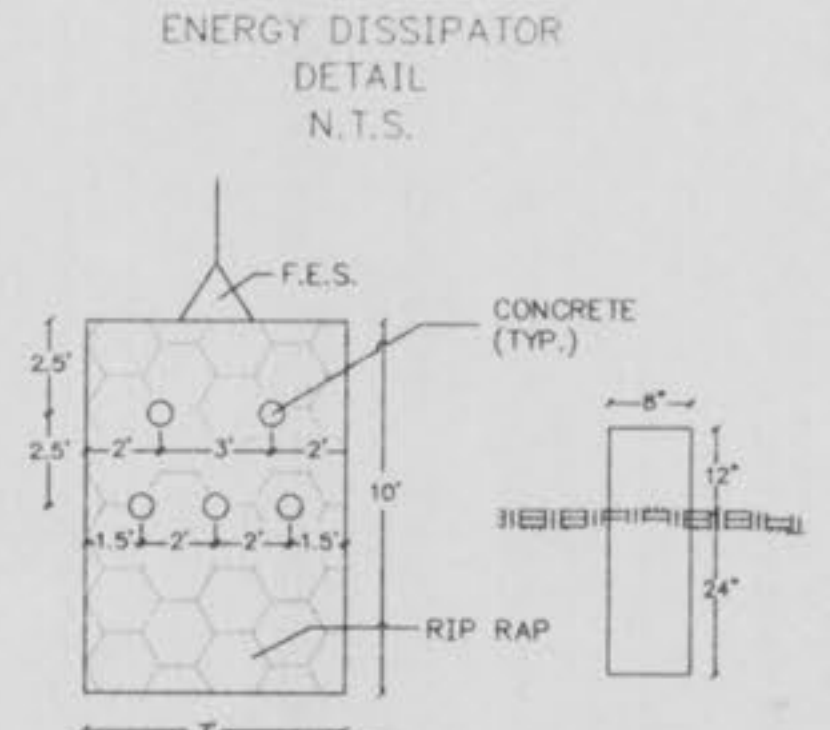
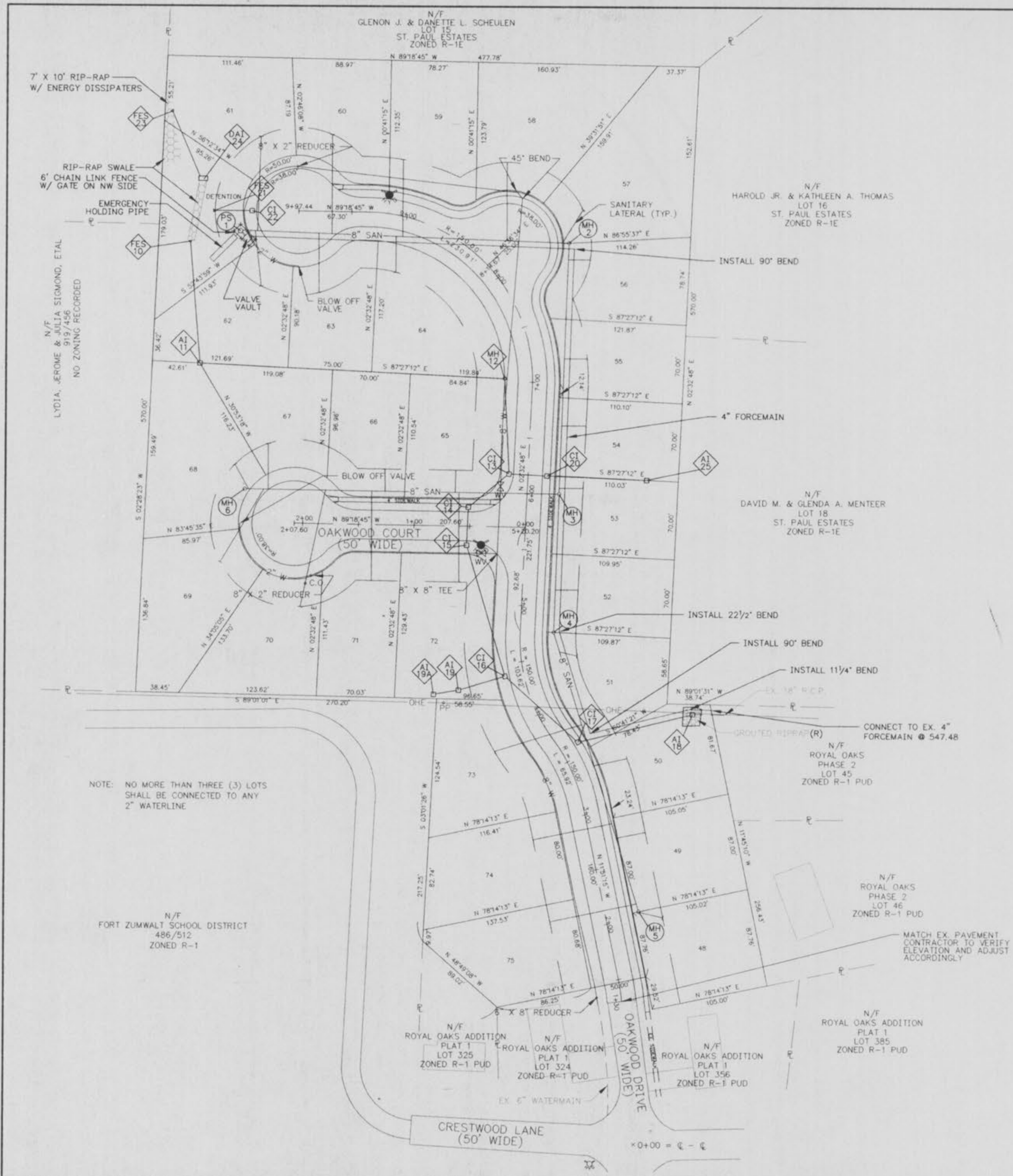


