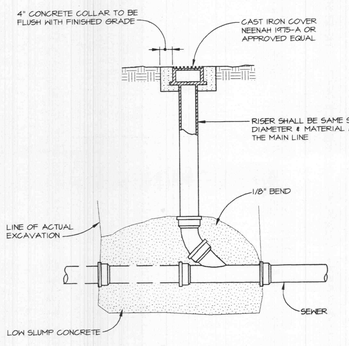
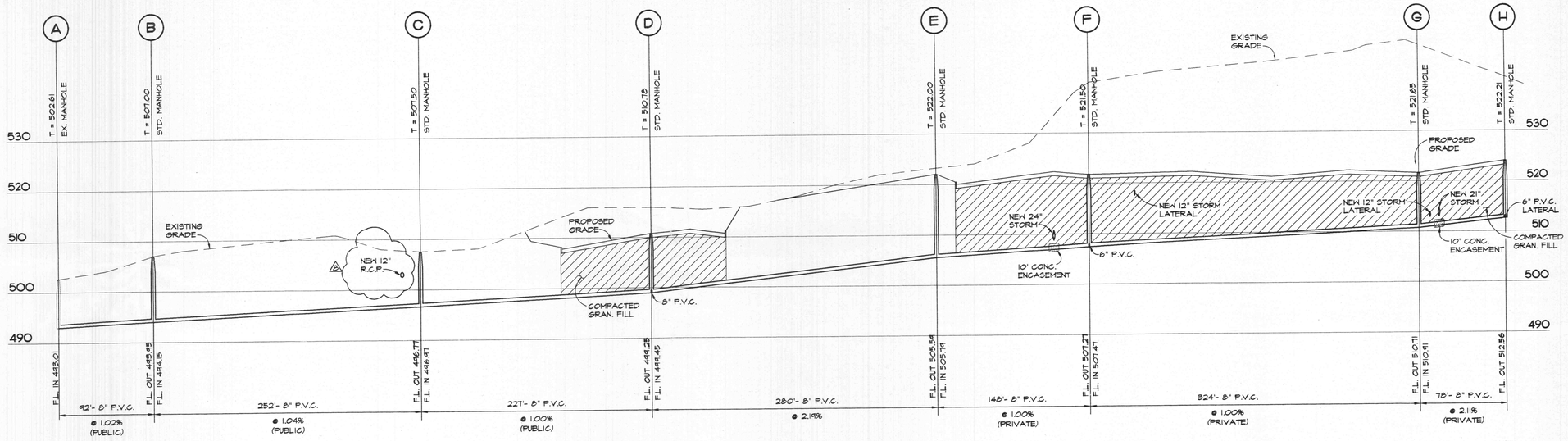


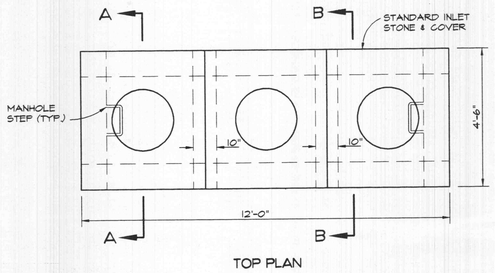
CLEAN OUT DETAIL

N.T.S.

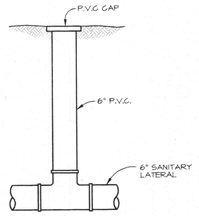


SANITARY SEWER PROFILES

SCALE: 1" = 50' HORIZ., 1" = 10' VERT.

