
Meeting Date: August 19, 2026

Staff Contact: Diane Agnew, Water Rights Program Manager

TITLE: C-26-17 – Approval of Contract with United States Department of Interior Bureau of Reclamation for Water Storage in Elephant Butte Reservoir

ACTION: Recommend Approval

SUMMARY:

Requesting an increase to the purchase order (PO) with United States Department of Interior Bureau of Reclamation (USBR) for Water Storage in Elephant Butte Reservoir.

If approved by the Board, an amended PO will be issued by the Albuquerque Bernalillo County Water Utility Authority to enable USBR to continue to provide Water Storage in Elephant Butte Reservoir. Additionally, the agreement is to construct, operate and maintain a ten-inch diameter waterline, on the lands of Valle de Oro National Wildlife Refuge (Refuge), Bernalillo County, New Mexico, by the Water Authority for potable water, public health and safety purposes.

Approval of this item shall also serve as delegation of authority for the Executive Director to approve all future amendments to this contract, if any.

FISCAL IMPACT:

The funding is expected to exceed the \$500K threshold.



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Post Office Box 1306
Albuquerque, New Mexico 87103

In Reply Refer To:
FWS/R2/NWRS

LA-New Mexico
Valle de Oro NWR (10f)
Water Authority Easement

RIGHT-OF-WAY EASEMENT

DATE: AUG 17 2021 (Date Stamp)

GRANTOR: UNITED STATES OF AMERICA, through the Secretary of the Interior, and his authorized representative, the Regional Director, U.S. Fish and Wildlife Service, Southwest Region.

GRANTOR'S MAILING ADDRESS: P.O. Box 1306
Albuquerque, NM 87103

GRANTEE: ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY
AUTHORITY

GRANTEE'S MAILING ADDRESS: One Civic Plaza, Room 5012
Albuquerque, New Mexico 87102

PURPOSE:

To construct, operate and maintain a 10-inch diameter waterline, on the lands of Valle de Oro National Wildlife Refuge (Refuge), Bernalillo County, New Mexico, by the Albuquerque Bernalillo County Water Utility Authority (Water Authority) for potable water, public health and safety purposes.

VARIABLE WIDTH WATERLINE RIGHT-OF-WAY EASEMENT GRANT:

The United States of America, through the Secretary of the Interior, and his authorized representative, the Regional Director, U.S. Fish and Wildlife Service, Southwest Region (P.O. Box 1306 Albuquerque, NM 87103-1306), herein after referred to as the Service, in accordance

Doc# 2021099409

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EASE R:\$25.00 Linda Stover, Bernalillo County



potable public water lines and appurtenant infrastructure, located within Section 30, Township 9 North, Range 3 East, New Mexico Principal Meridian, Bernalillo County, New Mexico. The construction of the waterline is located within the attached legal description of the variable width easement shown as **EXHIBIT A**, and construction plans shown as **EXHIBIT B**, attached and made a part of this right-of-way easement grant.

CONSIDERATION:

In accordance with 50 CFR 29.21-7, the U.S. Fish and Wildlife Service has determined that fair compensation has been waived for this right-of-way easement for the Water Authority through the development and delivery of potable water for the benefit of the refuge.

TERMS AND CONDITIONS:

By accepting this permit, the Permittee agrees to the following terms and conditions:

- (1) To comply with State and Federal laws applicable to the project within which the right-of-way easement is granted, and to the lands which are included in the right-of-way easement area, and lawful existing regulations thereunder. The project manager is the coordinating official having immediate jurisdiction over and administrative responsibility for all lands within the refuge. All entry upon the refuge must be coordinated with the project manager or the designated representative.
- (2) To clear only such native vegetation as is required for construction, operation and maintenance of the variable width waterline easement; and report any damage to the Service's project manager in charge; and to dispose of all vegetative and other material cut, uprooted, or otherwise accumulated during the construction, operation and maintenance of the project in such a manner as to decrease the fire hazard within the easement area and to control invasive and non-native species within the easement area.
- (3) Grantee is a political subdivision of the State of New Mexico, and as such, has no legal power to assume a contingent liability in an unknown amount with respect to damages caused by it to lands or property; accordingly, Grantee, agrees to repair all such damages to the right of way easement.
- (4) To pay the Service the full value for all damages to the lands or other property of the United States caused by Grantee, or its contractors, agents or assigns, and to indemnify the Service against any liability for damages to life, person or property arising from the occupancy or use of the lands under the right-of-way easement, except where the right-of-way easement is granted hereunder to a State or other governmental agency which has no legal power to assume such a liability with respect to damages caused by it to lands or property, such agency in lieu thereof agrees to repair all such damages. Where the right-of-way easement involves lands which are under the exclusive jurisdiction of the Service, the holder or his/her employees, contractors, or agents of the contractors, shall be liable to third parties for injuries incurred in connection with

the right-of-way easement area. Grants of easements involving special hazards will impose liability without fault for injury and damage to the land and property of the Service up to a specified maximum limit commensurate with the foreseeable risks or hazards presented. The amount of no-fault liability for each occurrence is hereby limited to no more than \$1,000,000 in accordance with the 50 CFR 29-4 section 7.

(5) That all or any part of the right-of-way easement granted may be terminated by the Service, for failure to comply with any or all of the terms or conditions of the grant, or for abandonment. A rebuttable presumption of abandonment is raised by deliberate failure of the Grantee to use for any continuous 2-year period the right-of-way permit for the purpose for which it was granted or renewed. In the event of noncompliance or abandonment, the Service will notify in writing the Grantee of the right-of-way easement of his/her intention to suspend or terminate such grant 60 days from the date of the notice, stating the reasons therefor, unless prior to that time the Grantee completes such corrective actions as are specified in the notice. The Service may grant an extension of time within which to complete corrective actions when, in his/her judgment, extenuating circumstances not within the Grantee's control such as adverse weather conditions, disturbance to wildlife during breeding periods or periods of peak concentration, or other compelling reasons warrant. Failure to take corrective action within the 60-day period will result in a determination by the Service to suspend or terminate the easement. No administrative proceeding shall be required where the easement or permit terminates under its terms. In the event of termination of the right-of-way permit for noncompliance, nonuse, or abandonment, a written notice of termination will be furnished to the Grantee.

(6) To keep the Service's project manager informed at all times of the address of its principal place of business and the names and addresses of its principal officers and employees serving as the project's point of contact.

(7) That in the operation and maintenance of the project, the Grantee shall not discriminate against any employee or applicant for employment because of race, creed, color, or national origin and shall require an identical provision to be included in all subcontracts.

(8) That the grant of the right-of-way easement shall be subject to the express condition that the exercise thereof will not unduly interfere with the management, administration, or disposal by the Service of the land affected thereby. The Grantee agrees and consents to the occupancy and use by the Service, its grantees, permittees, or lessees of any part of the right-of-way easement area not actually occupied for the purpose of the granted rights to the extent that it does not interfere with the full and safe utilization thereof by the Grantee. The holder of right-of-way easement also agrees that authorized representatives of the Service shall have the right of access to the right-of-way area for the purpose of making inspections and monitoring the construction, operation and maintenance of utilities.

(9) That the right-of-way easement herein granted shall be subject to the express covenant that any facility constructed thereon will be modified or adapted by the Grantee, if such is found by the Service to be necessary, so that such facility will not conflict with the use and occupancy of the land for any authorized works which may hereafter be constructed thereon under the authority of the Service. Any such modification will be planned and scheduled so as not to

interfere unduly with or to have minimal effect upon continuity of energy and delivery requirements.

(10) That the easement herein granted shall be for the specific purpose described and may not be construed to include the further right to authorize any other use within the easement area unless approved in writing by the Service.

(11) To refrain from or perform, those activities as required by the Service in order to comply with the requirements of the National Historic Preservation Act of 1966 (16 U.S.C. 470 et seq.), the Archeological and Historic Preservation Act of 1974 (16 U.S.C. 469 et seq.), Executive Order 11593 "Protection and Enhancement of the Cultural Environment" of May 13, 1971 (36 FR 8921), and "Procedures for the Protection of Historic and Cultural Properties" (36 CFR, Part 800) in the construction and maintenance of the right-of-way easement area and the existing right-of-way on refuge lands.

(12) Should previously unrecorded cultural resources be located on the right-of-way easement area or on refuge lands within the existing right-of-way, utility construction activities will be halted immediately at that location. The Service's Regional Archaeologist and the project manager are to be contacted at once. Should further archaeological investigations be deemed necessary by the Service's Regional Archaeologist; Permittee archeologists, the State Historic Preservation Office (SHPO), and the Grantee will develop and submit a mitigation plan to the Service for approval. Upon approval, the Service's Regional Archaeologist will then process the required Archaeological Resources Protection Act (ARPA) permit.

(13) Should human remains in an unmarked grave be encountered in the right-of-way easement area or on the existing right-of-way on Service lands, a Service law enforcement officer will be contacted immediately in addition to the Service's Regional Archaeologist, the project manager, the County Sheriff's Office, and the SHPO. Should the human remains be identified as Native American, then consultation with pertinent Native American groups will be initiated as per the Native American Grave Protection and Repatriation Act.

(14) If, during the course of construction, operation or maintenance of the right-of-way easement area, the Grantee notes illegal excavation or archaeological resource removal activities, this information shall be immediately provided to the project manager.

(15) This right-of-way easement is subject to existing easements and agreements and shall not interfere with existing structures and operations, including interference with its microwave or radio frequencies; if interference does occur the Grantee will take appropriate action, with concurrence with the Service to resolve any issues.

(16) The Grantee shall file a certification of construction completion with the Service and provide an "As Built" drawing. In the absence of any agreement to the contrary, the Grantee shall be allowed six (6) months after termination of the right-of-way easement, to remove all property or improvements placed thereon by him; otherwise. Extensions of time may be granted at the discretion of the Service.

(17) During the construction, operation and maintenance of this project, to the greatest extent practicable, Grantee (and their agents and contractors) will ensure that their transportation and equipment are free of any invasive plant species to limit the spread of these species on the Refuge. Grantee will implement best management practices to prevent and control the spread of noxious weeds, exotic plants, and invasive plants while working within the project area.

(18) In accordance with 31 U.S.C § 1341, 41 U.S.C. § 11, and Federal law, Grantee's responsibility under this right-of-way and every provision herein is contingent upon the availability of appropriated funds. Nothing in this right-of-way may be considered as implying that Congress will at a later date appropriate funds sufficient to meet deficiencies.

(19) Notwithstanding any other term, condition, or provision of this right-of-way easement, the Service's sole and exclusive remedy for Grantee's violation of or non-compliance with the terms and conditions of this right-of-way shall be the termination of this right-of-way pursuant to paragraph 9, and, as such, no term, condition, or provision of this right-of-way may be construed to require, as a result of Grantee's violation or non-compliance, that Grantee pay damages or other payments to the Service or that Grantee undertake any action that requires the expenditure of funds by the Grantee. No term, condition, or provision of this right-of-way may be construed to allow the Service to pursue any remedy, claim, or other action against Grantee that is inconsistent with or contrary to federal law or to require the Grantee to undertake any action or expenditure of funds that is inconsistent with or contrary to federal law. Further, any term, condition, or provision of this right-of-way that is determined to be inconsistent with or contrary to federal law shall be deemed void and unenforceable against the Grantee.

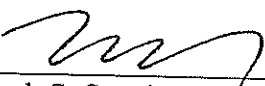
EASEMENT DURATION:

This right-of-way easement, shall be effective for a period of 30 years, or so long as it is used for the purpose granted, commencing on: AUG 23 2021 (Date Stamp)

Please provide a copy of this right-of-way easement to all contractors that may work on the Refuge. All persons working on the Refuge as well as the person signing below are responsible for abiding by the conditions of this easement. Failure to abide by any or all of the conditions of this right-of-way easement could result in fines or stoppage of work on the Refuge.

IN WITNESS WHEREOF, the Parties have hereto signed their names and affixed their respective seals, on the date first above written.

Albuquerque Bernalillo County Water Utility Authority

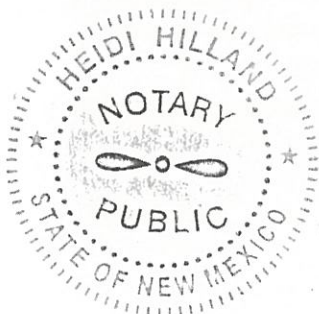


Mark S. Sanchez
Executive Director

ACKNOWLEDGEMENT

STATE OF NEW MEXICO)
)
COUNTY OF BERNALILLO)

On this 23rd day of July 2021, Mark S. Sanchez, personally appeared before me, who is known to me to be the signer of the foregoing document, and he/she acknowledged that he/she being authorized to do so in his/her official capacity executed the foregoing instrument for the purpose therein contained.

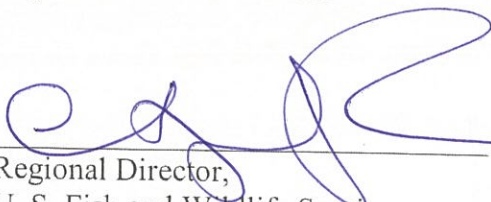


Heidi Hilland
Notary Public

Heidi Hilland
Notary's printed name

My Commission Expires: 5-15-2023

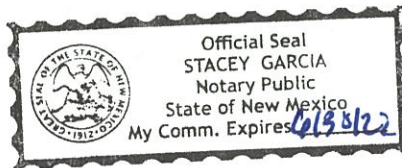
The United States of America
Department of the Interior


Regional Director,
U. S. Fish and Wildlife Service
Southwest Region

ACKNOWLEDGEMENT

STATE OF NEW MEXICO)
)
COUNTY OF BERNALILLO)

On this 17th day of August 2021, Amy Luceros, personally appeared before me, who is personally known to me to be the signer of the foregoing document, and he/she acknowledged that he/she being authorized to do so in his/her official capacity executed the foregoing instrument for the purpose therein contained.



Stacey Garcia
Notary Public

Stacey Garcia
Notary's Printed Name

My Commission Expires: 06/30/22

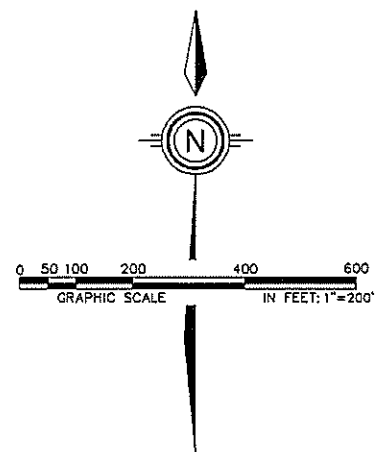


EXHIBIT
WATERLINE RIGHT-OF-WAY PERMIT
OF
TRACTS 1, 2 AND 3
LANDS OF VG FARMS
WITHIN
SECTION 30, T. 8 N., R. 3 E., N.M.P.M.
BERNALILLO COUNTY, NEW MEXICO
JULY 2021

LEGAL DESCRIPTION

THE FOLLOWING DESCRIBED VARIABLE WIDTH WATERLINE RIGHT-OF-WAY PERMIT IS LOCATED ON THAT PARCEL OF LAND CONVEYED TO THE UNITED STATES OF AMERICA BY SPECIAL WARRANTY DEED DATED JULY 31, 2014 AND RECORDED IN THE RECORDS OF THE COUNTY CLERK, BERNALILLO COUNTY, NEW MEXICO, AS DOCUMENT 2014060327, AND THE PARCEL CONVEYED TO THE UNITED STATES OF AMERICA BY SPECIAL WARRANTY DEED DATED DECEMBER 30, 2013 AND RECORDED IN THE RECORDS OF THE COUNTY CLERK, BERNALILLO COUNTY, NEW MEXICO, AS DOCUMENT 2013136784, SAID RIGHT-OF-WAY PERMIT BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A 1/2 INCH STEEL REBAR WITH A PLASTIC CAP STAMPED "WAYJON 14269", AT THE NORTHEAST CORNER OF TRACT 1 AND THE WESTERLY RIGHT-OF-WAY LINE OF SECOND STREET, S.W.;

THENCE S 09°09'02" W 1452.94 FEET ALONG THE EAST PROPERTY LINE OF SAID TRACT AND THE WEST LINE OF SAID ROAD RIGHT-OF-WAY;

THENCE S 31°40'05" W 88.85 FEET DEPARTING THE PROPERTY LINE OF SAID TRACT AND SAID ROAD RIGHT-OF-WAY;

THENCE S 09°10'05" W 658.79 FEET;

THENCE S 35°52'20" E 48.43 FEET TO A POINT ON THE EAST PROPERTY LINE OF SAID TRACT AND THE WEST LINE OF SAID ROAD RIGHT-OF-WAY;

THENCE S 09°07'42" W 28.28 FEET ALONG THE EAST PROPERTY LINE OF SAID TRACT AND SAID ROAD RIGHT-OF-WAY;

THENCE N 35°52'20" W 76.72 FEET DEPARTING THE PROPERTY LINE OF SAID TRACT AND SAID ROAD RIGHT-OF-WAY;

THENCE N 09°10'05" E 671.06 FEET;

THENCE N 31°40'05" E 89.07 FEET;

