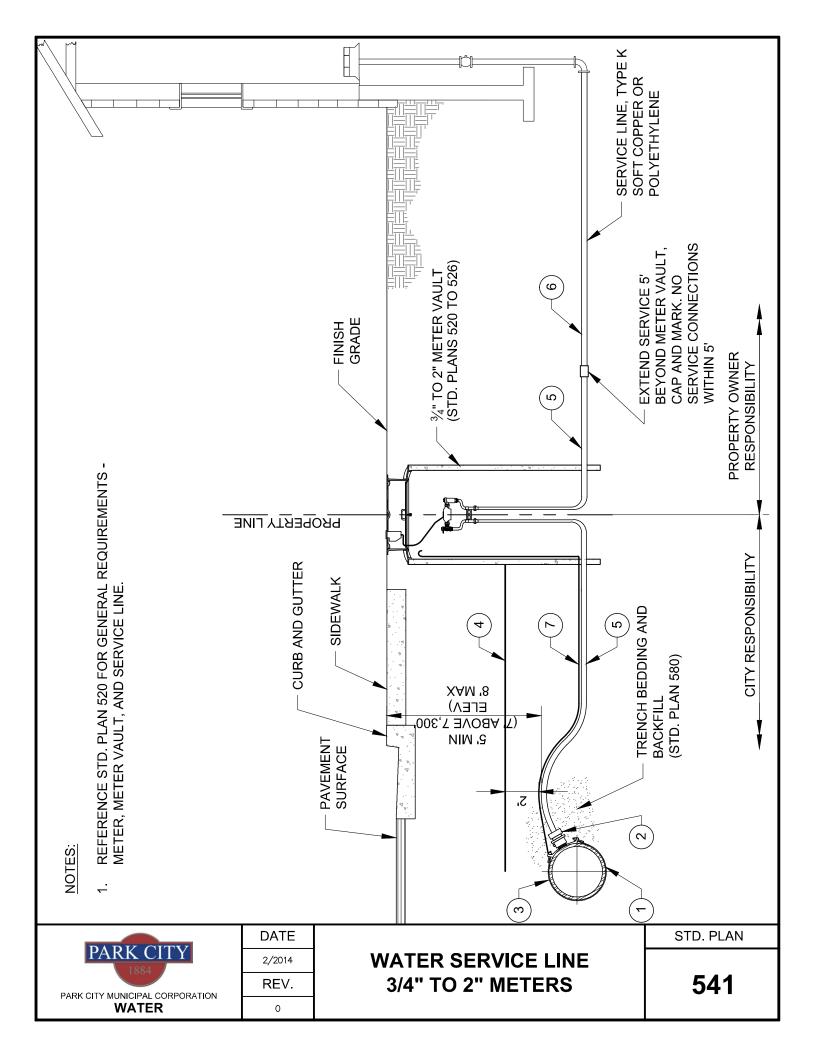


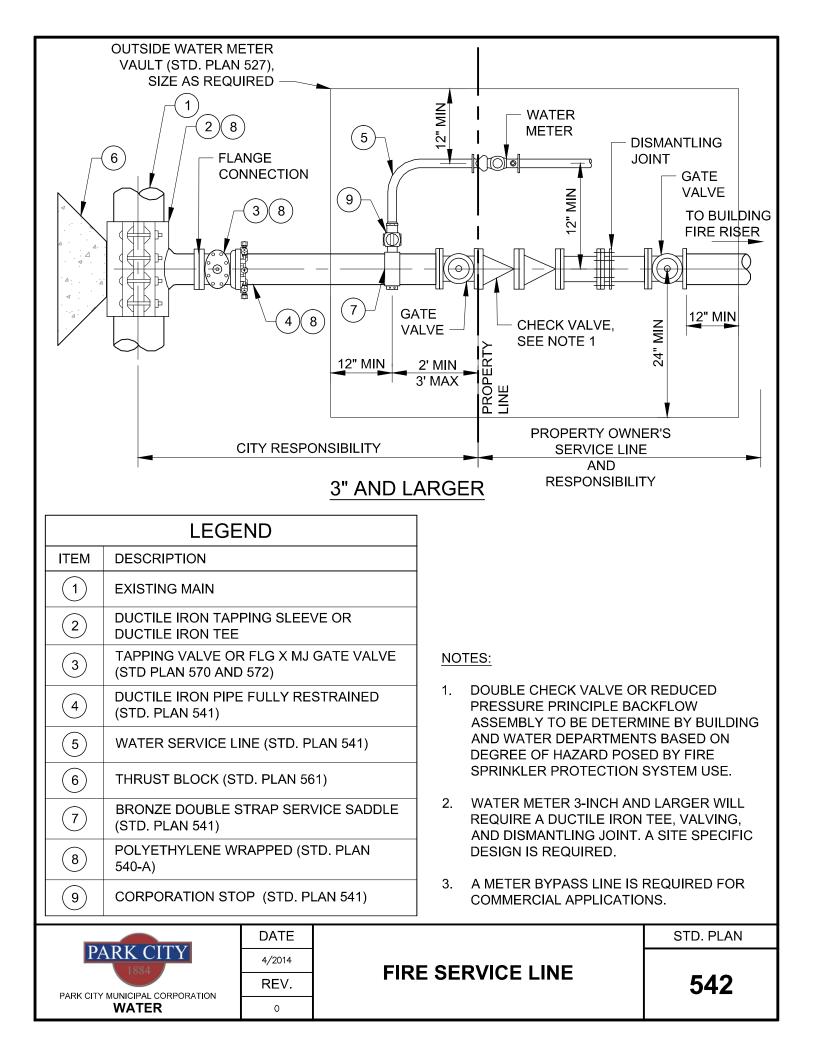
LEGEND AND APPROVED PARTS LIST

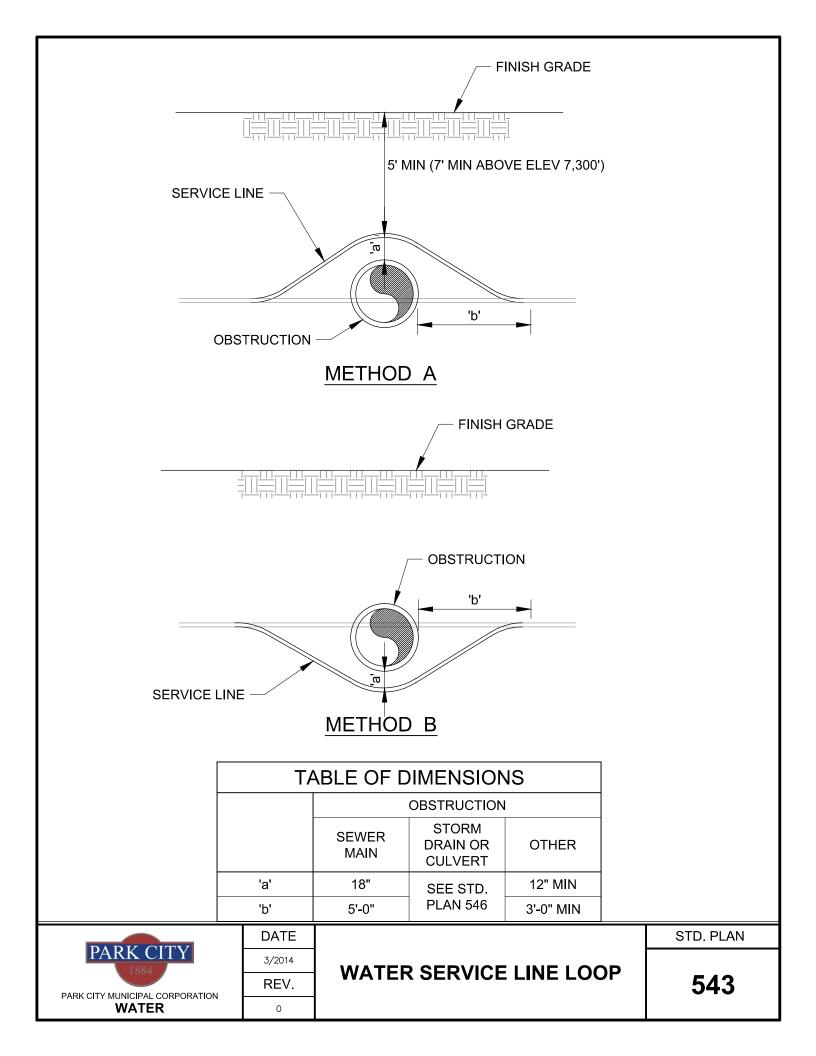
ITEM	DESCRIPTION			ACCEPTABLE MANUFACTURER	MODELS	
	DUCTILE IRON PIPE, 3" T		ER, PRESSURE PACIFIC	U.S. PIPE (1) PACIFIC STATES	STANDARD JOINT PIPE: PUSH ON TYTON JOINT	
1), CEMENT-MORTAR LINING, A EXTERIOR COATING, AWWA		U.S. PIPE (1) PACIFIC STATES	RESTRAINED JOINT PIPE: THRUST-LOCK TR FLEX	
2	POLYVINYL CHLORIDE (PVC) PIPE, C.I.O.D., C900, DR 18, INTEGRAL BELL JOINT			JM EAGLE (1)	<u>STANDARD JOIN</u> BLUE BRUTE	IT PIPE:
3	DUCTILE IRON FITTINGS, 3" TO 12" DIAMETER, FULL BODY, PRESSURE CLASS 350, CEMENT MORTAR LINED, ASPHALTIC EXTERIOR COATING, AWWA C153 / C104 FLANGES: AWWA C110 / C115, CLASS 125 FLANGE WITH FULL FACE OR RING FLANGE-TYTE GASKETS			U.S. PIPE (1) PACIFIC STATES	PUSH ON STYLE TYTON JOINT FLANGED FITTIN	
				U.S. PIPE (1) PACIFIC STATES	RESTRAINED JOINT PIPE: THRUST-LOCK TR FLEX	
4	FITTINGS – DUCTILE IRON MECHANICAL JOINT PIPE WITH RETAINER GLANDS OR SST TIE ROD / NUT RESTRAINTS, AWWA C110 / C111 / C104			EBBA IRON (1)	FITTINGS: MECHANICAL JOINT RETAINER GLANDS: MEGALUG SERIES 1100, STD T- BOLTS AND NUTS	
(5)	POLYETHYLENE ENCASEMENT, HIGH DENSITY CROSS LAMINATED (HDCL) POLYETHYLENE FILM, AWWA C105 & AWWA C703E METHODS A & C			CHRISTY'S (1)	AWWA C703E METHOD A (4 MIL) AT PIPE AND AWWA C703E METHOD C (10 MIL) AT BOLT-TYPE JOINTS, FITTINGS, AND VALVES	
