City of East Providence Water Utilities Division Pawtucket Avenue Water Main Relocation City of East Providence RFP #EP 22/23-23 East Providence, Rhode Island

CIVIL ENGINEER:



 PARE CORPORATION ENGINEERS - SCIENTISTS - PLANNERS

 8 BLACKSTONE VALLEY PLACE LINCOLN, RI 02865 401-334-4100
 10 LINCOLN ROAD, SUITE 210 FOXBORO, MA 02035 508-543-1755
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OWNER / APPLICANT:



CITY OF EAST PROVIDENCE WATER UTILITIES DIVISION 60 COMMERCE WAY EAST PROVIDENCE, RI 02914



BID DOCUMENTS MAY 2023

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<u> </u>	OJECT DESCRIPTION	<u>R(</u>	DAE
1.	THIS PROJECT CONSISTS OF THE INSTALLATION OF APPROXIMATELY 1,250 LF OF WATER MAIN IN PAWTUCKET AVENUE FROM ± 530 FEET SOUTH OF TAUNTON AVENUE TO ± 850 FEET NORTH OF WATERMAN AVENUE, AND MUNICIPAL PROPERTY OWNED BY THE CITY OF EAST PROVIDENCE.	1.	TH B/ A ^T
2.	PAWTUCKET AVENUE IS A STATE HIGHWAY MAINTAINED BY THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION.	2.	te Ri
<u>PL/</u>	AN NOTES	3.	C
1.	INFORMATION AS SHOWN ON THE DRAWINGS RELATING TO MATERIALS, SIZES, CONDITIONS, AND/OR LOCATIONS OF EXISTING STRUCTURES AND UTILITIES HAS BEEN COMPILED FROM BEST AVAILABLE INFORMATION FROM MULTIPLE SOURCES. THOSE SOURCES INCLUDE:		AL RE PE
	BETA SURVEY	4.	CC TC
	LIMITED FIELD RECONNAISSANCE PERFORMED BY PARE CORPORATION		CC IS
0	RECORDS RECEIVED FROM OWNER	5.	C
Z.	DATOM FOR ALL ELEVATIONS SHOWN ON THESE FLANS IS NAVDoo.		R/ N(
<u>GE</u>	NERAL NOTES	6.	DI A(
1.	TO HAVE SERVICE IN THE AREA, PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES. CONTRACTOR SHALL ADHERE TO ALL REGULATIONS OF THE UTILITIES INVOLVED.	7.	CC
2.	INFORMATION AS SHOWN ON THE DRAWINGS RELATING TO MATERIALS, SIZES, CONDITIONS, AND/OR LOCATIONS OF EXISTING STRUCTURES AND UTILITIES HAS BEEN COMPILED FROM THE BEST AVAILABLE INFORMATION AND IS NOT	SF	PEC
	GUARANTEED CORRECT OR COMPLETE. PRIOR TO BEGINNING WORK, CONTRACTOR SHALL VERIFY LOCATION OF ALL UTILITIES. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE ANY UTILITIES IN THE IMMEDIATE AREA	1.	G
	OF THIS PROJECT (INCLUDING THOSE TO BE CONNECTED TO) THROUGH THE PERFORMANCE OF TEST PITS OR OTHER INVESTIGATION METHODS, TO ASSURE THAT THESE UTILITIES WILL NOT IMPACT THE WORK IN THIS		W/ PF
	PROJECT. ANY SUBSTANTIAL DISCREPANCY IN UTILITY LOCATIONS, SIZES, MATERIALS, ETC., IDENTIFIED ON THE DRAWINGS SHALL BE CALLED TO THE OWNER'S ATTENTION IMMEDIATELY. ANY DAMAGE TO UTILITIES CAUSED BY THE CONTRACTOR SHALL BE THE CONTRACTOR'S RESPONSIBILITY, AND COSTS FOR REPAIR OR REPLACEMENT OF		ST
	SUCH DAMAGED UTILITIES SHALL BE BORNE BY THE CONTRACTOR.	2.	W. LA
3.	IN THE EVENT OF DAMAGE TO EXISTING UTILITIES, THE CONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEER IMMEDIATELY AND WILL BE RESPONSIBLE FOR CONTACTING THE AGENCY RESPONSIBLE FOR MAINTAINING		O Pl
