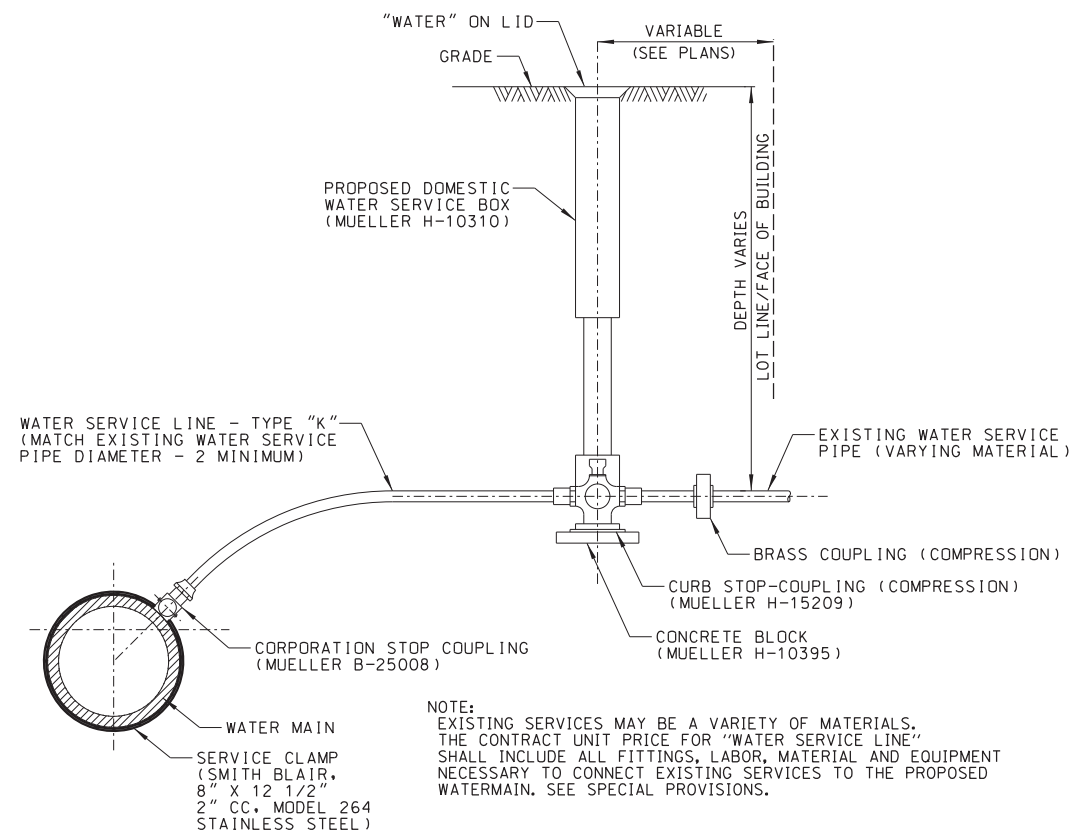


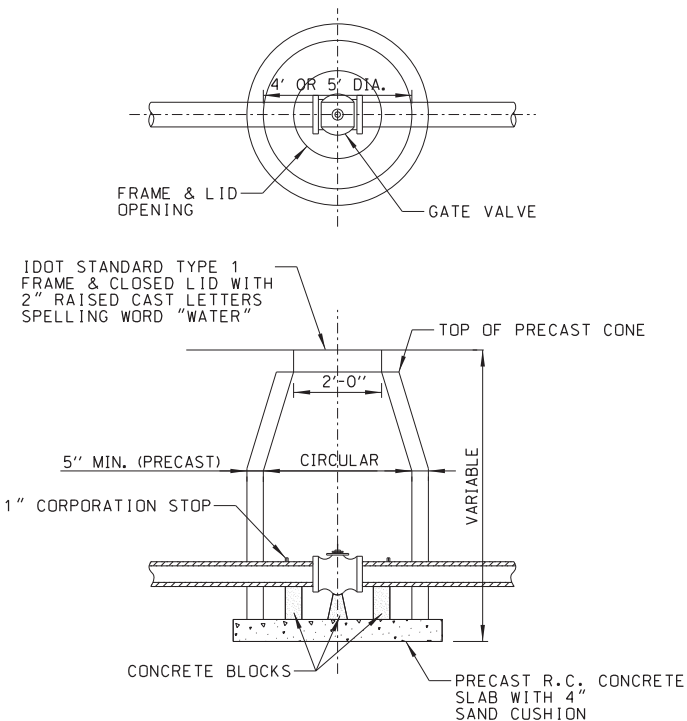
SIZE OF PIPE	TAPPING TEES, SLEEVES AND PLUGS				90° BENDS				45° BENDS OR LESS						
	HI	H	V	D	C. FT.	HI	H	V	D	C. FT.	HI	H	V	D	C. FT.
12"	54"	30"	24"	24"	13.40	54"	32"	36"	36"	18.15	42"	18"	24"	24"	9.60
8"	36"	18"	18"	18"	5.05	39"	18"	24"	18"	7.50	30"	11"	18"	18"	3.95
6"	24"	16"	18"	18"	3.50	30"	16"	18"	18"	4.05	24"	10"	16"	18"	3.20
4"	20"	13"	15"	15"	2.15	24"	12"	13"	13"	1.75	20"	8"	12"	12"	1.20