As BUILT 6/98



**LEGEND**

- FIRE HYDRANT
- EXISTING WATER
- SILTATION CONTROL
- WATER VALVE
- PROPOSED WATER
- SANITARY LATERAL



NOTE:  
 EXISTING UNDERGROUND AND OVERHEAD UTILITIES AND DRAINAGE STRUCTURES  
 HAVE BEEN PLOTTED FROM AVAILABLE INFORMATION AND THEIR LOCATIONS MUST  
 BE CONSIDERED APPROXIMATE ONLY. IT IS THE RESPONSIBILITY OF THE  
 CONTRACTOR TO NOTIFY THE UTILITY COMPANIES AND TO VERIFY THE LOCATIONS  
 OF EXISTING UTILITIES BEFORE ACTUAL CONSTRUCTION BEGINS. ANY DISCREPANCIES  
 NOTED MUST BE REPORTED TO THE ENGINEER IMMEDIATELY.

FLAT PLAN

GRADING PLAN

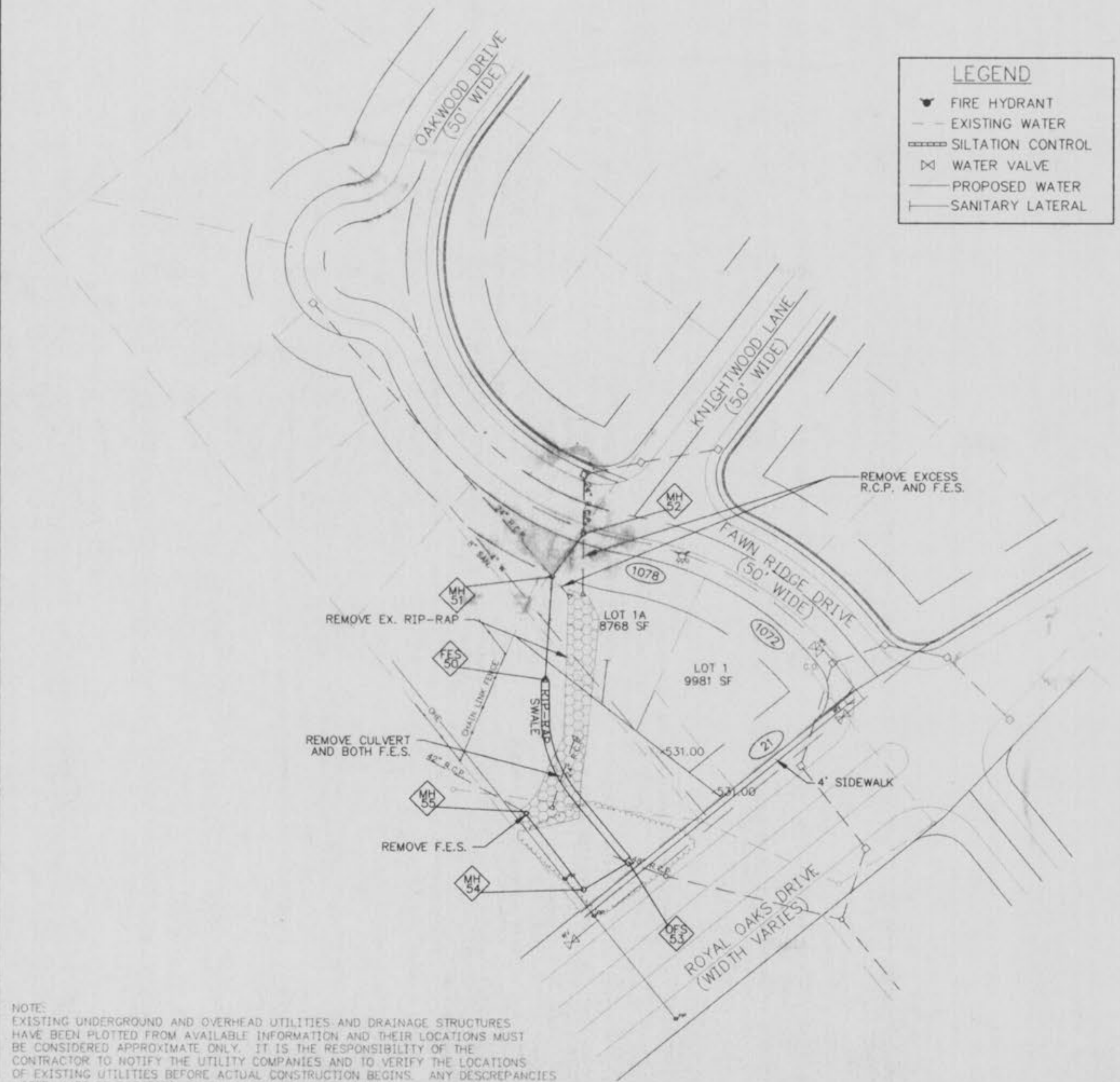
<b>GBA</b> GEORGE BUTLER ASSOCIATES, INC. <small>Engineers / Architects Kansas City, Mo. / Lenexa, Ks. / Olathe, Mo. / Wichita, Ks.</small>		DATE: NOVEMBER 1996
DESIGN BY: JUC		DRAWN BY: BMS
PROJECT NO.: 7391.06		SHEET NO. 5
ROYAL OAKS - PHASE 2 CONSTRUCTION PLANS		TOTAL SHEETS 13

