



**FOUNDATION LAYOUT**

(DIMENSIONS LOCATING PILES ARE TO THE CENTERLINE OF THE PILE AT THE BOTTOM OF THE CAP)

**NOTES:**

THE LOCATION OF THE CONSTRUCTION JOINT IN THE DRILLED PIERS AT BENT No. 2 ARE BASED ON AN APPROXIMATE GROUND LINE ELEVATION. IF THE CONSTRUCTION JOINT IS ABOVE THE ACTUAL GROUND ELEVATION, THE CONTRACTOR SHALL PLACE THE CONSTRUCTION JOINT 1 FT. BELOW THE GROUND LINE.

THE DRILLED PIERS AT BENT No. 1 AND BENT No. 2 HAVE BEEN DESIGNED FOR BOTH SKIN FRICTION AND TIP BEARING. THE REQUIRED TIP BEARING CAPACITY IS 30 TSF.

THE REQUIRED TIP BEARING CAPACITY AT BENT No. 1 AND BENT No. 2 SHALL BE VERIFIED.

DRILLED PIERS FOR BENT No. 1 AND BENT No. 2 HAVE BEEN DESIGNED FOR AN APPLIED LOAD OF 318 TONS EACH AT THE TOP OF THE COLUMN.

PERMANENT STEEL CASING IS REQUIRED FOR DRILLED PIERS AT BENT No. 1 AND BENT No. 2. THE CASING SHALL NOT EXTEND BELOW ELEVATION 732.0 FT. FOR BENT No. 1 AND 738.0 FT. FOR BENT No. 2 WITHOUT THE ENGINEER'S PERMISSION.

FOR PERMANENT STEEL CASING, SEE SPECIAL PROVISION FOR DRILLED PIERS.

DRILLED PIERS AT BENT No. 1 SHALL EXTEND TO AN ELEVATION NO HIGHER THAN 726.0 FT. (LEFT), 724.0 FT. (CENTER), AND 722.0 FT. (RIGHT) RESPECTIVELY, AND SATISFY THE REQUIRED TIP BEARING CAPACITY.

DRILLED PIERS AT BENT No. 2 SHALL EXTEND TO AN ELEVATION NO HIGHER THAN 731.0 FT. (LEFT), 726.0 FT. (CENTER), AND 724.0 FT. (RIGHT) RESPECTIVELY, AND SATISFY THE REQUIRED TIP BEARING CAPACITY.

THE SCOUR CRITICAL ELEVATION FOR BENT No. 1 IS ELEVATION 731.0 FT. AND THE SCOUR CRITICAL ELEVATION FOR BENT No. 2 IS ELEVATION 737.0 FT. THE SCOUR CRITICAL ELEVATIONS ARE FOR USE BY MAINTENANCE FORCES TO MONITOR POSSIBLE SCOUR PROBLEMS DURING THE LIFE OF THE STRUCTURE.

SPT TESTING IS NOT REQUIRED TO DETERMINE THE TIP BEARING CAPACITY OF THE DRILLED PIERS AT BENT No. 1 AND BENT No. 2.

SLURRY CONSTRUCTION SHALL NOT BE USED FOR THIS PROJECT.

CSL TUBES ARE REQUIRED AND CSL TESTING MAY BE REQUIRED FOR THE DRILLED PIERS AT BENT No. 1 AND BENT No. 2. SEE SPECIAL PROVISION FOR CROSSHOLE SONIC LOGGING.

SID INSPECTIONS ARE NOT REQUIRED TO DETERMINE THE BOTTOM CLEANLINESS OF THE DRILLED PIERS AT BENT No. 1 AND BENT No. 2.

FOR DRILLED PIERS, SEE SPECIAL PROVISIONS.

PILES FOR END BENT No. 1 AND END BENT No. 2 SHALL BE DRIVEN TO A MINIMUM BEARING CAPACITY OF 60 TONS EACH.

WHEN DRIVING PILES, THE MAXIMUM BLOW COUNT SHALL NOT BE EXCEEDED.

(CONTINUED ON SHEET 3 OF 3)

DRAWN BY : P.C. BREWER DATE : 3/11/04  
 CHECKED BY : S.B. WILLIAMS DATE : 7/2/04

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PROJECT NO. R-3427  
YADKIN COUNTY  
 STATION: 236+73.00 -L-

SHEET 2 OF 3

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH  
**GENERAL DRAWING**  
 BRIDGE OVER SOUTH DEEP  
 CREEK ON US 601 BETWEEN  
 SR 1733 AND SR 1150

REVISIONS						SHEET NO.	
NO.	BY:	DATE:	NO.	BY:	DATE:	S-2	
1			3			TOTAL SHEETS	31
2			4				