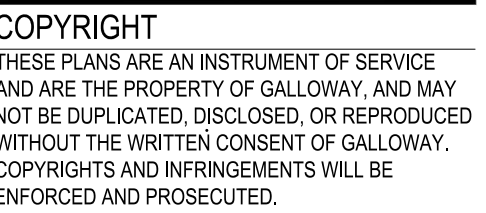


MERIDIAN STORAGE

UTILITY CONSTRUCTION DRAWINGS

VR239 & PPR2336

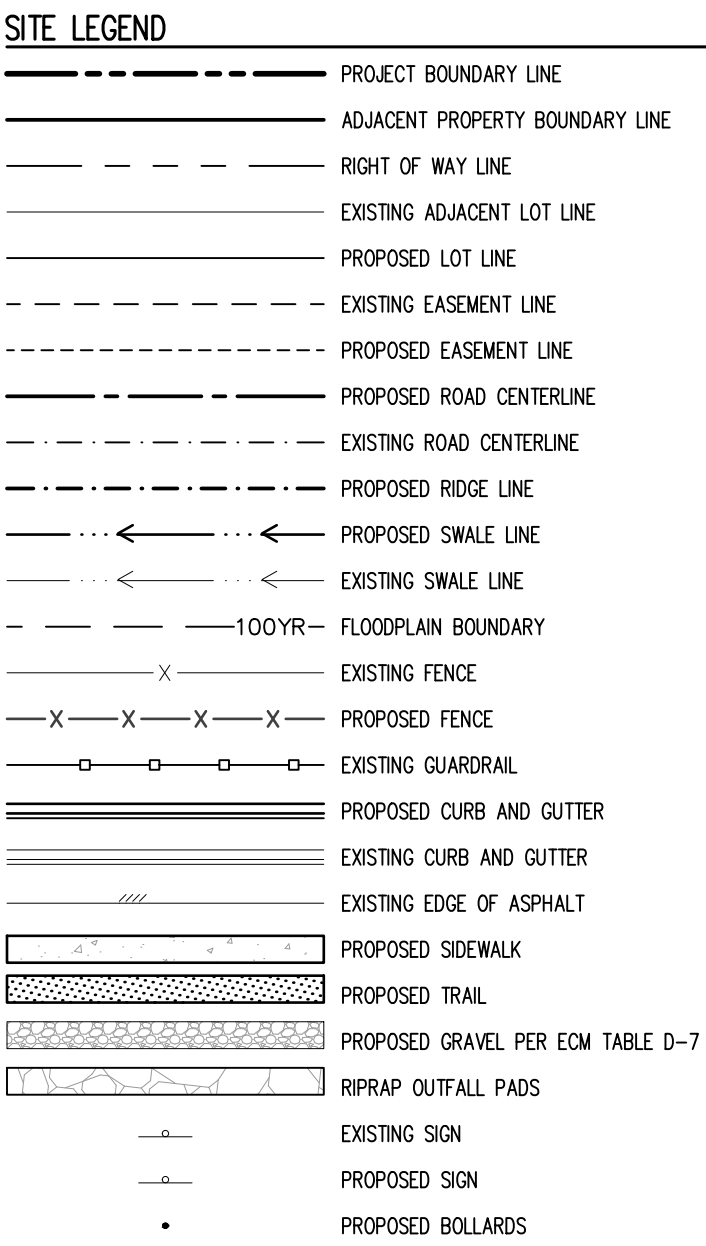
Sheet 1 of 12

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Project No:	MRS01
Drawn By:	JDM, BLB
Checked By:	BAS, CMWJ
Date:	08/04/2025

VR239 & PPR2336

Sheet 3 of 12

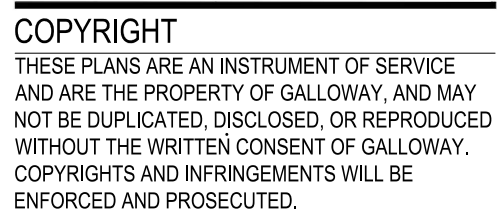


	EXISTING WATER LINE
	PROPOSED WATER LINE
	EXISTING SANITARY SEWER
	PROPOSED SANITARY SEWER
	EXISTING STORM SEWER
	PROPOSED STORM SEWER
	EXISTING GAS LINE
	PROPOSED GAS LINE
	EXISTING UNDERGROUND TELEPHONE
	EXISTING OVERHEAD ELECTRIC
	EXISTING FIBER OPTIC LINE
	EXISTING FIBER OPTIC STRUCTURES
	EXISTING TELEPHONE PEDESTAL
	EXISTING ELECTRIC TRANSFORMER
	EXISTING POWER POLE
	EXISTING STREET LIGHT
	PROPOSED STREET LIGHT
	PROPOSED WATER METER
	EXISTING WATER VALVE
	PROPOSED WATER VALVE
	EXISTING FIRE HYDRANT
	PROPOSED FIRE HYDRANT
	EXISTING STORM SEWER MANHOLE
	PROPOSED STORM SEWER MANHOLE
	EXISTING SANITARY SEWER MANHOLE
	PROPOSED SANITARY SEWER MANHOLE

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3. CONTRACTOR TO READ AND BECOME FAMILIAR WITH THE WOODMEN HILLS METROPOLITAN DISTRICT WATER AND WASTEWATER SYSTEM STANDARD SPECIFICATIONS, CRITERIA MANUAL AND DETAILS PRIOR TO BEGINNING CONSTRUCTION.

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00CZMJ & 6CZMA

STATE OF COLORADO, MERIDIAN ROAD & OWL PLACE
EL PASO COUNTY, FALCON, CO 80931

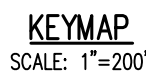
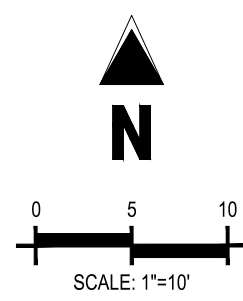
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Project No:	MRS01
Drawn By:	JDM, BLB
Checked By:	BAS, CMWJ
Date:	08/04/2025

VR239 & PPR2336

U1.1

Sheet 4 of 12



	PROJECT BOUNDARY LINE
	ADJACENT PROPERTY BOUNDARY LINE
	RIGHT OF WAY LINE
	EXISTING ADJACENT LOT LINE
	PROPOSED LOT LINE
	EXISTING EASEMENT LINE
	PROPOSED EASEMENT LINE
	PROPOSED ROAD CENTERLINE
	EXISTING ROAD CENTERLINE
	PROPOSED RIDGE LINE
	PROPOSED SWALE LINE
	EXISTING SWALE LINE
	100-YR FLOODPLAIN BOUNDARY
	EXISTING FENCE
	PROPOSED FENCE
	EXISTING GUARDRAIL
	PROPOSED CURB AND GUTTER
	EXISTING CURB AND GUTTER
	EXISTING EDGE OF ASPHALT
	PROPOSED SIDEWALK
	PROPOSED TRAIL
	PROPOSED GRAVEL PER EDM TABLE
	RIPRAP OUTFALL PADS
	EXISTING SIGN
	PROPOSED SIGN
	PROPOSED BOLLARDS

— W —	EXISTING WATER LINE
— W —	PROPOSED WATER LINE
— SS —	EXISTING SANITARY SEWER
— SS —	PROPOSED SANITARY SEWER
	EXISTING STORM SEWER
	PROPOSED STORM SEWER
— G —	EXISTING GAS LINE
— G —	PROPOSED GAS LINE
— UT —	EXISTING UNDERGROUND TELEPHONE
— OH —	EXISTING OVERHEAD ELECTRIC
— FO —	EXISTING FIBER OPTIC LINE
	EXISTING FIBER OPTIC STRUCTURES
	EXISTING TELEPHONE PEDESTAL
	EXISTING ELECTRIC TRANSFORMER
	EXISTING POWER POLE
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Know what's below.
Call before you dig.

