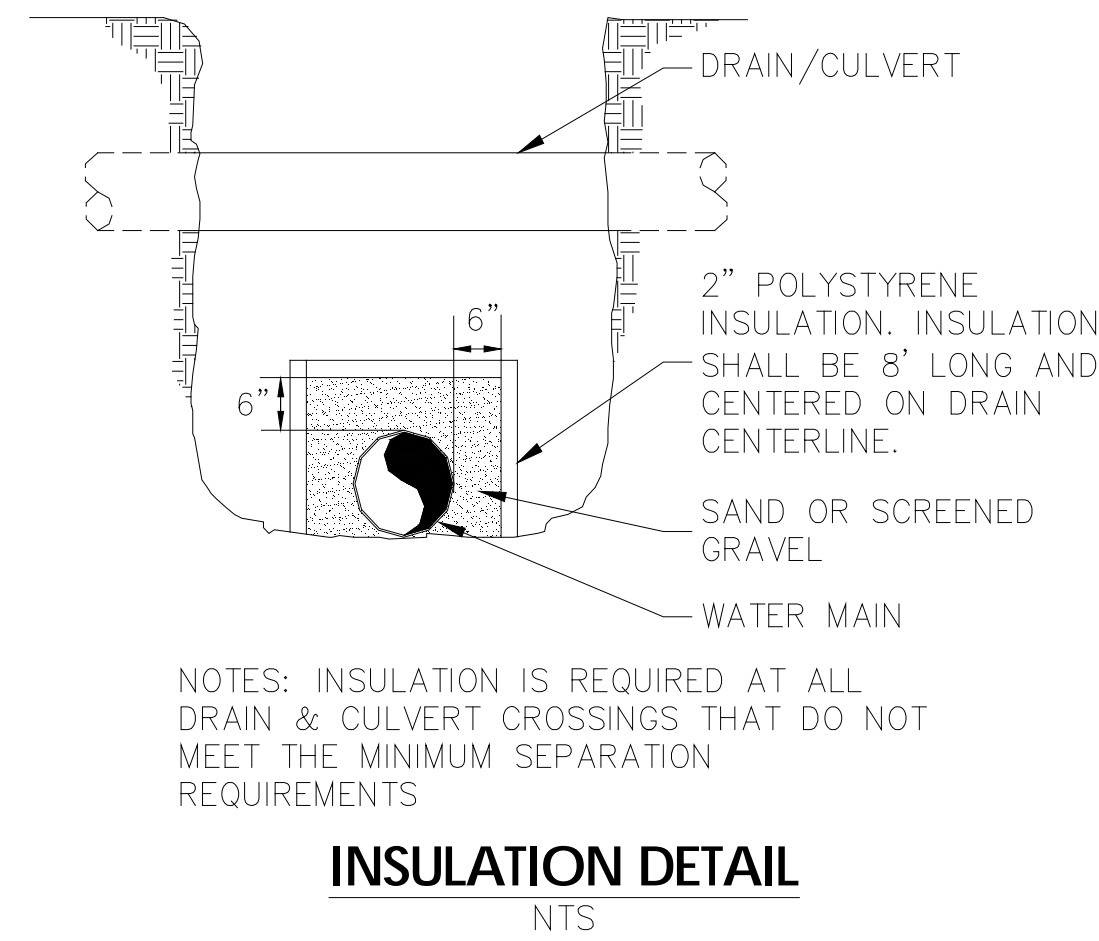
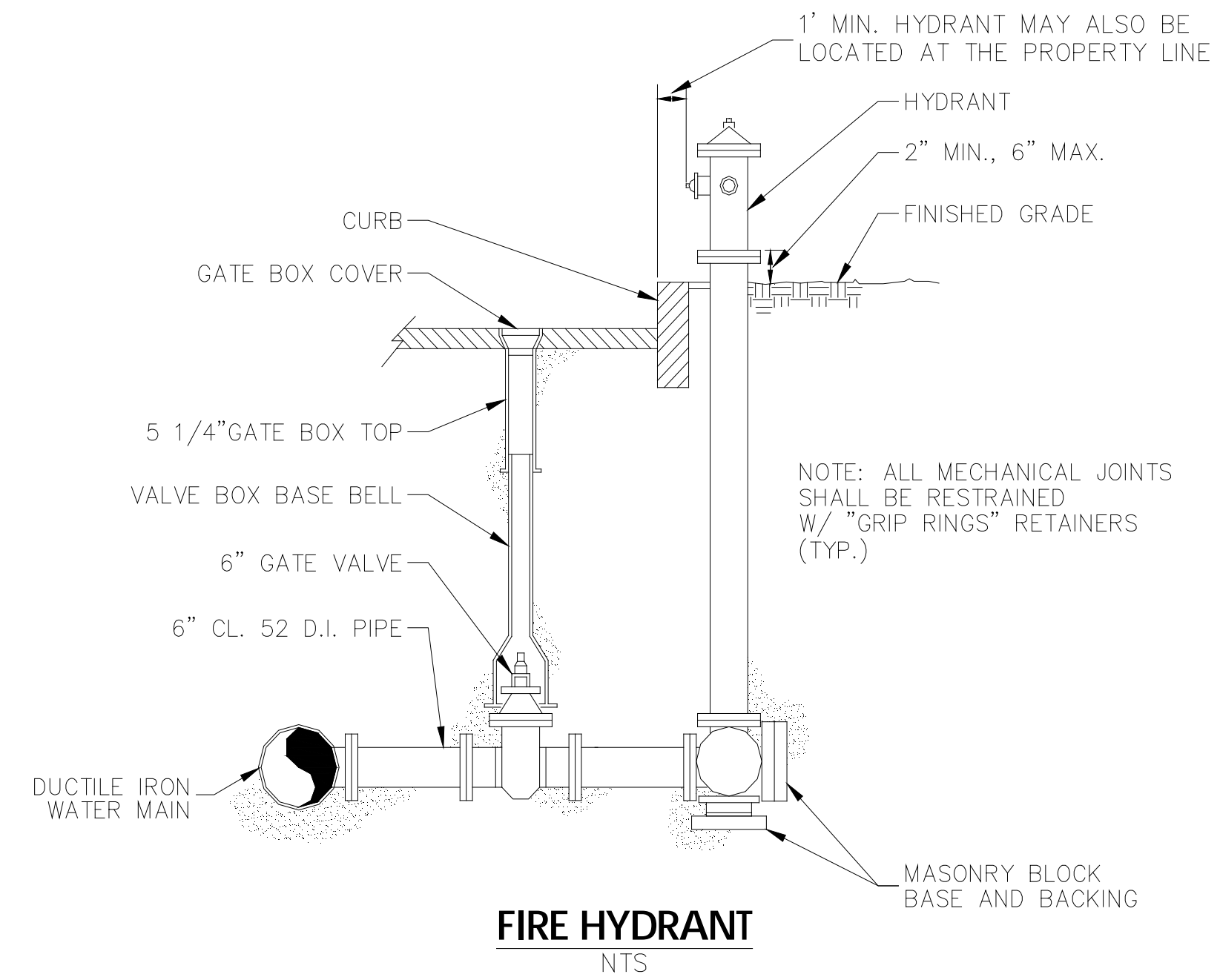


