ABBITT STREET, NEW BEDFORD, MA

TABLE OF CONTENTS

SHEET DESCRIPTION

1 OF 8 WORK SCOPE AND TABLE OF CONTENTS
2 OF 8 GENERAL NOTES AND MASTER BOM

3 OF 8 LEGENT

4 OF 8 LOCATION PLAN #1

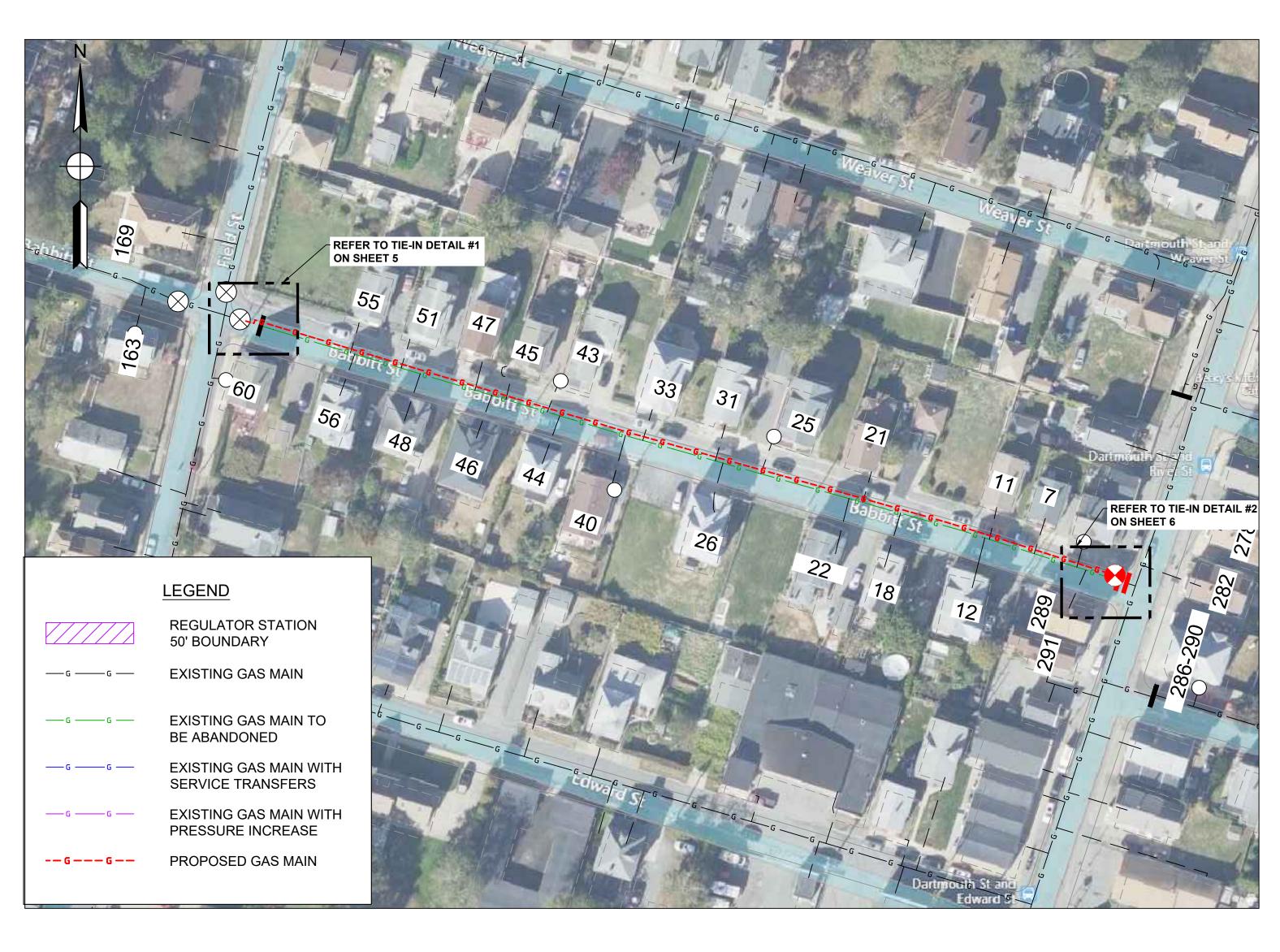
5 OF 8 TIE-IN DETAIL #1 AND BOM

6 OF 8 LOCATION PLAN #2

7 OF 8 TIE-IN DETAIL #2 AND BOM

8 OF 8 STANDARD CORROSION DETAILS

EVERS URCE ENERGY



MAIN

INSTALLATION: ±625' OF 2" PLASTIC LIP/35# MAIN
ABANDONMENT: ±611' OF 4" CAST IRON LP/14" WC MAIN
AFFECTED STREETS: BABBITT ST

SERVICES

REPLACEMENT: ±550' OF .5" PLASTIC LP/14" WC SERVICE TIE-OVER: ±550' OF .5" PLASTIC LP/14" WC SERVICE

TOTAL SERVICES: 22
METER MOVE OUTS: 15

NOTE:
EXISTING CONDITIONS SHOWN ARE BASED ON GIS, AERIAL AND
AVAILABLE RECORD DATA, NO FIELD SURVEY WAS PERFORMED.
CONTRACTOR TO VERIFY EXISTING CONDITIONS AS NEEDED IN THE
FIELD. PROPOSED MAIN ALIGNMENT AND OFFSETS ARE APPROXIMATE.

WORK SCOPE NEW BEDFORD, MASSACHUSETTS (NOT TO SCALE)

ISSUED FOR REVIEW

				A I	SSUED FO	OR REVIEW		12/06/2021	VD/AB
				NO. [DESCRIPT	ION		DATE D	W/CK/AP
						RE\	VISION STATUS		
SEALED BY:	SEALED ON:	DESIGNED IN ACCORDANCE WITH TITLE 49-PART 192 OF MINIMUM FEDERAL SAFETY STANDARDS AND GPTC GUIDE FOR GAS TRANSMISSION AND DISTRIBUTION PIPING SYSTEMS. LATEST EDITION.		EVERS URCE ENERGY					
		TRANSMISSION AND DISTRIBUTION PIPING SYSTEMS. LATEST EDITION.					STREET MAIN RI DRD, MASSACHU	ELAY	
	LICENSE EXPIRATION:	EN Chainearing	FIELD VERIFY DIMENSIONS PRIOR TO PIPE FABRICATION				AND TABLE OF (
	EXFINATION.	EN Engineering		SCALE	E: AS NOT	ED		SHEET	1 OF 8
		29 BARTLETT STREET MARLBOROUGH, MA 01752		DRAWN	BY / DATE	CHECKED BY / DATE	APPROVED BY / DATE	SHEET NUMBER	REV. NO.
SIGNATURE	29 BARTLETT STREET MARLBOROUGH, MA 01752 TEL. (630) 353-4000 FAX (630) 535-7777 WWW.ENENGINEERING.COM	FAX (630) 535-7777 WWW.ENENGINEERING.COM		VRD 1	1/30/2021	XX XX/XX/2021	XX XX/XX/2021	MA-NEB-21-PIP-028-0	D1 A