SITE LEGEND

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	RIGHT OF WAY LINE
	EXISTING ADJACENT LOT LINE
	PROPOSED LOT LINE
	EXISTING EASEMENT LINE
	PROPOSED EASEMENT LINE
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	EXISTING ROAD CENTERLINE
	PROPOSED RIDGE LINE
	PROPOSED SWALE LINE
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	100-YR FLOODPLAIN BOUNDARY
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	PROPOSED FENCE
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	PROPOSED CURB AND GUTTER
	EXISTING CURB AND GUTTER
	EXISTING EDGE OF ASPHALT
	PROPOSED SIDEWALK
	PROPOSED TRAIL
	PROPOSED GRAVEL PER ECM TABLE D-7
	RIPRAP OUTFALL PADS
	EXISTING SIGN
	PROPOSED SIGN
	PROPOSED BOLLARDS

UTILITY LEGEND

	EXISTING WATER LINE
	PROPOSED WATER LINE
	EXISTING SANITARY SEWER
	PROPOSED SANITARY SEWER
	EXISTING STORM SEWER
	PROPOSED STORM SEWER
	EXISTING GAS LINE
	PROPOSED GAS LINE
	EXISTING UNDERGROUND TELEPHONE
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CAUTION - NOTICE TO CONTRACTOR

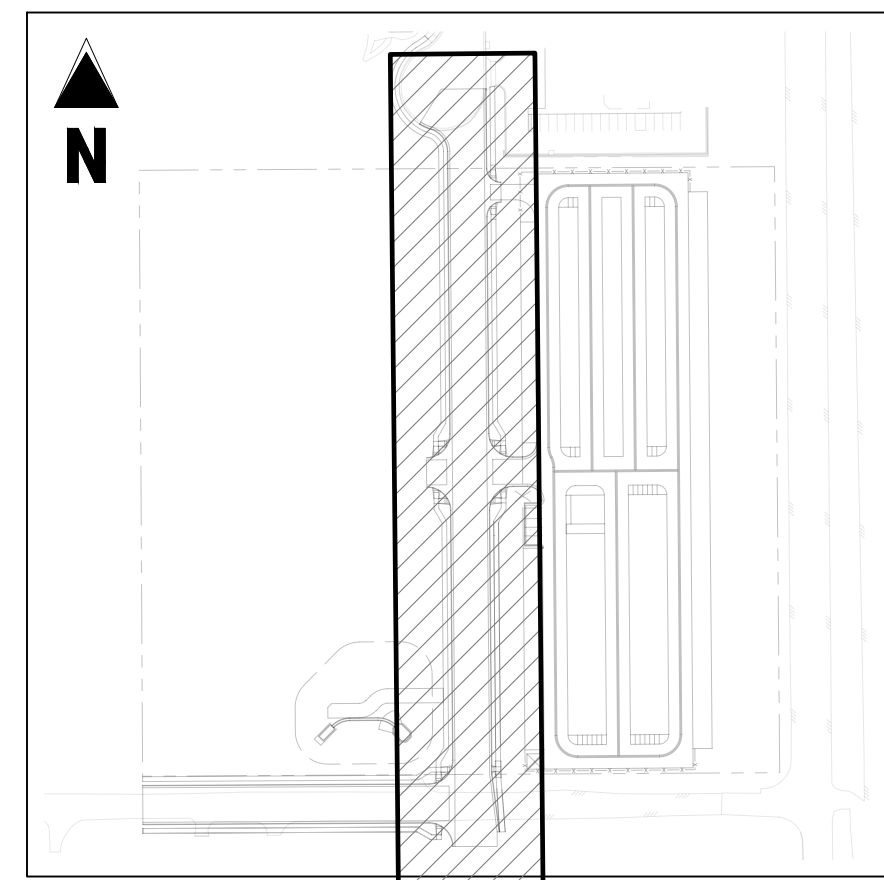
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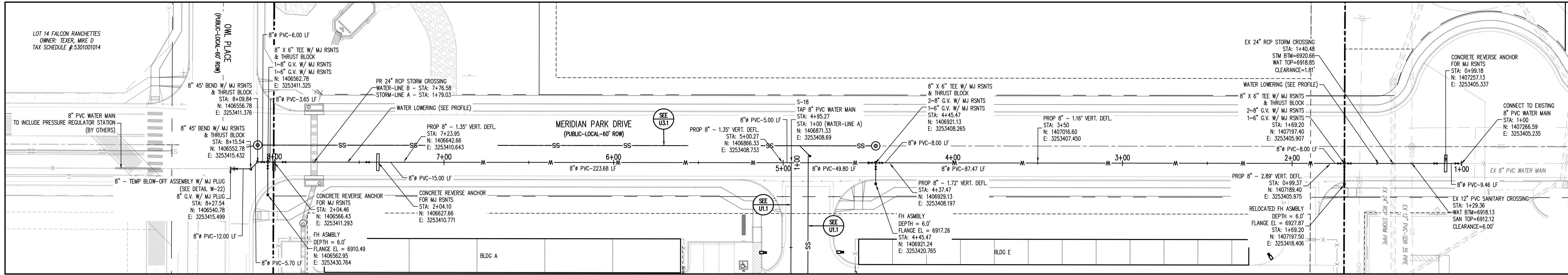
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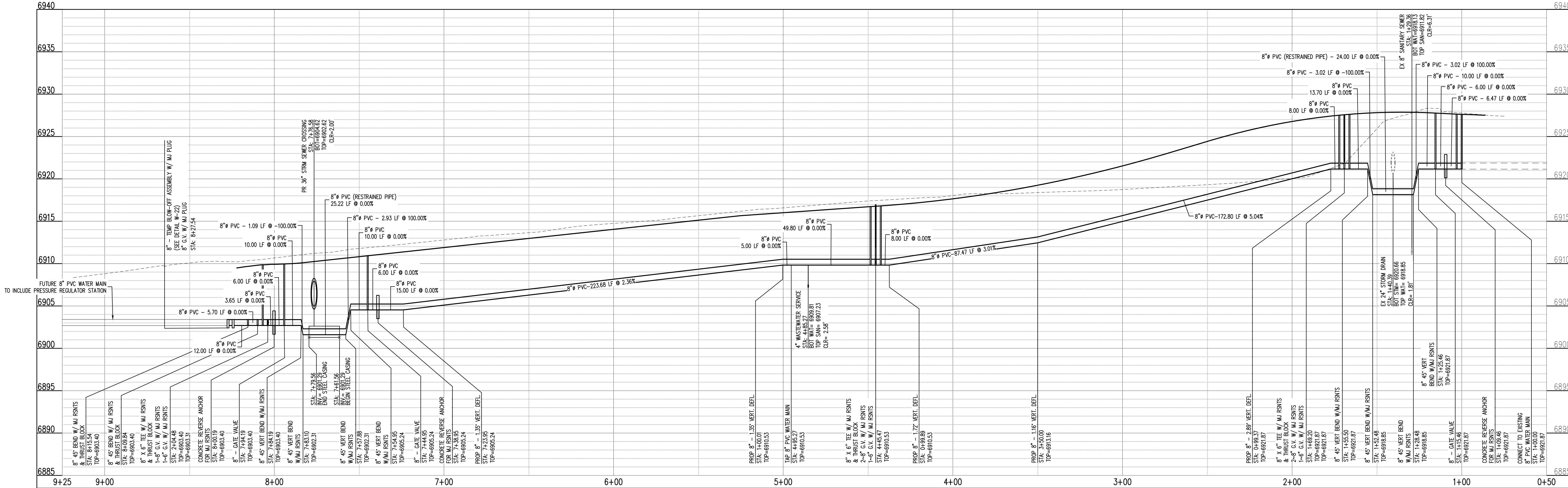
0 15 30
SCALE: 1"=30'