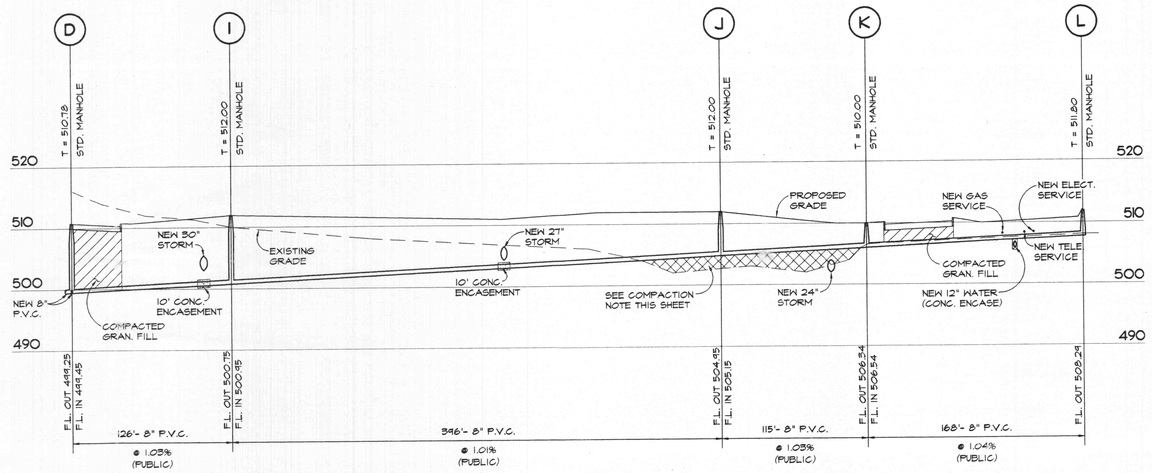


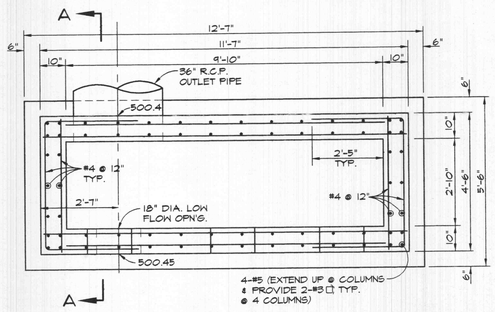
TOP PLAN



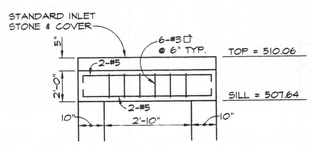
SAMPLE TEE

N.T.S.





SECTIONAL PLAN C-C

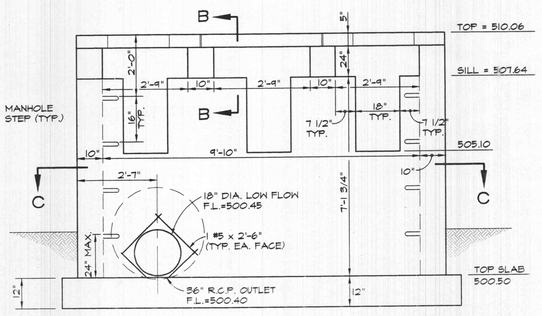


SECTION B-B

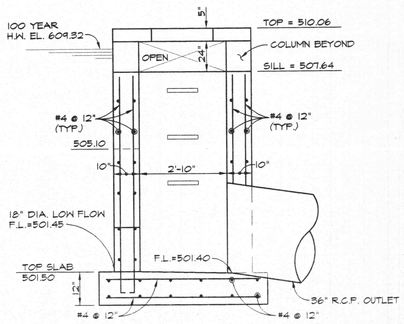
GENERAL NOTES:

1. ALL CONCRETE SHALL BE LOW SLUMP CLASS "A" CONCRETE.
2. ALL REINFORCING STEEL SHALL BE OF A.S.T.M. A615, GRADE 60.
3. ALL MANHOLE CASTINGS SHALL BE STANDARD M.S.D. CAST IRON MANHOLE FRAME AND LOCK TYPE COVERS.
4. THE CONTRACTOR SHALL SUPPLY THE DISTRICT WITH 5 SETS OF SHOP DRAWINGS PRIOR TO CONSTRUCTION OF REINFORCED CONCRETE STRUCTURES.

SPLICE LENGTH SCHEDULE						
f'c = 3,500 psi	ALL BARS					
fy = 60,000 psi	#4	#5	#6	#7	#8	
Tension Splice (L)	29	36	45	58	76	L



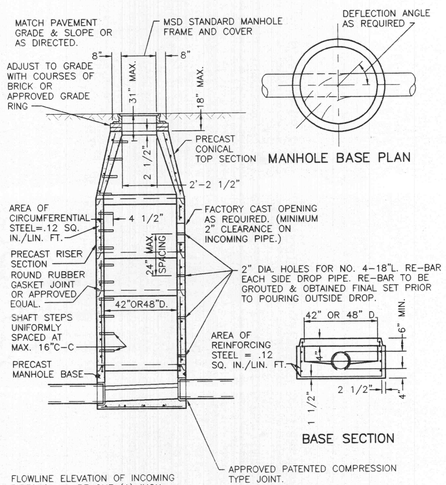
ELEVATION



SECTION A-A

DETENTION BASIN OVERFLOW STRUCTURE

SCALE: 1/2" = 1'-0"