6	DETECTABLE UNDERGROUND WARNING TAPE, 5-MIL MINIMUM, ALUMINUM BACKING, BLUE BACKGROUND, 6" WIDE			SETON (1)	85525	
7	TRACER WIRE: 12 GA. SOLID, BLUE PVC INSULATION; WIRE-WIRE CONNECTORS SILICONE-FILLED WIRE NUTS			CONNECTORS: IDEAL INDUSTRIES (1)	TWISTER DB PLUS OR APP'D EQUAL	
8	WAX TAPE COATING SYSTEM, APPLY TO ALL BURIED BOLTS AND NUTS INCLUDING MECHANICAL JOINT RESTRAINT SYSTEMS, AWWA C 217. REFER TO STD. PLAN 534.					
			DETAIL N	OTES		
 COORDINATE PIPE SIZE WITH APPROVED PLANS PRIOR TO ORDERING MATERIALS LOCATE MAIN, FITTINGS, VALVES, AND FIRE LINES PER APPROVED PLANS DUCTILE IRON PIPE IS REQUIRED WHEN WATER SYSTEM DESIGN PRESSURE EXCEEDS 150 PRESSURE RATING PROVIDE "DOMESTIC" DUCTILE IRON FITTINGS PROVIDE DUCTILE IRON RESTRAINED JOINT PIPE ON FIRE LINES, HYDRANT LINES, AND WHERE REQUIRED ON THE APPROVED PLANS PROVIDE 316 STAINLESS STEEL BOLTS AND NUTS WITH ANTI-SEIZE LUBRICATION ON ALL FLANGED CONNECTIONS REFER TO STANDARD PLAN 534 FOR SUPPLEMENTAL EXTERNAL CORROSION PROTECTION REQUIREMENTS. WHEN CATHODIC PROTECTION IS REQUIRED REFER TO STD. PLANS 534-538. REFER TO SPECIFICATIONS FOR FLUSHING, HYDROSTATIC TESTING, AND DISINFECTING REQUIREMENTS (1) DENOTES "OR EQUAL" MANUFACTURER AND MODEL. SUBMIT IN ACCORDANCE WITH CITY STANDARDS 						
	PARK CITY	DATE				STD. PLAN
	1884 ITY MUNICIPAL CORPORATION WATER	4/2014 REV. 0	WATER M	AIN AND FIF	RE LINES	540 S

