

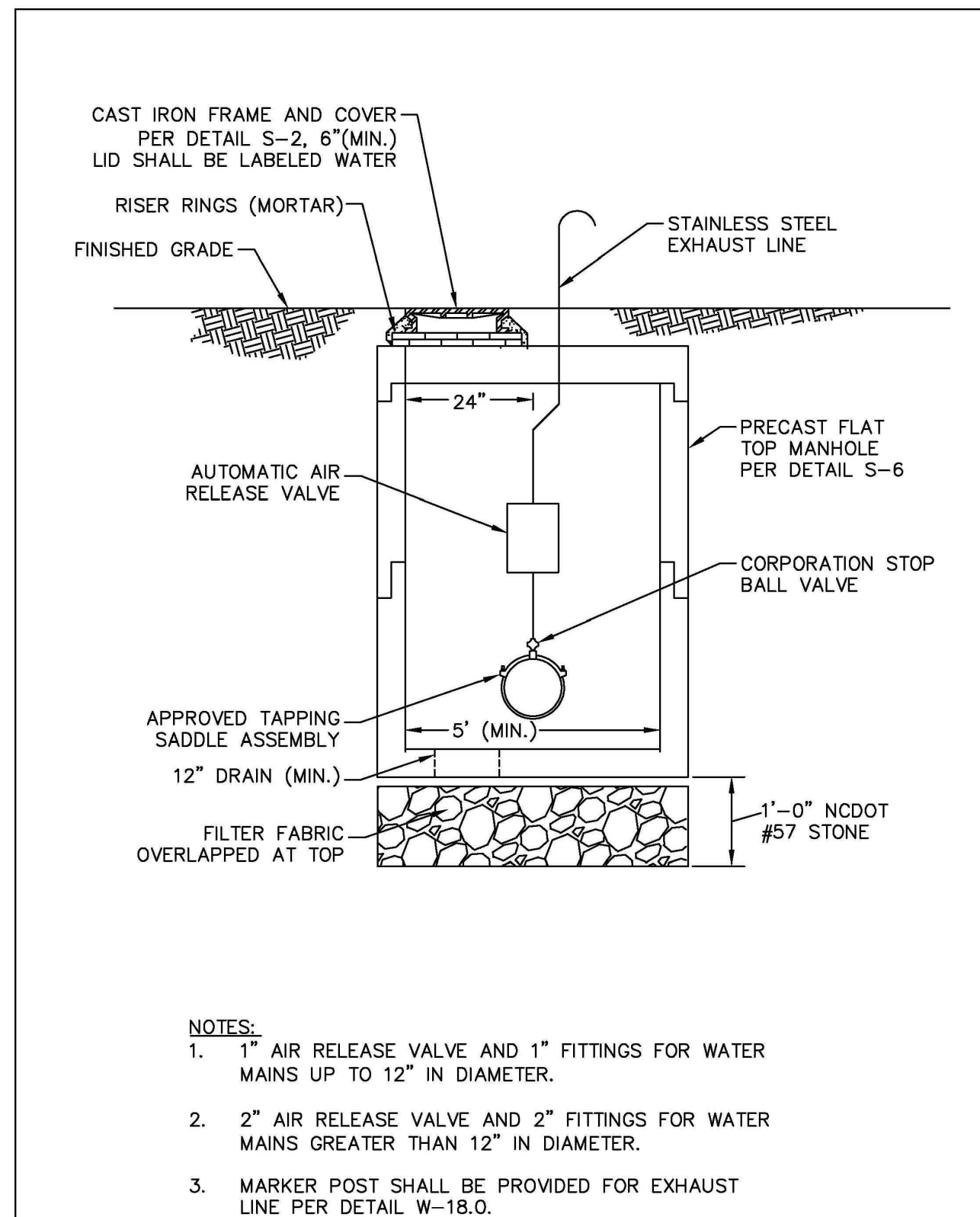
BLOW-OFF SIZES

2" MAIN	3/4" COPPER
6" MAIN	1 1/2" COPPER
8" MAIN	2" COPPER



WATER SYSTEMS
TEMPORARY 2"
BLOWOFF ASSEMBLY

OCTOBER 2008
NTS W - 10.0

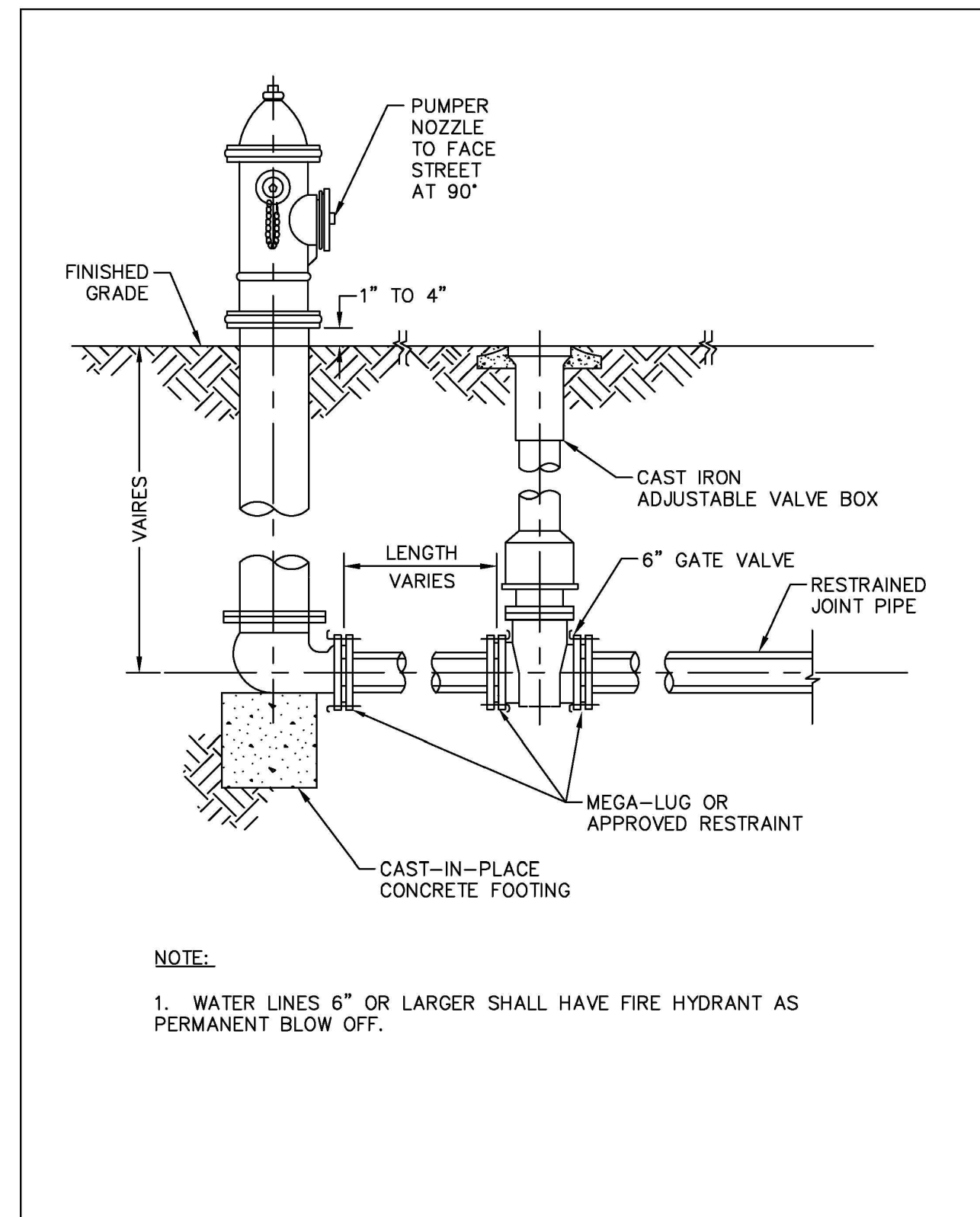


- NOTES:
- 1" AIR RELEASE VALVE AND 1" FITTINGS FOR WATER MAINS UP TO 12" IN DIAMETER.
 - 2" AIR RELEASE VALVE AND 2" FITTINGS FOR WATER MAINS GREATER THAN 12" IN DIAMETER.
 - MARKER POST SHALL BE PROVIDED FOR EXHAUST LINE PER DETAIL W-18.0.



