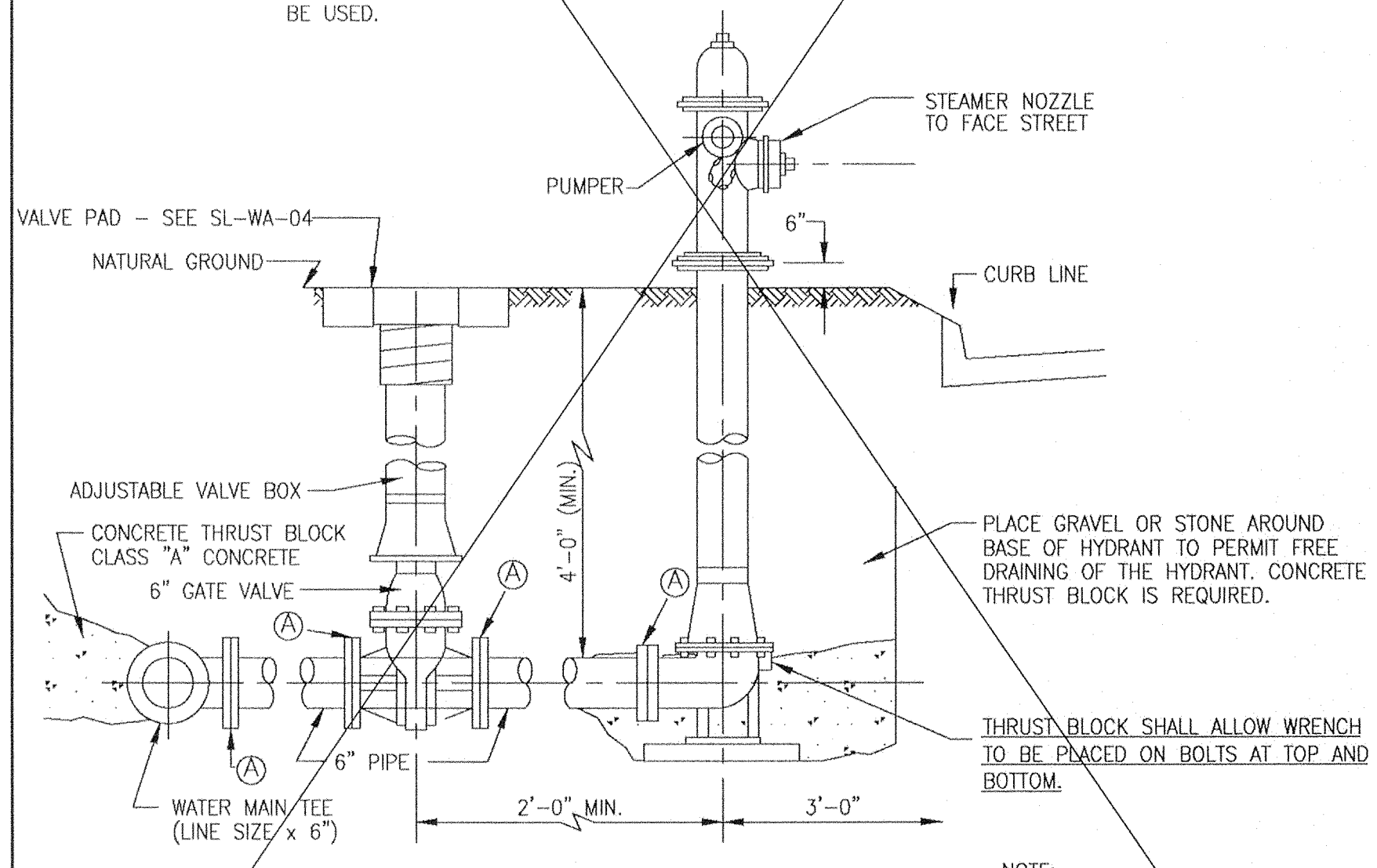


NOTE:
WHEN WATER LINE IS LOCATED IN EASEMENT, STANDARD TEE MAY BE USED.



