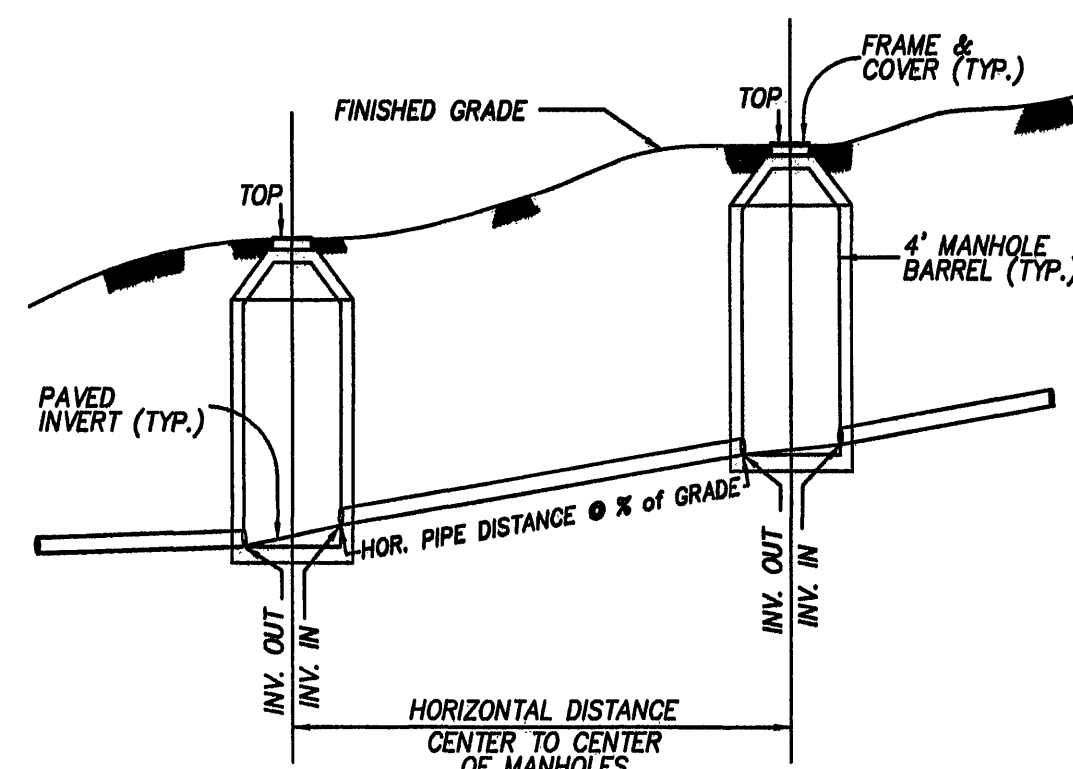