**GENERAL NOTES**

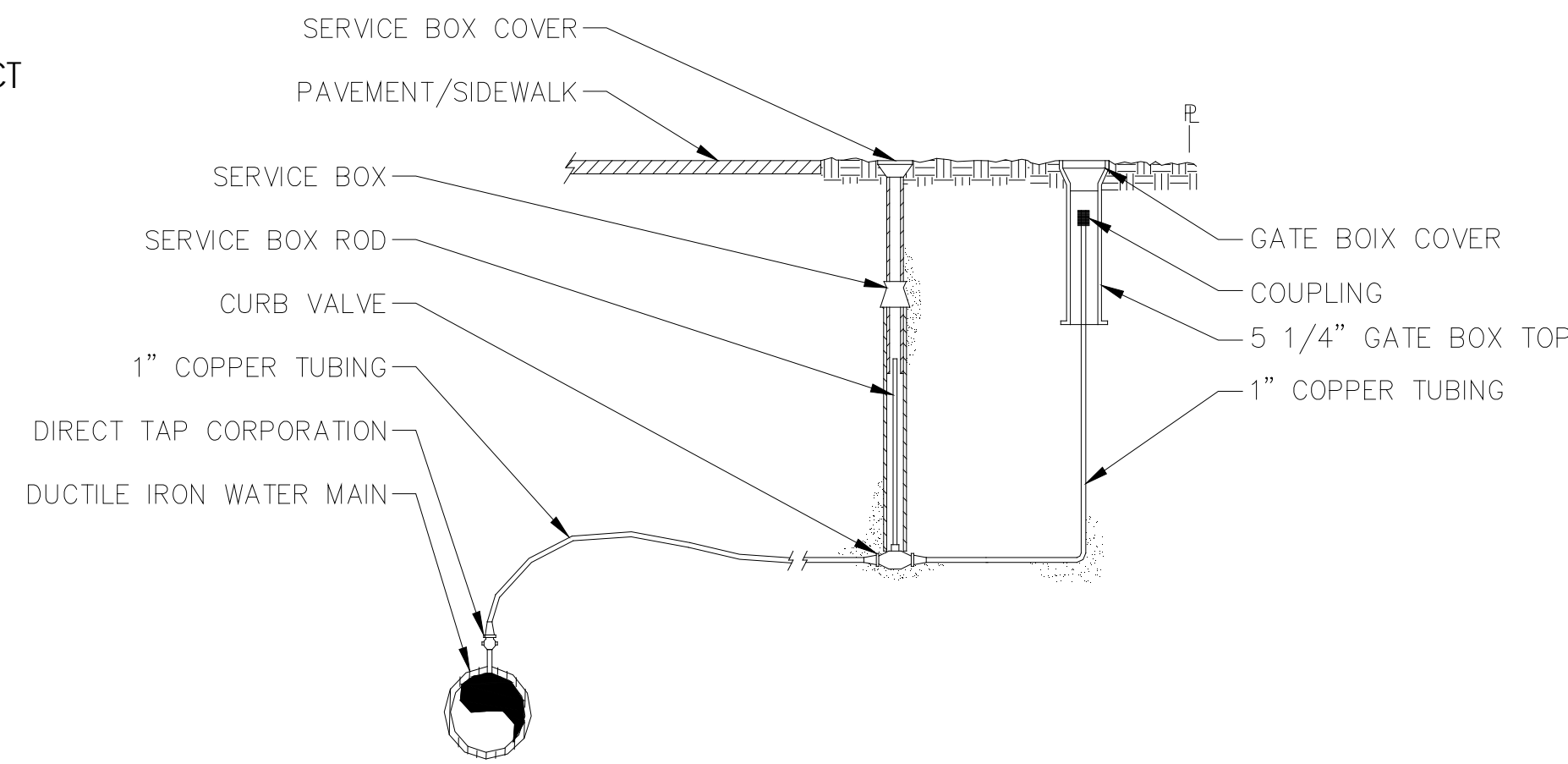
1. THE DEVELOPER SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS.
2. ALL WORK SHALL BE DONE IN ACCORDANCE WITH BRUNSWICK & TOPSHAM WATER DISTRICT SPECIFICATIONS.
3. TEST PITS SHALL BE EXCAVATED AT CROSSINGS WITH OTHER UTILITIES IN ADVANCE OF WATER MAIN CONSTRUCTION TO DETERMINE LOCATION AND DEPTH SUFFICIENTLY TO PERMIT ADJUSTMENT OF WATER MAIN ALIGNMENT AND DEPTH BY PIPE DEFLECTION.
4. THE DISTRICT SHALL FURNISH ALL MATERIALS FOR THE PROJECT INCLUDING: PIPE, COUPLINGS, FITTINGS, HYDRANTS, TAPPING SLEEVES AND VALVES, VALVE BOXES, CORPORATION STOPS, CURB STOPS, SERVICE PIPING, CURB BOXES, AND RETAINER GLANDS AND ACCESSORIES SUCH AS GASKETS, BOLTS, NUTS, AND GLANDS AS REQUIRED TO MAKE THE PIPING SYSTEM COMPLETE. ALL EARTHWORK AND CONCRETE INCLUDING CRUSHED STONE, GRAVEL, SAND, AND BORROW SHALL BE FURNISHED BY THE CONTRACTOR.
5. MINIMUM DEPTH OF COVER FOR ALL WATER MAINS AND SERVICES SHALL BE 5'-0" FROM FINISHED GRADE UNLESS OTHERWISE DIRECTED BY THE DISTRICT.
6. PROPOSED PIPELINE, VALVE, AND HYDRANT LOCATIONS ARE APPROXIMATE. FINAL LOCATION MAY BE ADJUSTED, WITH WRITTEN DISTRICT PERMISSION, AS REQUIRED TO AVOID CONFLICTS WITH OTHER UTILITIES AND STRUCTURES.
7. TAPPING SLEEVES AND VALVES SHALL BE FURNISHED BY THE DISTRICT FOR INSTALLATION BY OTHERS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR EXCAVATION OF THE EXISTING MAIN AND PREPARATION OF THE TRENCH FOR INSTALLATION OF THE TAPPING SLEEVE AND VALVE.
8. EXISTING WATER MAINS TO BE ABANDONED SHALL BE CUT, CAPPED, AND ABANDONED IN PLACE, AS INDICATED ON THE DRAWINGS.
9. ALL FITTINGS, VALVES, AND HYDRANTS SHALL HAVE MECHANICAL JOINTS RESTRAINED WITH "GRIP-RING" RESTRAINERS.
10. THE COMPLETED PIPING SYSTEM SHALL BE FLUSHED, DISINFECTED, AND PRESSURE TESTED BY THE CONTRACTOR PRIOR TO CHARGING THE SYSTEM. SERVICES SHALL BE INSTALLED UNDER LINE PRESSURE AFTER THE SYSTEM IS CHARGED.
11. THE CONTRACTOR SHALL NOT OPERATE ANY DISTRICT VALVE OR HYDRANT WITHOUT THE EXPRESSED PRIOR PERMISSION OF THE DISTRICT.