WATER SYSTEMS
AIR RELIEF MANHOLE

OCTOBER 2008
NTS W - 7.0

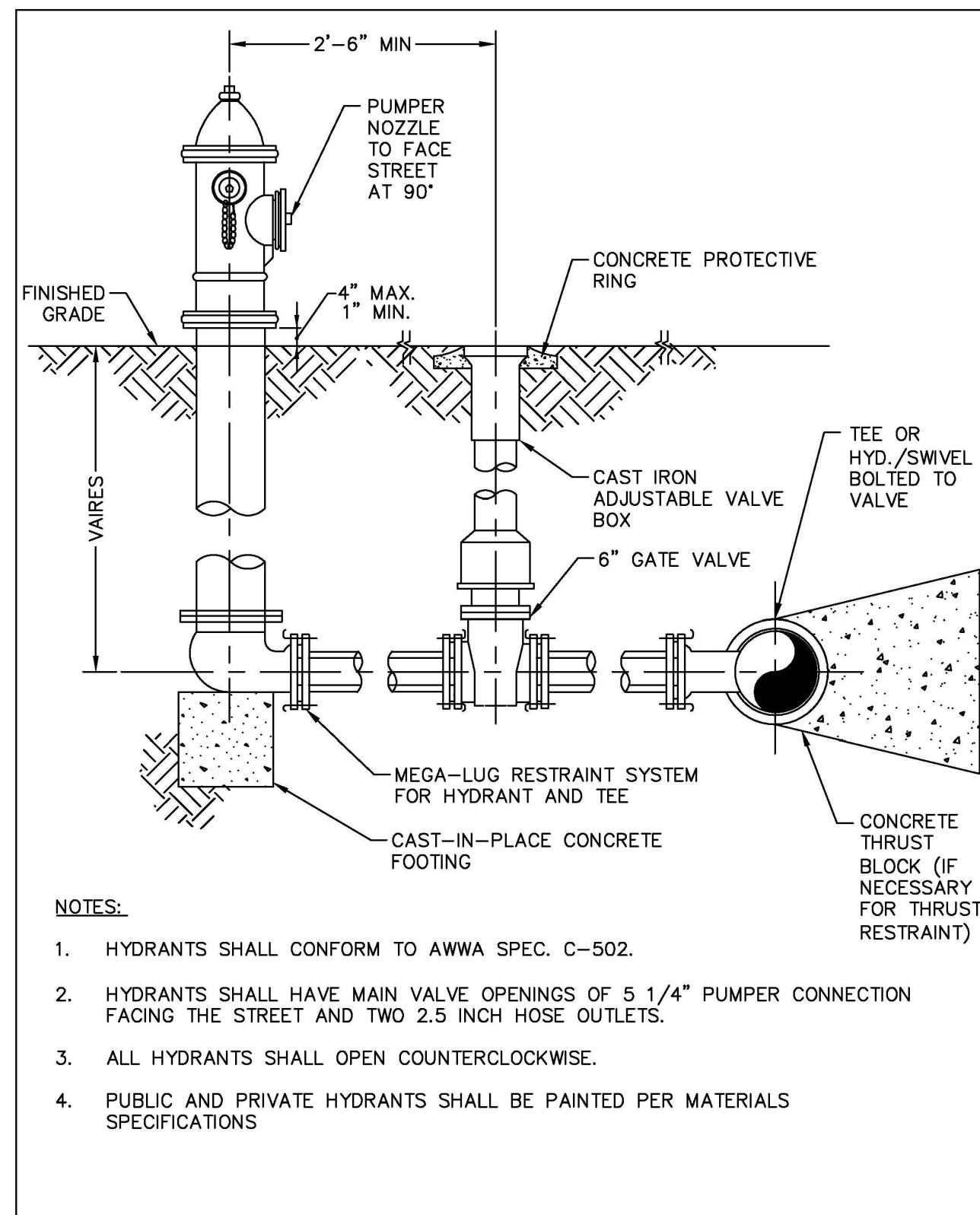


- NOTE:
1. WATER LINES 6" OR LARGER SHALL HAVE FIRE HYDRANT AS PERMANENT BLOW OFF.