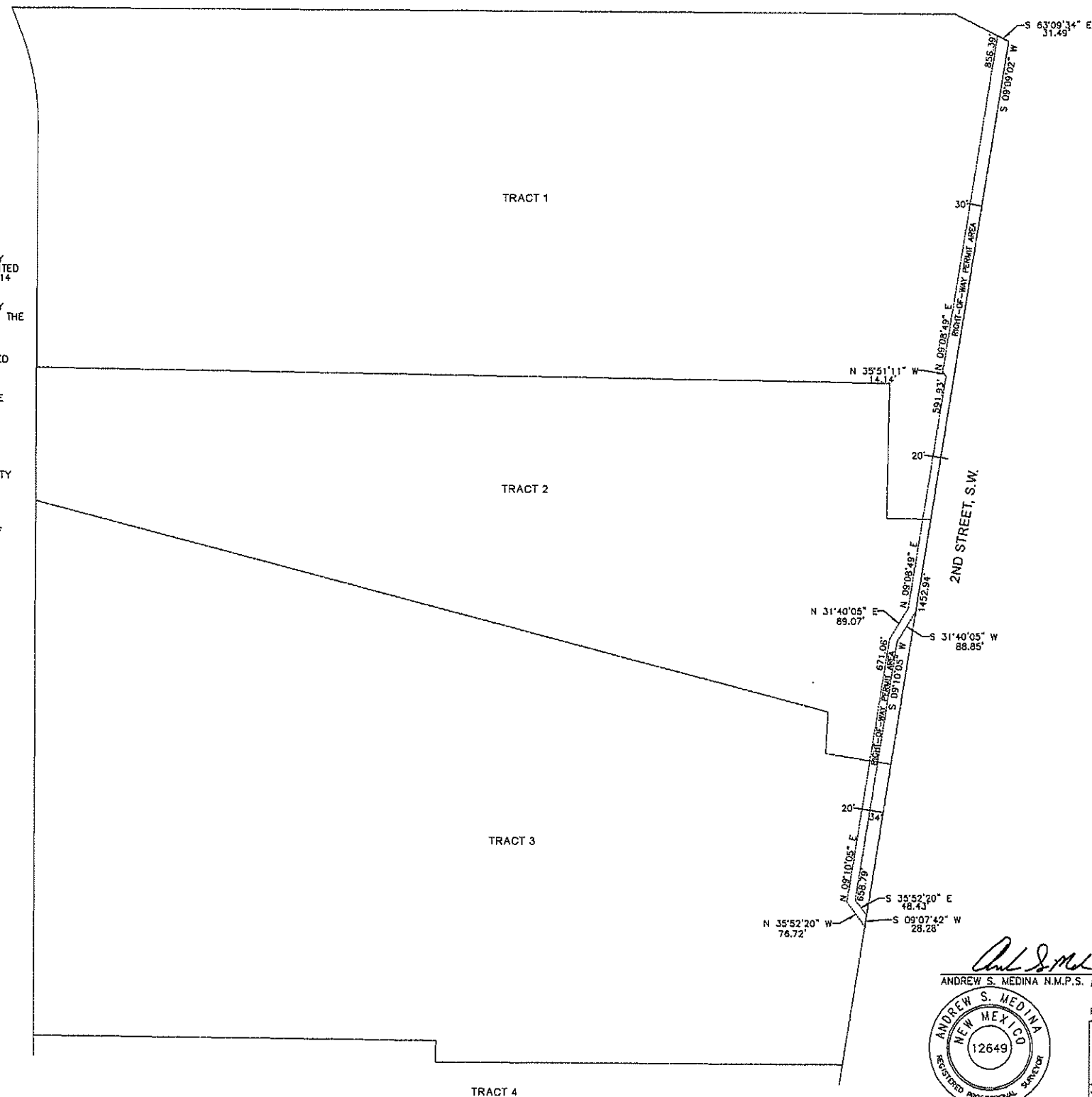
THENCE N 09°08'49" E 591.93 FEET;

THENCE N 35°51'11" W 14.14 FEET;

THENCE N 09°08'49" E 856.39 FEET;

THENCE S 63°09'34" E 31.49 FEET TO THE POINT OF BEGINNING;

CONTAINING 1.24 ACRES, MORE OR LESS.



Andrew S. Medina
ANDREW S. MEDINA N.M.P.S. #12649

7-13-2021
DATE



REVISED: 7-19-2021, 7-21-2021

SANDIA LAND
SURVEYING LLC

15 CASA TERREHOS PLACITAS, N.M. 87043 (505) 867-1241

JOB NO: VDO WL DATE: 7-13-2021

SCALE: 1"=300' DRAWN: A.S.M.

LEGEND

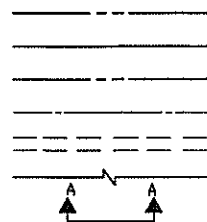
MATERIALS

CONCRETE
RIP-RAP



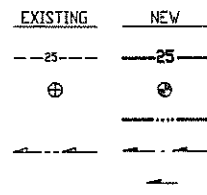
LINES

SUBDIVISION BOUNDARY
PROPERTY LINE (PLAND)
PROPERTY LINE (SECTION)
CENTERLINE
EASEMENT LINE
MATCH LINE
SECTION CUT LINE



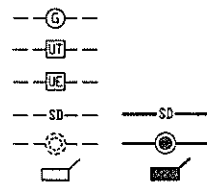
EARTHWORK

CONTOUR LINE
SPOT ELEVATION
PROJECT / PHASE BOUNDARY
FLOWLINE
DIRECTION OF FLOW



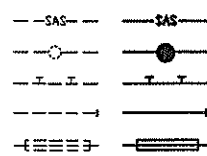
MISCELLANEOUS UTILITIES

GAS LINE
UNDERGROUND TELEPHONE
UNDERGROUND ELECTRICAL
STORM DRAIN
STORM DRAIN MANHOLE
STORM DRAIN INLET



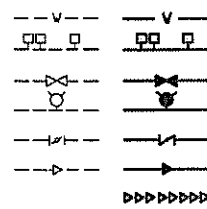
SANITARY SEWER

SANITARY SEWER LINE
SANITARY SEWER MANHOLE
SAS SERVICE CONNECTIONS
SAS CAP OR PLUG
ENCASEMENT



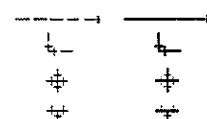
WATER

WATER LINE
WATER SERVICE CONNECTIONS
GATE VALVE
FIRE HYDRANT
BUTTERFLY VALVE
REDUCER
WATER PRESSURE ZONE BOUNDARY



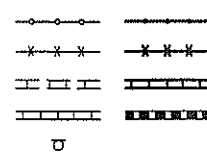
WATER FITTINGS

CAPS AND PLUGS
ELBOW
CROSS
TEE



MISCELLANEOUS

CHAINLINK FENCE
FIELD FENCE
COMMON YARD WALL
RETAINING WALL
POWER OR TELEPHONE POLE

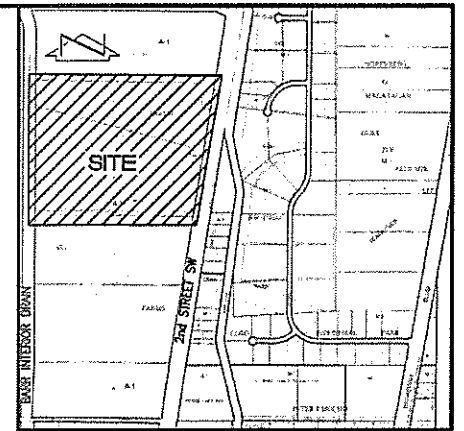


CONSTRUCTION PLANS for VALLE DE ORO WATER LINE EXTENSION

7851 2nd ST. S.W.

ALBUQUERQUE, NEW MEXICO 87105

JANUARY, 2020



VICINITY MAP

S-13

GENERAL NOTES:

- ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER CONTRACT SHALL, EXCEPT AS OTHERWISE STATED OR APPROVED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS-PUBLIC WORKS CONSTRUCTION-1908-UPDATE NO. 9.
- TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM, 811, FOR DESIGNATION (LINE-SPOTTING) OF EXISTING PUBLIC UTILITIES.
- UTILITY INFORMATION SHOWN HEREON IS BASED UPON ON-SITE SURFACE EVIDENCE, REVIEW OF AVAILABLE AECOM AND CITY OF ALBUQUERQUE RECORD DRAWINGS AND DISTRIBUTION MAPS AND UTILITY LINE-SPOTS PROVIDED BY HIGH MESA CONSULTING GROUP (2019.003.1). IN ADDITION, UTILITY LINE-SPOTS WERE REQUESTED VIA THE NEW MEXICO ONE CALL SERVICE (NM811 TICKET NO. 19MY070214). UTILITY LINES SHOWN ON THIS DRAWING ARE SHOWN IN AN APPROXIMATE MANNER ONLY AND SUCH LINES MAY EXIST WHERE NONE ARE SHOWN. IF ANY SUCH EXISTING LINES ARE SHOWN, THE LOCATION IS BASED UPON INFORMATION PROVIDED BY THE OWNER OF SAID UTILITY AND THE INFORMATION MAY BE INCOMPLETE, OR MAY BE OBSOLETE BY THE TIME CONSTRUCTION COMMENCES. THE SURVEYOR HAS CONDUCTED ONLY PRELIMINARY INVESTIGATION OF THE LOCATION, DEPTH, SIZE OR TYPE OF EXISTING UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES. THIS INVESTIGATION IS NOT CONCLUSIVE, AND MAY NOT BE COMPLETE, THEREFORE, MAKES NO REPRESENTATION PERTAINING THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFOR. THE PROPERTY OWNER, DEVELOPER, OR CONTRACTOR SHALL INFORM ITSELF OF THE LOCATION OF ANY UTILITY LINE, PIPELINE, OR UNDERGROUND UTILITY LINE IN OR NEAR THE AREA OF THE WORK IN ADVANCE OF AND DURING EXCAVATION WORK. THE PROPERTY OWNER, DEVELOPER, OR CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY AND PRESERVE ANY AND ALL EXISTING UTILITIES, PIPELINES, AND UNDERGROUND UTILITY LINES. IN PLANNING AND CONDUCTING EXCAVATION, THE CONTRACTOR SHALL COMPLY WITH STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS, IF ANY, PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES.
- SHOULD A CONFLICT EXIST BETWEEN THESE PLANS AND ACTUAL FIELD CONDITIONS, THE CONTRACTOR SHALL PROMPTLY NOTIFY THE ENGINEER IN WRITING SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY FOR ALL PARTIES.
- THE CONTRACTOR SHALL MAINTAIN ACCESS TO ADJACENT PROPERTIES DURING CONSTRUCTION.
- ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING SAFETY AND HEALTH.
- ALL UTILITIES AND UTILITY SERVICE LINES SHALL BE INSTALLED PRIOR TO PAVING.
- BACKFILL COMPACTION SHALL BE ACCORDING TO SPECIFIED STREET USE OR PER COA STANDARD DRAWING 2465, WHICHEVER IS MORE STRINGENT.
- TACK COAT REQUIREMENTS SHALL BE DETERMINED DURING CONSTRUCTION BY THE PROJECT ENGINEER.
- SIDEWALKS AND WHEELCHAIR RAMPS WITHIN THE CURB RETURNS SHALL BE CONSTRUCTED WHEREVER A NEW CURB RETURN IS CONSTRUCTED.
- IF CURB IS DEEPER FOR A DRIVEPAD OR A HANDICAP RAMP, THE DRIVEPAD OR RAMP SHALL BE CONSTRUCTED PRIOR TO ACCEPTANCE OF THE CURB AND GUTTER.
- ALL STORM DRAINAGE FACILITIES SHALL BE COMPLETED PRIOR TO FINAL ACCEPTANCE.
- THE CONTRACTOR SHALL COORDINATE WITH THE WATER AUTHORITY SEVEN (7) DAYS IN ADVANCE OF PERFORMING WORK THAT WILL AFFECT THE PUBLIC WATER OR SANITARY SEWER INFRASTRUCTURE. WORK REQUIRING SHUTOFF OF FACILITIES DESIGNATED AS MASTER PLAN FACILITIES MUST BE COORDINATED WITH THE WATER AUTHORITY 14 DAYS IN ADVANCE OF PERFORMING SUCH WORK. ONLY WATER AUTHORITY CREWS ARE AUTHORIZED TO OPERATE PUBLIC VALVES. SHUTOFF REQUESTS MUST BE MADE ONLINE AT http://www.abqwa.org/Water_Shut_Off_and_Turn_On_Procedures.aspx.
- CONTRACTOR SHALL NOTIFY THE CITY SURVEYOR NOT LESS THAN SEVEN (7) DAYS PRIOR TO STARTING WORK IN ORDER THAT THE CITY SURVEYOR MAY TAKE NECESSARY MEASURES TO INSURE THE PRESERVATION OF SURVEY MONUMENTS. CONTRACTOR SHALL NOT DISTURB PERMANENT SURVEY MONUMENTS WITHOUT THE CONSENT OF THE CITY SURVEYOR AND SHALL NOTIFY THE CITY SURVEYOR AND BEAR THE EXPENSE OF REPLACING ANY THAT MAY BE DISTURBED WITHOUT PERMISSION. REPLACEMENT SHALL BE DONE ONLY BY THE CITY SURVEYOR. WHEN A CHANGE IS MADE IN THE FINISHED ELEVATION OF THE PAYMENT OF ANY ROADWAY IN WHICH A PERMANENT SURVEY MONUMENT IS LOCATED, CONTRACTOR SHALL, AT HIS OWN EXPENSE, ADJUST THE MONUMENT COVER TO THE NEW GRADE UNLESS OTHERWISE SPECIFIED. REFER TO SECTION 4.4 OF THE SPECIFICATIONS.
- SEVEN (7) WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION THE CONTRACTOR SHALL SUBMIT TO THE COUNTY AND AECOMIA CONSTRUCTION COORDINATION DIVISION A DETAILED CONSTRUCTION SCHEDULE. TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL OBTAIN A BARRICADE PERMIT FROM THE CONSTRUCTION COORDINATION DIVISION. CONTRACTOR SHALL NOTIFY BARRICADE ENGINEER (924-3400) PRIOR TO OCCUPYING AN INTERSECTION. CONTRACTOR MUST REFER TO SECTION 19 OF THE STANDARD SPECIFICATION FOR TRAFFIC CONTROL.
- TWO WEEKS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHOULD NOTIFY THE TRANSIT DEPARTMENT OF ANY IMPACT THE PROPOSED PROJECT WILL HAVE ON THE TRANSIT SYSTEM SUCH AS CAUSING DETOUR, OR CAUSE THE CLOSING OR RELOCATION OF A BUS STOP. THE CONTACT PERSON IS DOUGLAS GOLF, OFFICE PHONE 505-724-3137, CELL PHONE 505-286-0151, AND EMAIL DOUGLAS.GOLF@ABQ.GOV.
- ALL STREET STRIPING ALTERED OR DESTROYED SHALL BE REPLACED WITH PLASTIC REFLECTORIZED STRIPING BY CONTRACTOR TO EXISTING LOCATION OR AS INDICATED BY THIS PLAN SET.
- CAUTION: THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH SHALL REMAIN THE RESPONSIBILITY OF THE CONTRACTOR. ALL EXCAVATION, TRENCHING AND SHORING ACTIVITIES MUST BE CARRIED-OUT IN ACCORDANCE WITH OSHA 29 CFR 1926, SUBPART P-EXCAVATIONS.
- ANY WORK OCCURRING WITHIN AN ARTERIAL ROADWAY MAY REQUIRE TWENTY-FOUR HOUR CONSTRUCTION.
- CONTRACTOR SHALL MAINTAIN A GRAFFITI-FREE WORK SITE. CONTRACTOR SHALL PROMPTLY REMOVE ANY AND ALL GRAFFITI FROM EQUIPMENT, WHETHER PERMANENT OR TEMPORARY.
- WHEN APPLICABLE, CONTRACTOR SHALL, ON BEHALF OF THE OWNER AND OPERATORS, SECURE "TOPSOIL DISTURBANCE PERMIT" FROM THE CITY AND/OR FILE A NOTICE OF INTENT (N.O.I.) WITH THE EPA PRIOR TO BEGINNING CONSTRUCTION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING ALL CONSTRUCTION SIGNING UNTIL THE PROJECT HAS BEEN ACCEPTED BY THE CITY OF ALBUQUERQUE.
- ALL FILL SHALL BE CLEAN, FREE FROM VEGETATION, DEBRIS, AND OTHER DELETERIOUS MATERIALS, AND SHALL NOT BE CONTAMINATED WITH HYDROCARBONS OR OTHER CHEMICAL CONTAMINANTS.
- CONTRACTOR SHALL REFER TO GEOTECHNICAL REPORT FOR EARTHWORK REQUIREMENTS, AS APPLICABLE.
- CONTRACTOR SHALL TEST ASPHALT PAVEMENT SUBGRADE R-VALUE PRIOR TO CONSTRUCTION. IN THE EVENT THE R-VALUE IS LESS THAN 50, CONTRACTOR SHALL REMOVE 2 FT. OF SUBGRADE MATERIAL AND IMPORT SUITABLE MATERIAL WITH R-VALUE 50 OR GREATER.
- THE CONTRACTOR SHALL CONTACT BERNALILLO COUNTY TRAFFIC ENGINEER BEFORE REMOVING AND/OR INSTALLING ANY TRAFFIC SIGNS OR PERMANENT STRIPING AND MARKINGS. ALL STRIPING PAVEMENT MARKINGS INCLUDING CROSSWALKS, LEGENDS AND SYMBOLS ARE TO BE CONSTRUCTED OF PREFORMED RETRO REFLECTORIZED NOT APPLIED THERMOPLASTIC. ALL SIGNS SHALL COMPLY WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) LATEST EDITION. ANY PAVEMENT MARKINGS AND SIGNS REMOVED OR DAMAGED DURING CONSTRUCTION SHALL BE REPLACED AT EXISTING LOCATIONS SUCH WORK SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION OF THE PROJECT.