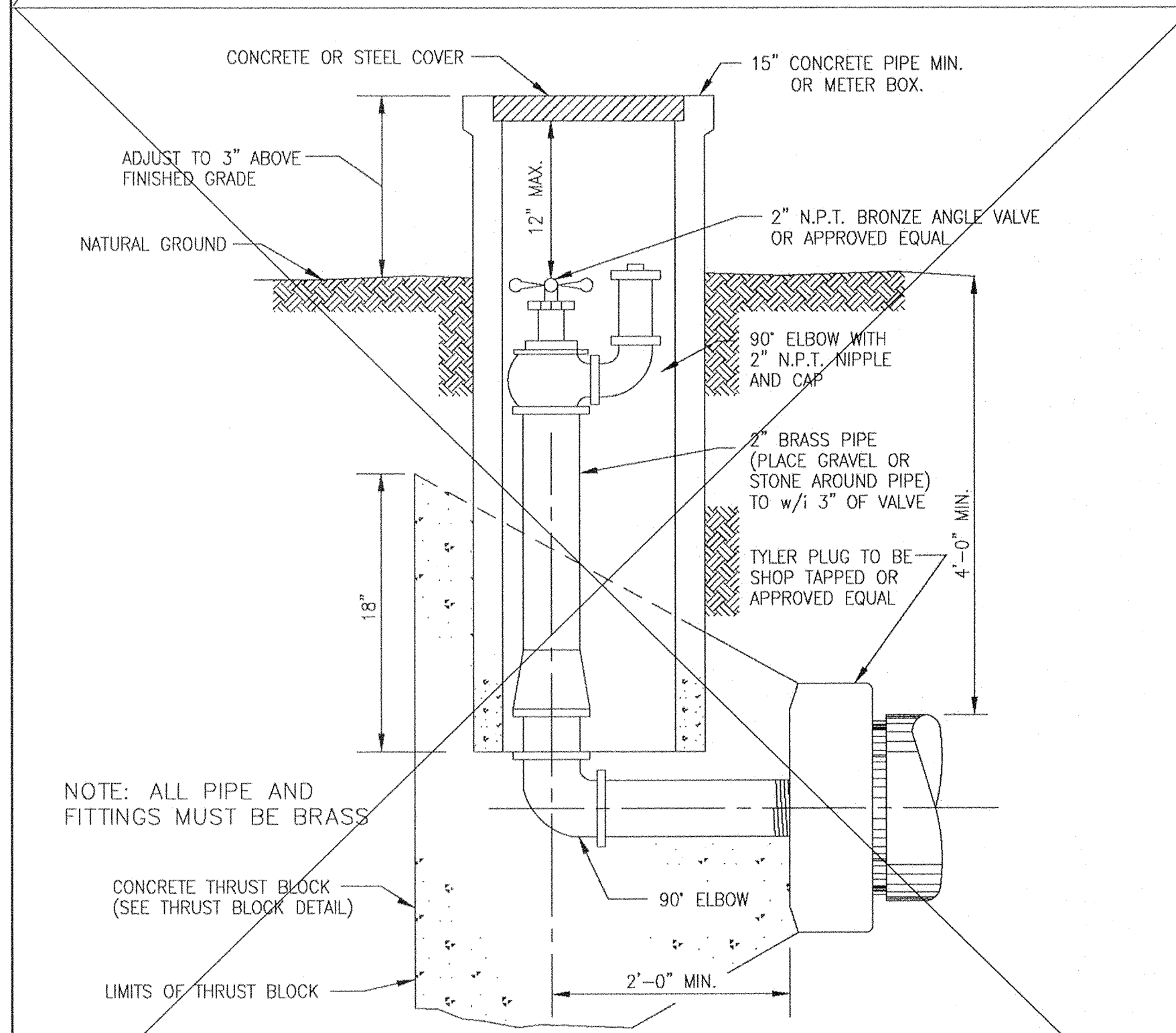
FLUSHING VALVE COLOR CODE

MAIN LINE DIAMETER	BONNET, PUMPER CAP AND STEAMER CAP
6 INCHES (AND LESS)	YELLOW
8 INCHES	WHITE
12 TO 16 INCHES	GREEN
GREATER THAN 16 INCHES	ORANGE