GENERAL NOTES

- A. 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.
 - 1. IF THE TIE IN POINT MOVES TO A DIFFERENT SEGMENT OF PIPE THAN SHOWN.
 - 2. IF A CHANGE IN THE LOCATION OF VALVES IS REQUIRED.
 - 3. 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.
 - 4. IF A CHANGE IN PIPE SIZE, MATERIAL, OR WALL THICKNESS IS REQUIRED.
 - 5. ALTERNATE FITTINGS THAT ARE ACCEPTABLE FOR ANY TIE-IN DETAIL WILL BE CALLED OUT IN THE DRAWING. FITTING CHANGES NOT SHOWN AS ALTERNATIVES ON THE DRAWING WILL NEED TO FOLLOW THE DRAWING CHANGE PROCESS CONTAINED IN SECTION V.D.
- B. CONSTRUCTION DRAWINGS, LOCATIONS OF EXISTING UTILITIES, UNDERGROUND STRUCTURES AND WORK LOCATIONS ARE BASED ON BEST AVAILABLE INFORMATION BUT HAVE NOT BEEN FIELD VERIFIED.
- C. ALL WORK, MATERIAL AND CONSTRUCTION SHALL BE PERFORMED AND COMPLETED IN COMPLIANCE WITH ALL PERMITS AND APPROVALS PER EVERSOURCE, LOCAL, STATE, OSHA AND FEDERAL REGULATIONS AND STANDARDS.
- D. ALL LIVE GAS WORK EXCEPT SERVICE SIZE TAPS, 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.
- E. 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.
- F. 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.
- G. EXCAVATOR REQUIRED TO CALL DIG-SAFE/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.
- H. IF THE PROJECT IS WITHIN 50 FEET OF A DISTRICT REGULATOR OR GATE STATION, ENSURE THAT A QUALIFIED I&R TECHNICIAN IS ON SITE.
- I. PROPERTY LINES, STRUCTURES AND EXISTING CONDITIONS DEPICTED ON PLANS ARE BASED ON EVERSOURCE GIS INFORMATION AND HAVE NOT BEEN FIELD VERIFIED BY LAND SURVEY UNLESS OTHERWISE NOTED.
- J. 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.
- K. MAINS AND SERVICES SHALL BE PRESSURE TESTED IN ACCORDANCE WITH EVERSOURCE STANDARDS.
- L. ALL PIPE SHALL BE INSTALLED WITH THE MINIMUM DEPTH REQUIRED BY EVERSOURCE STANDARDS AND APPLICABLE REGULATIONS.
- M. MAOP DEFINITIONS:

LP = 14" W.C

LIP = 35 PSIG

IP = 60 PSIG

HP = 90 PSIG

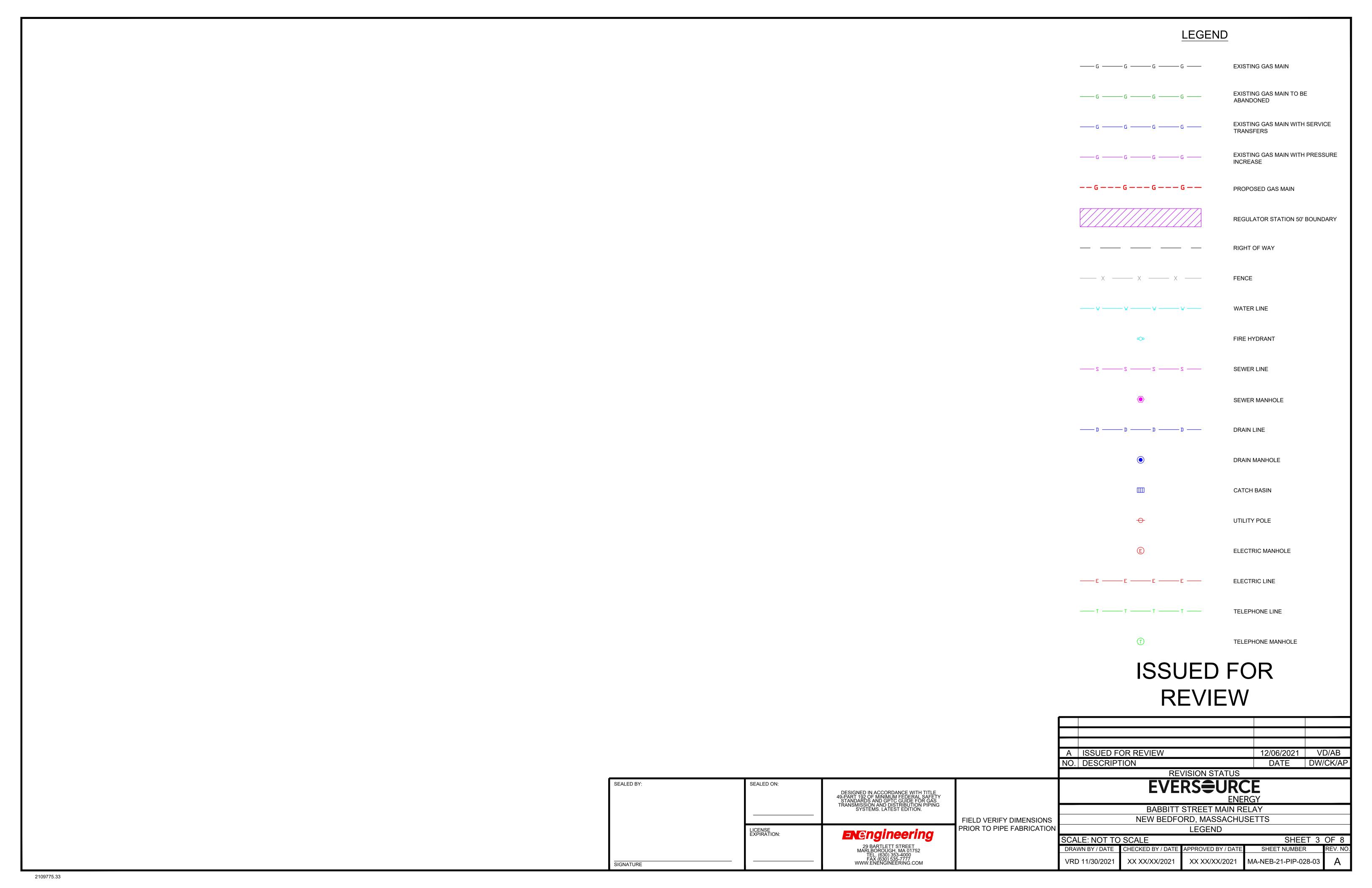
N. ENSURE ALL SERVICES BEING TRANSFERRED TO A HIGHER PRESSURE SYSTEM HAVE UPGRADED PRESSURE REGULATORS INSTALLED PRIOR TO ACTIVATION.

