ALL STATE AND LOCAL SEDIMENT CONTROL AND AIR POLLUTION ORDINANCES OR RULES.
6. BEFORE ANY MACHINE WORK IS DONE, CONTRACTOR SHALL STAKE OUT AND MARK THE ITEMS ESTABLISHED BY THE SITE PLAN. CONTROL POINTS SHALL BE PRESERVED AT ALL TIMES DURING THE COURSE OF THE PROJECT. LACK OF PROPER WORKING POINTS AND GRADE STAKES MAY REQUIRE CESSATION OF OPERATIONS UNTIL SUCH POINTS AND GRADES HAVE BEEN PLACED TO THE ENGINEER'S SATISFACTION. GENERAL CONTRACTOR'S REPRESENTATIVE MUST APPROVE STAKED ITEMS PRIOR TO CONSTRUCTION.
7. CONTRACTOR TO COORDINATE ALL WORK WITH OTHER UTILITY INSTALLATIONS NOT COVERED IN THESE PLANS (ELECTRIC, TELEPHONE, GAS, CABLE, ETC.) AND ALLOW FOR THEIR OPERATIONS AND CONSTRUCTION TO BE PERFORMED.
8. CONTRACTOR SHALL REPAIR OR REPLACE IN-KIND ANY DAMAGE THAT OCCURS AS RESULT OF THE WORK, AT CONTRACTOR'S OWN EXPENSE.
9. THE TERMS "CONTRACTOR", "THIS CONTRACTOR" AND "SITE CONTRACTOR" ARE DEFINED AS "SITE WORK CONTRACTOR".
10. THE TERM "PRIME CONTRACTOR", "THIS CONTRACTOR" OR "GENERAL CONTRACTOR" SHALL BE DETERMINED BY THE OWNER.
11. CONTRACTOR WILL PROTECT IN PLACE ALL SEWER MANHOLES AND WATER VALVES AND WILL RAISE AS SPECIFIED IN CONTRACT TO LEVEL OF NEW ELEVATION OF STREET.
12. IN THE CASE OF RUNOFF WATER CONTROL, THE CONTRACTOR SHALL PROTECT ALL WATER COURSES, THE GROUNDWATER, AND ALL BODIES OF WATER FROM POLLUTION BY FUELS, OILS, BITUMEN, OR OTHER HARMFUL MATERIALS.
13. CONTRACTOR TO PROVIDE POSITIVE DRAINAGE ON STREET IMPROVEMENTS AND MAINTAIN EXISTING DRAINAGE SLOPES AND PATHS TO MATCH EXISTING GRADES.

WATER NOTES

WATER WORKS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DETAILS AND MATERIALS AS SPECIFIED IN THE MOST CURRENT EDITION OF THE STANDARDS OF THE AMERICAN WATER WORKS ASSOCIATION. CONTRACTOR SHALL HAVE A CURRENT COPY OF THE STANDARD SPECIFICATIONS ON THE JOB SITE AT ALL TIMES.

THE SUBMISSION AND REVIEW OF ALL SUBMITTALS AS REQUIRED BY THE STANDARD SPECIFICATIONS ARE TO BE ACCOMPLISHED PRIOR TO THE PRE CONSTRUCTION MEETING.

NO WORK MAY BEGIN OR PROCEED WITHOUT DIRECTION OF CITY AND INSPECTOR. INSPECTOR'S SCHEDULING MUST BE 24-48 HOURS IN ADVANCE OF WORK.

WHERE ELEVATIONS AND GRADES ARE NOT SHOWN ON THE WATER MAIN PROFILE, TOP OF PIPE PROFILE IS MINIMUM 36-INCHES BELOW FINISH GRADE OF STREET

5- UNLESS OTHERWISE NOTED, CONNECTION TO EXISTING MAINS SHALL BE MADE DRY. THE TIME AND DURATION OF ANY SHUTDOWNS OF EXISTING MAINS SHALL BE SUBJECT TO APPROVAL BY THE CITY. CITY SHALL BE NOTIFIED THREE DAYS MINIMUM IN ADVANCE OF ANY SHUTDOWN

CONTRACTOR SHALL COORDINATE WITH CITY ALL ARRANGEMENTS FOR HIGH-LINING TEMPORARY SERVICES, ETC., PRIOR TO SHUTDOWNS. NO SHUTDOWNS WILL BE SCHEDULED ON A FRIDAY.

LINE VALVES, WHERE REQUIRED AT STREET INTERSECTIONS SHALL BE LOCATED ON THE PROLONGATION OF THE STREET RIGHT-OF-WAY WHENEVER POSSIBLE.

CONTRACTOR SHALL REVIEW ALL PROPOSED TRENCH WORK WITH CAL/OSHA. A COPY OF EXEMPTION LETTER OR TRENCHING PERMIT, IF REQUIRED, SHALL BE SUBMITTED TO THE CITY PRIOR TO CONSTRUCTION.

ALL WATER SERVICES FOR IRRIGATION, MULTIPLE RESIDENTIAL COMPLEXES (IF APPLICABLE) AND COMMERCIAL OR INDUSTRIAL DEVELOPMENTS SHALL HAVE AN APPROVED BACKFLOW PREVENTION DEVICE ON CUSTOMER'S SIDE OF WATER METER.

THE WATER SYSTEM SHALL BE PRESSURE TESTED IN ACCORDANCE WITH THE PROCEDURES IN THE STANDARD SPECIFICATIONS. THE CLASS OF PIPE SHALL BE USED AS THE DESIGNATED WORKING PRESSURE FOR TESTING ALL PIPES, VALVES (CLOSED) AND APPURTENANCES.

CONTRACTOR TO TIE OFF ALL VALVE LOCATIONS AND PROVIDE WRITTEN DIMENSIONS TO INSPECTOR IMMEDIATELY UPON INSTALLATION OF VALVES.

ALL DEFLECTIONS (HORIZONTAL AND VERTICAL) SHALL BE MADE BY USE OF JOINT COUPLINGS WITH 4" MAXIMUM DEFLECTION PER COUPLING (2" PER JOINT). NO BENDING (CURVING) OF PIPE SHALL BE ALLOWED.

THE CONTRACTOR SHALL FURNISH AND INSTALL, PER SPECIFICATIONS, THE APPROPRIATE BURIED UTILITY WARNING IDENTIFICATION TAPE ABOVE ALL PUBLIC WATERLINES INCLUDING WATER AND FIRE LATERALS LOCATED IN PUBLIC RIGHT OF WAY OR EASEMENT.

THE CONTRACTOR SHALL GUARANTEE ALL WORK FOR A PERIOD OF ONE (1) YEAR AFTER THE DATE OF ACCEPTANCE OF THE WORK BY THE CITY AND SHALL REPAIR OR REPLACE ANY OR ALL SUCH WORK TOGHETER WITH ANY OTHER WORK WHICH MAY BE DISPLACED IN SO DOING, THAT MAY PROVE DEFECTIVE IN WORKMANSHIP AND/OR MATERIALS WITHIN THE 1 YEAR PERIOD FROM DATE OF ACCEPTANCE WITHOUT EXPENSE WHATSOEVER TO THE CITY, ORDINARY WEAR AND TEAR, UNUSUAL ABUSE OR NEGLECT EXCEPTED.

CONSTRUCTION NOTES:

1. APPROVAL OF THESE PLANS BY THE PUBLIC WORKS DIRECTOR DOES NOT AUTHORIZE ANY WORK TO BE PERFORMED UNTIL NOTICE TO PROCEED HAS BEEN ISSUED.
2. DEVIATION OR CHANGES FROM THESE SIGNED PLANS WILL NOT BE ALLOWED UNLESS THERE IS A CONSTRUCTION CHANGE APPROVED BY THE ENGINEER.
3. CONTRACTOR SHALL PROTECT IN PLACE: WATER VALVES, SEWER MANHOLES AND COVERS, GAS VALVES, TV OR CABLE BOXES, MONUMENTS, IID POLES AND BOXES.
4. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS REQUIRED TO PROTECT ADJACENT PROPERTIES AND EASEMENTS DURING CONSTRUCTION. ANYTHING DAMAGED OR DESTROYED SHALL BE REPLACED OR REPAIRED TO CONDITION EXISTING PRIOR TO WORK AT THE CONTRACTOR'S COST.
5. THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN APPROXIMATE LOCATION, SUBJECT TO THE PROVISIONS OF SECTION 4215 OF THE CALIFORNIA GOVERNMENT CODE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITES BEFORE COMMENCING WORK. CONTACT DIG ALERT AT 811.

SPECIAL NOTES:

THE FOLLOWING NOTES ARE PROVIDED TO GIVE DIRECTIONS TO THE CONTRACTOR BY THE PUBLIC WORKS DIRECTOR.

1. THE PUBLIC WORKS DIRECTOR OR HIS REPRESENTATIVE(S) SHALL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CARRY OUT CONSTRUCTION WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, NOR SHALL THE ENGINEER BE REQUIRED TO SUPERVISE CONDUCT OF THE WORK OF THE CONSTRUCTION PROCEDURES AND SAFETY PROCEDURES FOLLOWED BY THE CONTRACTOR OR SUBCONTRACTORS OR THEIR RESPECTIVE EMPLOYEES OR BY ANOTHER PERSON AT THE JOB SITE OTHER THAN THAT OF THE ENGINEER'S EMPLOYEES.
2. THE CONTRACTOR SHALL TAKE DUE PRECAUTIONARY MEASURES TO PROTECT ANY EXISTING UTILITIES OR STRUCTURES LOCATED AT THE WORK SITE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE FOLLOWING OWNERS OF UTILITIES OR STRUCTURES PRIOR TO ANY EXCAVATION FOR VERIFICATION AND LOCATION OF UTILITIES AND NOTIFICATION OF COMMENCEMENT OF WORK.

1.	WATER/SEWER UTILITY: CITY OF WESTMORLAND	(760) 344-3411
2.	IMPERIAL IRRIGATION DISTRICT (POWER)	(760) 339-9280
3.	IMPERIAL IRRIGATION DISTRICT (WATER)	(760) 339-9263
4.	AT&T	(800) 442-4133
5.	THE GAS CO.	(800) 422-4133/(800) 227-2600
6.	SPECTRUM	(760) 335-4800

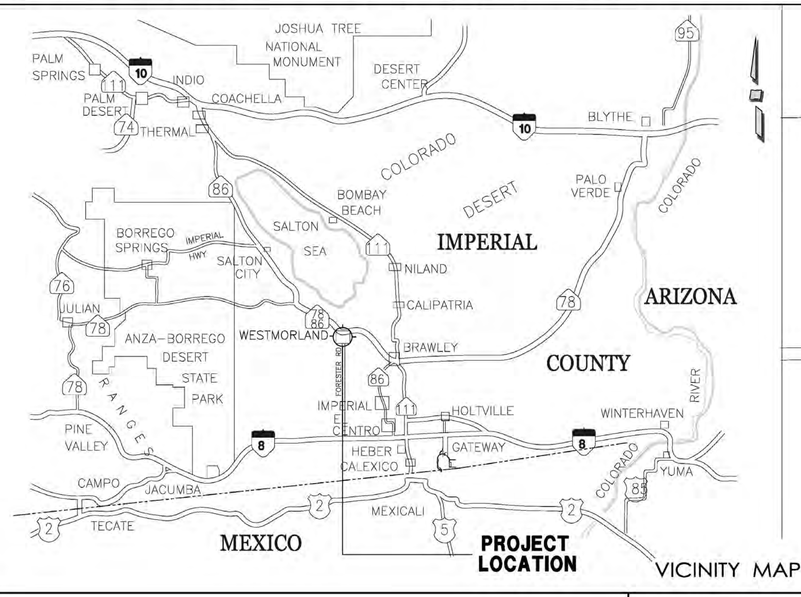
BEFORE EXCAVATING, VERIFY LOCATION OF UNDERGROUND UTILITIES, CONTACT ALERT 72 HOURS PRIOR TO THE START OF WORK.

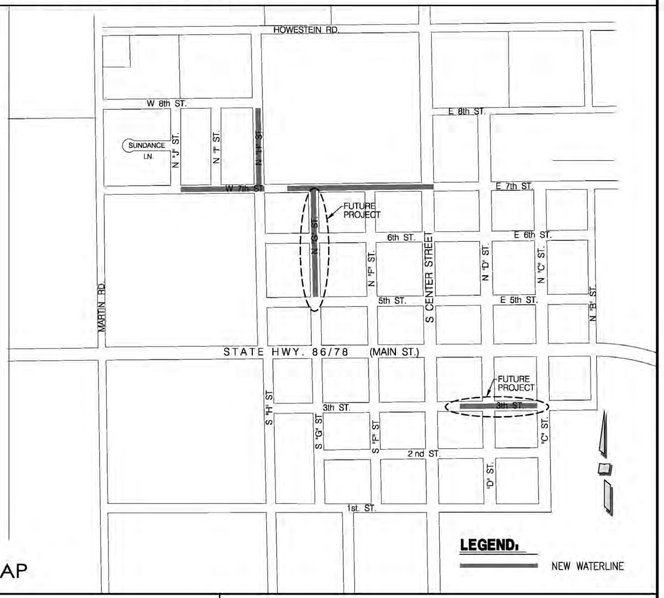
3. THE CONTRACTOR SHALL TAKE DUE CARE OF THE CONSTRUCTION BY MAINTAINING TRAFFIC CONTROL AND DEVICES.
4. THE CONTRACTOR SHALL NOTIFY EACH HOME OWNER AND BUSINESS AFFECTED BY THE CONSTRUCTION BY TYPED FLYER, NOTIFYING OF PARKING RESTRICTIONS AND WATER OUTAGES DURING CONSTRUCTION. FLYERS WILL BE OBTAINED THROUGH THE CITY, AND CONTRACTOR MUST COORDINATE DATE AND TIME WITH THE PUBLIC WORKS DIRECTOR AND POLICE DEPARTMENT.
5. THE CONTRACTOR SHALL MAINTAIN EXISTING DRAINAGE PATTERN. A WATER FLOW TEST SHALL BE PERFORMED ON NEWLY CONSTRUCTED CURB & GUTTER IN THE PRESENCE OF THE RESIDENT ENGINEER. COST FOR REMEDIAL ACTIVITIES, IF NECESSARY, SHALL BE COVERED BY CONTRACTOR.

TRAFFIC CONTROL NOTES:

CONTRACTOR WILL SUBMIT A TRAFFIC CONTROL PLAN PREPARED BY A CALIFORNIA LICENSED ENGINEER TO THE PUBLIC WORKS DIRECTOR PRIOR TO START OF WORK.

1. ALL TRAFFIC CONTROL SHALL COMPLY WITH CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CAMUTCD).
2. ALL DELINEATORS WILL BE EQUIPPED WITH A REFLECTIVE BAND FOR NIGHTTIME VISIBILITY.
3. FLASHING YELLOW BEACONS SHALL BE USED ON ALL C18 SIGNS AND ALL TYPE II BARRICADES GUARDING THE WORK AREA OVERNIGHT.
4. ALL SIGNS SHALL BE REFLECTORIZED AND STANDARD SIZE.
5. ALL DELINEATORS SHALL BE 28", PORTABLE, REFLECTORIZED, AND MAINTAINED ERECT IN POSITION AT ALL TIMES, AND SHALL BE REPAIRED OR CLEANED AS NECESSARY TO PRESERVE THEIR APPEARANCE AND CONTINUITY.
6. THE CONTRACTOR SHALL MAINTAIN ON A 24-HOUR BASIS ALL SIGNS, DELINEATORS, BARRICADES, ETC., TO ENSURE PROPER FLOW AND SAFETY OF TRAFFIC.
7. THE CONTRACTOR SHALL HAVE ALL SIGNS, DELINEATORS, BARRICADES, ETC., PROPERLY INSTALLED BEFORE COMMENCING CONSTRUCTION.
8. ADDITIONAL TRAFFIC CONTROLS, SIGNS, DELINEATORS OR BARRICADES MAY BE REQUIRED IN THE FIELD. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PLACEMENT OF ANY ADDITIONAL DEVICES NECESSARY TO ASSURE SAFETY TO THE PUBLIC AT ALL TIMES DURING CONSTRUCTION.
9. THE CONTRACTOR SHALL SHALL PROVIDE FOR SAFE PEDESTRIAN ACCESS AT ALL TIMES, INCLUDING SPECIAL ATTENTION TO SCHOOL PEDESTRIAN TRAFFIC.
10. THE CONTRACTOR SHALL ENSURE THE POSTING OF "TEMPORARY NO PARKING TOW AWAY" SIGNS DEFINING THE TIME AND DATE OF ANY SUCH RESTRICTION 72 HOURS PRIOR TO WORK.
11. THE CONTRACTOR SHALL NOTIFY ALL EMERGENCY AGENCIES (POLICE, FIRE, COUNTY FIRE, SHERIFF, CHP).
12. THE CITY OF WESTMORLAND RESERVES THE RIGHT TO MAKE ANY NECESSARY CHANGES TO THE TRAFFIC CONTROL DUE TO FIELD CONDITIONS AS WARRANTED, AND ALL CHANGES MUST BE APPROVED BY THE PUBLIC WORKS DIRECTOR PRIOR TO CHANGE. CONTRACTOR WILL USE FLAG PERSONNEL AS DEEMED NECESSARY.





