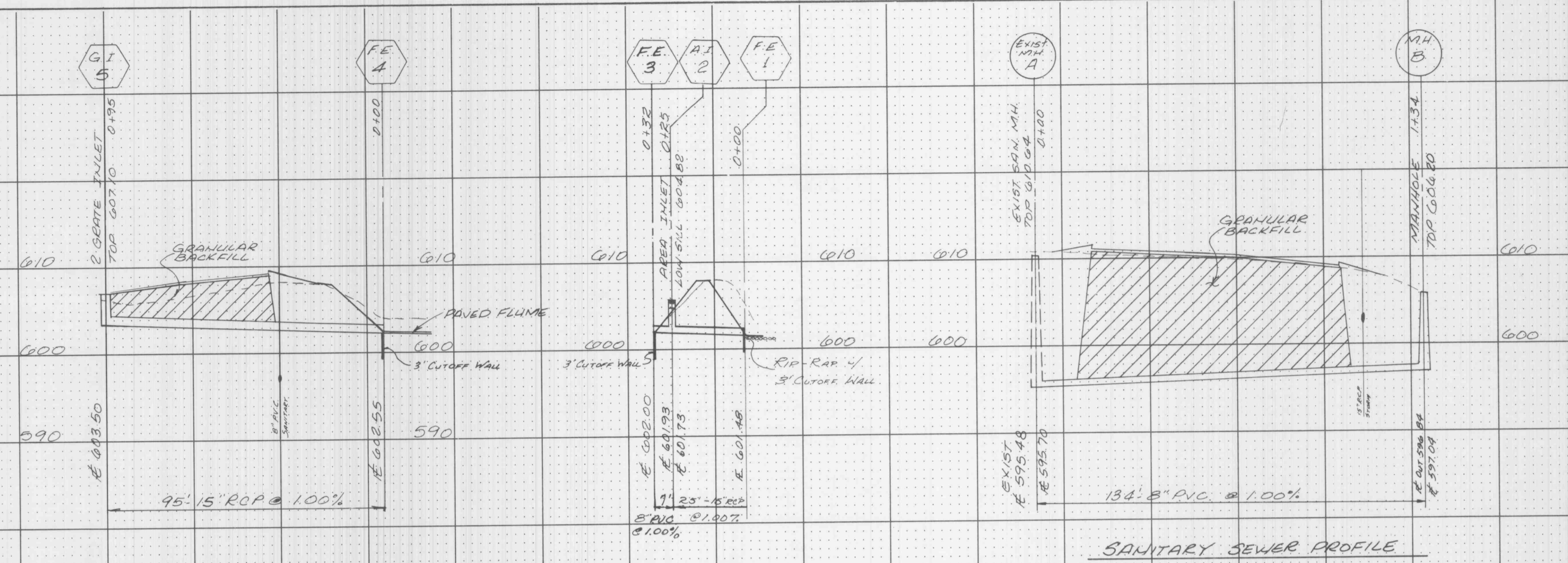
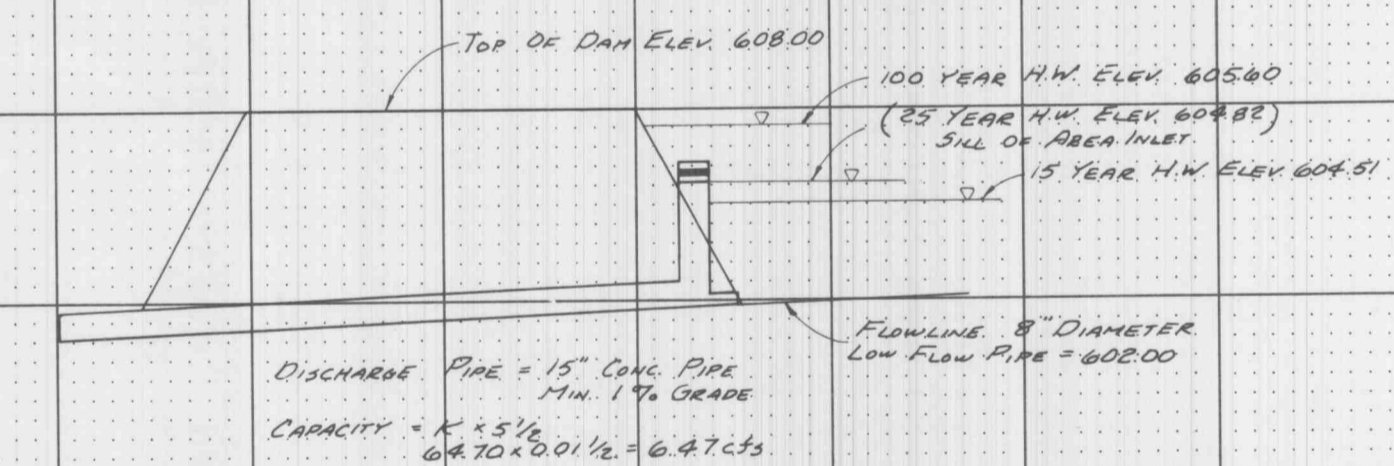
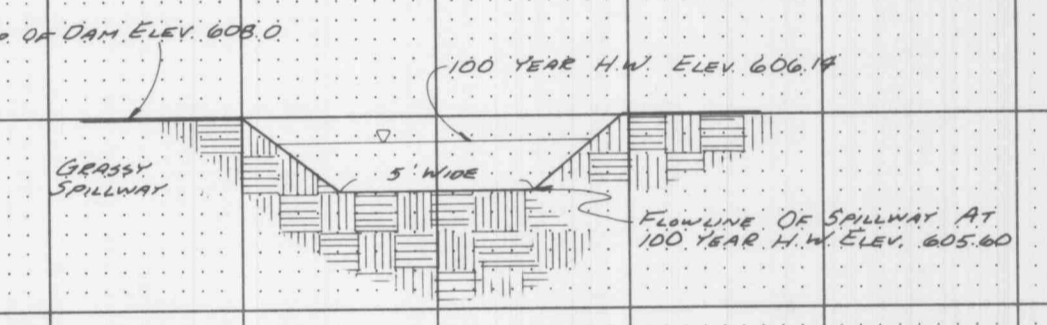