KEYMAP
SCALE: 1"=200'



WATER-LINE B (STA: 0+75 - 9+18.53)
SCALE: 1"=30'



WATER-LINE B (STA: 0+75 - 9+18.53)
SCALES: HORIZONTAL 1"=30', VERTICAL 1"=6'

Galloway

1155 Kelly Johnson Blvd., Suite 305
Colorado Springs, CO 80920
719.900.7220
GallowayUS.com



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UTILITY CONSTRUCTION DRAWINGS

MERIDIAN STORAGE
MERIDIAN STORAGE, LLC
VR239 & PPR2336

STATE OF COLORADO, MERIDIAN ROAD & OWL PLACE
EL PASO COUNTY, FALCON, CO 80931

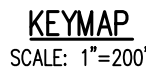
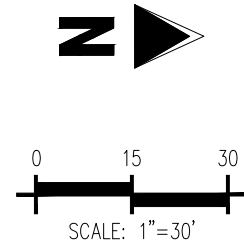
#	Date	Issue / Description	Init.
1	08/04/2025	ISSUED FOR CONSTRUCTION	CMWJ
2	12/07/2025	REMOVE RV STORAGE	CMWJ
3	05/22/2026	RELOCATE DROP STRUCTURE	CMWJ

Project No:	MRS01
Drawn By:	JDM, BLB
Checked By:	BAS, CMWJ
Date:	08/04/2025

WATER PLAN & PROFILE

U2.1

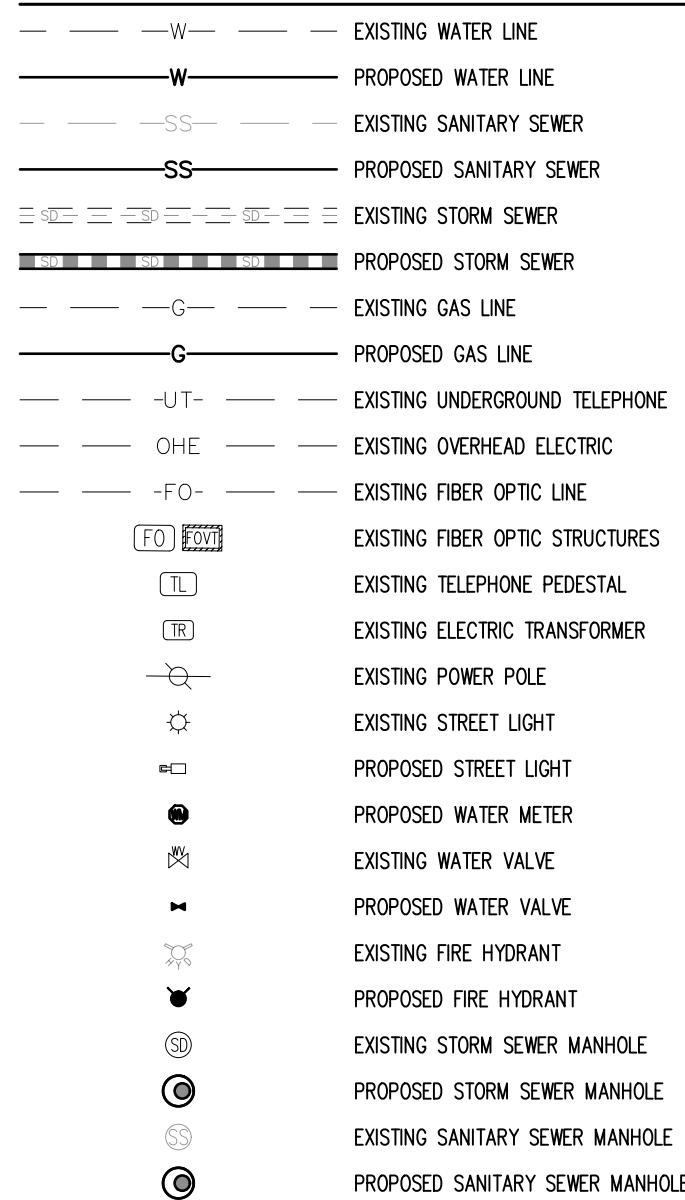
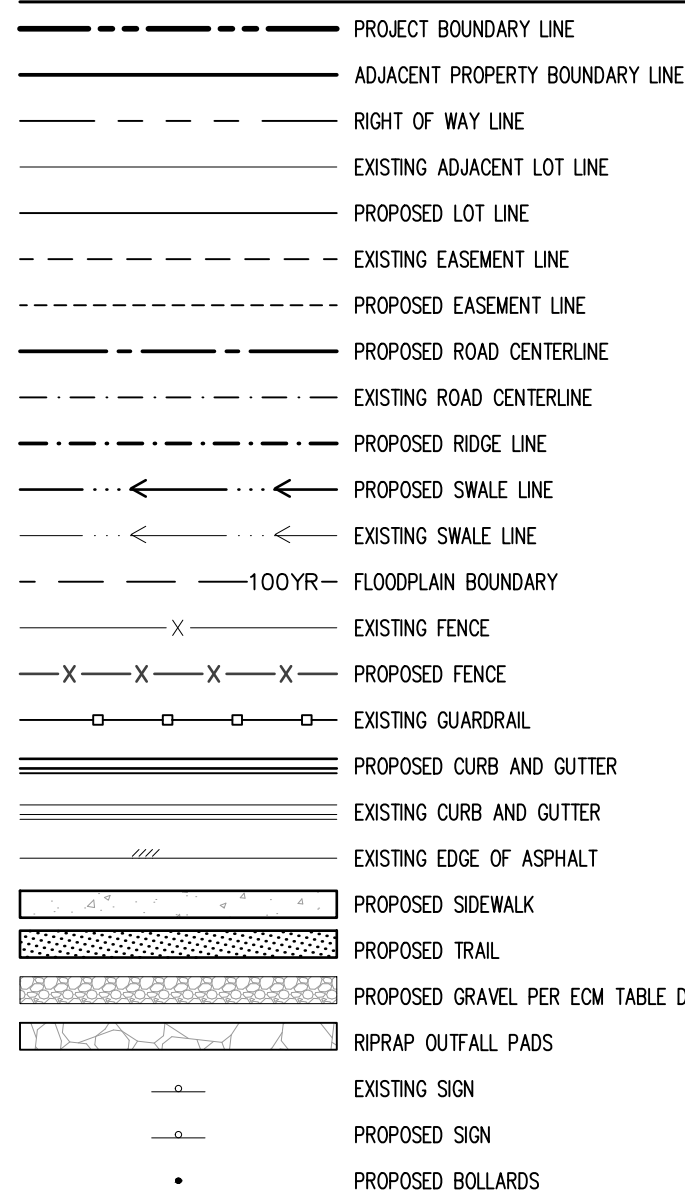
Sheet 5 of 12