PROJECT DESCRIPTION:

PROJECT WORK TO BE ACCOMPLISHED CONSISTS OF: SAWCUTTING AND REMOVAL OF EXISTING AC PAVEMENT AND BASE MATERIAL, RECYCLING THE MATERIAL OR HAULING TO A RECYCLER, INSTALL 8" DIA AND 6" DIA PVC PIPE PIPE C-900 COMPACTING THE BASE MATERIAL,
PLACING FOUR (4) INCHES OF 3/4" AGGREGATE HOT MIX ASPHALT PAVEMENT, ADJUSTING THE PIPE RISER COVER TO GRADE

STANDARD SPECIFICATIONS:

CURRENT VERSION OF STANDARD ESPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION ("GREEN BOOK")

MUTCD:

1. THE TRAFFIC CONTROL PLAN AND ALL STRIPING AND SIGNS WILL CONFORM TO TO THE MUTCD 2009 EDITION WITH REVISION NUMBERS 1 AND 2 INCORPORATED, DATED MAY 2012.

MONUMENT RESPONSIBILITY NOTE:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY MONUMENT AND/OR BENCHMARKS WHICH WILL BE DISTURBED OR DESTROYED BY CONSTRUCTION. SUCH POINTS WILL BE REFERENCED AND REPLACED WITH APPROPRIATE MONUMENTS BY A LICENSED LAND SURVEYOR OR A REGISTERED CIVIL ENGINEER AUTHORIZED TO PRACTICE LAND SURVEYIING. A CORNER RECORD OR RECORD OF SURVEY, AS APPROPRIATE, SHALL BE FILED BY THE LICENSED LAND SURVEYOR OR REGISTERED CIVIL ENGINEER AS REQUIRED BY THE LAND SURVEYOR'S ACT.

PROJECT ADDRESS:

STREETS OF WESTMORLAND
WESTMORLAND, CA 92281

ENGINEER:

ROBERTO C. MARTINEZ
R.C.E. 66706
BJ ENGINEERING AND SURVEYING, INC.
341 WEST CROWN COURT, SUITE 100
IMPERIAL, CA 92251
PH: (760) 353-3552

LEGEND:

SAWCUT	SAWCUT LINE
S	EXIST. SEWER LINE
4"W	EXIST. 4" DIA. WATERLINE
6"W	EXIST. 6" DIA. WATERLINE
8"W	EXIST. 8" DIA. WATERLINE
RAW	EXIST. IID RAW WATERLINE
6"W	PROPOSED 6" DIA. WATERLINE
8"W	PROPOSED. 8" DIA. WATERLINE
	PROPOSED FIRE HYDRANT
	PROPOSED BLOWOFF
	EXIST. FIRE HYDRANT
	EXIST. FIRE DEPT. CONNECTION
FOC	FACE OF CURB
WM	EXISTING WATER SERVICE

SHEET INDEX:

SHEET	DESCRIPTION
1	TITLE SHEET
2	WATER PIPE REPLACEMENT FROM: N "G" STREET BETWEEN W 5th STREET AND W 7th STREET, N "H" STREET BETWEEN W 7th STREET AND W 8th STREET.
3	WATER PIPE REPLACEMENT FROM: 3RD STREET BETWEEN C STREET AND G STREET
4	WATER PIPE REPLACEMENT FROM: 7th STREET BETWEEN J STREET AND D STREET
5	WATER PIPE REPLACEMENT FROM: 7th STREET BETWEEN D STREET AND B STREET, ALLEY BONITA BETWEEN COOK STREET AND CENTER STREET, CENTER STREET BETWEEN BONITA STREET AND 1ST STREET
6	CONSTRUCTION DETAILS AND SPECIFICATIONS
7	CONSTRUCTION DETAILS AND SPECIFICATIONS

DEMOLITION KEYNOTES:

A SAWCUT EXISTING PAVEMENT REMOVE, AND DISPOSE OF EXIST. AC LOCATION: AS INDICATED ON PLANS

WATER KEYNOTES:

- INSTALL 8" DIA. PVC C-900 DR. 18 WATER LINE 2/6
- INSTALL 6" DIA. PVC C-900 DR. 18 WATER LINE 2/6
- FIRE HYDRANT PER DETAIL 3/6
- INSTALL 8"ø WATER VALVE
- INSTALL 6"ø WATER VALVE
- ADJUST TO GRADE EXIST. WATER VALVE, AS NECESSARY
- (1) RECONNECT WATER SERVICE PER DETAIL 4/6
- (2) INSTALL STUB-OU BLOWOFF PER DETAIL 1/7

WATER NOTE:

WATER SERVICES: THE CITY OF WESTMORLAND AND CONTRACTOR TO COORDINATE WATER SERVICES LOCATION AND/OR REPLACEMENT OF EXISTING WATER SERVICES.

CONTRACTOR NOTES:

1. CONTRACTOR WILL PROVIDE A TRAFFIC CONTROL PLAN PRIOR TO THE CONSTRUCTION BEGINNING.
2. CONTRACTOR SHALL OBTAIN CONSTRUCTION STORMWATER PERMIT FROM THE STATE OF CALIFORNIA, IF REQUIRED.
3. CONTRACTOR TO USE NON-POTABLE WATER FOR CONSTRUCTION PURPOSES OR, PURCHASE CITY WATER.
4. THE CONTRACTOR SHALL SUBMIT MATERIALS SUBMITTALS FOR REVIEW AND APPROVAL BY THE CITY OF WESTMORLAND PUBLIC WORKS DEPARTMENT - ENGINEERING DIVISION. THIS INCLUDES, ASPHALT, BASE, CONCRETE, SAND, PIPES, FITTINGS, FIXTURES, ETC.

CALL BEFORE YOU DIG
UNDERGROUND SERVICE ALERT
CALL: TOLL FREE 811
TWO WORKING DAYS BEFORE YOU DIG

APPROVED BY PUBLIC WORKS DIRECTOR

CITY OF WESTMORLAND

BY: _____ DATE: _____
RAMIRO BARAJAS

ENGINEER OF RECORD

PLANS PREPARED UNDER THE SUPERVISION OF

BY: ROBERTO C. MARTINEZ DATE: _____

R.C.E. NO.: 74475

REGISTERED PROFESSIONAL ENGINEER ROBERTO C. MARTINEZ No. C74475 CIVIL STATE OF CALIFORNIA

NO.	REVISION	DATE	BY

NOTE: THE ENGINEER'S SEAL AFFIXED BESIDE INDICATES THAT THE METHOD OF ANALYSIS PRESENTED IS CONSISTENT WITH ACCEPTED ENGINEERING PRACTICES AND CODE ACCEPTED DESIGN VALUES AND THAT THIS ENGINEER IS ONLY RESPONSIBLE FOR THE DESIGN OF CIVIL ENGINEERING WORK SHOWN ON THIS PLAN.

BJ ENGINEERING & SURVEYING, INC.
Phone (760) 353-3552 341 WEST CROWN CT, STE 100
Fax (760) 353-3751 IMPERIAL, CA 92251

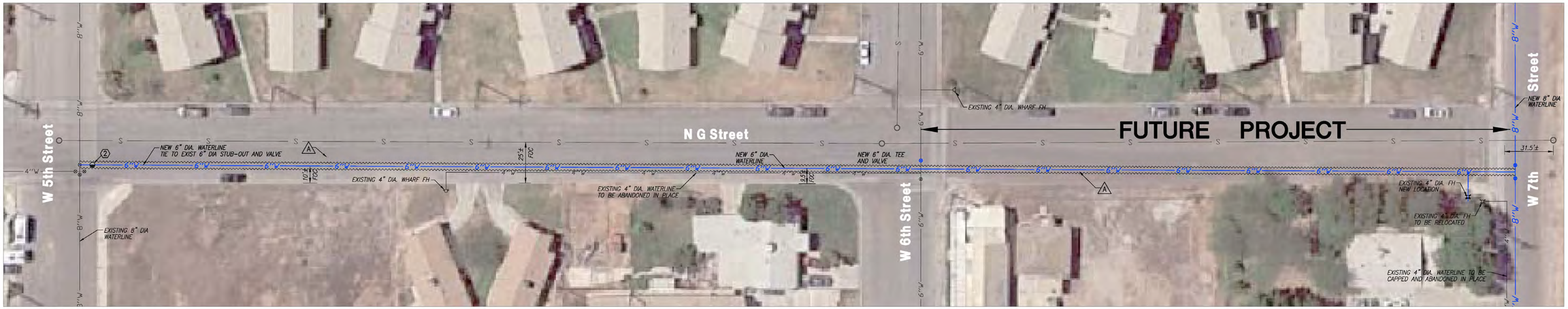
DWR-SCDRP- Water Distribution Piping Replacement

TITLE SHEET

SHEET: 1 OF: 7

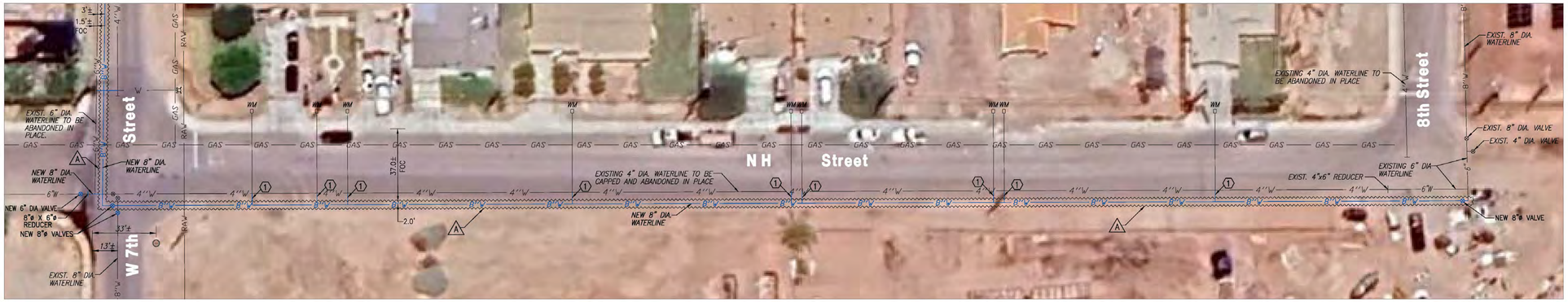
IN THE CITY OF WESTMORLAND, CA | DATE: 12/12/2024 | BY: R.W.

CLIENT: CITY OF WESTMORLAND | JOB NO.: 23-105



SCALE: 1" = 30

SCALE: 1" = 30



LEGEND:

SAWCUT LINE (EXIST. PAVEMENT)	PROPOSED 6" DIA. WATERLINE
EXCAVATION LINE (DIRT)	PROPOSED. 8" DIA. WATERLINE
EXIST. SEWER LINE	PROPOSED FIRE HYDRANT
EXIST. 4" DIA. WATERLINE	PROPOSED BLOWOFF
EXIST. 6" DIA. WATERLINE	EXIST. FIRE HYDRANT
EXIST. 8" DIA. WATERLINE	EXIST. FIRE DEPT. CONNECTION
EXIST. IID RAW WATERLINE	FACE OF CURB
	EXISTING WATER SERVICE

DEMOLITION KEYNOTES:

(A) SAWCUT EXISTING PAVEMENT REMOVE, AND DISPOSE OF EXIST. AC LOCATION: AS INDICATED ON PLANS

(B) DIRT EXCAVATION LINE LOCATION: AS INDICATED ON PLANS

WATER NOTE:

WATER SERVICES: THE CITY OF WESTMORLAND AND CONTRACTOR TO COORDINATE WATER SERVICES LOCATION AND/OR REPLACEMENT OF EXISTING WATER SERVICES.

WATER KEYNOTES:

INSTALL 8" DIA. PVC C-900 DR. 18 WATER LINE ..... (2/6)

INSTALL 6" DIA. PVC C-900 DR. 18 WATER LINE ..... (2/6)

FIRE HYDRANT PER DETAIL ..... (3/6)

INSTALL 8"ø WATER VALVE

INSTALL 6"ø WATER VALVE

ADJUST TO GRADE EXIST. WATER VALVE, AS NECESSARY

(1) RECONNECT WATER SERVICE PER DETAIL ..... (4/6)

(2) INSTALL STUB-OU BLOWOFF PER DETAIL ..... (1/7)

CALL BEFORE YOU DIG
UNDERGROUND SERVICE ALERT
CALL: TOLL FREE
811
TWO WORKING DAYS BEFORE YOU DIG

APPROVED BY PUBLIC WORKS DIRECTOR

CITY OF WESTMORLAND

BY: _____ DATE: _____

RAMIRO BARAJAS

ENGINEER OF RECORD

PLANS PREPARED UNDER THE SUPERVISION OF

BY: ROBERTO C. MARTINEZ DATE: _____

R.C.E. NO.: 74475

REGISTERED PROFESSIONAL ENGINEER ROBERTO C. MARTINEZ No. C74475 CIVIL STATE OF CALIFORNIA

NO.	REVISION	DATE	BY

NOTE: THE ENGINEER'S SEAL AFFIXED BESIDE INDICATES THAT THE METHOD OF ANALYSIS PRESENTED IS CONSISTENT WITH ACCEPTED ENGINEERING PRACTICES AND CODE ACCEPTED DESIGN VALUES AND THAT THIS ENGINEER IS ONLY RESPONSIBLE FOR THE DESIGN OF CIVIL ENGINEERING WORK SHOWN ON THIS PLAN.

BJ ENGINEERING & SURVEYING, INC.
Phone (760) 353-3552 341 WEST CROWN CT, STE 100
Fax (760) 353-3751 IMPERIAL, CA 92251

DWR-SCDRP- Water Distribution Piping Replacement

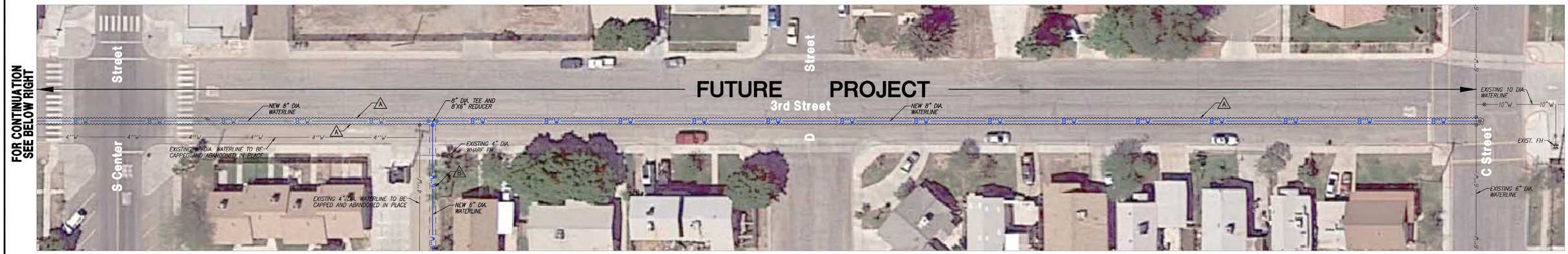
N 'G' STREET BETWEEN W 5th STREET AND W 7th STREET, N 'H' STREET BETWEEN W 7th STREET AND W 8th STREET

SHEET 2 OF: 7

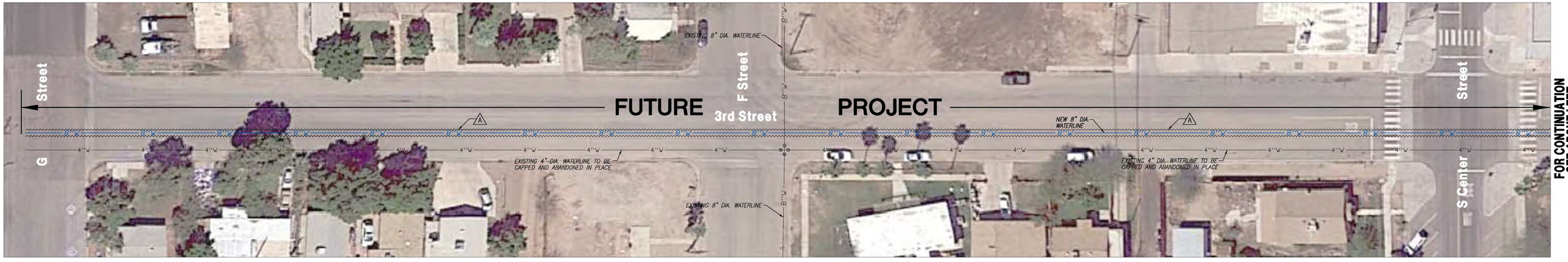
IN THE CITY OF WESTMORLAND, CA | DATE: 12/12/2024 | BY: R.W.