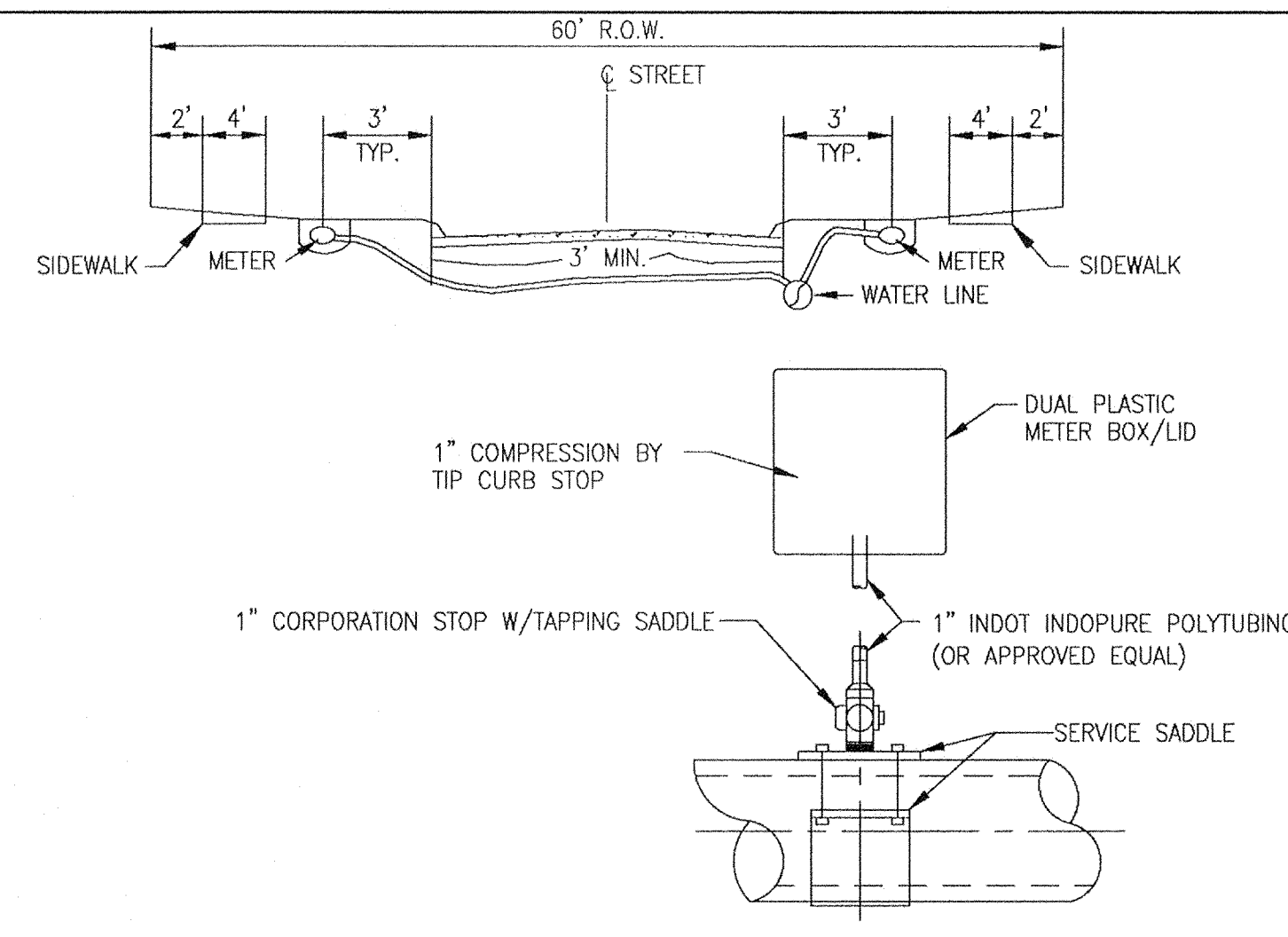
NOTE: ALL FIRE HYDRANTS SHALL BE MUELLER, KENNEDY, AMERICAN, M & H OR APPROVED EQUAL WITH STEAMER NOZZLE SIZE 4.125" PUMPER 2.5" N.S.T.

NOTE: ALL FLUSHING VALVES TO BE SAND BLASTED AND PAINTED AS PER C.O.S.L. DESIGN STANDARDS.