*As Built 6/98*

GRADING NOTES

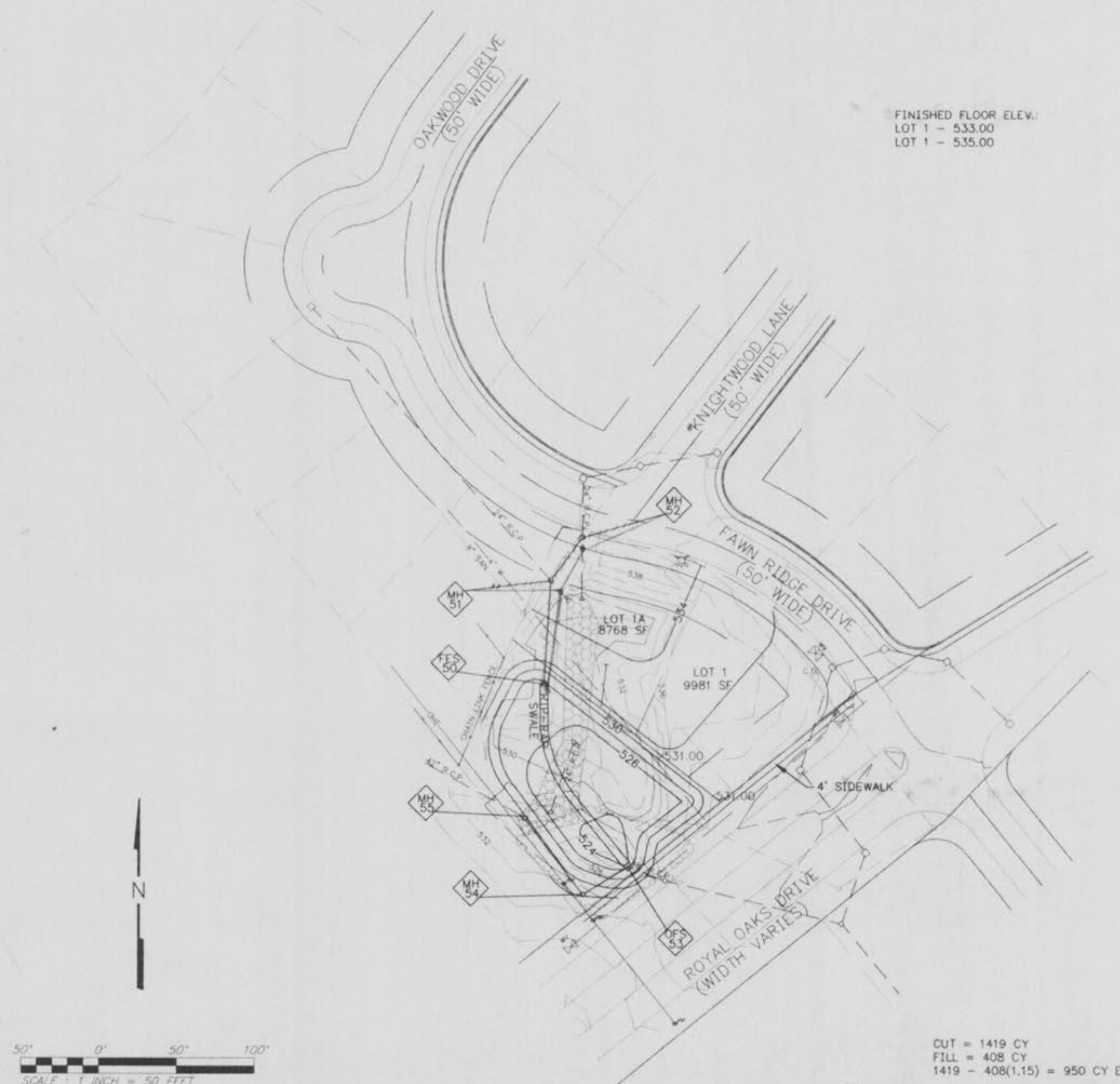
- All finish grades shall be within 0.2 feet of those shown on the plans. No slopes shall be greater than 3:1 except where shown. Following grading activities, all disturbed soil shall be seeded and mulched per specifications and erosion control shall be re-established.
- All filled areas shall be compacted to 90% maximum density as determined by the "Modified AASHTO Compaction Test", (A.S.T.M.-D-1557). All fill areas within the street shall be compacted to 95% maximum density as determined by the "Standard Proctor Test AASHTO A.S.T.M. D-698).
- All trench backfills under paved areas shall be granular backfill and shall be compacted to 95% maximum density obtained at optimum moisture content as determined by the Standard Compaction Test", (A.S.T.M. D-698). All trench backfills not under pavement may be earth material (free of large soil components and stones) and to be compacted to 95% of the obtained at optimum moisture content as determined by the Standard Compaction Test (A.S.T.M. D-698).
- Siltation control devices shall be placed as shown on the plans. Additional siltation control, if required, shall be placed at the direction of the Engineer.
- All grading must be in compliance with the Model Sediment and Erosion Control Regulations for Urban Development by St. Charles County Soil and Water Conservation District.