	UTILITIES. UNDER NO CIRCUMSTANCES WILL THE CONTRACTOR BACKFILL OR CONCEAL DAMAGED UTILITIES OR ATTEMPT REPAIRS WITHOUT PRIOR APPROVAL OF THESE AGENCIES. THE CONTRACTOR SHALL ALLOW THE UTILITY		SF
	UTILITY COMPANY. SHOULD THE UTILITY COMPANY ALLOW CONTRACTOR TO PERFORM REPAIR, THE CONTRACTOR SHALL ALLOW THE UTILITY AGENCIES THE OPPORTUNITY TO INSPECT THE REPAIRED FACILITIES PRIOR TO ANY	3.	FI NC
	BACKFILL OR CONCEALMENT.		ME
4.	ALL EXISTING SIGNS, POLES, UTILITIES, STRUCTURES, AND MAILBOXES, BOTH ABOVE AND BELOW GROUND, SHALL BE EITHER BRACED AND PROTECTED OR TEMPORARILY REMOVED AND REPLACED TO FACILITATE CONSTRUCTION OF THIS PROJECT. CONTRACTOR SHALL COORDINATE ACTION WITH OWNER OF SIGNS, POLES, UTILITIES, AND STRUCTURES. THERE WILL BE NO SEPARATE PAYMENT FOR THIS WORK.	4.	GA NC AN GA
5.	UPON COMPLETION OF THE WORK, ALL DISTURBED AREAS SHALL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN THAT WHICH EXISTED PRIOR TO CONSTRUCTION.		PF DF
δ.	ALL AREAS DISTURBED BY THE CONTRACTOR OUTSIDE OF THE PAYMENT LINES SHALL BE RESTORED TO THEIR ORIGINAL CONDITION AT NO EXTRA COST TO THE OWNER. ALL ORIGINAL GRADES SHALL BE RESTORED.	5.	VA IN
7.	EXACT LOCATION OF NEW PIPES, VALVES, FITTINGS, AND APPURTENANCES SHALL BE DETERMINED IN THE FIELD AND MUST BE APPROVED BY ENGINEER/OWNER.	6.	Н\ (С н\
8.	PRIOR TO BIDDING FOR THE PROJECT, THE CONTRACTOR SHALL VISIT THE SITE TO VERIFY EXISTING CONDITIONS.		PA FA
9.	THE CONTRACTOR SHALL MAINTAIN A SET OF FIELD RECORD DRAWINGS DURING PROGRESSION OF THE PROJECT TO BE UPDATED ON A DAILY BASIS. FINAL "RED-LINE" AS-BUILTS SHOWING ANY CHANGES SHALL BE PREPARED BY THE CONTRACTOR AND SUBMITTED TO THE OWNER AT COMPLETION OF THE PROJECT.	<u></u>	ATE
10.	IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ALL REQUIRED PERMITS, POST REQUIRED BONDS, AND SUPPLY THE NECESSARY NOTICES REGARDING CONSTRUCTION, UTILITIES, AND INCIDENTAL WORK WITH THE OWNER AND APPLICABLE UTILITY COMPANIES.	1.	GE A ' CC
11.	CONTRACTOR SHALL PROVIDE PROPER TRAFFIC CONTROL TO CONTROL AND ENSURE THE SAFETY OF PEDESTRIANS, TRAFFIC, AND WORKERS AT ALL TIMES. ALL TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREET AND HIGHWAYS" AS AMENDED AND APPROVED BY THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION. PROVIDE ACCESS TO DRIVEWAYS AT THE END OF EACH DAY. CONTRACTOR SHALL COORDINATE ROAD CLOSURES WITH THE POLICE DEPARTMENT. CONTRACTOR SHALL KEEP AT LEAST ONE LANE OF TRAVEL OPEN IN EACH DIRECTION IN ACCORDANCE WITH RIDOT APPROVED TMP.		PII AN AN HY TH
12.	CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND MAINTAINING AREAS REQUIRED FOR TEMPORARY	2.	IN Of
	PLACEMENT/STORAGE FOR STOCKPILING MATERIALS TO BE USED FOR CONSTRUCTION. ALL AREAS SHALL BE SUBJECT TO THE APPROVAL OF THE CITY OF EAST PROVIDENCE.		PF BE
