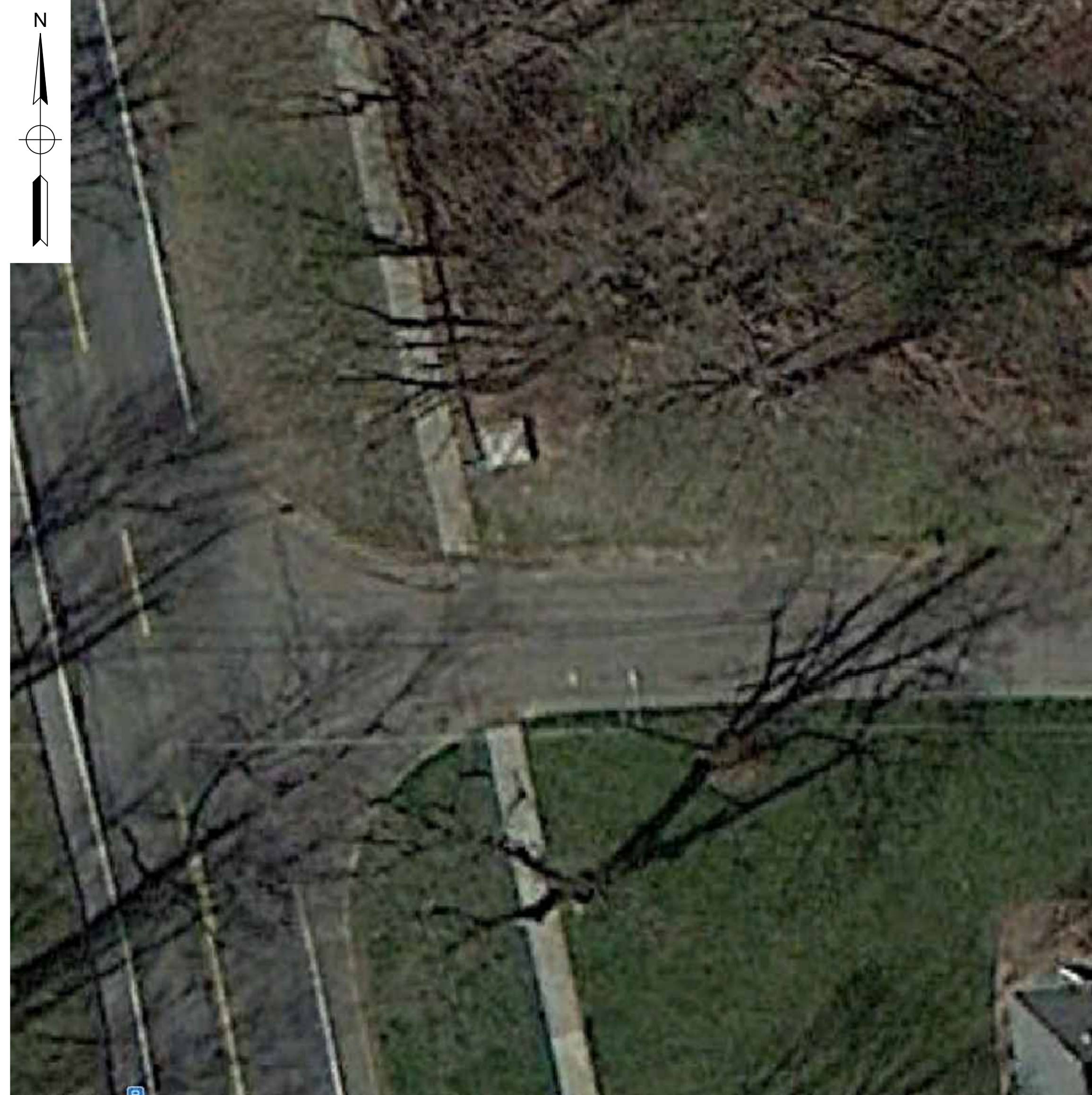


TABLE OF CONTENTS

SHEET #	TITLE
1 OF 6	COVER SHEET
2 OF 6	BILL OF MATERIALS / NOTES
3 OF 6	EXISTING CONDITIONS SITE PLAN
4 OF 6	PROPOSED SITE PLAN
5 OF 6	EXISTING CONDITIONS PIPING DETAILS
6 OF 6	PROPOSED PIPING DETAILS

EVERSOURCE ENERGY



WORK SCOPE

I&R INITIATIVES

- TIER 1 CONTROL LINE REMEDIATION
- OVERPIPE PROTECTION
- ASV DEVICE REPLACEMENT
- TEE STRAINER INSTALLATION
- TELEMETRY
- INVESTIGATION DIGS
- BYPASS BLOCKING VALVE REMEDIATION
- MISC WORK:

2021 EGMA I&R INITIATIVES
 HILLSIDE TERRACE @ LONGMEADOW STREET, LONGMEADOW, MA
 WORK LOCATION: HILLSIDE @ LONGMEADOW
 PREMISE ID: 11423
 PROJECT #: 21-77843

X	ISSUED FOR XXXXX	XX/XX/20	XX/XX
No.	Description	Date	Dw/Ck
Revision/Status			
HILLSIDE TERRACE @ LONGMEADOW STREET, LONGMEADOW, MA PROJECT #: 21-77843			
COVER SHEET			
SCALE: N.T.S.		SHEET 1 OF 6	
Drawn by / Date	Checked by / Date	Drawing Number	Rev. No.
XXX XX/XX/XX	XXX XX/XX/XX	MA-WES-STA-LON-3791-01	X