LEGEND	
	FIRE HYDRANT
	EXISTING WATER
	SILTATION CONTROL
	WATER VALVE
	PROPOSED WATER
	SANITARY LATERAL



NOTE:  
EXISTING UNDERGROUND AND OVERHEAD UTILITIES AND DRAINAGE STRUCTURES HAVE BEEN PLOTTED FROM AVAILABLE INFORMATION AND THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE UTILITY COMPANIES AND TO VERIFY THE LOCATIONS OF EXISTING UTILITIES BEFORE ACTUAL CONSTRUCTION BEGINS. ANY DISCREPANCIES NOTED MUST BE REPORTED TO THE ENGINEER IMMEDIATELY.

FINISHED FLOOR ELEV.:  
LOT 1 - 533.00  
LOT 1 - 535.00

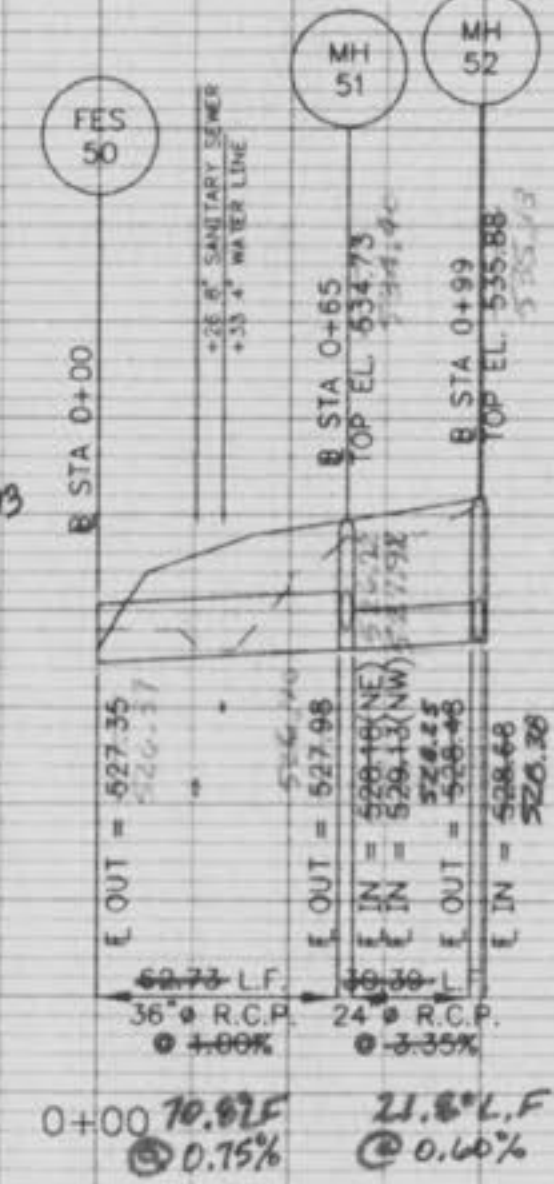
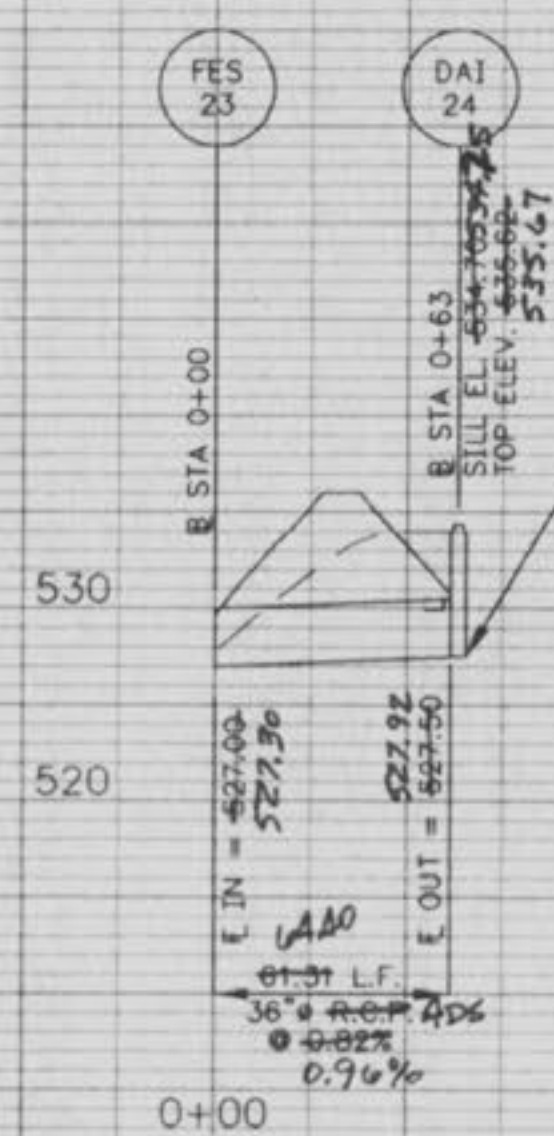
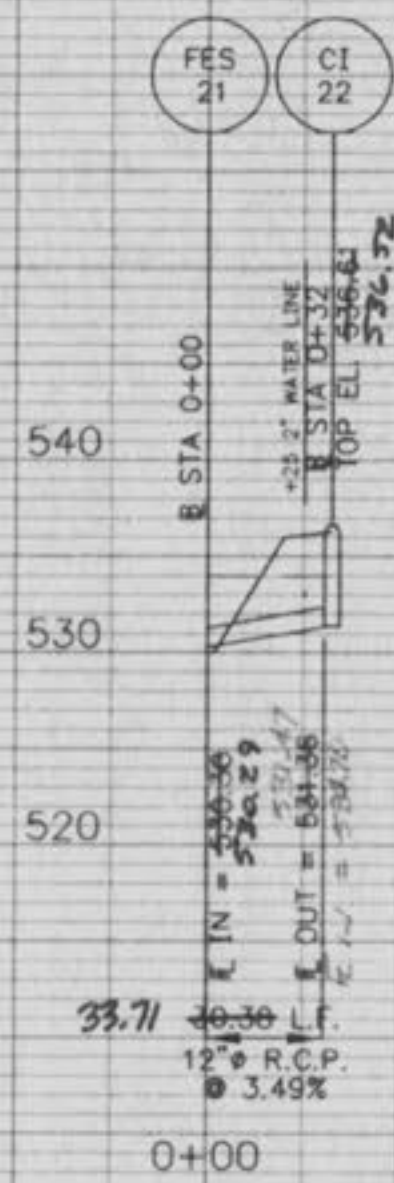
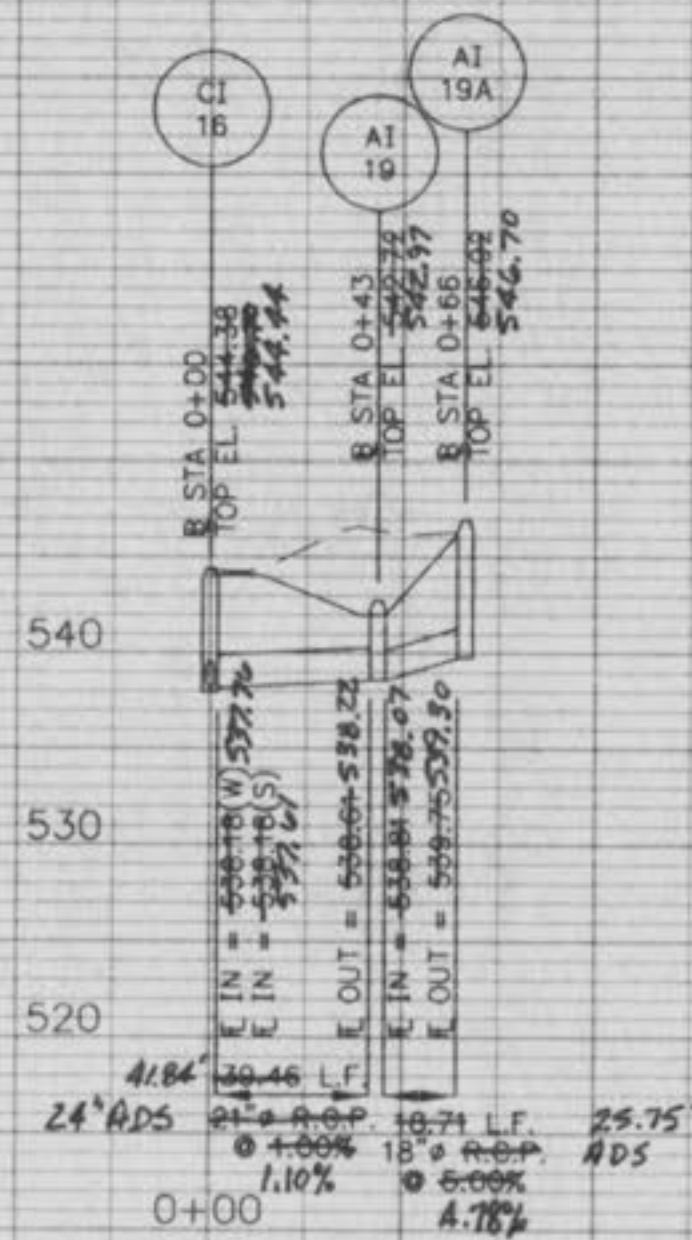