MANHOLE BASE PLAN

BASE SECTION

PRE-CAST CONCRETE MANHOLE FOR SEWERS 8" THROUGH 12"

COMPACTION NOTE:

THE SOILS ENGINEER SHALL VERIFY THAT ALL COMPRESSIBLE MATERIAL HAS BEEN REMOVED PRIOR TO PLACEMENT OF FILL AND THAT ALL FILL UNDER SANITARY AND STORM SEWER LINES CONSTRUCTED ABOVE GRADE HAS BEEN COMPACTED TO 90% OF "MODIFIED PROCTOR". FILL IS TO BE PLACED IN MAXIMUM 9" LIFTS. TESTS SHALL BE TAKEN AT A MAXIMUM OF 50' INTERVALS ALONG THE ROUTE OF THE PIPE IN FILL AREAS. TEST SHALL BE TAKEN AT 2' INTERVALS VERTICALLY STARTING AT THE BOTTOM OF THE FILL AND CONTINUING THROUGH THE FILL TO THE TOP OF THE PIPE. TESTS SHALL BE TAKEN AT 6' INTERVALS HORIZONTALLY ON BOTH SIDES OF THE PIPE FOR A DISTANCE EQUAL TO THE DEPTH OF THE FILL FROM THE TOP OF PIPE TO VIRGIN SOIL. A COPY OF THESE RESULTS WILL BE SUBMITTED TO M.S.D. PRIOR TO CONSTRUCTION OF SEWER.

ATTENTION SEWER CONTRACTOR

For sewer pipe (storm, sanitary and combined) with a design grade less than one percent (1%), verification of the pipe grade will be required for each installed reach of sewer, prior to any surface restoration or installation of any surface improvements. The Contractor's field supervisor will be required to provide daily documentation verifying that the as-built pipe grade meets the design grade through the submittal of signed cut sheets to the Sewer Inspector upon request.

Field surveyed verification must be made under the direction of a licensed land surveyor or registered engineer. The Contractor will be required to remove and replace any sewer reach having an as-built grade which is flatter than the design grade by more than 0.1%. Sewers with grades greater than the design slope may be left in place, provided no other sewer grade is reduced by this variance in the as-built grade.

Sewer Inspector also reserves the right to require the Contractor to remove and replace any sewer (at any time prior to construction approval) for which the as-built grade does not comply with the grade tolerance stated in the above paragraph.

The Sewer Contractor shall be responsible for any costs associated with the field verification of the sewer grade, or removal and replacement of the sewer pipe or associated appurtenances.

THE SEAL OF STANLEY F. VISNOVSKE ON THIS DRAWING APPLIES ONLY TO THE CIVIL/SITE ENGINEERING SHOWN. IT DOES NOT APPLY, NOR IS ANY RESPONSIBILITY TAKEN FOR GEOTECHNICAL (INCLUDING BUT NOT LIMITED TO SOILS STABILITY), STRUCTURAL, HVAC, PLUMBING, ELECTRICAL, FIRE PROTECTION, TRAFFIC ENGINEERING, SURVEYING (BOUNDARY AND TOPOGRAPHIC), OR ARCHITECTURAL (BUILDING OR LANDSCAPE).

Heideman & Associates, Inc.
Consulting
Civil / Surveying
Electrical
Mechanical
Engineers
13545 Barrett Parkway Drive
Suite 200
St. Louis, Missouri 63021
Phone: 314-822-2217
Fax: 314-822-7858

Sanitary Sewer Profiles / Deatils

LOWE'S of O'FALLON

O'Fallon, Missouri

REVISIONS	
DATE	DESCRIPTION
11/24/98	RREVIEW CITY COMMENTS
12/23/98	CITY REVIEW COMMENTS
3/1/99	REVISED RET. WALL
4/6/99	REV. ENTRANCES
5/28/99	CITY REVIEW COMMENTS
7/12/99	REV. SAN. SEWER
8/6/99	CITY REVIEW COMMENTS
8/30/99	CITY REVIEW COMMENTS

DATE 11-10-98
CHECKED BY SFV
DRAWN BY DPB
SHEET NO. C-8
JOB NO. 98293