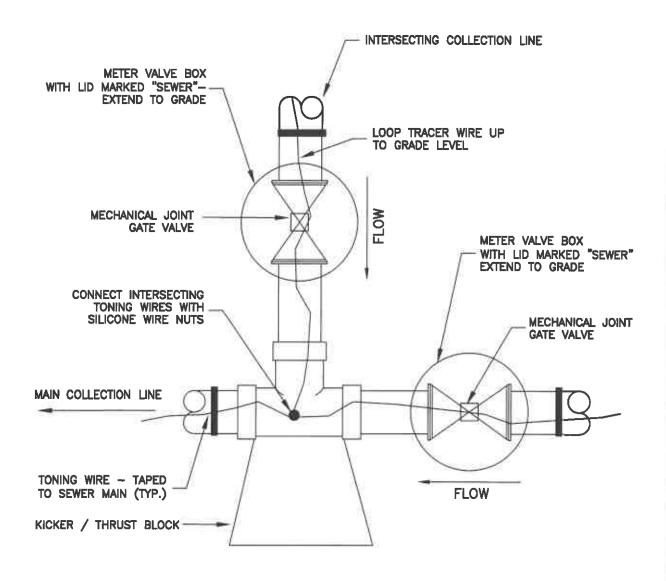


TYPICAL SERVICE CONNECTION (PRESSURE)

NOTES:

DRAWING NUMBER: 01	PREPARED BY:		
Scale: 1" == 8"	Revision:	Date: 7.3.2019	Filename: typdetalleheets.dwg



** GATE VALVE / BOX NOTE

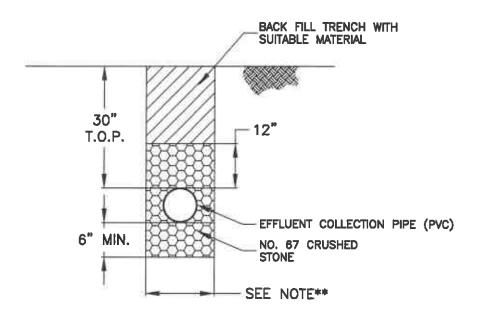
VALVE BOXES FOR THE MECHANICAL GATE VALVES SHALL BE OF TWO-PIECE DESIGN, 5½ Ø WITH DROP COVERS MARKED "SEWER", PAINTED GREEN, AND MANUFACTURED BY RUSSO PRODUCTS OR EQUIVALENT.

ALL OTHER VALVE BOXES SHALL INCLUDE: CONCRETE BOX AND STEEL FRAME WITH COVER MARKED "SEWER" MANUFACTURED BY JARRETT CONCRETE OF EQUIVALENT.

COLLECTION LINES 2"ø, AND SMALLER, SCH40 PVC BALL VALVES WILL BE USED.

COLLECTION LINES 3", AND LARGER, FLOWMASTER MECHANICAL JOINT SQUARE HEAD VALVES, OR EQUAL WILL BE USED.

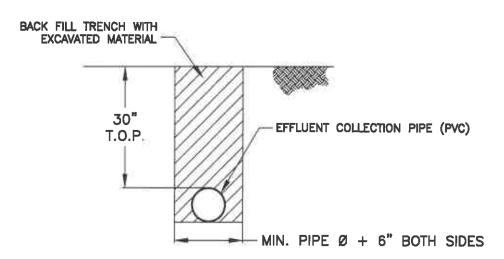
TYPICAL COLLECTION LINE INTERSECTION Scale: N.T.S. Revision: Date: 4.30.2019 Filename: typdetallehoets.dwg TYPICAL COLLECTION LINE INTERSECTION DRAWING NUMBER: 02 PREPARED BY: UTILITIES GROUP



TYPICAL TRENCH (ROCK EXCAVATION)

SCALE: AS NOTED

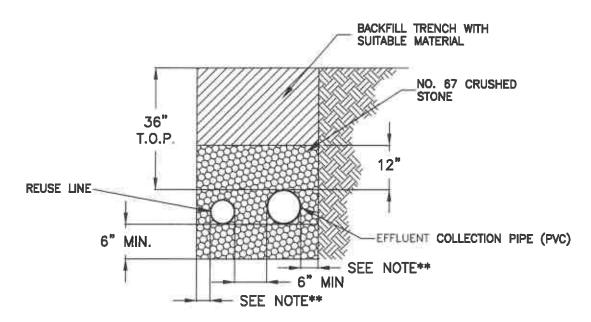
**TRENCH TO BE AT MINIMUM 12" WIDE OR 3 * PIPE Ø WHICH EVER IS GREATER



TYPICAL TRENCH (EARTH EXCAVATION)