SCALE: 1 INCH = 50 FEET

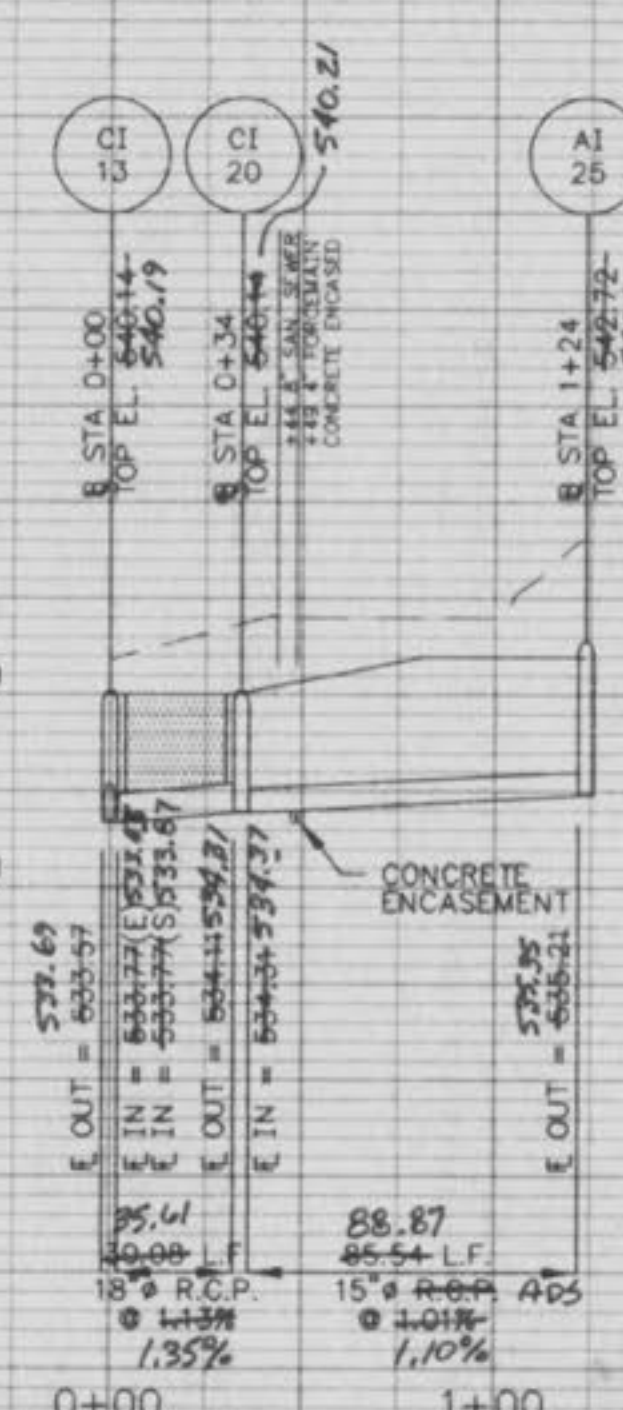
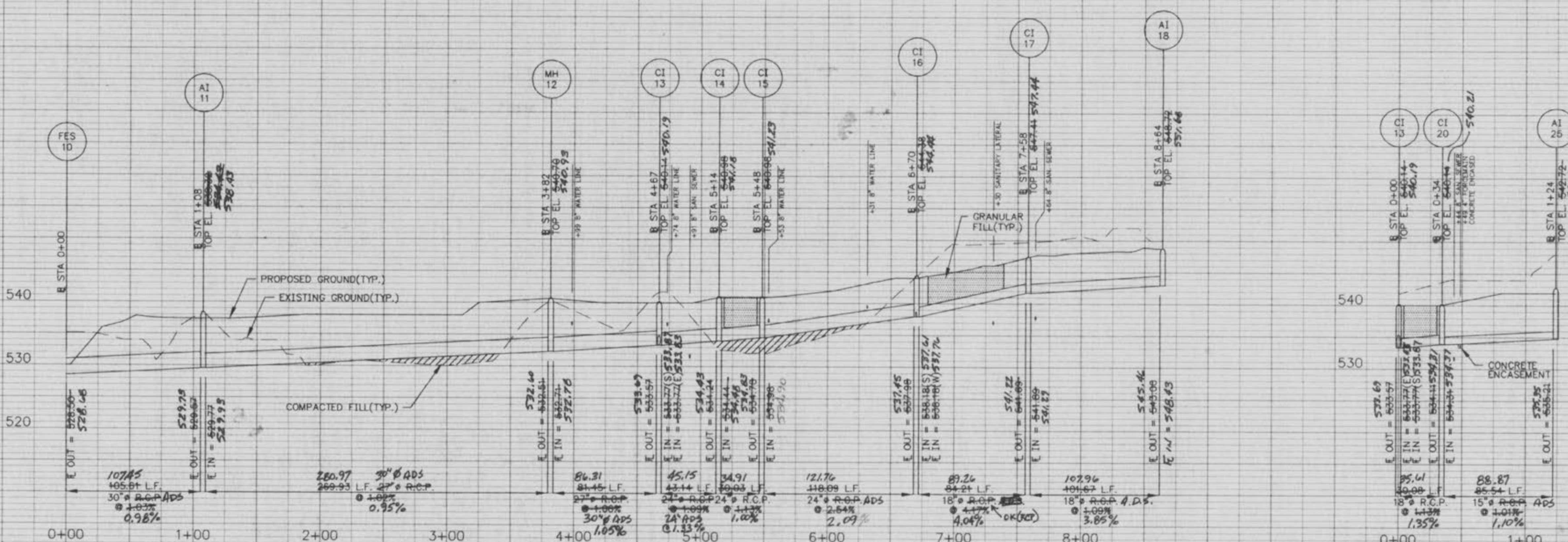