INDEX OF DRAWINGS

SHEET	DESCRIPTION
1	COVER SHEET, VICINITY MAP, GENERAL NOTES, LEGEND AND INDEX OF DRAWINGS
2	PLAT
3	OVERALL SITE PLAN AND SHUT-OFF PLAN
4	PLAN AND PROFILE - STA 10+00.00 TO STA 14+50.00
5	PLAN AND PROFILE - STA 14+50.00 TO STA 19+00.00
6	PLAN AND PROFILE - STA 19+00.00 TO STA 23+70.00
7	PLAN AND PROFILE - STA 23+70.00 TO STA 28+40.00
8	PLAN AND PROFILE - STA 28+40.00 TO STA 32+90.00
9	PLAN AND PROFILE - STA 32+90.00 TO STA 37+40.00
10	PLAN AND PROFILE - STA 37+40.00 TO STA 42+10.00
11	PLAN AND PROFILE - STA 42+10.00 TO STA 46+70.00
12	PLAN AND PROFILE - STA 46+70.00 TO STA 51+30.00
13	PLAN AND PROFILE - STA 51+30.00 TO STA 55+22.86
14	STREET NAME SIGN DETAILS
15	SIGNING & CONSTRUCTION TRAFFIC CONTROL STANDARDS

EXERCISE OF PROFESSIONAL RESPONSIBILITY
I, GRAEME MEYER, a duly qualified and licensed professional engineer, under the laws of the State of New Mexico, do hereby certify that the "AS-BUILT" INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED FROM FIELD CONSTRUCTION AND "AS-BUILT" SURVEYS PERFORMED BY ME OR UNDER MY SUPERVISION THAT THE "AS-BUILT" INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED BY ME OR UNDER MY SUPERVISION AND THAT THIS "AS-BUILT" INFORMATION IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. I AM NOT RESPONSIBLE FOR ANY OTHER ERRORS, OMISSIONS, CALCULATIONS, ENGINEERING, OR CONTENT OF THESE DRAWINGS.

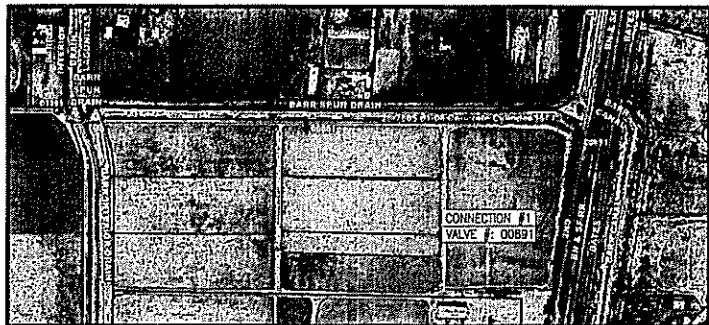
SANITARIO SURVEYING LLC
11 CANA STREET
ALBUQUERQUE, NM 87102
(505) 241-4115

5-20-2021
R.E.V.1560-6
5-16-2021

2019.003.4

HIGH MESA Consulting Group
Professional Engineers & Surveyors - City of Albuquerque
6010-B Midway Park Blvd. NE • Albuquerque, New Mexico 87109
Phone: 505.345.4254 • Fax: 505.345.4254 • www.highmesacg.com

REV.	1, 3, 8-13	ABQWA / COUNTY REVIEW	03/2020	DATE	USER	DEPARTMENT	DATE	
ENGINEERS STAMP & SIGNATURE	CITY ENGINEER	APPROVALS	ENGINEER	DATE	*****			
	BRC Chairman	Transportation	Water/Wastewater	Hydrology	CLP	Const. Mgmt.	Const. Coord.	
	APPROVED FOR CONSTRUCTION						B.C.P.W.D.	DATE
	ABCWUA						DATE	
	City Project No. 579580						SHEET 1 OF 15	
PWCO 2019-0089								



WATER VALVE SHUT-OFF PLAN

WS-13

NOT TO SCALE

WATER VALVE SHUTOFF PLAN NOTES:

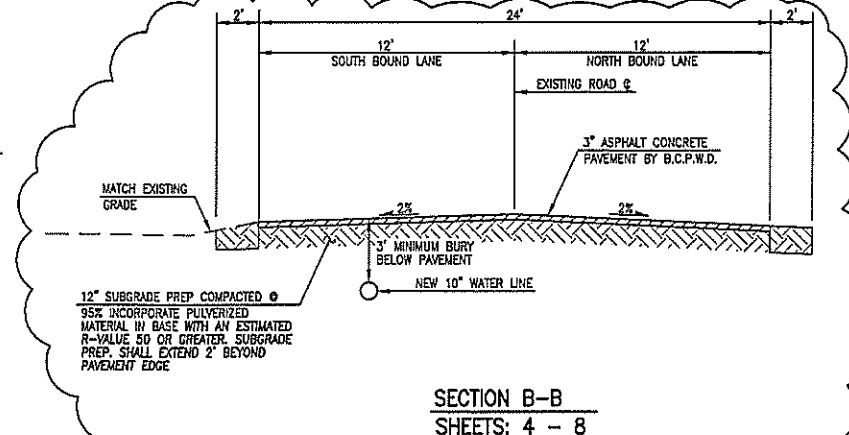
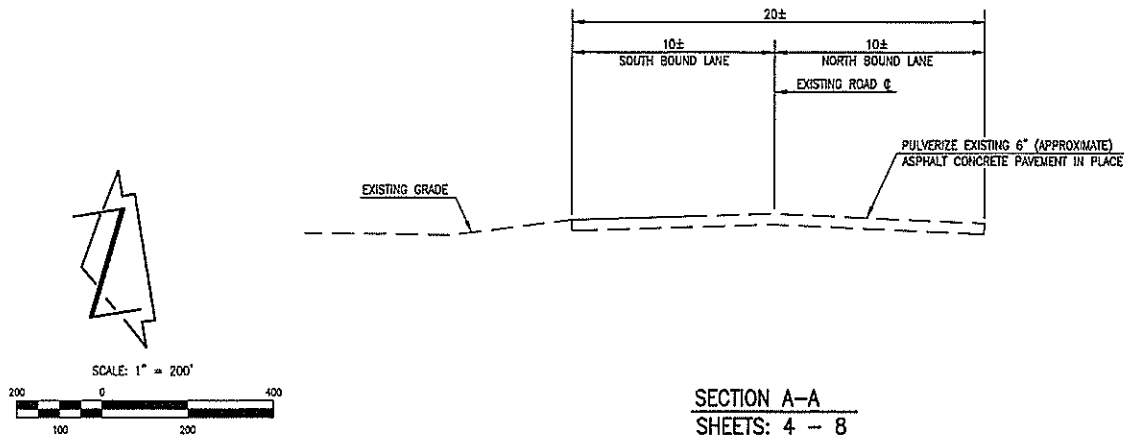
1. THE FOLLOWING VALVE CAN BE CLOSED TO ISOLATE THE PROPOSED NON-PRESSURE CONNECTIONS:
• CONNECTION #1; VALVE # 00891
2. WATER AUTHORITY PERSONNEL SHALL PERFORM ALL SHUTOFFS. THE CONTRACTOR SHALL NOT OPERATE ANY VALVES THAT MAY AFFECT SYSTEM OPERATIONS.
3. THE CONTRACTOR SHALL COORDINATE WITH THE WATER AUTHORITY SEVEN (7) DAYS IN ADVANCE OF PERFORMING WORK THAT WILL AFFECT THE PUBLIC WATER INFRASTRUCTURE. WORK REQUIRING SHUTOFF OF FACILITIES DESIGNATED AS MASTER PLAN FACILITIES MUST BE COORDINATED WITH THE WATER AUTHORITY 14 DAYS IN ADVANCE OF PERFORMING SUCH WORK. ONLY WATER AUTHORITY CREWS ARE AUTHORIZED TO OPERATE PUBLIC VALVES. SHUTOFF REQUESTS MUST BE MADE ONLINE AT http://www.abqwater.org/Water_Shut-off_and_Turn-on_Procedures.aspx
4. WITHIN FIVE (5) DAYS AFTER RECEIPT OF CONTRACTOR'S SHUTOFF REQUEST, TRIAL SHUTOFFS WILL BE CONDUCTED. THE WATER AUTHORITY TO FURNISH LABOR AND APPURTENANCES NECESSARY TO VERIFY COMPLETENESS OF SHUTOFFS.
5. THE CONTRACTOR SHALL HAVE ALL FITTINGS, MATERIALS AND EQUIPMENT ON SITE PRIOR TO VALVE SHUTOFF. ALL EXCAVATION SHALL BE COMPLETE EXCEPT AS NECESSARY TO MAINTAIN SAFE SYSTEM OPERATION WHILE UNDER PRESSURE.
6. THE CONTRACTOR SHALL PROVIDE ALL RESTRAINTS AND THRUST BLOCKS NECESSARY TO EFFECT ALL NECESSARY SHUTOFFS AND CONNECTIONS.
7. AT THE TIME OF WATER SHUTOFF APPLICATION, THE CONTRACTOR SHALL REQUEST THAT THE WATER AUTHORITY NOTIFY ALL AFFECTED PROPERTY OWNERS AT LEAST TWENTY-FOUR (24) HOURS IN ADVANCE OF THE RESPECTIVE SHUTOFFS. ALL VALVES REFERENCED ABOVE, ALSO SHOWN ON SITE PLAN AT LEFT AT A LARGER SCALE FOR CLARITY.

EASEMENT KEYED NOTES

1. 10' PNM AND USTAT EASEMENT GRANTED BY THE DOCUMENT FILED 02-18-1954, BOOK D 270, PAGE 311, DOC# 13625 (ANCHOR EASEMENTS ARE 2' WIDE)
2. 10' PNM AND USTAT EASEMENT GRANTED BY DOCUMENT FILED 02-07-1958, BOOK D 413, PAGE 471, DOC# 53880 (ANCHOR EASEMENTS ARE 2' WIDE)
3. 10'/15' SOUTHERN UNION GAS COMPANY EASEMENT GRANTED BY DOCUMENT FILED 04-29-1966, BOOK R/W 143, PAGE 465, DOC# 5814 AND MODIFIED BY DOCUMENT FILED 04-21-1983, BOOK MISC. 8-A, PAGE 398, DOC# 1983024571
4. 7' PNM AND M&T EASEMENT GRANTED BY THE DOCUMENT FILED 05-27-1982, BOOK MISC. 933, PAGE 874, DOC# 1982027977
5. 10' PNM AND M&T EASEMENT GRANTED BY THE DOCUMENT FILED 05-12-1983, BOOK MISC. 14-A, PAGE 273, DOC# 1983030092
6. 10' PNM OVERHEAD EASEMENT GRANTED BY THE DOCUMENT FILED 06-22-2006, BOOK A119, PAGE 1858, DOC# 2006092116 (APPROXIMATE LOCATION)
7. 30' PUBLIC WATER LINE AND PUBLIC SEWER LINE EASEMENT GRANTED BY PLAT FILED 03-26-2012, PLAT BOOK 2012C, PAGE 38, DOC. #2012030059
8. APPROXIMATE 54' PRIVATE ACCESS EASEMENT GRANTED BY PLAT FILED 03-26-2012, PLAT BOOK 2012C, PAGE 38, DOC. #2012030059 (PRICE'S WAY)
9. 30' PUBLIC WATER LINE EASEMENT GRANTED BY DOCUMENT FILED 04-12-2006, BOOK A115, PAGE 1753, DOC# 2006051918, AND ALSO GRANTED BY DOCUMENT FILED 10-05-2006, BOOK A125, PAGE 1561, DOC# 2006151963

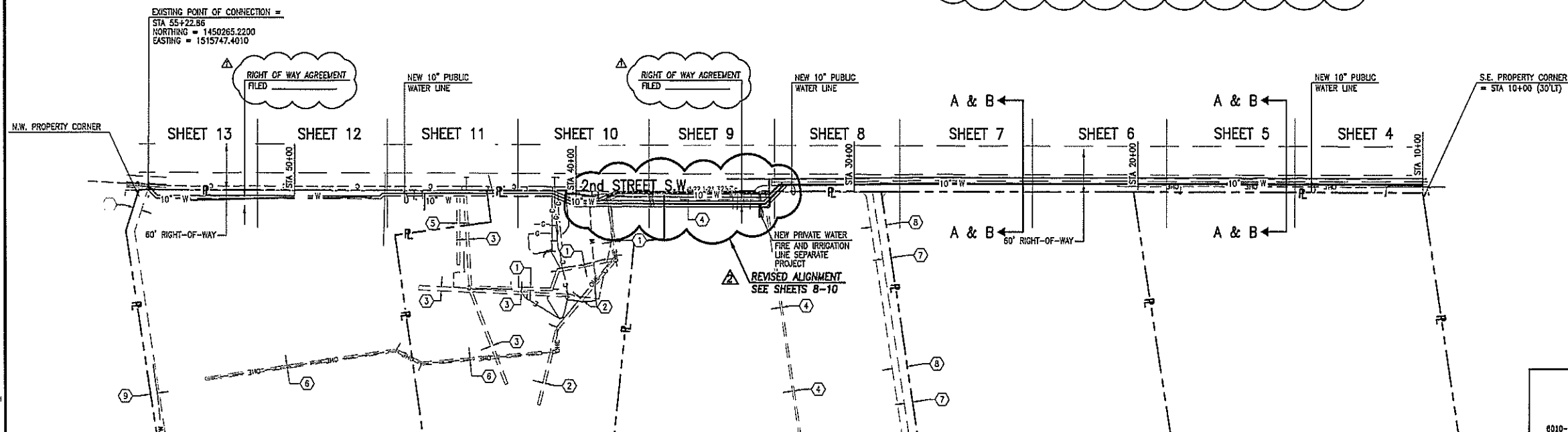
EASEMENT KEYED NOTES

- AGO AUTOMATIC GATE OPERATOR
BW BARBED WIRE FENCE
C/C COMMUNICATION CONDUIT
CUP CORRUGATED METAL PIPE
CVR COMMUNICATION RISER
CONC CONCRETE
DCO DOUBLE CLEANOUT
DYS PAINTED DOUBLE YELLOW TRAFFIC STRIPE
DYSP PAINTED DASHED YELLOW TRAFFIC STRIPE
E/ ASPHALT
ECB ELECTRIC CABINET
ECND ELECTRIC CONDUIT
EDC ELECTRIC DISCONNECT SWITCH
EJB ELECTRIC JUNCTION BOX
EM ELECTRIC METER
UNKC UNKNOWN CONDUIT
EO ELECTRIC OUTLET
CLM PERMANENT GAS LINE MARKER
GR GUARD RAIL-3 STEEL CABLES
GRV GRAVE
GS GAS SERVICE
GSN VEHICLE SENSOR AT GATE
GW GUY WIRE ANCHOR
INV PIPE INVERT
MF METAL FENCE
MTS METAL SIGN-GENERAL
OHC(2) OVERHEAD COMMUNICATION (# OF LINES)
OHE(4) OVERHEAD ELECTRIC (# OF LINES)
PVC POLYVINYL CHLORIDE PIPE
RCP REINFORCED CONCRETE PIPE
SGT SLIDING GATE
SPT/G SEPTIC TANK ABOVE GROUND
ST STEEL PIPE
STC SEPTIC TANK COVER
STP GATE STOP POST
SWS PAINTED SOLID WHITE TRAFFIC STRIPE
SYS PAINTED SOLID YELLOW TRAFFIC STRIPE
TCO TOP OF CONCRETE
TP TOP OF PIPE
TRN ELECTRIC TRANSFORMER
TS TRAFFIC SIGN
TW TOP OF WALL
WC WELL CASING/LID
WDF WOOD FENCE
WF OUTDOOR WATER FAUCET
WGP WOOD GUARD POST
WLE WATER LINE EXPOSED
WMB WATER METER BOX
WP WOOD POLE
WPP WOOD POWER POLE
WV WATER VAULT
SND SMALL DECIDUOUS TREE
- G--- COMMUNICATION LINE BY PAINT MARK
---G--- GAS LINE BY PAINT MARK
---OHE--- OVERHEAD ELECTRIC LINE
---E--- ELECTRIC LINE BY PAINT MARK
---SAS--- SANITARY SEWER BY PAINT MARK
---SD--- STORM DRAIN BY PAINT MARK
---W--- WATER LINE BY PAINT MARK



STA 10+00 TO STA 32+70± - 2nd ST. REPLACEMENT SECTION
SCALE: 1" = 4'

STA 10+00 TO STA 32+70± - 2nd ST. REPLACEMENT SECTION
SCALE: 1" = 4'



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THE BOUNDARY INFORMATION DEPICTED BY THIS PLAN IS BASED UPON "RECORD PLATS." THE TOPOGRAPHIC INFORMATION DEPICTED HEREON IS BASED UPON THE DIGITAL ORTHOPHOTO, SUPPLEMENTAL TOPOGRAPHIC AND UTILITY SURVEY PREPARED BY HIGH MESA CONSULTING GROUP, NUPS NO. 11184, DATED 05/24/2019. (2019.003.2).