SCALE: AS NOTED

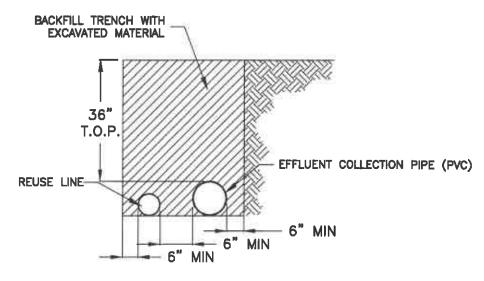
TYPICAL TRENCH		
Scale: AS NOTED	DRAWING NUMBER: 03	
Revision:	PREPARED BY:	
Date: 4.30.2019	A denus∜	
Filename: typdelalisheeta.dwg	UTILITIES GROUP	



BEDDING/BACKFILL REQUIREMENTS (ROCK EXCAVATION)

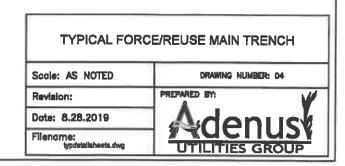
SCALE: AS NOTED

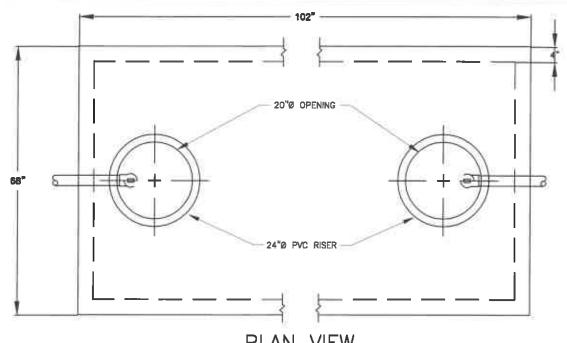
**TRENCH TO BE AT MINIMUM 12" WIDE OR 3 * LARGEST PIPE Ø WHICH EVER IS GREATER



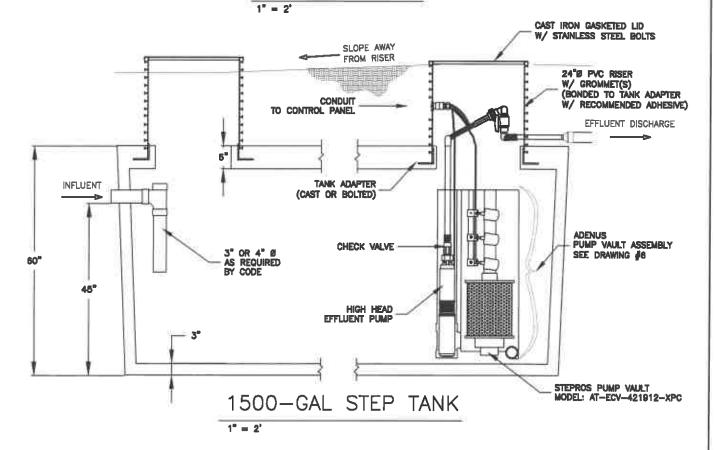
BEDDING/BACKFILL REQUIREMENTS (EARTH EXCAVATION)