FIELD VERIFY DIMENSIONS
PRIOR TO PIPE FABRICATION



EVERSOURCE STANDARD NOTES

- IF ANY OF THE FOLLOWING OCCUR A DRAWING REVISION IS REQUIRED AND MUST BE APPROVED AND/OR STAMPED BY THE ENGINEER OF RECORD. CHANGES CAN BE APPROVED AND/OR STAMPED BY A PROJECT ENGINEER, BUT THE ENGINEER OF RECORD MUST BE INFORMED.
 - IF THE TIE IN POINT MOVES TO A DIFFERENT SEGMENT OF PIPE THAN SHOWN
 - IF A CHANGE IN THE LOCATION OF VALVES IS REQUIRED
 - IF THERE IS ANY CHANGE TO WHAT IS SHOWN ON THE DRAWING WITHIN 50 FT OF A PRESSURE REGULATING STATION, DISTRICT REGULATOR, OR GATE STATION
 - IF A CHANGE IN PIPE SIZE, MATERIAL, FITTINGS, OR WALL THICKNESS IS REQUIRED.
- MINOR CHANGES SUCH AS OFFSETS MAY NOT REQUIRE DRAWING CHANGES.
- EXCAVATOR SHALL CALL DIGSAFE / CALL BEFORE YOU DIG (DIAL 811) AT LEAST 72 HOURS PRIOR TO CONSTRUCTION. SATURDAYS, SUNDAYS, AND HOLIDAYS ARE EXCLUDED FROM THE 72-HOUR TIME SPAN, NOT CONSIDERED BUSINESS WORKDAYS.
- CONSTRUCTION DRAWINGS ARE BASED ON EVERSOURCE HISTORICAL DOCUMENTATION AND HAVE NOT BEEN FIELD VERIFIED. WHEN THE PIPE IS EXPOSED AND VARIANCES TO THE CERTIFIED DRAWINGS ARE FOUND, CONTACT GAS ENGINEERING TO DETERMINE PATH FORWARD.
- ALL WORK SHALL BE PERFORMED PER EVERSOURCE, LOCAL, STATE, OSHA, AND FEDERAL REGULATIONS AND STANDARDS.
- MATERIAL AND CONSTRUCTION SHALL CONFORM TO EVERSOURCE GAS STANDARDS.
- THE LOCATIONS OF EXISTING UTILITIES AND UNDERGROUND STRUCTURES ARE APPROXIMATE AND MUST BE FIELD VERIFIED. ADDITIONAL UNDERGROUND FACILITIES MAY EXIST THAT ARE NOT SHOWN ON THESE DRAWINGS WHICH MAY REQUIRE ADDITIONAL OFFSETS IN THE PIPELINE.
- WORK LOCATIONS SHOWN ON THE DRAWINGS ARE APPROXIMATE. EXACT LOCATIONS OF TIE-INS SHALL BE DETERMINED AT THE TIME OF CONSTRUCTION TO SUIT FIELD CONDITIONS AT THE SPECIFIC TIE-IN POINT. VERIFY LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO BEGINNING ANY TIE-IN WORK.
- ALL LIVE GAS WORK INCLUDING BUT NOT LIMITED TO TAPPING OF FITTINGS ON LIVE MAINS, STOPPING, MANIPULATING VALVE, ABANDONMENT, SHALL BE PERFORMED BY, OR AT THE DIRECTION AND UNDER THE DIRECT SUPERVISION OF EVERSOURCE GAS PERSONNEL AND IN ACCORDANCE WITH THE WRITTEN PROCEDURE. DRAWING CHANGES MAY ALSO REQUIRE A CHANGE TO THE PROCEDURE.
- EXCAVATOR IS REQUIRED TO PROTECT EXISTING UTILITIES, STRUCTURES, LANDSCAPES FEATURES, SIGNAGE, CURBS, ETC. CARE SHOULD BE TAKEN NOT TO DISTURB OR DAMAGE SUCH ITEMS. ROADWAY, SIDEWALKS, AND GRASS DISTURBED SHALL BE RESTORED TO THE SATISFACTION OF THE CITY OR TOWN. PLANT BEDS WILL BE RELOCATED TO THEIR EXISTING REGULAR LOCATION.
- IF THE PROJECT IS WITHIN 50 FEET OF A DISTRICT REGULATOR OR GATE STATION, ENSURE THAT A QUALIFIED I&R TECHNICIAN IS ON SITE.
- ALL TRAFFIC CONTROL SHALL CONFORM TO THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), INCLUDING ALL REVISIONS AND ADDENDA. ALL TRAFFIC CONTROL DEVICES WILL BE SUPPLIED BY EXCAVATOR.
- PROPERTY LINES, STRUCTURES AND EXISTING CONDITIONS DEPICTED ON PLANS ARE BASED ON EVERSOURCE GIS INFORMATION AND HAVE NOT BEEN VERIFIED BY LAND SURVEY UNLESS NOTED.
- EXISTING SERVICES SHOWN ON PLAN ARE FOR INFORMATION ONLY. PROPOSED SERVICES ARE NOT SHOWN ON PLANS AND ARE TO BE INSTALLED PER EVERSOURCE CONSTRUCTION STANDARDS.
- PROPOSED WORK SHALL BE PERFORMED AND COMPLETED IN COMPLIANCE WITH ALL PERMITS AND APPROVALS.

EVERSOURCE SPECIAL NOTES
(AS APPLICABLE)

DRAWING LEGEND

Gas Main Symbology

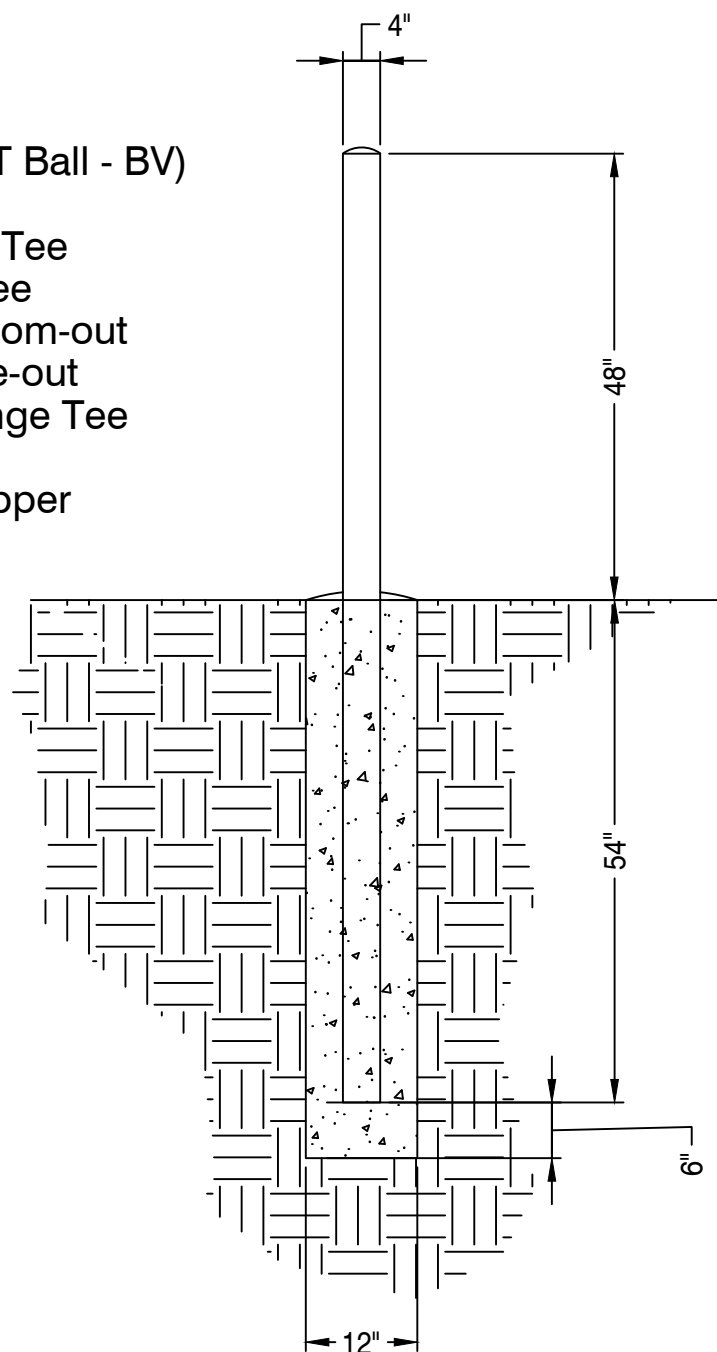
- Existing Gas Main
- Existing Gas Main to Be Abandoned
- Proposed Gas Main

