

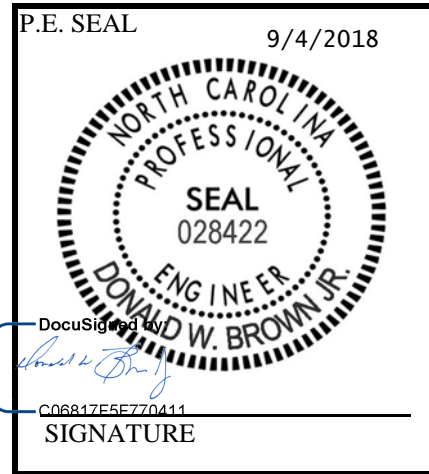
# FOUNDATION RECOMMENDATIONS

**Prepared for NCDOT by: Stewart**

PROJECT 17BP.6.R.103  
 TIP NO. SF-420151  
 COUNTY Harnett  
 STATION 17+37.00 -L-

DESCRIPTION Bridge No. 151 on SR 1415 (Rawls Church Road) over Hector's Creek

	INITIALS	DATE
DESIGN	CT	7/26/18
CHECK	DB	8/1/18
APPROVAL		



*Not considered final until all signatures are complete*

	STATION	FOUNDATION TYPE	FACTORED RESISTANCE	ADDITIONAL INFORMATION
END BENT 1	16+85.88 -L-	Cap on HP 12 x 53 Steel H-Piles	115 Tons/Pile	Bottom of Cap Elev. = 249.5 ft± Average Estimated Pile Length = 15 ft Number of Piles/Cap = 7
END BENT 2	17+88.13 -L-	Cap on HP 12 x 53 Steel H-Piles	115 Tons/Pile	Bottom of Cap Elev. = 250.0 ft± Average Estimated Pile Length = 15 ft Number of Piles/Cap = 7

**(SEE NOTES ON PLANS AND COMMENTS ON FOLLOWING PAGES.)**

## **FOUNDATION RECOMMENDATIONS NOTES ON PLANS**

1. FOR PILES, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.
2. PILES AT END BENT NO. 1 AND END BENT NO. 2 ARE DESIGNED FOR A FACTORED RESISTANCE OF 115 TONS PER PILE.
3. DRIVE PILES AT END BENT NO. 1 AND END BENT NO. 2 TO A REQUIRED DRIVING RESISTANCE OF 195 TONS PER PILE.
4. STEEL H-PILE POINTS ARE REQUIRED FOR STEEL H-PILES AT END BENT NO. 1 AND END BENT NO. 2. FOR STEEL PILE POINTS, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.

## **FOUNDATION RECOMMENDATIONS COMMENTS**

1. A SINGLE ROW WITH 5 PLUMB AND 2 BRACED PILES IS PLANNED FOR END BENT NO. 1 AND END BENT NO. 2.
2. END BENT SLOPES OF 1.5H:1V ARE SATISFACTORY WITH SLOPE PROTECTION.
3. NO WAITING PERIOD IS REQUIRED FOR END BENT CONSTRUCTION AFTER COMPLETION OF EMBANKMENT.
4. USE TYPE II MODIFIED BRIDGE APPROACH DETAIL.
5. PILE REDRIVES NOT REQUIRED FOR END BENT NO. 1 AND END BENT NO. 2.

## PILE PAY ITEMS

(Revised 8/11/15)

WBS ELEMENT 17BP.6.R.103

DATE 8/1/2018

TIP NO. SF-420151

DESIGNED BY CT

COUNTY Harnett

CHECKED BY DB

STATION 17+37.00 -L-

DESCRIPTION Bridge No. 151 on SR 1415 (Rawls Church Rd.) over Hector's Creek

NUMBER OF BENTS WITH PILES \_\_\_\_\_  
 NUMBER OF PILES PER BENT \_\_\_\_\_  
 NUMBER OF END BENTS WITH PILES \_\_\_\_\_  
 NUMBER OF PILES PER END BENT \_\_\_\_\_

Only required for "Predrilling for Piles" & "Pile Excavation" pay items

<b>Bent # or End Bent #</b>	<b>PILE PAY ITEM QUANTITIES</b>						<b>PDA Testing (per each)</b>
	<b>Steel Pile Points (yes/no)</b>	<b>Pipe Pile Plates (yes/no/maybe)</b>	<b>Predrilling For Piles (per linear ft)</b>	<b>Pile Redrives (per each)</b>	<b>Pile Excavation (per linear ft)</b>		
					<b>In Soil</b>	<b>Not In Soil</b>	
END BENT #1	yes						X
END BENT #2	yes						
<b>TOTALS</b>			0	0	0	0	

Notes:

Blanks or "no" represent quantity of zero.

If steel pile points are required, calculate quantity of "Steel Pile Points" as equal to the number of steel piles.

If pipe pile plates are or may be required, calculate the quantity of "Pipe Pile Plates" as equal to the number of pipe piles.

Show quantity of "PDA Testing" on the plans as total only.