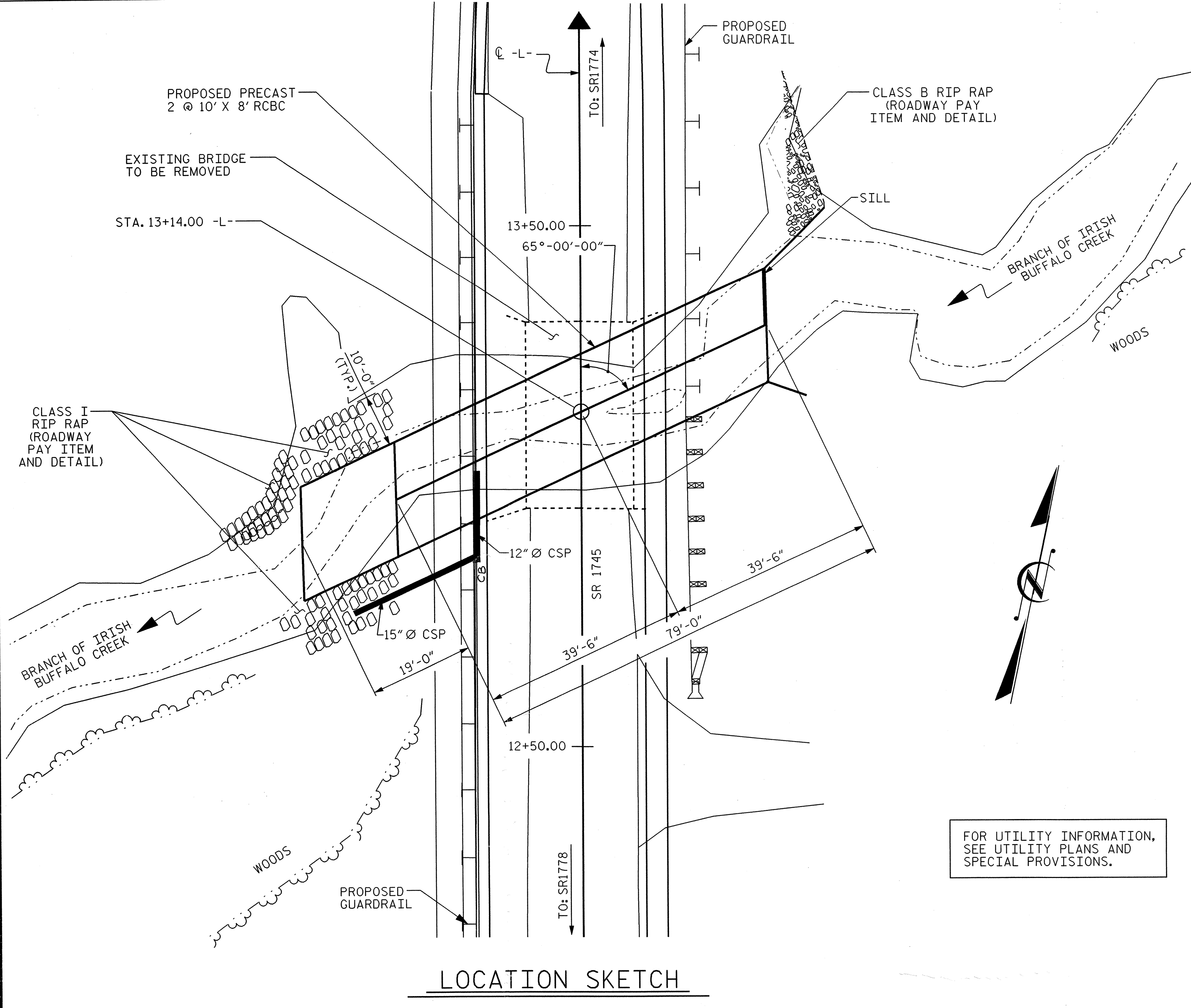