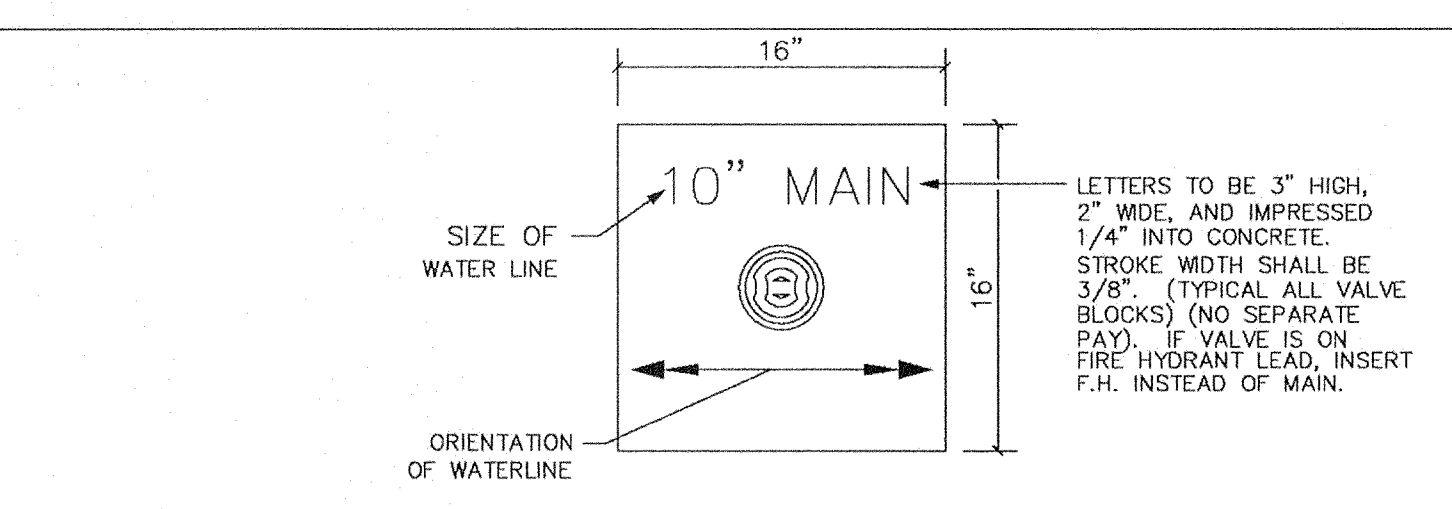
TYPICAL GATE & FIRE HYDRANT INSTALLATION (A) = RESTRAINED JOINT
N.T.S. SL-WA-01



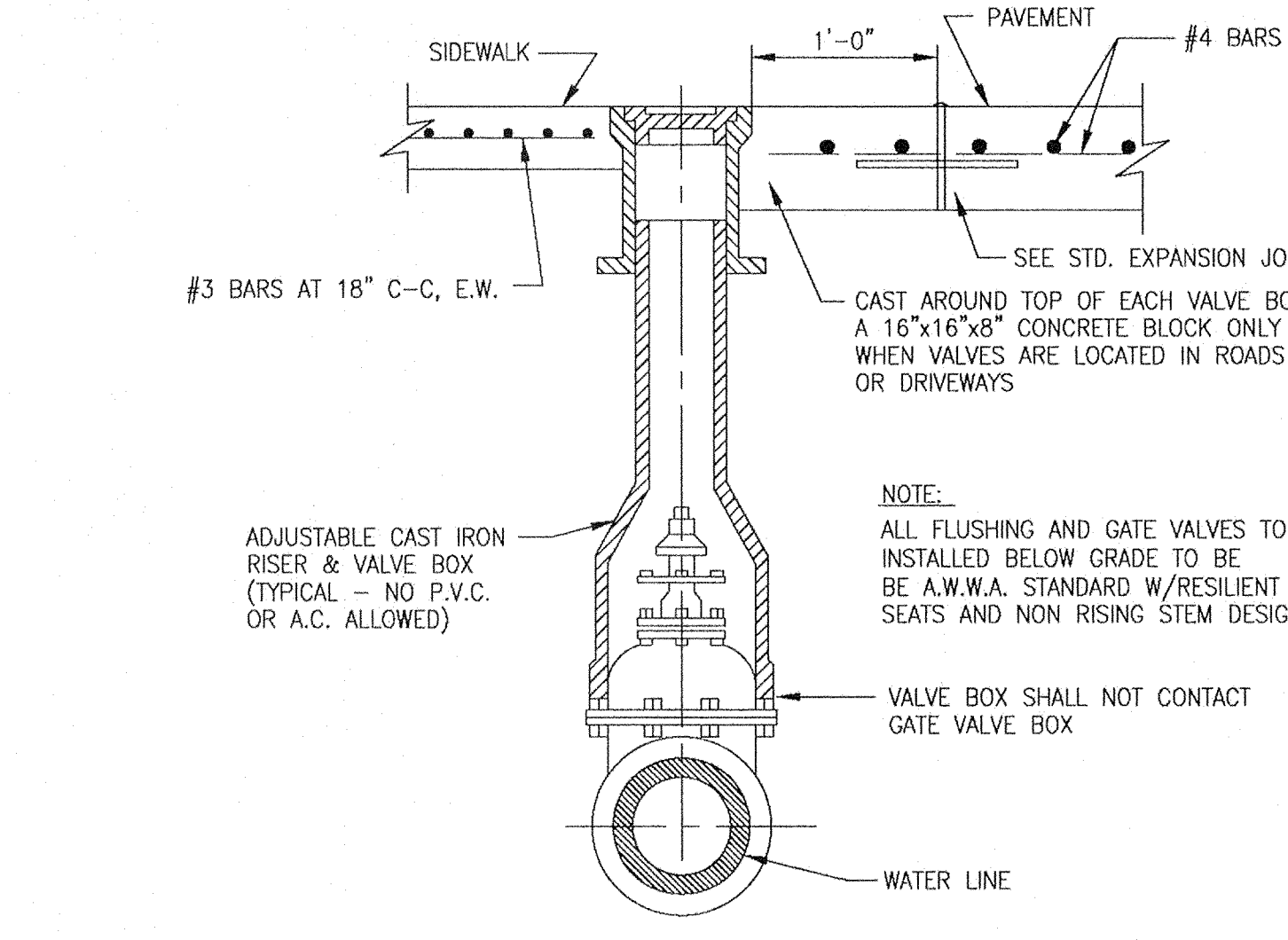
2" BLOW OFF VALVE ASSEMBLY
N.T.S. SL-WA-02