HIGH MESA Consulting Group
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Phone: 505.345.4250 • Fax: 505.345.4254 • www.highmesaeng.com

2019.003.45

ALBUQUERQUE BERNALILLO COUNTY
WATER UTILITY AUTHORITY

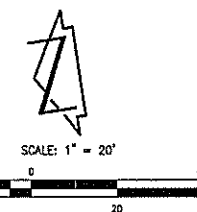
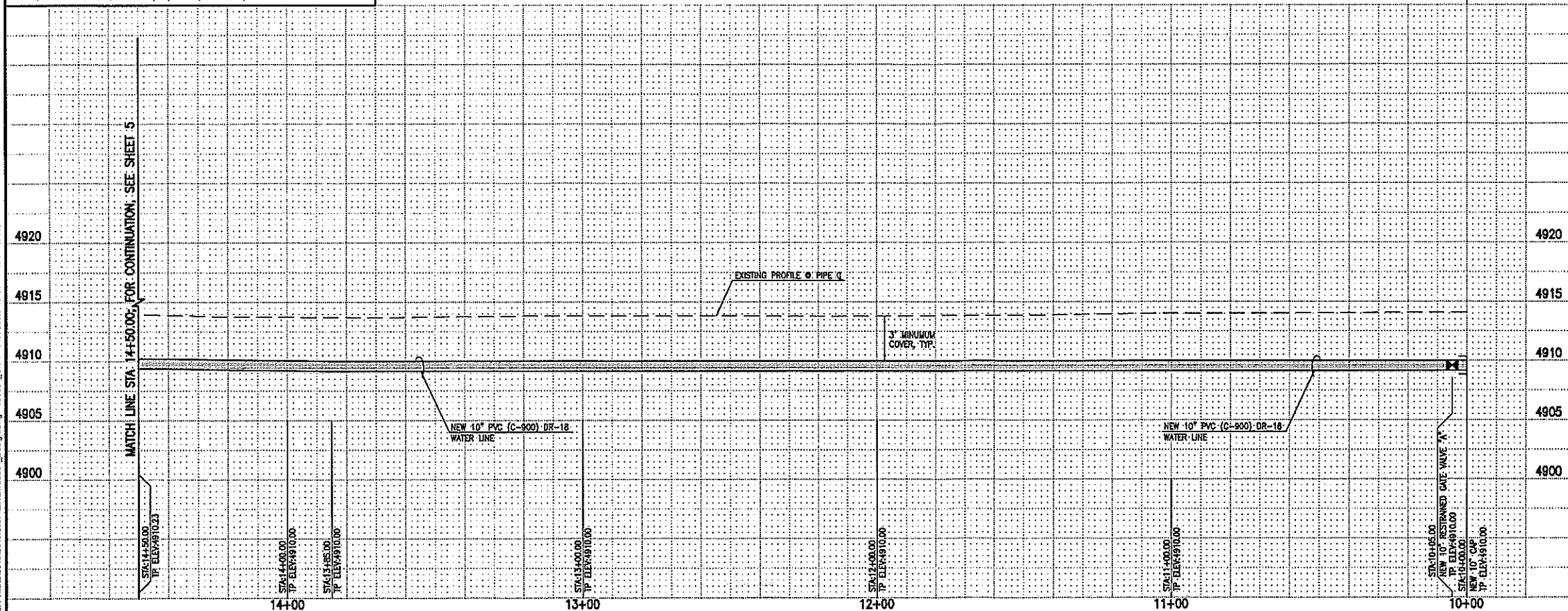
TITLE: VALLE DE ORO
WATER LINE EXTENSION - PLAN AND PROFILE
OVERALL SITE PLAN

Design Review Committee	City Engineer Approval	Load Design Update	
City Project No. 579580	Zone Map No. S-13	Sheet 3 of 15	
PWCO 2019-0089			

MATCH LINE STA 14+50.00; FOR CONTINUATION, SEE SHEET 5

MATCH LINE STA 14+50.00; FOR CONTINUATION, SEE SHEET 5

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- WATER LINE CONSTRUCTION NOTES:**
- ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER CONTRACT SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS-PUBLIC WORKS CONSTRUCTION-1986-UPDATE NO.9.
 - ALL STATIONING IS BASED ON THE WATER LINE CENTERLINE UNLESS INDICATED OTHERWISE.
 - PROPOSED WATER LINE MATERIALS SHALL BE PVC PIPE, MEETING AWWA C-900: DR18 REQUIREMENTS (6'-12") OR DUCTILE IRON PIPE MEETING AWWA C-150 REQUIREMENTS (8'-48"). WATER SERVICE PIPE MATERIAL SHALL BE COPPER OR MUNGIPER.
 - ALL MATERIALS USED SHALL CONFORM WITH THE MATERIALS PRESENT ON THE "AWWA APPROVED PRODUCTS LIST, LATEST EDITION".
 - ELECTRONIC MARKER DEVICES (EMD) SHALL BE INSTALLED IN ACCORDANCE WITH THE STANDARD SPECIFICATION, SECTION 170.
 - WATER LINE SHALL HAVE A MINIMUM COVER OF 3'-0" (FINISHED GRADE TO TOP OF PIPE). EXTRA DEPTH TRENCHING, IF REQUIRED, SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION, THEREFORE, NO SEPARATE PAYMENT WILL BE MADE.
 - IN ACCORDANCE WITH SECTION 601 OF THE "STANDARD SPECIFICATIONS", METALLIZED DETECTABLE WARNING TAPE SHALL BE INSTALLED 18" ABOVE ALL PVC PIPE INSTALLED ON THIS PROJECT.
 - JOINT RESTRAINT SHALL BE PROVIDED ON ALL JOINTS OF FIRE LINES.
 - FOR THE PURPOSES OF THIS PROJECT, ALL RESTRAINED JOINTS AND JOINT RESTRAINT SHALL BE MECHANICALLY RESTRAINED JOINT RESTRAINT LENGTHS SPECIFIED HEREON (L_R) ARE THE LENGTHS TO BE RESTRAINED EACH SIDE OF THE FITTING.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR SELECTING APPROPRIATE MEANS AND METHODS TO EXCAVATE AND TRENCH AND INSTALL PIPE SO AS TO NOT EXCEED RIGHT-OF-WAY OR EASEMENT LIMITS, AND SO AS NOT TO INTERFERE WITH OTHER UTILITIES. THIS SHALL BE CONSIDERED INCIDENTAL TO TRENCHING, THEREFORE, NO SEPARATE PAYMENT WILL BE MADE.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING, SUPPORTING AND REPLACING, IF DAMAGED, ALL OTHER UTILITIES ENCOUNTERED DURING CONSTRUCTION. THIS SHALL BE CONSIDERED INCIDENTAL TO TRENCHING, THEREFORE, NO SEPARATE PAYMENT WILL BE MADE.
 - NEW WATER LINE INSTALLATIONS SHALL INCLUDE INSULATED 12 GAUGE COPPER TRACER WIRE AND RELATED ACCESS PORTS AND TERMINAL ANODES. TRACER WIRE IS TO BE INSTALLED CONTINUOUSLY ALONG THE PIPE WITH WATER-PROOF SPLICE BOXES AT JUNCTIONS AND TEES. IN ACCORDANCE WITH AWWA STD DWG 2202, TRACER WIRE INSTALLATION SHALL BE CONSIDERED INCIDENTAL TO TRENCHING, THEREFORE, NO SEPARATE PAYMENT WILL BE MADE. TRACER WIRE PORTS AND TERMINALS SHALL BE VERIFIED IN FIELD WITH AWWA INSPECTOR AND ENGINEER PRIOR TO INSTALLATION.

- UTILITY LEGEND**
- C— COMMUNICATION LINE BY PAINT MARK
 - G— GAS LINE BY PAINT MARK
 - OHE— OVERHEAD ELECTRIC LINE
 - E— ELECTRIC LINE BY PAINT MARK
 - SAS— SANITARY SEWER BY PAINT MARK
 - SD— STORM DRAIN BY PAINT MARK
 - W— WATER LINE BY PAINT MARK
 - X— EXISTING FIRE HYDRANT
 - V— EXISTING VALVE BOX
 - P— PROPOSED FIRE HYDRANT
 - F— FIRE DEPARTMENT CONNECTION
 - V— PROPOSED VALVE BOX
 - P— PROPOSED WATER CAP
 - F— EXISTING FIRE LINE
 - F— PROPOSED FIRE LINE
 - P— EXISTING POST INDICATOR VALVE
 - P— PROPOSED POST INDICATOR VALVE
 - D— EXISTING WATER SERVICE
 - D— PROPOSED WATER SERVICE
 - W— EXISTING WATER LINE
 - W— PROPOSED WATER LINE

WATER LINE AND FIRE HYDRANT GIS DATA

ITEM	LOCATION	NAD'83 GRID COORDINATES (US SURVEY FEET)		
		NORTHING	EASTING	ELEVATION
VALVE				
"A"	STA 10+05.00	1445369.71	15174576.74	4912.04

2019.003.4

ALBUQUERQUE BERNALILLO COUNTY
WATER UTILITY AUTHORITY

TITLE: VALLE DE ORO
WATER LINE EXTENSION - PLAN AND PROFILE
STA 10+00.00 TO STA 14+50.00

Design Review Committee	City Engineer Approval
Lead Design Update	

City Project No. 579580
PWCO 2019-0089

Zone Map No. S-13

Sheet 4 of 15

AS BUILT INFORMATION

CONTRACTOR	DATE
7-8-20	

BENCH MARKS

CONTRIBUTOR	DATE
5-5	

AS BUILT INFORMATION

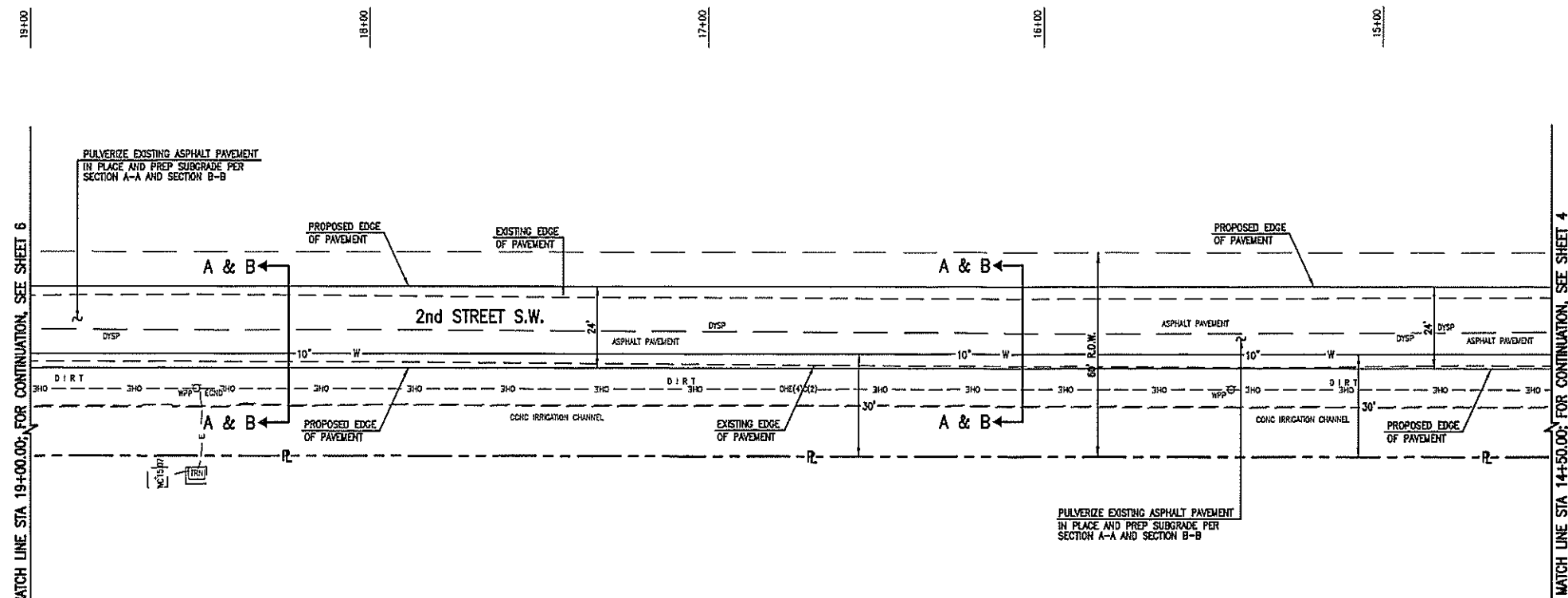
CONTRIBUTOR	DATE
5-5	

ENGINEER'S SEAL

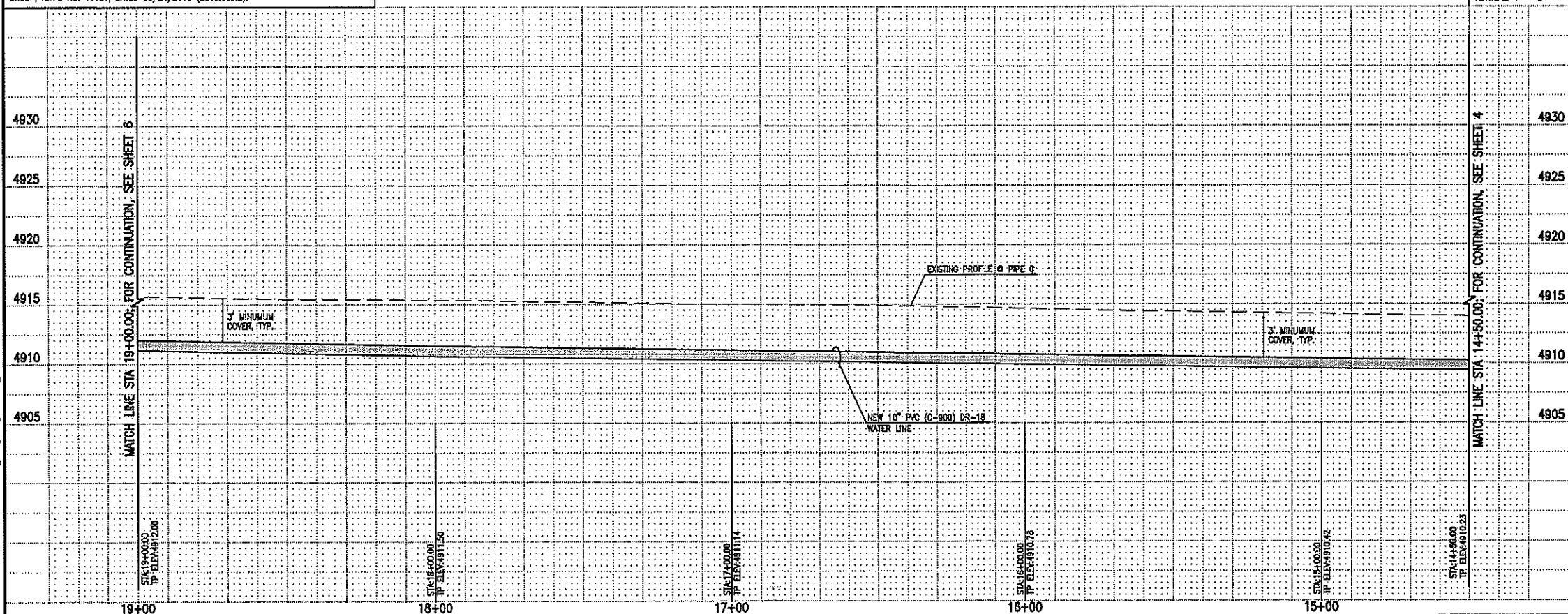
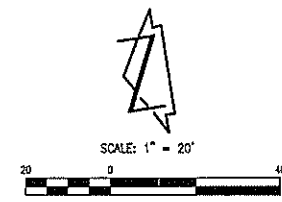
10-10-2020

REVISIONS

NO.	DATE	BY	REMARKS
1	01-2020	R.L.C.	DESIGN
2	01-2020	J.V.R.	
3	01-2020	G.H.	