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VR239 & PPR2336

STATE OF COLORADO, MERIDIAN ROAD & OWL PLACE
EL PASO COUNTY, FALCON, CO 80931

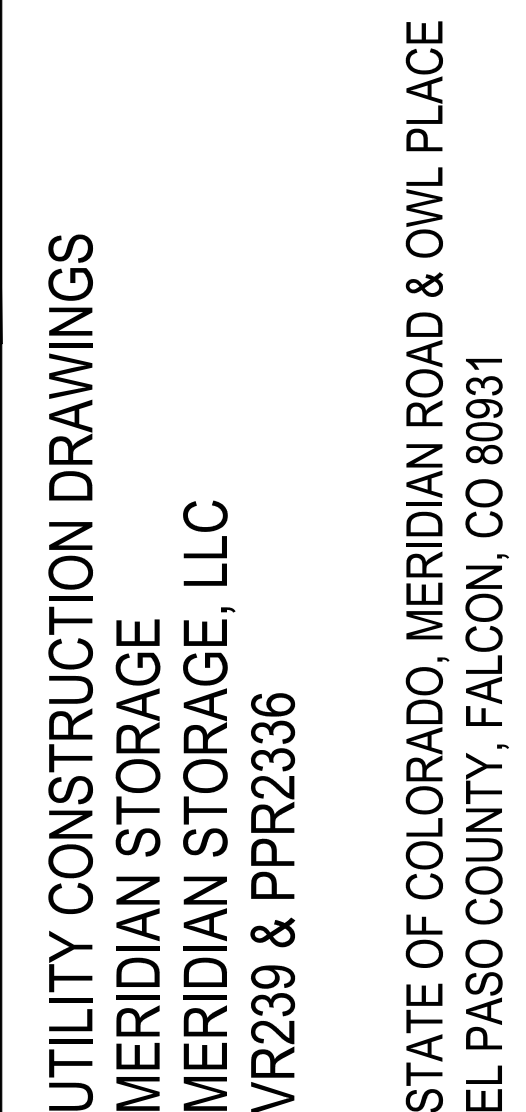
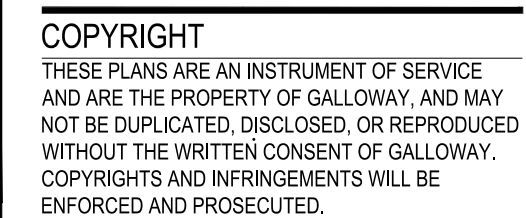
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Project No:	MRS01
Drawn By:	JDM, BLB
Checked By:	BAS, CMWJ
Date:	08/04/2025

WASTEWATER PLAN & PROFILE

VR239 & PPR2336

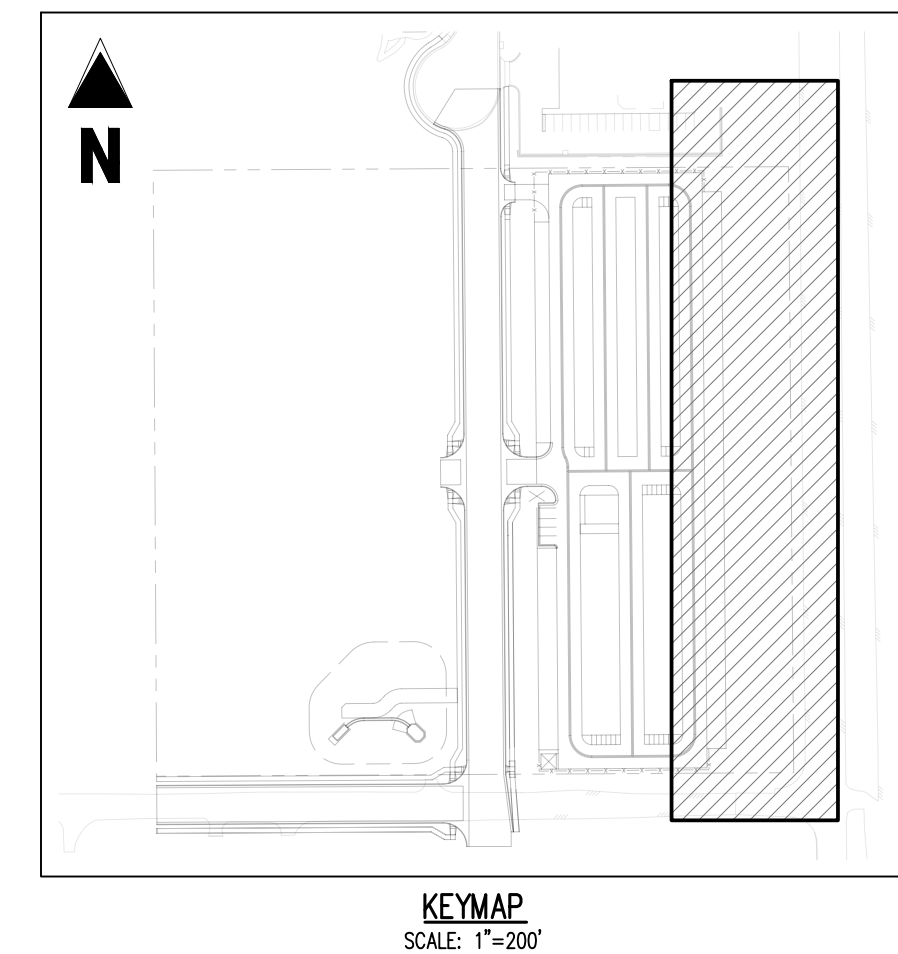
Sheet 6 of 12

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Project No:	MRS01
Drawn By:	JDM, BLB
Checked By:	BAS, CMWJ
Date:	08/04/2025

WASTEWATER MAIN RELOCATION

U3.2
Sheet 7 of 12



SITE LEGEND

- | | |
|--|---------------------------------|
| | PROJECT BOUNDARY LINE |
| | ADJACENT PROPERTY BOUNDARY LINE |
| | RIGHT OF WAY LINE |
| | EXISTING ADJACENT LOT LINE |
| | PROPOSED LOT LINE |
| | EXISTING EASEMENT LINE |
| | PROPOSED EASEMENT LINE |
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| | EXISTING ROAD CENTERLINE |
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| | PROPOSED SWALE LINE |
| | EXISTING SWALE LINE |
| | FLOODPLAIN BOUNDARY |
| | EXISTING FENCE |
| | PROPOSED FENCE |
| | EXISTING GUARDRAIL |
| | PROPOSED CURB AND GUTTER |
| | EXISTING CURB AND GUTTER |
| | EXISTING EDGE OF ASPHALT |
| | PROPOSED SIDEWALK |
| | PROPOSED TRAIL |
| | PROPOSED GRAVEL PER EOM TABLE |
| | RIPRAP OUTFALL PADS |
| | EXISTING SIGN |
| | PROPOSED SIGN |
| | PROPOSED BOLLARDS |