Gas Main Material/Pressure Label References

- MATERIAL CODES**
- CS* Coated Steel Gas Main
 - CI* Cast Iron Gas Main
 - BS* Bare Steel Gas Main
 - WI* Wrought Iron Gas Main
 - PH* High Density Polyethylene Gas Main
 - PM* Medium Density Polyethylene Gas Main
- PRESSURE CODES**
- *LP Low Pressure
 - *IP Intermediate Pressure
 - *MP Medium Pressure
 - *HP High Pressure
- MISCELLANEOUS CODES**
- *-SER Service
 - *-R Riser
 - (TC) Transmission Class
- Gas Main Installation Method Label References**
- AT Attached
 - BH Bridge Hanger
 - BLGH Building Hanger
 - DB Directional Bore
 - IS Inserted
 - OC Open Cut
 - PB Pneumatic Bore
 - PL Plowed
 - PB Pneumatic Bore
 - PL Plowed
 - RT Roof Top
 - (E) Existing
 - (P) Proposed

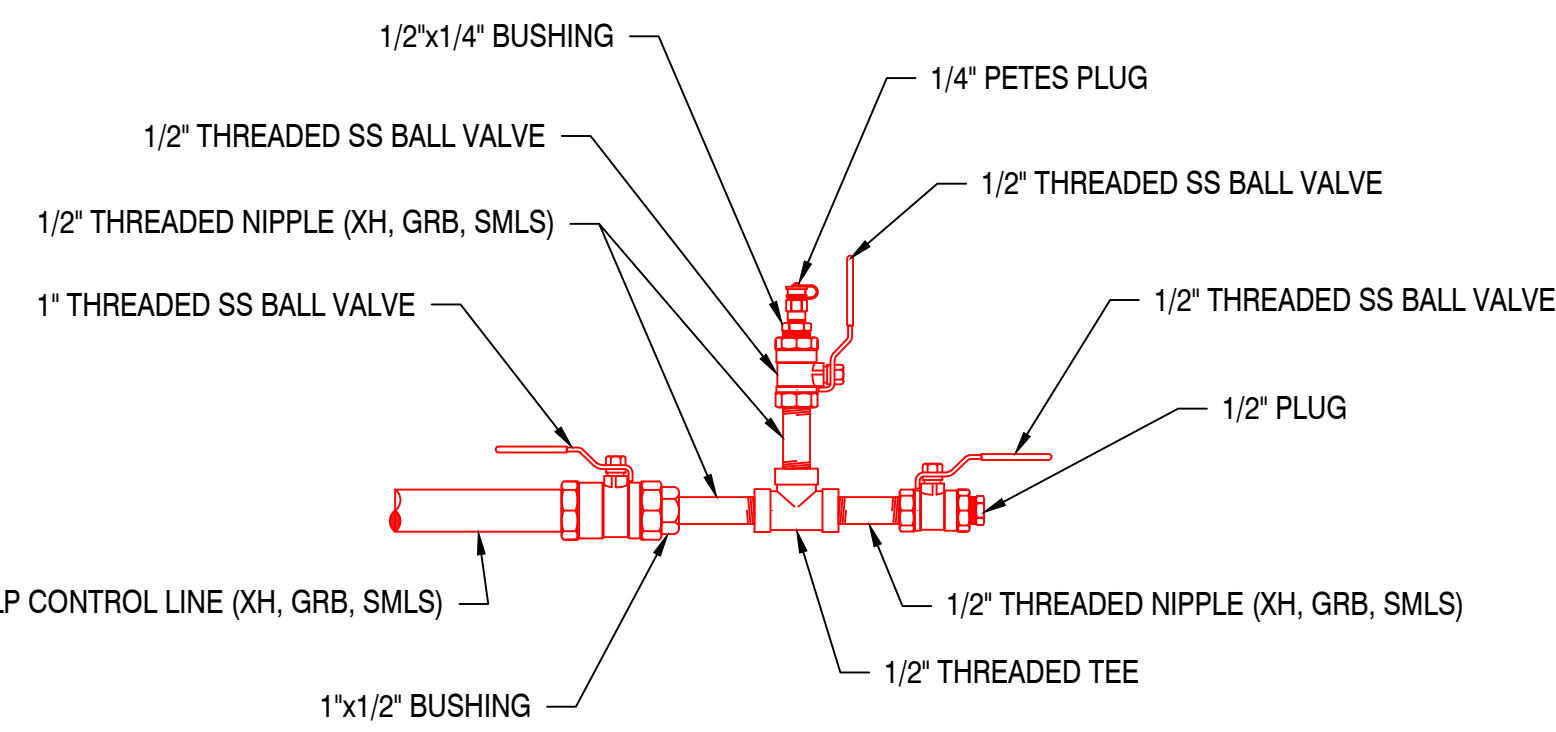
Gas Facility Symbology

- ⊗ x"GV Gas Valve
 - x"PV Critical Gas Valve
 - x"HVTT High Volume Tapping Tee
 - x"SST Pressure Control Fitting - ShortStopp Tee
 - x"SPH Pressure Control Fitting - Spherical Tee
 - x"MF-BO Pressure Control Fitting - Mueller Bottom-out
 - x"MF-SO Pressure Control Fitting - Mueller Side-out
 - x"MF-FT Pressure Control Fitting - Mueller Flange Tee
 - ⊗ x"SS Pressure Control Fitting - ShortStopp
 - ⊗ x"MF Pressure Control Fitting - Mueller Stopper
 - ⊗ x"x" POLYTAP Polytapp Side Saddle Fitting
 - Transition
 - End Cap
 - Riser
 - Reducer
 - EM Electronic Marker
 - TWS Flush-mounted Tracer Wire Station
 - Post Pipeline Marker with Tracer Wire
 - Gas Main Marker without Tracer Wire
 - Test Well
 - Regulator Station
 - Single Customer Regulator
 - Meter
 - Meter with Regulator
 - Test Point (Station)
 - Gas Service Tie-over
 - Gas Service Replacement
 - Meter Move Out
- Swing Tie Symbology**
- Ⓣ Telephone Manhole
 - Ⓧ Drain Manhole
 - Ⓧ Electric Manhole
 - Ⓧ Catch Basis
 - Ⓧ Sewer Manhole
 - Ⓧ Fire Hydrant
 - Ⓧ Utility Pole
 - Ⓧ Property Marker
 - Ⓧ Telephone Pedestal
 - Ⓧ Television Pedestal
 - Ⓧ Unknown Manhole
 - Ⓧ Water Box
 - Ⓧ Water Gate
 - Ⓧ Electric Pedestal
 - Ⓧ Iron Pin
 - Ⓧ Light Pole

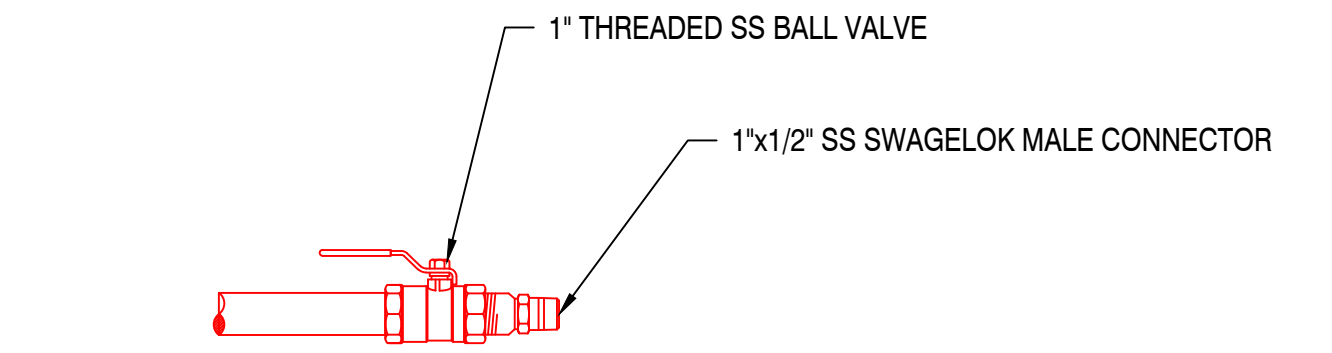


1 4" BOLLARD
Scale: N.T.S.

DOME TOP WITH CONCRETE
STANDARD STEEL PIPE FILLED WITH CONCRETE
PAINT EXPOSED SURFACES YELLOW
CONCRETE SLOPED AWAY FROM PIPE AT BASE



