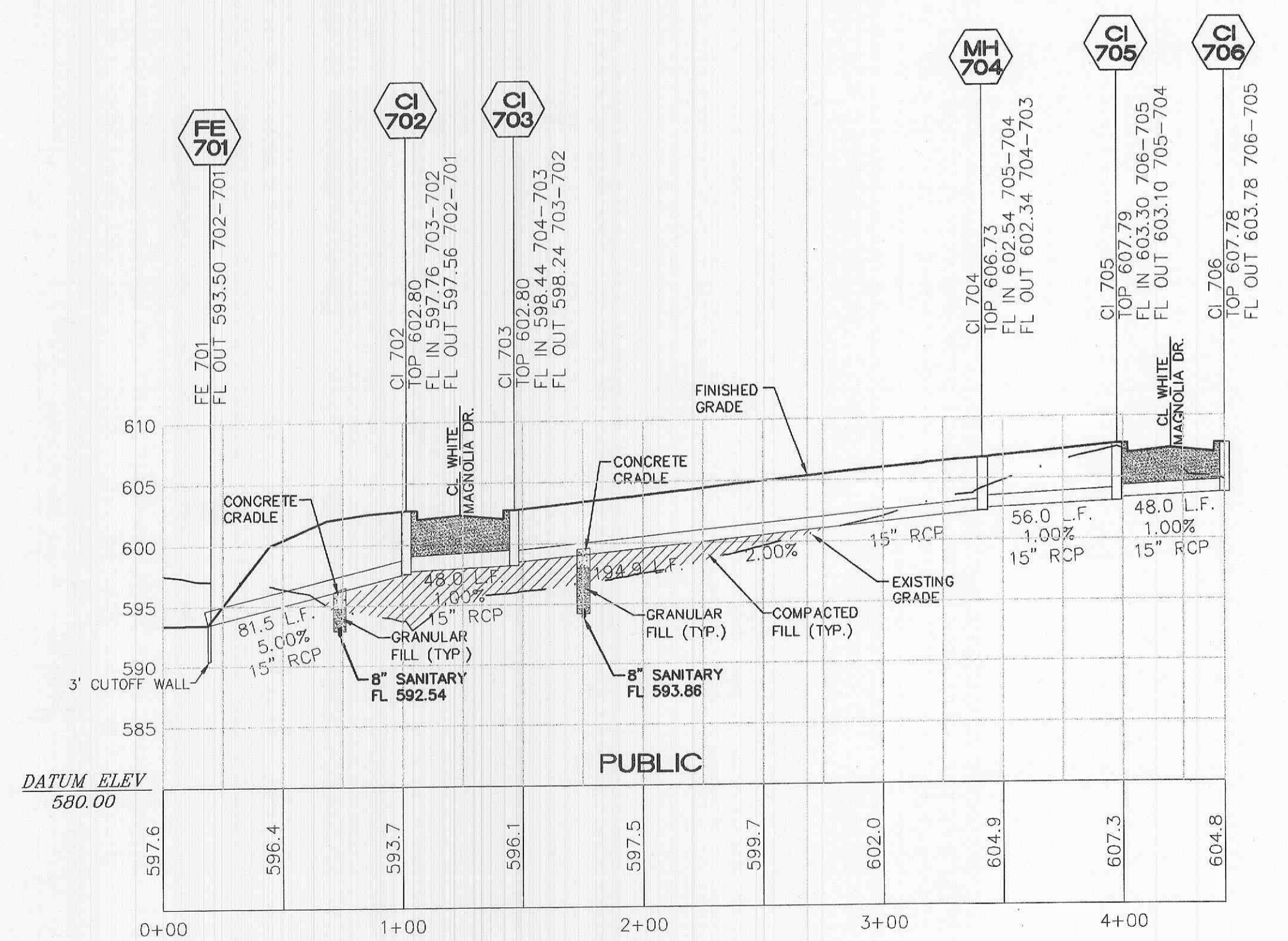
