NOS. 1 TO 4

FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.

TEMPORARY SHORING IS REQUIRED FOR THE MAINTENANCE OF TRAFFIC FROM STATION 189+00 +/- -L-, 12.3' LT, TO STATION 190+50 +/- -L-, 7.0' LT.

BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.

TEMPORARY SHORING SHALL BE CONSTRUCTED AFTER THE SURCHARGE IS REMOVED AND THE CULVERT IS IN PLACE.

TEMPORARY SHORING SHALL BE EXTENDED TO THE TOP OF FOOTING ELEVATION OF THE CULVERT.

DESIGN TEMPORARY SHORING FROM STATION 189+00 +/- -L-, 12.3' LT, TO STATION 190+50 +/- -L-, 7.0' LT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

UNIT WEIGHT  $(\gamma)$  = 120 LB/CF FRICTION ANGLE  $(\phi)$  = 28 DEGREES COHESION (C) = 0 LB/SFGROUNDWATER ELEVATION = 2628 FT

## SHORING LOCATION NO. (5)

FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.

TEMPORARY SHORING IS REQUIRED TO SUPPORT THE EXISTING BRIDGE FOOTING FOR THE CULVERT CONSTRUCTION FROM STATION 189+80 +/- -L-, 22.1' LT, TO STATION 190+10 +/- -L-, 22.1' LT.

BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.

DESIGN TEMPORARY SHORING FROM STATION 189+80 +/- -L-, 22.1' LT, TO STATION 190+10 +/- -L-, 22.1' LT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

UNIT WEIGHT  $(\gamma)$  = 120 LB/CF FRICTION ANGLE  $(\phi)$  = 28 DEGREES COHESION (C) = 0 LB/SFGROUNDWATER ELEVATION = 2628 FT

TEMPORARY SHORING FROM STATION 189+80 +/- -L-, 22.1' LT, TO STATION 190+10 +/- -L-, 22.1' LT SHALL BE DESIGNED BY A PROFESSIONAL DESIGNER USING THE SOIL PARAMETERS PROVIDED. SUBMIT SHORING DESIGN FOR REVIEW.

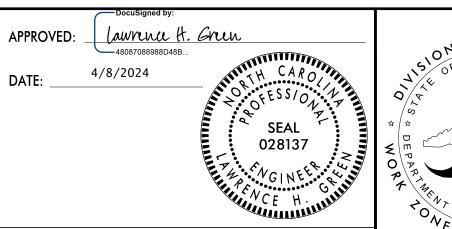
IT MAY BE PREFERRED TO USE A TEMPORARY SOIL NAIL WALL FOR TEMPORARY SHORING FROM STATION 189+80 +/- -L-, 22.1' LT, TO STATION 190+10 +/- -L-, 22.1' LT. FOR TEMPORARY SOIL NAIL WALLS, SEE TEMPORARY SOIL NAIL WALLS PROVISION.

PROJ. REFERENCE NO. SHEET NO. TMP-02C HB-0003



1223 Jones Franklin Rd. Raleigh, N.C. 27606 License No. F-0377 Bus: 919 851 8077 Fax: 919 851 8107

TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION



**DOCUMENT NOT CONSIDERED FINAL** 

**UNLESS ALL SIGNATURES COMPLETED** 

TEMPORARY SHORING DATA