UTILITY LEGEND

- | | |
|--|---------------------------------|
| | EXISTING WATER LINE |
| | PROPOSED WATER LINE |
| | EXISTING SANITARY SEWER |
| | PROPOSED SANITARY SEWER |
| | EXISTING STORM SEWER |
| | PROPOSED STORM SEWER |
| | EXISTING GAS LINE |
| | PROPOSED GAS LINE |
| | EXISTING UNDERGROUND TELEPHONE |
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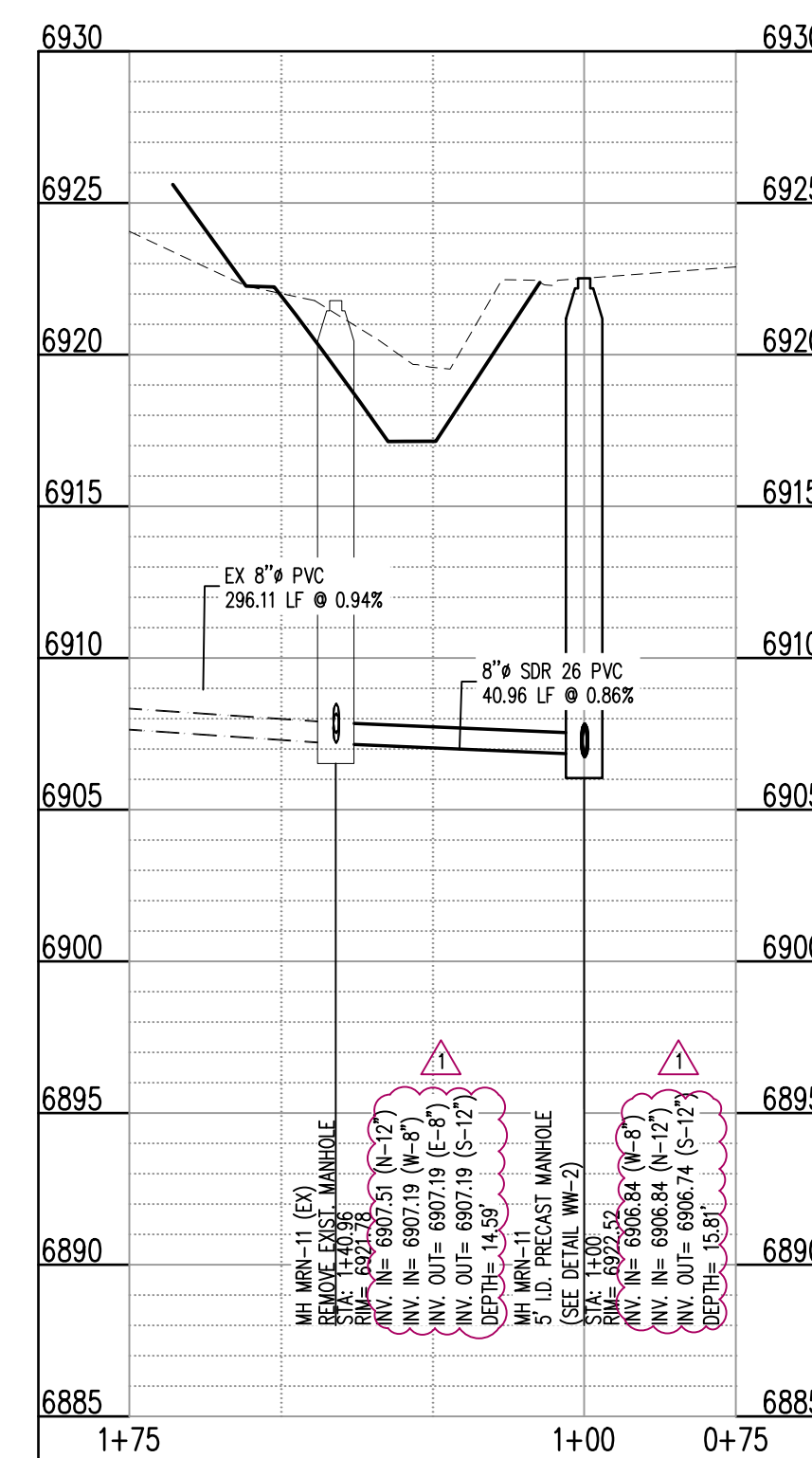
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- 811**
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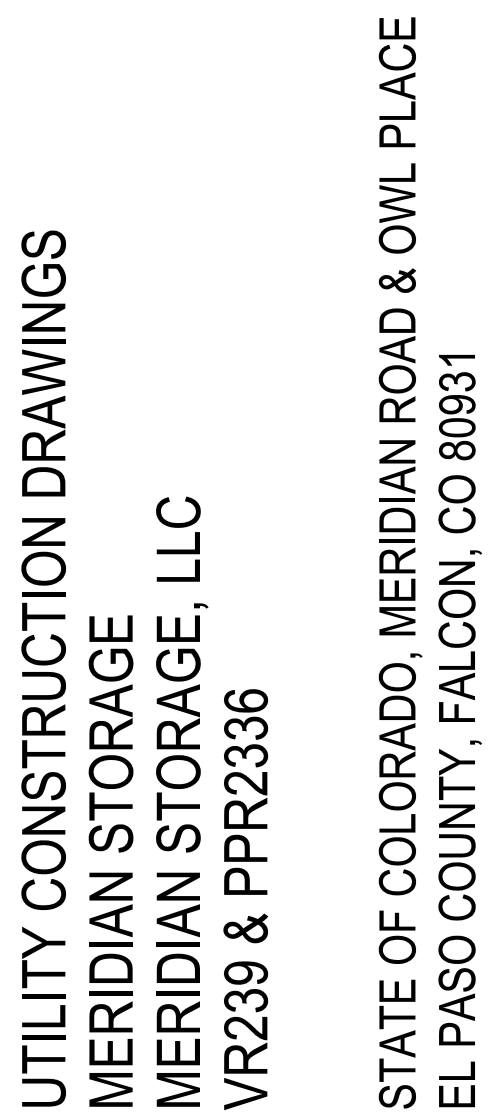
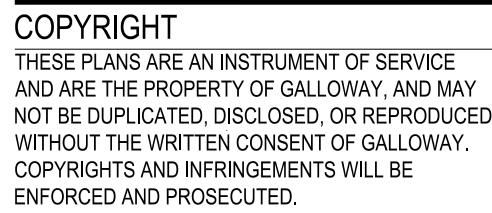
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By: Gilbert LaForce, P.E.
Deputy County Engineer
Date: 07/06/2026 10:39:00 AM.
El Paso County Department of Public Works



SANITARY—LINE D (STA: 0+75 – 1+75)

SCALES: HORIZONTAL 1"=30', VERTICAL 1"=6'



Project No:	MRS01
Drawn By:	JDM, BLB
Checked By:	BAS, CMWJ
Date:	08/04/2025

DUCTILE IRON PIPE

MECHANICAL JOINT CONNECTION

PIPE MUST BE CUT AT RIGHT ANGLES TO LONGITUDINAL CENTERLINE IN ALL CASES.

PIPE ENDS SHALL BE FREE OF BURRS.

MORTAR LINING SHALL BE FLUSH WITH PIPE ENDS.

COUGES CUT IN PIPE ENDS SHALL NOT BE ALLOWED.

DUCTILE IRON PIPE

SLIP JOINT CONNECTION

PIPE CUT IN STRAIGHT LINE AND REVEALED AT 45° ANGLE ON END.

GENERAL NOTES:

1. ALL PIPE CUTTING EQUIPMENT AND PIPE CUTS MUST BE APPROVED BY THE WATER AND SANITATION DISTRICT INSPECTOR.
2. ALL PIPE ENDS TO BE USED IN INSTALLATION SHALL BE DRESSED SMOOTH TO THE SATISFACTION OF THE INSPECTOR PRIOR TO INSTALLATION.
3. AT THE REQUEST OF THE CONTRACTOR MAKING THE INSTALLATION, THE DISTRICT WILL MAKE PIPE CUTS, PROVIDED THE CURRENT FEE PER CUT IS PAID AND 24-HOUR NOTICE IS GIVEN (THE CURRENT FEE IS SUBJECT TO CHANGE.)
4. ALL DIP DELIVERED TO JOB SITE MUST BE NEW MATERIAL.