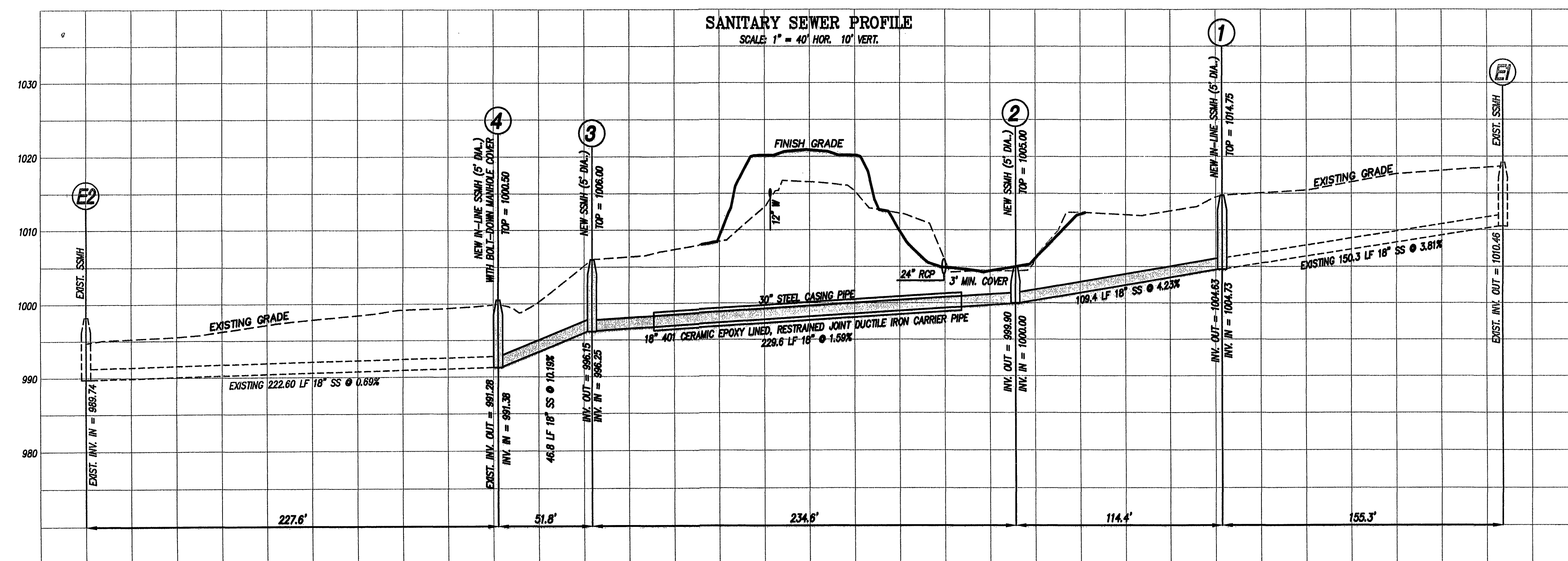
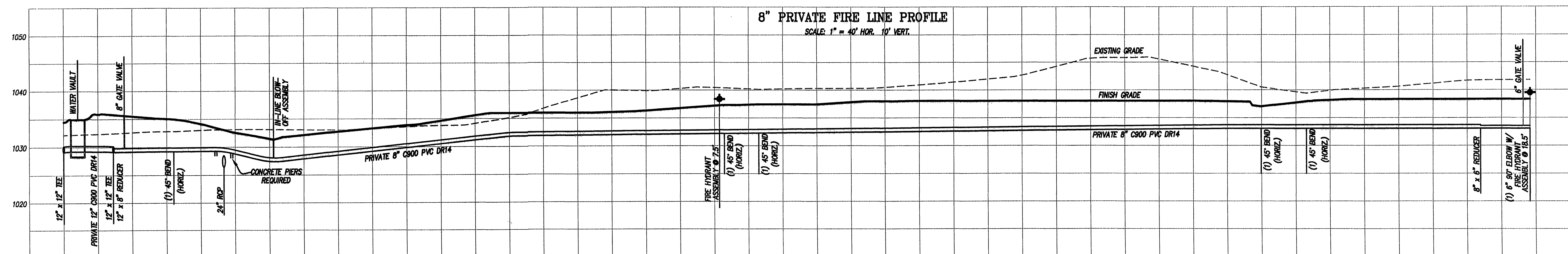