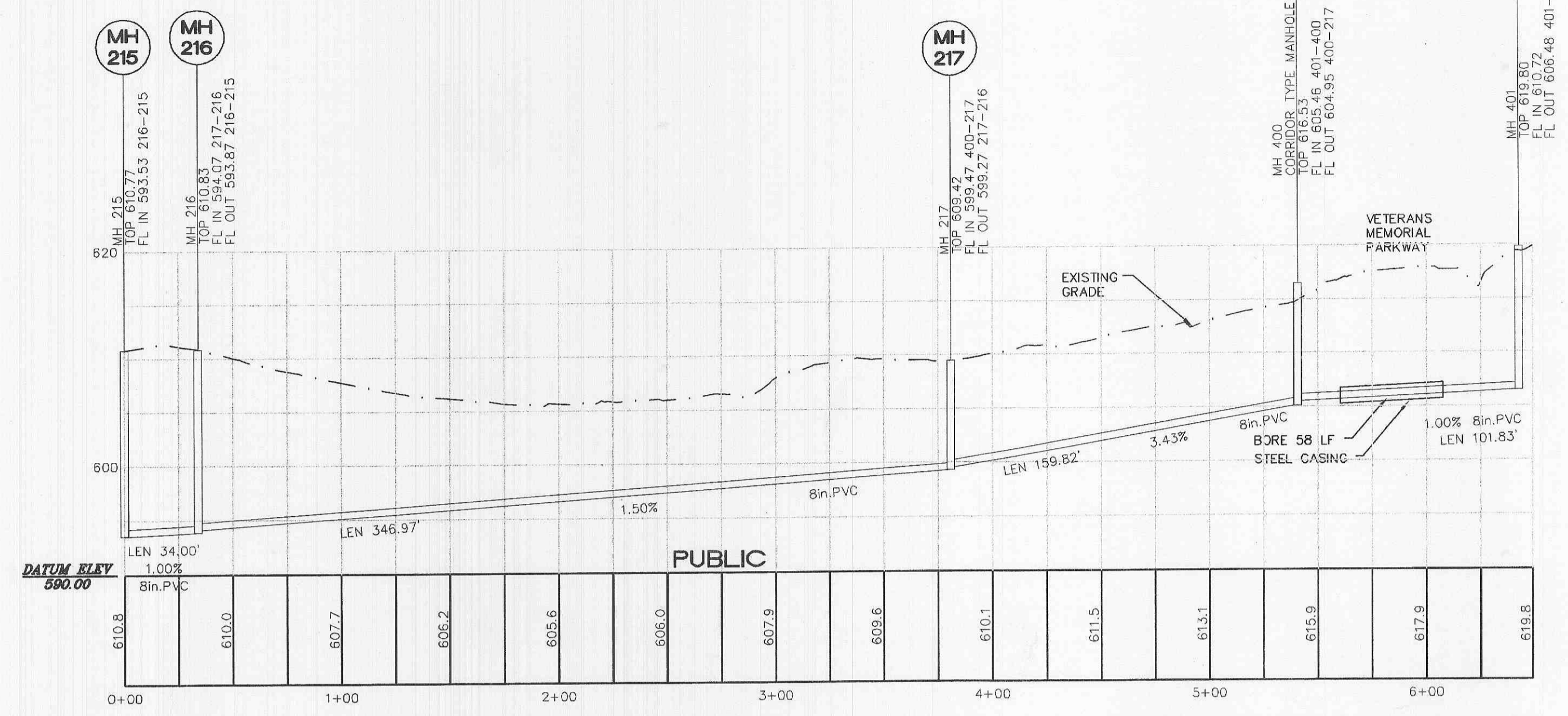
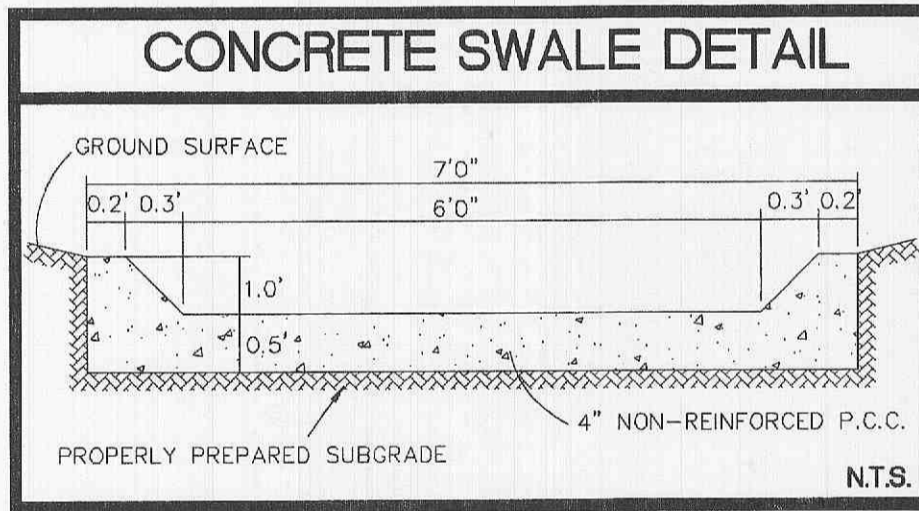
