



FOUNDATION LAYOUT

DIMENSIONS LOCATING PILES AND DRILLED PIERS
ARE TO THE CENTERLINE AT THE BOTTOM OF CAP

NOTES:

PILES FOR END BENTS NO.1 AND NO.2 SHALL BE DRIVEN TO A MINIMUM BEARING CAPACITY OF 50 TONS EACH.

THE DRILLED PIERS AT BENTS NO.1, 2, 3, AND 4 HAVE BEEN DESIGNED FOR BOTH SKIN FRICTION AND TIP BEARING. THE REQUIRED TIP BEARING CAPACITY AT BENTS 1, 2, 3, AND 4 IS 26.0 TSF.

THE REQUIRED TIP BEARING CAPACITY AT BENTS NO. 1, 2, 3, AND 4 SHALL BE VERIFIED.

DRILLED PIERS FOR BENTS NO.1, 2, 3, AND 4 HAVE BEEN DESIGNED FOR AN APPLIED LOAD OF 214 TONS EACH AT THE TOP OF THE COLUMN.

PERMANENT STEEL CASING MAY BE REQUIRED FOR DRILLED PIERS AT BENTS NO. 2 AND 3. IF REQUIRED, THE CASING SHALL NOT EXTEND BELOW ELEVATION 400.4 FT. AND 403.3 FT., RESPECTIVELY, WITHOUT THE ENGINEER'S PERMISSION. THE NEED FOR PERMANENT STEEL CASING WILL BE DETERMINED BY THE ENGINEER.

PERMANENT STEEL CASING IS NOT REQUIRED FOR DRILLED PIERS AT BENTS NO. 1 AND 4.

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

DRILLED PIERS AT BENTS NO. 1, 2, 3, AND 4 SHALL EXTEND TO AN ELEVATION NO HIGHER THAN 392.5 FT., 392.0 FT., 394.0 FT. AND 395.0 FT., RESPECTIVELY, AND SATISFY THE REQUIRED TIP BEARING CAPACITY.

SLURRY CONSTRUCTION SHALL NOT BE USED FOR THIS PROJECT.

FOR DRILLED PIERS, SEE SPECIAL PROVISIONS.

THE SCOUR CRITICAL ELEVATION FOR BENTS NO. 1, 2, 3, AND 4 IS 405.8 FT., 400.5 FT., 401.1 FT., AND 405.3 FT. RESPECTIVELY. 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 BENTS NO. 1, 2, 3, AND 4.

SID INSPECTIONS ARE NOT REQUIRED TO DETERMINE THE BOTTOM CLEANLINESS OF THE DRILLED PIERS AT BENT NO. 1, 2, 3, AND 4.

CSL TUBES ARE REQUIRED AND CSL TESTING MAY BE REQUIRED FOR THE DRILLED PIERS AT BENTS NO. 1, 2, 3, AND 4. SEE SPECIAL PROVISION FOR CROSSHOLE SONIC LOGGING.

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

CONTRACTOR IS ADVISED OF THE PRESENCE OF SHALLOW ROCK ELEVATION, WHERE PERMANENT CASING IS REQUIRED. THE CONTRACTOR MUST EXERCISE EVERY EFFORT TO STABILIZE THE PERMANENT CASING.

FOR DRIVEN PILE FOUNDATION AT END BENT NO.1 RIGHT SIDE, PILE EXCAVATION IS REQUIRED AND THE MINIMUM DRIVEN PILE LENGTH IS 10.0 FT. PILE EXCAVATION IS NOT REQUIRED AT END BENT NO.1 LEFT SIDE.

THE CONTRACTOR IS ADVISED THAT HAMMER RATED ENERGY SHALL BE LIMITED TO 24.0 KIPS-FT± TO PREVENT PILE DAMAGE FOR DRIVING THE PILE INTO THE ROCK LAYER.

FOR PILE EXCAVATION, SEE SPECIAL PROVISION FOR DETAILS.

AT THE CONTRACTOR'S OPTION, AND UPON REMOVAL OF THE CAUSEWAY, THE CLASS II RIP RAP USED IN THE CAUSEWAY MAY BE PLACED AS RIP RAP SLOPE PROTECTION. SEE SPECIAL PROVISIONS FOR CONSTRUCTION, MAINTENANCE AND REMOVAL OF TEMPORARY ACCESS AT STATION 17+41.00 -L-.

(NOTES CONTINUED ON SHEET 3 OF 3.)

DRAWN BY : R. G. EMERSON DATE : 05/04
CHECKED BY : D. E. PETREY DATE : 06/04

13-JUL-2004 09:54
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PROJECT NO. B-3690
RANDOLPH COUNTY
STATION: 17+41.00 -L-

SHEET 2 OF 3

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
GENERAL DRAWING
FOR BRIDGE ON SR 2641
(LAMBETH MILL ROAD)
OVER BRUSH CREEK BETWEEN
NC 22/42 AND SR 1005



REVISIONS					SHEET NO.
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