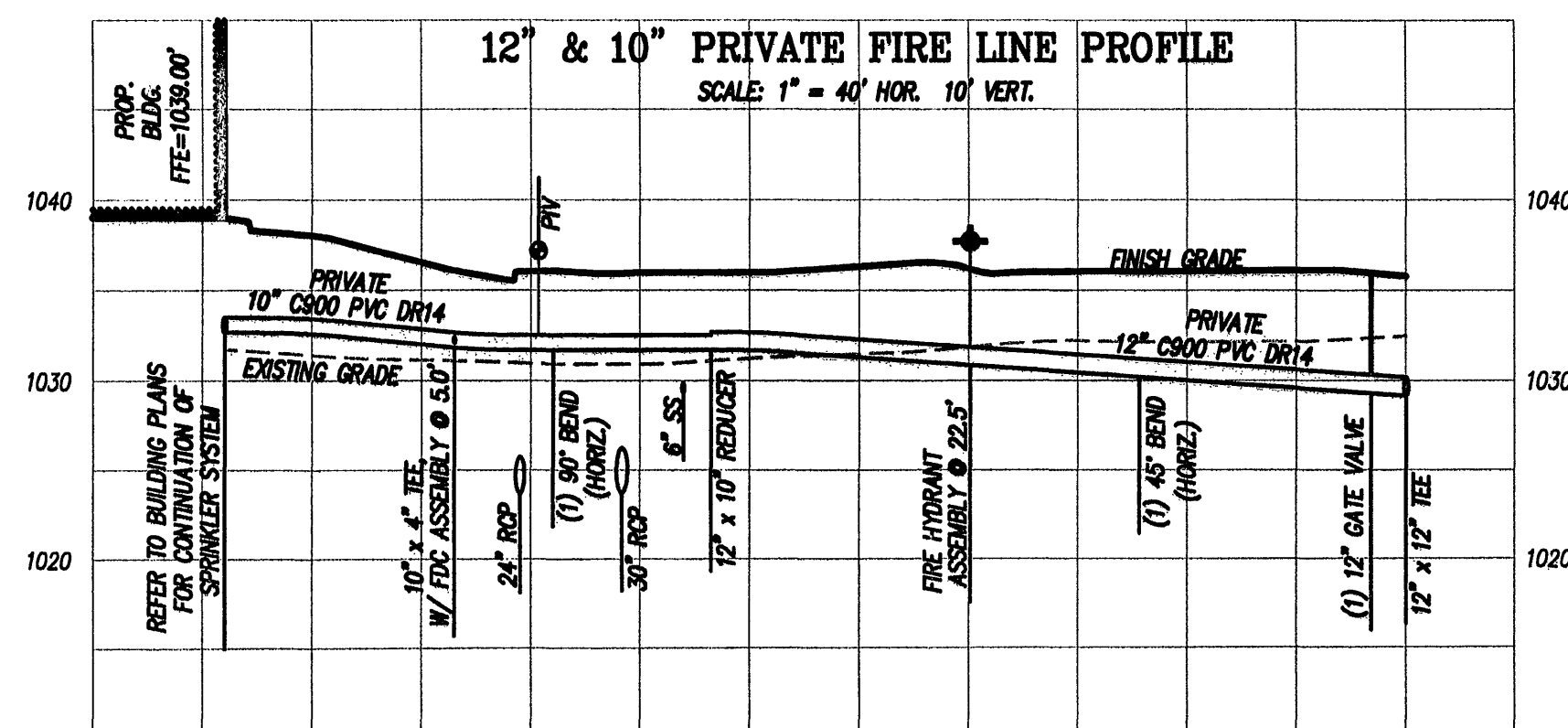


