

FOUNDATION LAYOUT

(DIMENSIONS LOCATING PILES AND DRILLED PIERS ARE SHOWN TO THE CENTERLINE OF PILES AND DRILLED PIERS.)

— NOTES ===

DRILLED PIERS AT BENT 1 AND BENT 2 WILL BE BEARING ON MATERIAL THAT DETERIORATES WHEN EXPOSED TO WATER. THE REQUIRED BEARING CAPACITY SHALL BE SATISFIED AND CONCRETE POURED IMMEDIATELY AFTER THE VERIFICATION OF THE BEARING CAPACITY.

THE DRILLED PIERS AT BENT 1 AND BENT 2 HAVE BEEN DESIGNED FOR BOTH SKIN FRICTION AND TIP BEARING. THE REQUIRED TIP BEARING CAPACITY IS 1440 KPA.

THE REQUIRED TIP BEARING CAPACITY AT BENT 1 AND BENT 2 SHALL BE VERIFIED.

DRILLED PIERS FOR BENT 1 AND BENT 2 HAVE BEEN DESIGNED FOR AN APPLIED LOAD OF 1900 KN EACH AT THE TOP OF THE COLUMN.

DRILLED PIERS AT BENT 1 AND BENT 2 SHALL EXTEND TO AN ELEVATION NO HIGHER THAN 81.5 AND SATISFY THE REQUIRED TIP BEARING CAPACITY.

FOR DRILLED PIERS, SEE SPECIAL PROVISIONS.

PERMANENT STEEL CASING IS NOT REQUIRED FOR DRILLED PIERS AT BENT 1 AND BENT 2.

PILES FOR END BENT 1 AND END BENT 2 SHALL BE DRIVEN TO A MINIMUM BEARING CAPACITY OF 530 KN EACH.

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

SPT TESTING IS REQUIRED TO DETERMINE THE TIP BEARING CAPACITY OF THE DRILLED PIERS AT BENT 1 AND BENT 2. SEE DRILLED PIERS SPECIAL PROVISION.

SID INSPECTIONS ARE REQUIRED TO DETERMINE THE BOTTOM CLEANLINESS OF THE DRILLED PIERS AT BENT 1 AND BENT 2. SEE DRILLED PIERS SPECIAL PROVISION.

CSL TUBES ARE REQUIRED AND CSL TESTING MAY BE REQUIRED FOR THE DRILLED PIERS AT BENT 1 AND BENT 2. SEE SPECIAL PROVISION FOR CROSSHOLE SONIC LOGGING.

THE CONTRACTOR SHALL OBSERVE A ONE MONTH WAITING PERIOD BEFORE BEGINNING ANY WORK FOR END BENT CONSTRUCTION AFTER COMPLETION OF THE EMBANKMENT AT EACH END BENT. THE CONTRACTOR MAY BEGIN THE REINFORCED BRIDGE APPROACH FILL CONSTRUCTION AFTER COMPLETION OF END BENT INCLUDING WINGWALLS.

PROJECT NO. R-2610A

CHATHAM COUNTY

STATION: 27+85.488 -L-

SHEET 2 OF 3

STATE OF NORTH CAROLINA

DEPARTMENT OF TRANSPORTATION

RALEIGH

GENERAL DRAWING

FOR BRIDGE ON SBL US 421

OVER NORFOLK SOUTHERN

RAILROAD BETWEEN

SR 1007 AND SR 1010

(LEFT LANE BRIDGE)

REVISIONS

DATE: NO. BY: DATE: 5-42

TOTAL SHEETS

SEAL 11809

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STR. #2