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ELEVATIONS ARE IN NAVD 1988

- WATER LINE CONSTRUCTION NOTES:**

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7. IN ACCORDANCE WITH SECTION 801 OF THE "STANDARD SPECIFICATIONS", METALIZED DETECTABLE WARNING TAPE SHALL BE INSTALLED 18" ABOVE ALL PVC PIPE INSTALLED ON THIS PROJECT.
8. JOINT RESTRAINT SHALL BE PROVIDED ON ALL JOINTS OF FIRE LINES.
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UTILITY LEGEND

- | | |
|---|----------------------------------|
| ---C--- | COMMUNICATION LINE BY PAINT MARK |
| ---G--- | Gas LINE BY PAINT MARK |
| ---OHE--- | OVERHEAD ELECTRIC LINE |
| ---E--- | ELECTRIC LINE BY PAINT MARK |
| ---SS--- | SANITARY SEWER BY PAINT MARK |
| ---SD--- | STORM DRAIN BY PAINT MARK |
| ---W--- | WATER LINE BY PAINT MARK |
|  | EXISTING FIRE HYDRANT |
|  | EXISTING VALVE BOX |
|  | PROPOSED FIRE HYDRANT |
|  | FIRE DEPARTMENT CONNECTION |
|  | PROPOSED VALVE BOX |
|  | PROPOSED WATER CAP |
| ---F---P--- | EXISTING FIRE LINE |
| ---F--- | PROPOSED FIRE LINE |
| ---D-B--- | EXISTING POST INDICATOR VALVE |
|  | PROPOSED POST INDICATOR VALVE |
| ---O---D--- | EXISTING WATER SERVICE |
|  | PROPOSED WATER SERVICE |
| ---W---W--- | EXISTING WATER LINE |
| ---W--- | PROPOSED WATER LINE |

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2019.003.4

ALBUQUERQUE BERNALILLO COUNTY
WATER UTILITY AUTHORITY

TITLE: VALLE DE ORO
WATER LINE EXTENSION -- PLAN AND PROFILE
STA 14+50.00 TO STA 19+00.00

Design Review Committee	City Engineer Approval
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City Project No. 579580	Zone No.
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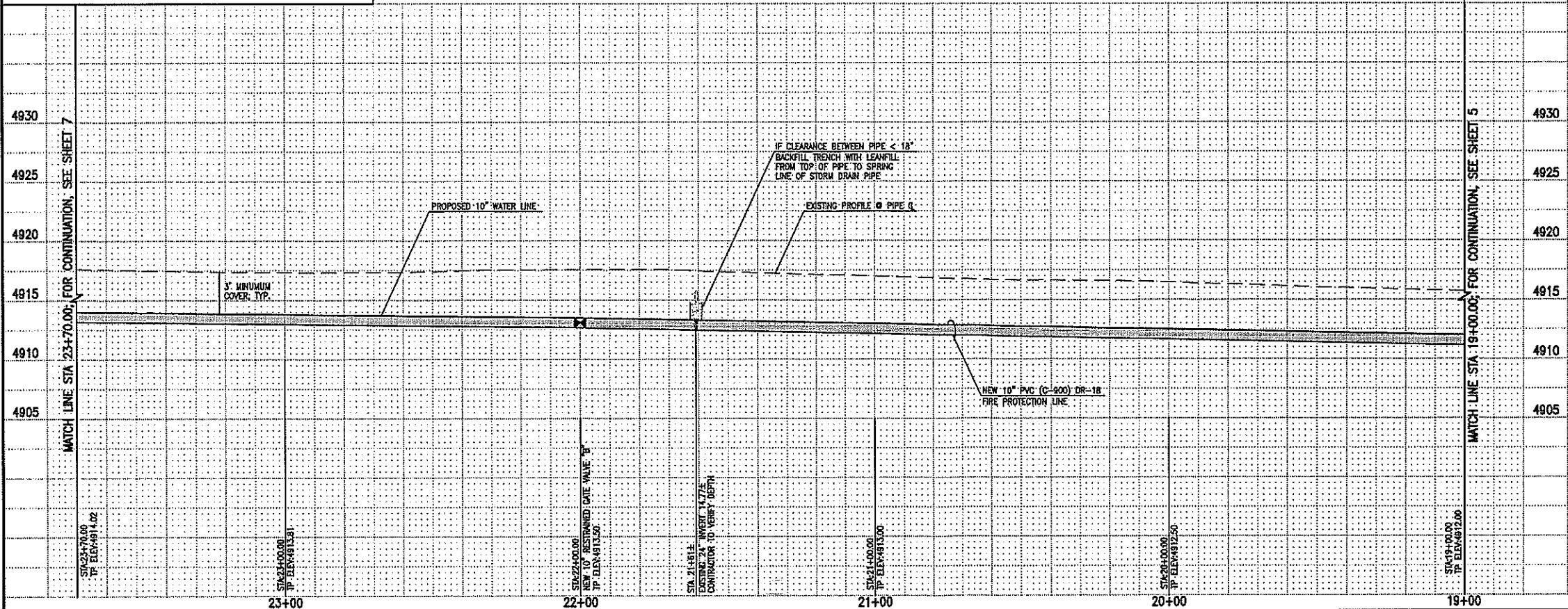
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Zone Map No.	Sheet	of
S-13	5	15

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MATCH LINE STA 23+70.00; FOR CONTINUATION, SEE SHEET 7

NOTE:
THIS IS NOT A BOUNDARY SURVEY OR A RIGHT-OF-WAY SURVEY. APPARENT PROPERTY CORNERS, RIGHT-OF-WAY LINES, OR PROPERTY LINES AS SHOWN ARE DERIVED FROM RECORD SURVEY PLATS, RIGHT-OF-WAY MAPS, OR DEEDS REFERENCED HEREON AND ARE NOT GUARANTEED OR TO BE RELIED ON FOR THE ESTABLISHMENT OF PROPERTY LINES. THE BOUNDARY INFORMATION DEPICTED BY THIS PLAN IS BASED UPON RECORD PLATS. THE TOPOGRAPHIC INFORMATION DEPICTED HEREON IS BASED UPON THE DIGITAL ORTHOPHOTO, SUPPLEMENTAL TOPOGRAPHIC AND UTILITY SURVEY PREPARED BY HIGH MESA CONSULTING GROUP, NMPS NO. 11184, DATED 05/24/2019 (2019.003.2).



ELEVATIONS ARE IN NAVD 1988

WATER LINE CONSTRUCTION NOTES:

- ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER CONTRACT SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS-PUBLIC WORKS CONSTRUCTION-1986-UPDATE NO.9.
- ALL STATIONING IS BASED ON THE WATER LINE CENTERLINE UNLESS INDICATED OTHERWISE.
- PROPOSED WATER LINE MATERIALS SHALL BE PVC PIPE, MEETING AWWA C-900; DR18 REQUIREMENTS (6"-12") OR DUCTILE IRON PIPE MEETING AWWA C-150 REQUIREMENTS (6"-48"). WATER SERVICE PIPE MATERIAL SHALL BE COPPER OR MUNCIE.
- ALL MATERIALS USED SHALL CONFORM WITH THE MATERIALS PRESENT ON THE "ABQMA APPROVED PRODUCTS LIST, LATEST EDITION".
- ELECTRONIC MARKER DEVICES (EMD) SHALL BE INSTALLED IN ACCORDANCE WITH THE STANDARD SPECIFICATION, SECTION 170.
- WATER LINE SHALL HAVE A MINIMUM COVER OF 3'-0" (FINISHED GRADE TO TOP OF PIPE). EXTRA DEPTH TRENCHING, IF REQUIRED, SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION, THEREFORE, NO SEPARATE PAYMENT WILL BE MADE.
- IN ACCORDANCE WITH SECTION 801 OF THE "STANDARD SPECIFICATIONS", METALIZED DETECTABLE WARNING TAPE SHALL BE INSTALLED 18" ABOVE ALL PVC PIPE INSTALLED ON THIS PROJECT.
- JOINT RESTRAINT SHALL BE PROVIDED ON ALL JOINTS OF FIRE LINES.
- FOR THE PURPOSES OF THIS PROJECT, ALL RESTRAINED JOINTS AND JOINT RESTRAINT SHALL BE MECHANICALLY RESTRAINED. JOINT RESTRAINT LENGTHS SPECIFIED HEREON (L_R) ARE THE LENGTHS TO BE RESTRAINED EACH SIDE OF THE FITTING.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR SELECTING APPROPRIATE MEANS AND METHODS TO EXCAVATE AND TRENCH AND INSTALL PIPE SO AS TO NOT EXCEED RIGHT-OF-WAY OR EASEMENT LIMITS, AND SO AS NOT TO INTERFERE WITH OTHER UTILITIES. THIS SHALL BE CONSIDERED INCIDENTAL TO TRENCHING, THEREFORE, NO SEPARATE PAYMENT WILL BE MADE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING, SUPPORTING AND REPLACING, IF DAMAGED, ALL OTHER UTILITIES ENCOUNTERED DURING CONSTRUCTION. THIS SHALL BE CONSIDERED INCIDENTAL TO TRENCHING, THEREFORE, NO SEPARATE PAYMENT WILL BE MADE.
- NEW WATER LINE INSTALLATIONS SHALL INCLUDE INSULATED 12 GAUGE COPPER TRACER WIRE AND RELATED ACCESS PORTS AND TERMINAL ANODES. TRACER WIRE IS TO BE INSTALLED CONTINUOUSLY ALONG THE PIPE WITH WATER-PROOF SPLICE BOXES AT JUNCTIONS AND TEES. IN ACCORDANCE WITH ABQMA STD DWG 2302, TRACER WIRE INSTALLATION SHALL BE CONSIDERED INCIDENTAL TO TRENCHING, THEREFORE, NO SEPARATE PAYMENT WILL BE MADE. TRACER WIRE PORTS AND TERMINALS SHALL BE VERIFIED IN FIELD WITH ABQMA INSPECTOR AND ENGINEER PRIOR TO INSTALLATION.
- AT UTILITY CROSSINGS, WHERE LESS THAN 18" OF VERTICAL SEPARATION FROM STORM DRAIN PIPING OR STRUCTURES IS PROPOSED, LEAN FILL CONSTRUCTION (PER SECTION 207 OF THE STANDARD SPECIFICATIONS) SHALL BE USED TO PROTECT THE WATER OR SEWER LINE. LEAN FILL SHALL EXTEND A PERPENDICULAR DISTANCE OF 5 FEET ON EACH SIDE OF THE STORM PIPE OR STRUCTURE.

UTILITY LEGEND

- C--- COMMUNICATION LINE BY PAINT MARK
- G--- GAS LINE BY PAINT MARK
- OHE--- OVERHEAD ELECTRIC LINE
- E--- ELECTRIC LINE BY PAINT MARK
- SAS--- SANITARY SEWER BY PAINT MARK
- SD--- STORM DRAIN BY PAINT MARK
- W--- WATER LINE BY PAINT MARK
- EXISTING FIRE HYDRANT
- EXISTING VALVE BOX
- PROPOSED FIRE HYDRANT
- FIRE DEPARTMENT CONNECTION
- PROPOSED VALVE BOX
- PROPOSED WATER CAP
- F-P--- EXISTING FIRE LINE
- F-P--- PROPOSED FIRE LINE
- P-I-V--- EXISTING POST INDICATOR VALVE
- P-I-V--- PROPOSED POST INDICATOR VALVE
- W-S--- EXISTING WATER SERVICE
- W-S--- PROPOSED WATER SERVICE
- W--- EXISTING WATER LINE
- W--- PROPOSED WATER LINE

WATER LINE AND FIRE HYDRANT GIS DATA

ITEM	LOCATION	NAD' 83 GRID COORDINATES (US SURVEY FEET)
VALVE		NORTHING EASTING ELEVATION
"B"	STA 22+00.00	1446570.24 1514768.67 4914.47

HIGH MESA Consulting Group
Engineers, Surveyors & Planners
6010-B Midway Park Blvd., NE • Albuquerque, New Mexico 87109
Phone: 505.345.4250 • Fax: 505.345.4254 • www.highmesacg.com

2019.003.4

ALBUQUERQUE BERNALILLO COUNTY
WATER UTILITY AUTHORITY

TITLE: VALLE DE ORO
WATER LINE EXTENSION - PLAN AND PROFILE
STA 19+00.00 TO 23+70.00

Design Review Committee City Engineer Approval

City Project No. 579580
PWCO 2019-0089

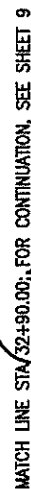
Zone Map No.

S-13

Sheet

6 of 15

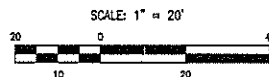
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DESIGNED BY SLS		DATE	
DRAWN BY		DATE	
CHECKED BY		DATE	
APPROVED BY		DATE	
REVISIONS		DATE	
NO. DATE		REVISIONS	
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MATCH LINE STA 28+40.00; FOR CONTINUATION, SEE SHEET 7

NOTE: THIS IS NOT A BOUNDARY SURVEY OR A RIGHT-OF-WAY SURVEY. APPARENT PROPERTY CORNERS, RIGHT-OF-WAY LINES, OR PROPERTY LINES AS SHOWN ARE DERIVED FROM RECORD SURVEY PLATS, RIGHT-OF-WAY MAPS, OR DEEDS REFERENCED HEREON AND ARE NOT GUARANTEED OR TO BE RELIED ON FOR THE ESTABLISHMENT OF PROPERTY LINES. THE BOUNDARY INFORMATION DEPICTED BY THIS PLAN IS BASED UPON RECORD PLATS, THE AERIAL PHOTOGRAPHIC INFORMATION DEPICTED HEREON, AND BASED UPON THE DIGITAL ORTHOPHOTO SUPPLEMENTAL TOPOGRAPHIC AND UTILITY SURVEY PREPARED BY HIGH MESA CONSULTING GROUP, NPMFS NO. 11184, DATED 05/24/2019 (2019.003.2).

10" WATER LINE



SCALE:
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'



00

2+0

2+0

31.

31.

30+

30+

9+00

9+00

Journal

Journal

WATER LINE CONSTRUCTION NOTES:

1. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER CONTRACT SHALL BE DONE BY OTHERS, AS STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS-PUBLIC WORKS CONSTRUCTION-1986-UPDATE NO. 9.
2. ALL STATIONING IS BASED ON THE WATER LINE CENTERLINE UNLESS INDICATED OTHERWISE.
3. PROPOSED WATER LINE MATERIALS SHALL BE PVC PIPE, MEETING AWWA C-300; DR18 REQUIREMENTS (6"-12") OR DUCTILE IRON PIPE MEETING AWWA C-150 REQUIREMENTS (6"-48"). WATER SERVICE PIPE MATERIAL SHALL BE COPPER OR POLYETHYLENE.
4. ALL MATERIALS USED SHALL CONFORM WITH THE MATERIALS PRESENT ON THE "AWCWA APPROVED PRODUCTS LIST, LATEST EDITION".
5. ELECTRONIC MARKER DEVICES (EMD) SHALL BE INSTALLED IN ACCORDANCE WITH THE STANDARD SPECIFICATION, SECTION 170.
6. WATER LINE SHALL HAVE A MINIMUM COVER OF 3'-0" (FINISHED GRADE TO TOP OF PIPE), EXTRA DEPTH TRENCHING, IF REQUIRED, SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION, THEREFORE, NO SEPARATE PAYMENT WILL BE MADE.
7. IN ACCORDANCE WITH SECTION 801 OF THE "STANDARD SPECIFICATIONS", METALLIZED DETECTABLE WARNING TAPE SHALL BE INSTALLED 18" ABOVE ALL PVC PIPE INSTALLED ON THIS PROJECT.
8. JOINT RESTRAINT SHALL BE PROVIDED ON ALL UNITS OF FIRE LINES.
9. FOR THE PURPOSES OF THIS PROJECT, ALL RESTRAINED JOINTS AND JOINT RESTRAINT SHALL BE MECHANICALLY RESTRAINED. JOINT RESTRAINT LENGTHS SHALL BE 12 INCHES (12") AND THE LENGTHS TO BE RESTRAINED EACH SIDE OF THE FITTING.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SELECTING APPROPRIATE MEANS AND METHODS TO EXCAVATE AND TRENCH AND INSTALL PIPE SO AS TO NOT EXCEED RIGHT-OF-WAY OR EASEMENT LIMITS, AND SO AS NOT TO INTERFERE WITH OTHER UTILITIES. THIS SHALL BE CONSIDERED INCIDENTAL TO TRENCHING, THEREFORE, NO SEPARATE PAYMENT WILL BE MADE.
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12. NEW WATER LINE INSTALLATIONS SHALL INCLUDE INSULATED 12 GAUGE COPPER TRACER WIRE AND RELATED ACCESS PORTS AND TERMINAL ANODES. TRACER WIRE IS TO BE INSTALLED CONTINUOUSLY ALONG THE PIPE WITH WATER-PROOF SPLICED BOND CONNECTIONS AND TIES. IN ACCORDANCE WITH AWCWA STD DWG 2302, TRACER WIRE INSTALLATION SHALL BE CONSIDERED INCIDENTAL TO TRENCHING, THEREFORE, NO SEPARATE PAYMENT WILL BE MADE. TRACER WIRE PORTS AND TERMINALS SHALL BE VERIFIED BY FIELD WITH AWCWA INSPECTOR AND ENGINEER PRIOR TO INSTALLATION.