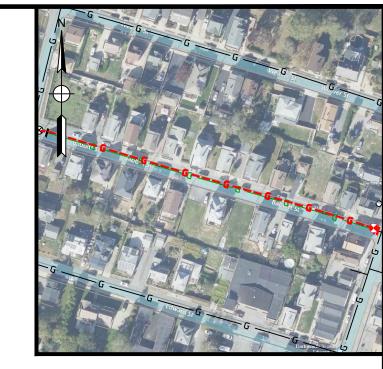
					PROJECT TITLE - MASTER BOM
ltem#	Size	Quanity	Units	Maximo #	Description
9	2"	1	EA	562087	VALVE,BALL, 2 IN IPS, POLYETHYLENE, SDR 11, BUTT WELD, W/ FULL PORT OPENING
88	2"	4	EA	542572	CAP, PIPE, 2 IN IPS SDR 11, BUTT END, POLYETHYLENE, P100
133	2" X 1/2"	3	EA	500866	TEE,PIPE, NON-BLOWING, 2 X 1/2 IN CTS X 0.090 IN THK WALL SDR 7, ELECTROFUSION X COMPRESSION ENDS, LIGHT WALL, POLYETHYLENE, PE3408/PE100
148	2" X 1"	2	EA	602892	FITTING, TEE, 2 IN IPS X 1 IN IPS, ELECTROFUSION HIGH VOLUME TAPPING WITH BUTT FUSION OUTLET, HDPE, BLACK
201	4"	2	EA	578128	FITTING,COUPLING, VENTED, SEAL & RESTRAINT, 4 IN, W/ END CAP, FOR CAST IRON PIPE
220	4" x 2"	4	EA	543028	CLAMP, PIPE, REPAIR, 4 IN IPS, SS, W/2 IN TAP
350	2"	2	EA	579840	FITTING, COUPLING, METFIT, 2 IN X 0.216 IN THK WALL SDR 11
351	2"	2	EA	582521	FITTING, ELBOW, METFIT, 2 IN IPS X 0.216 IN THK WALL SDR 11, ASTM F1924, WAS ITEM 578277, NSTAR M-410, E-27-A
358	2"	625	LF	554025	PIPE, 2 IN IPS X 0.216 IN THK WALL SDR 11, 2.375 IN OD, 350 FT LG COIL, POLYETHYLENE, PE3408/PE100
369	1/2"	1	EA	579972	FITTING,CAP, METFIT, 1/2 IN CTS X 0.90 IN THK WALL SDR 7, REPLACED IN 542609
371	1"	1	EA	583182	FITTING,CAP, METFIT, 1 IN IPS X 0.119 IN THK WALL SDR 11, ASTM F1924, FOR CAPPING PE GAS DISTRIBUTION PIPE AND TUBING, REPLACED IN 54261.
737	4 1/4" square	1	EA	577813	BOX VALVE, CURB, W/ 4-1/4 IN SQ NON-LOCKING LID, FOR 2 IN VALVES, PAVEMENT RISER RING IN 583489, 20/BOX

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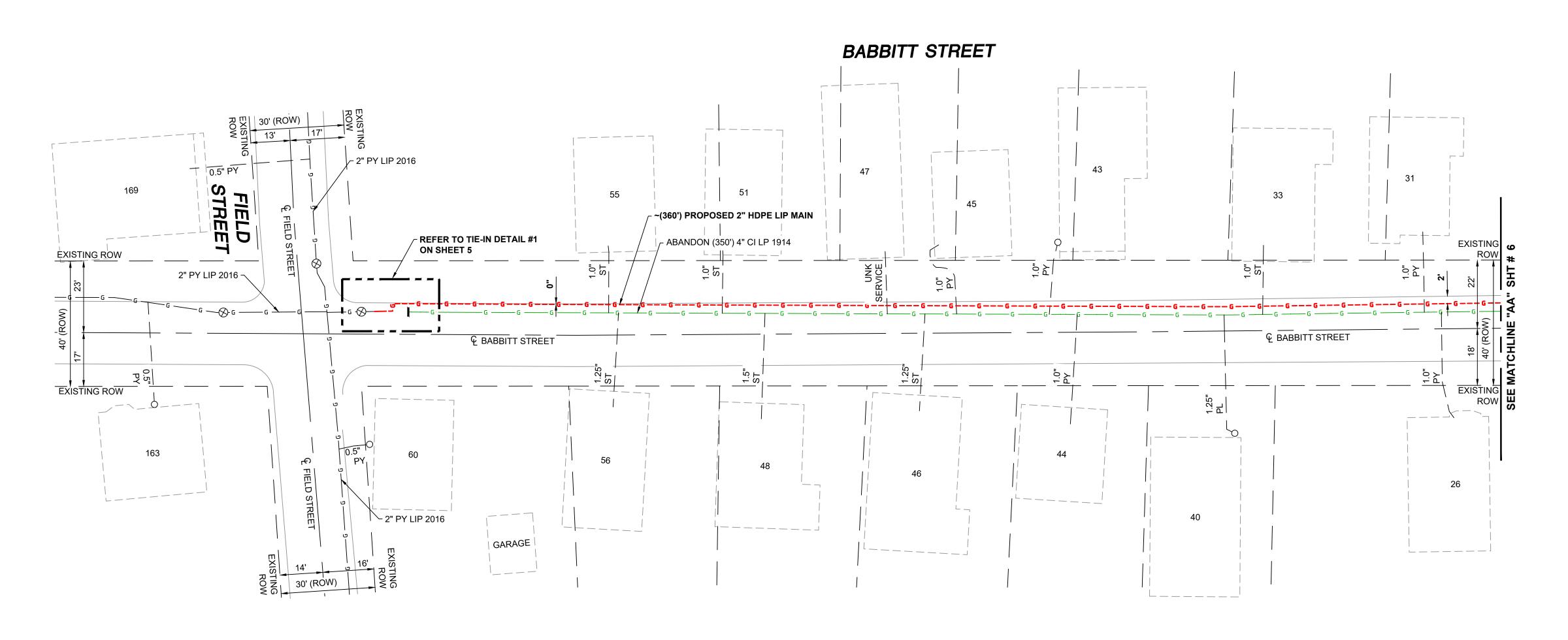
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				NO. DI	ESCRIPTION		DATE	DW/CK/AP
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		DESIGNED IN ACCORDANCE WITH TITLE 49-PART 192 OF MINIMUM FEDERAL SAFETY STANDARDS AND GPTC GUIDE FOR GAS TRANSMISSION AND DISTRIBUTION PIPING SYSTEMS. LATEST EDITION.	FIELD VERIFY DIMENSIONS	ENERGY BABBITT STREET MAIN RELAY				
				NEW PERSONS AMONA OF HIGHER				
	LICENSE EXPIRATION:	EN Chainearina	PRIOR TO PIPE FABRICATION		GENERAL N	OTES AND MAST	ER BOM	
	EXPINATION.	EN Engineering		SCALE:	: NOT TO SCALE		SHEET	2 OF 8
		29 BARTLETT STREET MARLBOROUGH, MA 01752		DRAWN E	BY / DATE CHECKED BY / DATE	APPROVED BY / DATE	SHEET NUMBER	REV. NO.
SIGNATURE		1EL. (630) 353-4-4000 FAX (630) 535-7777 WWW.ENENGINEERING.COM		VRD 11	1/30/2021 XX XX/XX/2021	XX XX/XX/2021	MA-NEB-21-PIP-028	3-02 A
SIGNATURE		29 BARTLETT STREET MARLBOROUGH, MA 01752 TEL. (630) 353-4000 FAX (630) 535-7777 WWW.ENENGINEERING.COM		VRD 11	1/30/2021 XX XX/XX/2021	XX XX/XX/2021	MA-NEB-21-PIP-028	3-02 A

