DES BY: E. NOLTING DWG BY: B.PETERSON
CHK BY: F.CORDOVA _ DATE : 09/21 _ DATE : 09/21 _ DATE : 09/21 _ DATE : 09/21 DES CHK: F. CORDOVA

NOTES:

- Q PILE

— EXCAVATABLE

→ FRONT OF H-PILE

-BOTTOM OF WALL

FLOWABLE FILL

. NIM

TIMBER LAGGING

STEEL H-PILE —

SOLDIER PILE WALL SECTION

2'-6"Ø HOLE FILLED-WITH CONCRETE

-EXISTING

GRADE

FOR TEMPORARY RAILROAD SHORING, SEE SPECIAL PROVISIONS.

FOR SOLDIER PILE RETAINING WALLS, SEE SPECIAL PROVISIONS.

BEFORE BEGINNING SOLDIER PILE WALL DESIGN FOR RETAINING WALL NO.2, SURVEY WALL LOCATION AND SUBMIT A REVISED WALL PROFILE VIEW (WALL ENVELOPE) FOR REVIEW. DO NOT START WALL DESIGN OR CONSTRUCTION UNTIL THE REVISED WALL ENVELOPE IS ACCEPTED.

DESIGN RETAINING WALL NO.2 FOR THE FOLLOWING:

1. DESIGN HEIGHT (H) = WALL HEIGHT 2. IN-SITU ASSUMED MATERIAL PARAMETERS ABOVE ELEVATION 2600 FT:

a.Unit Weight = 120 PCF

b. Friction Angle = 28 DEGREES c. Cohesion = O PSF

3. IN-SITU ASSUMED MATERIAL PARAMETERS BELOW ELEVATION 2600 FT:

a.Unit Weight = 125 PCF

b. Friction Angle = 34 DEGREES c. Cohesion = O PSF

4. ASSUMED GROUNDWATER ELEVATION 2620 FT.

DESIGN RETAINING WALL NO.2 FOR A COOPER E80 RAILROAD LIVE LOAD.

DRILLED-IN H-PILES ARE REQUIRED FOR RETAINING WALL NO. 2.

NO SPLICES ARE PERMITTED IN H-PILES EXCEPT WHERE LOW VERICAL CLEARANCE IS AN ISSUE.

FOR PILE SPLICE DETAILS, SEE "SUBSTRUCTURE END BENT 1 SECTIONS AND DETAILS" SHEET.

CURE CONCRETE AND EXCAVATABLE FLOWABLE FILL AT LEAST 7 DAYS BEFORE EXCAVATING IN FRONT OF TEMPORARY SHORING.

EXCAVATE IN FRONT OF PILES FROM THE TOP DOWN AND IMMEDIATELY INSTALL TIMBER LAGGING BETWEEN PILES TO RETAIN THE SOIL AS EXCAVATION PROGRESSES.

POSITION LAGGING WITH AT LEAST 3"OF CONTACT IN THE HORIZONTAL DIRECTION BETWEEN LAGGING AND H-PILE FLANGES.

REMOVE TEMPORARY RAILROAD SHORING WHEN NO LONGER NEEDED TO A MINIMUM OF TWO FEET BELOW PROPOSED GROUND.

ESTIMATED PILE LENGTH						
TYPE	NO.	LENGTH/EA.	TOTAL			
HP14×89	9	34′	306′			

PROJECT NO. <u>B-3186/B-5898</u>

HAYWOOD

_ COUNTY

STATION: 68+65.75 ± -L_RT-

SHEET 2 OF 2

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

TEMPORARY SHORING SOLDIER PILE



Eric Molting 1/25/2022

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

HDR Engineering, Inc. of the Carolinas 555 Fayetteville St., Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116

	SHEET NO.				
BY:	DATE:	NO.	BY:	DATE:	SO3R-61
		8			TOTAL SHEETS
		4			61