PLAN
DEAD-END OR
REAR-ANCHOR

ELEVATION
LOADING ON
REVERSE ANCHOR

DIAMETER (in)	PRESSURE (psf)	x (in)	Ax (in)	y (in)	Ay (in)	Ab (sf)	h (in)	Vol (cy)
2	250	12	72	12	28.80	6.80	18	1.0
4	250	18	84	12	30.80	9.73	18	1.0
6	250	36	120	12	33.05	18.53	18	1.5
12	170	36	120	10	43.20	24.60	18	2.0
12	250	48	144	18	49.20	36.80	24	3.75
16	170	54	156	18	53.40	44.05	24	4.25
16	250	60	168	24	65.40	60.50	36	8.5

NOTES:

1. THE MINIMUM BEARING SURFACE AREAS SHOWN ARE BASED ON A MAX. STATIC PIPE PRESSURE OF 170/250 POUNDS PER SQUARE INCH PLUS A SAFETY FACTOR OF 1.5, AND AN ALLOWABLE SOIL BEARING CAPACITY OF 1,500 POUNDS PER SQUARE FOOT. FOR HIGHER ADDITIONAL ASSUMPTIONS INCLUDE A MAX OFF-TEMPERATURE CHANGE AND A POISSON RATIO OF 0.45. REFERENCE AWWA W-23, M-41, AND W-55.
2. THE DESIGN ENGINEER IS RESPONSIBLE FOR VERIFYING ASSUMPTIONS BASED ON ACTUAL SITE CONDITIONS. SITE WATERS FROM THE ASSUMPTIONS, THE DESIGN ENGINEER SHALL PROVIDE A SITE-SPECIFIC DESIGN THAT SHALL BE IN ACCORDANCE WITH AWWA W-23, PIPE DESIGN AND INSTALLATION, AND AWWA M-41, DUCTILE IRON PIPE, AND FITTINGS. SITE-SPECIFIC DESIGN USING BEST PRACTICE INFORMATION SHALL BE SUBMITTED TO THE DISTRICT FOR APPROVAL.
3. THE MINIMUM LATERAL BEARING SURFACE AREA (Ab) AND APPROXIMATE VOLUME OF CONCRETE (Vol) SHALL BE SHOWN ON THE CONSTRUCTION PLANS FOR ALL CONCRETE REVERSE ANCHORS.
4. THE APPROXIMATE VOLUMES SHOWN ARE BASED ON THE MINIMUM DIMENSIONS IN THE TABLE. THE APPROXIMATE VOLUME IS ROUNDED UP TO THE NEAREST 0.25 CUBIC YARDS.
5. A SITE-SPECIFIC DESIGN SHALL BE REQUIRED FOR PIPES LARGER THAN 16 INCHES OR MAX. STATIC PIPE PRESSURES GREATER THAN 250 POUNDS PER SQUARE INCH. THE DESIGN ENGINEER HAS THE OPTION OF PROVIDING A SITE-SPECIFIC DESIGN FOR PIPES SMALLER THAN 16 INCHES OR MAX. STATIC PRESSURES LESS THAN THE PRESSURES LISTED IN THE TABLE.
6. SOFT ROADS WITH EXCESS DEFORMATION TENDENCY TO MULE THE ANCHOR.
7. A TRENCH WIDTH OF 4 FEET AND 6 INCHES UNDER THE PIPE ARE ASSUMED FOR BEARING CALCULATIONS. (A, Ay, Ab, AND V).
8. THE DESIGN ENGINEER SHALL DETERMINE THE CONSTRUCTION OF THE CONCRETE REVERSE ANCHOR SHALL NOT COME IN CONTACT WITH OTHER UTILITIES.
9. DUCTILE IRON FITTINGS AND PIPE SHALL BE WRAPPED IN POLYETHYLENE TUBING NEAR ADJACENT TO CONCRETE.

NOTE:
USE DETAIL "B" WHEN
INSTALLING TO ADJACENT
ELEVATION

NOTE:
1. IF APPROPRIATE LOCATION FOR DISCHARGED WATER CANNOT BE REACHED BY ROLLING THE BEND, ADDITIONAL BENDS MAY BE REQUIRED BY THE DISTRICT INSPECTOR.

2. COAT THE RODS, BEAM, AND GALVANIZED STEEL PIPE WITH EPOXY POLYAMIDE COATING, 10 MILS THICK, MIN.

3. EXHIBE BLOW-OFF ASSEMBLY MUST BE ADEQUATELY SUPPORTED, CONCRETE PIER STONES MAY BE REQUIRED.

4. PIPE DROP APPROVED FOR USE IN POTABLE WATER SYSTEMS MUST BE USED ON ALL THREADED FITTINGS.

5. TEMPORARY BLOW-OFF VALVE ASSEMBLIES SHALL BE INSPECTED BY THE DISTRICT INSPECTOR PRIOR TO BACKFILL. INSTALL COMPACTOR TO BE SAME AS PIPE COMPACTOR SPECIFICATIONS.

6. 2\"/>

7. THE DISTRICT INSPECTOR MAY REQUIRE TEE-BACK RODS IN ADDITION TO THE MJ RESTRAINTS DEPENDING ON FIELD CONDITIONS AND SYSTEM PRESSURES.

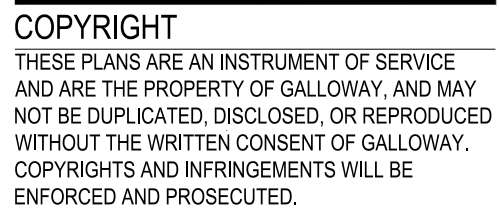
TEMP BLOW-OFF ASSEMBLIES - 4", 6", & 8" MAINS W/MJ PLUG

DESIGN: CDM/SGS CHECK: WPH/ST/1011 DATE: 8-1-16	REVISION: 01/06/2016 REVISION: 02/06/2016	WOODMEN HILLS METHROGLAN DISTRICT	WATER & WASTEWATER SYSTEM STANDARD SPECIFICATIONS	W-22
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The drawing consists of two views: a Plan View (N.T.S.) and a Profile View (N.T.S.).

Plan View (N.T.S.): This view shows the top-down layout of the tapping operation. A horizontal "BRANCH PIPE" is shown with a "TAPPING SLEEVE AND VALVE" attached to its left side. To the left of the tapping sleeve is a "WATER MAIN" with several tapping points. The "EDGE OF TAP EXCAVATION" is indicated by a dashed line. The "EDGE OF DITCH" is shown on the right. A dimension line indicates a distance of "8'-0\" (TAPS 4' & LARGER)" from the tapping sleeve to the edge of the excavation.