SCALE: AS NOTED





PLAN VIEW

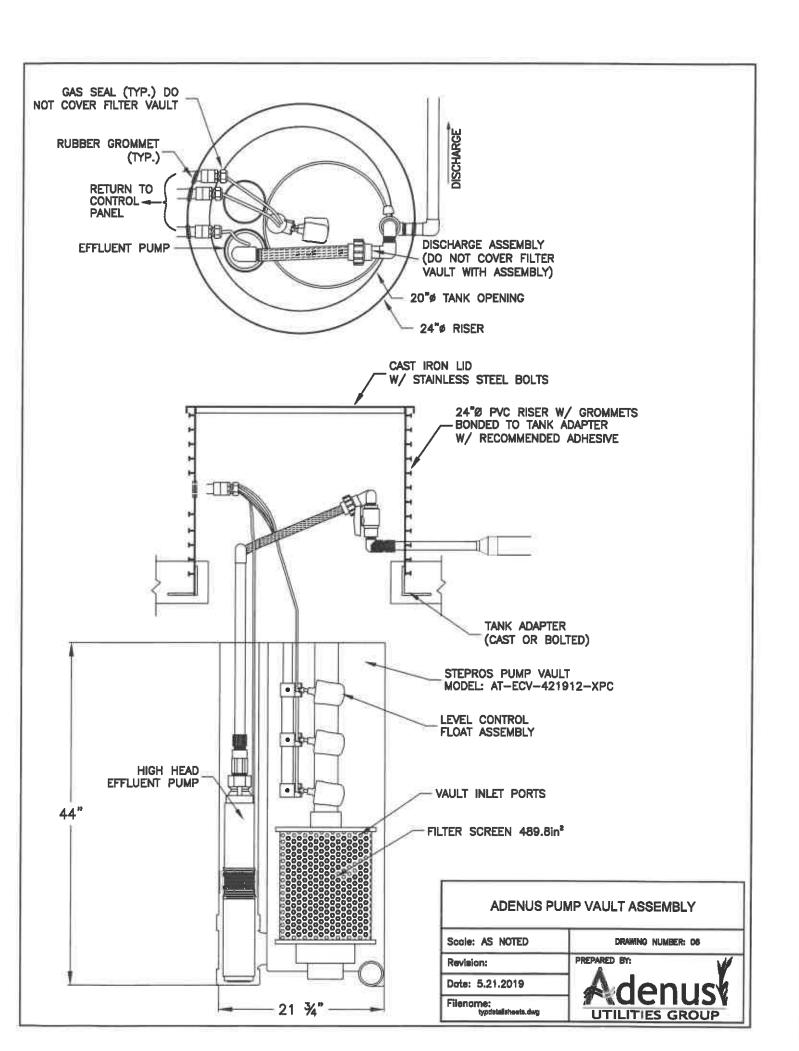


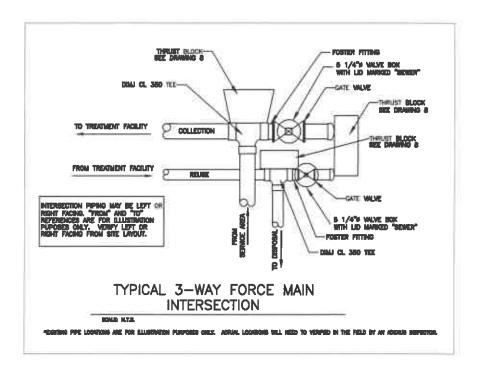
NOTES:

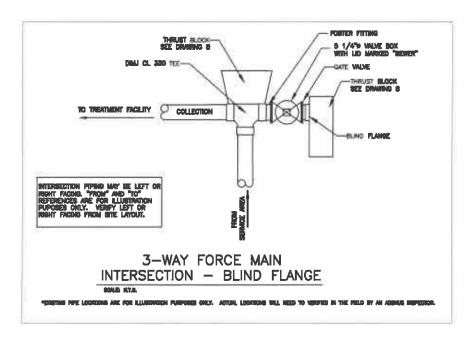
TANKS WILL BE A 1500-GALLON, WATERTIGHT PRE-CAST STEP TANK, AS MANUFACTURED BY JARRETT CONCRETE PRODUCTS, OR APPROVED EQUAL

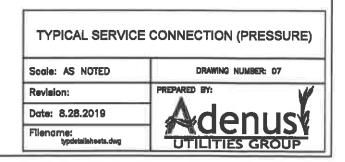
CONTACT: 615.792.9332

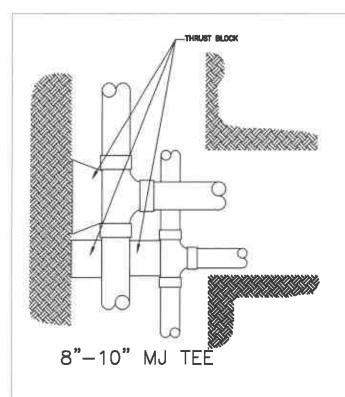
TYPICAL STEP COLLECTION TANK Scale: 1" = 2" DRAWING NUMBER: 05 PREPARED BY: Revision: Date: 5.8.2019 Filename: typdetallsheets,dwg **UTILITIES GROUP**