CLIENT: CITY OF WESTMORLAND | JOB NO.: 23-105

SCALE: 1" = 30



SCALE: 1" = 30



LEGEND:

SAWCUT LINE (EXIST. PAVEMENT)	PROPOSED 6" DIA. WATERLINE
EXCAVATION LINE (DIRT)	PROPOSED. 8" DIA. WATERLINE
EXIST. SEWER LINE	PROPOSED FIRE HYDRANT
EXIST. 4" DIA. WATERLINE	PROPOSED BLOWOFF
EXIST. 6" DIA. WATERLINE	EXIST. FIRE HYDRANT
EXIST. 8" DIA. WATERLINE	EXIST. FIRE DEPT. CONNECTION
EXIST. IID RAW WATERLINE	FACE OF CURB
	EXISTING WATER SERVICE

DEMOLITION KEYNOTES:

(A) SAWCUT EXISTING PAVEMENT REMOVE, AND DISPOSE OF EXIST. AC
LOCATION: AS INDICATED ON PLANS

(B) DIRT EXCAVATION LINE
LOCATION: AS INDICATED ON PLANS

WATER NOTE:

WATER SERVICES: THE CITY OF WESTMORLAND AND CONTRACTOR TO COORDINATE WATER SERVICES LOCATION AND/OR REPLACEMENT OF EXISTING WATER SERVICES.

WATER KEYNOTES:

INSTALL 8" DIA. PVC C-900 DR. 18 WATER LINE ..... (2/6)

INSTALL 6" DIA. PVC C-900 DR. 18 WATER LINE ..... (2/6)

FIRE HYDRANT PER DETAIL ..... (3/6)

INSTALL 8"ø WATER VALVE

INSTALL 6"ø WATER VALVE

ADJUST TO GRADE EXIST. WATER VALVE, AS NECESSARY

(1) RECONNECT WATER SERVICE PER DETAIL ..... (4/6)

(2) INSTALL STUB-OU BLOWOFF PER DETAIL ..... (1/7)

CALL BEFORE YOU DIG
UNDERGROUND SERVICE ALERT
CALL: TOLL FREE
811
TWO WORKING DAYS BEFORE YOU DIG

APPROVED BY PUBLIC WORKS DIRECTOR

CITY OF WESTMORLAND

BY: _____ DATE: _____

RAMIRO BARAJAS

ENGINEER OF RECORD

PLANS PREPARED UNDER THE SUPERVISION OF

BY: ROBERTO C. MARTINEZ DATE: _____

R.C.E. NO.: 74475

REGISTERED PROFESSIONAL ENGINEER — ROBERTO C. MARTINEZ — No. C74475 — CIVIL — STATE OF CALIFORNIA

NO.	REVISION	DATE	BY

NOTE: THE ENGINEER'S SEAL AFFIXED BESIDE INDICATES THAT THE METHOD OF ANALYSIS PRESENTED IS CONSISTENT WITH ACCEPTED ENGINEERING PRACTICES AND CODE ACCEPTED DESIGN VALUES AND THAT THIS ENGINEER IS ONLY RESPONSIBLE FOR THE DESIGN OF CIVIL ENGINEERING WORK SHOWN ON THIS PLAN.

BJ
ENGINEERING & SURVEYING, INC.
Phone (760) 353-3552 341 WEST CROWN CT, STE 100
Fax (760) 353-3751 IMPERIAL, CA 92251

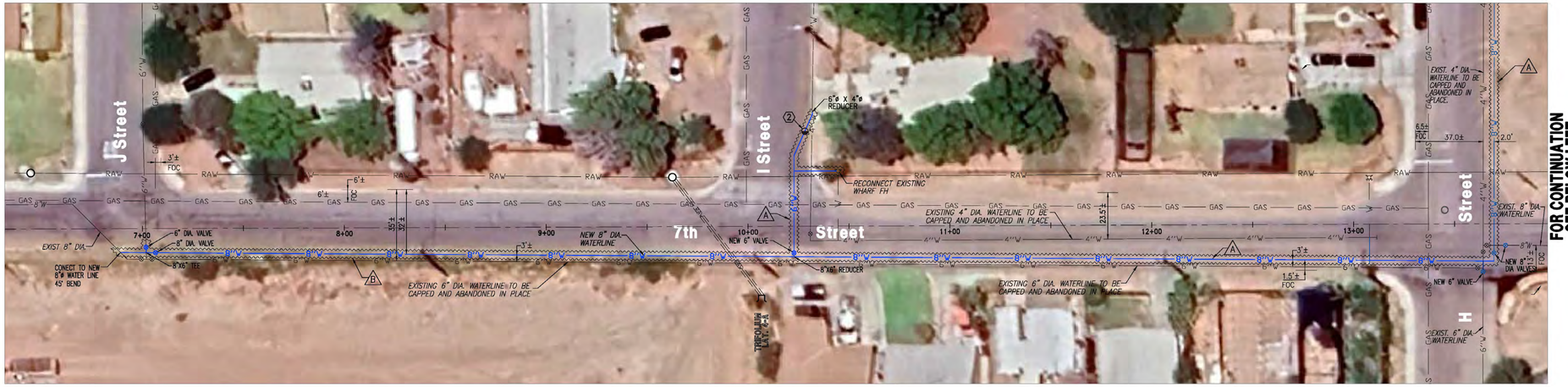
DWR-SCDRP- Water Distribution Piping Replacement

3RD STREET BETWEEN C STREET AND G STREET
3RD STREET BETWEEN G STREET AND S CENTER STREET

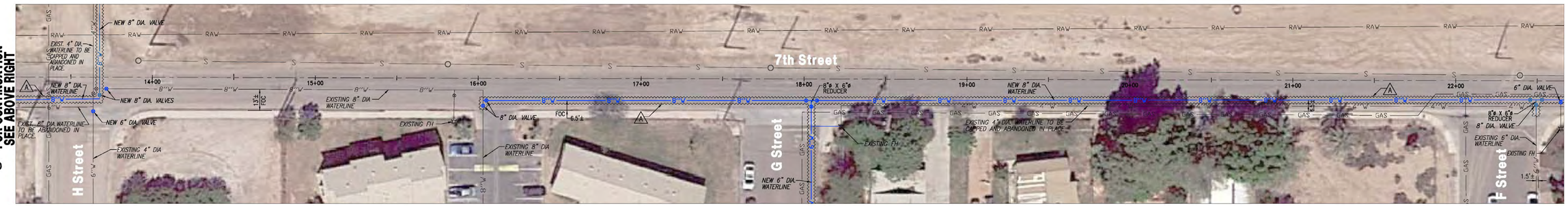
IN THE CITY OF WESTMORLAND, CA | DATE: 12/12/2024 | BY: R.W.

CLIENT: CITY OF WESTMORLAND | JOB NO.: 23-105

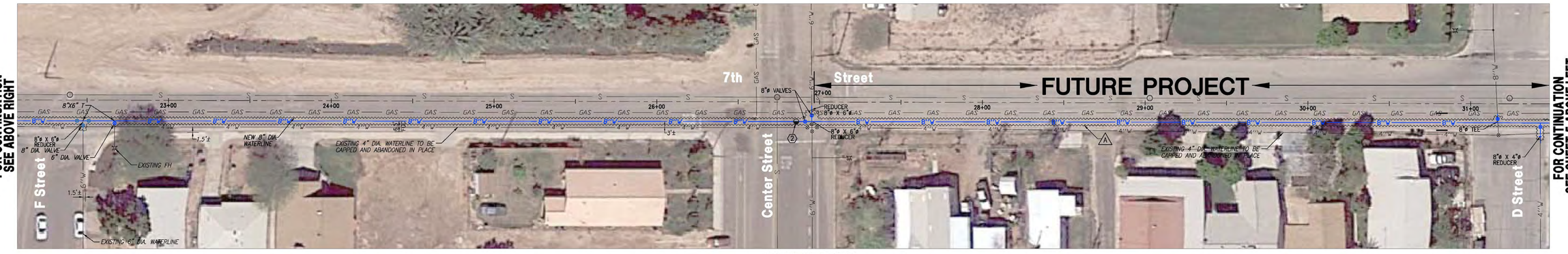
SHEET 3 OF: 7



SCALE: 1" = 30



SCALE: 1" = 30



SCALE: 1" = 30

LEGEND:

SAWCUT LINE (EXIST. PAVEMENT)	PROPOSED 6" DIA. WATERLINE
EXCAVATION LINE (DIRT)	PROPOSED. 8" DIA. WATERLINE
EXIST. SEWER LINE	PROPOSED FIRE HYDRANT
EXIST. 4" DIA. WATERLINE	PROPOSED BLOWOFF
EXIST. 6" DIA. WATERLINE	EXIST. FIRE HYDRANT
EXIST. 8" DIA. WATERLINE	EXIST. FIRE DEPT. CONNECTION
EXIST. IID RAW WATERLINE	FACE OF CURB
	EXISTING WATER SERVICE

DEMOLITION KEYNOTES:

(A) SAWCUT EXISTING PAVEMENT REMOVE, AND DISPOSE OF EXIST. AC
LOCATION: AS INDICATED ON PLANS

(B) DIRT EXCAVATION LINE
LOCATION: AS INDICATED ON PLANS

WATER NOTE:

WATER SERVICES: THE CITY OF WESTMORLAND AND CONTRACTOR TO COORDINATE WATER SERVICES LOCATION AND/OR REPLACEMENT OF EXISTING WATER SERVICES.

WATER KEYNOTES:

INSTALL 8" DIA. PVC C-900 DR. 18 WATER LINE — 2/6

INSTALL 6" DIA. PVC C-900 DR. 18 WATER LINE — 2/6

FIRE HYDRANT PER DETAIL — 3/4

INSTALL 8"ø WATER VALVE

INSTALL 6"ø WATER VALVE

ADJUST TO GRADE EXIST. WATER VALVE, AS NECESSARY

(1) RECONNECT WATER SERVICE PER DETAIL — 4/6

(2) INSTALL STUB-OU BLOWOFF PER DETAIL — 1/7

CALL BEFORE YOU DIG
UNDERGROUND SERVICE ALERT CALL: TOLL FREE 811
TWO WORKING DAYS BEFORE YOU DIG

APPROVED BY PUBLIC WORKS DIRECTOR
CITY OF WESTMORLAND
BY: _____ DATE: _____
RAMIRO BARAJAS

ENGINEER OF RECORD
PLANS PREPARED UNDER THE SUPERVISION OF
BY: ROBERTO C. MARTINEZ DATE: _____
R.C.E. NO.: 74475

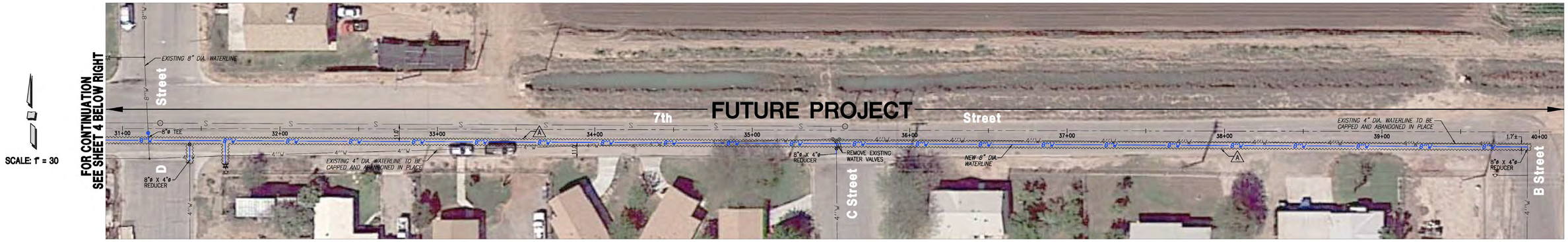
REGISTERED PROFESSIONAL ENGINEER — ROBERTO C. MARTINEZ — No. C74475 — CIVIL — STATE OF CALIFORNIA

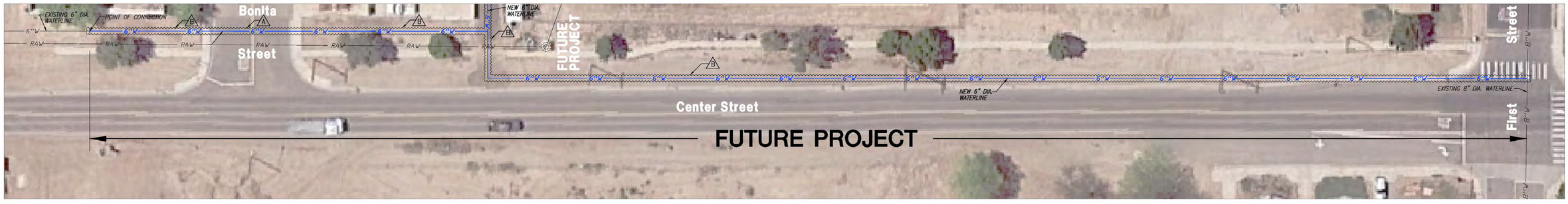
NO.	REVISION	DATE	BY

NOTE: THE ENGINEER'S SEAL AFFIXED BESIDE INDICATES THAT THE METHOD OF ANALYSIS PRESENTED IS CONSISTENT WITH ACCEPTED ENGINEERING PRACTICES AND CODE ACCEPTED DESIGN VALUES AND THAT THIS ENGINEER IS ONLY RESPONSIBLE FOR THE DESIGN OF CIVIL ENGINEERING WORK SHOWN ON THIS PLAN.

BJ ENGINEERING & SURVEYING, INC.
Phone (760) 353-3552 341 WEST CROWN CT, STE 100
Fax (760) 353-3751 IMPERIAL, CA 92251

DWR-SCDRP- Water Distribution Piping Replacement
7th STREET BETWEEN J STREET AND D STREET
SHEET 4 OF 7
IN THE CITY OF WESTMORLAND, CA | DATE: 12/12/2024 | BY: R.W.
CLIENT: CITY OF WESTMORLAND | JOB NO.: 23-105





LEGEND:

SAWCUT LINE (EXIST. PAVEMENT)	PROPOSED 6" DIA. WATERLINE
EXCAVATION LINE (DIRT)	PROPOSED. 8" DIA. WATERLINE
EXIST. SEWER LINE	PROPOSED FIRE HYDRANT
EXIST. 4" DIA. WATERLINE	PROPOSED BLOWOFF
EXIST. 6" DIA. WATERLINE	EXIST. FIRE HYDRANT
EXIST. 8" DIA. WATERLINE	EXIST. FIRE DEPT. CONNECTION
EXIST. IID RAW WATERLINE	FACE OF CURB
	EXISTING WATER SERVICE

DEMOLITION KEYNOTES:

A SAWCUT EXISTING PAVEMENT REMOVE, AND DISPOSE OF EXIST. AC
LOCATION: AS INDICATED ON PLANS

B DIRT EXCAVATION LINE
LOCATION: AS INDICATED ON PLANS

WATER NOTE:

WATER SERVICES: THE CITY OF WESTMORLAND AND CONTRACTOR TO COORDINATE WATER SERVICES LOCATION AND/OR REPLACEMENT OF EXISTING WATER SERVICES.