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KEY MAP
(NOT TO SCALE)



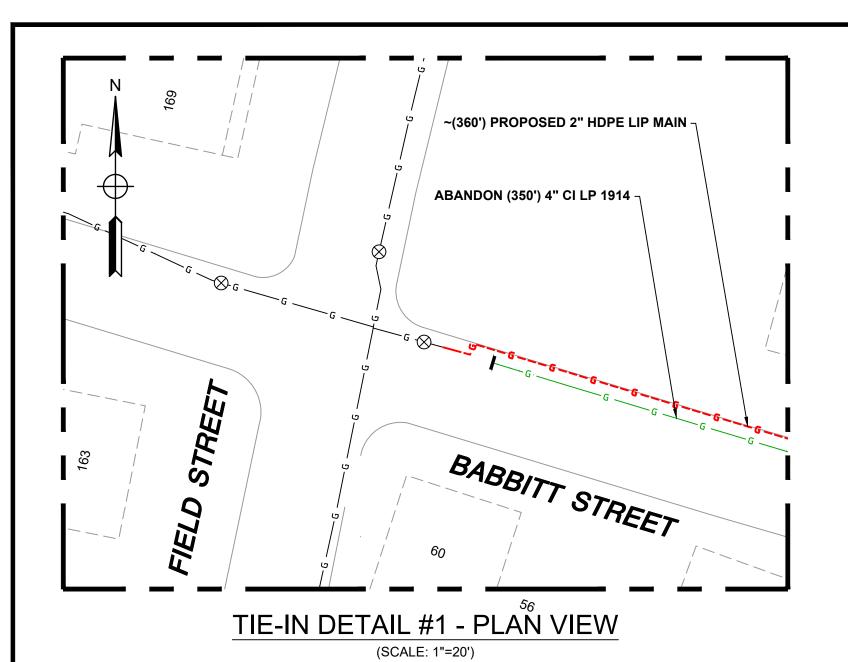
LOCATION PLAN #1 (SCALE: 1"=20')

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		TRANSMISSION AND DISTRIBUTION PIPING SYSTEMS. LATEST EDITION.		BABBITT STREET MAIN RELAY				
			FIELD VERIFY DIMENSIONS NEW BEDFORD, MASSACHUSE			JSETTS		
	LICENSE EXPIRATION:	EN Gnainearina	PRIOR TO PIPE FABRICATION		LC	CATION PLAN #1		
	EXITION.	ENEngineering		SCALE: 1"=20' SHEET 4 OF				T 4 OF
		29 BARTLETT STREET MARLBOROUGH, MA 01752		DRAWN BY / DATE	CHECKED BY / DATE	APPROVED BY / DATE	SHEET NUMBER	REV.
SIGNATURE		29 BARTLETT STREET MARLBOROUGH, MA 01752 TEL. (630) 353-4000 FAX (630) 535-7777 WWW.ENENGINEERING.COM		VRD 11/30/2021	XX XX/XX/2021	XX XX/XX/2021	MA-NEB-21-PIP-02	8-04 A

NOTES:

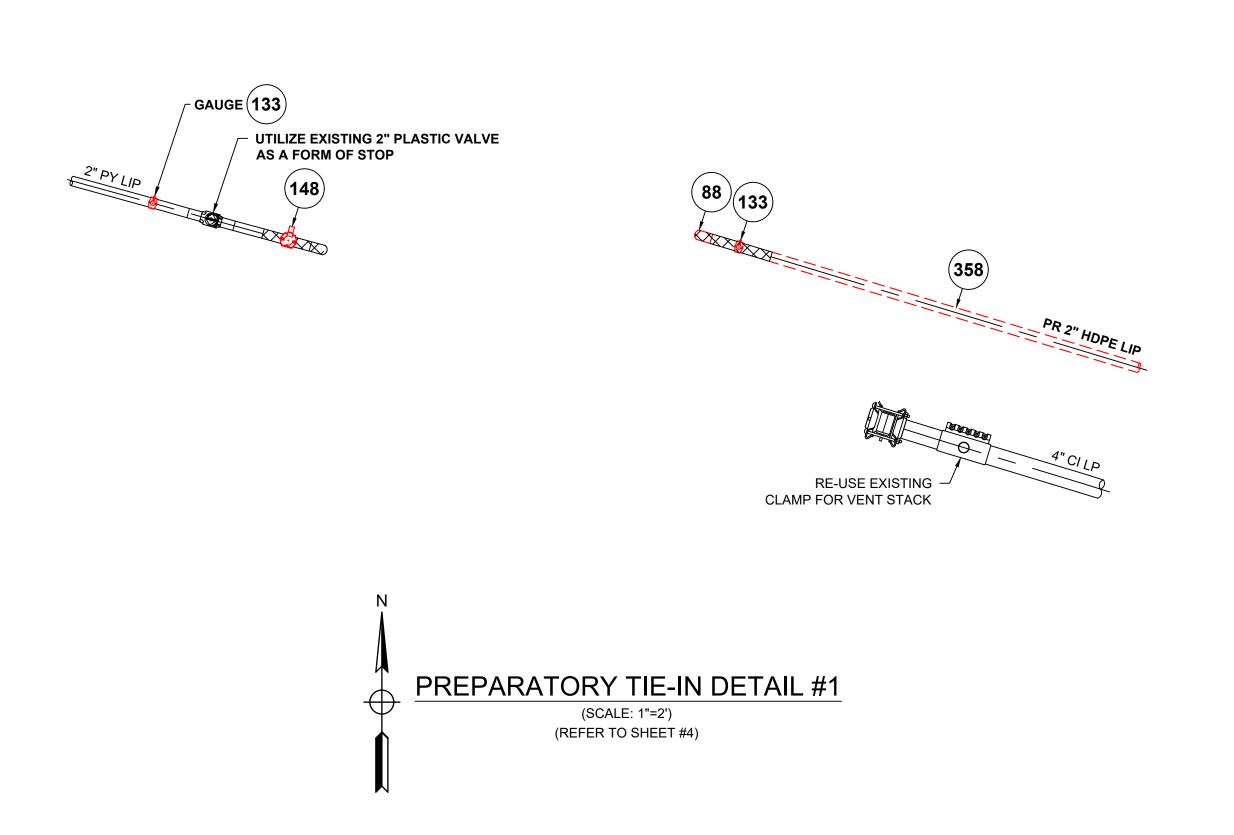
1. REFER TO GENERAL NOTES ON SHEET #2.
2. CONTRACTOR TO POTHOLE EXISTING UTILITIES AT CROSSING LOCATIONS PRIOR TO CONSTRUCTION.