13.	THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL UNSUITABLE AND EXCESS SOIL AND MATERIALS FROM THE WORK SITE. COSTS ASSOCIATED WITH REMOVAL AND DISPOSAL OF UNSUITABLE AND EXCESS SOIL SHALL BE BORNE BY THE CONTRACTOR.	3.	BA EX ME
14.	THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TEMPORARY SHEETING, SHORING, DEWATERING, AND BRACING REQUIRED TO MAINTAIN THE STRUCTURAL STABILITY OF ADJACENT STRUCTURES AND UTILITIES DURING CONSTRUCTION CONTRACTOR SHALL SECURE OPEN EXCAVATIONS IN ACCORDANCE WITH OSHA STANDARDS IN O	4.	AL AN
	EXCAVATION SHALL BE OPEN AT THE END OF THE WORK DAY, CONTRACTOR SHALL BACKFILL THE EXCAVATION OR COMPLETELY COVER WITH STEEL PLATES AT THE END OF THE WORK DAY.	5.	FL
15.	ALL PAVED SURFACES SHALL BE SWEPT CLEAN AT THE END OF EACH WORK DAY.		A۱ FL
16.	ALL WORK SHALL CONFORM TO THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (STATE STANDARDS).	6.	PF TE
со	NSTRUCTION SCHEDULING	-	LA TE
1.	ALLOWABLE WORK HOURS SHALL BE IN ACCORDANCE WITH TRANSPORTATION MANAGEMENT PLAN (TMP)	EF	ROS
	APPROVED BY RIDOT. NO WORK OF ANY KIND, INCLUDING SETUP OR BREAKDOWN OF TEMPORARY TRAFFIC CONTROLS, SHALL BE DONE OUTSIDE OF THESE ALLOWABLE HOURS. NO WORK SHALL OCCUR OUTSIDE OF THESE HOURS WITHOUT CONSENT OF CITY OF EAST PROVIDENCE AND RIDOT.	1.	AL TH
2.	IT IS THE CITY'S INTENT TO COMPLETE THIS PROJECT IN ADVANCE OF THE START OF THE 2023-2024 SCHOOL YEAR. THE START OF THE 2023-2024 SCHOOL YEAR IS SCHEDULED FOR MONDAY AUGUST 28, 2023.	2.	SE DE PF
3.	THE CITY OF EAST PROVIDENCE SHALL HAVE UNINTERRUPTED WATER SERVICE FOR THE DURATION OF CONSTRUCTION, EXCEPT DURING SCHEDULED SHUT DOWNS WHEN APPROVED BY THE CITY OF EAST PROVIDENCE.	3.	DF Al
4.	CONSTRUCTION SHALL BE PHASED IN SUCH A WAY AS TO MINIMIZE WATER SHUTDOWNS AND SERVICE SHALL BE MAINTAINED TO THE SHAW'S SHOPPING PLAZA AT ALL TIMES. CONTRACTOR SHALL PROVIDE BYPASS AS REQUIRED TO MAINTAIN WATER SERVICE. OTHERWISE, UNDER NO CIRCUMSTANCES SHALL ANY OTHER CUSTOMER BE OUT OF WATER SERVICE FOR MORE THAN 8 HOURS AT A TIME. SHUT DOWN OF ANY CUSTOMER SHALL NOT OCCUR ON CONSECUTIVE DAYS.		E\ GI AF ST
5.	THE CITY OF EAST PROVIDENCE SHALL BE NOTIFIED AT LEAST 48 HOURS IN ADVANCE PRIOR TO A SHUTDOWN. CITY OF EAST PROVIDENCE WILL NOTIFY CUSTOMERS OF SCHEDULED SHUTDOWN.	4.	AC SE
3.	TEMPORARY BYPASS SHALL BE REQUIRED WHEN THE WORK REQUIRES A SHUT DOWN GREATER THAN 8 HOURS. THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER AND THE CITY OF EAST PROVIDENCE A TEMPORARY BYPASS	5.	CC NE
_	LAYOUT FOR REVIEW AND APPROVAL.	6.	uf Ri
1.	PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL SUBMIT A DETAILED CONSTRUCTION, PHASING, AND PAYMENT SCHEDULE. CONSTRUCTION, PHASING, AND PAYMENT SCHEDULES SHALL INCLUDE LINE ITEMS FOR COORDINATION WITH APPLICABLE PUBLIC AGENCIES AND PUBLIC/PRIVATE UTILITIES, WHEN NECESSARY.	7.	UF C(DI