**WATERMAIN THRUST BLOCKING - TABLE A**  
N.T.S.

NOTE: THRUST BLOCKING TO BE INSTALLED AT ALL HORIZONTAL AND VERTICAL BENDS, CAPS, VALVES, HYDRANTS AND AT LOCATIONS DIRECTED BY ENGINEER. THRUST BLOCK TO BE READY MIXED PORTLAND CEMENT CONCRETE, PLACED BETWEEN SOLID GROUND AND FITTING, AND SHALL BE ANCHORED IN SUCH A MANNER THAT PIPE AND FITTING WILL BE ACCESSIBLE FOR REPAIR. ALL ENDS OD 1 1/4" OR MORE. ALL TEES AND ALL PLUGS SHALL BE PROTECTED AS SHOWN. WHERE CONDITIONS PREVENT THE USE OF CONCRETE THRUST BLOCKS, RESTRAINED JOINTS OF A TYPE APPROVED BY THE ENGINEER MAY BE USED.

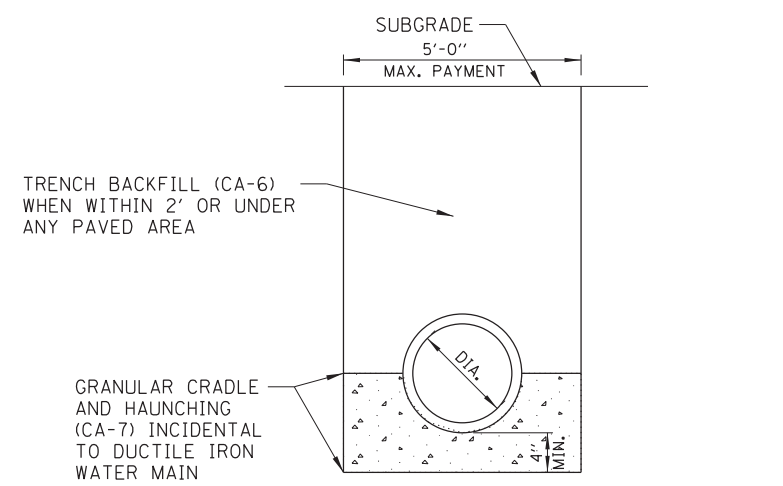


**TYPICAL WATER SERVICE CONNECTION**  
N.T.S.

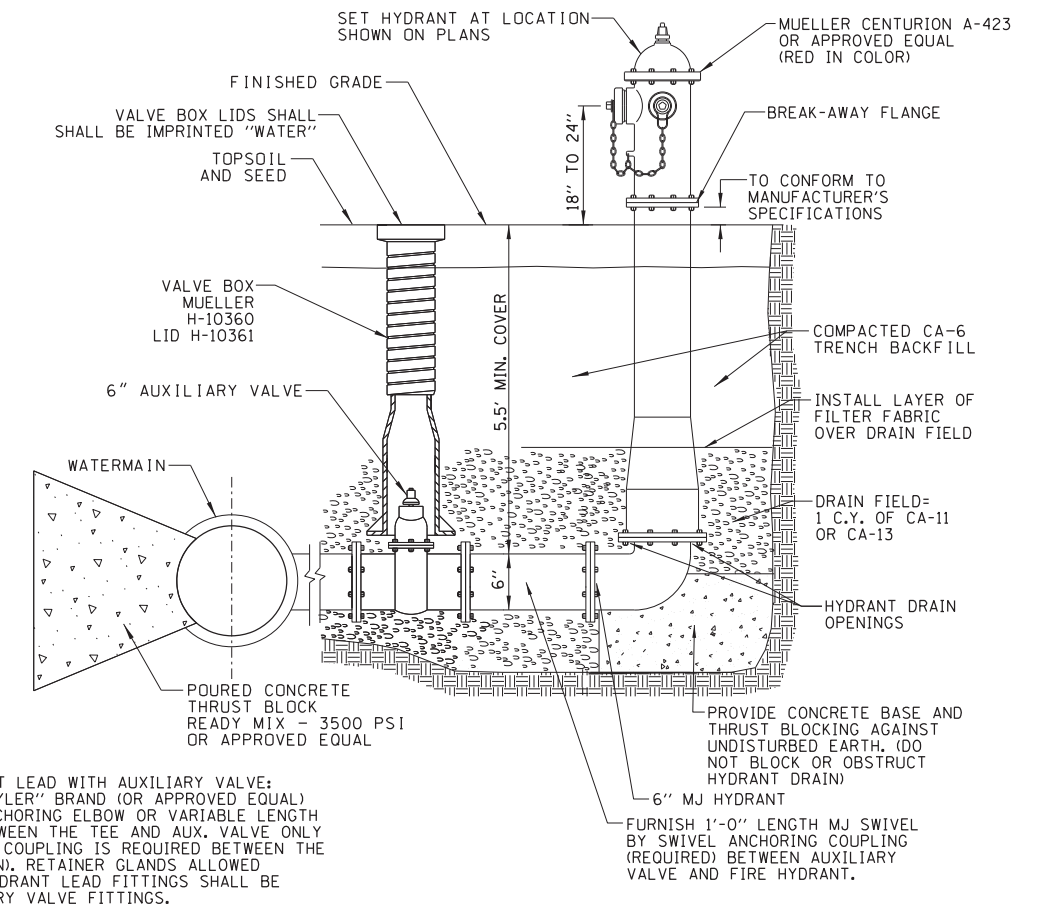


NOTE: THE CONTRACT UNIT PRICE FOR VALVE VAULTS TYPE A SHALL INCLUDE THE FRAME AND CLOSED LID, AND COMPACTED TRENCH BACKFILL. PRECAST REINFORCED CONCRETE RISERS ARE TO BE LAID IN MASTIC JOINTS WITH FLUSH JOINTS. FURNISHING AND INSTALLING SAND CUSHION TO BE INCLUDED IN THE CONTRACT UNIT PRICE FOR VALVE VAULT, TYPE A.