2 STANDARD CONTROL LINE TAP DETAILS
Scale: N.T.S.



3 STANDARD TELEMETRY LINE DETAILS
Scale: N.T.S.

BILL OF MATERIALS				
ITEM	QTY	SIZE	DESCRIPTION	DESIGN PRESS. (psig)
1	1	2"	PIETRO FIORENTINI, REVAL 182 150RF W/ DUCTILE BODY TOP ENTRY WITH 201+R31 STAINLESS PILOT SBC WATERPROOF SLAM SHUT, UNDERGROUND PIT INSTALLATION SURFACE TREATMENT COATING, STAINLESS STEEL FASTENERS, WATERPROOF PROVING SWITCH WITH 25 FOOT CABLE, WITH #2700830 SPRING RED/BLACK SPRING SET AT 14" W.C., UPSO SPRING #2700338 WHITE SET AT 4" W.C., OPSO #2700830 SPRING RED/BLACK SET AT 20" W.C., AND MATERIAL CERTIFICATE 04B (REG.)SECONDO PGGG2740005IT	285
2	8	5/8" x 3"	STUD BOLT, ASTM A-193-B7, THREADED ENTIRE LENGTH, W/ 2 HEX NUTS A194-2H (FOR 2" FLANGE 150, REQ'S 4 BOLTS EA.)	N/A
	2	2"	GASKET FLAT RING, ANSI 150, 1/16" THICK, NON-ASBESTOS, NON-GLASS FIBER GARLOCK BLUE-GARD STYLE 3000, 1,000 PSIG MAXIMUM PRESSURE	1,000
3	2	1" x 1"	MUELLER H-17656 CS NO-BLO VALVE TEE WLD X WLD 1440#WP	1,440
4	30	1"	PIPE 0.179"W GB SMLS 30MIL FBE SA106	1,906
5	2	1"	ELL 90 DEG CS SOCK-WELD BLK 3000# SA105	1,906
6	2	1"	VALVE, BALL, CONTRO S8000-M3 2000WOG 316SS FP 2PC B VLV THD SS B TFM LL	2,000
	2	1" x 1/2"	BUSHING, HEX-HD, CS, BLK, 6000#	2,662
	2	1/2" x 4"	NIPPLE, XH, GB, SMLS, CS A106, TBE	2,450
	4	1/2" x 3"	NIPPLE, XH, GB, SMLS, CS A106, TBE	2,450
	2	1/2"	TEE BLK CS THD 3000# SA105	2,450
	4	1/2"	VALVE, BALL, CONTRO S8000-M3 2000WOG 316SS FP 2PC B VLV THD SS B TFM LL	2,000
	2	1/2" x 1/4"	BUSHING, HEX-HD, CS, BLK, 6000#	3,133
	2	1/4"	PETES PLUG II, BRASS BODY, NEOPRENE CORE, WITH CAP & BLUE TETHER, 500# W.P	500
	2	1/2" x 1/2"	SWAGELOK MALE COMPR CONNECTOR SS-810-1-8 T316SS TUB X MPT	3,700
	2	1/2"	PLUG, HEX HEAD, XH CS, 6000#, SA105 (FOR PRESSURE TEST)	3,133
	2	1/4"	PLUG, HEX HEAD, XH CS, 6000#, SA105 (FOR PRESSURE TEST)	3,085
7	2	1"	VALVE, BALL, CONTRO S8000-M3 2000WOG 316SS FP 2PC B VLV THD SS B TFM LL	2,000
	2	1/2" x 1"	SWAGELOK MALE CONNECTOR 1/2 TUBE OD x 1 MALE NPT SS-810-1-16	3,700
	2	1"	PLUG, HEX HEAD, XH CS, 6000#, SA105 (FOR PRESSURE TEST)	2,662
8	24	LS-300-C	LINK SEAL (4 LINKS REQUIRED PER PENETRATON - 1" PIPE THRU 3" CORE DRILL)	N/A
9	10	2"	CONDUIT GRC EXPLOSION PROOF	N/A
10	1	2"	CONDUIT END CAP GRC EXPLOSION PROOF	N/A
-	-	17LB	MAGNESIUM ANODE 17 LB - HIGH POTENTIAL C/W 10 FT #12 TW-R C & P INSULATED RED LEAD WIRE. PACKAGED IN BACKFILL. 75% GYPSUM. 20% BENTONITE, 5% SODIUM SULPHATE.	N/A
-	1	24" X 59"	OVERPIPE PROTECTION PLATE, 0.6" THICK	N/A
	1	-	OVERPIPE PROTECTION PLATE JOINING CLIP (1 PER PLATE)	N/A
	1	-	OVERPIPE PROTECTION PLATE CAP FOR CLIP (1 PER PLATE)	N/A
-	4	48" X 59"	OVERPIPE PROTECTION PLATE, 0.6" THICK	N/A