WAY RESTORATION

ERE WILL BE NO OPEN TRENCHES ALLOWED AT THE END OF EACH WORK DAY. ALL TRENCHES SHALL BE CKFILLED TO GRADE EACH DAY AND SHALL BE PAVED WITH A TEMPORARY TRENCH PATCH TO EXISTING GRADE THE END OF EACH WORK WEEK.

MPORARY TRENCH PATCH SHALL BE TAKEN UP TO PREPARE ROAD FOR CONCRETE ROAD BASE AND FINAL ESTORATION.

NCRETE ROAD BASE, PERMANENT TRENCH PATCHING, MICRO MILLING, AND OVERLAYING OF THE ROADS SHALL PERFORMED IN ACCORDANCE WITH THEIR RESPECTIVE DETAILS AND AS CALLED FOR IN THE SPECIFICATIONS. L TRAVEL LANES THAT ARE DISTURBED SHALL BE ENTIRELY MICROMILLED AND OVERLAIN TO MEET RIDOT EQUIREMENTS, EXCEPT IN THE CASE OF CROSS TRENCHES WHERE CONCRETE BASE RESTORATION AND RMANENT PATCH IS SUITABLE.

INTRACTOR SHALL NOTIFY ENGINEER AND CITY OF EAST PROVIDENCE OF CONDITION OF EXISTING ROAD BASE BOTH SIDES OF TRENCH FOR DIRECTION ON LIMITS OF RESTORATION. ENGINEER AND THE CITY WILL DIRECT INTRACTOR ON WHETHER EXISTING CONCRETE ROAD BASE PANEL(S) CAN REMAIN OR IF OVERDIG AND REMOVAL REQUIRED, BASED ON CONSULTATION WITH RIDOT.

INTRACTOR SHALL BE RESPONSIBLE FOR RAISING OR LOWERING OF ALL CASTINGS, WHETHER EXISTING OR STALLED AS PART OF THIS PROJECT, TO FINISH GRADE WITH EITHER COURSES OF BRICK AND MORTAR OR AISING OR LOWERING OF VALVE BOXES AND COVERS. INSTALLATION OF EXTENSIONS ON VALVE BOXES SHALL OT BE ALLOWED.

STURBED PAVEMENT MARKINGS, WHETHER SHOWN ON THE DRAWINGS OR NOT, SHALL BE RESTORED IN CORDANCE WITH RIDOT REQUIREMENTS.

INTRACTOR SHALL RESTORE EXISTING LOOP DETECTORS THAT ARE DISTURBED DURING CONSTRUCTION.

IFICATION OF WATER MAIN, VALVES AND APPURTENANCES

ENERAL: ALL MATERIALS SHALL BE NEW, UNUSED, AND PURCHASED SPECIFICALLY FOR THIS PROJECT. ALL ATER MAIN, VALVES, AND APPURTENANCES SHALL BE MADE IN THE UNITED STATES OF AMERICA AND SHALL BE ROVIDED WITH DOCUMENTATION INDICATING THE LOCATION OF FOUNDRY AND/OR PLACE OF ORIGIN, UNLESS THERWISE APPROVED. ALL HARDWARE FOR WATER MAIN PIPING, VALVES, AND APPURTENANCES SHALL BE AINLESS STEEL FOR CORROSION RESISTANCE.