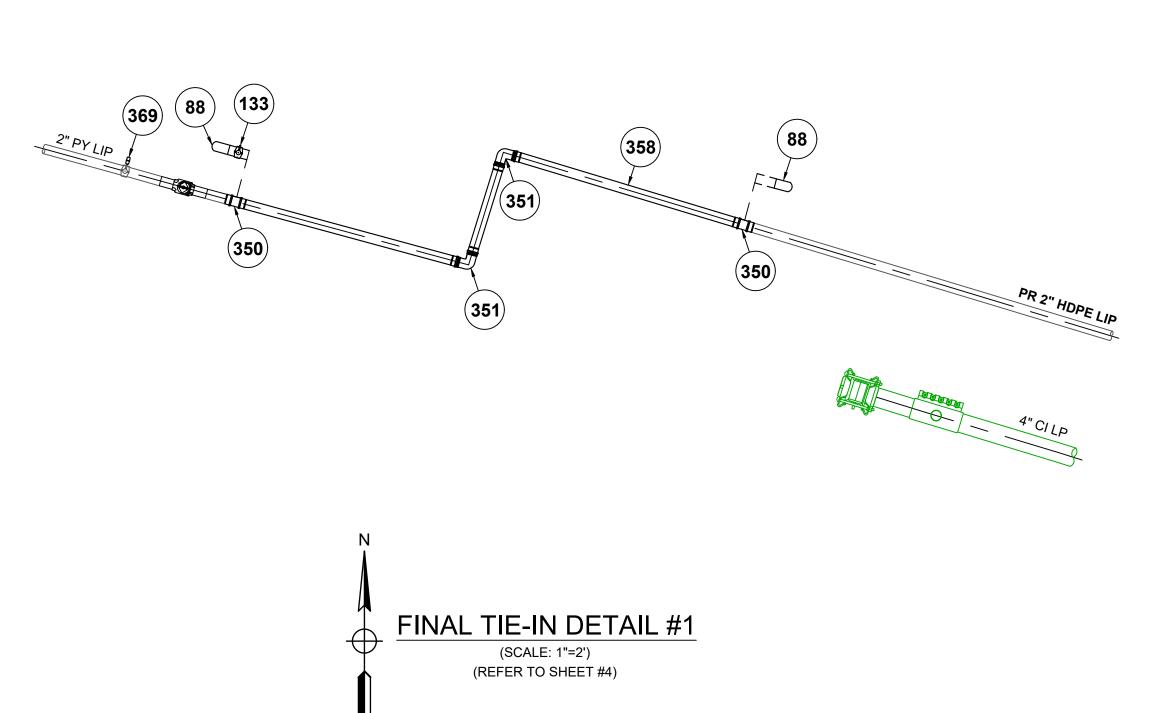


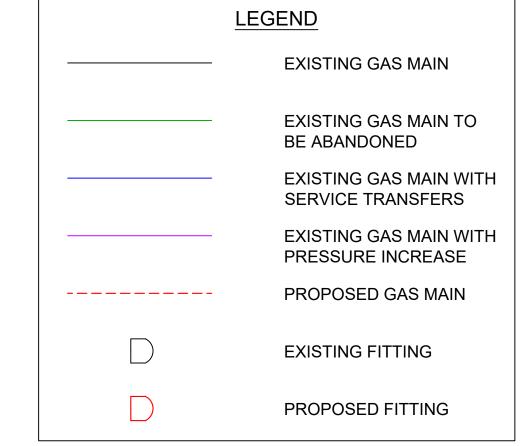
(REFER TO SHEET #4)

BABBITT S	BABBITT STREET, NEW BEDFORD, MA - Tie-in #1: Preparatory										
REQUIRED BILL OF MATERIALS											
ITEM	SIZE	MAXIMO NO.	Description	Quanity	Units						
88	2"	542572	CAP,PIPE, 2 IN IPS SDR 11, BUTT END, POLYETHYLENE, P100	1	EA						
133	132 2" V 1/2"	2" X 1/2" 500866	TEE, PIPE, NON-BLOWING, 2 X 1/2 IN CTS X 0.090 IN THK WALL SDR 7, ELECTROFUSION X	2	EA						
155	2 / 1/2		COMPRESSION ENDS, LIGHT WALL, POLYETHYLENE, PE3408/PE100								
148	2" X 1"	X 1" 602892	FITTING, TEE, 2 IN IPS X 1 IN IPS, ELECTROFUSION HIGH VOLUME TAPPING WITH BUTT	1	EA						
140	2 7 1	002892	FUSION OUTLET, HDPE, BLACK	1	LA						
358	2"	PIPE, 2 IN IPS X 0.216 IN THK WALL SDR 11, 2.375 IN OD, 350 FT LG COIL, POLYETHYLENE,		15	LF						
556	330 2	554025	PE3408/PE100	13	LF						
		•									