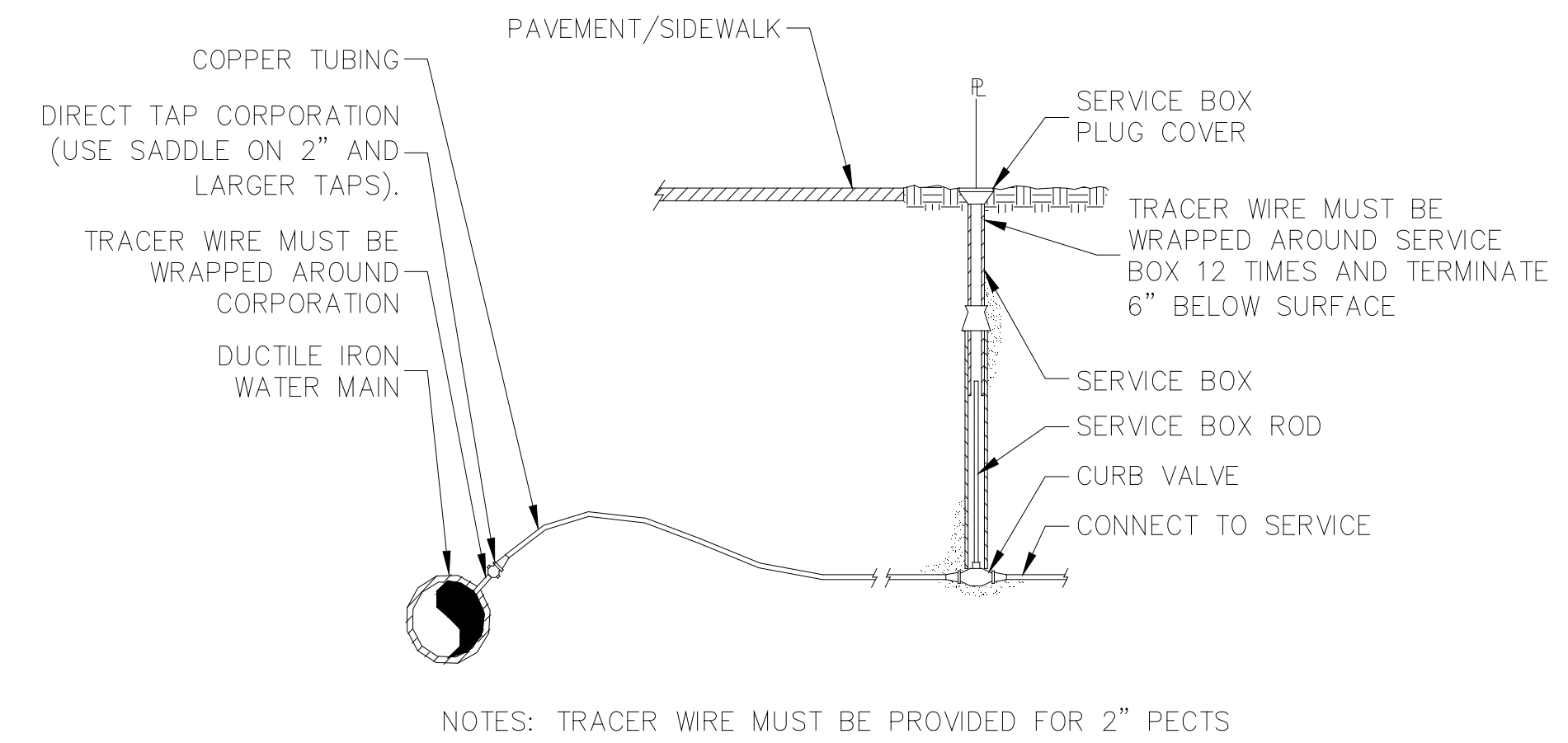
**INSULATION DETAIL**  
NTS



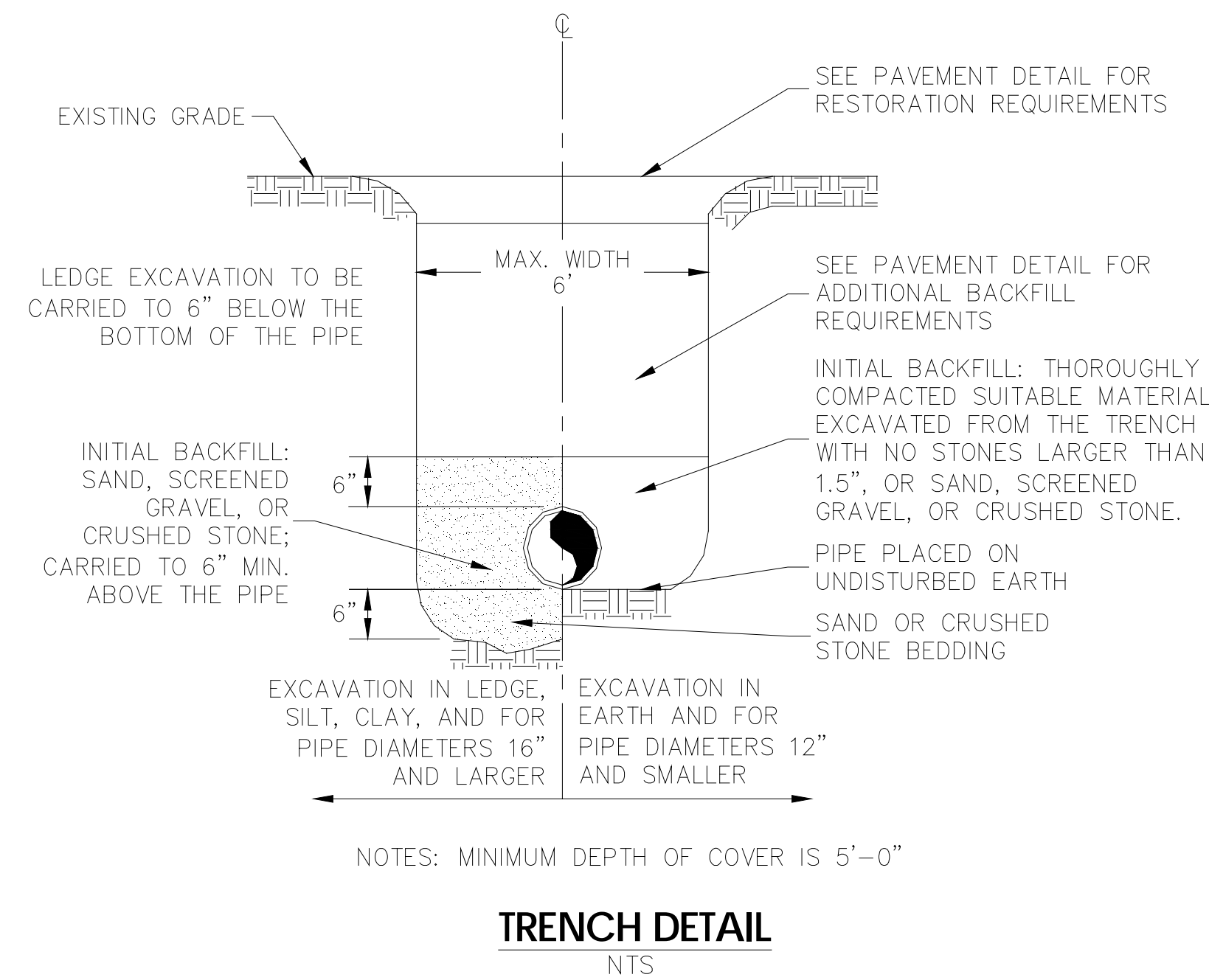
**FIRE HYDRANT**  
NTS



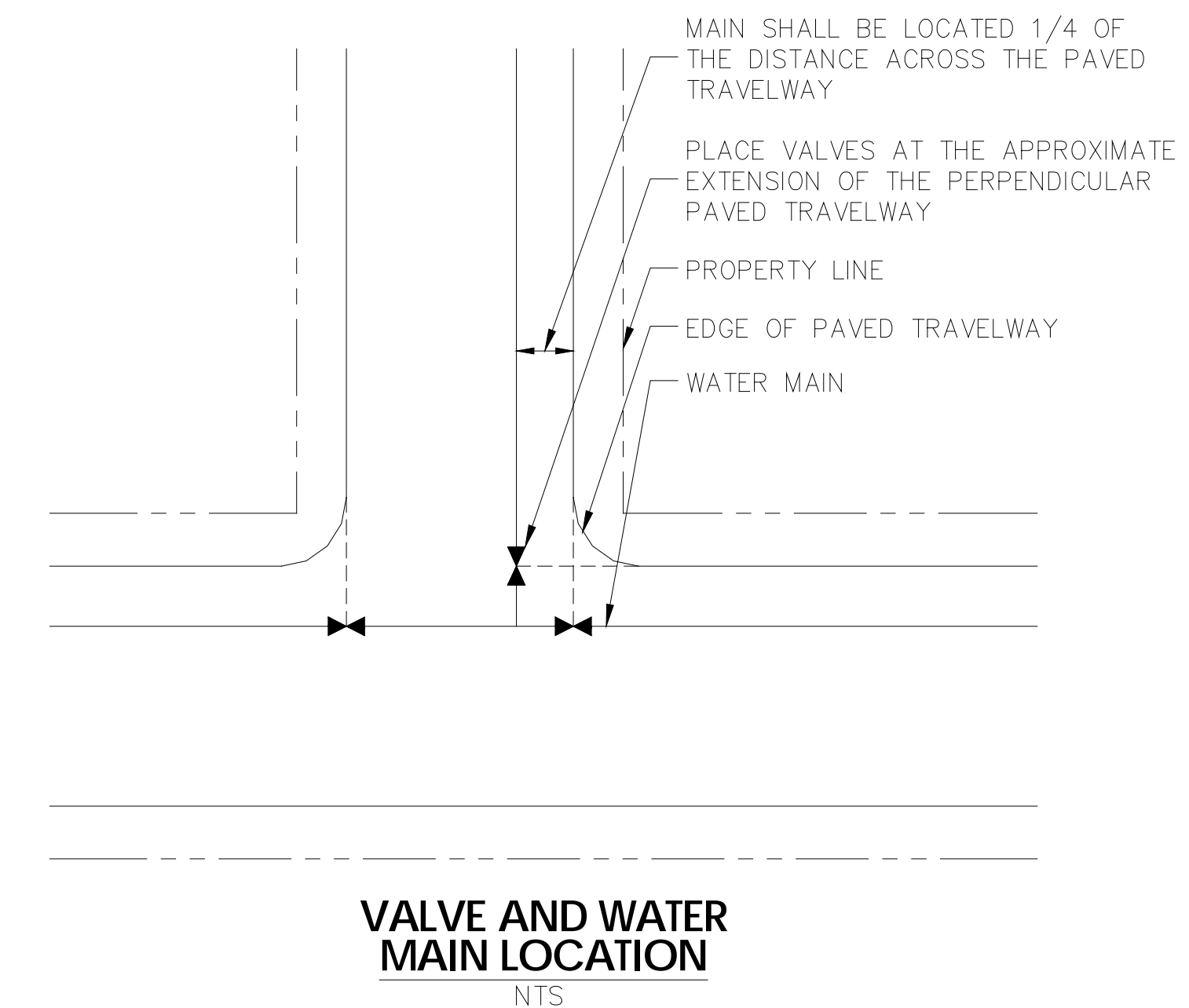
**AIR RELIEF**  
NTS



**SERVICE DETAIL**  
NTS



**TRENCH DETAIL**  
NTS