ATER MAIN: BURIED WATER MAIN SHALL BE CLASS 52 DUCTILE IRON PIPE CONFORMING TO AWWA C150 AND C151 TEST REVISION AS INDICATED ON THE DRAWINGS. ALL D.I. PIPE SHALL HAVE DOUBLE BITUMINOUS SEAL COATING ALL EXTERIOR SURFACES AND DOUBLE CEMENT-MORTAR INTERIOR LINING NOT LESS THAN ¹/₈" THICK FOR 3-12" PE AND $rac{3}{16}$ " FOR 16-30" PIPE. D.I. JOINTS TO BE PUSH-ON EXCEPT WHERE MECHANICAL OR FLANGED JOINTS ARE HOWN ON THE DRAWINGS. JOINTS SHALL CONFORM TO AWWA C111, LATEST REVISION.

TTINGS: FITTINGS TO BE USED WITH DUCTILE IRON PIPE SHALL BE DUCTILE IRON WITH A PRESSURE RATING OF OT LESS THAN 350 PSI. FITTINGS SHALL CONFORM TO AWWA C153, LATEST REVISION. ALL D.I. FITTINGS SHALL AVE A DOUBLE CEMENT LINING NOT LESS THAN $\frac{1}{8}$ " THICK FOR 3-12" PIPE AND SHALL BE RESTRAINED WITH GALUGS SERIES 1100 OR EQUIVALENT.

ATE VALVES: RESILIENT SEATED GATE VALVES SHALL BE DUCTILE IRON-BODY, STAINLESS STEEL MOUNTED, DN-RISING STEM CONFORMING TO AWWA C-509, LATEST REVISION. GATE VALVES SHALL BE MECHANICAL JOINT ND SHALL OPEN RIGHT. ALL GATE VALVE HARDWARE SHALL BE STAINLESS STEEL FOR CORROSION RESISTANCE. ATE VALVES SIZED 3" to 12" SHALL BE SUITABLE FOR 250 PSI MAXIMUM WORKING PRESSURE AND 400 PSI TEST RESSURE. ALL GATE VALVES SHALL BE RESTRAINED WITH MEGALUGS SERIES 1100 OR EQUIVALENT. SHOP RAWINGS SHALL INDICATE THE NUMBER OF TURNS TO OPEN.

ALVE BOXES & COVERS: VALVE BOXES SHALL BE CAST IRON, TWO-PIECE, ADJUSTABLE STYLE, SLIP TYPE WITH SIDE DIAMETER OF 5-1/4". COVERS SHALL BE CAST IRON, 5-1/4" WITH WORD "WATER" INSCRIBED.

(DRANTS: HYDRANTS SHALL COMPLY IN ALL RESPECTS TO AWWA C-502. HYDRANTS SHALL OPEN TO THE LEFT COUNTER-CLOCKWISE) AND HAVE A DIRECTION-TO OPEN ARROW WITH THE WORD "OPEN" IMPRINTED ON THE (DRANT. HYDRANTS SHALL BE AVK MODEL 27-80 5^1_4 " 250W OR MUELLER SUPER-CENTURION. HYDRANTS SHALL BE AINTED "SAFETY" YELLOW WITH CAPS AND BONNET PAINTED RED. AT LEAST ONE COAT SHALL BE APPLIED AT THE ACTORY AND AT LEAST ONE COAT APPLIED IN THE FIELD AFTER INSTALLATION.