**STANDARD TYPE "A" VALVE VAULT**  
N.T.S.



**TYPICAL TRENCH DETAIL FOR WATER MAIN**  
N.T.S.



**FIRE HYDRANT SPECIFICATIONS:**  
TYPE: MUELLER CENTURION A-423  
SIZE OF MAIN VALVE OPENING: 5 1/4"  
HOSE NOZZLES: 2 - 2 1/2" N.S.T.  
SEAMER NOZZLE: 1 - 4 1/2" N.S.T.  
INLET CONNECTION: MECHANICAL JOINT  
DIRECTION OF OPENING: COUNTER CLOCKWISE  
SHAPE OF OPERATING NUT: PENTAGON  
COLOR: RED  
MUNICIPALITY: VILLAGE OF ROSEMONT

PREFERRED ANCHORING FITTINGS FOR HYDRANT LEAD WITH AUXILIARY VALVE: STANDARD ALL MJ TEE WITH "MEG LUG OR TYLER" BRAND (OR APPROVED EQUAL) MJ RETAINER GLANDS, SWIVEL BY SWIVEL ANCHORING ELBOW OR VARIABLE LENGTH SWIVEL BY SWIVEL ANCHORING COUPLING BETWEEN THE TEE AND AUX. VALVE ONLY (1'-0" LENGTH SWIVEL BY SWIVEL ANCHORING COUPLING IS REQUIRED BETWEEN THE AUXILIARY VALVE AND HYDRANT INSTALLATION). RETAINER GLANDS ALLOWED ONLY AT CONNECTION TO TEE. ALL OTHER HYDRANT LEAD FITTINGS SHALL BE SWIVEL BY SWIVEL TYPE, INCLUDING AUXILIARY VALVE FITTINGS.

**FIRE HYDRANT WITH AUX. VALVE AND VALVE BOX**  
N.T.S.