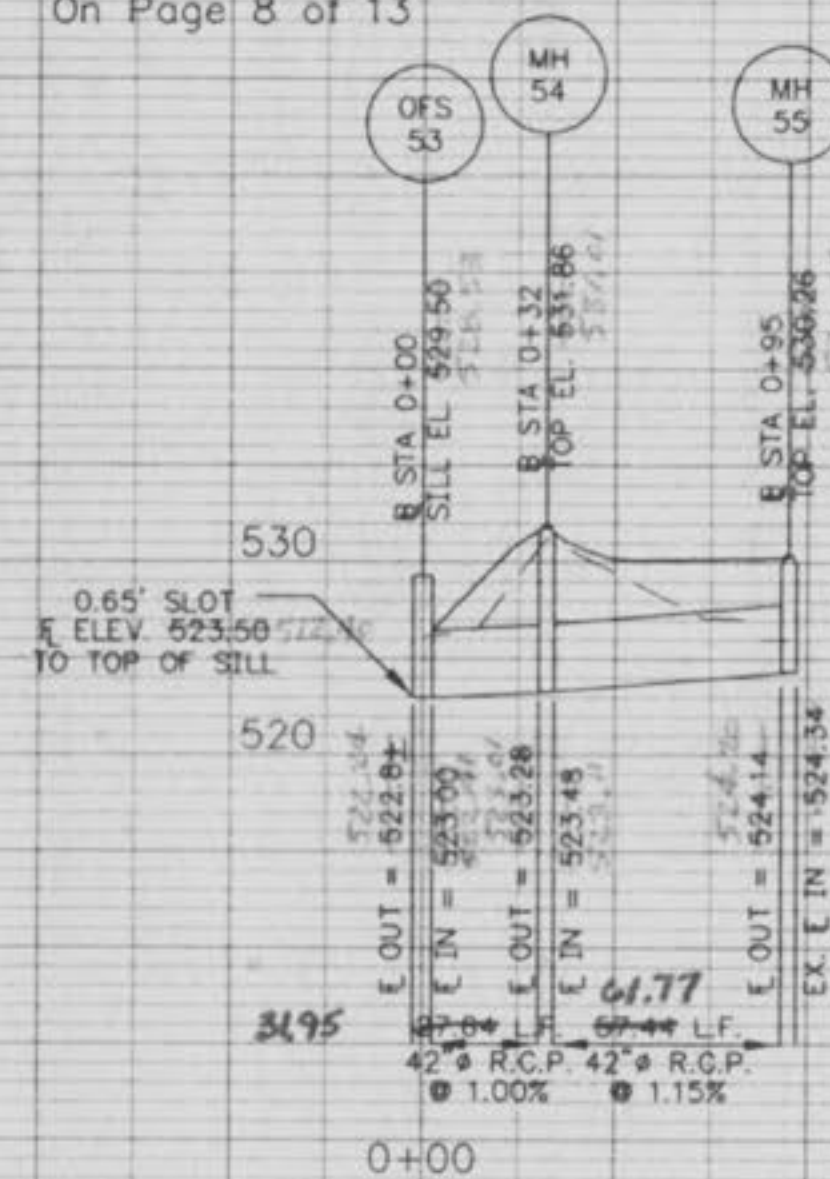
CUT = 1419 CY  
FILL = 408 CY  
1419 - 408(1.15) = 950 CY EXCESS CUT