	4	-	OVERPIPE PROTECTION PLATE JOINING CLIP (1 PER PLATE)	N/A
	4	-	OVERPIPE PROTECTION PLATE CAP FOR CLIP (1 PER PLATE)	N/A
-	-	1 GAL	TAPECOAT OMNI PRIME COLD APPLY WRAP PRIMER 1 GAL UN2234	N/A
-	-	2" x 25'	TAPECOAT T-TAPE #235021GPE 2"x25', 12 ROLLS/CASE	N/A
-	1	-	TELEMETRY CABINET - EMERSON	N/A
-	1	-	TELEMETRY CABINET PRECAST CONCRETE PAD (BY OTHERS)	N/A
-	-	-	TEST BOX 5" DIA. ABS PLASTIC FOR CORROSION CONTROL 18 X 18 IN SHAFT LENGTH W/NON-LOCKING MAGNETIZED COVER, WITH TERMINAL PLATE WALL THICKNESS .150 + -.015 CP TEST #NMTN501818.4PT 2000# OR MORE-FREIGHT PREPAID ALLOWED	N/A
-	-	4"	WAX TAPE 4 IN WIDE X 9 FT LONG 24/ROLLS/CS, TRENTON #1	N/A
			NOTE 1: Maximum Allowed Pressure values are the maximum pressure for which a component can be used in a NiSource/EGMA system. Values are determined by manufacturer ratings, design pressure calculations, and in the case of steel pipe/fittings, the Maximum Allowed Pressure has been established by calculating a pressure that keeps the SMYS below 20%, i.e. non-transmission classification.	
			NOTE 2: Material quantities listed are for reference only.	

X	ISSUED FOR XXXXX	XX/XX/20	XX/XX
No.	Description	Date	Dw/Ck
Revision/Status			
HILLSIDE TERRACE @ LONGMEADOW STREET, LONGMEADOW, MA			
PROJECT #: 21-77843			
BILL OF MATERIALS / NOTES			
SCALE: N.T.S.		SHEET 2 OF 6	
Drawn by / Date	Checked by / Date	Drawing Number	Rev. No.
XXX XX/XX/XX	XXX XX/XX/XX	MA-WES-STA-LON-3791-01	X

FIELD VERIFY DIMENSIONS
PRIOR TO PIPE FABRICATION

ASSESSORS MAP 393 BLOCK 58 LOT 29A
 HILLSIDE TERRACE
 N/F TOWN OF LONGMEADOW
 DEED BOOK 5548 PAGE 302

GAS REGULATOR STATION
 VAULTS - NO EASEMENT
 DOCUMENT ENCOUNTERED
 IN TITLE RESEARCH
 COMPONENT OF PROJECT

~ PUBLIC - ROUTE 5 - COUNTY LAYOUT - VARIABLE WIDTH ~
 LONGMEADOW STREET

T OF ROADWAY LAYOUT

GRASS

WOODED GUARDRAIL

TREE LINE

4" PL GAS LINE

PAVED AREA

FIBERGLASS MANHOLE

GRASS

EOP

HILLSIDE
 ~ 50.00' WIDE ~
 TERRACE

ABANDONNED WATER LINE

SMH

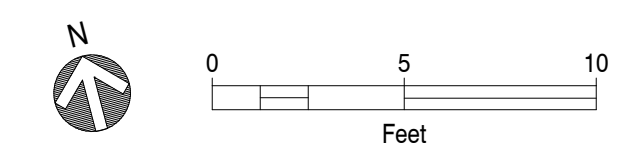
SMH

10" WATER LINE

CB

CONC. SIDEWALK

UP#90-1



X	ISSUED FOR XXXXX	XX/XX/20	XX/XX
No.	Description	Date	Dw/Ck
Revision/Status			
HILLSIDE TERRACE @ LONGMEADOW STREET, LONGMEADOW, MA PROJECT #: 21-77843			
EXISTING CONDITIONS SITE PLAN			
SCALE: AS NOTED		SHEET 3 OF 6	
Drawn by / Date	Checked by / Date	Drawing Number	Rev. No.
XXX XX/XX/XX	XXX XX/XX/XX	MA-WES-STA-LON-3791-01	X

FIELD VERIFY DIMENSIONS
 PRIOR TO PIPE FABRICATION

\\192.168.1.95\Land Survey Maps\NSource\Engineering Support\CY2021 Station Work\Springfield Stations\11423_Hillside Terrace @Longmeadow Street