WATER SYSTEMS
FIRE HYDRANT
BLOW OFF

OCTOBER 2008
NTS W - 11.0

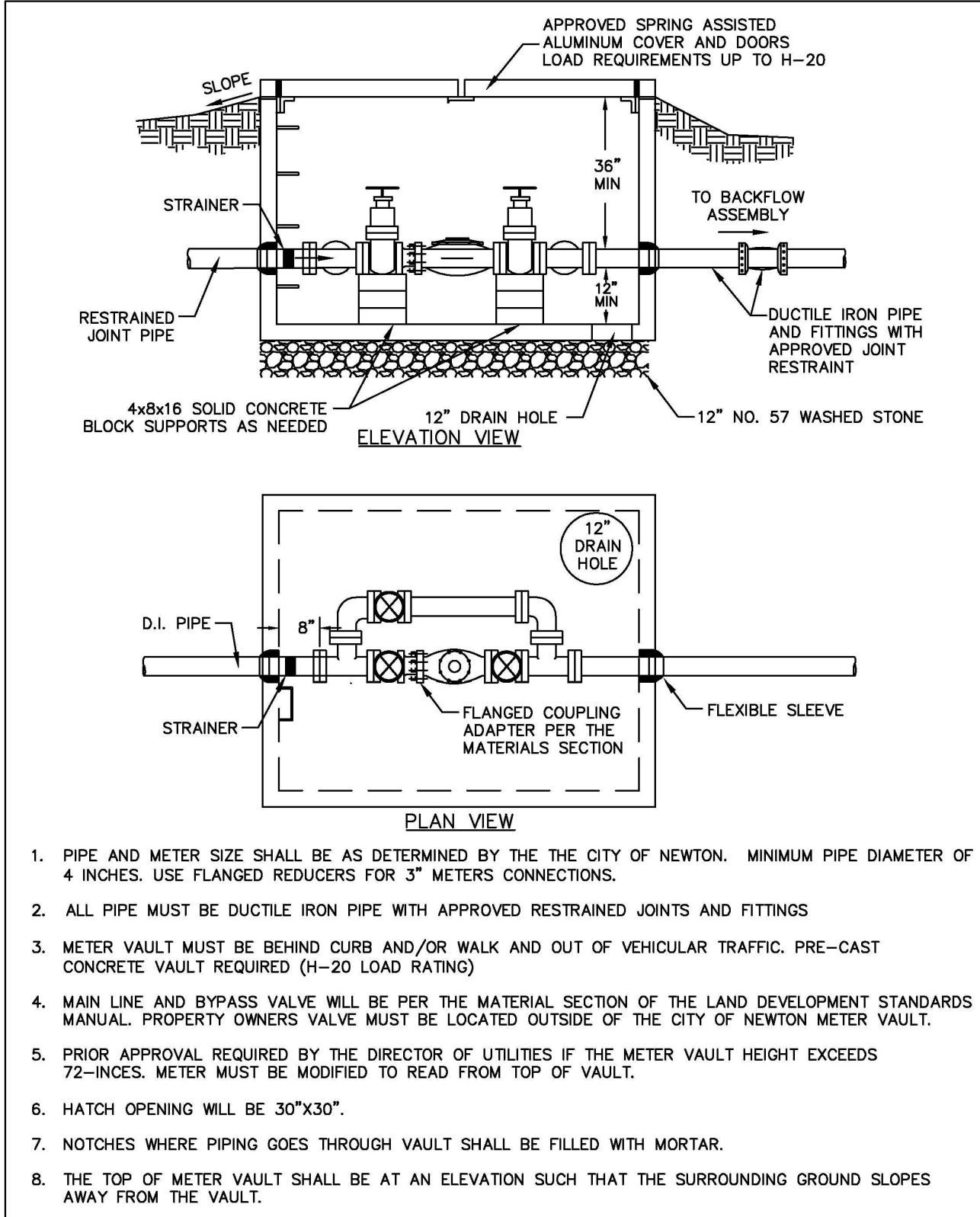


- NOTES:
1. HYDRANTS SHALL CONFORM TO AWWA SPEC. C-502.
 2. HYDRANTS SHALL HAVE MAIN VALVE OPENINGS OF 5 1/4" PUMPER CONNECTION FACING THE STREET AND TWO 2.5 INCH HOSE OUTLETS.
 3. ALL HYDRANTS SHALL OPEN COUNTERCLOCKWISE.
 4. PUBLIC AND PRIVATE HYDRANTS SHALL BE PAINTED PER MATERIALS SPECIFICATIONS