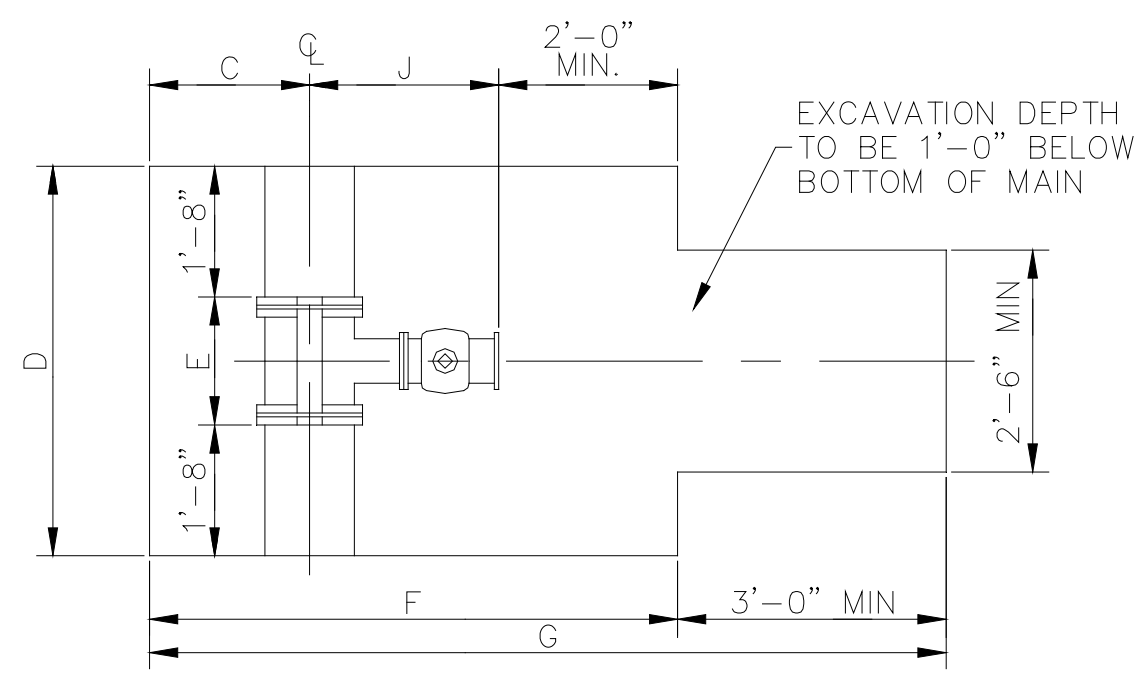
**VALVE AND WATER MAIN LOCATION**  
NTS

DRAWN BY: \_\_\_\_\_  
CHECKED BY: \_\_\_\_\_  
DATE: \_\_\_\_\_  
APPROVED BY: \_\_\_\_\_  
DATE: 6/1/2009  
PROJECT NO.: \_\_\_\_\_  
SCALE: \_\_\_\_\_