WATER KEYNOTES:

INSTALL 8" DIA. PVC C-900 DR. 18 WATER LINE ..... (2/6)

INSTALL 6" DIA. PVC C-900 DR. 18 WATER LINE ..... (2/6)

FIRE HYDRANT PER DETAIL ..... (3/4)

INSTALL 8"ø WATER VALVE

INSTALL 6"ø WATER VALVE

ADJUST TO GRADE EXIST. WATER VALVE, AS NECESSARY

① RECONNECT WATER SERVICE PER DETAIL ..... (4/6)

② INSTALL STUB-OU BLOWOFF PER DETAIL ..... (1/7)

CALL BEFORE YOU DIG
UNDERGROUND SERVICE ALERT
CALL: TOLL FREE
811
TWO WORKING DAYS BEFORE YOU DIG

APPROVED BY PUBLIC WORKS DIRECTOR

CITY OF WESTMORLAND

BY: _____ DATE: _____

RAMIRO BARAJAS

ENGINEER OF RECORD

PLANS PREPARED UNDER THE SUPERVISION OF

BY: ROBERTO C. MARTINEZ DATE: _____

R.C.E. NO.: 74475

REGISTERED PROFESSIONAL ENGINEER — ROBERTO C. MARTINEZ — No. C74475 — CIVIL — STATE OF CALIFORNIA

NO.	REVISION	DATE	BY

NOTE: THE ENGINEER'S SEAL AFFIXED BESIDE INDICATES THAT THE METHOD OF ANALYSIS PRESENTED IS CONSISTENT WITH ACCEPTED ENGINEERING PRACTICES AND CODE ACCEPTED DESIGN VALUES AND THAT THIS ENGINEER IS ONLY RESPONSIBLE FOR THE DESIGN OF CIVIL ENGINEERING WORK SHOWN ON THIS PLAN.

BJ ENGINEERING & SURVEYING, INC.
Phone (760) 353-3552 341 WEST CROWN CT, STE 100
Fax (760) 353-3751 IMPERIAL, CA 92251

DWR-SCDRP- Water Distribution Piping Replacement

7th STREET BETWEEN D STREET AND B STREET, ALLEY BONITA BETWEEN COOK STREET AND CENTER STREET, CENTER STREET BETWEEN BONITA STREET AND 1ST STREET

IN THE CITY OF WESTMORLAND, CA | DATE: 12/12/2024 | BY: R.W.

CLIENT: CITY OF WESTMORLAND | JOB NO.: 23-105

SHEET 5 OF: 7

PVC POTABLE WATER SPECIFICATIONS

1.–STANDARDS – STANDARD TO BE USED SHALL MEAN THOSE STANDARDS OF THE AMERICAN WATER WORKS ASSOCIATION IN EFFECT ON JANUARY 1, 1999. SAID STANDARDS ARE AVAILABLE FROM THE BOOKSTORE OF SAID ASSOCIATION, 6666 W. QUINCY AVENUE, DENVER, CO 80235 (800) 926–7337.

2.–MATERIALS OF CONSTRUCTION – ALL WATER PIPE, FITTINGS AND APPURTENANCES CALLED FOR IN THE THESE CONTRACT DOCUMENTS SHALL CONFORM TO THE FOLLOWING STANDARDS, THOSE OTHER STANDARDS THEREIN REFERENCED AND THESE SPECIAL PROVISIONS.

A.– PIPE: AWWA C–900 AND C–905. PIPE 12 INCHES AND SMALLER SHALL BE CLASS 150, DR–18; LARGER PIPE SHALL BE 235 PSI, DR–18. ALL PIPES SHALL HAVE BELL AND SPIGOT, ELASTOMERIC GASKETED JOINTS. PIPE SHALL BE SUPPLIED WITH AN AFFIDAVIT OF COMPLIANCE.

B.– FITTINGS: AWWA C–153 AND C–104. FITTINGS SHALL BE CEMENT–MORTAR LINED. UNLESS OTHERWISE SHOWN OR INDICATED BY THE CONTRACT DRAWINGS, BENDS SHALL BE FURNISHED WITH MECHANICAL JOINT ENDS; TEES AND CROSSES SHALL BE FURNISHED WITH FLANGED JOINT ENDS. FLANGE TO MECHANICAL JOINT ADAPTERS SHALL BE FURNISHED TO CONNECT PIPE TO TEES AND CROSSES WHERE VALVES DO NOT OCCUR. GLANDS SHALL BE OF THE SAME MANUFACTURER AS FITTINGS.

C.– GATE VALVES: AWWA C–509. VALVES 12 INCHES AND SMALLER SHALL BE RESILIENT–WEDGE GATE, FUSION–BONDED EPOXY COATED INSIDE AND OUT; AND, UNLESS OTHERWISE SHOWN OR INDICATED BY THE CONTRACT DRAWINGS, SHALL BE FURNISHED WITH A MECHANICAL JOINT ONE END AND A FLANGED JOINT THE OTHER. VALVES, WHEN CLOSED, SHALL PROVIDE A BUBBLE–TIGHT SEAL AGAINST LEAKAGE AND SHALL BE OF THE TYPE AND DESIGN THAT ALLOWS REPLACEMENT OF ALL INTERNAL PARTS WITHOUT REMOVING THE VALVE BODY FROM THE PIPELINE. ALL INTERNAL PARTS SHALL BE MATERIALS SUITABLE FOR EXPOSURE TO WATER CONTAINING CHLORINE AS A DISINFECTANT AT VARIOUS CONCENTRATIONS. VALVES SHALL BE SUPPLIED WITH AN AFFIDAVIT OF COMPLIANCE.

E.– DOMESTIC MANUFACTURERS: ALL PIPEFITTINGS AND VALVES SHALL BE THE PRODUCT OF A DOMESTIC (USA) MANUFACTURER.

F.– FIRE HYDRANTS: AWWA C–503. FIRE HYDRANTS SHALL BE OF THE WET–BARREL TYPE, ALL EQUAL TO THAT CALLED OUT IN THE CONTRACT DRAWINGS. THE BURY–ELL, RISERS AND DOUBLE GROOVED BREAK–OFF SPOOLS SHALL BE OF EPOXY COATED INSIDE, DUCTILE IRON. ALL BOLTS USED IN THE FIRE HYDRANT ASSEMBLY SHALL BE OF APPROVED STAINLESS STEEL.
THE BURY–ELL SHALL BE SUPPLIED WITH A MECHANICAL JOINT INLET AND FOR CONNECTION OF THE PIPE AND INSTALLATION OF JOINT RESTRAINT DEVICE. ALL HYDRANTS SHALL BE FURNISHED WITH OUTLET CAPS WITH CHAIN AND AN AFFIDAVIT OF COMPLIANCE.

G.– BOLTS: ALL BOLTS USED FOR INSTALLATION OF UNDERGROUND FITTINGS AND VALVES SHALL BE EITHER TEXLAN COATED OR OF APPROVED STAINLESS STEEL.

H.– AIR VALVES: AWWA C–512. ALL AIR–RELEASE VALVES, AIR–VACUUM VALVES AND COMBINATION AIR VALVES SHALL BE OF CAST–IRON BODY WITH INTERNAL PARTS OF STAINLESS STEEL, BUNA–M, DERLIN OR OTHER SIMILAR CORROSION RESISTANT MATERIALS, SUITABLE FOR EXPOSURE TO WATER CONTAINING CHLORINE AS A DISINFECTANT IN VARIOUS CONCENTRATIONS. AIR–VALVES SHALL BE EQUAL TO THAT CALLED OUT IN THE CONTRACT DRAWINGS.

I.– JOINT RESTRAINT DEVICES: ALL MECHANICAL JOINTS INCORPORATED INTO THE CONTRACT PROJECT SHALL BE FITTED WITH JOINT RESTRAINT DEVICES EQUAL TO THOSE MANUFACTURED BY EBA–IRON OF EASTLAND, TEXAS AND SOLD AS THE 2000 PV SERIES, INSTALLED IN FULL CONFORMANCE TO THE MANUFACTURER'S WRITTEN INSTRUCTIONS. THE CONTRACTOR SHALL ALSO FURNISH AND INSTALL SERIES 1600 AND 2800 PIPE JOINT HARNESSES ON A SUFFICIENT NUMBER OF JOINTS AWAY FROM THE JOINT RESTRAINT DEVICE TO INSURE AGAINST SEPARATION OF THE PIPE. A SOIL FRICTION OF 150 PSF MAY BE USED FOR CALCULATING THE NUMBER OF PIPE JOINTS TO WHICH A HARNESS MUST BE APPLIED. FOR 12–INCH PIPE, ALL JOINTS WITHIN 45 FT. MUST BE HARNESSED; FOR 18–INCH PIPE, ALL JOINTS WITHIN 65 FT. MUST BE HARNESSED.

J.– EPOXY COATINGS: AWWA C–550. EPOXY COATING CALLED FOR IN THESE SPECIAL PROVISIONS SHALL BE FUSION–BONDED AT THE FACTORY.

K.– PIPE BEDDING AND BACKFILL: GRANULAR MATERIAL FOR PIPE BEDDING AND PIPE ZONE BACKFILL TO NO LESS THAN 12 INCHES ABOVE TOP OF PIPE, SHALL CONSIST OF SAND FREE FROM CLAY OR ORGANIC MATERIAL, 90 TO 100 PERCENT PASSING THE NO. 4 SIEVE BUT NO MORE THAN 5 PERCENT PASSING THE NO. 200 SIEVE, HAVING A SAND EQUIVALENT OF NO LESS THAN 35. THE MATERIAL SHALL BE SUITABLE FOR THE COMPACTION METHODS USED TO OBTAIN NO LESS THAN 90% OF MAXIMUM RELATIVE DENSITY.

L.– CONCRETE: CONCRETE REQUIRED FOR THRUST BLOCKS SHALL BE TRANSIT MIXED, PORTLAND CEMENT CONCRETE, HAVING A SLUMP AT TIME PLACEMENT NOT EXCEEDING 6 INCHES AND CONTAINING SUFFICIENT CEMENT TO PROVIDE A COMPRESSIVE STRENGTH OF NO LESS THAN 2000 PSI IN 28 DAYS.

3.–PIPELINE CONSTRUCTION – ALL WATER PIPE, FITTINGS AND APPURTENANCES CALLED FOR SHALL BE INSTALLED, DISINFECTED AND TESTED IN ACCORDANCE WITH THE FOLLOWING REFERENCED STANDARDS, THOSE OTHER STANDARDS THEREIN REFERENCED, THE WRITTEN RECOMMENDATIONS OF THE MANUFACTURER AND THESE SPECIAL PROVISIONS.

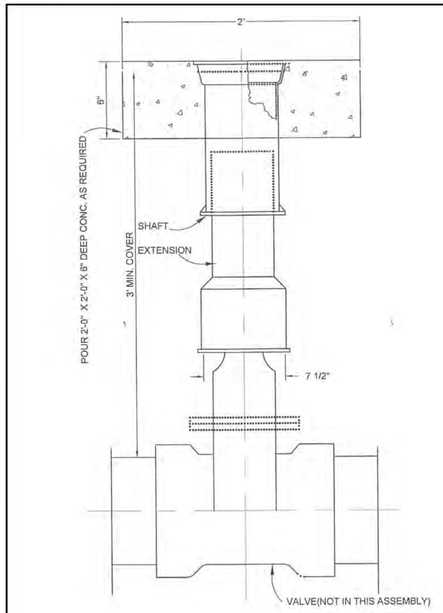
A.– INSTALLATION: AWWA C–600 AND C–605 EXCESS EARTH FROM EXCAVATIONS SHALL BE REMOVED FROM THE ROADWAY SECTION AND DISPOSED OF. TAPE SHALL BE PLACED IMMEDIATELY ABOVE THE PIPE ZONE BACKFILL. THE TEST PRESSURE FOR PIPE STRENGTH AND LEAKAGE SHALL BE NO LESS THAN 150 PSI.

B.– POLYETHYLENE WRAPPING: AWWA C–105. ALL FITTINGS AND APPURTENANCES INCLUDING BUT NOT LIMITED TO, VALVES, TEES, CROSSES, BENDS, TAPPED COUPLINGS, PIPE JOINT HARNESSES, JOINT RESTRAINT DEVICES, AND JOINT ADAPTERS, SHALL BE ENCASED WITHIN A WRAPPING OF LOW–DENSITY, MINIMUM 10 MIL THICK, POLYETHYLENE SHEETING LOOSELY PLACED AND TAPED TO THE BODY OF THE CONNECTED PIPE(S).

C.– DISINFECTION: AWWA C–651. THE CONTRACTOR MAY EMPLOY ANY ONE OF THE DISINFECTION METHODS PROVIDED FOR, SUBJECT TO THE CITY ENGINEER'S REVIEW AND APPROVAL OF THE CONTRACTOR'S PROCEDURES, EQUIPMENT AND PROPOSED MEANS OF DISPOSING OF THE CHLORINATED WATER. THE DEVELOPER OR CONTRACTOR SHALL ARRANGE AND PAY FOR BACTERIOLOGICAL TESTING OF THE DISINFECTION EFFORTS. DISINFECTING SHALL CONTINUE UNTIL TESTING RESULTS ARE FOUND ACCEPTABLE TO THE CITY ENGINEER.

D.– COMPACTION TESTING: TESTING OF TRENCH BACKFILL FOR DENSITY SHALL BE NO LESS OFTEN THAN ONCE IN THE PIPE ZONE AND ONCE FOR EACH 24 INCHES OF DEPTH AT SPACING NOT TO EXCEED 150 FT. FAILING TEST SHALL BE RETESTED AFTER RECOMPACTION. RETESTING SHALL INCLUDE TWO ADDITIONAL TESTS, ONE EACH LOCATED 50 FT. BOTH WAYS FROM THE FAILING TEST LOCATION UNTIL ALL TESTS SHOW CONFORMING DENSITIES.

E.– VALVE BOXES: ALL VALVES SHALL BE INSTALLED WITH VALVE BOXES AS SHOWN OR CALLED FOR BY THE CONTRACT DRAWINGS.

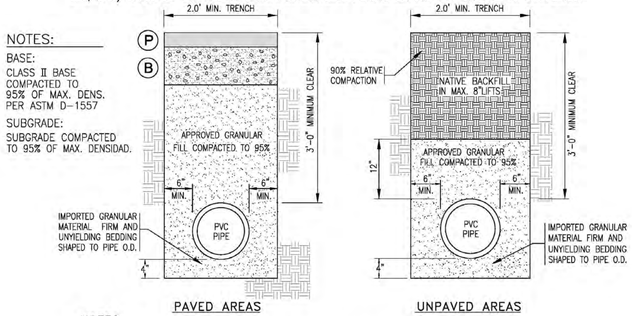


CAST IRON VALVE BOX

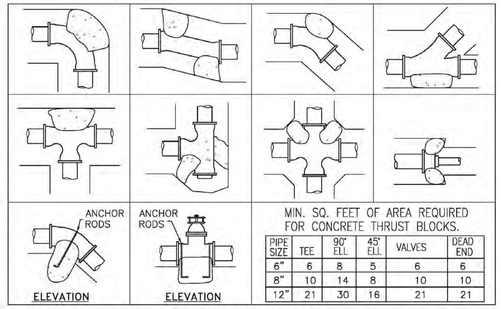
WATER VALVE DETAIL N.T.S.

