℄ HP 12 X 53
STEEL PILES

℄ HP 12 X 53
STEEL BRACE PILES
BATTER 3:12

BENT 1
CONTROL LINE

BENT 2
CONTROL LINE

℄ HP 12 X 53
STEEL BRACE PILES
BATTER 3:12

1'-4½" TO
℄ PILES

7'-9"

21'-0"

42'-0"

FILL FACE @
END BENT 2

W.P. #1
STA. 14+44.30 -L-

7'-9"

4'-8"

3'-1"

7'-9"

W.P. #2
STA. 14+74.30 -L-

-L-

21'-0"

42'-0"

7'-9"

7'-9"

3'-1"

4'-8"

W.P. #3
STA. 15+24.30 -L-

W.P. #4
STA. 15+54.30 -L-

120°-00'-00" (TYP.)

FILL FACE @
END BENT 1

7'-9"

21'-0"

℄ 3'-0" Ø DRILLED
PIER (TYP.)

℄ 3'-0" Ø DRILLED
PIER (TYP.)

7'-9"

1'-4½" TO
℄ PILES

BENT 1

BENT 2

℄ HP 12 X 53
STEEL PILES

END BENT 1

FOUNDATION LAYOUT

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

END BENT 2

FOUNDATION NOTES

THE DRILLED PIERS AT BENT 1 AND 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 BENTS 1
AND 2 SHALL BE VERIFIED.

DRILLED PIERS FOR BENTS 1 AND 2 HAVE BEEN
DESIGNED FOR AN APPLIED LOAD OF 206 TONS EACH AT
THE TOP OF THE COLUMN.

PERMANENT STEEL CASING IS REQUIRED FOR DRILLED
PIERS AT BENTS 1 AND 2, AND THE CASING SHALL
NOT EXTEND BELOW ELEVATION 266.5 FT. WITHOUT THE
ENGINEER'S PERMISSION.

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

DRILLED PIERS AT BENTS 1 AND 2 SHALL EXTEND
TO AN ELEVATION NO HIGHER THAN 259 FT. AND SATISFY
THE REQUIRED TIP BEARING CAPACITY.

THE SCOUR CRITICAL ELEVATION FOR BENTS 1 AND 2
IS ELEVATION 265 FT. 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
AND 2.

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
AND BENT 2.

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.

PILES FOR END BENT 1 AND END BENT 2 SHALL
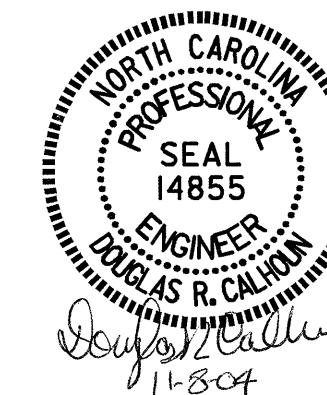BE DRIVEN TO A MINIMUM BEARING CAPACITY OF 50
TONS EACH.

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

PROJECT NO. __B-3451__

__DURHAM__ COUNTY

STATION: __14+99.30 -L-__

SHEET 2 OF 3

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING
FOR BRIDGE ON SR 1306
OVER MUD CREEK BETWEEN
SR 1308 & NC 751

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-2
1			3			TOTAL SHEETS
2			4			27

DRAWN BY : T. A. HARRIS	DATE : 6/5/03
CHECKED BY : K. MCCAULEY	DATE : 6/11/03