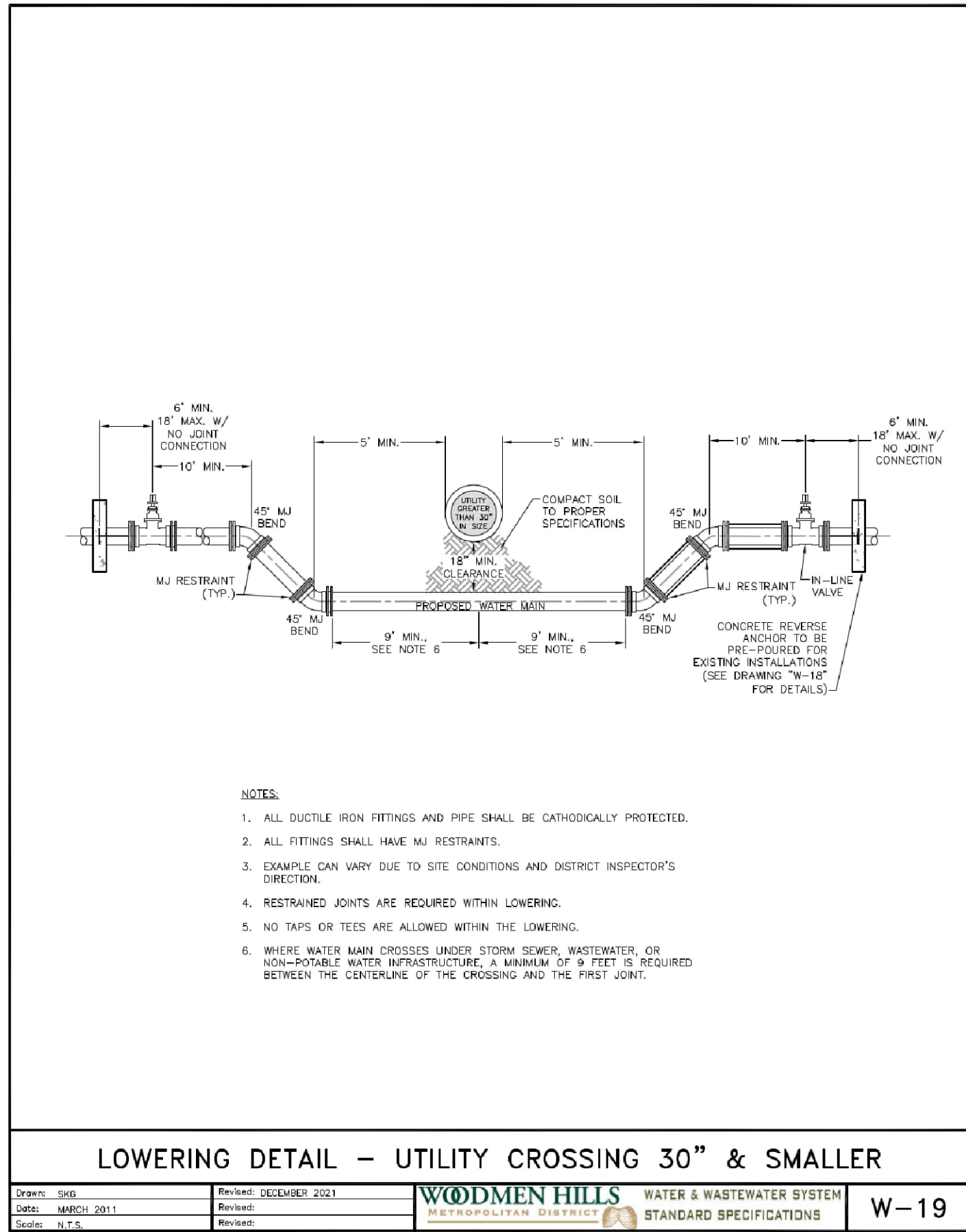
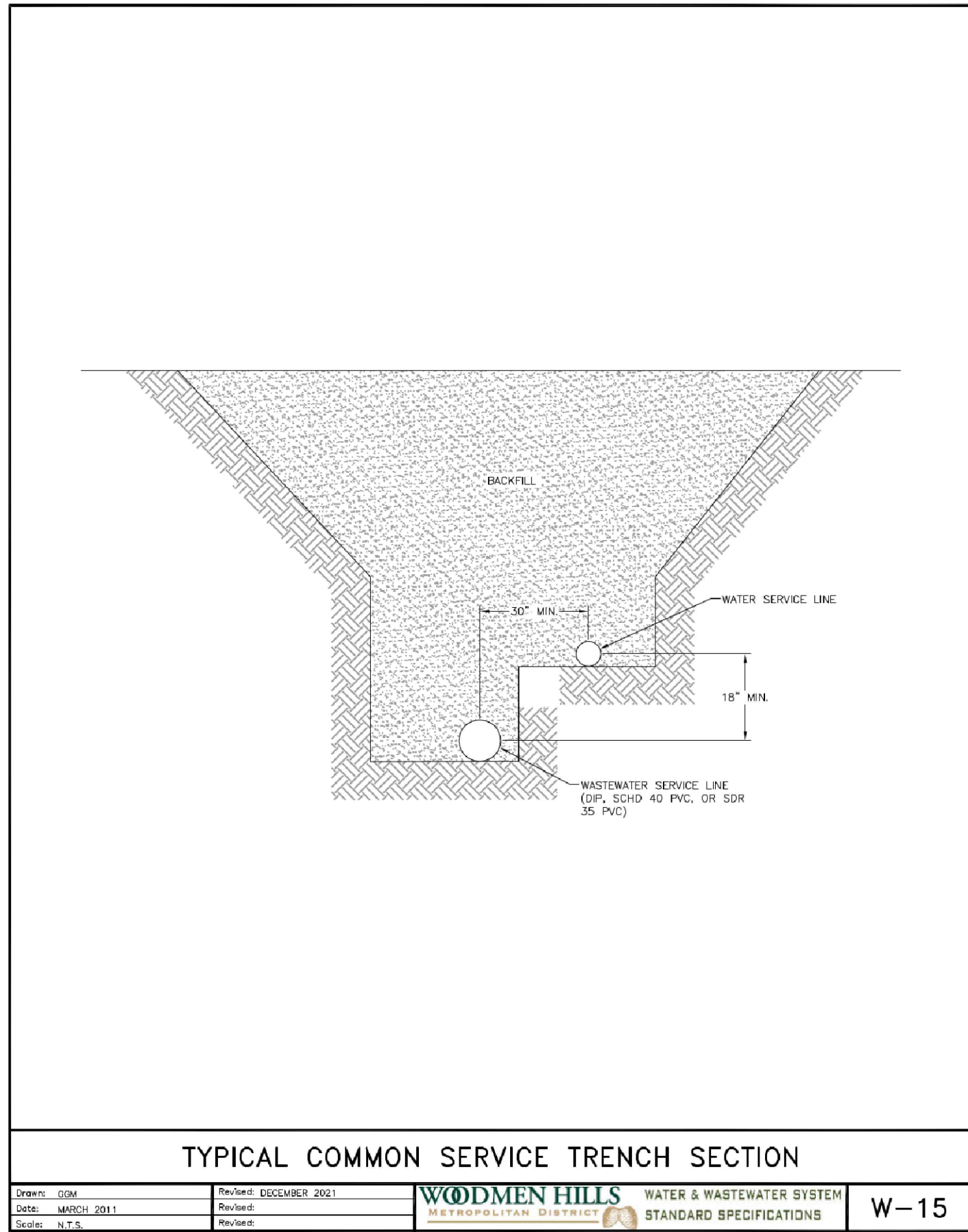
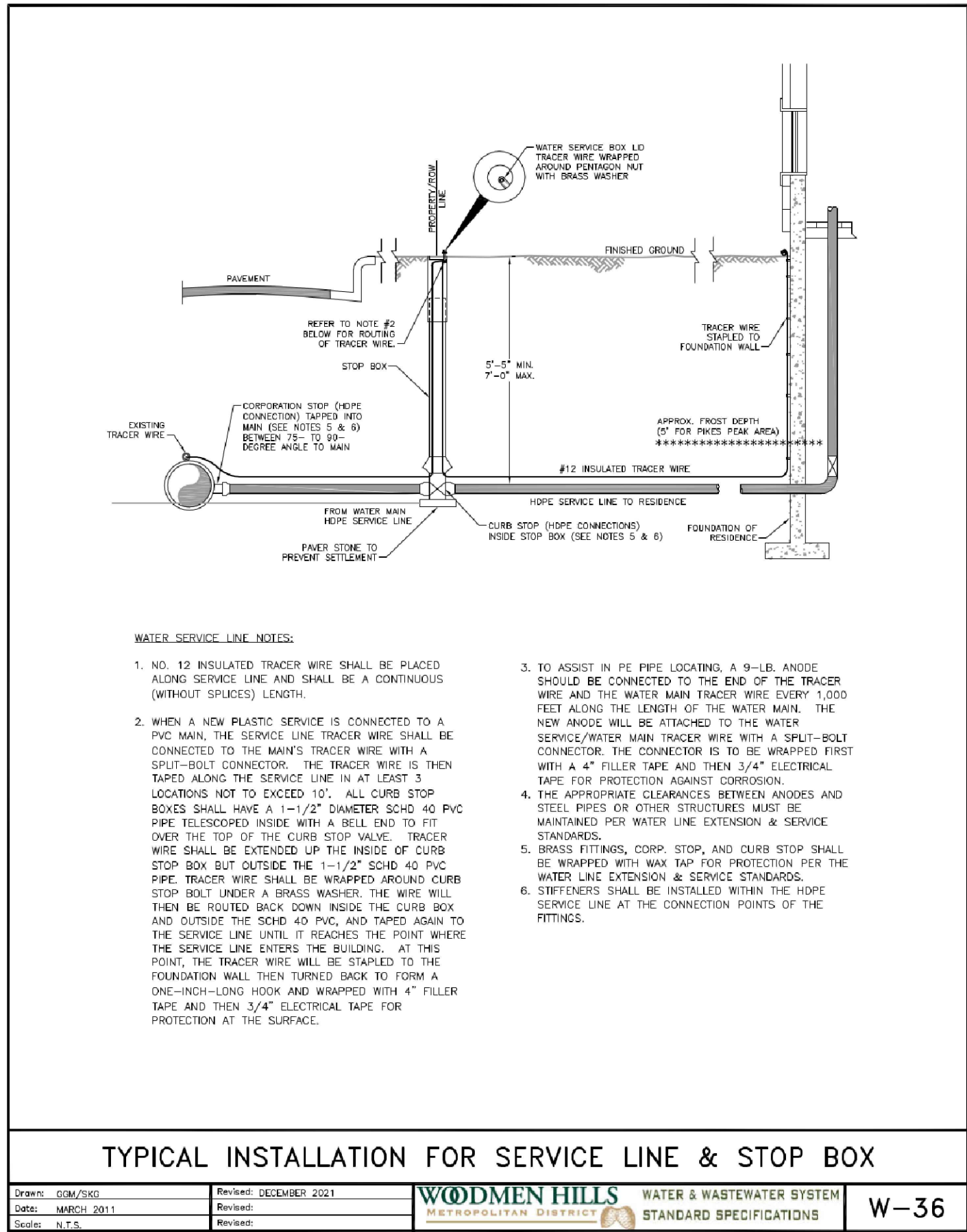
Profile View (N.T.S.): This view shows the side elevation of the tapping operation. The "TSP OF GROUND" is indicated by a line with downward-pointing arrows. The "UNDISTURBED EARTH (TYP.)" is shown on the left. The "TAPPING SLEEVE & VALVE" is shown in cross-section, connected to the "BRANCH PIPE". Below the tapping sleeve, a note states: "PLACE 3/4\" ROCK BELOW TAPPING SLEEVE AND VALVE TO SPRINGING OF PIPE". At the bottom, another note states: "IN WET AND/OR UNSTABLE GROUND, THE TRENCH BOTTOM WILL BE BROUGHT TO GRADE WITH 1/2\" ROCK TO SUPPORT TUBSIT BLOCK".