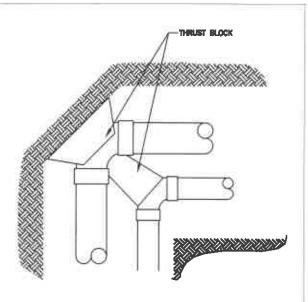












INC. 90°, 45°, 22.5° MJ FITTINGS

TABLE 1 - THRUST/100 TABLE (POUNDS PER 100 PSI)				
SIZE	TEE/PLUGS	80,	45"	22.5
8"	4783	6763	3410	1885
10"	7430	10808	5297	2898

FOR REDUCERS, SUBTRACT SMALL OPENING PLUG THRUST FROM LARGE OPENING PLUG THRUST TO CALCULATE THRUST/100

TABLE 2 - SOIL BEARING CAPACITY		
SOIL TYPE	SAFE BEARING LOAD (LIBO FER SE FT)	
SOFT CLAY	1000	
SAND	2000	
SAND AND GRAVEL	3000	
SAND AND GRAVEL CEMENTW/CLAY	4000	
HARD PAN	10000	

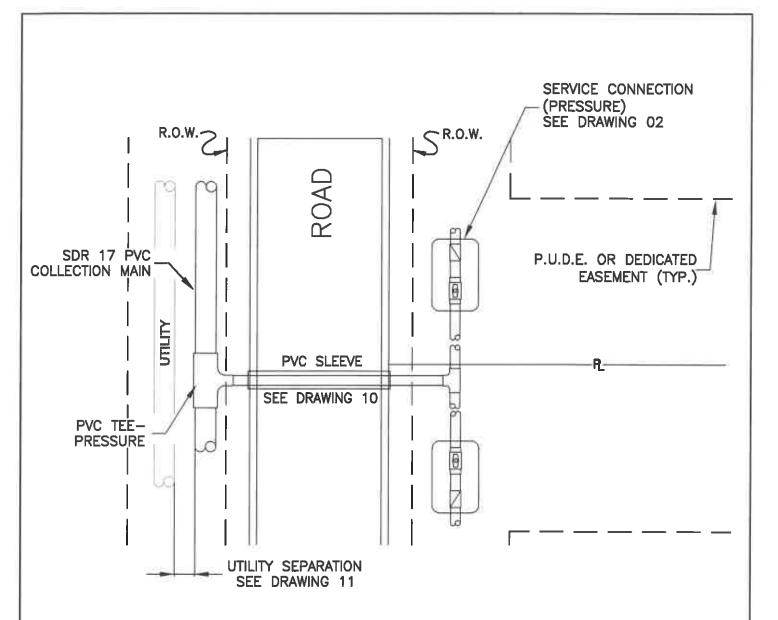
TYPICAL THRUST BLOCK

SCALE: N.T.S.

1. PROVIDE POURED CONCRETE THRUST BLOCKS AT ALL CHANGES IN SIZE OR DIRECTION. BENOS, REDUCERS, PLUGS, AND THE OPPOSITE SIDE OF TEE BRANCHES ALL REQUIRE THRUST BLOCKS.

2. DIMOE THE ROTAL THRUST BY THE BEARING CAPACITY OF THE SCIL, IN EXCANATION (FROM TABLE 2) TO DETERMINE THE AREA (IN SQUARE FEET) OF THRUST BLOCK REQUIRED TO BE IN CONTACT WITH THE UNDISTURBED SOIL.

FORCE MAIN THRUST BLOCK DETAIL Scale: N.T.S. Revision: Date: 8.28.2019 Filename: typdatalishsets.twg UTILITIES GROUP



TYPICAL ROAD CROSSING SERVICE CONNECTION

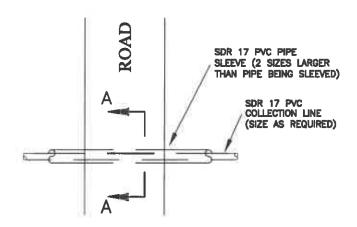
N.T.S.