ASSESSORS MAP 393 BLOCK 58 LOT 29A
 HILLSIDE TERRACE
 N/F TOWN OF LONGMEADOW
 DEED BOOK 5548 PAGE 302

GAS REGULATOR STATION
 VAULTS - NO EASEMENT
 DOCUMENT ENCOUNTERED
 IN TITLE RESEARCH
 COMPONENT OF PROJECT

~ PUBLIC - ROUTE 5 - COUNTY LAYOUT - VARIABLE WIDTH ~
LONGMEADOW STREET
 ~ ~

TOF ROADWAY LAYOUT

GRASS
 4" PL GAS NE
 WOODED GUARDRAIL
 TELEMETRY EQUIPMENT W/ BOLLARDS
 LOCAL CONDUIT FOR TELEMETRY
 PAVED AREA
 SAC

TREE LINE

FIBERGLASS MANHOLE

GRASS

(2) TELEMETRY CS CONTROL LINES

EOP

(2) 1" CS CONTROL LINES

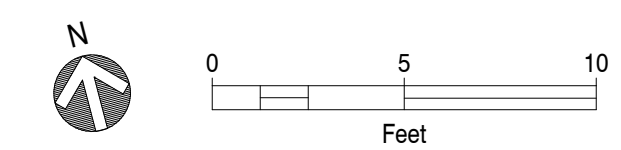
HILLSIDE
 ~ 50.00' WIDE ~
TERRACE

ABANDONNED WATER LINE

10" WATER LINE
 SMH
 EMH
 SMH
 CB

CONC. SIDEWALK

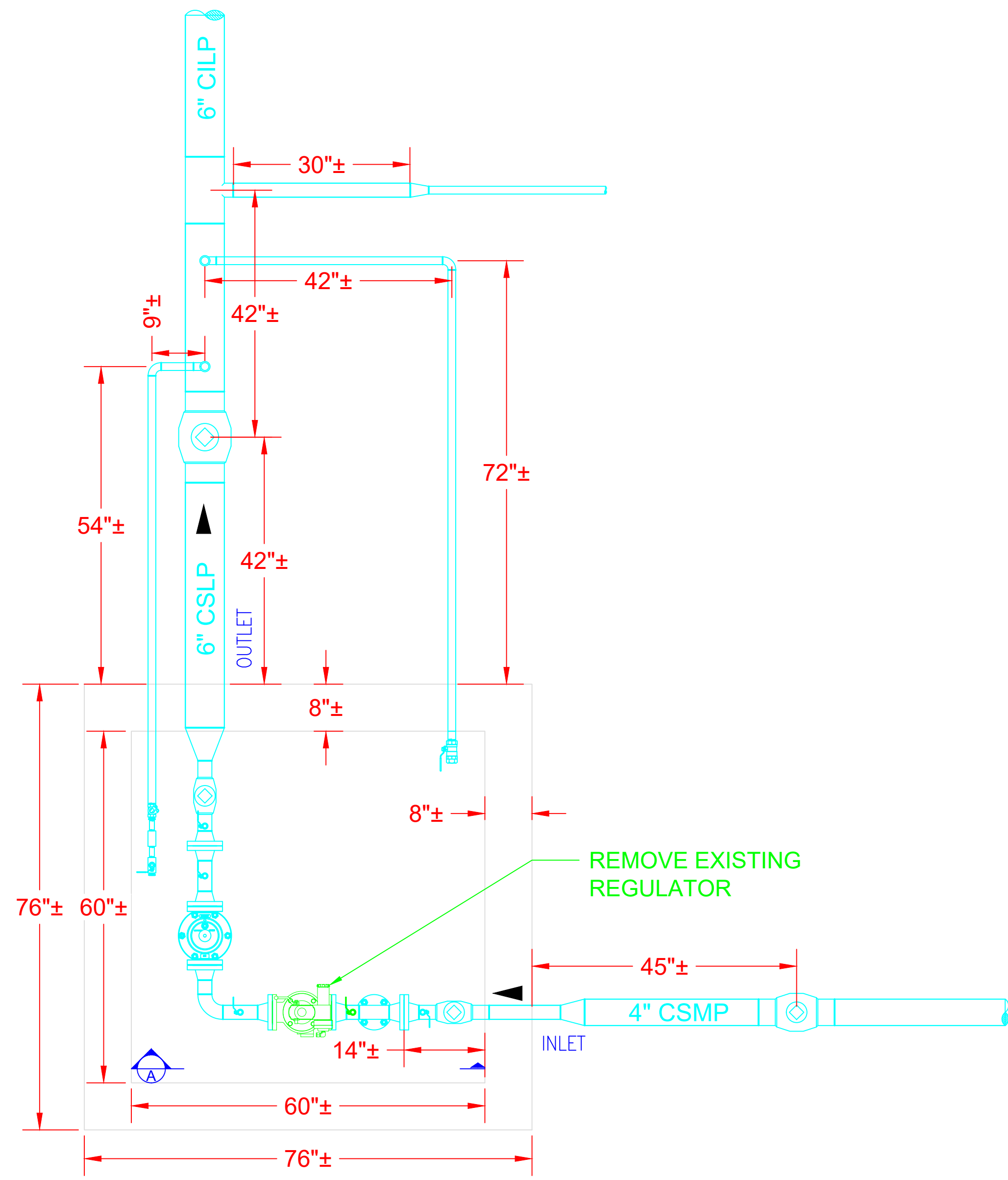
UP#90-1



X	ISSUED FOR XXXXX	XX/XX/20	XX/XX
No.	Description	Date	Dw/Ck
Revision/Status			
HILLSIDE TERRACE @ LONGMEADOW STREET, LONGMEADOW, MA			
PROJECT #: 21-77843			
PROPOSED SITE PLAN			
SCALE: AS NOTED		SHEET 4 OF 6	
Drawn by / Date	Checked by / Date	Drawing Number	Rev. No.
XXX XX/XX/XX	XXX XX/XX/XX	MA-WES-STA-LON-3791-01	X