WATER SYSTEMS
FIRE HYDRANT

OCTOBER 2008
NTS W - 1.0

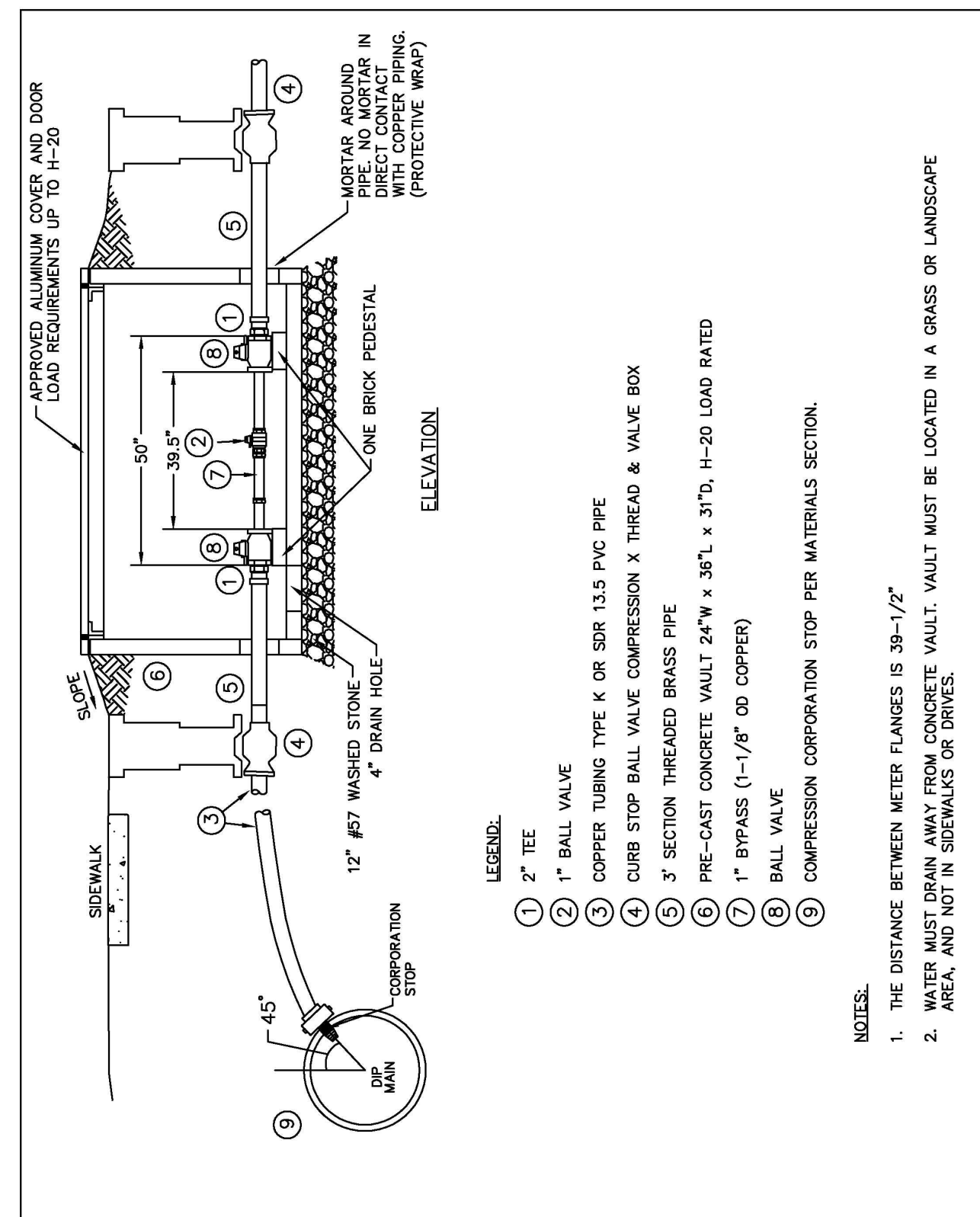


1. PIPE AND METER SIZE SHALL BE AS DETERMINED BY THE THE CITY OF NEWTON. MINIMUM PIPE DIAMETER OF 4 INCHES. USE FLANGED REDUCERS FOR 3" METERS CONNECTIONS.
2. ALL PIPE MUST BE DUCTILE IRON PIPE WITH APPROVED RESTRAINED JOINTS AND FITTINGS
3. METER VAULT MUST BE BEHIND CURB AND/OR WALK AND OUT OF VEHICULAR TRAFFIC. PRE-CAST CONCRETE VAULT REQUIRED (H-20 LOAD RATING)
4. MAIN LINE AND BYPASS VALVE WILL BE PER THE MATERIAL SECTION OF THE LAND DEVELOPMENT STANDARDS MANUAL. PROPERTY OWNERS VALVE MUST BE LOCATED OUTSIDE OF THE CITY OF NEWTON METER VAULT.
5. PRIOR APPROVAL REQUIRED BY THE DIRECTOR OF UTILITIES IF THE METER VAULT HEIGHT EXCEEDS 72-INCHES. METER MUST BE MODIFIED TO READ FROM TOP OF VAULT.
6. HATCH OPENING WILL BE 30"x30".
7. NOTCHES WHERE PIPING GOES THROUGH VAULT SHALL BE FILLED WITH MORTAR.
8. THE TOP OF METER VAULT SHALL BE AT AN ELEVATION SUCH THAT THE SURROUNDING GROUND SLOPES AWAY FROM THE VAULT.