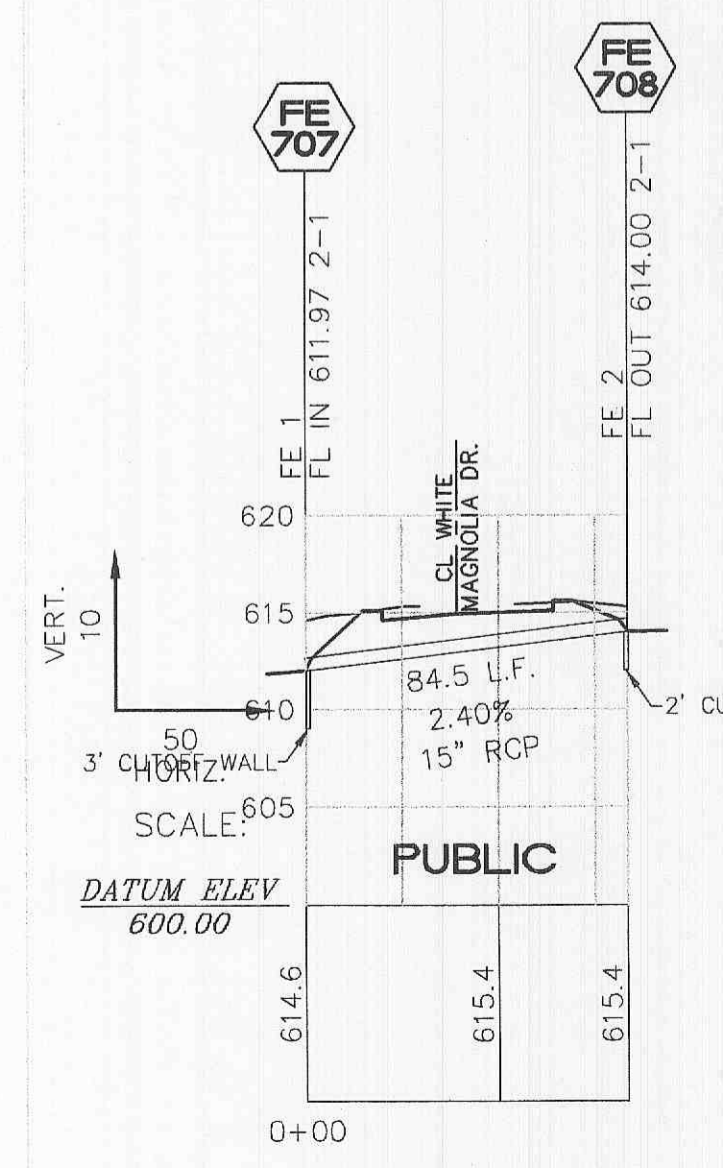