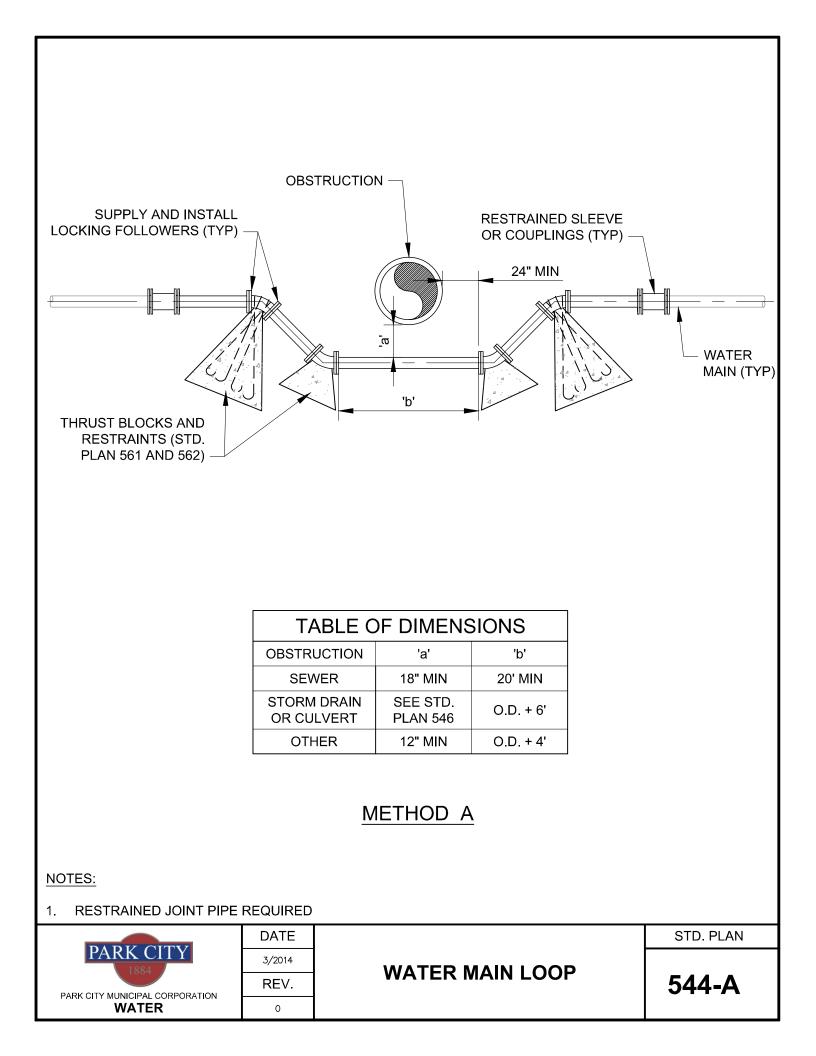


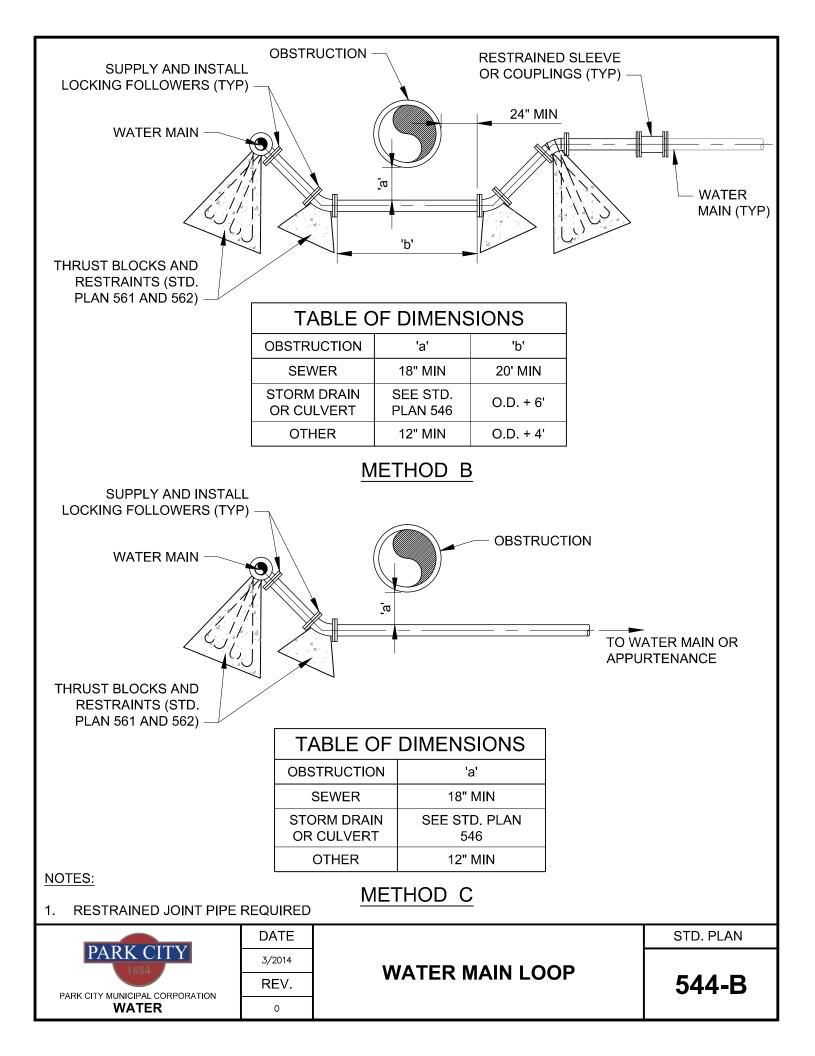
LEGEND AND APPROVED PARTS LIST

ITEM	DESCRIPTION	ACCEPTABLE MANUFACTURER	МС	DELS	
_	BRONZE SERVICE SADDLE:	MUELLER	DI & AC PIPE: BR2B SERIES, 1-1/2" SERVICE, CC THDS; 2" SERVICE FIP THDS <u>PVC PIPE:</u> H-13000 SERIES, 1-1/2" SERVICE, CC THDS; 2" SERVICE FIP THDS		
1	DI & AC PIPE; DOUBLE STRAP PVC PIPE; TWO-PIECE BOLTED	FORD	DI & AC PIPE: ST 1-1/2" SERVICE, 2" SERVICE, FIP <u>PVC PIPE:</u> 1-1/2" SERVICE, THDS; 2" SERVICE, STY	CC THDS; THDS	
2	BRASS CORPORATION STOP, INLET CC THREAD,	MUELLER	B-25008N		
	OUTLET CTS COMPRESSION	FORD	FB1100-(SERVIC	E SIZE)-G-NL	
3	POLYETHYLENE ENCASEMENT, HIGH DENSITY CROSS LAMINATED (HDCL) POLYETHYLENE FILM, AWWA C105 & AWWA C703E METHOD C	CHRISTY'S OR APPROVED EQUAL	AWWA C703E MI (4 MIL)	ETHOD C	
4	DETECTABLE UNDERGROUND WARNING TAPE, 5-MIL MINIMUM, ALUMINUM BACKING BLUE BACKGROUND, 6" WIDE	SETON OR APPV'D EQUAL	85525		