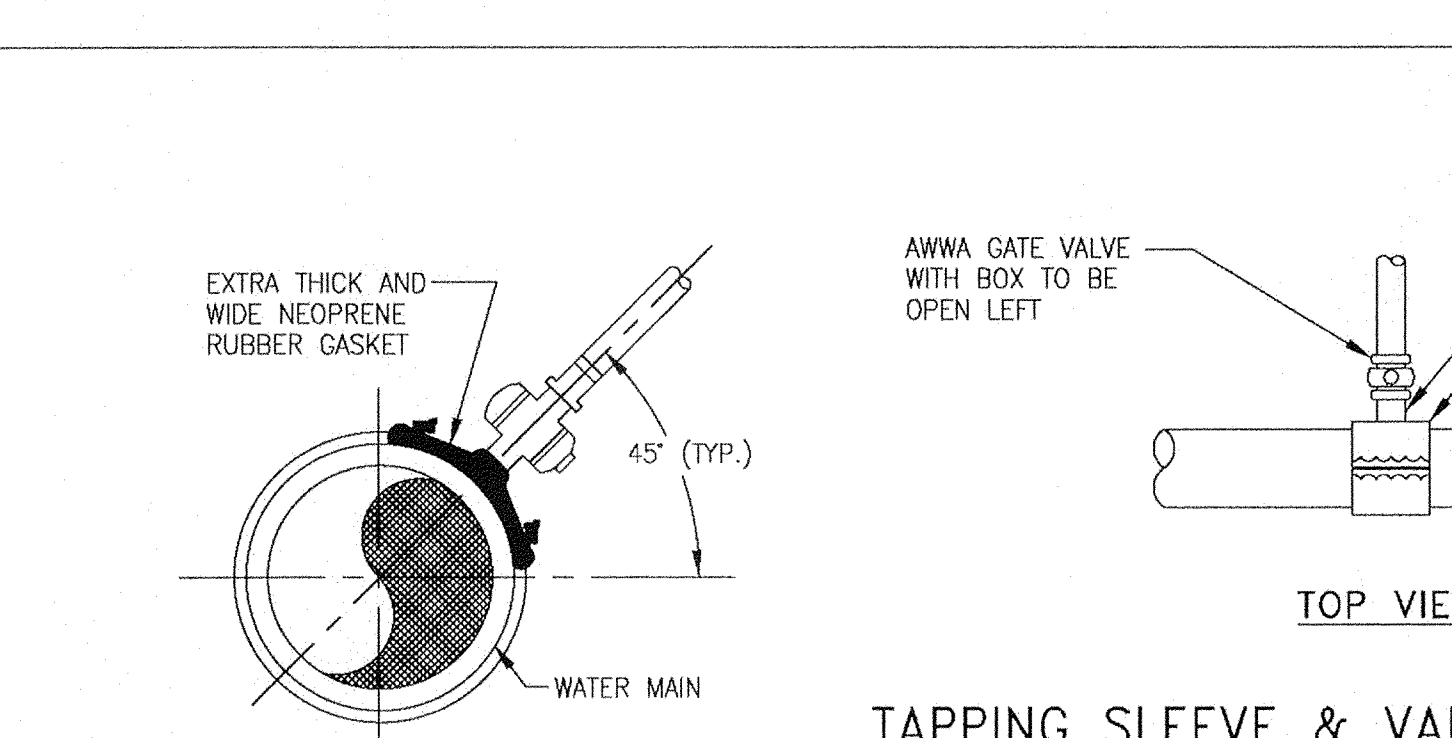
WATER SERVICE CONNECTION AND WATER SERVICE TAPPING ASSEMBLY DETAIL
N.T.S. SL-WA-03