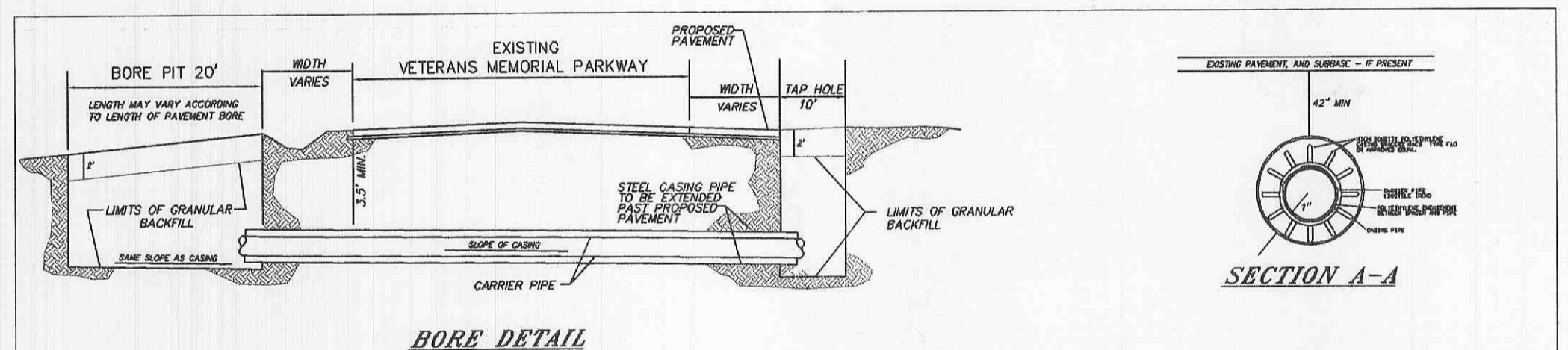
**SANITARY SEWER PROFILES**



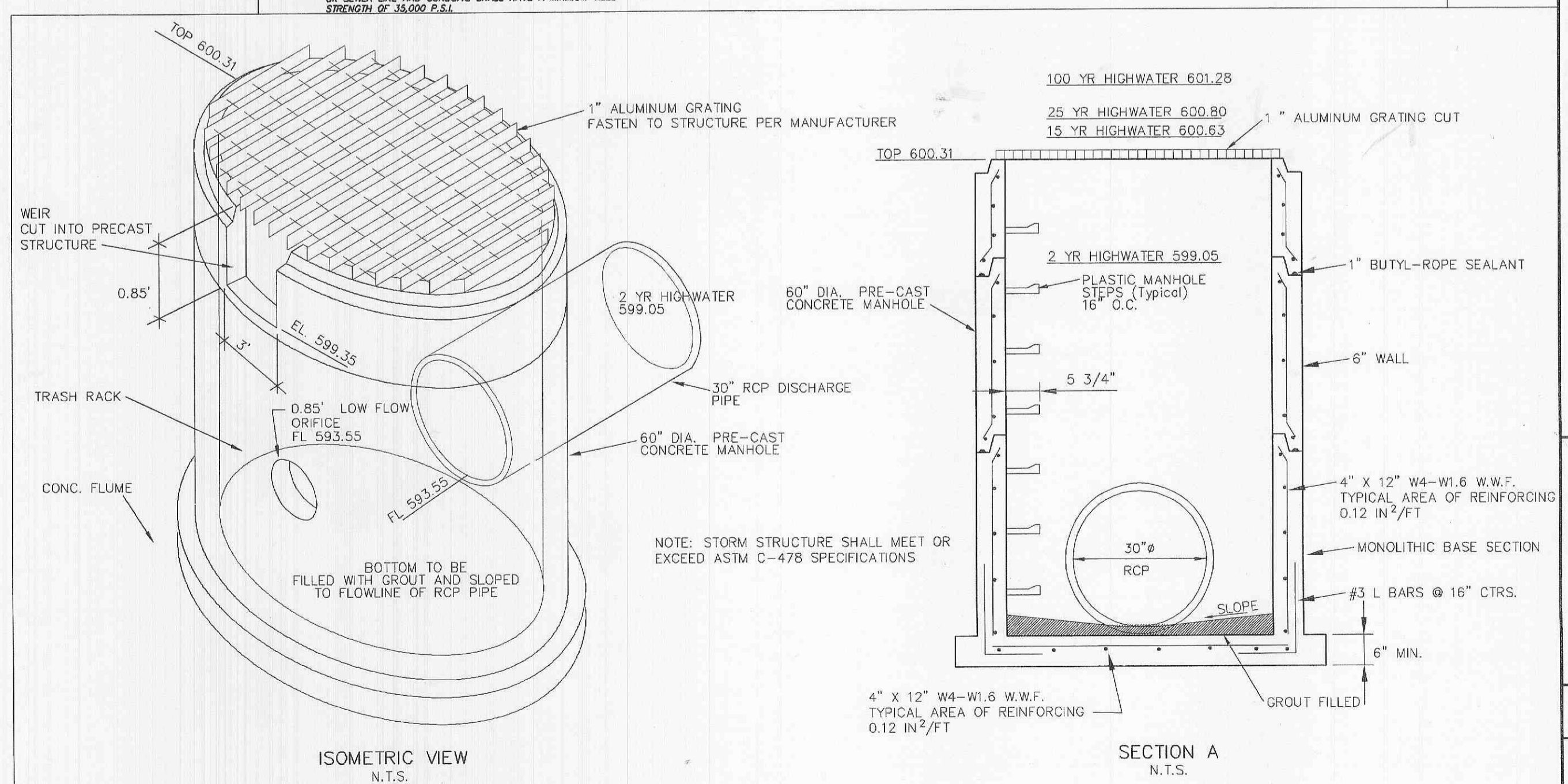
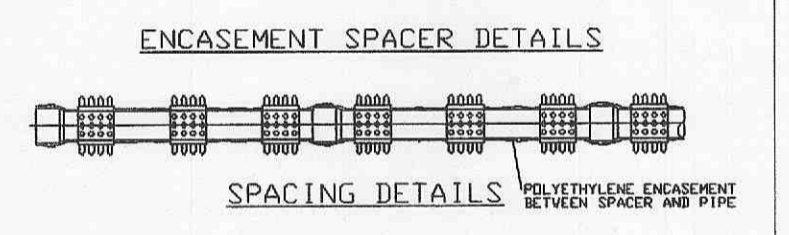
**STORM SEWER PROFILES**