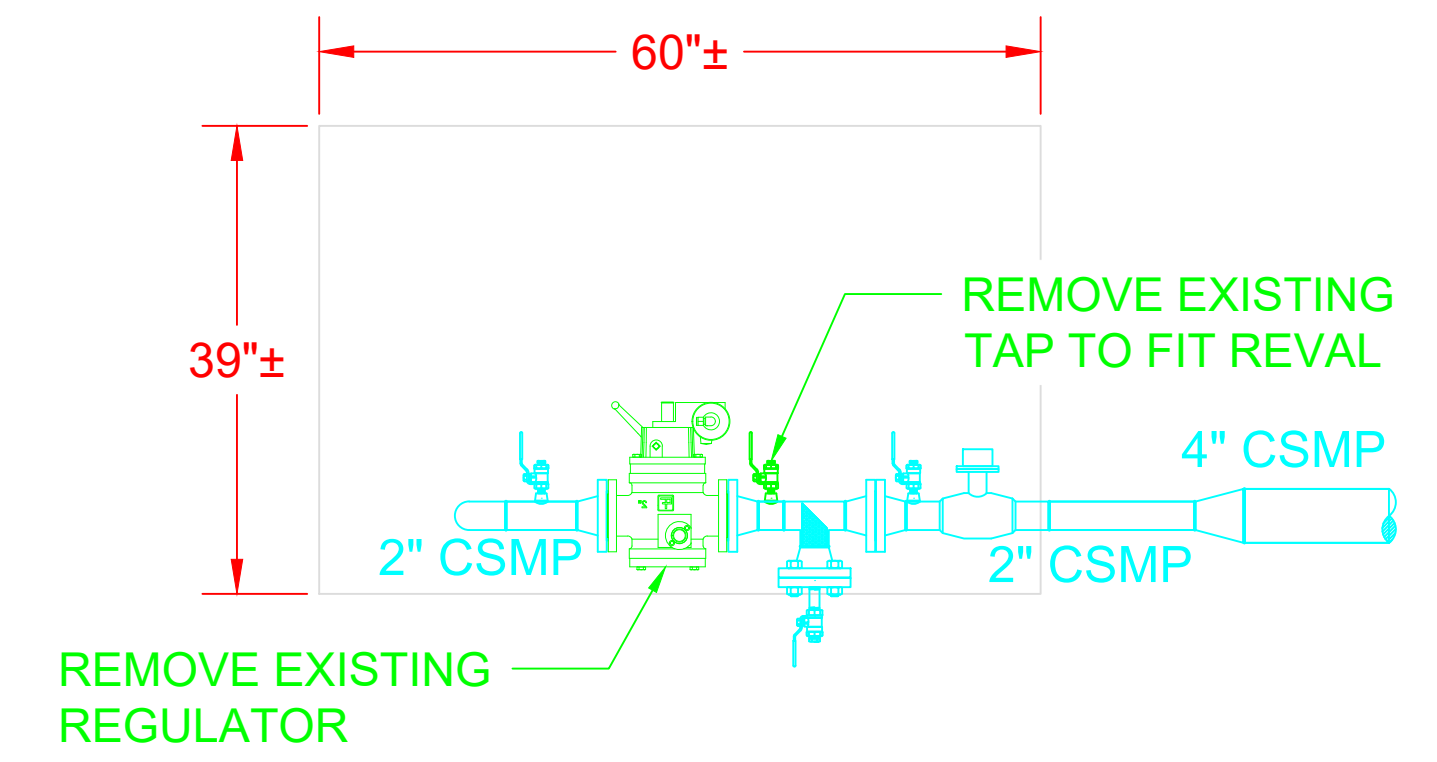
FIELD VERIFY DIMENSIONS
 PRIOR TO PIPE FABRICATION

\\192.168.1.95\Land Survey Maps\GIS\Source\Engineering Support\CY2021 Station Work\Springfield Stations\11423_Hillside Terrace @Longmeadow Street



PLAN VIEW

Scale: 3/4" = 1'-0"



ELEVATION VIEW (A-A)

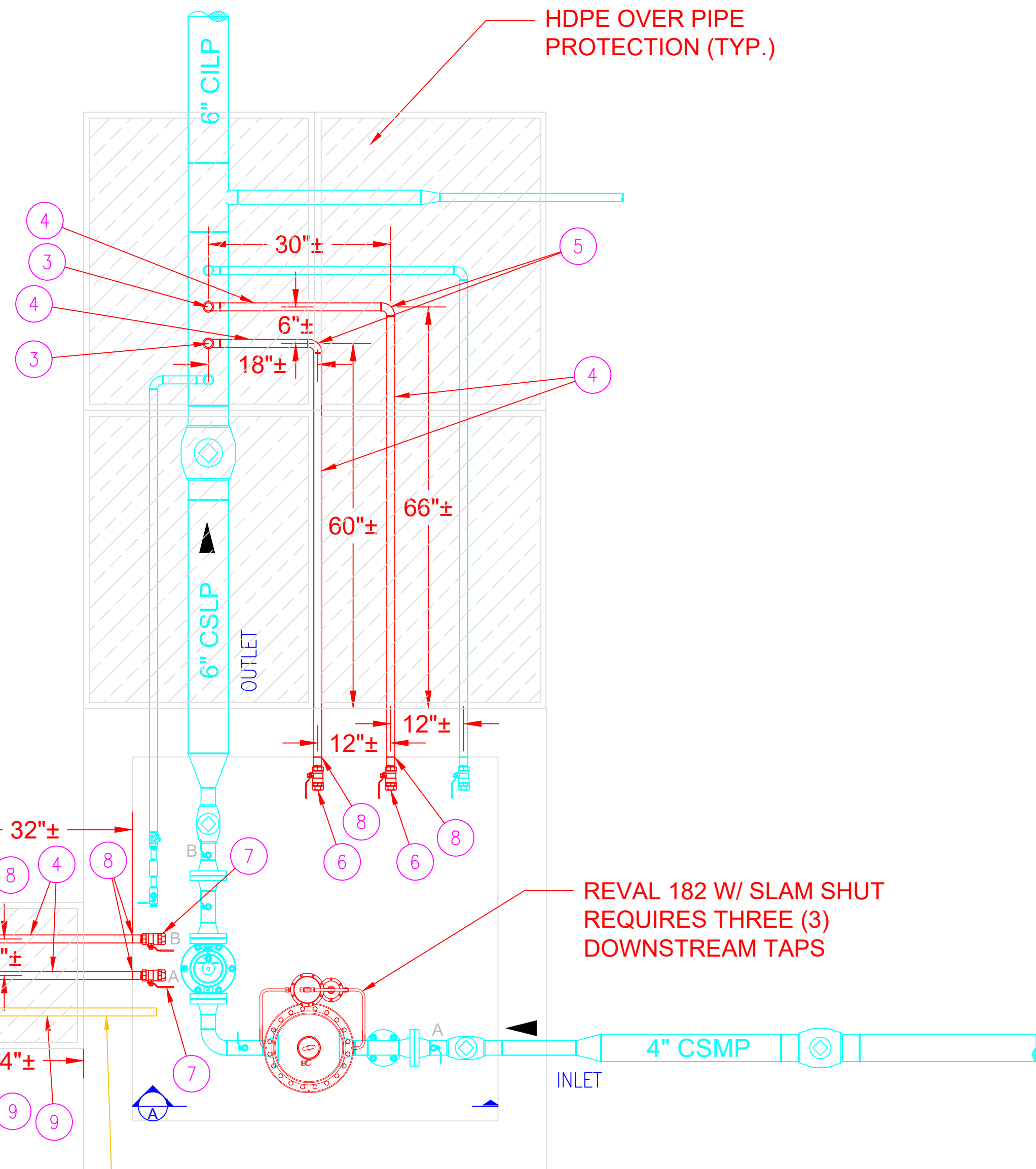
Scale: 3/4" = 1'-0"