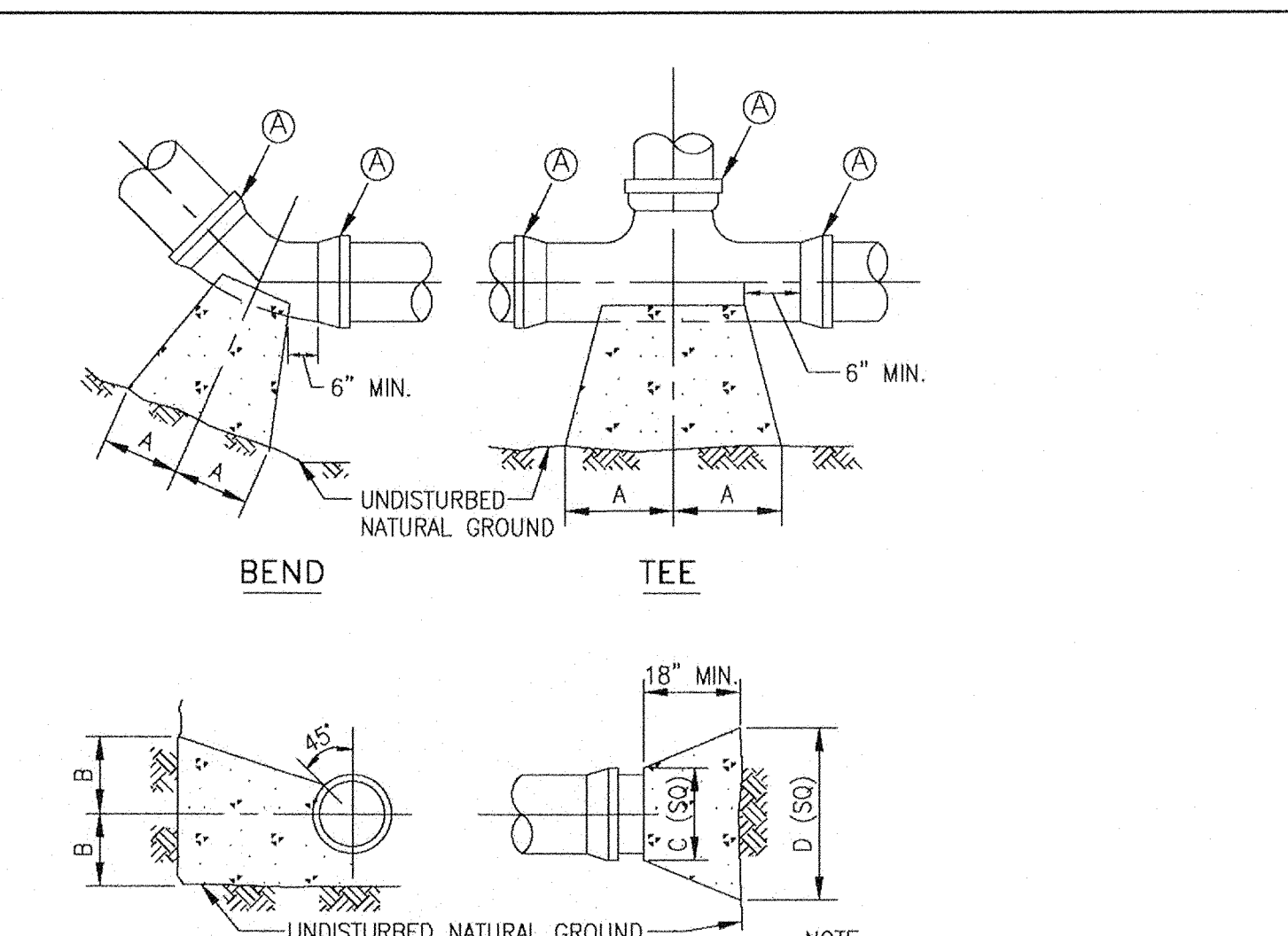
CONCRETE PAD
N.T.S. NOTE: ALL VALVES MUST HAVE CONCRETE PAD