WATER NOTES:

1. ALL WATER LINES INSTALLED SHALL BE HYDROSTATICALLY TESTED FOR LEAKAGE BASED ON THE "WATER PRESSURE TEST" SECTION OF THE MOST CURRENT VERSION OF THE "GREENBOOK: STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION".
2. ALL WATER LINES INSTALLED SHALL BE HIGH–CHLORINE AND BAC–T TESTED, TEST RESULTS TO BE REVIEWED FOR APPROVAL BEFORE THE WATERLINE CAN BE ACTIVATED.
3. DETECTABLE TAPE SHALL BE INSTALLED 1'–0" ABOVE THE WATERLINE.
4. ALL COMPONENTS INSTALLED ALONG THE WATERLINE (I.E. FITTINGS, GATE VALVES, COUPLINGS, BURY ELS, ETC.) SHALL BE WRAPPED IN 8 MIL POLYETHYLENE PLASTIC BEFORE ANY BACKFILL IS COMPLETED.



NOTES:
1. ALL ANCHOR RODS SHALL BE GALVANIZED STEEL, 1/2" DIAMETER MINIMUM, WRAPPED AROUND PIPE
2. ALL CONCRETE THRUST BLOCKS TO BEAR ON UNDISTURBED SOIL IN EACH DIRECTION OF THRUST

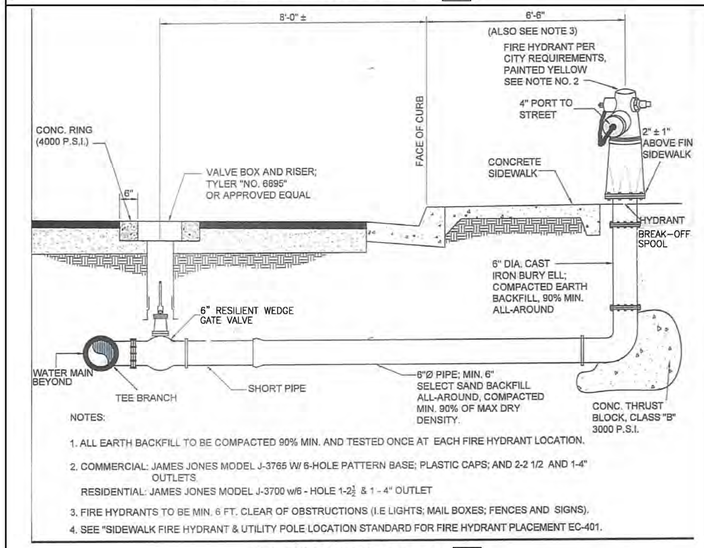


MIN. SQ. FEET OF AREA REQUIRED FOR CONCRETE THRUST BLOCKS.

PIPE SIZE	TEE	90° ELL	45° ELL	VALVES	DEAD END
6"	6	8	5	6	6
8"	10	14	8	10	10
12"	21	30	16	21	21

THRUST BLOCKS DETAILS

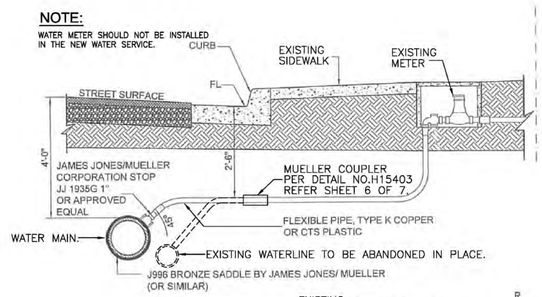
WATER TRENCH DETAIL N.T.S. 2

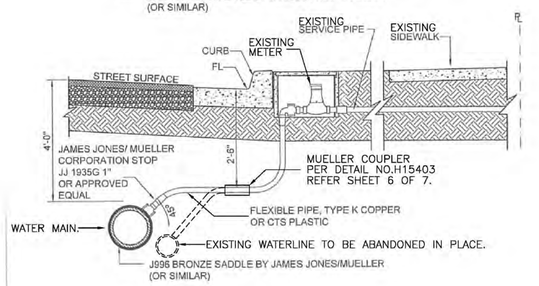


NOTES:
1. ALL EARTH BACKFILL TO BE COMPACTED 90% MIN. AND TESTED ONCE AT EACH FIRE HYDRANT LOCATION.
2. COMMERCIAL: JAMES JONES MODEL J–3765 W 6–HOLE PATTERN BASE; PLASTIC CAPS; AND 2–2 1/2 AND 1–4" OUTLETS.
   RESIDENTIAL: JAMES JONES MODEL J–3700 w/6 – HOLE 1–2½ & 1 – 4" OUTLET
3. FIRE HYDRANTS TO BE MIN. 6 FT. CLEAR OF OBSTRUCTIONS (I.E LIGHTS; MAIL BOXES; FENCES AND SIGNS).
4. SEE "SIDEWALK FIRE HYDRANT & UTILITY POLE LOCATION STANDARD FOR FIRE HYDRANT PLACEMENT EC–401.

FIRE HYDRANT DETAIL N.T.S. 3

NOTE:
WATER METER SHOULD NOT BE INSTALLED IN THE NEW WATER SERVICE.

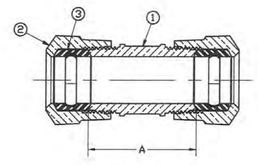




NOTE:
–ALL LOT SERVICE LATERALS TO BE INSTALLED PRIOR TO PAVING STREET.
–ALL MATERIALS TO BE REVIEWED AND APPROVED BY THE CITY PRIOR TO CONSTRUCTION.

WATER SERVICE DETAIL N.T.S. 4

No.	QTY.	DESCRIPTION	MATERIAL
1	1	SPUD	CAST BRASS ASTM B62 ALLOY C83600
2	2	CONN. NUT	CAST BRASS ASTM B62 ALLOY C83600
3	2	CTS GSKT SUB	SBR D2000 – GSKT 410ss – BAND



SIZE	A
1/2	1.625
3/4	2.062
1	2.406
1x3/4	1.835
1–1/4	2.375
1–1/4x1	2.154
1–1/2	3.312
1–1/2x1	2.840
2	3.375

FILEPATH: PROD–ENG\MUELLER\APPROVED\H15403

REV	ECR	DESCRIPTION	DATE	BY	CHKR
				DRFTR	RWD 6/25/03
				CHKR	
				ENGR	
				MGR	

PER EST NO XXXXX EST FIN WT = 0.0000 lbs

Mueller Co.

UNLESS OTHERWISE NOTED
SURFACE PREPARATION BREAK CORNERS) ---- .005
SURFACE FINISH --- 000 RMS
TOLERANCES: LINEAR ---------- ± .000 ANGULAR ---------- ± 0°00'

THIRD ANGLE PROJECTION

REF. No. | SCALE: NONE

MAT'L:

DESCR. H–15403 STRAIGHT SERVICE FITTING (110 CTS x 110 CTS)

PART NUMBER H15403

MUELLER COUPLER N.T.S.

CALL BEFORE YOU DIG
UNDERGROUND SERVICE ALERT CALL: TOLL FREE 811
TWO WORKING DAYS BEFORE YOU DIG

APPROVED BY PUBLIC WORKS DIRECTOR
CITY OF WESTMORLAND
BY: _____ DATE: _____
RAMIRO BARAJAS

ENGINEER OF RECORD
PLANS PREPARED UNDER THE SUPERVISION OF
BY: ROBERTO C. MARTINEZ DATE: _____
R.C.E. NO.: 74475

REGISTERED PROFESSIONAL ENGINEER ROBERTO C. MARTINEZ No. C74475 CIVIL STATE OF CALIFORNIA

NO.	REVISION	DATE	BY

NOTE: THE ENGINEER'S SEAL AFFIXED BESIDE INDICATES THAT THE METHOD OF ANALYSIS PRESENTED IS CONSISTENT WITH ACCEPTED ENGINEERING PRACTICES AND CODE ACCEPTED DESIGN VALUES AND THAT THIS ENGINEER IS ONLY RESPONSIBLE FOR THE DESIGN OF CIVIL ENGINEERING WORK SHOWN ON THIS PLAN.

BJ ENGINEERING & SURVEYING, INC.
Phone (760) 353-3552 341 WEST CROWN CT, STE 100
Fax (760) 353-3751 IMPERIAL, CA 92251

DWR-SCDRP- Water Distribution Piping Replacement

CONSTRUCTION DETAILS AND SPECIFICATIONS

SHEET 6 OF 7

IN THE CITY OF WESTMORLAND, CA DATE: 12/12/2024 BY: R.W.

CLIENT: CITY OF WESTMORLAND JOB NO.: 23–105

STREET TECHNICAL SPECIFICATIONS

1. SUBBASE PREPARATION

THE NATIVE MATERIAL BENEATH P.C.C. CONCRETE AND ASPHALT CONCRETE INFRASTRUCTURE INCLUDING BUT NOT LIMITED TO P.C.C. DRIVEWAY ENTRANCES, P.C.C. SIDEWALKS, P.C.C. RIBBON GUTTERS, P.C.C. VALLEY GUTTER, P.C.C. CROSS–GUTTER, P.C.C. BARRIER CURB, A.C. BARRIER CURB, P.C.C. CURB AND GUTTER, P.C.C. SIDEWALK, P.C.C. SPANDRELS, P.C.C. TRANSITION AREAS AND A.C. PAVEMENT SHALL BE EXCAVATED TO ±0.05 FEET OF DESIGN SUBBASE GRADE. THE DESIGN SUBBASE GRADE SHALL BE FIELD VERIFIED AND APPROVED BY THE CITY ENGINEER PRIOR TO THE PLACEMENT OF GRANULAR SAND FILL, CRUSHER FINES OR CLASS 2 BASE. THE CITY ENGINEER SHALL DETERMINE THE NUMBER AND LOCATION OF POINTS TO CHECK FOR THE SUBBASE GRADE ELEVATION COMPLIANCE. PRIOR TO THE CITY ENGINEER'S INSPECTION OF THE SUBBASE GRADE THE CONTRACTOR SHALL ESTABLISH BLUETOP HUBS (STAKES SET TO DESIGN SUBBASE GRADE) IF REQUIRED BY THE ENGINEER.

2. SUBGRADE PREPARATION

THE CLASS 2 BASE, SAND OR CRUSHER FINES BENEATH A.C. PAVEMENT AND CONCRETE INFRASTRUCTURE SHALL BE PLACED TO WITHIN ±0.02 FEET OF DESIGN SUBGRADE PRIOR TO THE PLACEMENT OF A.C. PAVEMENT OR P.C.C. CONCRETE. THE CITY ENGINEER SHALL FIELD VERIFY THE SUBGRADE ELEVATIONS IN THE FIELD PRIOR TO THE PLACEMENT OF CLASS 2 BASE, GRANULAR SAND MATERIAL OR CRUSHER FINES. PLACEMENT OF P.C.C. CONCRETE OR A.C. PAVEMENT SHALL NOT BE ALLOWED UNTIL THE ENGINEER HAS APPROVED THE SUBGRADE DESIGN GRADE.

3.0 SAND

CLEAN GRANULAR SAND FREE OF CLAY, SHALE AND DELETERIOUS MATERIAL SHALL BE DELIVERED TO THE SITE AND PLACED AS NOTED ON THE PLANS. SAND SHALL BE COMPACTED TO 90 PERCENT OF MAXIMUM DENSITY AT OPTIMUM WATER CONTENT PER ASTM D–1557 UNLESS OTHERWISE NOTED ON THE PLANS. THE MATERIAL SHALL CONFORM TO A SAND EQUIVALENT OF 30 OR GREATER. THE MAXIMUM AMOUNT OF MATERIAL PASSING THE NUMBER 200 SIEVE SHALL BE 7 PERCENT. THE SAND SHALL CONFORM TO THE FOLLOWING GRADATION PERCENTAGES:

SIEVE SIZE	PERCENT PASSING
3/8"	100
NO. 4	98–90
NO. 8	90–75
NO. 10	75–60
NO. 16	60–50
NO. 30	50–38
NO. 40	38–29
NO. 50	29–19
NO. 100	19–7
NO. 200	7–0

THE CONTRACTOR SHALL SUPPLY A FIVE GALLON SAMPLE OF SAND MATERIAL TO THE MATERIAL TESTING LABORATORY WITHIN FOUR (4) DAYS AFTER THE NOTICE TO PROCEED IS ISSUED. THE GRADATION, SAND EQUIVALENT AND MAXIMUM DENSITY OF THE SAND MATERIAL SHALL BE DETERMINED. THE TEST RESULTS SHALL BE FORWARDED TO THE ENGINEER. THE COST OF TESTING SHALL BE INCURRED BY THE CONTRACTOR. THE GRADATION OF THE GRANULAR SAND SHALL BE DETERMINED AND THE TEST RESULTS FORWARDED TO THE CITY ENGINEER PRIOR TO THE DELIVERY OF THE GRANULAR SAND MATERIAL TO THE CONSTRUCTION SITE. PRIOR TO THE PLACEMENT OF SAND THE NATIVE SUBBASE GRADE SHALL BE CHECKED AND APPROVED BY THE CITY ENGINEER.

CRUSHER FINES SHALL BE ALLOWED TO BE UTILIZED IN LIEU OF SAND IF APPROVED BY THE CITY ENGINEER.

4.0 CRUSHER FINES

CRUSHER FINES SHALL CONSIST OF DECOMPOSED GRANITE INDIGENOUS TO THE IMPERIAL VALLEY. CRUSHER FINES UTILIZED FOR THIS PROJECT SHALL CONFORM TO THE FOLLOWING GRADATION REQUIREMENTS:

SIEVE SIZE	PERCENT PASSING
5/8"	100
NO. 4	80 – 100
NO. 8	50 – 85
NO. 30	30 – 50
NO. 200	4 – 15

THE SAND EQUIVALENT SHALL BE 20 OR GREATER.

5.0 CLASS 2 BASE

THE CLASS 2 BASE MATERIAL SHALL CONFORM TO CALTRANS SECTION 26, LATEST EDITION, FOR 25MM MAXIMUM BASE MATERIAL. THE GRADATION REQUIREMENTS ARE AS FOLLOWS:

SIZE	PERCENT PASSING
1 IN/25.04MM	100
3/4 IN/19.00MM	87–100
#4/4.75MM	30–65
#30/600MM	5–35
#200/75.00MM	0–12

THE SAND EQUIVALENT SHALL BE 25 OR GREATER. AN ANGULAR AGGREGATE IS TO BE USED. CLASS 2 BASE MATERIAL SHALL BE COMPACTED TO 95 PERCENT OF MAXIMUM DENSITY ACCORDING TO ASTM D–1557, UNLESS OTHERWISE NOTED ON THE PLANS OR DETAILS. THE TOLERANCE FOR THE CLASS 2 BASE BETWEEN DESIGN SUBGRADE ELEVATION AND ACTUAL SUBGRADE ELEVATION AS CONSTRUCTED IN THE FIELD SHALL BE PLUS OR MINUS 0.02 FEET AS REFERENCED FROM THE DESIGN SUBGRADE. PRIOR TO THE PLACEMENT OF CLASS 2 BASE THE NATIVE SUBBASE GRADE SHALL BE CHECKED AND APPROVED BY THE CITY ENGINEER. THE NATIVE SUBBASE GRADE SHALL BE WITHIN PLUS OR MINUS 0.05 FEET OF NATIVE SUBBASE DESIGN GRADE PRIOR TO THE PLACEMENT OF CLASS 2 BASE.

THE CONTRACTOR SHALL SUPPLY A FIVE GALLON SAMPLE OF THE CLASS 2 BASE TO THE MATERIAL TESTING LABORATORY WITHIN FOUR (4) DAYS OF THE NOTICE TO PROCEED. THE MATERIAL SHALL BE DELIVERED TO THE TESTING LABORATORY TO DETERMINE THE MAXIMUM DENSITY, GRADATION, R–VALUE, SAND EQUIVALENT AND DURABILITY INDEX OF THE CLASS 2 BASE. A COPY OF THE TEST RESULTS SHALL BE FORWARDED TO THE CITY ENGINEER BY THE GEOTECHNICAL CONSULTANT FOR REVIEW. THE GRADATION OF THE CLASS 2 BASE SHALL BE DETERMINED AND THE TEST RESULTS FORWARDED TO THE CITY ENGINEER FOR APPROVAL PRIOR TO THE DELIVERY OF THE CLASS 2 BASE MATERIAL TO THE CONSTRUCTION SITE. CLASS 2 BASE UTILIZING RECYCLED MATERIALS SHALL NOT BE ALLOWED.