5	WATER SERVICE LINE: HIGH-DENSITY POLYETHYLENE TUBING (CTS), BLUE, SDR 9, AWWA C901 1-1/2" DIA. SERVICE: 3/4" AND 1" SINGLE METER 1-1/2" DIA. SERVICE: 3/4" AND 1" DUAL METERS 2" DIA. SERVICE: 1-1/2" AND 2" SINGLE METER 2" DIA. SERVICE: 1-1/2" DUAL METERS	ADS OR APPV'D EQUAL			
6	WATER SERVICE LINE: HIGH-DENSITY POLYETHYLENE TUBING (CTS), BLUE, SDR 9, AWWA C901; OR, TYPE K COPPER, SOFT, AWWA C800	ADS OR APPV'D EQUAL			
7	TRACER WIRE: 12 GA. SOLID, BLUE PVC INSULATION; WIRE-WIRE CONNECTORS SILICONE-FILLED WIRE NUTS	IDEAL INDUSTRIES	TWISTER DB PLUS OR APP'D EQUAL		
 COORDINATE SERVICE SIZE WITH CITY PRIOR TO ORDERING MATERIALS LOCATE SERVICE PER APPROVED PLANS NO SERVICE LINE FITTINGS ALLOWED BETWEEN CORPORATION STOP AND METER VAULT CURB STOP VALVE APPLY WAX TAPE COATING SYSTEM TO SERVICE SADDLE BOLTS AND NUTS, AWWA C217. SYSTEM TO INCLUDE FILLER MATERIAL, TAPE COATING, AND PROTECTIVE OUTERWRAP. DENSO NORTH AMERICA, TRENTON, OR APPROVED EQUAL (STD. PLAN 534) 					
	DATE			STD. PLAN	
	1884	R SERVICE TO 2" METE		541 S	