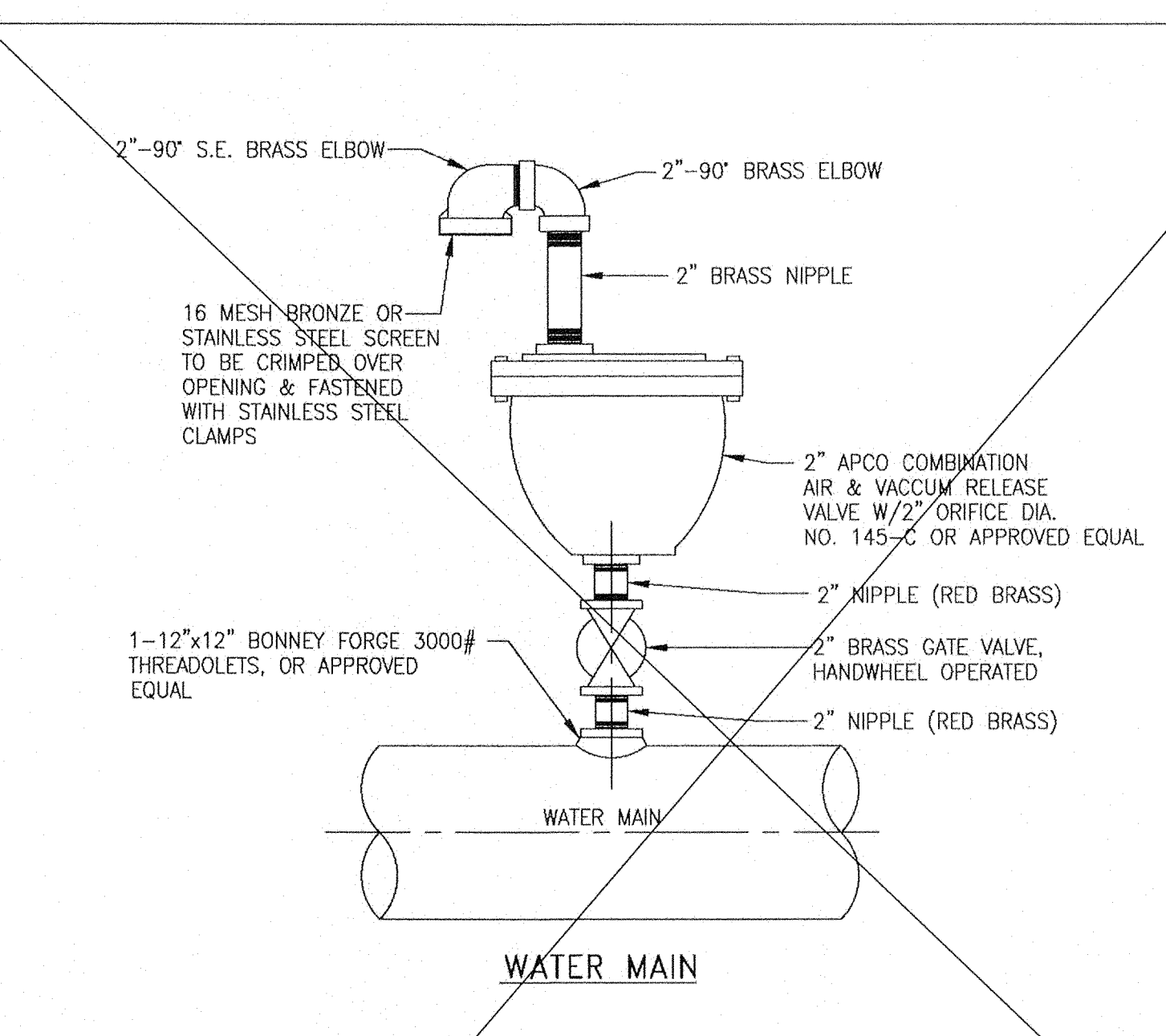
VALVE BOX INSTALLATION DETAIL
N.T.S. SL-WA-04