6.0 P.C.C. CONCRETE

P.C.C. CONCRETE, UTILIZED FOR BUT NOT LIMITED TO, CURB AND GUTTER, BARRIER CURB, SPANDRELS, CROSS–GUTTER, VALLEY GUTTER, RIBBON GUTTERS, RESIDENTIAL AND COMMERCIAL DRIVEWAYS, SIDEWALKS AND ALL OTHER CONCRETE INFRASTRUCTURE SHALL CONTAIN A MINIMUM OF 6 ½ SACKS OF CEMENT PER YARD AND ATTAIN 4,500 P.S.I. COMPRESSIVE STRENGTH AFTER 28 DAYS CURING UNLESS STATED OTHERWISE ON THE PLANS. A CONCRETE MIX DESIGN IS TO BE SUBMITTED TO THE ENGINEER WITHIN FIVE (5) DAYS AFTER THE ISSUANCE OF THE NOTICE TO PROCEED. NEW FORMWORK SHALL BE UTILIZED IN THE CONSTRUCTION OF EVERY CONCRETE FACILITY. THE FORMWORK SHALL BE TRUE TO LINE AND GRADE. THE VERTICAL FLOWLINE ELEVATION TOLERANCE SHALL BE +/– 0.02 FEET FOR DESIGN GRADE FOR SLOPES OF 1.0% OR GREATER, +/– 0.01 FOR DESIGN GRADE FOR SLOPES LESS THAN 1.0%. THE ENGINEER SHALL CHECK THE FORMWORK FOR LINE AND GRADE PRIOR TO THE PLACEMENT OF CONCRETE. CONCRETE "CURB MACHINES" SHALL NOT BE ALLOWED FOR CURB AND GUTTER AND RIBBON GUTTERS DESIGNED AT A SLOPE OF 1 PERCENT OR LESS. THE SUBCONTRACTOR SHALL NOTIFY THE ENGINEER 72 HOURS PRIOR TO THE REQUIRED INSPECTION. EXPOSED SURFACES OF CONCRETE AREAS SHALL RECEIVE A DOUBLE TROWEL FINISH. WEAKENED PLANE JOINTS SHALL BE PLACED EVERY 8 LINEAL FEET FOR RIBBON GUTTER, CROSS GUTTER AND VALLEY GUTTER CONSTRUCTION UNLESS OTHERWISE ILLUSTRATED ON THE STANDARD PLANS. EXPANSION JOINTS SHALL BE PLACED EVERY 64 FEET ALONG CURB AND GUTTER, BARRIER CURB, VALLEY GUTTER AND SIDEWALK CONSTRUCTION UNLESS OTHERWISE ILLUSTRATED ON THE STANDARD PLANS. INSTALLATION OF CURB AND GUTTER, VALLEY GUTTER AND CROSS–GUTTERS SHALL BEGIN AT THE LOWEST ELEVATION AND PROCEED UPHILL. A TOTAL OF ONE (1) SET OF CYLINDERS AND ONE (1) SLUMP TEST SHALL BE REQUIRED FOR EVERY 50 CUBIC YARDS OF CONCRETE, EXCEPT THAT A MINIMUM OF ONE (1) SET OF CYLINDERS AND SLUMP TEST SHALL BE REQUIRED EACH DAY TWENTY (20) OR MORE YARDS OF CONCRETE ARE PLACED AT A PROJECT SITE. THE MAXIMUM ALLOWABLE SLUMP SHALL BE 4 INCHES. A SET OF CYLINDERS SHALL BE COMPOSED OF THREE (3) CYLINDERS. THE FIRST CYLINDER OF A SET SHALL BE TESTED AFTER SEVEN (7) DAYS CURING. THE SECOND CYLINDER OF A SET SHALL BE TESTED AFTER 28 DAYS CURING. THE THIRD CYLINDER SHALL BE HELD IN RESERVE AND TESTED IF DIRECTED BY THE CITY ENGINEER. THE TEST RESULTS WILL BE FORWARDED TO THE CITY ENGINEER FOR REVIEW. THE CITY ENGINEER SHALL RECEIVE A CONCRETE VENDOR SLIP FOR EACH TRUCK LOAD OF CONCRETE DELIVERED TO THE PROJECT SITE.

PRIOR TO THE PLACEMENT OF CONCRETE, THE SUBGRADE DEPTH SHALL BE INSPECTED TO INSURE THAT THE FULL DEPTH OF CONCRETE, AS NOTED ON THE PLANS, IS ATTAINED. EXCESS FILL MATERIAL SHALL BE REMOVED AS REQUIRED BY THE CITY ENGINEER. THE FORM BOARDS SHALL BE CHECKED FOR THE PROPER ELEVATION. COMPACTION TESTS ON THE SUBGRADE SHALL HAVE ACHIEVED THE DENSITY REQUIREMENTS SPECIFIED. THE ENGINEER SHALL THEN ALLOW THE PLACEMENT OF CONCRETE.

THE CONCRETE SHALL BE SCREEDED AND FLOATED. ALL EDGES SHALL BE STRUCK WITH A CONCRETE EDGER. WEAKENED PLANE JOINTS SHALL BE ESTABLISHED AT RIGHT ANGLES TO THE SIDEWALK EDGE AS ILLUSTRATED ON THE STANDARD DRAWINGS. THE WEAKENED PLANE JOINTS SHALL BE 3/8 INCH IN WIDTH AND 3/4 INCH IN DEPTH. EXPANSION JOINTS CONSISTING OF 1/2 INCH THICK CELOTEX MATERIAL SHALL BE PLACED ACROSS THE FULL SECTION OF THE P.C.C. SIDEWALK EVERY 64 LINEAL FEET, OR AS REQUIRED BY THE STANDARD PLANS. AFTER THE CONCRETE SURFACE HAS BEEN FLOATED AND CURED ADEQUATELY, IT SHALL RECEIVE A DOUBLE TROWEL FINISH. THE TROWELING SHALL BE ACCOMPLISHED BY HAND WITH A STEEL TROWEL. THE SURFACE OF THE CONCRETE SHALL RECEIVE A LIGHT BROOM FINISH AFTER THE SURFACE IS DOUBLE TROWELED. THE SURFACE OF THE CONCRETE SHALL BE SMOOTH AND TRUE TO GRADE. TOLERANCE FOR THE CONCRETE SURFACE SHALL BE 1/8 INCH IN 10 LINEAL FEET WITH MAXIMUM HIGH AND LOW VARIANCE NOT OCCURRING IN LESS THAN 20 FEET. THE CONTRACTOR SHALL APPLY A CURING COMPOUND TO THE CONCRETE.
THE CONCRETE SURFACES SHALL BE CLEANED OF ALL DIRT AND RESIDUE PRIOR TO THE PLACEMENT OF THE CONCRETE SEALER. CONCRETE SHALL NOT BE PLACED AFTER 10:00 A.M. ON FRIDAYS.

7.0 BITUMINOUS PAVEMENT

THE BITUMINOUS ASPHALT CONCRETE SHALL CONSIST OF MINERAL AGGREGATE, UNIFORMLY MIXED WITH BITUMINOUS MATERIAL AT A CENTRAL PLANT. AGGREGATE BASE SHALL BE 19MM/(3/4 INCH) MAXIMUM, MEDIUM. THE ASPHALT CONCRETE SHALL CONFORM WITH THE FOLLOWING PERCENTAGES:

SIEVE SIZE	LIMITS OF PROPOSED PERCENT PASSING	GRADATION – X
1 IN/25.00MM	100	----
3/4 IN/19.00MM	90 – 100	----
3/8 IN/9.50MM	60 – 85	----
#4/4.75MM X +/– 8	49 – 54	
#8/2.36MM X +/– 8	36 – 40	
#30/0.600MM X +/– 8	18 – 21	
#200/0.075MM	0 – 11	----

IN THE TABLE ABOVE, "X" IS THE GRADATION WHICH THE CONTRACTOR PROPOSES TO FURNISH FOR SPECIFIC SIEVE.

ASPHALT BINDER SHALL BE IN ACCORDANCE WITH THE APPROVED A.C. MIX DESIGN.

THE ASPHALT CONCRETE SHALL BE TYPE "A" OR "B" AS SET FORTH IN THE STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS, SECTION 39, LATEST EDITION, UNLESS OTHERWISE SPECIFIED WITHIN THESE SPECIFICATIONS. THE ASPHALT CONCRETE SHALL BE APPLIED WITH A VIBRATORY MACHINE. THE GRADE OF ALL ASPHALT BITUMEN SHALL BE AR (AGED RESIDUE) 4,000 OR AR 8000 AS APPROVED BY THE CITY ENGINEER. THE MINIMUM BITUMEN SHALL BE IN ACCORDANCE WITH THE APPROVED MIX DESIGN. THE ASPHALT CONCRETE SHALL BE COMPACTED TO 95 PERCENT OF MAXIMUM DENSITY PER ASTM D–1559. THE TEMPERATURE OF THE ASPHALT WHEN DELIVERED TO THE APPLICATION SITE SHALL RANGE BETWEEN 285 DEGREES F AND 359 DEGREES F. THE FINISHED SURFACE SHALL BE WITHIN +/– 0.02 FEET OF FINISH DESIGN GRADE WITH MAXIMUM HIGH AND LOW VARIANCE OCCURRING IN A MAXIMUM OF 10 HORIZONTAL FEET.

ROLLERS OF THE VIBRATORY, STEEL WHEEL, OR PNEUMATIC–TIRED TYPE MAY BE USED. THEY SHALL BE IN GOOD CONDITION, CAPABLE OF OPERATING AT SLOW SPEEDS TO AVOID DISPLACEMENT OF THE BITUMINOUS MIXTURE. THE NUMBER, TYPE, AND WEIGHT OF ROLLERS SHALL BE SUFFICIENT TO COMPACT THE MIXTURE TO THE REQUIRED DENSITY WHILE IT IS STILL IN A WORKABLE CONDITION. THE USE OF EQUIPMENT WHICH CAUSES EXCESSIVE CRUSHING OF THE AGGREGATE WILL NOT BE PERMITTED.

AFTER SPREADING, THE MIXTURE SHALL BE THOROUGHLY AND UNIFORMLY COMPACTED BY ROLLING. THE SURFACE SHALL BE ROLLED WHEN THE MIXTURE HAS ATTAINED SUFFICIENT STABILITY SO THAT THE ROLLING DOES NOT CAUSE UNDUE DISPLACEMENT, CRACKING OR SHOVING. THE SEQUENCE OF ROLLING OPERATIONS AND THE TYPE OF ROLLERS USED SHALL BE AT THE DISCRETION OF THE CONTRACTOR.

THE SPEED OF THE ROLLER SHALL, AT ALL TIMES, BE SUFFICIENTLY SLOW TO AVOID DISPLACEMENT OF THE HOT MIXTURE. ANY DISPLACEMENT OCCURRING AS A RESULT OF REVERSING THE DIRECTION OF THE ROLLER OR FROM ANY OTHER CAUSE, SHALL BE CORRECTED AT ONCE.

ROLLING SHALL CONTINUE UNTIL THE ROLLER MARKS ARE ELIMINATED, THE SURFACE IS OF UNIFORM TEXTURE AND TRUE TO GRADE AND CROSS SECTION AND THE REQUIRED FIELD DENSITY IS OBTAINED.

TO PREVENT ADHESION OF THE MIXTURE TO THE ROLLER, THE WHEELS SHALL BE KEPT PROPERLY MOISTENED, BUT EXCESSIVE WATER WILL NOT BE PERMITTED.

IN AREAS NOT ACCESSIBLE TO THE ROLLER, THE MIXTURE SHALL BE THOROUGHLY COMPACTED WITH HOT HAND TAMPERS.

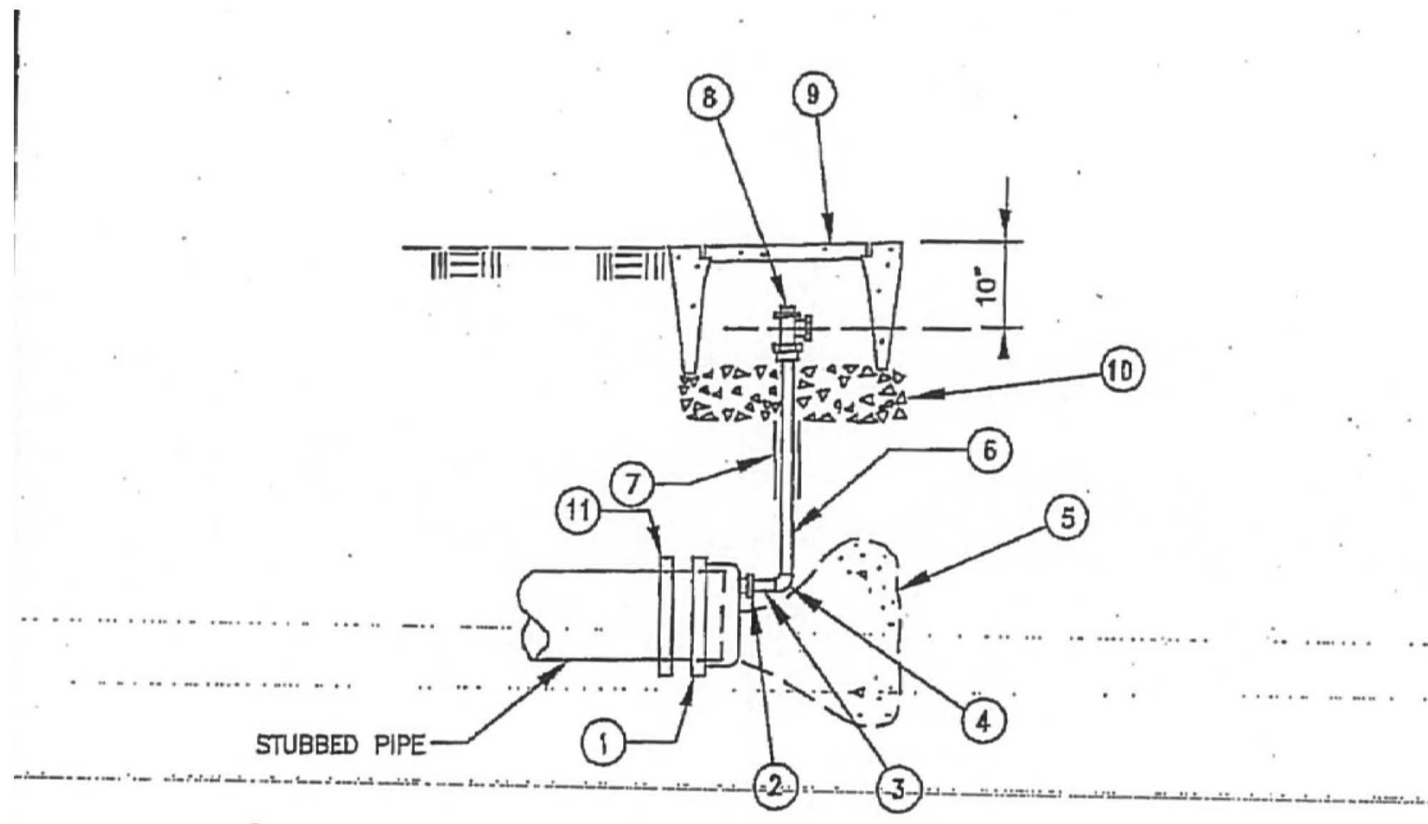
ANY MIXTURES THAT BECOME LOOSE AND BROKEN, MIXED WITH DIRT, OR IN ANYWAY DEFECTIVE, SHALL BE REMOVED AND REPLACED WITH FRESH HOT MIXTURE AND IMMEDIATELY COMPACTED TO CONFORM TO THE SURROUNDING AREA. THIS WORK SHALL BE DONE AT THE CONTRACTOR'S EXPENSE.

THE CONTRACTOR SHALL PAY FOR ALL COSTS ASSOCIATED WITH THE PREPARATION OF THE MARSHALL MIX DESIGN, COMPACTION TESTS AND EXTRACTION/GRADATION TESTS REQUIRED FOR THIS PROJECT. THE CONTRACTOR SHALL INCUR ALL COSTS RELATIVE TO THE PREPARATION OF THE MARSHALL MIX DESIGN AND GEOTECHNICAL TESTING RELATIVE TO THIS PROJECT.