ER MAIN & SERVICE INSTALLATION NOTES

ENERAL: CONTRACTOR IS REQUIRED TO PROVIDE UNINTERRUPTED WATER SERVICE DURING CONSTRUCTION. IF WATER SHUTDOWN IS REQUIRED, THE SHUTDOWN SHALL BE NO LONGER THAN 8 HOURS AND SHALL BE DORDINATED WITH THE CITY OF EAST PROVIDENCE NO LESS THAN 72 HOURS IN ADVANCE. IF THE CONTRACTOR PTS TO WORK OUTSIDE OF THE CONSTRUCTION SHUTDOWN CONSTRAINTS, THE CONTRACTOR MUST USE BYPASS PING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION, DISINFECTION, TESTING, MAINTENANCE, ND BREAK DOWN TO MAINTAIN WATER SERVICE TO CUSTOMERS AS NEEDED DURING CONSTRUCTION, START-UP, ND TESTING. THE CONTRACTOR SHALL WORK WITH THE LOCAL FIRE DEPARTMENT FOR THE USE OF TEMPORARY (DRANTS. A TESTABLE BACKFLOW PREVENTER SHALL BE PROVIDED BY CONTRACTOR ON ALL BYPASS PIPING. HE CONTRACTOR SHALL SUBMIT BYPASS PIPING PLANS, AS NECESSARY, TO THE ENGINEER FOR APPROVAL.

STALLATION: WATER MAIN SHALL BE INSTALLED WITH A MINIMUM 4.5 FEET OF COVER UNLESS OTHERWISE NOTED I THE DRAWINGS. PIPE SHALL BE INSULATED WITH APPROVED MATERIAL WHERE 4.5 FEET OF COVER IS NOT ROVIDED. PIPE SHALL BE LAID ON COMPACTED GRAVEL BORROW BEDDING AND COVERED WITH GRAVEL BORROW EDDING MATERIAL AS INDICATED IN THE CONTRACT SPECIFICATIONS AND DRAWINGS.

ACKFILL: BACKFILL OF EXCAVATION SHALL BE PERFORMED WITH SUITABLE MATERIAL OR REFILLS FROM SITE (CAVATION WITH NO PARTICLE LARGER THAN 3 INCHES, AND COMPACTED IN ACCORDANCE WITH AASHTO T 180 THOD D TO A MINIMUM DRY DENSITY OF 95% IN 6-INCH LIFTS. UNSUITABLE MATERIALS (I.E., PEAT, CLAY, RGANIC MATTER, DEBRIS) SHALL BE REMOVED OFF SITE FOR DISPOSAL AT NO ADDITIONAL COST TO THE OWNER.

IGNMENT: ALIGNMENT OF WATER MAIN IS DIAGRAMMATIC ONLY AND DOES NOT REFLECT ALL BENDS, FITTINGS, ND APPURTENANCES THAT MAY BE REQUIRED FOR PROPER INSTALLATION.

USHING & DISINFECTION: ALL NEW WATER MAIN SHALL BE FLUSHED AND DISINFECTED IN ACCORDANCE WITH NWA C651, LATEST REVISION AND SHALL BE SUBJECT TO THE STANDARDS OF THE CITY OF EAST PROVIDENCE. USHING AND DISINFECTION SHALL BE PERFORMED IN THE PRESENCE OF ENGINEER AND THE CITY OF EAST ROVIDENCE. FORM OF CHLORINE USED FOR DISINFECTION SHALL BE APPROVED BY ENGINEER.

ESTING: ALL NEW WATER MAIN SHALL BE SUBJECTED TO PRESSURE AND LEAKAGE TESTING PER AWWA C600, TEST REVISION AND SHALL BE SUBJECT TO THE STANDARDS OF THE CITY OF EAST PROVIDENCE. PRESSURE EST SHALL BE 1.5 TIMES THE NORMAL PRESSURE, BUT NO LESS THAN 150 PSI FOR 2 HOURS.

ION AND SEDIMENTATION CONTROL

L EROSION AND SEDIMENT CONTROL MATERIALS AND METHODS ARE TO BE PROVIDED IN ACCORDANCE WITH HE RHODE ISLAND EROSION AND SEDIMENT CONTROL HANDBOOK AND THE RIDOT STANDARDS.

EDIMENT CONTROL BARRIERS ARE TO BE INSTALLED BY THE CONTRACTOR AS SHOWN ON THE PLANS AND ETAILS PRIOR TO THE COMMENCEMENT OF ANY EARTHWORK IN THOSE AREAS. CONTRACTOR SHALL ALSO ROVIDE TEMPORARY SEDIMENT PROTECTION AS SHOWN ON THE DETAILS FOR ALL EXISTING CATCH BASIN OR RAINAGE INLET STRUCTURES ALONG ROUTE OF THE WATER MAIN CONSTRUCTION.