X	ISSUED FOR XXXXX	XX/XX/20	XX/XX
No.	Description	Date	Dw/Ck
Revision/Status			
HILLSIDE TERRACE @ LONGMEADOW STREET, LONGMEADOW, MA			
PROJECT #: 21-77843			
EXISTING CONDITIONS PIPING DETAILS			
SCALE: AS NOTED		SHEET 5 OF 6	
Drawn by / Date	Checked by / Date	Drawing Number	Rev. No.
XXX XX/XX/XX	XXX XX/XX/XX	MA-WES-STA-LON-3791-01	X

FIELD VERIFY DIMENSIONS
PRIOR TO PIPE FABRICATION



\\192.168.1.95\Land Survey Maps\Source\MA\Wesboro Engineering Support\CY2021 Station Work\Springfield Stations\11423_Hillside Terrace @ Longmeadow Street



PLAN VIEW

Scale: 3/4" = 1'-0"

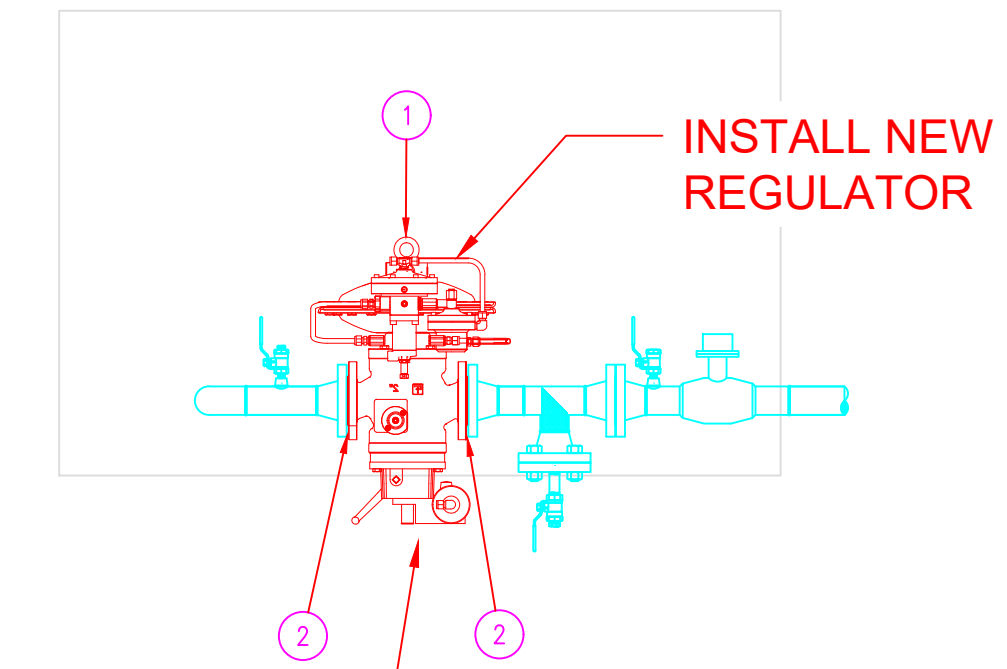
- (2) 1" CS TELEMETRY CONTROL LINES
- BOLLARD (TYP. OF 4)
- TELEMETRY CABINET
- PROPOSED OCAL CONDUIT (EMPTY & CAPPED) FOR FUTURE CABINET
- LOCATION OF FUTURE CABINET
- PROPOSED LOCATION OF FUTURE BOLLARDS (TYP. OF 2)

INSTALL OCAL CONDUIT PER COMPANY STANDARDS. REFER TO BOM (PG 2)

REVAL 182 W/ SLAM SHUT REQUIRES THREE (3) DOWNSTREAM TAPS

HDPE OVER PIPE PROTECTION (TYP.)

CONSTRUCTION NOTE:
1. REMOVAL OF GRAVEL IS NEEDED TO FIT REGULATOR



INSTALL NEW REGULATOR

REMOVE GRAVEL TO ENSURE PROPER PERFORMANCE & MAINTENANCE OF ASV/REGULATOR

ELEVATION VIEW (A-A)

Scale: 3/4" = 1'-0"

- NOTES:**
1. PROPOSED STATION COMPONENTS SHALL BE PRESSURE TESTED AT A MINIMUM 150PSIG NOT TO EXCEED 200PSIG FOR A MINIMUM OF ONE HOUR OR THE DURATION APPROPRIATE PER COMPANY STANDARDS.
 2. 100% NDTs REQUIRED PER COMPANY STANDARD INCLUDING BUT NOT LIMITED TO RADIOGRAPHIC INSPECTION/REVIEW
 3. REFER TO BILL OF MATERIALS INCLUDED ON PAGE 2 FOR FULL MATERIAL REQUIREMENTS.
 4. ORIENTATION AND/OR COMPOSITION OF TAPS WITHIN FACILITY MAY DEVIATE FROM APPROVED (STAMPED) PLAN TO ACCOMMODATE ACCESS AND WORKABILITY CONCERNS AND SUIT EGMA M&R DESIGNATED USE.

X	ISSUED FOR XXXXX	XX/XX/20	XX/XX
No.	Description	Date	Dw/Ck
Revision/Status			
HILLSIDE TERRACE @ LONGMEADOW STREET, LONGMEADOW, MA PROJECT #: 21-77843			
PROPOSED PIPING DETAILS			
SCALE: AS NOTED		SHEET 6 OF 6	
Drawn by / Date	Checked by / Date	Drawing Number	Rev. No.
XXX XX/XX/XX	XXX XX/XX/XX	MA-WES-STA-LON-3791-01	X

FIELD VERIFY DIMENSIONS PRIOR TO PIPE FABRICATION