A SAMPLE OF THE BITUMINOUS MIX WILL BE OBTAINED EACH MORNING PAVEMENT OPERATIONS ARE OCCURRING. THE SAMPLE SHALL BE OBTAINED BY THE GEOTECHNICAL TESTING CONSULTANT. THE MAXIMUM DENSITY OF THE SAMPLE SHALL BE DETERMINED. THE RESULTS OF THE TEST WILL BE USED TO BASE THE FIELD DENSITY TESTS AGAINST. AN EXTRACTION FROM THE SAMPLE SHALL BE TAKEN TO DETERMINE THE PERCENTAGE OF BITUMEN IN THE MIX. THE GRADATION OF THE SAMPLE SHALL ALSO BE OBTAINED. DENSITY TESTS WILL BE TAKEN DURING THE ROLLING OPERATION. THE PAVEMENT SHALL CONTINUE TO BE ROLLED UNTIL THE DESIRED DENSITY IS OBTAINED. THE COSTS ASSOCIATED WITH THE TESTING SHALL BE BORNE BY THE CONTRACTOR. THE CONTRACTOR SHALL PROVIDE TWO (2) SETS OF TEST REPORTS TO THE ENGINEER. A FIELD TECHNICIAN PROVIDED BY THE GEOTECHNICAL TESTING CONSULTANT SHALL BE MADE AVAILABLE DURING THE ASPHALT PLACEMENT TO CONTINUOUSLY MONITOR THE DENSITY OF THE ASPHALT.

8. WATER VALVE FRAMES AND COVERS

ALL WATER VALVE BOXES AND LIDS, GAS VALVE BOXES AND LIDS, AND OTHER SIMILAR EXISTING UTILITIES SHALL BE RAISED TO THE GRADE OF THE FINISHED PAVEMENT SURFACE BY THE CONTRACTOR , WATER VALVE LIDS AND SIMILAR UTILITY COVERS SHALL BE LOWERED A MINIMUM OF 3 INCHES BELOW THE DESIGN PAVEMENT SURFACE PRIOR TO THE INSTALLATION OF A.C. PAVEMENT. WATER VALVE LIDS SHALL BE RAISED
AFTER PAVING OPERATIONS HAVE OCCURRED.
WATER AND GAS VALVE EXTENSION RISERS AND COVERS SHALL BE RAISED 3/8 INCHES BELOW THE PAVEMENT GRADE AFTER PAVING OPERATIONS ARE COMPLETE.



PROFILE

CONSTRUCTION NOTES

1. SET TOP OF METER BOX FLUSH WITH SIDEWALK.
2. SPLICES OF COPPER TUBING SHALL NOT BE ALLOWED.
3. POLY–SLEEVE COLORS REQUIRED BLUE = POTABLE WATER SERVICE
4. METER BOX TO BE PAINTED OSHA SAFETY YELLOW – 2 COATS.
5. INSTALL THRUST BLOCK PER TEMPORARY THRUST BLOCK DRAWING.
6. IF BENDS ARE REQUIRED IN COPPER, USE 12" MINIMUM RADIUS.
7. SEE APPROVED MATERIAL LIST.
8. DO NOT PLACE CONCRETE ON COPPER OR PIPE.

ITEM #	SIZE & DESCRIPTION
1.	TAPPED CAP, DUCTILE IRON WITH OFFSET 2" OPENING, I
2.	2" x 1" NYLON BUSHING
3.	1" SWEAT x M.I.P. ADAPTOR
3.	1" COMPRESSION x M.I.P.
4.	1" COPPER ELL 90°
4.	1" ELL 90° COMPRESSION
5.	THRUST BLOCK
6.	1" COPPER TUBING K SOFT
7.	1" POLY–SLEEVE – 6 MIL–BLUE
8.	1" METER STOP, ANGLE–COMPRESSION OR FLARE
9.	METER BOX BROOKE PRODUCTS NO.37 OR EQUAL.
10.	6" BASE OF 3/8" ROCK
11.	JOINT RESTRAINT DEVICE

STUB-OUT BLOWOFF N.T.S. 1

WATER TECHNICAL SPECIFICATIONS

1.1 PIPE INSTALLATION

THIS SECTION COVERS FURNISHING ALL LABOR, SUPERVISION, MATERIALS AND EQUIPMENT AND PERFORMING ALL OPERATIONS NECESSARY TO FURNISH AND INSTALL THE PIPING, FITTINGS, AND VALVES. ALL PIPE, FITTINGS, VALVES AND ACCESSORIES FURNISHED BY THE CONTRACTOR SHALL BE NEW MATERIAL FREE FROM RUST OR CORROSION. ALL PIPING, VALVES AND FITTINGS SHALL BE CLEANED ON THE INSIDE WHEN INSTALLED AND THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO INSURE THAT THE LINES ARE KEPT FREE OF ANY FOREIGN MATTER AND DIRT UNTIL THE WORK IS COMPLETED. ALL PIPE SHALL BE CAREFULLY PLACED AND SUPPORTED AT THE PROPER LINES AND GRADES, AS SHOWN ON THE DRAWINGS. PIPING RUNS SHOWN ON THE DRAWINGS SHALL BE FOLLOWED AS CLOSELY AS POSSIBLE EXCEPT FOR MINOR ADJUSTMENTS TO AVOID OTHER PIPING OR STRUCTURAL FEATURES. IF MAJOR RELOCATIONS ARE REQUIRED, THEY SHALL BE APPROVED BY THE CITY ENGINEER. THE BEDDING SHALL BE DEFINED AS THAT MATERIAL SUPPORTING, SURROUNDING AND EXTENDING TO ONE FOOT ABOVE THE TOP OF THE PIPE. IF SOFT, SPONGY UNSTABLE, OR SIMILAR OTHER MATERIAL IS ENCOUNTERED UPON WHICH THE BEDDING MATERIAL OR PIPE IS TO BE PLACED, THIS UNSUITABLE MATERIAL SHALL BE REMOVED TO A DEPTH ORDERED BY THE CITY ENGINEER AND REPLACED WITH BEDDING MATERIAL SUITABLY DENSIFIED. BEDDING MATERIAL SHALL FIRST BE PLACED SO THAT THE PIPE IS SUPPORTED FOR THE FULL LENGTH OF THE BARREL WITH FULL BEARING ON THE BOTTOM SEGMENT OF THE PIPE. HUNCHING OF THE PIPE SHALL NOT BE ALLOWED. THE REMAINDER OF THE BEDDING SHALL THEN BE PLACED. EXCEPT WHERE OTHERWISE SPECIFIED OR ILLUSTRATED ON THE PLANS, BEDDING MATERIAL SHALL BE GRANULAR SAND MATERIAL. PIPE WILL BE CAREFULLY INSPECTED IN THE FIELD BEFORE AND AFTER LAYING. IF ANY CAUSE FOR REJECTION IS DISCOVERED IN A PIPE AFTER IT HAS BEEN LAID, IT SHALL BE SUBJECT TO REJECTION. ANY CORRECTIVE WORK SHALL BE APPROVED BY THE CITY ENGINEER AND SHALL BE ACCOMPLISHED BY THE CONTRACTOR. PIPE SHALL BE LAID UPGRADE WITH THE SOCKET ENDS OF THE PIPE UPGRADE UNLESS OTHERWISE AUTHORIZED BY THE CITY ENGINEER. PIPE SHALL BE LAID TRUE TO LINE AND GRADE WITH UNIFORM BEARING UNDER THE FULL LENGTH OF THE BARREL OF THE PIPE. SUITABLE EXCAVATION SHALL BE MADE TO RECEIVE THE BELL OR COLLAR, WHICH SHALL NOT BEAR UPON THE SUBGRADE OR BEDDING. ANY PIPE WHICH IS NOT IN TRUE ALIGNMENT OR SHOWS ANY UNDUE SETTLEMENT AFTER LAYING SHALL BE TAKEN UP AND RELAID AT THE CONTRACTOR'S EXPENSE. PIPE SECTIONS SHALL BE LAID AND JOINED IN SUCH A MANNER THAT THE OFFSET OF THE INSIDE OF THE PIPE AT ANY JOINT WILL BE HELD TO A MINIMUM AT THE INVERT. THE MAXIMUM HORIZONTAL OFFSET AT THE INVERT OF THE PIPE SHALL BE 1% OF THE INSIDE DIAMETER OF THE PIPE OR 0.02 FEET, WHICHEVER IS SMALLER. THE VERTICAL GRADE SHALL BE +/– 0.02 FEET OF THE DESIGN INVERT. IN JOINING SOCKET PIPE, THE SPIGOT OF EACH PIPE SHALL BE SO SEATED IN THE SOCKET OF THE ADJACENT PIPE AS TO GIVE A UNIFORM ANNULAR SPACE ALL AROUND THE PIPE IN THE SOCKET. UNAVOIDABLE OFFSETS SHALL BE DISTRIBUTED AROUND THE CIRCUMFERENCE OF THE PIPE IN SUCH A MANNER THAT THE MINIMUM OFFSET OCCURS AT THE INVERT. AT THE CLOSE OF WORK EACH DAY, OR WHENEVER THE WORK CEASES FOR ANY REASON, THE END OF THE PIPE SHALL BE SECURELY CLOSED.

1.2 PVC PIPE

THIS SPECIFICATION DESIGNATES GENERAL REQUIREMENTS FOR UNPLASTICIZED POLYVINYL CHLORIDE (PVC) PLASTIC CLASS WATER PIPE WITH INTEGRAL BELL AND SPIGOT JOINTS FOR THE CONVEYANCE OF WATER. PIPE SHALL MEET THE REQUIREMENTS OF AWWA C900 OR AWWA C905 "POLYVINYL CHLORIDE (PVC) WATER DISTRIBUTION".

ALL PIPE SHALL BE SUITABLE FOR USE AS PRESSURE CONDUIT. PROVISIONS MUST BE MADE FOR EXPANSION AND CONTRACTION AT EACH JOINT WITH AN ELASTOMERIC RING. THE BELL SHALL CONSIST OF AN INTEGRAL WALL SECTION WITH A FACTORY INSTALLED, SOLID CROSS SECTION ELASTOMERIC RING WHICH MEETS THE REQUIREMENTS OF ASTM F–477. THE BELL SECTION SHALL BE DESIGNED TO BE AT LEAST AS HYDROSTATICALLY STRONG AS THE PIPE WALL AND MEET THE REQUIREMENTS OF AWWA C900. SIZES AND DIMENSIONS SHALL BE AS SHOWN IN THIS SPECIFICATION. JOINT DESIGN SHALL MEET QUALIFICATION REQUIREMENTS OF ASTM F3139. EACH PIPE SHALL BE TESTED TO FOUR TIMES THE PRESSURE CLASS OF THE PIPE FOR A MINIMUM OF 5 SECONDS. THE INTEGRAL BELL SHALL BE TESTED WITH THE PIPE.
STANDARD LAYING LENGTHS SHALL BE 20 FEET (± 1") FOR ALL SIZES.
THE PIPE STIFFNESS USING F/DY FOR PVC CLASS WATER PIPE IS CONTAINED IN THE TABLE BELOW:
CLASSDRFDY (PSI) 100 25 1291501836420014815
PIPE SHALL WITHSTAND, WITHOUT FAILURE AT 73°F, AN IMPACT OF A FALLING MISSILE, TUP C, AT THE FOLLOWING LEVELS. (PER ASTM D 2444.)
PIPE SIZE (IN.)IMPACT (FT./LBS.)4100610081001012012120
THERE SHALL BE NO VISIBLE EVIDENCE OF SHATTERING OR SPLITTING WHEN THE ENERGY IS IMPOSED.
RANDOMLY SELECTED SAMPLES TESTED IN ACCORDANCE WITH ASTM D 1599 SHALL WITHSTAND, WITHOUT FAILURE, PRESSURES LISTED BELOW WHEN APPLIED IN 60–70 SECONDS.
CLASSMINIMUM BURST PRESSURE AT 73°F (PSI)100535150755200985
ALL PIPE FOR THIS PROJECT SHALL CONFORM WITH THE SPECIFICATIONS FOR AWWA C–900, CLASS 150 PVC PIPE MATERIAL FOR DIAMETER SIZES 4 INCHES THROUGH 12 INCHES AND AWWA C–905, DR 18 PVC PIPE MATERIAL FOR DIAMETER SIZES 14 INCHES THROUGH 30 INCHES.

1.3 DUCTILE IRON FITTINGS

FITTINGS FOR THE WATER MAINS SHALL BE COMPOSED OF DUCTILE IRON. THE DUCTILE IRON FITTINGS SHALL CONFORM TO ASTM A536. THE FITTINGS SHALL BE CEMENT MORTAR LINED IN ACCORDANCE WITH ANSI/AWWA C–104/A21.4, STANDARD FOR CEMENT MORTAR LINING FOR DUCTILE IRON AND GRAY IRON PIPE FITTINGS FOR WATER, LATEST REVISION. THE PRESSURE RATING FOR 3 INCH – 24 INCH DIAMETER SIZES SHALL BE 350 PSI. THE PRESSURE RATING FOR 30 INCH – 48 INCH DIAMETER SIZES SHALL BE 250 PSI. ASPHALTIC SEAL COATING SHALL BE APPLIED TO THE INTERIOR AND EXTERIOR OF THE FITTINGS IN ACCORDANCE WITH ANSI/AWWA C104/A21.4.

1.4 DUCTILE IRON PIPE

DUCTILE IRON PIPE SHALL BE CLASS 52 OR GREATER. THE DUCTILE IRON PIPE MATERIAL SHALL CONFORM WITH ANSI/AWWA C110/A21.10. FLANGED PIPE SHALL CONFORM TO ANSI/AWWA C115/A21.15. MECHANICAL JOINT PIPE SHALL CONFORM TO ANSI/AWWA C111/A21.11. FASTITE JOINTS SHALL CONFORM WITH ANSI/AWWA C111/A21.11. THE CEMENT–MORTAR LINING FOR THE INTERIOR OF THE PIPE SHALL CONFORM TO ANSI/AWWA C104/A21.4. THE ASPHALTIC COATING SHALL COMPLY WITH ANSI/AWWA C110/A21.10. DUCTILE IRON PIPELINE SHALL BE WRAPPED WITH A POLYETHYLENE WRAP. DUCTILE IRON PIPELINE SHALL BE BACKFILLED WITH GRANULAR SAND PER THE PIPE TRENCH STANDARD DETAIL.

1.5 HARDWARE

ALL NUTS, BOLTS AND MISCELLANEOUS HARDWARE SHALL BE COMPOSED OF 316 STAINLESS STEEL UNLESS OTHERWISE NOTED ON THE PLANS OR APPROVED BY THE CITY ENGINEER. AN ANTI–SEIZE MATERIAL SHALL BE APPLIED TO THE STAINLESS STEEL HARDWARE. A TRIPAC BLUE FLUOROPOLYMER COATING FOR STEEL AND DUCTILE IRON HARDWARE SHALL BE APPROVED AT THE DISCRETION OF THE CITY ENGINEER

1.6 RESILIENT WEDGE GATE VALVES

RESILIENT WEDGE GATE VALVES SHALL CONFORM TO AWWA C509, LATEST EDITION. THE WEDGE SHALL BE FULLY ENCAPSULATED IN THE ELASTOMER, INCLUDING THE GUIDES. THE BRASS STEM NUT SHALL BE RIGIDLY ENCLOSED IN THE WEDGE TO MAINTAIN ALIGNMENT. THE ELASTOMER SHALL BE BONDED TO THE WEDGE. THE VALVE BODY SHALL BE COMPOSED OF DUCTILE IRON.

THE STEM SHALL HAVE TWO O–RINGS AND A WIPER ABOVE THE COLLAR AND ONE O–RING BELOW THE COLLAR. STEM SEALS MUST BE REPLACEABLE WITH THE VALVE UNDER PRESSURE.