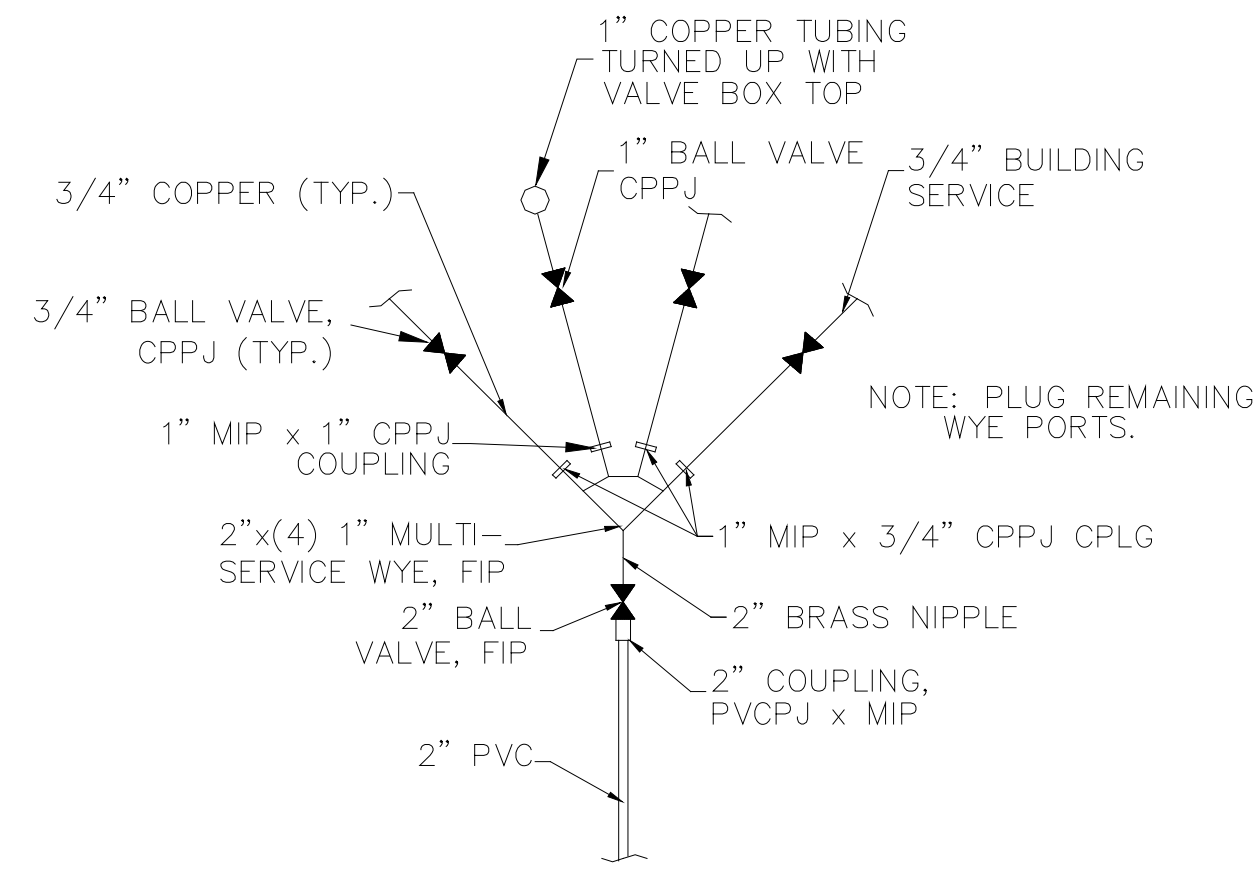
**WATER MAIN EXTENSION**

**STANDARD DETAILS**

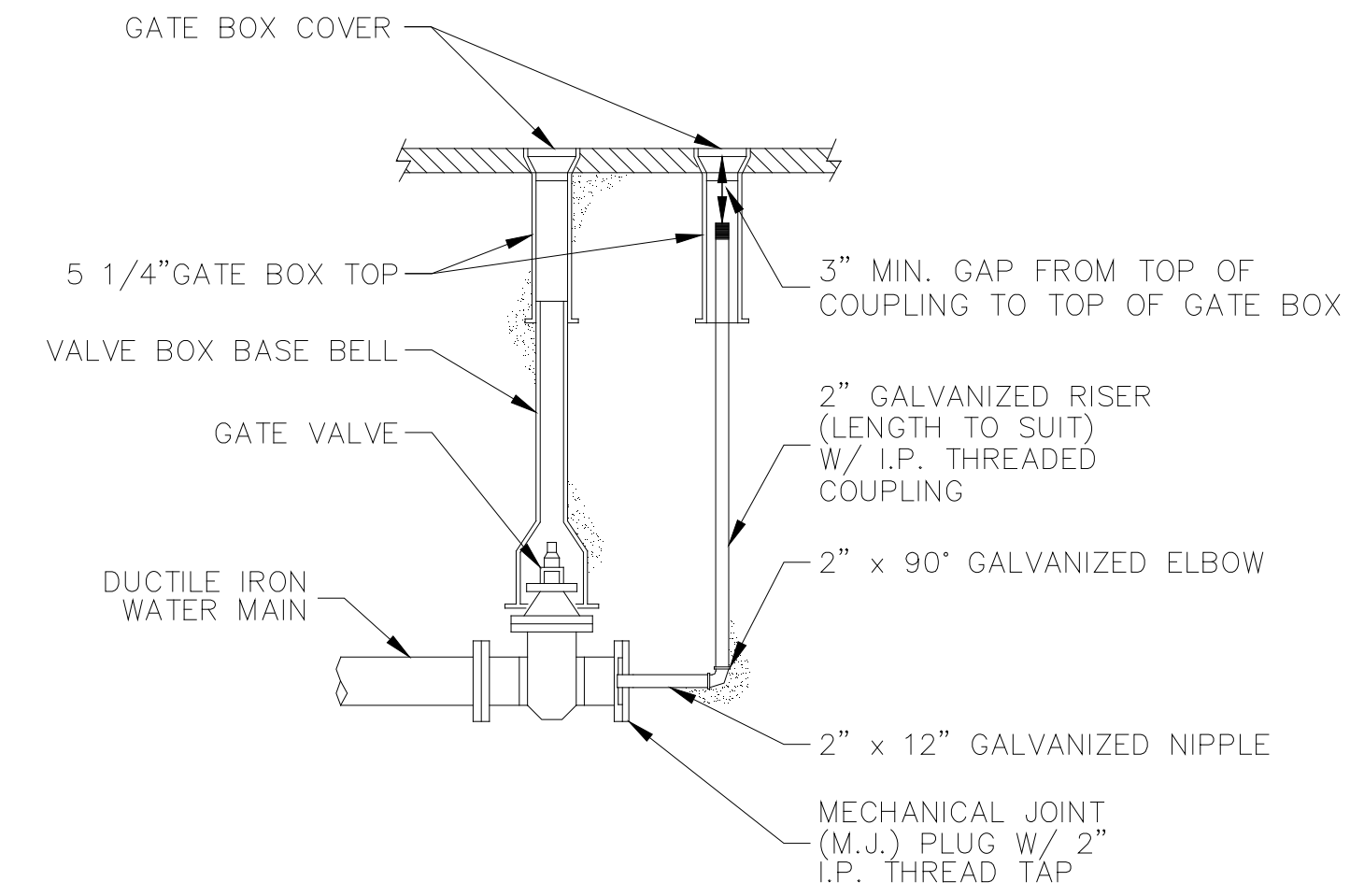


SLEEVE SIZE	C	D	E	F	G	J
6x4	1'-4"	4'-10"	18 3/8"	5'-0"	8'-0"	20 3/8"
6x6	1'-4"	4'-10"	18 3/8"	5'-1"	8'-1"	21 7/16"
8x6	1'-6"	5'-1"	19 1/4"	5'-4"	8'-4"	22 13/16"
8x8	1'-6"	4'-11"	21 1/4"	5'-6"	8'-6"	24 5/8"
10x4	1'-6"	4'-11"	19"	5'-5"	8'-5"	22 9/16"
10x6	1'-6"	4'-11"	19"	5'-6"	8'-6"	23 13/16"
10x8	1'-6"	5'-3"	23"	5'-7"	8'-7"	25 5/16"
10x10	1'-6"	5'-3"	23"	5'-9"	8'-9"	26 3/8"
12x4	1'-7"	4'-11"	19"	5'-7"	8'-7"	23 9/16"
12x6	1'-7"	4'-11"	19"	5'-8"	8'-8"	24 13/16"
12x8	1'-7"	5'-1"	21"	5'-9"	8'-9"	26 5/16"
12x10	1'-7"	5'-5"	25"	5'-10"	8'-10"	27 3/8"
12x12	1'-7"	5'-5"	25"	5'-11"	8'-11"	27 1/2"