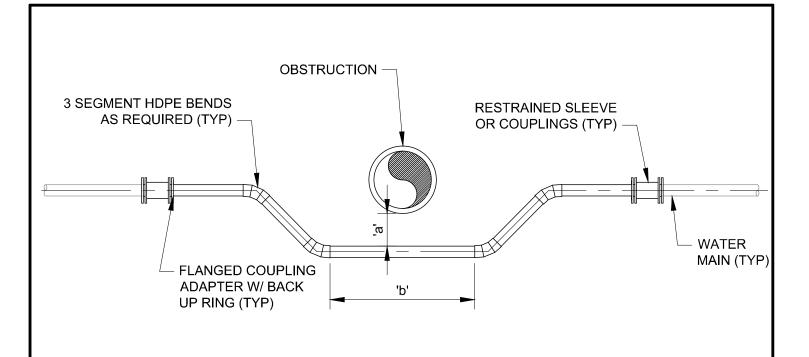


TABLE OF DIMENSIONS				
OBSTRUCTION	'a'	'b'		
SEWER	18" MIN	20' MIN		
STORM DRAIN OR CULVERT	SEE STD. PLAN 546	O.D. + 6'		
OTHER	12" MIN	O.D. + 4'		

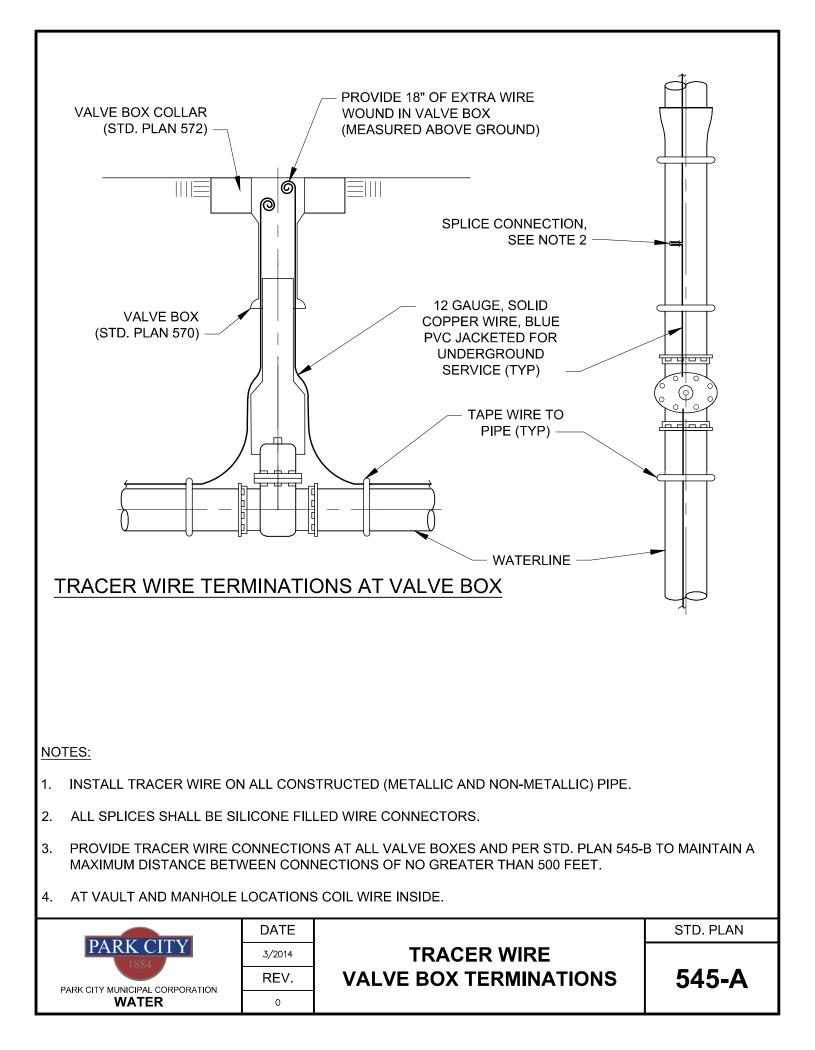
HDPE METHOD

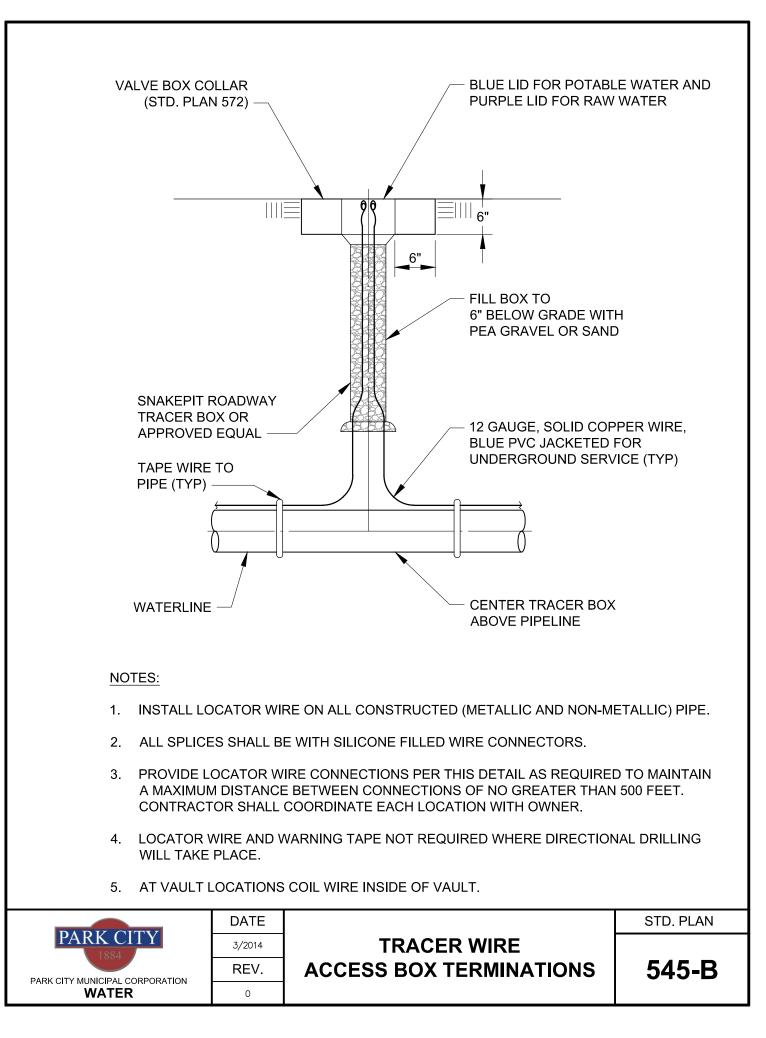
NOTES:

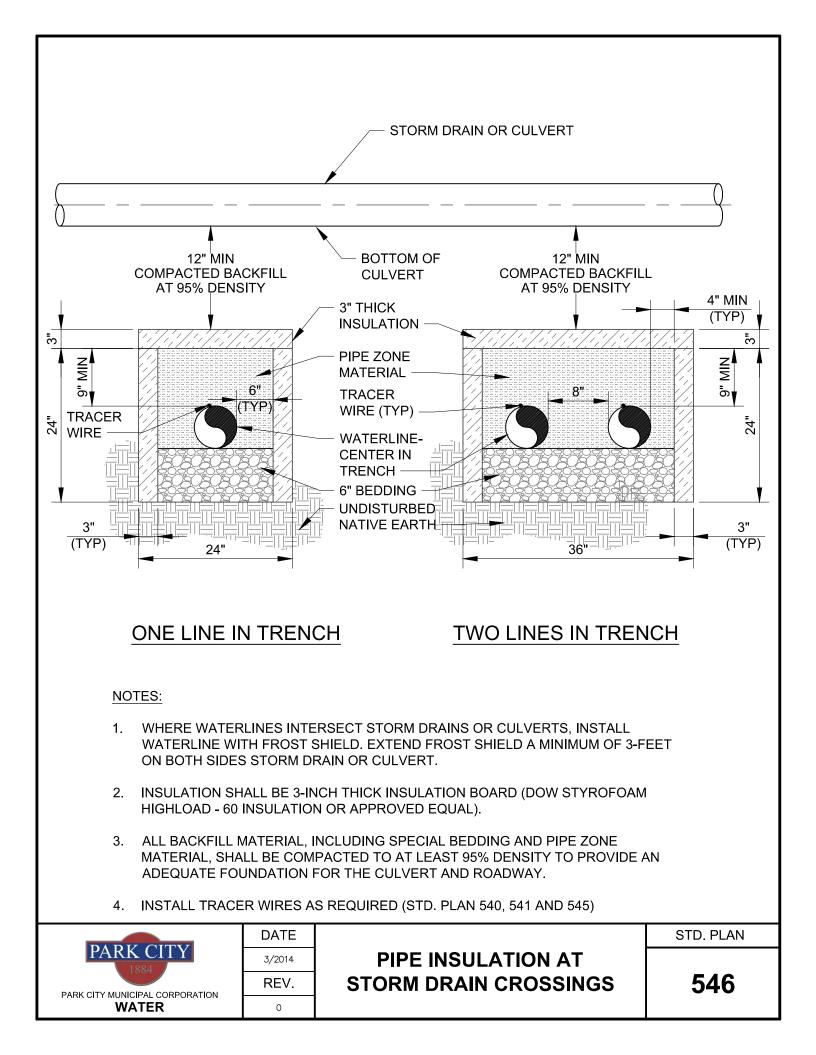
HDPE PIPE WATERLINE LOOP MINIMUM REQUIREMENTS:

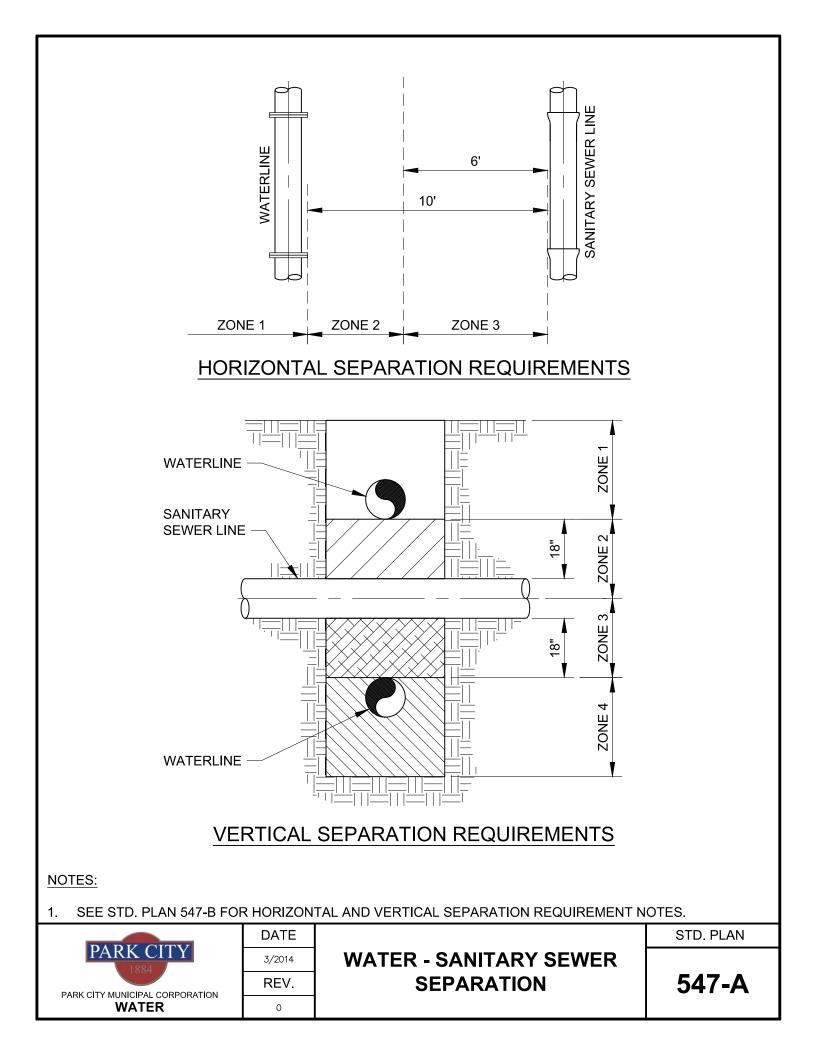
- 1. GENERAL: PIPE SHALL BE HDPE 4710 DR11 WITH AN INSIDE DIAMETER EQUAL TO OR GREATER THAN THE CONNECTING PIPE ON BOTH ENDS.
- 2. PIPE SHALL BE FUSION WELDED ALONG LENGTH AND FULLY RESTRAINED AT TRANSITIONS TO DIFFERING PIPE MATERIALS WITH FLANGES OR OTHER CITY APPROVED METHOD.
- 3. FITTINGS ALONG THE LOOP LENGTH SHALL BE HDPE UNLESS OTHERWISE APPROVED BY OWNER.
- 4. BENDING RADIUS NOT TO EXCEED PIPE MANUFACTURES RECOMMENDATIONS.
- 5. REDUCERS AND TRANSITION COUPLINGS SHALL BE PROVIDED ON BOTH ENDS AS REQUIRED AND SHALL BE HDPE OR DUCTILE IRON. CATHODIC PROTECTION REQUIRED ON FERROUS COMPONENTS PER STD. PLAN 534

	DATE	WATER MAIN LOOP	STD. PLAN
PARK CITY	3/2014		
	REV.		544-C
PARK CITY MUNICIPAL CORPORATION WATER	0		









HORIZONTAL SEPARATION NOTES:

- 1. ZONE 1: WATER LINE AND SEWER LINE SEPARATED 10 FEET OR GREATER NO SPECIAL REQUIREMENTS
 - ZONE 2: WHERE LOCAL CONDITIONS AND SITE SPECIFIC CONDITIONS PRECLUDE ZONE 1 SEPARATION – SPECIAL REQUIREMENTS APPLY:

A) APPROVAL BY DIVISION OF ENVIRONMENTAL QUALITY, DIVISION OF DRINKING WATER AND,

B) SEWER PIPES IN GOOD CONDITION

AND,

C) NO HIGH GROUNDWATER

AND,

D) WATER LINE SEPARATED BY AT LEAST 6 FEET AT OUTSIDE PIPE WALLS AND,

E) BOTTOM OF WATER LINE IS AT LEAST 18 INCHES ABOVE TOP OF SEWER LINE AND,

- F) WATER LINE CONSTRUCTED WITH MECHANICAL, RESTRAINED JOINT PIPE
- ZONE 3: WATER LINE AND SEWER LINE SEPARATED LESS THAN 6 FEET NOT ALLOWED WITHOUT APPLICATION TO AND APPROVAL BY UTAH DIVISION OF ENVIRONMENTAL QUALITY, DIVISION OF DRINKING WATER FOR EXCEPTION TO THE RULE. ADDITIONAL MITIGATION MEASURES TO PROTECT PUBLIC HEALTH REQUIRED
- 2. ADDITIONAL WATER-SEWER SEPARATION AND/OR SPECIAL PIPE MATERIALS MAY BE REQUIRED IN AREAS OF HIGH GROUNDWATER, SOILS CONDITIONS, OR SPECIAL SEWER LINE CONTENTS
- 3. SERVICE LINE TAPS NOT ALLOWED IN ZONE 2
- 4. SERVICE LINE TAPS WITHIN ZONE 3 ALLOWED ONLY BY SITE SPECIFIC APPROVAL BY DIVISION OF ENVIRONMENTAL QUALITY, DIVISION OF DRINKING WATER
- 5. <u>SANITARY SEWER FORCE MAINS</u>:
 - a. WATER LINE TO MAINTAIN 10 FEET HORIZONTAL SEPARATION AND 18 INCHES VERTICAL SEPARATION ABOVE SEWER FORCE MAIN
 - b. NEW SEWER FORCE MAIN CROSSING UNDER AN EXISTING WATER MAIN TO BE ENCLOSED IN A CONTINUOUS SLEEVE
 - c. NEW WATER MAIN CROSSING OVER AN EXISTING SEWER FORCE MAIN, 200 PSI MINIMUM WORKING PRESSURE RATED PIPE MATERIALS REQUIRED
- 6. CONSULT SNYDERVILLE BASIN WATER RECLAMATION DISTRICT FOR ADDITIONAL SANITARY SEWER RELATED REQUIREMENTS AND SEWER LINE MODIFICATIONS

VERTICAL SEPARATION NOTES:

- 1. ZONE 1: WATER LINE ABOVE SEWER LINE AND SEPARATED 18 INCHES OR GREATER NO SPECIAL REQUIREMENTS
 - ZONE 2: WATER LINE ABOVE SEWER LINE SEPARATED LESS THAT 18 INCHES LOOP WATER LINE, REFER TO STD. PLANS 543 AND 544. INSTALL CONTROLLED LOW-STRENGTH MATERIAL (CLSM), "FLOWABLE FILL", 100 PSI MINIMUM TO 150 PSI MAXIMUM MIX DESIGN, FOR FULL TRENCH WIDTH WITHIN WATER PIPE ZONE AND TO TOP OF SEWER LINE
 - ZONE 3: WATER LINE BELOW SEWER LINE SEPARATED LESS THAN 18 INCHES LOOP WATER LINE, REFER TO STD. PLANS 543 AND 544. INSTALL CONTROLLED LOW-STRENGTH MATERIAL (CLSM), "FLOWABLE FILL", 100 PSI MINIMUM TO 150 PSI MAXIMUM MIX DESIGN, FOR FULL TRENCH WIDTH WITHIN WATER PIPE ZONE AND TO 18 INCHES ABOVE SEWER LINE
 - ZONE 4: WATER LINE BELOW SEWER LINE SEPARATED GREATER THAN 18 INCHES CENTER ONE FULL UNCUT LENGTH OF WATER PIPE OVER THE CROSSING AND PROVIDE MECHANICAL RESTRAINED PIPE JOINTS UNTIL THE WATER PIPE EXTENDS TO A DISTANCE OF 10 FEET PERPENDICULAR TO EACH SIDE OF THE SEWER LINE. INSTALL CONTROLLED LOW-STRENGTH MATERIAL (CLSM), "FLOWABLE FILL", 100 PSI MINIMUM TO150 PSI MAXIMUM MIX DESIGN, FOR FULL TRENCH WIDTH WITHIN WATER PIPE ZONE AND TO 18 INCHES ABOVE SEWER LINE
- 2. SERVICE LINE TAPS NOT ALLOWED IN ZONES 2 AND 3.
- 3. <u>SANITARY SEWER FORCE MAINS:</u> SEE HORIZONTAL SEPARATION REQUIREMENTS, NOTE 5,
- 4. CONSULT SNYDERVILLE BASIN WATER RECLAMATION DISTRICT FOR ADDITIONAL SANITARY SEWER RELATED REQUIREMENTS AND SEWER LINE MODIFICATIONS

PARK CITY 1884 PARK CITY MUNICIPAL CORPORATION	DATE	
	5/2014	W
	REV.	
WATER		

VATER – SANITARY SEWER SEPARATION NOTES

STD. PLAN

547-B