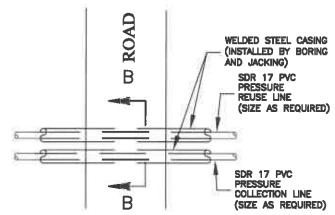
** GATE VALVE / BOX NOTE

VALVE BOXES FOR THE MECHANICAL GATE VALVES SHALL BE OF TWO-PIECE DESIGN, 5½ WITH DROP COVERS MARKED "SEWER", PAINTED GREEN, AND MANUFACTURED BY RUSSO PRODUCTS OR EQUIVALENT.

ALL OTHER VALVE BOXES SHALL INCLUDE: CONCRETE BOX AND STEEL FRAME WITH COVER MARKED "SEWER" MANUFACTURED BY JARRETT CONCRETE OF EQUIVALENT.

ROAD CROSSING SERVICE CONNECTION Scale: N.T.S. DRAWING NUMBER: 00 PREPARED BY: Date: 8.28.2019 Filename: typdetallaheets.dwg UTILITIES GROUP



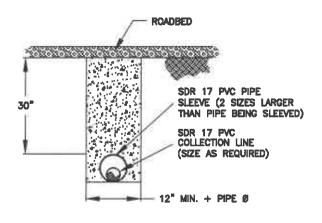


TYPICAL SEWER LINE ROAD CROSSING

N.T.S.

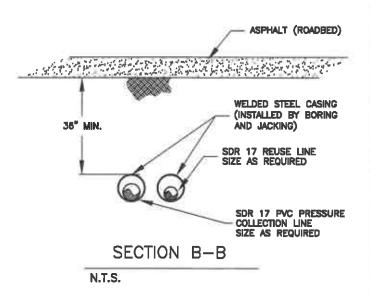
TYPICAL SEWER LINE STATE ROAD CROSSING

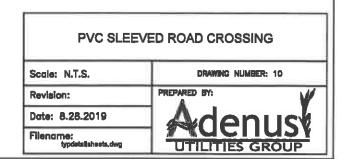
N.T.S.

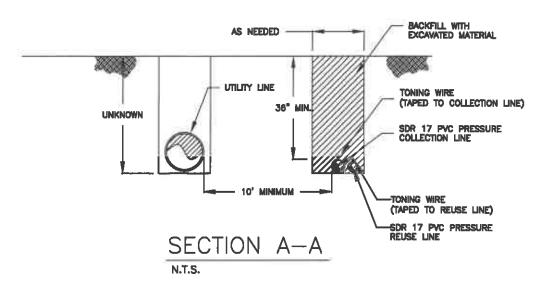


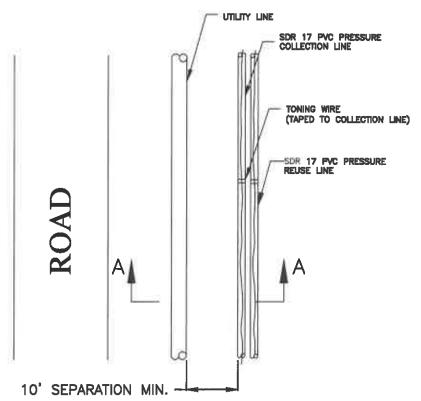
SECTION A-A

N.T.S.



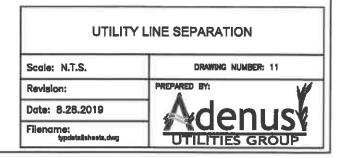


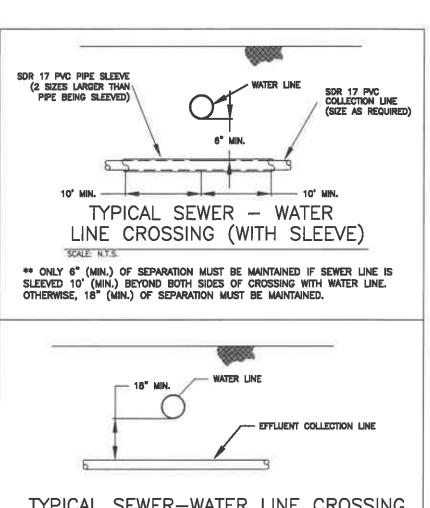




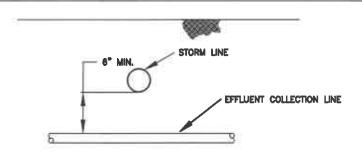
TYPICAL UTILITY LINE SEPARATION DETAIL

N.T.S.