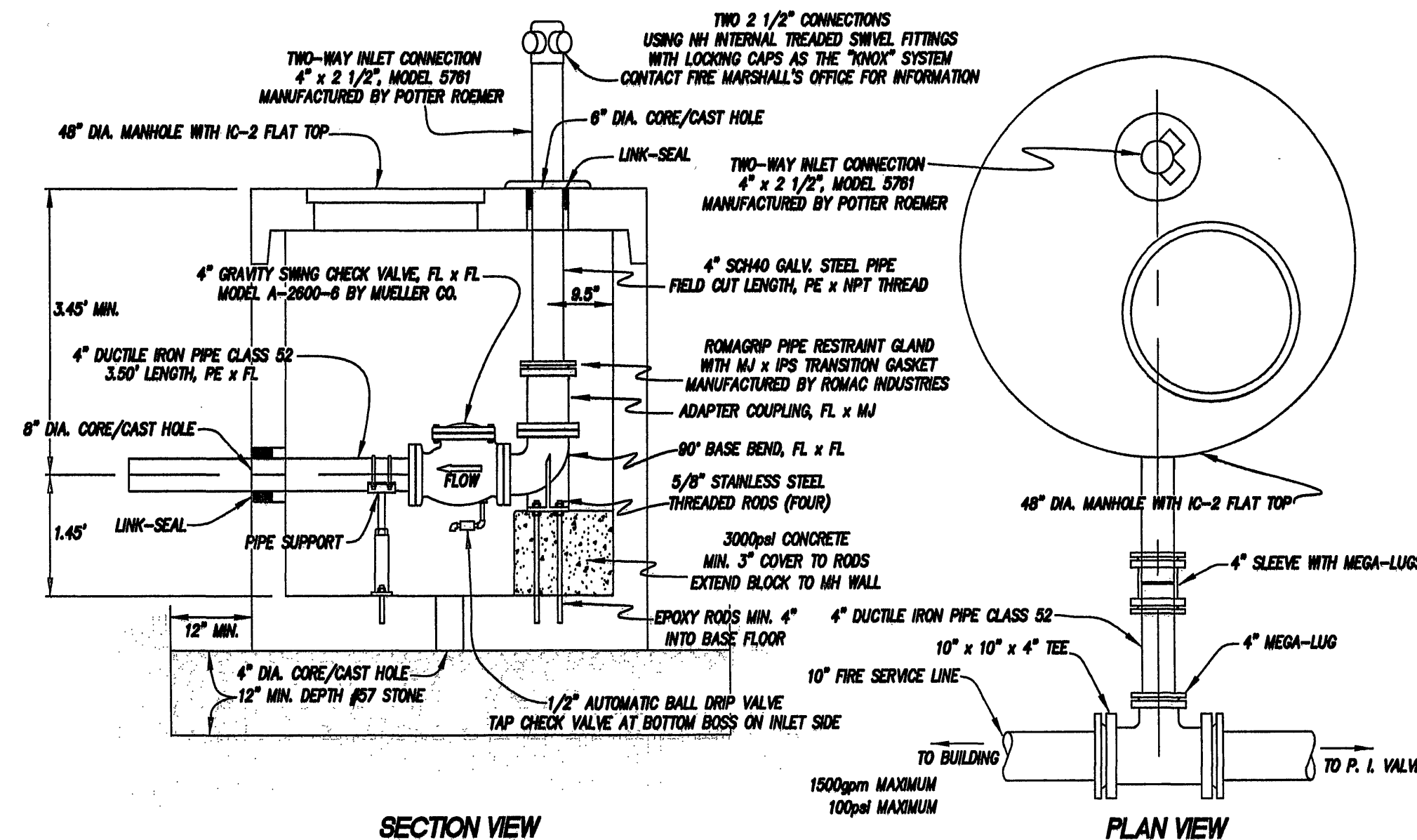
Abstract

1. ALL WATER AND SANITARY SEWER LINES SHALL HAVE A MINIMUM OF 3.0 FEET OF COVER.
2. MAINTAIN A MINIMUM OF 18" CLEARANCE FROM OUTSIDE OF PIPE TO OUTSIDE OF PIPE AT ALL WATER, SANITARY SEWER, AND STORM DRAIN CROSSINGS. WHERE THIS CLEARANCE CAN NOT BE ACHIEVED, CONCRETE PIERS SHALL BE UTILIZED IN ACCORDANCE WITH THE WESTERN VIRGINIA WATER AUTHORITY'S WATER AND SANITARY SEWER STANDARDS.
3. SANITARY SEWER MAIN PIPE MATERIAL SHALL BE PVC, SDR-35, EXCEPT AS NOTED, OR APPROVED EQUAL.
4. WORKING PRESSURE OF EXISTING 12" WATER MAIN ALONG HOLLINS ROAD AT PROPOSED CONNECTION IS LESS THAN 100 PSI. NEW WATER LINE MAIN PIPE MATERIAL SHALL BE C900 PVC DR14, UNLESS OTHERWISE INDICATED, OR APPROVED EQUAL.
5. ALL NEW DROP INLETS AND STORM DRAIN MANHOLES SHALL HAVE VDOT STD. IS-1, INLET SHAPING.
6. ALL DRAINAGE STRUCTURES DEEPER THAN 4.0 FEET SHALL HAVE STEPS (VDOT STD. ST-1) INSTALLED.
7. SAFETY SLABS (VDOT STD. SL-1) ARE REQUIRED IN ALL DRAINAGE STRUCTURES WITH A DEPTH OF 12.0 FEET OR GREATER. THE SPACING OF THE SLABS SHOULD BE 8 TO 12 FEET WITH NO SAFETY SLAB LOCATED WITHIN 6 FEET FROM THE TOP OR BOTTOM OF THE STRUCTURE.