*As Built 5/98*

As Built 6/98

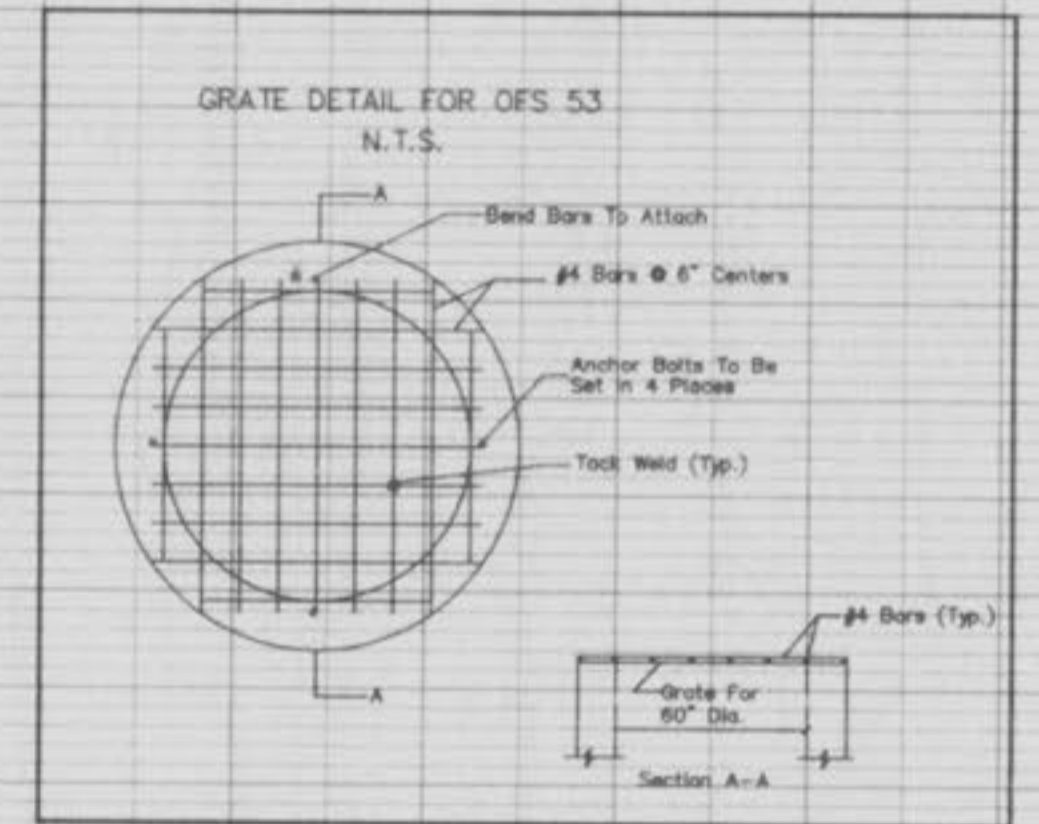
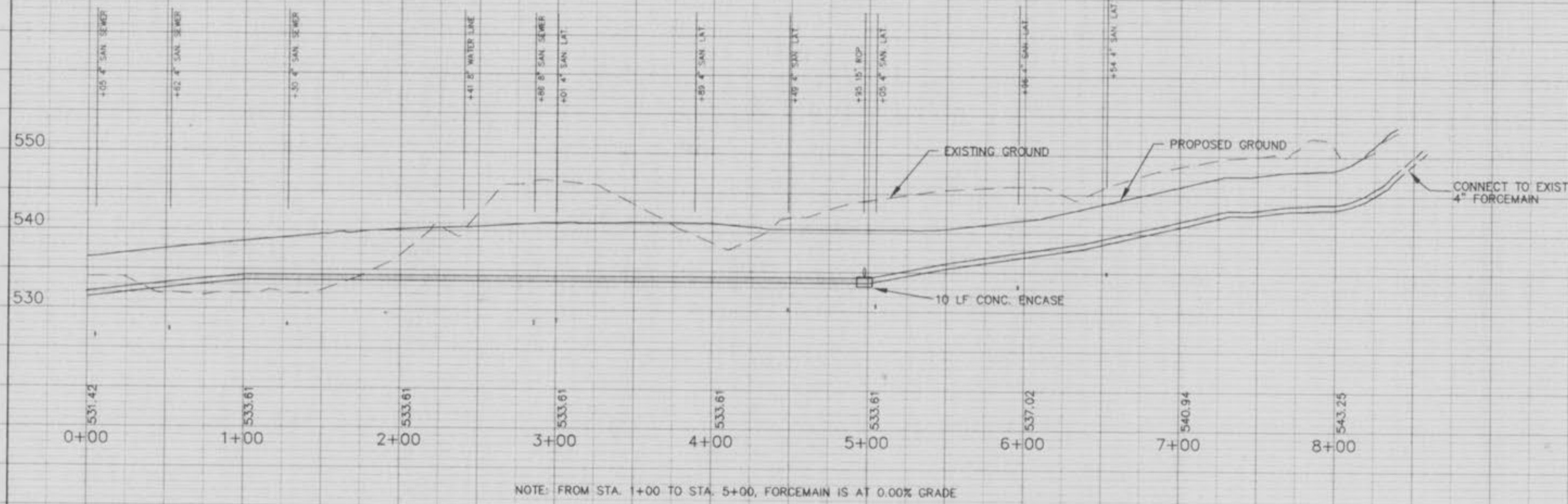


See OFS 53 Detail  
 On Page 8 of 13



As Built 6/98

**FORCEMAIN PROFILE**



**SANITARY SEWER PROFILES**