EQUIRED	BILL OF MATE	RIALS			
ITEM	SIZE	MAXIMO NO.	Description	Quanity	Units
88	2"	542572	CAP,PIPE, 2 IN IPS SDR 11, BUTT END, POLYETHYLENE, P100	2	EA
133	2" X 1/2"	500866	TEE,PIPE, NON-BLOWING, 2 X 1/2 IN CTS X 0.090 IN THK WALL SDR 7, ELECTROFUSION X COMPRESSION ENDS, LIGHT WALL, POLYETHYLENE, PE3408/PE100	1	EA
350	2"	579840	FITTING, COUPLING, METFIT, 2 IN X 0.216 IN THK WALL SDR 11	2	EA
351	2"	582521	FITTING, ELBOW, METFIT, 2 IN IPS X 0.216 IN THK WALL SDR 11, ASTM F1924, WAS ITEM 578277, NSTAR M-410, E-27-A	2	EA
358	2"	554025	PIPE, 2 IN IPS X 0.216 IN THK WALL SDR 11, 2.375 IN OD, 350 FT LG COIL, POLYETHYLENE, PE3408/PE100	10	LF
369	1/2"	579972	FITTING,CAP, METFIT, 1/2 IN CTS X 0.90 IN THK WALL SDR 7, REPLACED IN 542609	1	EA





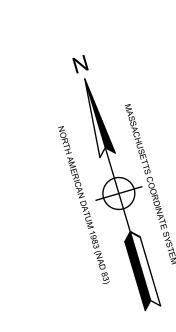


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		DESIGNED IN ACCORDANCE WITH TITLE 49-PART 192 OF MINIMUM FEDERAL SAFETY STANDARDS AND GPTC GUIDE FOR GAS TRANSMISSION AND DISTRIBUTION PIPING SYSTEMS. LATEST EDITION.		ENERGY				
				BABBITT STREET MAIN RELAY				
				NEW BEDFORD, MASSACHUSETTS				
	LICENSE EXPIRATION:	EN Graincorina	PRIOR TO PIPE FABRICATION	ATION TIE-IN DETAIL #1 AND BOM				
	EXPINATION.	EN Engineering		SCALE: AS NOT	ED (DO NOT SC	ALE FROM DRAW	/INGS) SHEE	Г 5 OF 8
		29 BARTLETT STREET MARLBOROUGH, MA 01752		DRAWN BY / DATE	CHECKED BY / DATE	APPROVED BY / DATE	SHEET NUMBER	REV. NO.
IGNATURE		29 BARTLETT STREET MARLBOROUGH, MA 01752 TEL. (630) 353-4000 FAX (630) 535-7777 WWW.ENENGINEERING.COM		VRD 11/30/2021	XX XX/XX/2021	XX XX/XX/2021	MA-NEB-21-PIP-028	3-05 A

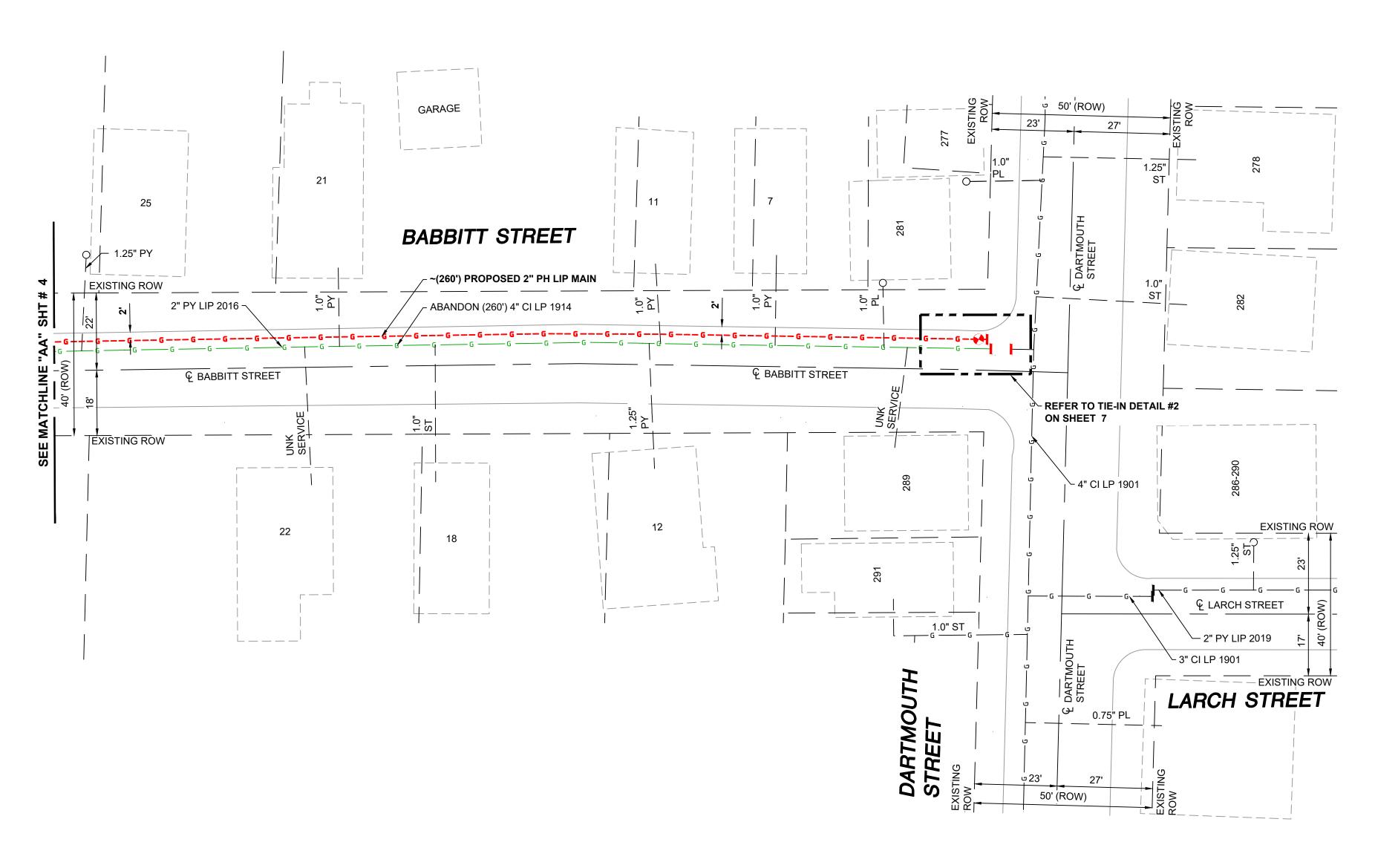
NOTES:

1. REFER TO GENERAL NOTES ON SHEET #2.





KEY MAP
(NOT TO SCALE)