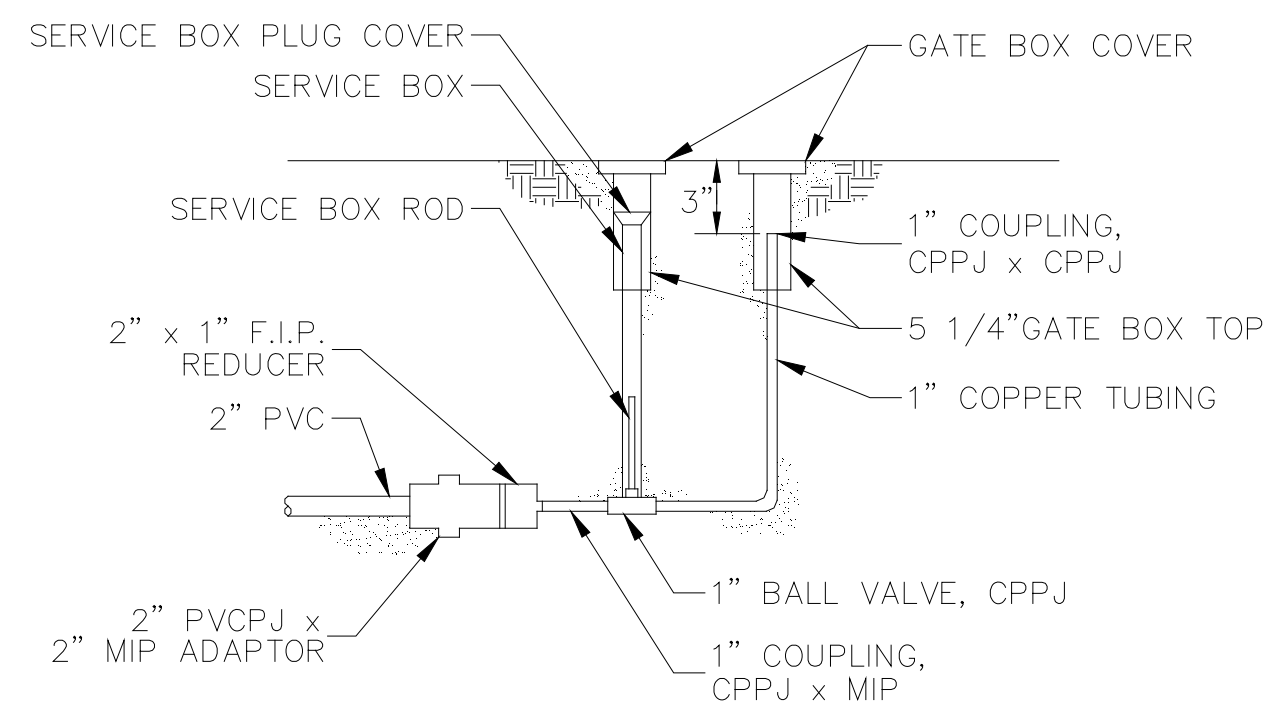
**EXCAVATION DIMENSIONS TAPPING SLEEVES AND VALVES**  
NTS



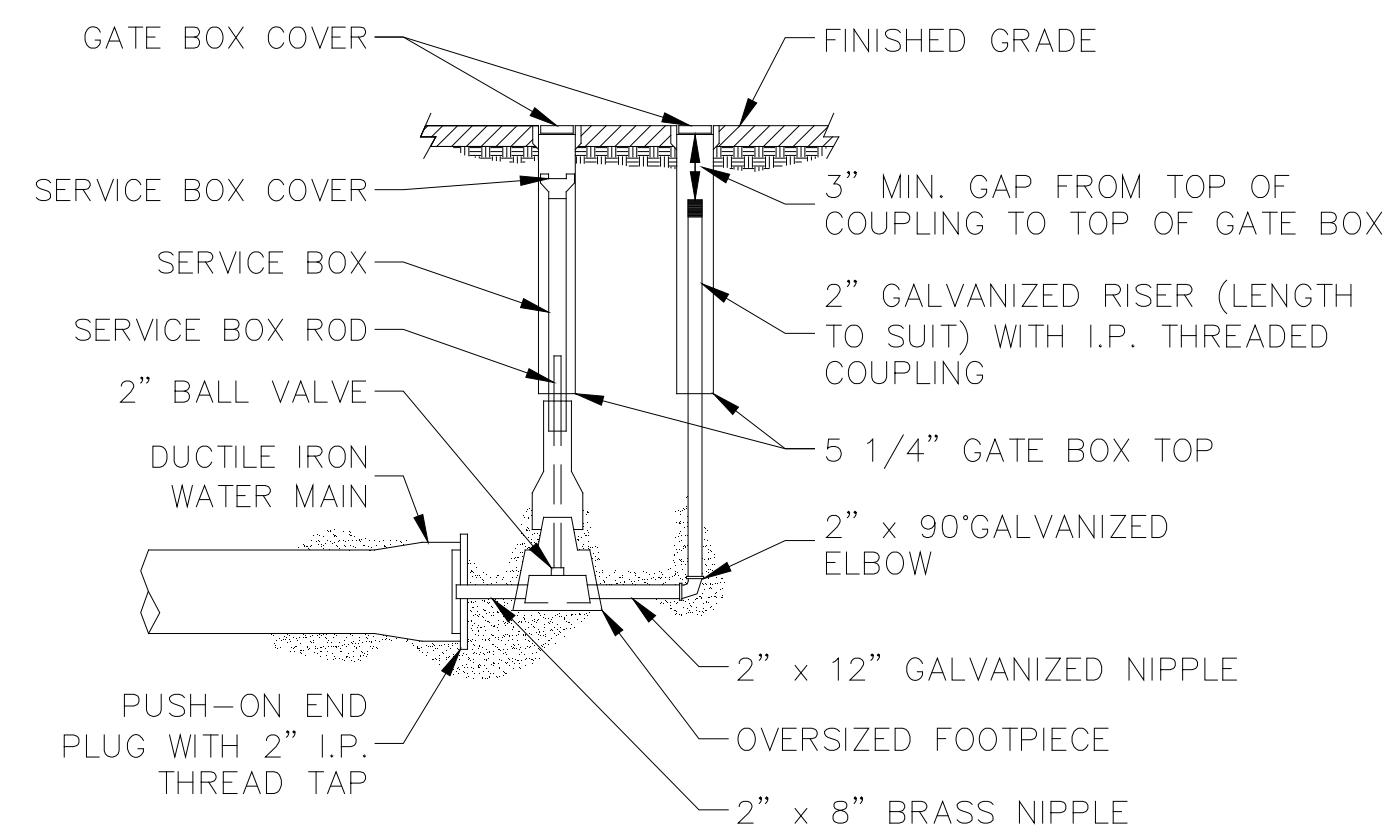