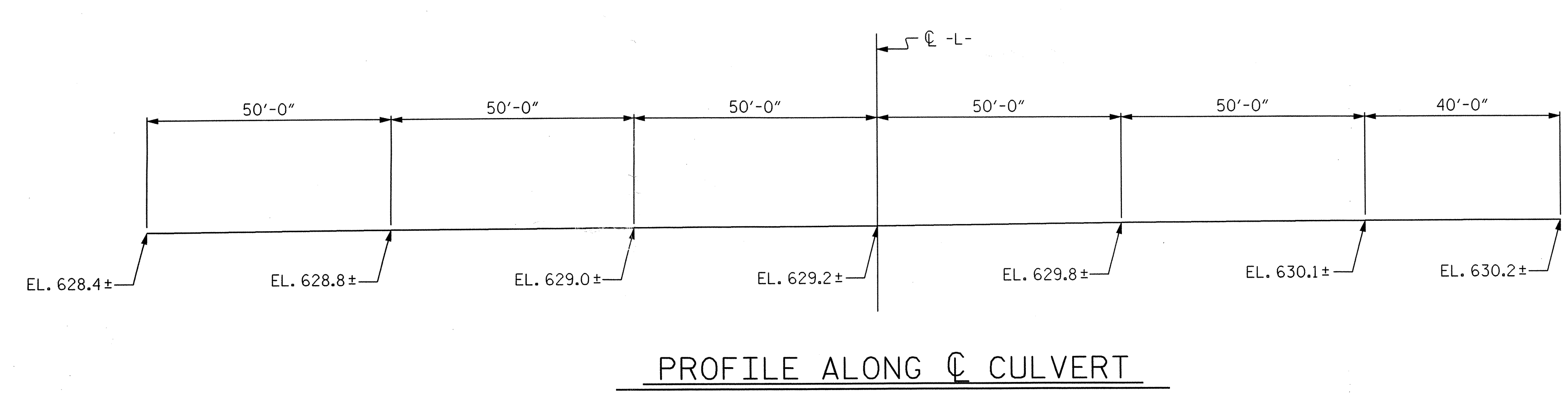