EASEMENT KEYED NOTES

- 30' PUBLIC WATER LINE AND PUBLIC SEWER LINE EASEMENT GRANTED BY PLAT FILED 03-26-2012, PLAT BOOK 2012C, PAGE 38, DOC. #2012030059
- APPROXIMATE 54' PRIVATE ACCESS EASEMENT GRANTED BY PLAT FILED 03-26-2012, PLAT BOOK 2012C, PAGE 38, DOC. #2012030059 (PRICE'S WAY)

UTILITY LEGEND

- | | |
|--|----------------------------------|
| | COMMUNICATION LINE BY PAINT MARK |
| | GAS LINE BY PAINT MARK |
| | OVERHEAD ELECTRIC LINE |
| | ELECTRIC LINE BY PAINT MARK |
| | SANITARY SEWER BY PAINT MARK |
| | STORM DRAIN BY PAINT MARK |
| | WATER LINE BY PAINT MARK |
| | EXISTING FIRE HYDRANT |
| | EXISTING VALVE BOX |
| | PROPOSED FIRE HYDRANT |
| | FIRE DEPARTMENT CONNECTION |
| | PROPOSED VALVE BOX |
| | PROPOSED WATER CAP |
| | EXISTING FIRE LINE |
| | PROPOSED FIRE LINE |
| | EXISTING POST INDICATOR VALVE |
| | PROPOSED POST INDICATOR VALVE |
| | EXISTING WATER SERVICE |
| | PROPOSED WATER SERVICE |
| | EXISTING WATER LINE |
| | PROPOSED WATER LINE |

HIGH MESA Consulting Group

5010-B Midway Park Blvd. NE • Albuquerque, New Mexico 87109
Phone: 505.345.4250 • Fax: 505.345.4254 • www.highmagnog.com

2019.00345

ALBUQUERQUE BERNALILLO COUNTY
WATER UTILITY AUTHORITY

TITLE: VALLE DE ORO
WATER LINE EXTENSION -- PLAN AND PROFILE
STA 28+40.00 TO STA 32+90.00

Design Review Committee	City Engineer Approval
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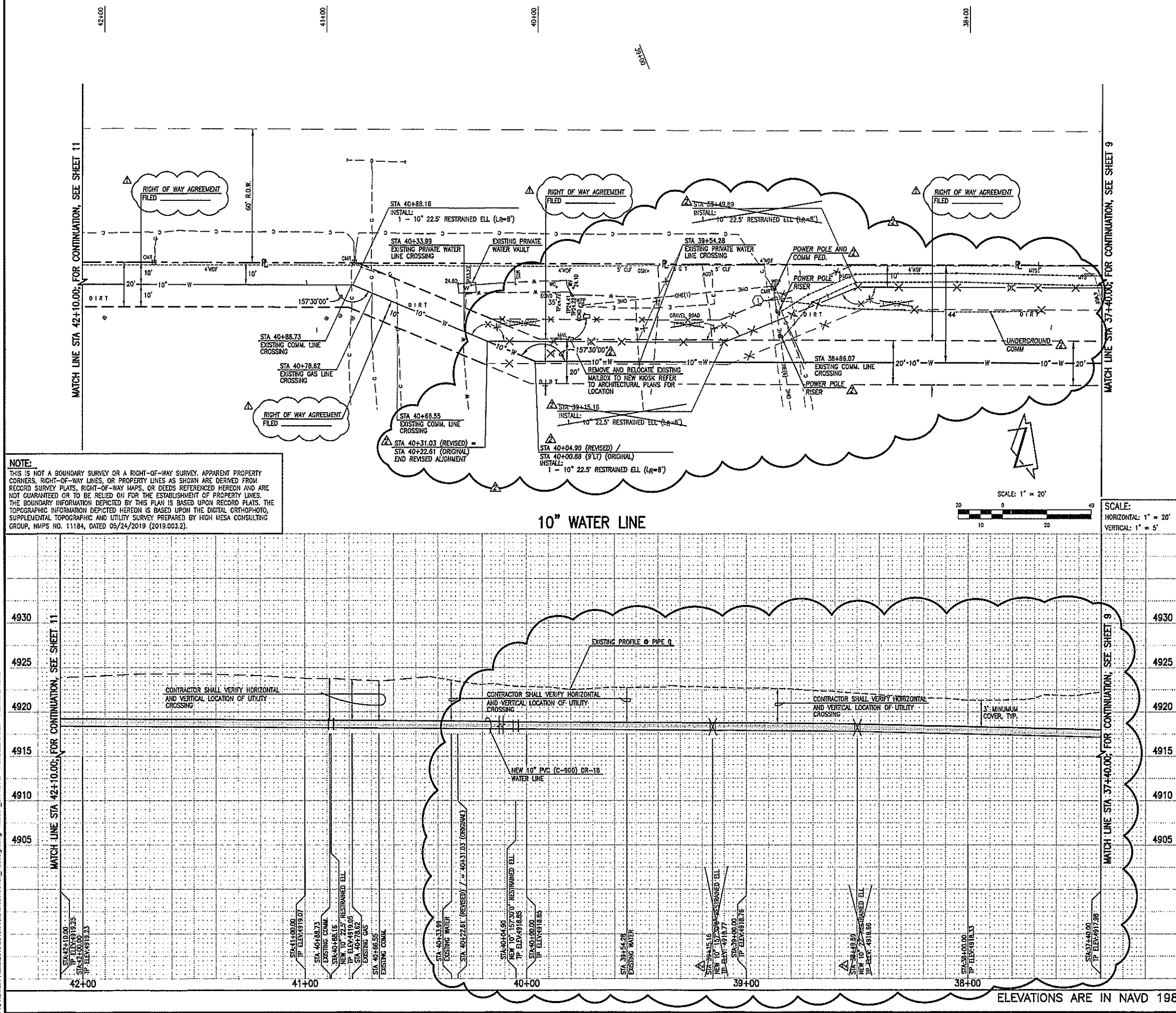
City Project No. 579580
PWCO 2019-0089

Zone Map No.
S-13

Sheet 8 of 15

ELEVATIONS ARE IN NAVD 1988

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WATER LINE CONSTRUCTION NOTES:

- ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER CONTRACT SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS-PUBLIC WORKS CONSTRUCTION-1986-UPDATE NO.9.
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- THE CONTRACTOR SHALL BE RESPONSIBLE FOR SELECTING APPROPRIATE MEANS AND METHODS TO EXCAVATE AND TRENCH AND INSTALL PIPE SO AS TO NOT EXCEED RIGHT-OF-WAY OR EASEMENT LIMITS, AND SO AS NOT TO INTERFERE WITH OTHER UTILITIES. THIS SHALL BE CONSIDERED INCIDENTAL TO TRENCHING, THEREFORE, NO SEPARATE PAYMENT WILL BE MADE.
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EASEMENT KEYED NOTES

① 10' PNM AND M&T EASEMENT GRANTED BY THE DOCUMENT FILED 02-18-1954, BOOK D 270, PAGE 311, DOC# 13625 (ANCHOR EASEMENTS ARE 2' WIDE)

UTILITY LEGEND

- C— COMMUNICATION LINE BY PAINT MARK
- G— GAS LINE BY PAINT MARK
- OHE— OVERHEAD ELECTRIC LINE
- E— ELECTRIC LINE BY PAINT MARK
- S— SANITARY SEWER BY PAINT MARK
- SD— STORM DRAIN BY PAINT MARK
- W— WATER LINE BY PAINT MARK
- X— EXISTING FIRE HYDRANT
- V— EXISTING VALVE BOX
- F— PROPOSED FIRE HYDRANT
- FC— FIRE DEPARTMENT CONNECTION
- VB— PROPOSED VALVE BOX
- WC— PROPOSED WATER CAP
- FL— EXISTING FIRE LINE
- FP— PROPOSED FIRE LINE
- PIV— EXISTING POST INDICATOR VALVE
- PPIV— PROPOSED POST INDICATOR VALVE
- WS— EXISTING WATER SERVICE
- WSS— PROPOSED WATER SERVICE
- WL— EXISTING WATER LINE
- WW— PROPOSED WATER LINE

AS BUILT INFORMATION

CONTRACTOR	DATE	BY	REVIEWED BY
AN ADIS 3 1/4" ALUMINUM DISK STAMPED "ACS 4-513 1987", SET 0.15' ABOVE GRADE, BETWEEN 2nd STREET AND BHAUSE RAILROAD TRACKS, NEAR THE SOUTHEASTERN PORTION OF THE SURVEY, AS SHOWN ON SHEET 4.	05/24/19	HMCG	2019.003.2

ENGINEER'S SEAL

01-10-2020

03/18/2021

03/12/2020

DESIGN

DESIGNED BY	DATE	DESIGNED BY	DATE
R.J.C.	01-2020	J.Y.R.	01-2020
DRAWN BY	DATE	DRAWN BY	DATE
G.L.	01-2020	G.L.	01-2020

2019.003.45

ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY

TITLE: VALLE DE ORO WATER LINE EXTENSION - PLAN AND PROFILE STA 37+40.00 TO STA 42+10.00

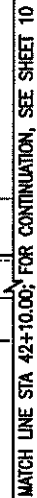
Design Review Committee City Engineer Approval

2019.003.45

City Project No. 579580 PWC 2019-0089

Zone Map No. S-13

Sheet 10 of 15



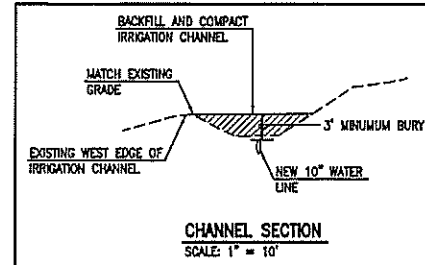
PWCO	2019-0089	S-1
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MATCH LINE STA 51+30.00; FOR CONTINUATION, SEE SHEET 13

MATCH LINE STA 46+70.00; FOR CONTINUATION, SEE SHEET 11

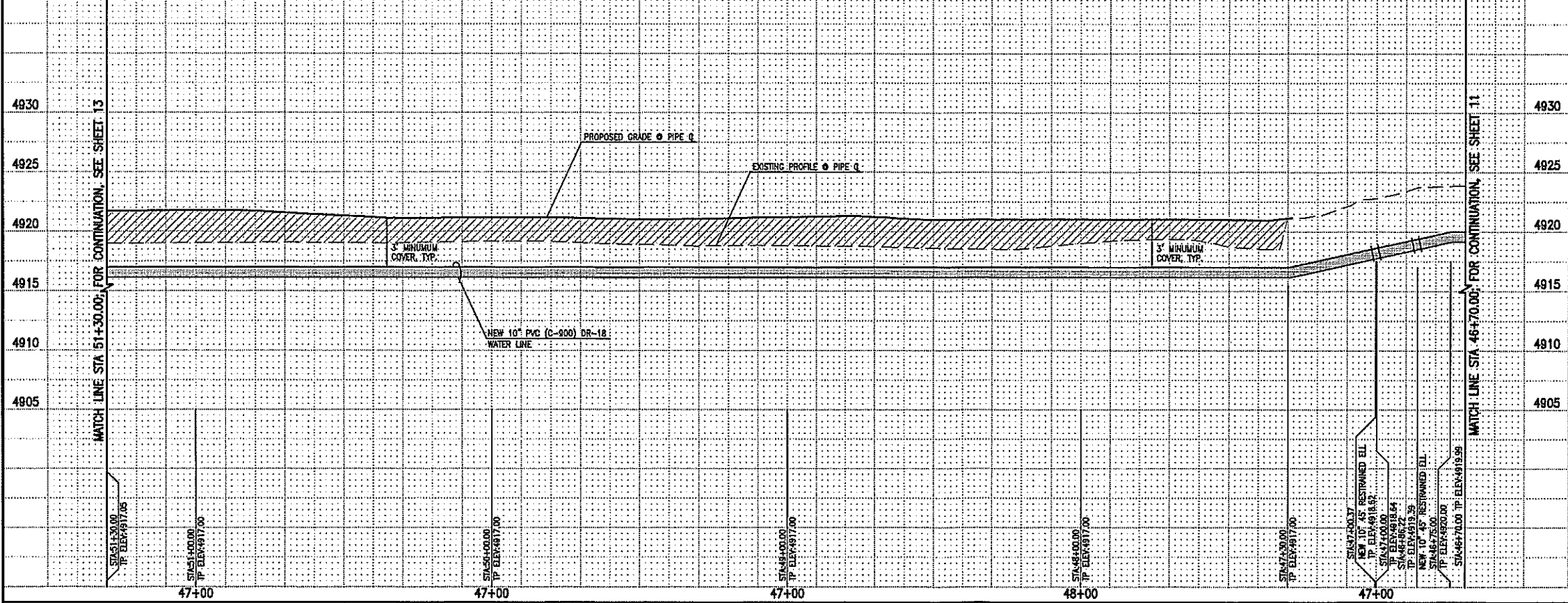
- EASEMENT KEYED NOTES**
- 10' PNM AND MSTAT EASEMENT GRANTED BY THE DOCUMENT FILED 02-18-1954, BOOK D 270, PAGE 311, DOC# 13625 (ANCHOR EASEMENTS ARE 2' WIDE)
 - 10' PNM AND MSTAT EASEMENT GRANTED BY DOCUMENT FILED D 413, PAGE 471, DOC# 53880 (ANCHOR EASEMENTS ARE 2' WIDE)
 - 10'/15' SOUTHERN UNION GAS COMPANY EASEMENT GRANTED BY DOCUMENT FILED 04-28-1965, BOOK R/W 143, PAGE 485, DOC# 5814 AND MODIFIED BY DOCUMENT FILED 04-21-1983, BOOK MISC. 8-A, PAGE 396, DOC# 1983024571
 - 7' PNM AND MSTAT EASEMENT GRANTED BY THE DOCUMENT FILED 05-27-1982, BOOK MISC. 933, PAGE 874, DOC# 198207877
 - 10' PNM AND MSTAT EASEMENT GRANTED BY THE DOCUMENT FILED 05-12-1983, BOOK MISC. 14-A, PAGE 273, DOC# 198303092
 - 10' PNM OVERHEAD EASEMENT GRANTED BY THE DOCUMENT FILED 05-22-2005, BOOK A119, PAGE 1856, DOC# 2005092116 (APPROXIMATE LOCATION)
 - 30' PUBLIC WATER LINE AND PUBLIC SEWER LINE EASEMENT GRANTED BY PLAT FILED 03-26-2012, PLAT BOOK 2012C, PAGE 38, DOC# 2012030059
 - APPROXIMATE 54' PRIVATE ACCESS EASEMENT GRANTED BY PLAT FILED 03-26-2012, PLAT BOOK 2012C, PAGE 38, DOC# 2012030059 (PRICE'S WAY)
 - 30' PUBLIC WATER LINE EASEMENT GRANTED BY DOCUMENT FILED 04-12-2009, BOOK A115, PAGE 1753, DOC# 2009051918, AND ALSO GRANTED BY DOCUMENT FILED 10-05-2006, BOOK A125, PAGE 1561, DOC# 2006151563



- WATER LINE CONSTRUCTION NOTES:**
- ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER CONTRACT SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS-PUBLIC WORKS CONSTRUCTION-1986-UPDATE NO.9.
 - ALL STATIONING IS BASED ON THE WATER LINE CENTERLINE UNLESS INDICATED OTHERWISE.
 - PROPOSED WATER LINE MATERIALS SHALL BE PVC PIPE, MEETING AWWA C-900 OR 18" DR-18 REQUIREMENTS (10'-12') OR DUCTILE IRON PIPE MEETING AWWA C-150 REQUIREMENTS (6'-48'). WATER SERVICE PIPE MATERIAL SHALL BE COPPER OR MUNCIEP.
 - ALL MATERIALS USED SHALL CONFORM WITH THE MATERIALS PRESENT ON THE "ABCWA APPROVED PRODUCTS LIST, LATEST EDITION".
 - ELECTRONIC MARKER DEVICES (EMD) SHALL BE INSTALLED IN ACCORDANCE WITH THE STANDARD SPECIFICATION, SECTION 170.
 - WATER LINE SHALL HAVE A MINIMUM COVER OF 3'-0" (FINISHED GRADE TO TOP OF PIPE). EXTRA DEPTH TRENCHING, IF REQUIRED, SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION, THEREFORE, NO SEPARATE PAYMENT WILL BE MADE.
 - IN ACCORDANCE WITH SECTION 801 OF THE "STANDARD SPECIFICATIONS", METALIZED DETECTABLE WARNING TAPE SHALL BE INSTALLED 18" ABOVE ALL PVC PIPE INSTALLED ON THIS PROJECT.
 - JOINT RESTRAINT SHALL BE PROVIDED ON ALL JOINTS OF FIRE LINES.
 - FOR THE PURPOSES OF THIS PROJECT, ALL RESTRAINED JOINTS AND JOINT RESTRAINT SHALL BE MECHANICALLY RESTRAINED. JOINT RESTRAINT LENGTHS SPECIFIED HEREON (L_R) ARE THE LENGTHS TO BE RESTRAINED EACH SIDE OF THE FITTING.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR SELECTING APPROPRIATE MEANS AND METHODS TO EXCAVATE AND TRENCH AND INSTALL PIPE SO AS TO NOT EXCEED RIGHT-OF-WAY OR EASEMENT LIMITS, AND SO AS NOT TO INTERFERE WITH OTHER UTILITIES. THIS SHALL BE CONSIDERED INCIDENTAL TO TRENCHING, THEREFORE, NO SEPARATE PAYMENT WILL BE MADE.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING, SUPPORTING AND REPLACING, IF DAMAGED, ALL OTHER UTILITIES ENCOUNTERED DURING CONSTRUCTION. THIS SHALL BE CONSIDERED INCIDENTAL TO TRENCHING, THEREFORE, NO SEPARATE PAYMENT WILL BE MADE.
 - NEW WATER LINE INSTALLATIONS SHALL INCLUDE INSULATED 12 GAUGE COPPER TRACER WIRE AND RELATED ACCESS PORTS AND TERMINAL ANODES. TRACER WIRE IS TO BE INSTALLED CONTINUOUSLY ALONG THE PIPE WITH WATER-PROOF SPLICER BOXES AT JUNCTIONS AND TEES. IN ACCORDANCE WITH ABCWA STD DWG 2302, TRACER WIRE INSTALLATION SHALL BE CONSIDERED INCIDENTAL TO TRENCHING, THEREFORE, NO SEPARATE PAYMENT WILL BE MADE. TRACER WIRE PORTS AND TERMINALS SHALL BE VERIFIED IN FIELD WITH ABCWA INSPECTOR AND ENGINEER PRIOR TO INSTALLATION.