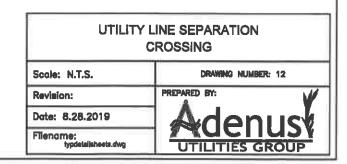


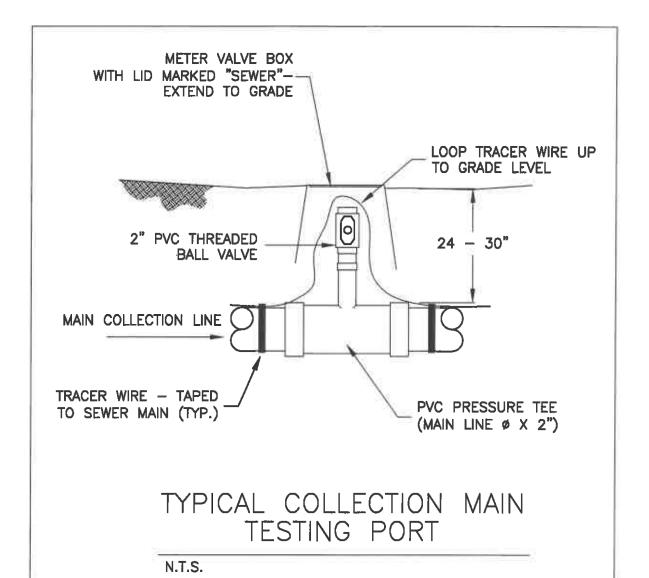
TYPICAL SEWER-WATER LINE CROSSING SCALE N.T.S.



TYPICAL SEWER-STORM LINE CROSSING

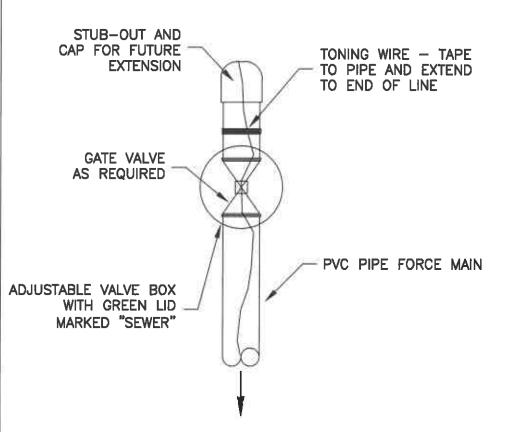
SCALE: N.T.S.





INSTALL ONE (1) TESTING PORT PER COLLECTION LINE. COORDINATE INSTALLATION/LOCATION WITH UTILITY INSPECTOR, OR ADENUS ENGINEER. LOCATION OF TESTING PORT TO BE NOTED ON AS—BUILT DRAWINGS.

COLLECTION LINE TESTING PORT Scale: N.T.S. DRAWING NUMBER: 13 Revision: Date: 8.28.2019 Filename: typdetalleheets.dwg TILITIES GROUP



TYPICAL STUB FOR EXTENSION N.T.S.

** GATE VALVE / BOX NOTE

VALVE BOXES FOR THE MECHANICAL GATE VALVES SHALL BE OF TWO-PIECE DESIGN, 51 0 WITH DROP COVERS MARKED "SEWER", PAINTED GREEN, AND MANUFACTURED BY RUSSO PRODUCTS OR EQUIVALENT.

ALL OTHER VALVE BOXES SHALL INCLUDE: CONCRETE BOX AND STEEL FRAME WITH COVER MARKED "SEWER" MANUFACTURED BY JARRETT CONCRETE OF EQUIVALENT.

COLLECTION LINES 2"#, AND SMALLER, SCH40 PVC BALL VALVES WILL BE USED.

COLLECTION LINES 3", AND LARGER, FLOWMASTER MECHANICAL JOINT SQUARE HEAD VALVES, OR EQUAL WILL BE USED.

STUB	FOR EXTENSION
Scale: N.T.S.	DRAWING NUMBER: 14
Revision:	PREPARED BY:
Date: 8.28.2019	- Adenus €
Filename: typdetallsheets.dwg	UTILITIES GROUP