THE STEM MATERIAL SHALL BE STANDARD BRONZE. STAINLESS STEEL (ANSI–420) SHALL ALSO BE THE WATERWAY SHALL BE FULL SIZE TO ALLOW FOR TAPPING USE; NO CAVITIES OR DEPRESSIONS SHALL BE ACCEPTABLE FOR USE AS AN ALTERNATIVE. PERMITTED IN THE SEAT AREA.

VALVE BODY AND BONNET SHALL BE ELECTROSTATICALLY APPLIED, FUSION BONDED, EPOXY COATED BOTH INSIDE AND OUT BY THE VALVE MANUFACTURER. THE COATING SHALL MEET THE REQUIREMENTS OF AWWA C–550, LATEST EDITION. COATING SHALL BE APPLIED ONLY AT THE VALVE MANUFACTURER'S FACILITIES. EXTERIOR HARDWARE SHALL BE COMPOSED OF 316 STAINLESS STEEL.

THE BONNET BOLTS SHALL NOT BE EXPOSED TO THE ENVIRONMENT.

O–RING STYLE SEALS SHALL BE USED AS GASKETS ON THE BONNET AND ON THE STUFFING BOX. THE BELOW GRADE VALVES SHALL BE SUPPLIED WITH A STANDARD 2" OPERATING NUT.

THE VALVES SHALL BE AN AFC, CLOW, AVK, WATEROUS, M&H VALVE COMPANY, OR AMERICAN DARLING RESILIENT WEDGE GATE VALVE OR AN APPROVED EQUAL. ALL VALVES SHALL BE RESILIENT WEDGE GATE

1.8 FLANGED COUPLING ADAPTERS

FLANGED COUPLING ADAPTERS SHALL BE USED TO JOIN PLAIN END PIPE WITH FLANGED DUCTILE IRON FITTINGS AND VALVES. ADAPTERS SHALL CONFORM TO AWWA SPECIFICATION C–153. BODIES SHALL BE COMPOSED OF DUCTILE IRON AND CONFORM WITH ASTM A536. THE FLANGED COUPLING ADAPTER SHALL BE

CEMENT LINED IN ACCORDANCE WITH AWWA C104 (ANSI A21.4). THE FLANGED COUPLING ADAPTER SHALL WITHSTAND A WORKING PRESSURE OF 350 PSI.

1.9 TRANSITION COUPLING

THE TRANSITION COUPLINGS SHALL BE INSTALLED AS REQUIRED. THE CENTER RINGS SHALL BE CONSTRUCTED OF DUCTILE IRON CONFORMING TO ASTM A536–80, GRADE 65–45–12. THE END RINGS SHALL BE CONSTRUCTED OF DUCTILE IRON CONFORMING TO ASTM A536, GRADE 65–45–12. GASKETS SHALL BE COMPOSED OF VIRGIN STYRENE BUTADIENE RUBBER (SBR) COMPOUNDED FOR WATER AND SEWER SERVICE IN ACCORDANCE WITH ASTM D2000 MBA 810. HARDWARE FOR THE TRANSITION COUPLING SHALL BE 316 STAINLESS STEEL. THE COATING FOR THE DUCTILE IRON TRANSITION COUPLING SHALL BE FUSION BONDED EPOXY. THE TRANSITION COUPLING SHALL BE CAPABLE OF SUSTAINING A WORKING PRESSURE OF 250 PSI.

1.10 RESTRAINED JOINT FITTINGS

MECHANICAL JOINT RESTRAINT SHALL BE INCORPORATED INTO THE DESIGN FOR THE FOLLOWER GLAND. THE GRIPPING OR RESTRAINING MECHANISM SHALL TRANSMIT UNIFORM RESTRAINING PRESSURE AROUND THE CIRCUMFERENCE OF THE PIPE, THUS AVOIDING POINT LOADING OR PIPE DISTORTION. THIS RESTRAINING PROCESS SHALL BE KEPT SEPARATE FROM THE MECHANICAL JOINT SEALING PROCESS AND NOT A PART OF THE SEALING FUNCTION. ALL COMPONENTS SHALL BE MANUFACTURED OF DUCTILE IRON CONFORMING TO ASTM A536–80, GRADE 65–45–12.

THE RESTRAINING TWIST OFF NUT BOLT SYSTEM SHALL HAVE A TORQUE LIMITING FEATURE DESIGNED TO BREAK OFF AT 75 TO 90 FT–LBS. OF TORQUE TO INSURE PROPER ACTUATING OF RESTRAINING DEVICES. BOTH THE TWIST OFF NUT AND THE REMOVAL NUT SHALL BE THE SAME SIZE AS TEE–BOLT NUT. HARDWARE SHALL BE COMPOSED OF 304 STAINLESS STEEL.

THE GLAND SHALL BE SUCH THAT IT CAN REPLACE THE STANDARDIZED MECHANICAL JOINT GLAND AND CAN BE USED WITH THE STANDARDIZED MECHANICAL JOINT BELL CONFORMING TO ANSI/AWWA C111/A21.11, C110/A21.10 AND C153/A21.53 OF THE LATEST REVISION.

GENERAL CONDITIONS

7. TRAFFIC CONTROL:

THE CONTRACTOR IS REQUIRED TO SUBMIT A TRAFFIC CONTROL PLAN, PREPARED BY A CALIFORNIA LICENSED ENGINEER TO THE CITY OF WESTMORLAND FOR REVIEW AND APPROVAL PRIOR TO COMPLETING DEMOLITION OR EXCAVATION WORK IN STREET OR ALLEY AREAS WITHIN THE CITY OF WESTMORLAND. THE CONTRACTOR SHALL ADVISE ALL BUSINESS, RESIDENTIAL, INSTITUTIONS AND GOVERNMENTAL AGENCIES NEAR THE VICINITY OF THE PROJECT OF IMPENDING CONSTRUCTION ACTIVITIES AT LEAST TWO (2) WORKING DAYS PRIOR TO THE COMMENCEMENT OF ANY WORK. THE TRAFFIC CONTROL PLAN SHALL BE PREPARED IN CONFORMANCE WITH THE STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION, "MANUAL OF TRAFFIC CONTROLS FOR CONSTRUCTION AND MAINTENANCE WORK ZONES", LATEST EDITION.

THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ALL NECESSARY TRAFFIC CONTROL TO PROTECT AND GUIDE TRAFFIC FOR ALL WORK IN THE CONSTRUCTION AREA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EXPENSES RELATIVE TO TRAFFIC CONTROL. ALL TRAFFIC CONTROLS SHALL BE CLEARLY POSTED WITH SIGNS PRIOR TO THE BEGINNING OF ANY WORK. ALL TRAFFIC RESTRICTIONS LISTED HEREIN ARE TO SUPPLEMENT OTHER TRAFFIC REGULATIONS OF THE CITY OF WESTMORLAND AND ARE NOT INTENDED TO DELETE ANY PART OF THESE REGULATIONS. THE CONTRACTOR SHALL ATTEMPT TO MAINTAIN LOCAL ACCESS TO ALL PROPERTIES ON THE PROJECT AT THE END OF EACH WORKING DAY, WHEN POSSIBLE. ANY STREET CLOSURE SHALL BE APPROVED BY THE CITY ENGINEER AND PUBLIC WORKS MANAGER.

8. SIGNS.

STOP SIGNS AND ALL OTHER TRAFFIC SIGNS SHALL BE MOVED IF NECESSARY DURING THE CONSTRUCTION PROCESS AND BE REPOSITIONED TEMPORARILY IN A LOCATION DETERMINED BY THE ENGINEER. STOP SIGNS SHALL NOT BE REMOVED FROM SERVICE, BUT RATHER RELOCATED TO A VISIBLE LOCATION. OTHER SIGNS LOCATED WITHIN THE CONSTRUCTION AREA SHALL BE STORED BY THE CONTRACTOR DURING THE CONSTRUCTION PHASE OF THE PROJECT. AT THE CONCLUSION OF THE PROJECT, ALL SIGNS SHALL BE POSITIONED IN A PERMANENT LOCATION AS DETERMINED BY THE ENGINEER.

9. BARRICADES.

DURING THE INSTALLATION OF THE P.C.C. CONCRETE FACILITIES, SANITARY SEWER, STORM WATER AND WATER FACILITIES, THE CONTRACTOR SHALL MAINTAIN LIGHTED BARRICADES ALONG THE LENGTH OF THE CONCRETE FACILITIES AND PIPELINES TO PROHIBIT PEDESTRIAN TRAFFIC OR VEHICULAR TRAFFIC FROM UTILIZING THE NEW CONCRETE FACILITIES UNTIL THE CURING PROCESS IS COMPLETE OR ENTERING OPEN EXCAVATIONS. THE CONTRACTOR SHALL SUPPLY THE QUANTITY OF BARRICADES REQUIRED. IF THE LIGHTED BARRICADES BECOME DEFECTIVE OR NON–FUNCTIONAL, THE BARRICADES SHALL BE IMMEDIATELY REPLACED AS DIRECTED BY THE ENGINEER. BARRICADES SHALL BE PLACED ALONG THE EDGES OF THE NEW CONCRETE FACILITIES OR PIPELINE EXCAVATIONS TO DIVERT VEHICULAR AND PEDESTRIAN TRAFFIC AROUND THE CONSTRUCTION AREAS. WARNING TAPE SHALL BE EXTENDED BETWEEN THE BARRICADES. ADDITIONAL BARRICADES SHALL BE ADDED IF REQUIRED AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL INCLUDE THE COST ASSOCIATED WITH BARRICADE SUPPLY AND PLACEMENT IN THE BID PROPOSAL.

10. UTILITIES.

THE ELECTRIC CONDUIT FOR STREET LIGHTS SHALL BE PLACED WITHIN THE PUBLIC RIGHT OF WAY AS ILLUSTRATED ON THE IMPROVEMENT PLANS.

12. RESTROOM FACILITIES.

THE DEVELOPER SHALL LOCATE MEN'S AND WOMEN'S PORTABLE RESTROOM FACILITIES AT THE PROJECT SITE DURING THE CONSTRUCTION PERIOD. THE PORTABLE RESTROOMS SHALL BE CLEANED ON A WEEKLY BASIS.

13. ACCESS TO PRIVATE PROPERTY.

THE CONTRACTOR SHALL PROVIDE FOR INGRESS AND EGRESS FOR PRIVATE PROPERTY ADJACENT TO THE WORK THROUGHOUT THE PERIOD OF CONSTRUCTION.

14. CLEAN–UP OF EXISTING STREETS.

ANY DIRT, DUST OR MUD, EITHER TRACKED ON–SITE BY EQUIPMENT OR BLOWN INTO ADJACENT CITY STREETS WILL BE CLEANED UP DAILY BY THE RESPONSIBLE CONTRACTOR OR SUBCONTRACTOR.

15. COORDINATION OF INSPECTION SERVICES.

THE CONTRACTOR SHALL ARRANGE FOR INSPECTIONS FOR THIS PROJECT WITH THE CITY OF WESTMORLAND DEPARTMENT OF PUBLIC WORKS AT (760) 344–3411 A MINIMUM OF 24 HOURS IN ADVANCE OF THE REQUESTED INSPECTION. IN THE EVENT THE CONTRACTOR OR SUBCONTRACTOR DECLINES THE INSPECTION AT THE PRE–ARRANGED TIME AND DATE OF INSPECTION, THE CONTRACTOR SHALL BE CHARGED THE CURRENT HOURLY RATE OF THE CITY ENGINEER PERSONNEL FROM THE TIME THE PERSONNEL LEAVES THE CITY ENGINEER'S OFFICE UNTIL THE TIME THE PERSONNEL RETURNS TO THE CITY ENGINEER'S OFFICE.

16. PUMPING OF NATIVE SOIL.

DURING GRADING OPERATIONS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR SELECTING EQUIPMENT THAT WILL NOT CAUSE "PUMPING" OF THE SOIL DUE TO THE DEPTH OF GROUNDWATER PRIOR TO CONSTRUCTION.

17. REQUIREMENTS OF CONTRACTORS AND SUBCONTRACTORS.

ALL CONTRACTORS AND SUBCONTRACTORS PARTICIPATING ON THIS PROJECT SHALL BE LICENSED BY THE STATE OF CALIFORNIA, HAVE A CITY BUSINESS LICENSE AND SHALL FILE A CERTIFICATE OF WORKMENS' COMPENSATION WITH THE CITY OF WESTMORLAND PRIOR TO THE START OF CONSTRUCTION.

18. LISTING OF GENERAL CONTRACTORS AND SUBCONTRACTORS.

A LIST OF ALL SUBCONTRACTORS AND THE GENERAL CONTRACTOR SHALL BE PROVIDED BY THE CONTRACTOR TO THE CITY OF WESTMORLAND PUBLIC WORKS DEPARTMENT AND CITY ENGINEER PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES AT THE PROJECT SITE.

19. OPEN TRENCHES.

NO OPEN TRENCHES WILL BE PERMITTED OVERNIGHT WITHOUT THE APPROVAL OF THE PUBLIC WORKS DIRECTOR.

20. PRE–CONSTRUCTION CONFERENCE.

A PRE–CONSTRUCTION CONFERENCE SHALL BE CONDUCTED WITH THE PUBLIC WORKS DIRECTOR, CITY ENGINEER, CITY MANAGER, CONTRACTOR, AND SUBCONTRACTORS, AT LEAST 7 DAYS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES.

21. CONTRACTOR AND SUBCONTRACTOR RESPONSIBILITY.

THE CONTRACTOR, DEVELOPER AND SUBCONTRACTORS AGREE TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION INCLUDING THE SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND SHALL NOT BE LIMITED TO NORMAL WORKING HOURS.
CONTRACTOR AND SUBCONTRACTORS SHALL DEFEND, INDEMNIFY AND HOLD THE CITY OF IMPERIAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT.

22. SEPARATION REQUIREMENTS OF DOMESTIC WATER AND SANITARY SEWER SERVICES.

SEPARATION REQUIREMENTS FOR WATER AND SEWER MAINS, SEWER LATERALS AND WATER SERVICES SHALL BE OBSERVED AS DIRECTED BY THE CALIFORNIA DEPARTMENT OF HEALTH SERVICES STANDARDS AND THE CITY OF WESTMORLAND STANDARD DETAILS.

23. CUT SHEET DISTRIBUTION.

THE CONTRACTOR SHALL FURNISH TWO (2) SETS OF "CUT SHEETS" FOR SEWER, WATER AND STREET CONSTRUCTION TO THE CITY OF WESTMORLAND PUBLIC WORKS DEPARTMENT AND THE CITY ENGINEER A MINIMUM OF 24 HOURS PRIOR TO THE COMMENCEMENT OF PIPELINE OR STREET CONSTRUCTION.

CALL BEFORE YOU DIG
UNDERGROUND SERVICE ALERT
CALL: TOLL FREE
811
TWO WORKING DAYS BEFORE YOU DIG

APPROVED BY PUBLIC WORKS DIRECTOR
CITY OF WESTMORLAND
BY: ______ DATE: ______
RAMIRO BARAJAS

ENGINEER OF RECORD
PLANS PREPARED UNDER THE SUPERVISION OF
BY: ROBERTO C. MARTINEZ DATE: ______
R.C.E. NO.: 74475

REGISTERED PROFESSIONAL ENGINEER
ROBERTO C. MARTINEZ
No. C74475
CIVIL
STATE OF CALIFORNIA

NO.	REVISION	DATE	BY

NOTE: THE ENGINEER'S SEAL AFFIXED BESIDE INDICATES THAT THE METHOD OF ANALYSIS PRESENTED IS CONSISTENT WITH ACCEPTED ENGINEERING PRACTICES AND CODE ACCEPTED DESIGN VALUES AND THAT THIS ENGINEER IS ONLY RESPONSIBLE FOR THE DESIGN OF CIVIL ENGINEERING WORK SHOWN ON THIS PLAN.

BJ
ENGINEERING & SURVEYING, INC.
Phone (760) 353-3552 341 WEST CROWN CT, STE 100
Fax (760) 353-3751 IMPERIAL, CA 92251

DWR-SCDRP- Water Distribution Piping Replacement

CONSTRUCTION DETAILS AND SPECIFICATIONS

IN THE CITY OF WESTMORLAND, CA
DATE: 12/12/2024
BY: R.W.
CLIENT: CITY OF WESTMORLAND
JOB NO.: 23–105
SHEET 7 OF: 7