- UTILITY LEGEND**
- C--- COMMUNICATION LINE BY PAINT MARK
 - G--- GAS LINE BY PAINT MARK
 - O--- OVERHEAD ELECTRIC LINE
 - E--- ELECTRIC LINE BY PAINT MARK
 - SAS--- SANITARY SEWER BY PAINT MARK
 - SD--- STORM DRAIN BY PAINT MARK
 - W--- WATER LINE BY PAINT MARK
 - EXISTING FIRE HYDRANT
 - EXISTING VALVE BOX
 - PROPOSED FIRE HYDRANT
 - FIRE DEPARTMENT CONNECTION
 - PROPOSED VALVE BOX
 - PROPOSED WATER CAP
 - EXISTING FIRE LINE
 - PROPOSED FIRE LINE
 - EXISTING POST INDICATOR VALVE
 - PROPOSED POST INDICATOR VALVE
 - EXISTING WATER SERVICE
 - PROPOSED WATER SERVICE
 - EXISTING WATER LINE
 - PROPOSED WATER LINE

NOTE:
THIS IS NOT A BOUNDARY SURVEY OR A RIGHT-OF-WAY SURVEY. APPARENT PROPERTY CORNERS, RIGHT-OF-WAY LINES, OR PROPERTY LINES AS SHOWN ARE DERIVED FROM RECORD SURVEY PLATS, RIGHT-OF-WAY MAPS, OR DEEDS REFERENCED HEREON AND ARE NOT GUARANTEED OR TO BE RELIED ON FOR THE ESTABLISHMENT OF PROPERTY LINES. THE BOUNDARY INFORMATION DEPICTED BY THIS PLAN IS BASED UPON RECORD PLATS, THE TOPOGRAPHIC INFORMATION DEPICTED HEREON IS BASED UPON THE DIGITAL ORTHOPHOTO, SUPPLEMENTAL TOPOGRAPHIC AND UTILITY SURVEY PREPARED BY HIGH MESA CONSULTING GROUP, NNPS NO. 11184, DATED 05/24/2019 (2019.003.2).



AS BUILT INFORMATION				BENCH MARKS				SURVEY INFORMATION				ENGINEER'S SEAL			
CONTRACTOR	DATE	BY	DATE	MARK	DATE	BY	DATE	NO.	DATE	BY	DATE	DESIGNED BY	DATE	CHECKED BY	DATE
ABCWA	7-8-20	SL-5	DATE	15' ARMY GRADE, BETWEEN 2ND STREET AND BNSF RAILROAD TRACKS, NEAR THE SOUTHERN PORTION OF THE SURVEY, AS SHOWN ON SHEET 4.	2019.003.2	MMCG	05/24/19	2019.003.2	03/20/20	ABCWA / COUNTY REVIEW	03/20/20	R.J.C.	01-2020	J.Y.R.	01-2020
ELEVATION = 4920.25 FEET (NAVD 1988)															

2019.003.4

ALBUQUERQUE BERNALILLO COUNTY
WATER UTILITY AUTHORITY

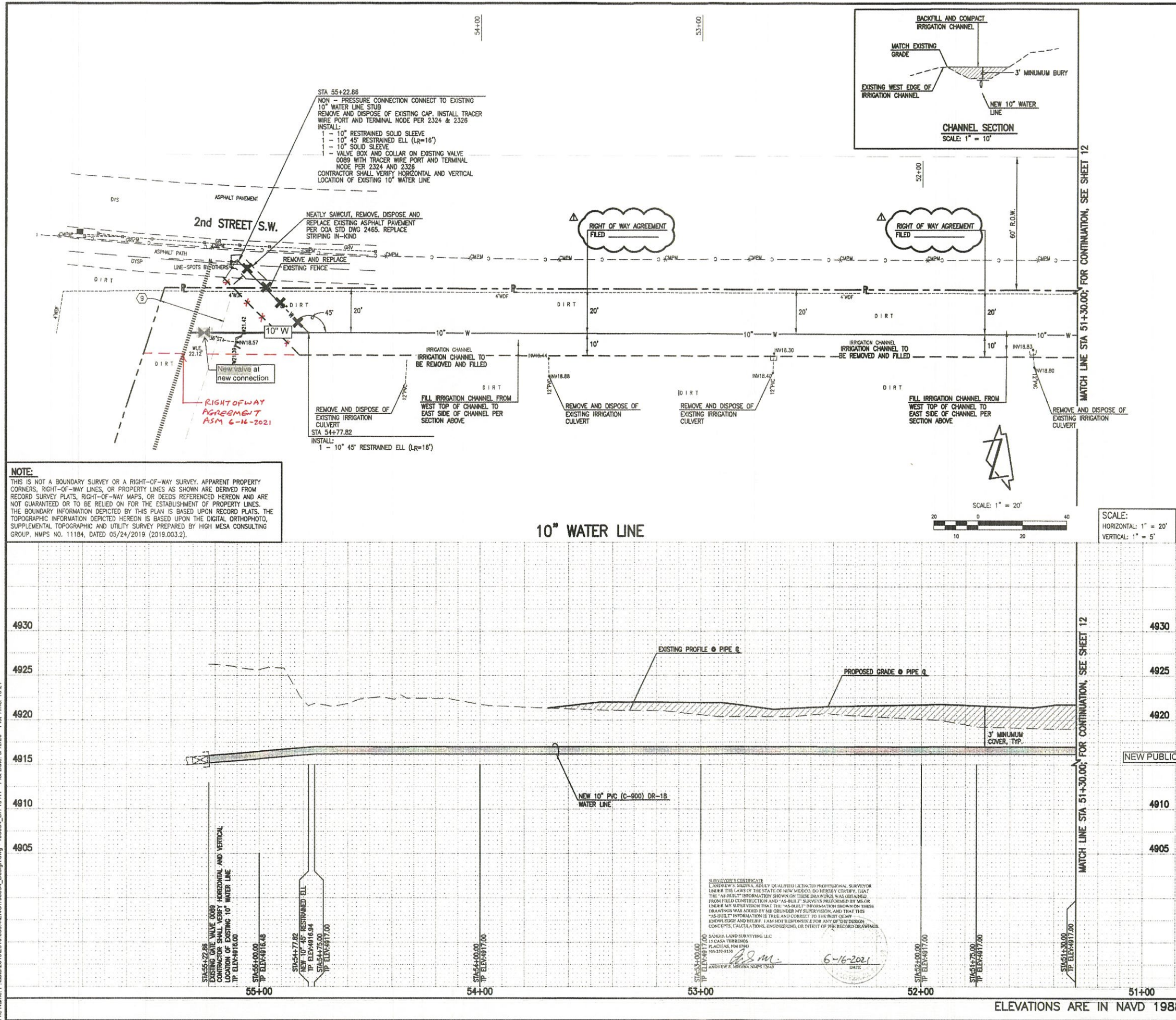
TITLE: VALLE DE ORO
WATER LINE EXTENSION - PLAN AND PROFILE
STA 46+70.00 TO STA 51+30.00

Design Review Committee: City Engineer Approval

City Project No. 579580
PWCO - 2019-0089

Zone Map No. S-13
Sheet 12 of 15

File Name: P:\data\2019\003\MENOS190034_Design.dwg - 190034_SH 13 R1 Plot Date: 3/12/20 Plot Time: 15:21



WATER LINE CONSTRUCTION NOTES:

- ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER CONTRACT SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS-PUBLIC WORKS CONSTRUCTION-1986-UPDATE NO.9.
- ALL STATIONING IS BASED ON THE WATER LINE CENTERLINE UNLESS INDICATED OTHERWISE.
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- ALL MATERIALS USED SHALL CONFORM WITH THE MATERIALS PRESENT ON THE "ABQWA APPROVED PRODUCTS LIST, LATEST EDITION".
- ELECTRONIC MARKER DEVICES (EMD) SHALL BE INSTALLED IN ACCORDANCE WITH THE STANDARD SPECIFICATION, SECTION 720.
- WATER LINE SHALL HAVE A MINIMUM COVER OF 3'-0" (FINISHED GRADE TO TOP OF PIPE). EXTRA DEPTH TRENCHING, IF REQUIRED, SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION, THEREFORE, NO SEPARATE PAYMENT WILL BE MADE.
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EASEMENT KEYED NOTES

30' PUBLIC WATER LINE EASEMENT GRANTED BY DOCUMENT FILED 04-12-2008, BOOK A115, PAGE 1753, DOC# 2006051918, AND ALSO GRANTED BY DOCUMENT FILED 10-05-2006, BOOK A125, PAGE 1561, DOC# 2006151963

UTILITY LEGEND

- C--- COMMUNICATION LINE BY PAINT MARK
- G--- GAS LINE BY PAINT MARK
- OHE--- OVERHEAD ELECTRIC LINE
- E--- ELECTRIC LINE BY PAINT MARK
- SAS--- SANITARY SEWER BY PAINT MARK
- SD--- STORM DRAIN BY PAINT MARK
- W--- WATER LINE BY PAINT MARK
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- PROPOSED VALVE BOX
- PROPOSED WATER CAP
- EXISTING FIRE LINE
- PROPOSED FIRE LINE
- EXISTING POST INDICATOR VALVE
- PROPOSED POST INDICATOR VALVE
- EXISTING WATER SERVICE
- PROPOSED WATER SERVICE
- EXISTING WATER LINE
- PROPOSED WATER LINE

WATER LINE AND FIRE HYDRANT GIS DATA

ITEM	LOCATION	NAD'83 GRID COORDINATES (US SURVEY FEET)
VALVE		NORTHING EASTING ELEVATION
NEW PUBLIC VALVE	STA 55+22.86	1449811.39 1515246.85 4917.10

2019.003.4

ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY

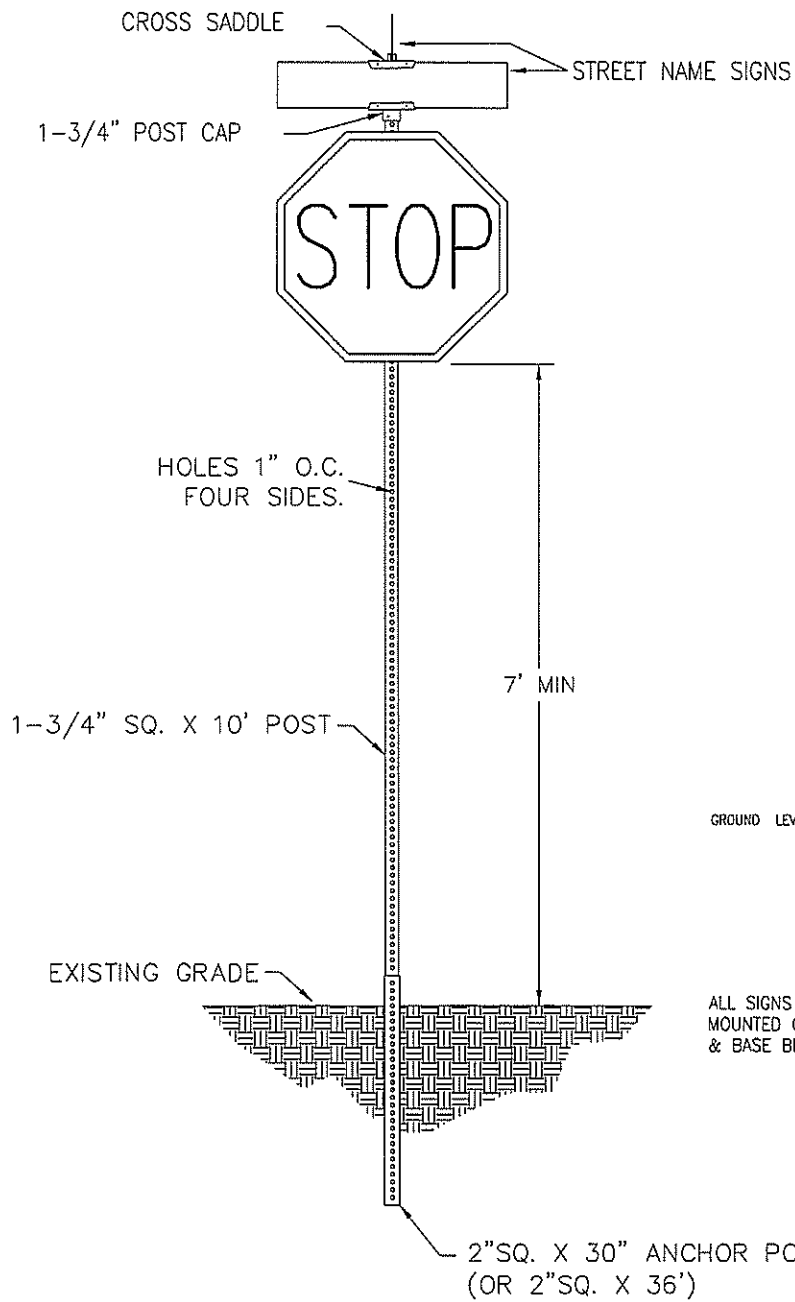
TITLE: VALLE DE ORO WATER LINE EXTENSION - PLAN AND PROFILE STA 51+30.00 TO STA 55+22.86

Design Review Committee	City Engineer Approval

City Project No. 579580 PWCO 2019-0089 Zone Map No. S-13 Sheet 13 of 15

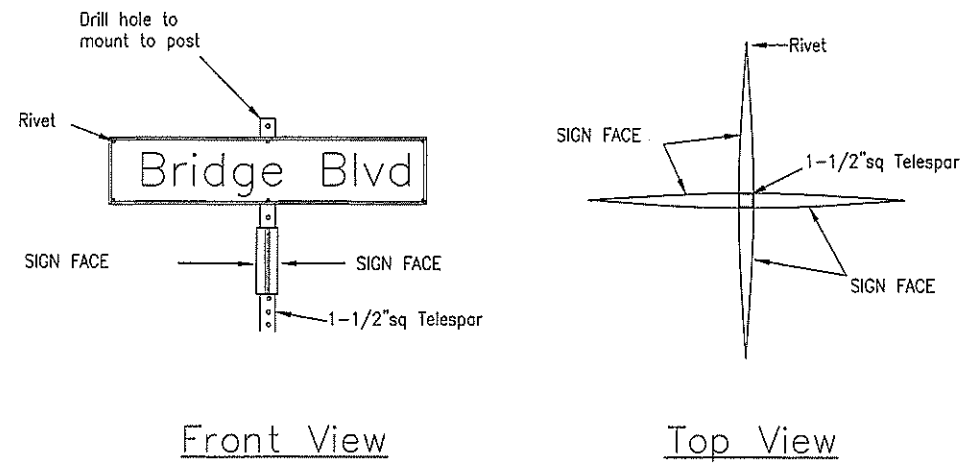
STREET NAME SIGNS AND POST DETAIL

Standard Sign Post Detail



Telespar Post Mount

USE FOR SIGNS WIDER THAN 42" AND TALLER THAN 8"



GENERAL NOTES

1. THE LETTERING FOR NAMES OF STREETS ON STREET NAME SIGNS SHALL BE COMPOSED OF A COMBINATION OF LOWER-CASE LETTERS WITH INITIAL UPPER-CASE LETTERS
2. ALL STREET NAME SIGNS SHALL BE WHITE LETTERS ON GREEN BACKGROUND WITH A 1/2" WHITE BORDER. USE HIP REFLECTIVE SHEETING TYPE IV OR HIGHER.
3. SEE MUTCD FOR MINIMUM MOUNTING HEIGHT IN RURAL AREAS
4. PUNCTUATION MARKS SUCH AS PERIODS, COMMAS, ETC. SHALL NOT BE USED.

RECOMMENDED MINIMUM LETTER HEIGHTS ON STREET NAME SIGNS

TYPE OF MOUNTING	TYPE OF STREET OR HIGHWAY	SPEED LIMIT	RECOMMENDED MINIMUM LETTER HEIGHT
			INITIAL UPPER—CASE
Overhead	All Types	All Speed Limits	12 inches
Post—Mounted	Multi—Lane	More than 40 MPH	8 inches
Post—Mounted	Multi—Lane	40 MPH or less	6 inches
Post—Mounted	2—Lane	All Speed Limits	6 inches*

*On local two-lane streets with speed limits of 25 mph or less, 4-inch initial upper-case letters with 3-inch lower-case letters may be used.

# OF POSTS	MAXIMUM SIGN SQUARE FOOTAGE
1	6
2	12
3	18

6010-B Midway Park Blvd. NE • Albuquerque, New Mexico 87109 Phone: 505.345.4260 • Fax: 505.345.4264 • www.highmesacg.com											
2019.003.4											
ALBUQUERQUE BERNALILLO COUNTY WATER LINE AUTHORITY											
TITLE: VALLE DE ORO WATER LINE EXTENSION STREET NAME SIGN DETAILS											
Design Review Committee			City Engineer Approval			Last Design Update	No. Permits		No. Projects		
City Project No. 579580						Zone Map No.		Sheet		Of	
PWCO 2019-0089						S-13		14		15	

CONSTRUCTION TRAFFIC CONTROL GENERAL NOTES

1. PROJECT IS SUBJECT TO THE REQUIREMENTS OF COUNTY ORDINANCE NO. 82.6 AND COUNTY ORDINANCE NO. 66-116 THROUGH 66-140 AND 66-171 THROUGH 66-175. THE CONTRACTOR IS RESPONSIBLE FOR ACQUIRING ALL PERMITS NECESSARY. CONTRACTOR SHALL CALL 848-1504 FOR MORE INFORMATION.

2. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN TO BERNALILLO COUNTY TRAFFIC ENGINEERING AT LEAST 3 BUSINESS DAYS PRIOR TO COMMENCEMENT OF WORK. TRAFFIC CONTROL PLANS SHALL BE PREPARED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION AND BY CERTIFIED PERSONNEL AND MUST BE APPROVED PRIOR TO COMMENCEMENT OF WORK ON THE PROJECT. CALL 848-1504 FOR FURTHER INFORMATION.

3. A DAILY TRAFFIC CONTROL DIARY SHALL BE MAINTAINED BY THE CONTRACTOR REFLECTING THE TYPES AND LOCATIONS OF ALL TRAFFIC CONTROL DEVICES, SIGNS, BARRICADES, ETC. BEING USED ON THE PROJECT IN COMPLIANCE WITH THE APPROVED TRAFFIC CONTROL PLAN. THIS DIARY SHALL BE SUBMITTED TO BERNALILLO COUNTY TRAFFIC ENGINEERING UPON COMPLETION OF THE PROJECT CONSTRUCTION OR WHEN SO REQUESTED BY THE PROJECT MANAGER OR BERNALILLO COUNTY TRAFFIC ENGINEERING.

4. CONTRACTOR SHALL PROVIDE A WEEKLY CONSTRUCTION ACTIVITY SCHEDULE TO BERNALILLO COUNTY PUBLIC WORKS DIVISION ATTN: PROJECT MANAGER

5. THE CONTRACTOR SHALL FILE A WRITTEN REPORT TO TRAFFIC ENGINEERING WITH 72 HOURS ADVANCE NOTICE DESCRIBING THE TRAFFIC CONTROL PLAN THAT WILL BE IN EFFECT EACH DAY.

6. SUBJECT TO THE APPROVED TRAFFIC CONTROL PLAN, AT LEAST ONE LANE SHALL BE OPEN TO TRAFFIC AT ALL TIMES. CONTRACTOR SHALL OBTAIN AN APPROVED TRAFFIC CONTROL PLAN AND SHALL MAINTAIN THE TEMPORARY TRAFFIC CONTROL ZONE IN SUCH A MANNER AS TO ASSURE PROPER SAFETY TO THE TRAVELING PUBLIC AT ALL TIMES. IN CASES WHEN GRADING, EXCAVATION AND BACKFILL OPERATIONS ARE BEING CONDUCTED IMMEDIATELY IN FRONT OF THE PROPERTY, ACCESS WILL NOT BE DENIED FOR MORE THAN 4 HOURS WITHOUT APPROVAL BY THE COUNTY.

7. TRAFFIC LANES PROVIDED DURING CONSTRUCTION SHALL BE MAINTAINED, IN SUCH A CONDITION UNDER ALL WEATHER CONDITIONS, SO AS TO PERMIT THE REASONABLE PASSAGE OF MOTOR VEHICLES, AND SHALL BE KEPT GRADED AND SMOOTH, AND WATERED AS NEEDED TO CONTROL DUST.

8. TYPICAL TRAFFIC CONTROL PLANS DO NOT REFLECT THE EXISTING TOPOGRAPHY SUCH AS DRIVEWAYS, LANE WIDTHS, AND BUSINESS/RESIDENTIAL ACCESSES. EVERY LOCATION THAT REQUIRES CONSTRUCTION TRAFFIC CONTROL SHALL HAVE A DETAILED TRAFFIC CONTROL PLAN SHOWING ALL EXISTING TOPOGRAPHY.

9. CONSTRUCTION SHALL NOT BEGIN UNLESS A TRAFFIC CONTROL PLAN HAS BEEN APPROVED AND VERIFIED BY BERNALILLO COUNTY TRAFFIC ENGINEERING.

10. ALL TEMPORARY TRAFFIC CONTROL DEVICES SHALL COMPLY WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION OR LOCAL JURISDICTION STANDARDS, WHICHEVER ARE GREATER. INSTALLATION AND MAINTENANCE OF ALL TEMPORARY TRAFFIC CONTROL DEVICES IS THE RESPONSIBILITY OF THE CONTRACTOR. ANY FIELD ADJUSTMENTS SHALL BE APPROVED BY BERNALILLO COUNTY TRAFFIC ENGINEERING OR BERNALILLO COUNTY PROJECT MANAGER.

11. THE CONSTRUCTION TRAFFIC CONTROL INITIAL SET-UP FOR EACH PHASE SHALL BE BY AN AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION (ATSSA) CERTIFIED WORKSITE TRAFFIC SUPERVISOR. THE MAINTENANCE AND SERVICING SHALL ALSO BE DONE BY AN ATSSA CERTIFIED WORKSITE TRAFFIC SUPERVISOR OR EQUIVALENT.

12. CONTRACTOR IS RESPONSIBLE TO MAINTAIN AND SERVICE ALL TRAFFIC CONTROL DEVICES 24 HOURS A DAY, 7 DAYS A WEEK THROUGHOUT LENGTH OF PROJECT. CONTRACTOR IS RESPONSIBLE THAT ALL TRAFFIC CONTROL DEVICES COMPLY WITH THE MUTCD, LATEST EDITION OR LOCAL JURISDICTION STANDARDS, WHICHEVER ARE GREATER.

13. ALL ADVANCE WARNING SIGNS SHALL BE DOUBLE INDICATED WHENEVER THERE ARE MULTI-LANE TRAFFIC IN ANY ONE GIVEN DIRECTION WITH SUFFICIENT MEDIAN SPACE.

14. ALL CHANNELIZATION DEVICES FOR TAPERS AND TANGENTS (WITH THE EXCEPTION OF FLAGGING TAPER AND DOWNSTREAM TAPER) SHALL BE PLACED APART, A DISTANCE MEASURED IN FEET, EQUAL TO THAT OF THE POSTED SPEED LIMIT. NO EXCEPTIONS UNLESS APPROVED BY BERNALILLO COUNTY TRAFFIC ENGINEERING PER THE LATEST EDITION OF THE MUTCD.

15. EQUIPMENT OR MATERIALS SHALL NOT BE STORED WITHIN THE DISTANCE ALLOWED BY THE LATEST ROADSIDE DESIGN GUIDE, OF A TRAVELED TRAFFIC LANE DURING NON-WORKING HOURS WITHOUT THE APPROVAL OF BERNALILLO COUNTY TRAFFIC ENGINEERING.

16. CONTRACTOR SHALL PROVIDE AND MAINTAIN SAFE AND ADEQUATE PEDESTRIAN AND BICYCLE ROUTES AROUND THE CONSTRUCTION AREA.

17. CONTRACTOR IS RESPONSIBLE FOR OBLITERATION OF ANY CONFLICTING STRIPING AND RESPONSIBLE FOR ALL TEMPORARY STRIPING.

18. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL FACILITIES, BUSINESSES AND/OR RESIDENTS AND COORDINATE WITH ALL INVOLVED AS NEEDED.

19. CONTRACTOR SHALL PROVIDE ACCESS SIGNS FOR BUSINESSES LOCATED WITHIN THE CONSTRUCTION AREA UNDER THE SUPERVISION OF BERNALILLO COUNTY TRAFFIC ENGINEERING. EACH ACCESS SIGN SHALL HAVE 5 INCH, WHITE LETTERING ON BLUE BACKGROUND. SHOPPING CENTERS AND MALLS SHALL BE LISTED AS SUCH.

20. 48 HOURS PRIOR TO OCCUPYING OR CLOSING OF A RIGHT-OF-WAY, CONTRACTOR SHALL NOTIFY: POLICE, FIRE DEPARTMENT, SCHOOLS, HOSPITALS, TRANSIT AUTHORITY, BUSINESSES AND/OR RESIDENTS THAT WILL BE AFFECTED BY THE CONSTRUCTION.

21. EXCAVATIONS SHALL BE PLATED, TEMPORARILY PATCHED OR RESURFACED PRIOR TO OPENING OF TRAFFIC. A MINIMUM OF 11 FEET, SHALL BE PROVIDED FOR TRAFFIC IN ANY GIVEN DIRECTION. CONTRACTOR IS RESPONSIBLE FOR ANY WORK INVOLVED IN SATISFYING THESE REQUIREMENTS.

22. THE CONTRACTOR SHALL CONTACT BERNALILLO COUNTY TRAFFIC ENGINEERING (848-1575) BEFORE REMOVING AND/OR INSTALLING ANY TRAFFIC SIGNS OR PERMANENT STRIPING AND MARKINGS. ALL STRIPING, PAVEMENT MARKINGS INCLUDING CROSSWALKS, LEGENDS AND SYMBOLS ARE TO BE CONSTRUCTED OF INTERSECTION GRADE HOT/PREFORMED THERMOPLASTIC AND LINE MARKINGS ARE TO BE CONSTRUCTED OF HIGH DURABLE PAINT IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) LATEST EDITION. ANY PAVEMENT MARKINGS AND SIGNS REMOVED OR DAMAGED DURING CONSTRUCTION SHALL BE REPLACED AT EXISTING LOCATIONS (SUCH WORK SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION OF THE PROJECT).

TAPER REQUIREMENT

SPEED LIMIT (MPH)	TAPER LENGTH (L) (FEET)			MINIMUM NUMBER OF DEVICES FOR TAPER	MAXIMUM DEVICE SPACING IN FEET	
	10' LANE	11' LANE	12' LANE		ALONG TAPER	AFTER TAPER
20	70	75	80	5	20	20
25	105	115	125	6	25	25
30	150	165	180	7	30	30
35	205	225	245	8	35	35
40	270	295	320	9	40	40
45	450	495	540	13	45	45
50	500	550	600	13	50	50
55	550	605	660	13	55	55

RECOMMENDED ADVANCE WARNING SIGN MINIMUM SPACING

ROAD TYPE	DISTANCE BETWEEN SIGNS**		
	A	B	C
URBAN (LOW SPEED)*	100 FT	100 FT	100 FT
URBAN (HIGH SPEED)*	350 FT	350 FT	350 FT
RURAL	500 FT	500 FT	500 FT
EXPRESSWAY/FREEWAY	1,000 FT	1,500 FT	2,640 FT

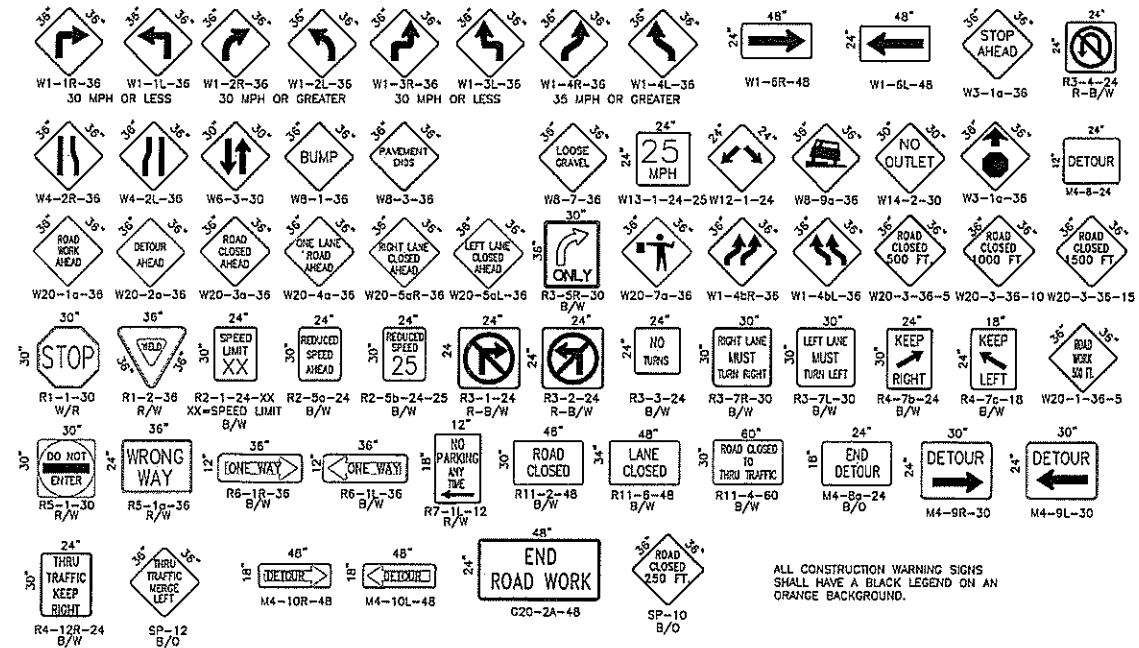
* LOW SPEED - 40MPH OR LESS, HIGH SPEED - 45MPH OR GREATER

** THE COLUMN HEADINGS A, B, AND C ARE THE DIMENSIONS SHOWN IN FIGURES 6H-1 THROUGH 6H-45 IN THE MUTCD. THE A DIMENSION IS THE DISTANCE FROM THE TRANSITION OR POINT OF RESTRICTION TO THE FIRST SIGN. THE B DIMENSION IS THE DISTANCE BETWEEN THE FIRST AND SECOND SIGNS. THE C DIMENSION IS THE DISTANCE BETWEEN THE SECOND AND THIRD SIGNS. (THE "FIRST SIGN" IS THE SIGN CLOSEST TO THE TTC ZONE. THE "THIRD SIGN" IS THE SIGN THAT IS FURTHEST UPSTREAM FROM THE TTC ZONE.)

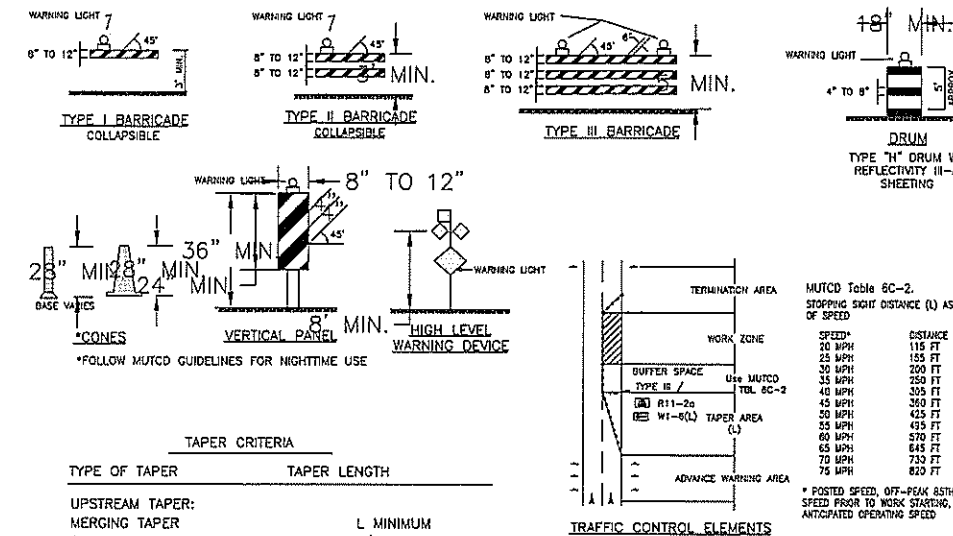
LEGEND

- WORK AREA
- BARRICADE - TYPE I, TYPE II, OR TYPE "H" DRUM W/ REFLECTIVITY III-A SHEETING
- BARRICADE - TYPE III
- VERTICAL PANEL
- WARNING SIGN
- A, B, C DISTANCE BETWEEN SIGNS - SEE TABLE ABOVE
- FLAGMAN POSITION
- SPACING BETWEEN BARRICADES - A DISTANCE MEASURED IN FEET EQUAL TO THE SPEED LIMIT OF THE STREET
- L TAPER LENGTH - SEE TABLE ABOVE

SIGN FACE DETAILS



ALL CONSTRUCTION WARNING SIGNS SHALL HAVE A BLACK LEGEND ON AN ORANGE BACKGROUND.



MUTCD Table 6C-2. STOPPING SIGHT DISTANCE (L) AS A FUNCTION OF SPEED

SPEED*	DISTANCE (L)
20 MPH	115 FT
25 MPH	155 FT
30 MPH	200 FT
35 MPH	250 FT
40 MPH	305 FT
45 MPH	360 FT
50 MPH	425 FT
55 MPH	495 FT
60 MPH	570 FT
65 MPH	645 FT
70 MPH	730 FT
75 MPH	820 FT

* POSTED SPEED, OFF-PEAK 85TH PERCENTILE SPEED PRIOR TO WORK STARTING, OR THE ANTICIPATED OPERATING SPEED

HIGH MESA Consulting Group

8018-B Midway Park Blvd. NE • Albuquerque, New Mexico 87109
Phone: 505.345.4200 • Fax: 505.345.4294 • www.highmesacg.com

2019.003.4

ALBUQUERQUE BERNALILLO COUNTY
WATER LINE AUTHORITY

TITLE: VALLE DE ORO
WATER LINE EXTENSION
SIGNING & CONSTRUCTION TRAFFIC CONTROL STANDARDS

Design Review Committee City Engineer Approval

City Project No. 579580 Zone Map No. S-13 Sheet 15 of 15