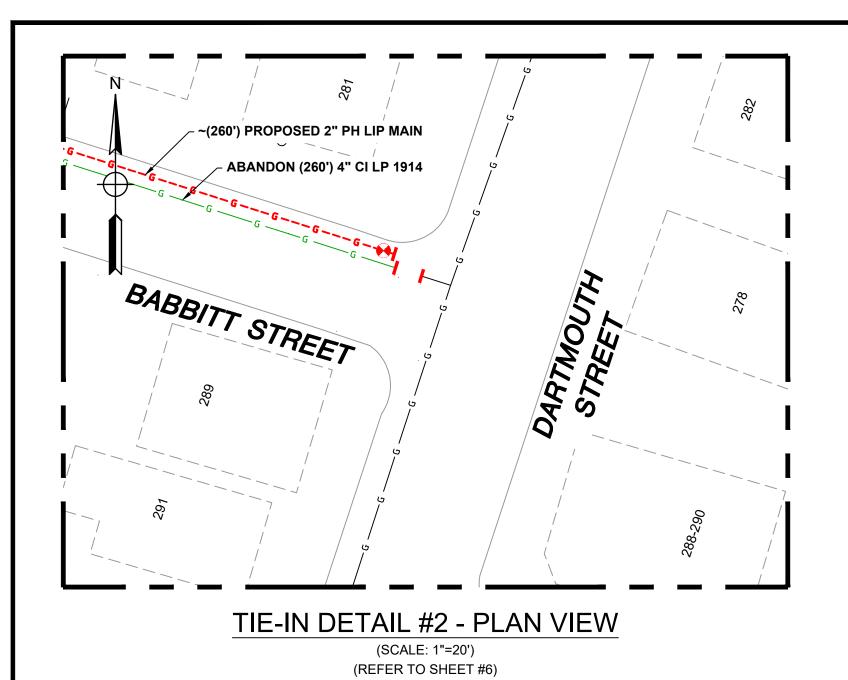
LOCATION PLAN #2 (SCALE: 1"=20')

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				A ISSUED FOR REVIEW NO. DESCRIPTION REVISION STATU		VD/AB DW/CK/AP
SEALED BY:	SEALED ON:	DESIGNED IN ACCORDANCE WITH TITLE 49-PART 192 OF MINIMUM FEDERAL SAFETY STANDARDS AND GPTC GUIDE FOR GAS TRANSMISSION AND DISTRIBUTION PIPING SYSTEMS. LATEST EDITION.	FIELD VERIFY DIMENSIONS	EVERS E BABBITT STREET MAIN NEW BEDFORD, MASSAC	NERGY RELAY	
SIGNATURE	LICENSE EXPIRATION: PRENGINEERING 29 BARTLETT STREET MARLBOROUGH, MA 01752 TEL. (630) 353-4000 FAX (630) 535-7777 WWW.ENENGINEERING.COM	PRIOR TO PIPE FABRICATION	LOCATION PLAN SCALE: 1"=20' DRAWN BY / DATE CHECKED BY / DATE APPROVED BY / DATE VRD 11/30/2021 XX XX/XX/2021 XX XX/XX/202	SHEET NUMBER	_	

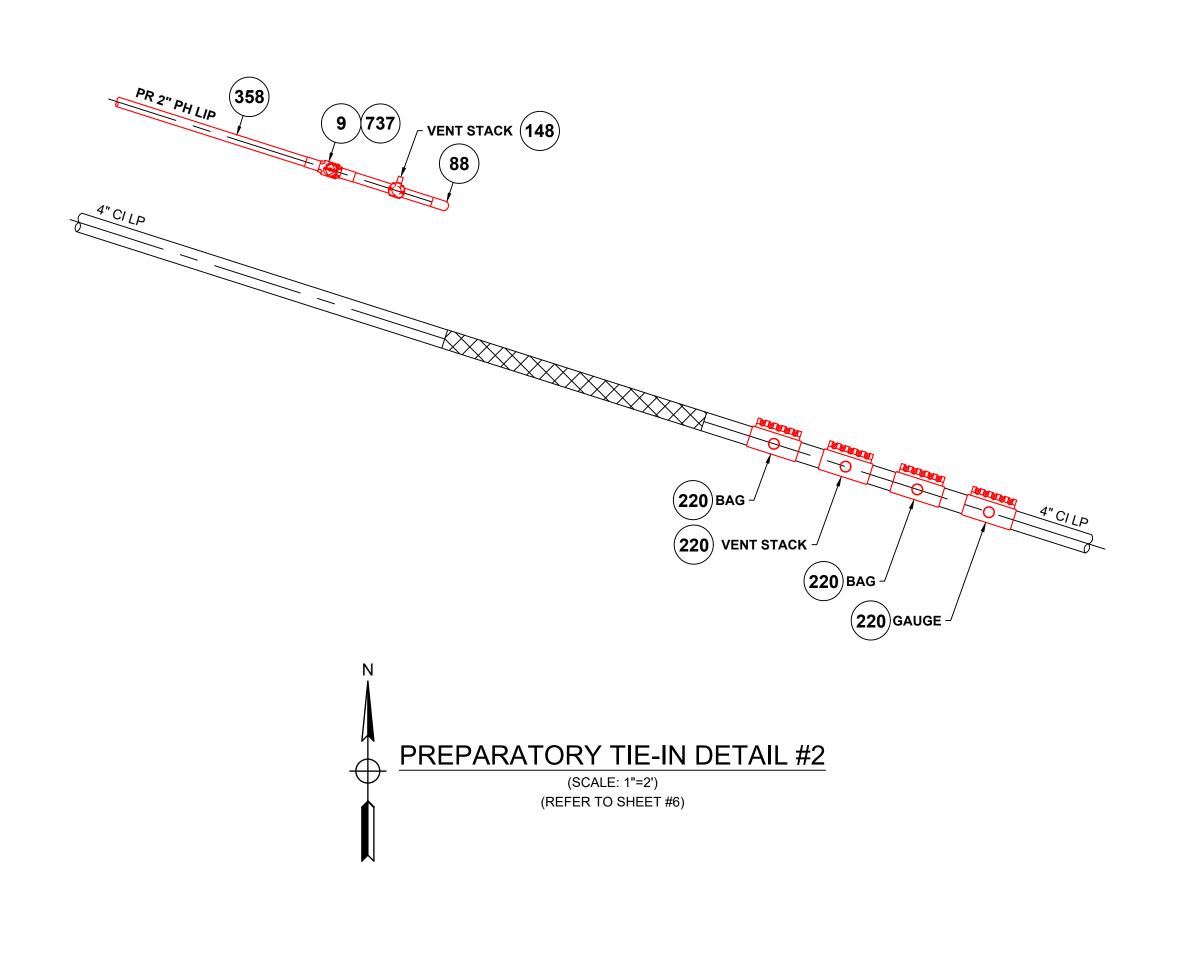
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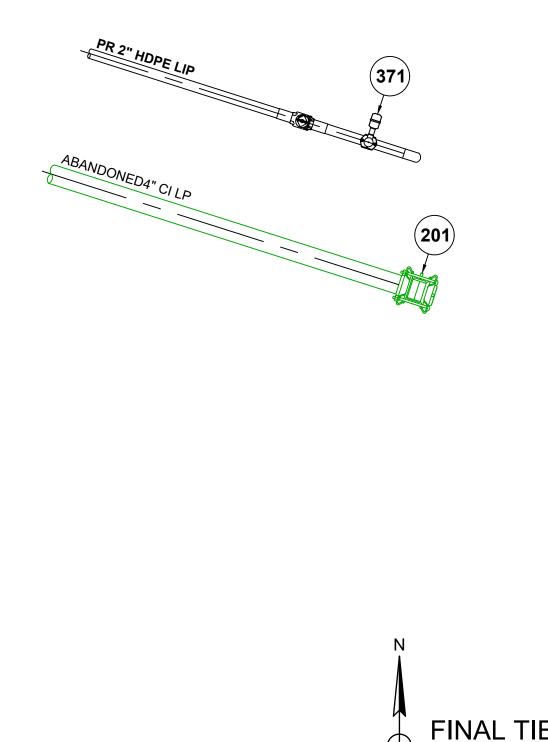
1. REFER TO GENERAL NOTES ON SHEET #2.
2. CONTRACTOR TO POTHOLE EXISTING UTILITIES AT CROSSING LOCATIONS PRIOR TO CONSTRUCTION.