**SERVICE WYE**  
NTS



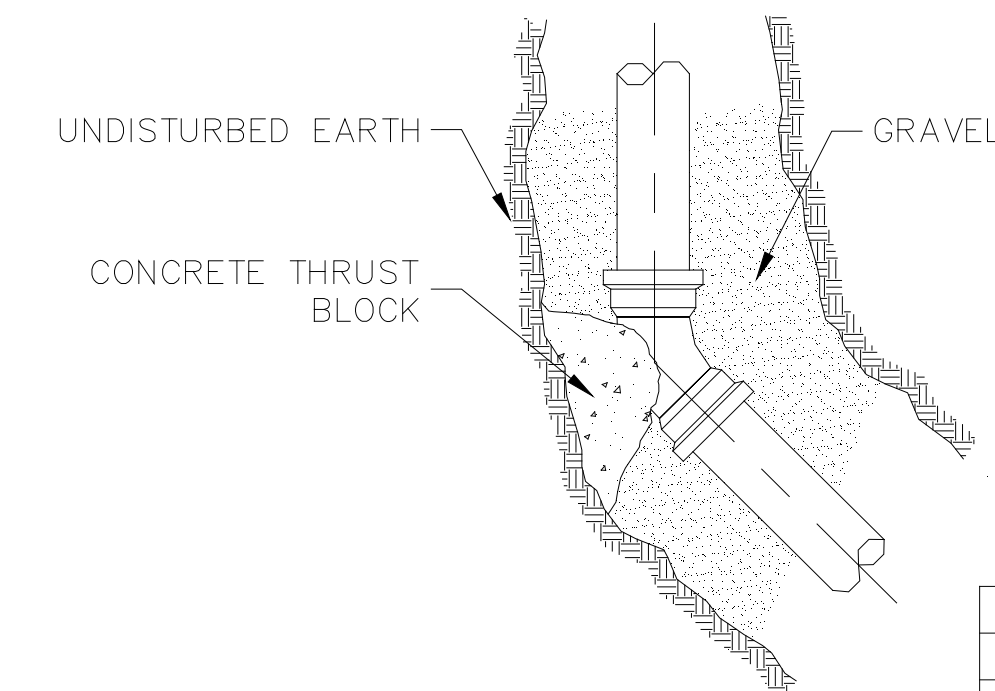
**M.J. PLUG TO 2" BLOWOFF ASSEMBLY**  
NTS