DATE	
BY	
FINAL SURVEY	
FLIPPED	
NOTE BOOK	
NO.	
AREAS CHECKED	

DATE	
BY	
ORIGINAL SURVEY	
FLIPPED	
NOTE BOOK	
NO.	
AREAS CHECKED	



**DETENTION BASIN**  
 25 YEAR / 30 MIN. STORM  
 COMMERCIAL TRACT  
 UNDEVELOPED P.I. = 2.15  
 DEVELOPED P.I. = 4.93  
 SITE AREA = 1.008 ACRES  
 DIFFERENTIAL RUNOFF  
 1.008 AC. x (4.93 - 2.15) = 2.80 cfs x 60 = 168 cfm  
 DETENTION REQUIRED:  
 2.30 cfs x 30 MIN. x 60 SEC./MIN. = 4,140 CU. FT. VOLUME  
 ALLOWABLE FLOW OUT OF BASIN:  
 Q IN = 4.93 cfs x 60 = 295.8 cfm  
 DETENTION = 230 cfs  
 Q OUT = 2.07 cfs x 60 = 124.2 cfm  
 DETENTION PROVIDED:  
 4171 SQ. FT. STORAGE PROVIDED AT ELEV. 609.76



**OUTFALL STRUCTURE**  
 STANDARD AREA  
 INLET OPEN 4 SIDES  
 SET SILL OPENING AT ELEV. 607.19  
 Q = C L H<sup>3/2</sup> (LOW FLOW BACKED)  
 QES 4.93 cfs = 30 x 1.67 x H<sup>3/2</sup>  
 4.93 = 35.01 x H<sup>3/2</sup>  
 35.01 = H<sup>3/2</sup>  
 0.124 = H<sup>3/2</sup>  
 0.124<sup>2/3</sup> = H  
 0.15 = H

