

FOUNDATION LAYOUT

DIMENSIONS LOCATING END BENT PILES AND BENT DRILLED PIERS ARE SHOWN TO CENTERLINE OF PILES AND DRILLED PIERS.

PILES AT END BENTS 1 AND 2 ARE HP 12 x 53 STEEL PILES.

FOUNDATION NOTES:

THE DRILLED PIERS AT BENT 1 HAVE BEEN DESIGNED FOR SKIN FRICTION AND TIP BEARING. THE REQUIRED TIP BEARING CAPACITY IS 25 TSF.

DRILLED PIERS AT BENT 1 SHALL EXTEND TO AN ELEVATION NO HIGHER THAN 222.5 FEET AND SATISFY THE REQUIRED TIP BEARING CAPACITY.

DRILLED PIERS FOR BENT 1 HAVE BEEN DESIGNED FOR AN APPLIED LOAD OF 210 TONS EACH AT THE TOP OF THE COLUMN.

PERMANENT STEEL CASING IS REQUIRED FOR DRILLED PIERS AT BENT 1 AND THE CASING SHALL NOT EXTEND BELOW ELEVATION 231.0 FT WITHOUT THE ENGINEER'S PERMISSION.

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

THE SCOUR CRITICAL ELEVATION FOR BENT 1 IS ELEVATION 235.0 FEET. THE SCOUR CRITICAL ELEVATIONS ARE FOR USE BY MAINTENANCE FORCES TO MONITOR POSSIBLE SCOUR PROBLEMS DURING THE LIFE OF THE STRUCTURE.

FOR DRILLED PIERS, SEE SPECIAL PROVISIONS.

SPT TESTING IS NOT REQUIRED TO DETERMINE THE TIP BEARING CAPACITY OF THE DRILLED PIERS AT BENT 1.

SLURRY CONSTRUCTION SHALL NOT BE USED FOR THIS PROJECT.

SID INSPECTIONS ARE NOT REQUIRED TO DETERMINE THE BOTTOM CLEANLINESS OF THE DRILLED PIERS AT BENT 1.

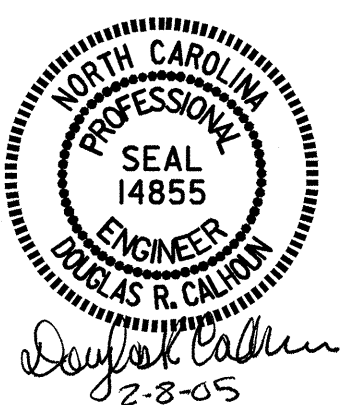
CSL TUBES ARE REQUIRED AND CSL TESTING MAY BE REQUIRED FOR THE DRILLED PIERS AT BENT 1. SEE SPECIAL PROVISION FOR CROSSHOLE SONIC LOGGING.

PILES AT END BENTS 1 & 2 SHALL BE DRIVEN TO A MINIMUM BEARING CAPACITY OF 50 TONS EACH.

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

THE REQUIRED TIP BEARING CAPACITY AT BENT 1 SHALL BE VERIFIED.

DRILLED PIERS WILL BE CONSTRUCTED ON TRIASSIC ROCK WHICH HAS A HIGH POTENTIAL TO DEGRADE WHEN EXPOSED TO AIR AND WATER. THEREFORE, THE CONTRACTOR IS CAUTIONED NOT TO EXCAVATE THE BOTTOM FEW FEET OF THE PIER UNTIL JUST PRIOR TO CONCRETING. INSPECTION OF THE BOTTOM SHALL BE MADE NO MORE THAN ONE HOUR PRIOR TO PLACING CONCRETE AND ANY SOFT OR LOOSE MATERIAL REMOVED.



PROJECT NO. B-3450
DURHAM COUNTY
 STATION: 14+31.00 -L-

SHEET 2 OF 3

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH						SHEET NO. S-2
GENERAL DRAWING						TOTAL SHEETS 53
BRIDGE OVER TRIBUTARY TO SANDY CREEK ON SR 1116 BETWEEN SR 2220 AND US 15/501						
REVISIONS						NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			
2			4			

DRAWN BY: A.L.MEADOWS DATE: 7/17/02
 CHECKED BY: K.McCAULEY DATE: 8/06/02