L CONSTRUCTION PHASE EROSION CONTROLS SHALL BE INSPECTED BY THE CONTRACTOR AT LEAST ONCE /ERY SEVEN (7) CALENDAR DAYS AND WITHIN TWENTY-FOUR (24) HOURS AFTER ANY STORM EVENT WHICH ENERATES AT LEAST 0.25 INCHES OF RAIN IN A TWENTY-FOUR (24) HOUR PERIOD. THE CONTRACTOR SHALL NOTE REAS OF EROSION AND SEDIMENT MIGRATION, AS WELL AS THE CONDITION AND EFFECTIVENESS OF THE ORMWATER CONTROLS.

CCUMULATED SEDIMENTS SHALL BE EXCAVATED AND PROPERLY DISPOSED OF WHEN THE HEIGHT OF THE EDIMENT EXCEEDS ONE HALF (1/2) THE HEIGHT OF THE COMPOST FILTER SOCKS.

DMPOST FILTER SOCKS SHALL BE REPLACED EVERY SIX (6) MONTHS, AT A MINIMUM, AND MORE FREQUENTLY IF ECESSARY. ANY DAMAGED COMPOST FILTER SOCKS SHALL BE PROMPTLY REPLACED.

PON COMPLETION OF EARTHWORK OUTSIDE OF THE PAVED LIMITS, PERMANENT VEGETATION SHALL BE E-ESTABLISHED.

PON COMPLETION OF THE PROJECT AND PERMANENT STABILIZATION OF THE GROUND SURFACE, ALL SEDIMENT ONTROL BARRIERS SHALL BE REMOVED SO AS NOT TO IMPEDE STORM FLOW OR DRAINAGE AND SHALL BE SPOSED OF IN AN APPROPRIATE FASHION.

EXISTING

BUILDING

WATER LINE

GAS LINE



OVERHEAD WIRE CURB SIGN SHRUB TREE UTILITY POLE LIGHT POLE WATER VALVE WATER SHUT-OFF HYDRANT CATCH BASIN DRAIN MANHOLE SEWER MANHOLE

ABBREVIATIONS

PL	PROPERTY LIN
СВ	CATCH BASIN
DMH	DRAIN MANHO
EMH	ELECTRICAL M
HMA	HOT MIX ASPH
SMH	SEWER MANHO
SCO	SEWER CLEAN
CONC.	CONCRETE
_P	LIGHT POLE
JP	UTILITY POLE
GW	GUY WIRE
HYD	FIRE HYDRANT
WSO	WATER SHUT-0
WV	WATER VALVE
WMP	WATER METER
NV.	INVERT
ELEV.	ELEVATION
DEPT.	DEPARTMENT

LEGEND

PROPERTY LINE CONTOUR LINE TREELINE (APPROX)

BUSHES OR SHRUB LINE DRAINAGE LINE SEWER LINE

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M
♦ So
-
LOD

PROPOSED

CURB STOP TRANSITION COUPLING COMPOST FILTER SOCK LIMIT OF DISTURBANCE FULL-DEPTH SAWCUT

WATER MAIN

HYDRANT

DI CAP

GATE VALVE

CURB





Y LINE ASIN NHOLE AL MANHOLE

SPHALT ANHOLE EAN-OUT

OLE

RANT

HUT-OFF **LVE**

ETER PIT

SCAL 0' ■ B/ O	E ADJ	USTME ONE IN AL DR/	ENT GUI 1" CH ON AWING	DE
		WATER UTILITIES DIVISION	PAWTUCKET AVENUE WATER MAIN RELOCATION	
BRAN No Maria PROFI	DON	M. BL	ANCH 89 5.2 RED ENGIN	ARD 85 3.22 EER
	<u>IS:</u>			