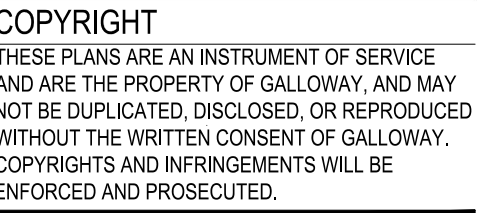


Project No:	MRS01
Drawn By:	JDM, BLB
Checked By:	BAS, CMWJ
Date:	08/04/2025

VR239 & PPR2336

U4.3
Sheet 10 of 12

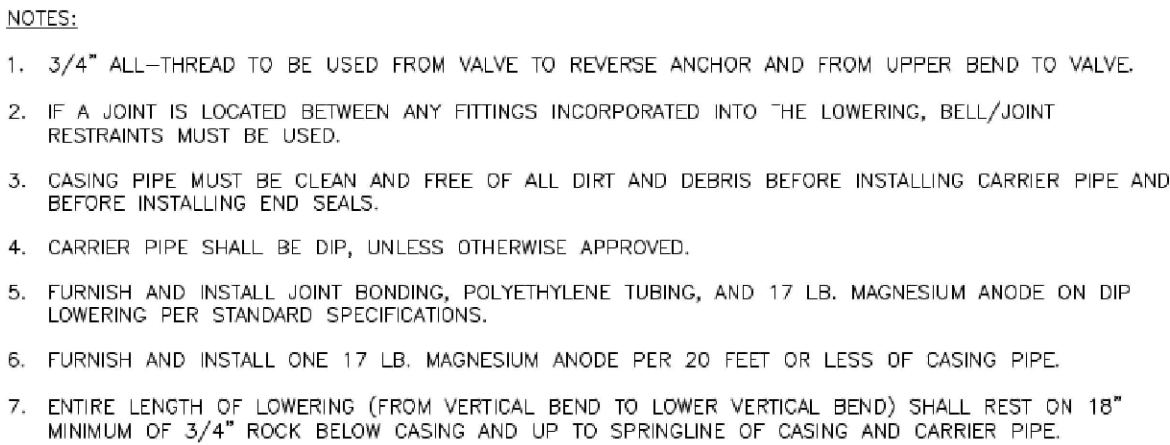




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VR239 & PPR2336

Sheet 11 of 12



- NOTES:
1. 3/4" ALL-THREAD TO BE USED FROM VALVE TO REVERSE ANCHOR AND FROM UPPER BEND TO VALVE.
 2. IF A JOINT IS LOCATED BETWEEN ANY FITTINGS INCORPORATED INTO THE LOWERING, BELL/JOINT RESTRAINTS MUST BE USED.
 3. CASING PIPE MUST BE CLEAN AND FREE OF ALL DIRT AND DEBRIS BEFORE INSTALLING CARRIER PIPE AND BEFORE INSTALLING END SEALS.
 4. CARRIER PIPE SHALL BE DIP, UNLESS OTHERWISE APPROVED.
 5. FURNISH AND INSTALL JOINT BONDING, POLYETHYLENE TUBING, AND 17 LB. MAGNESIUM ANODE ON DIP LOWERING PER STANDARD SPECIFICATIONS.
 6. FURNISH AND INSTALL ONE 17 LB. MAGNESIUM ANODE PER 20 FEET OR LESS OF CASING PIPE.
 7. ENTIRE LENGTH OF LOWERING (FROM VERTICAL BEND TO LOWER VERTICAL BEND) SHALL REST ON 18" MINIMUM OF 3/4" ROCK BELOW CASING AND UP TO SPRINGLINE OF CASING AND CARRIER PIPE.

LOWERING DETAIL W/CASING UTILITY CROSSING GREATER THAN 30"

Drawn: SUG	Revised: DECEMBER 2021	 WOODMEN HILLS WATER & WASTEWATER SYSTEM METROPOLITAN DISTRICT STANDARD SPECIFICATIONS
Date: MARCH, 2011	Revised:	
Scale: N.T.S.	Revised:	