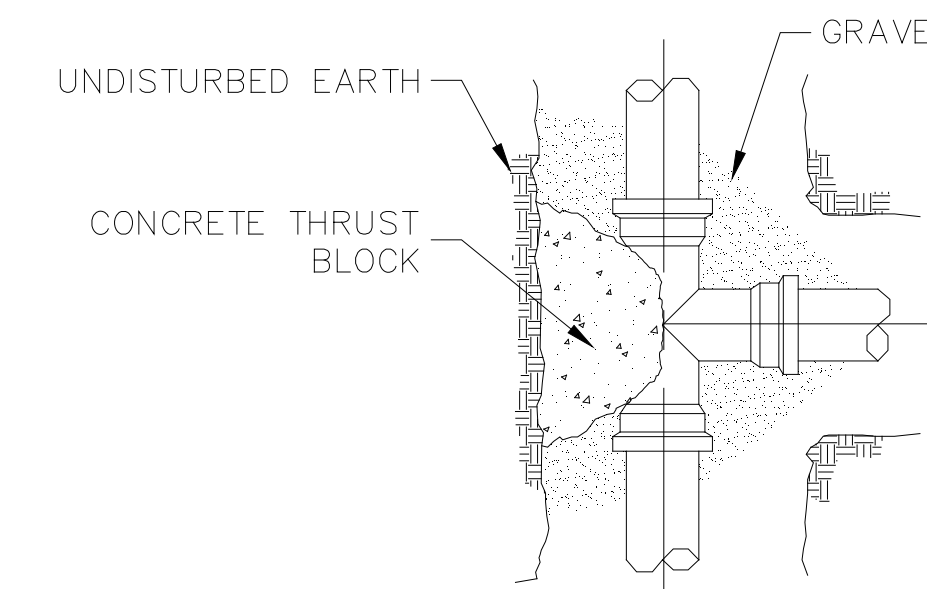
**2" PVC TO 1" BLOWOFF ASSEMBLY**  
NTS



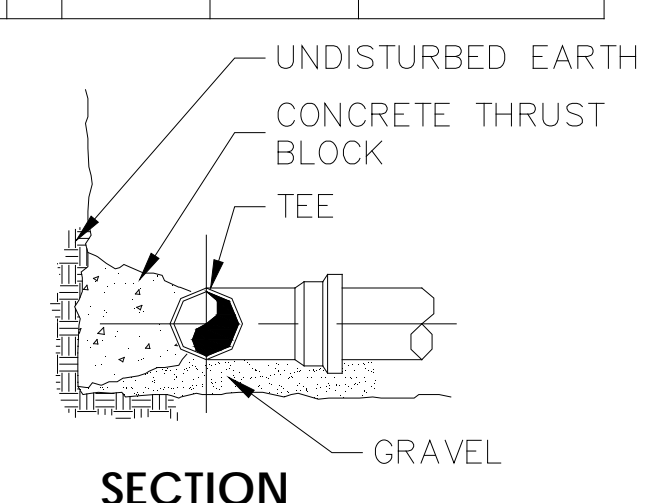
**BLOWOFF ASSEMBLY**  
NTS



**45° BEND**



**PLAN**

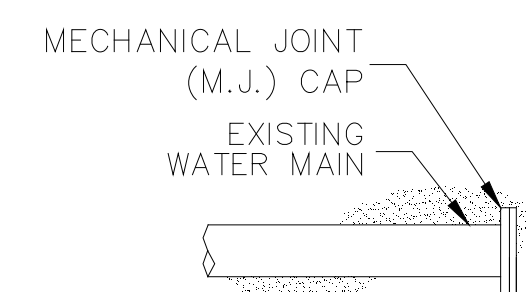


**SECTION**

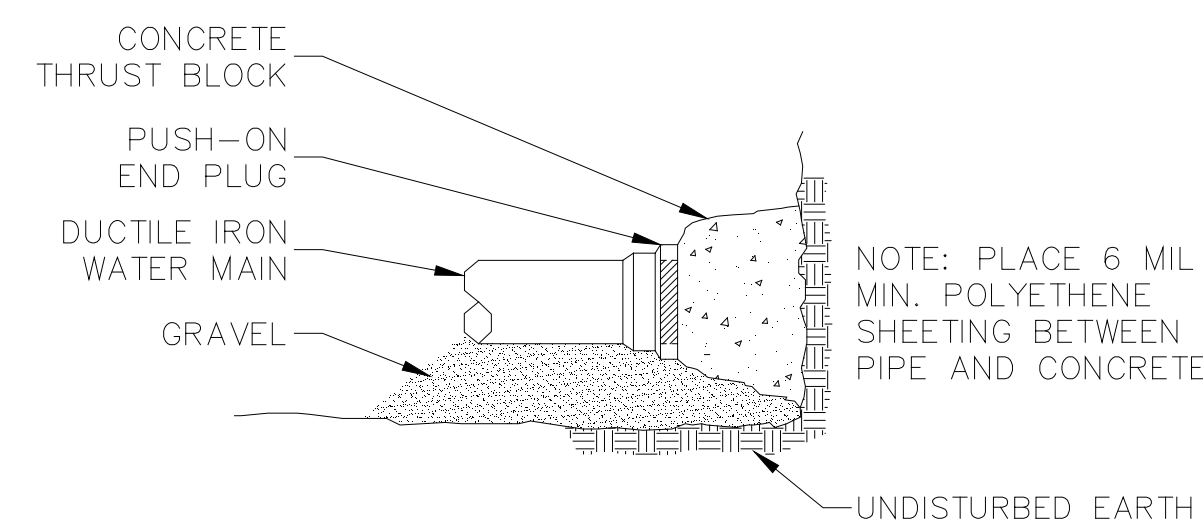
**TEE & BEND DETAIL**  
NTS

CONCRETE THRUST BLOCK SIZE REQUIREMENTS				
		SQ. FT. OF BEARING ON UNDISTURBED SOIL		
FITTINGS		90°BENDS	45°BENDS	TEES AND PLUGS
PIPE SIZE	6"	4.0	2.0	3.0
	8"	8.0	4.0	6.0
	12"	15	10	10

CONCRETE THRUST BLOCK SIZE REQUIREMENTS				
		SQ. FT. OF BEARING ON UNDISTURBED SOIL		
FITTINGS		90°BENDS	45°BENDS	TEES AND PLUGS
PIPE SIZE	6"	4.0	2.0	3.0
	8"	8.0	4.0	6.0
	12"	15	10	10



**CUT & CAP EXISTING WATER MAIN**  
NTS



**END PLUG DETAIL**  
NTS

DRAWN BY: \_\_\_\_\_  
CHECKED BY: \_\_\_\_\_  
DATE: \_\_\_\_\_  
APPROVED BY: \_\_\_\_\_  
DATE: 6/1/2009  
PROJECT NO.: \_\_\_\_\_  
SCALE: \_\_\_\_\_

BRUNSWICK & TOPSHAM  
**WATER DISTRICT**  
PO BOX 489  
TOPSHAM, ME 04086

**WATER MAIN EXTENSION**

**STANDARD DETAILS**