PROJECT NO .: 12200.16 DATE MAY 2023 SCALE: DESIGNED BY: CHECKED BY: BMB DRAWN BY: AKL APPROVED BY: TPT

NOTES & LEGEND

DRAWING TITLE:

DRAWING NO .: C1.C

SHEET NO. 2 OF 9



12 Jobs\12200.16 EP\DWGS\SITE PLAN



TEES				HORTIZONTAL BENDS						VERTICAL BENDS							ANCHORAGES										
PIPE SIZE-D (DIA.)						PIPE	SIZE-D	(DIA.)				PIPE SIZE-D (DIA.)						PIPE SIZE-D (DIA.)									
		6"	8"	12"	16"	20"	DEN	BEND		8"	12"	16"	20"	DEN	U	6"	8"	12"	16"	20"	BEND		6"	8"	12"	16"	20"
	A	8"	10"	1'-0"	1'-3"	1'-6"		Х	1'-0"	1'-0"	1'-0"	1'-3"	1'-6"		L	1'-3"	1'-8"	2'-6"	3'-6"	4'-8"		R	2'-6"	3'-0"	4'-6"	5'-4"	6'-0"
	В	8"	10"	1'-2"	1'-4"	1'-6"	1/8	Y	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	1/8	М	7"	8"	11"	1'-4"	1'-6"	1/8	S	2'-6"	2'-9"	3'-6"	2'-6"	5'-6"
	С	10"	1'-0"	1'-3"	1'-6"	1'-8"		Z	8"	10"	1'-2"	1'-4"	1'-6"		N	7"	8"	11"	1'-4"	1'-6"		Т	3'-0"	4'-0"	4'-9"	7'-0"	9'-6"
	E	8"	10"	1'-2"	1'-6"	1'-10"		Х	1'-0"	1'-0"	1'-0"	1'-3"	1'-6"		L	9"	1'-0"	1'-9"	2'-6"	3'-0"		R	2'-0"	2'-8"	4'-0"	4'-6"	5'-0"
							1/16	Y	1'-0"	1'-4"	1'-6"	1'-9"	2'-6"	1/16	М	7"	7"	10"	1'-0"	1'-2"	1/16	S	1'-9"	2'-3"	2'-6"	3'-2"	3'-8"
								Z	Z 8" 10" 1'-2" 1'-4" 1'-6"	1'-6"		N	7"	7"	8"	10"	1'-0"		Т	2'-6"	3'-4"	4'-0"	6'-0"	8'-6"			
								Х	1'-0"	1'-0"	1'-0"	1'-2"	1'-4"		L	6"	8"	1'-0"	1'-4"	1'-9"		R	1'-6"	2'-0"	3'-0"	3'-8"	4'-3"
							1/32	Y	1'-0"	1'-0"	1'-2"	1'-4"	1'-6"	1/32	М	7"	7"	10"	1'-0"	1'-2"	1/32	S	1'-3"	1'-9"	2'-0"	2'-4"	2'-6"
								Z	8"	10"	1'-2"	1'-4"	1'-6"		N	7"	7"	8"	10"	1'-0"		Т	2'-0"	2'-6"	3'-0"	4'-6"	5'-9"

















- VEHICLES.
- THE MAXIMUM SPACING BETWEEN THE FLUORESCENT TRAFFIC CONES 6. FOR TAPER AND TANGENT SECTIONS ON DESIGNATED PROJECT ROADWAYS AND SIDE STREETS SHALL BE MAX. TWENTY-FIVE (25) FEET.

- INCLUDING ALL REVISIONS AND ADDENDA.
- 12. THE CONTRACTOR SHALL PROVIDE NECESSARY ACCESS FOR FIRE APPARATUS AND OTHER EMERGENCY VEHICLES THROUGH THE WORK ZONE AT ALL TIMES.

DAILY HALF ROAD CLOSURE SOUTHBOUND CLOSURE

 \bigcirc

UNANCHORED BARRIER FOR TEMPORARY TRAFFIC CONTROL (TL-3)









LONG TERM SOUTHBOUND CLOSURE

UNANCHORED BARRIER FOR TEMPORARY TRAFFIC CONTROL (TL-3)

20'