BENCH MARK: TBM #2 R. R. SPIKE IN 20" OAK TREE LOCATED 130.08 FT. RT. OF STA. 12+26.51 -L-, ELEV. 639.35 FT.

F. A. PROJ. NO. BRSTP - 1745 (3)



LOCATION SKETCH



PROFILE ALONG CULVERT

DRAWN BY : K. P. SEDAI DATE : 4/26/02
 CHECKED BY : T. A. WALTER DATE : 5/13/02

NOTES

- ASSUMED LIVE LOAD = HS20 OR ALTERNATE LOADING.
- FOR OTHER STANDARD DATA AND NOTES SEE STANDARD NOTES SHEET.
- 3" Ø WEEP HOLES INDICATED TO BE IN ACCORDANCE WITH THE SPECIFICATIONS.
- THE RESIDENT ENGINEER SHALL CHECK THE LENGTH OF CULVERT BEFORE STAKING IT OUT TO MAKE CERTAIN THAT IT WILL PROPERLY TAKE CARE OF THE FILL.
- DIMENSIONS FOR WING LAYOUT AS WELL AS ADDITIONAL REINFORCING STEEL EMBEDDED IN BARREL ARE SHOWN ON WING SHEET.
- THE CONCRETE FOR THE PRECAST UNITS SHALL ATTAIN A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS OF 5000 P.S.I.. THE CONCRETE FOR THE HEADWALLS, LEVELING PAD, WINGS AND END CURTAIN WALLS SHALL BE CLASS "A" CONCRETE AS PER THE STANDARD SPECIFICATIONS.
- CAST-IN-PLACE CONCRETE SHALL BE POURED IN THE FOLLOWING ORDER:
 1. LEVELING PAD.
 2. WING FOOTINGS, AND CURTAIN WALL.
 3. HEADWALLS, WING WALLS.
- ALL PRECAST UNITS SHALL BE PLACED PRIOR TO POURING THE WINGS, END CURTAIN WALLS AND HEADWALLS. THE EXTERIOR PRECAST UNITS AND LEVELING PAD SHALL BE UNDERMINED TO PROVIDE FOR THE WING FOOTINGS TO BE POURED TO THE DEPTH AND DIMENSIONS AS SHOWN ON THIS PLAN SHEET.
- FOUNDATION CONDITIONING MATERIAL SHALL HAVE A THICKNESS OF AT LEAST 1'-0" BELOW THE BOTTOM OF THE LEVELING PAD. THE MATERIAL SHALL BE FORMED AND SCREED TO THE PROPER ELEVATION AT LEAST 1'-0" BEYOND THE SIDES OF THE LEVELING PAD.
- THE PRECAST UNITS SHALL BE CAREFULLY POSITIONED ON THE PREPARED LEVELING PAD, FEMALE END UPGRADE WITH THE MALE END FULLY INSERTED AND EACH JOINT CHECKED FOR ALIGNMENT PRIOR TO JACKING THE UNIT INTO PLACE. SATISFACTORY FITTING AND PROPER GRADE SHALL BE MAINTAINED AS THE WORK PROCEEDS.
- THE CONTRACTOR SHALL PROVIDE INDEPENDENT ASSURANCE SAMPLES OF REINFORCING STEEL AS FOLLOWS: FOR PROJECTS REQUIRING UP TO 400 TONS OF REINFORCING STEEL, ONE 30 INCH SAMPLE OF EACH SIZE BAR USED, AND FOR PROJECTS REQUIRING OVER 400 TONS OF REINFORCING STEEL, TWO 30 INCH SAMPLES OF EACH SIZE BAR USED. THE BARS FROM WHICH THE SAMPLES ARE TAKEN MUST THEN BE SPliced WITH REPLACEMENT BARS OF THE SIZE AND LENGTH OF THE SAMPLE, PLUS A MINIMUM LAP SPLICE OF THIRTY BAR DIAMETERS.
- FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.
- FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS .
- FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.