SANITARY SEWER
HORIZONTAL AND SLOPE DISTANCE DETAIL

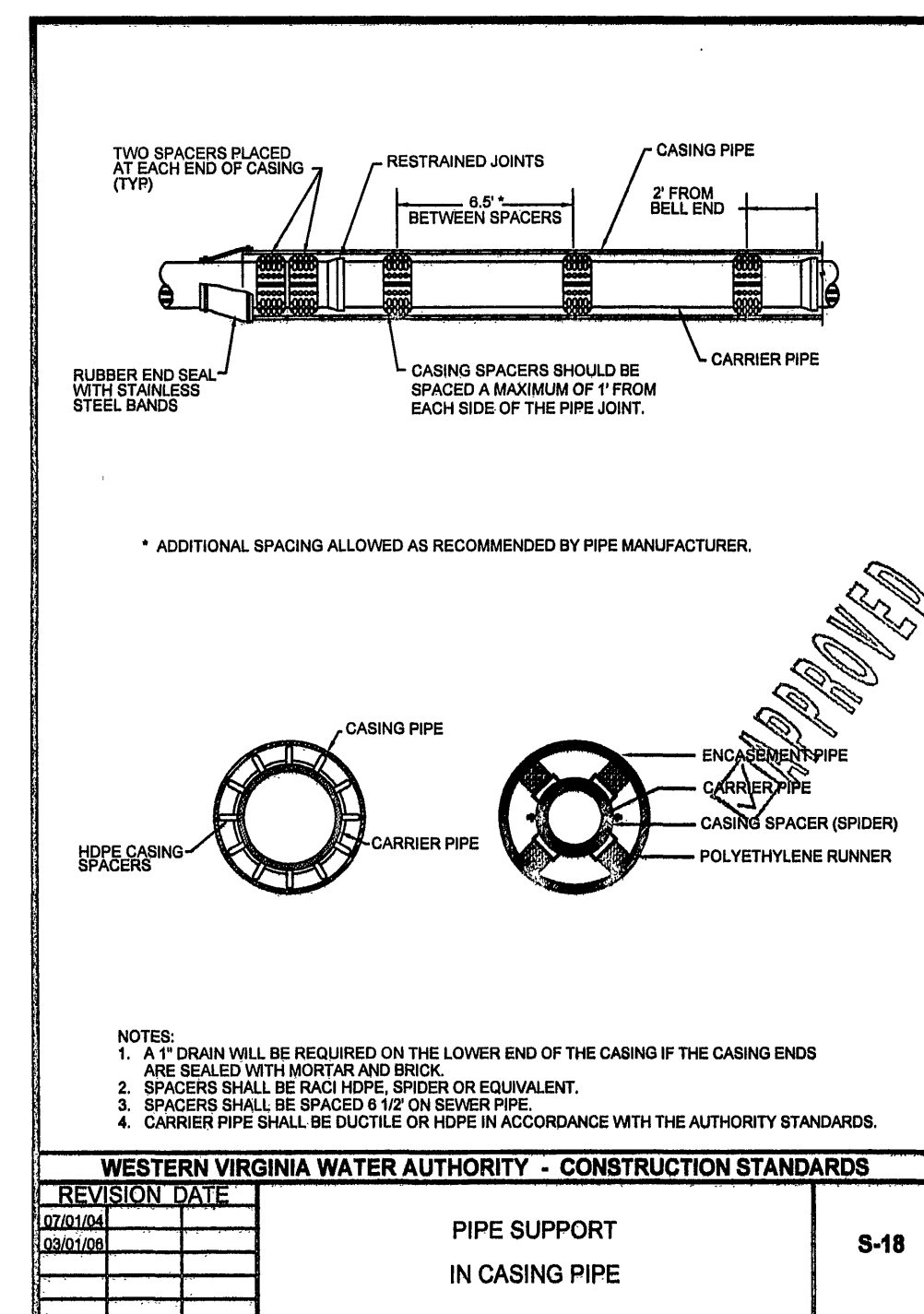
NO SCALE



SECTION VIEW

FIRE DEPARTMENT CONNECTION

NOT TO SCALE



WATER LINE & SANITARY

L.A.

LUMSDEN ASSOCIATES, P.C.
ENGINEERS-SURVEYORS-PLANNERS
ROANOKE, VIRGINIA

COMMONWEALTH OF VIRGINIA
9-24
B. I.
HENDERS
Lic. No. 13,140
PROFESSIONAL

DEVELOPMENT PLAN FOR
AMERICAN TIRE DISTRIBUTORS
ROANOKE, VIRGINIA
PREPARED FOR
PINECREST DEVELOPMENT COMPANY
ROANOKE CITY & COUNTY, VIRGINIA

REVISIONS		DATE	DESCRIPTION
1			
2			
3			
4			
5			

DATE: September 29, 2010

SCALE: AS SHOWN

COMMISSION NO: 2010-019

SHEET 10 OF 20

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