Conc Swale  
Q2 = 55.91 cfs  
Depth of Flow = 11.90 feet



- DO NOT SCALE DRAWING. FOLLOW DIMENSIONS.
- INSTALLATION OF THE CASING AND CARRIER PIPES SHALL MEET THE REQUIREMENTS FOR THE CITY OF OTTAWA SPECIFICATION.
- ALL JOINTS IN THE CASING PIPE SHALL BE WELDED.
- THE PIPE TO BE PLACED IN THE BORE HOLE SHALL BE CAST-IRON PIPE EXCEPT AS REQUIRED ON THE PLANS.
- STEEL CASING PIPE USED IN THE INSTALLATION OF WATER OR SEWER LINE AND CONDUITS SHALL HAVE A MINIMUM YIELD STRENGTH OF 35,000 P.S.I.
- CARRIER PIPE SHALL BE 8" DIA.
- CASING PIPE SHALL BE 12" DIA. STEEL (0.281" WALL THICKNESS).
- NOTE: EXISTING FACILITIES ARE TO REMAIN IN USE AT ALL TIMES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL SERVICE LINES AND UTILITIES PRIOR TO CONSTRUCTION.

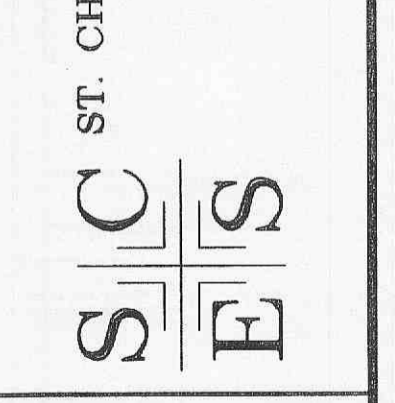


**DETENTION STRUCTURE DETAIL** P & Z FILE NO. 3603.1

10/26/04	REVISED AS PER CITY COMMENTS
12/02/04	REVISED SANITARY
05/17/05	REVISED DETENTION

**MAGNOLIA COMMERCIAL  
SANITARY AND STORM PROFILES**  
CISSELL MUELLER

ST. CHARLES ENGINEERING & SURVEYING, INC.  
801 S. FIFTH STREET, SUITE 202  
ST. CHARLES, MO 63301  
TEL: (636) 947-0607 FAX: (636) 947-2448



7-20-05  
ORDER NO. 031486  
DATE 08/26/04