9. STRAINER SHALL BE INSTALLED INSIDE METER VAULT



WATER SYSTEMS
3" AND LARGER
SERVICE CONNECTION

OCTOBER 2008
NTS W - 5.0



- LEGEND:
- 1 2" TEE
 - 2 1" BALL VALVE
 - 3 COPPER TUBING TYPE K OR SDR 13.5 PVC PIPE
 - 4 CURB STOP BALL VALVE COMPRESSION X THREAD & VALVE BOX
 - 5 3" SECTION THREADED BRASS PIPE
 - 6 PRE-CAST CONCRETE VAULT 24"W x 36"L x 31"D, H-20 LOAD RATED
 - 7 1" BYPASS (1-1/8" OD COPPER)
 - 8 BALL VALVE
 - 9 COMPRESSION CORPORATION STOP PER MATERIALS SECTION.

- NOTES:
1. THE DISTANCE BETWEEN METER FLANGES IS 39-1/2"
 2. WATER MUST DRAIN AWAY FROM CONCRETE VAULT. VAULT MUST BE LOCATED IN A GRASS OR LANDSCAPE AREA, AND NOT IN SIDEWALKS OR DRIVES.



WATER SYSTEMS
2" SERVICE CONNECTION

JANUARY 2009
NTS W - 4.0

NOT CONSIDERED FINAL
SIGNATURES COMPLETE

PROJECT REFERENCE NO. R-3100B	SHEET NO. UC-3A
DESIGNED BY: RJM	
DRAWN BY: RAB	
CHECKED BY: DGC	
APPROVED BY:	
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UTILITY CONSTRUCTION PLANS ONLY	

UTILITY CONSTRUCTION
Prepared by