TAPPING SLEEVE & VALVE DETAIL
N.T.S. SL-WA-07



THRUST BLOCK DETAIL
N.T.S. (A) = RESTRAINED JOINT
SL-WA-05



AIR RELEASE VALVE DETAIL
N.T.S. SL-WA-06

NOTES:
POLYETHYLENE WRAP FOR IRON PIPE

- NOTE:
- POLYETHYLENE FILM SHALL BE USED AS A WRAP TO PROTECT CAST IRON AND OTHER METALS IN A CORROSIVE SOIL ENVIRONMENT.
 - AN 8 MIL POLYETHYLENE FILM WRAP SHALL BE REQUIRED AROUND ALL METAL PIPE AND APPURTENANCES (EXCEPT FIRE HYDRANTS).
 - POLYETHYLENE FILM SHALL BE FURNISHED AND INSTALLED EITHER IN TUBULAR FORM PRIOR TO LOWERING THE PIPE IN TRENCH OR IN SHEET FORM.
 - POLYETHYLENE TUBE ENCASUREMENT SHALL CONFORM WITH THE MINIMUM REQUIREMENTS OF "POLYETHYLENE ENCASUREMENT FOR GRAY AND DUCTILE CAST-IRON PIPING FOR WATER AND OTHER LIQUIDS", ANSI/AWWA C105, CURRENT REVISION. SOILS WITHIN A PROJECT SHALL BE TESTED IN ACCORDANCE WITH APPENDIX A OF ANSI/AWWA C105 TO ADEQUATELY DETERMINE THE REQUIREMENTS FOR ENCASUREMENT.
 - ALL FITTINGS AND PIPE JOINTS WITHIN 10' OF A FITTING SHALL HAVE RESTRAINT JOINTS

SIZE	90° BEND		45° BEND		22 1/2° BEND		TEES		PLUGS	
	A	B	A	B	A	B	A	B	A	B
2 1/2"	12"	7"	6"	7"	6"	6"	7"	8"	8"	14"
6"	16"	10"	9"	10"	6"	12"	10"	12"	10"	21"
8"	22"	13"	12"	13"	8"	10"	13"	16"	12"	29"
10"	26"	17"	14"	17"	10"	13"	16"	20"	14"	36"
12"	29"	21"	16"	21"	11"	16"	18"	24"	16"	41"
14"	35"	24"	19"	24"	12"	20"	22"	27"	18"	48"
16"	38"	27"	21"	27"	12"	24"	24"	30"	20"	54"
20"	50"	40"	30"	40"	18"	30"	30"	40"	30"	*78"
24"	50"	40"	30"	40"	18"	30"	30"	40"	30"	*78"
30"	60"	48"	36"	48"	20"	36"	36"	48"	36"	*96"

BENDS, TEES & PLUGS FOR PIPE OF VARIOUS SIZES

SL-WA-08

No.	DATE	REVISION

SEAL

DESIGN ENGINEER: *Carlos J. Barillas* DATE: 5/13/12



CITY OF SUGAR LAND, TEXAS
ENGINEERING DEPARTMENT

CONSTRUCTION PLANS FOR:

WATER LINE
CONSTRUCTION DETAILS

JOB No.:
DATE:
DESIGNED BY:
DRAWN BY:
CHECKED BY:
SCALE:

SL-15
SHEET OF

- CONSTRUCTION NOTES:**
- WATER LINES 12" (IN.) AND LESS SHALL BE AWWA C-900 DR18 WATER LINE GREATER THAN 12" (IN.) IN Ø SHALL BE AWWA C-905 DR 18
 - ALL FLUSHING VALVES AND GATE VALVES TO BE AMERICAN WATER WORKS ASSOC. (AWWA) STANDARD COUNTERCLOCKWISE OPENING WITH NON-RISING STEM DESIGN.
 - ALL DUCTILE IRON PIPE SHALL BE CLASS 50 MORTAR LINED. NO A.C. PIPE WILL BE ALLOWED AND ALL DUCTILE IRON FITTINGS SHALL BE MORTAR LINED PUSHON OR MECHANICAL JOINTS.
 - ALL BACKFILL WITHIN THE R.O.W. SHALL BE COMPACTED TO 95% STANDARD PROCTOR DENSITY.
 - MINIMUM SPACING BETWEEN TAPS SHALL BE 2' AT ALTERNATING TAP ANGLES.

SL-WA-08