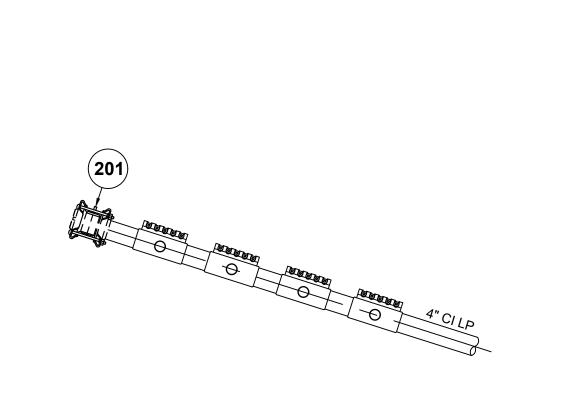


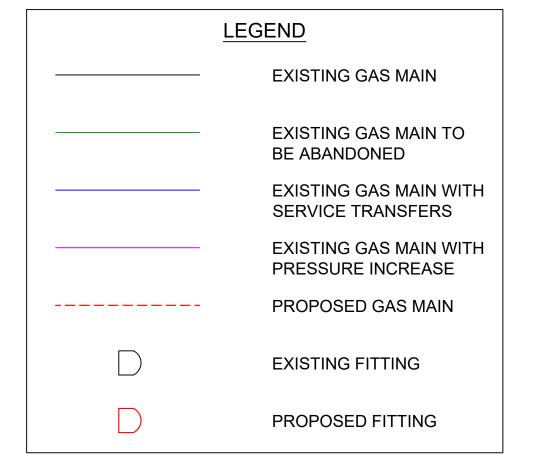
REQUIRED BILL OF MATERIALS								
ITEM	SIZE	MAXIMO NO.	Description	Quanity	Units			
9	2"	562087	VALVE,BALL, 2 IN IPS, POLYETHYLENE, SDR 11, BUTT WELD, W/ FULL PORT OPENING	1	EA			
88	2"	542572	CAP,PIPE, 2 IN IPS SDR 11, BUTT END, POLYETHYLENE, P100	1	EA			
148	2" X 1"	602892	FITTING, TEE, 2 IN IPS X 1 IN IPS, ELECTROFUSION HIGH VOLUME TAPPING WITH BUTT FUSION OUTLET, HDPE, BLACK	1	EA			
220	4" x 2"	543028	CLAMP, PIPE, REPAIR, 4 IN IPS, SS, W/2 IN TAP	4	EA			
358	2"	554025	PIPE, 2 IN IPS X 0.216 IN THK WALL SDR 11, 2.375 IN OD, 350 FT LG COIL, POLYETHYLENE, PE3408/PE100	10	LF			
737	4 1/4" square	577813	BOX VALVE, CURB, W/ 4-1/4 IN SQ NON-LOCKING LID, FOR 2 IN VALVES, PAVEMENT RISER RING IN 583489, 20/BOX	1	EA			

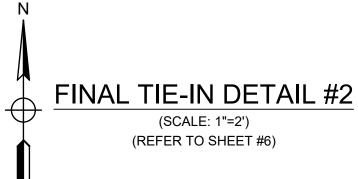
BABBITT S	BABBITT STREET, NEW BEDFORD, MA- Tie-in #2: Final									
REQUIRED	EQUIRED BILL OF MATERIALS									
ITEM	SIZE	SIZE MAXIMO NO. Description		Quanity	Units					
201	4"	578128	FITTING, COUPLING, VENTED, SEAL & RESTRAINT, 4 IN, W/ END CAP, FOR CAST IRON PIPE	2	EA					
371	1"	583182	FITTING,CAP, METFIT, 1 IN IPS X 0.119 IN THK WALL SDR 11, ASTM F1924, FOR CAPPING PE GAS DISTRIBUTION PIPE AND TUBING, REPLACED IN 542612	1	EA					











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	TRANSMISSION AND DISTRIBUTION PIPING SYSTEMS. LATEST EDITION. FIELD VERIFY DIMENSIONS				BABBITT STREET MAIN RELAY NEW BEDFORD, MASSACHUSETTS				
	LICENSE EXPIRATION:	EN Spaincaring	PRIOR TO PIPE FABRICATION	, , , , , , , , , , , , , , , , , , ,					
	EAFIRATION.	ENE ngineering		SCALE: AS NOT	ED (DO NOT SC	ALE FROM DRAV	VINGS) SHEE	T 7 OF 8	
		29 BARTLETT STREET MARLBOROUGH, MA 01752		DRAWN BY / DATE	CHECKED BY / DATE	APPROVED BY / DATE	SHEET NUMBER	REV. NO.	
SIGNATURE		29 BARTLETT STREET MARLBOROUGH, MA 01752 TEL. (630) 353-4000 FAX (630) 535-7777 WWW.ENENGINEERING.COM		VRD 11/30/2021	XX XX/XX/2021	XX XX/XX/2021	MA-NEB-21-PIP-02	8-07 A	

NOTES:

1. REFER TO GENERAL NOTES ON SHEET #2.