- WHEN ANY PRECAST UNIT IS DAMAGED DURING HANDLING, THE ENGINEER AT HIS DISCRETION SHALL REJECT THE UNIT AS BEING UNFIT FOR INSTALLATION AND THE CONTRACTOR SHALL REMOVE SUCH REJECTED UNIT FROM THE PROJECT. MINOR DAMAGE TO THE UNIT MAY BE REPAIRED BY THE CONTRACTOR WHEN PERMITTED BY THE ENGINEER.
- CARE SHALL BE TAKEN DURING BACKFILL AND COMPACTION OPERATION TO MAINTAIN ALIGNMENT AND PREVENT DAMAGE TO THE JOINTS. UNITS WHICH BECOME MISALIGNED, SHOW EXCESSIVE SETTLEMENT, OR HAVE OTHERWISE BEEN DAMAGED BY THE CONTRACTOR'S OPERATION SHALL AT THE DISCRETION OF THE ENGINEER BE REMOVED AND REPLACED BY THE CONTRACTOR AT NO COST TO THE DEPARTMENT OF TRANSPORTATION.
- CONCRETE CHAMFERS ON EXTERIOR LONGITUDINAL EDGES OF THE PRECAST UNITS MAY BE AS PER THE FABRICATORS RECOMMENDATION, HOWEVER ALL WORKMANSHIP SHALL PROVIDE CONCRETE COVER OVER THE WELDED WIRE FABRIC AS SPECIFIED ON THE PLANS AND THE CONCRETE CHAMFERS CHOSEN SHALL IN NO WAY FUNCTIONALLY LESSEN THE DESIGN SHOWN ON THE PLANS.
- DESIGN EARTH COVER = 2.70 FT.
- FOR PRECAST REINFORCED CONCRETE BOX CULVERT, SEE SPECIAL PROVISIONS.
- THE EXISTING BRIDGE CONSISTING OF 8 LINES OF W16 X 36 I BEAMS ON 2'-7" CTS. & TIMBER DECK SUPPORTED BY TIMBER CAP & PILES W/TIMBER BULKHEADS SHALL BE REMOVED. THE EXISTING BRIDGE IS PRESENTLY POSTED BELOW THE LEGAL LOAD LIMIT. SHOULD THE STRUCTURAL INTEGRITY OF THE BRIDGE FURTHER DETERIORATE, THIS LOAD LIMITATION MAY BE REDUCED AS FOUND NECESSARY DURING THE LIFE OF THE PROJECT. SEE SPECIAL PROVISION FOR REMOVAL OF EXISTING STRUCTURE AT STATION 13+14.00 -L-.
- INASMUCH AS THE PAINT SYSTEM ON THE EXISTING STRUCTURAL STEEL CONTAINS LEAD, THE CONTRACTOR'S ATTENTION IS DIRECTED TO ARTICLE 107-1 OF THE STANDARD SPECIFICATIONS. ANY COSTS RESULTING FROM COMPLIANCE WITH APPLICABLE STATE OR FEDERAL REGULATIONS PERTAINING TO HANDLING OF MATERIALS CONTAINING LEAD BASED PAINT SHALL BE INCLUDED IN THE BID PRICE FOR "REMOVAL OF EXISTING STRUCTURE AT STATION 13+14.00 -L-".
- FOR CULVERT DIVERSION DETAILS AND PAY ITEMS, SEE EROSION CONTROL PLANS.
- THE CONTRACTOR MAY CHOOSE TO CONSTRUCT A CAST-IN-PLACE CULVERT IN ACCORDANCE WITH THE INCLUDED PLANS AT NO ADDITIONAL COST TO THE DEPARTMENT. THE CONTRACT REQUIREMENTS WITH RESPECT TO CONSTRUCTION STAGING AND TIME SHALL BE SATISFIED REGARDLESS OF WHETHER A PRECAST OR CAST-IN-PLACE CULVERT IS CONSTRUCTED.

TOTAL BILL OF MATERIAL

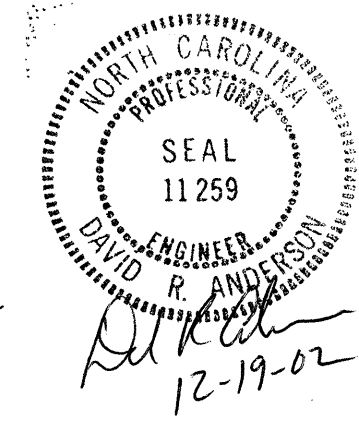
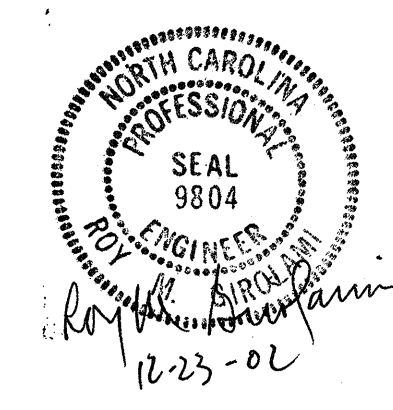
PRECAST REINFORCED CONCRETE BOX CULVERT @ STA. 13+14.00 -L-	LUMP SUM
CULVERT EXCAVATION	LUMP SUM
FOUNDATION CONDITIONING MATERIAL BOX CULVERT	TONS 166
REMOVAL OF EXISTING STRUCTURE	LUMP SUM

PROJECT NO. B-3424
 CABARRUS COUNTY
 STATION: 13+14.00 -L-

SHEET 1 OF 11 REPLACE BRIDGE #264

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

PRECAST DOUBLE
 10'-0" X 8'-0"
 CONCRETE BOX CULVERT



REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			C-1
2			4			TOTAL SHEETS 11