| PROJ. REFERENCE NO. | SHEET NO. |
|---|---|
| U-5875 | TMP-3B |

# TEMPORARY SHORING NOTES

## SHORING LOCATION NO. 1

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

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 -L- 26+20±, 5* LT, TO STATION -L- 26+68±, 5* LT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

- UNIT WEIGHT (γ) = 120 LB/CF
- FRICTION ANGLE (φ) = 30 DEGREES
- COHESION (c) = 0 LB/SF
- GROUNDWATER ELEVATION = 67.5 FT ±

DO NOT USE A TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION -L- 26+20±, 5*LT, TO STATION -L- 26+68±, 5*LT.

AT THE CONTRACTOR* OPTION AND WHEN APPLICABLE, USE STANDARD TEMPORARY SHORING FOR TEMPORARY SHORING FROM STATION -L- 26+20±, 5*LT, TO STATION -L- 26+68±, 5*LT. SEE GEOTECHNICAL STANDARD DETAIL NO. 1801.01 FOR STANDARD TEMPORARY SHORING.

## SHORING LOCATION NO. 2

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

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 -L- 26+20±, 2* RT, TO STATION -L- 26+68±, 2* RT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

- UNIT WEIGHT (γ) = 120 LB/CF
- FRICTION ANGLE (φ) = 30 DEGREES
- COHESION (c) = 0 LB/SF
- GROUNDWATER ELEVATION = 67.5 FT ±

DO NOT USE CANTILEVER, BRACED AND/OR ANCHORED SHORING FOR TEMPORARY SHORING FROM STATION -L- 26+20±, 2*RT, TO STATION -L- 26+68±, 2*RT.

AT THE CONTRACTOR* OPTION AND WHEN APPLICABLE, USE STANDARD TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION -L- 26+20±, 2*RT, TO STATION -L- 26+68±, 2* RT. SEE GEOTECHNICAL STANDARD DETAIL NO. 1801.02 FOR STANDARD TEMPORARY WALLS.

## SHORING LOCATION NO. 3

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

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 -L- 63+64±, 8* LT, TO STATION -L- 64+37±, 7* LT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

- UNIT WEIGHT (γ) = 120 LB/CF
- FRICTION ANGLE (φ) = 30 DEGREES
- COHESION (c) = 0 LB/SF
- GROUNDWATER ELEVATION = 56.5 FT ±

DO NOT USE A TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION -L- 63+64±, 8*LT, TO STATION -L- 64+37±, 7*LT.

IT MAY BE PREFERRED TO USE A TEMPORARY SOIL NAIL WALL FOR TEMPORARY SHORING FROM STATION -L- 63+64±, 8*LT, TO STATION -L- 64+37±, 7*LT. FOR TEMPORARY SOIL NAIL WALLS, SEE TEMPORARY SOIL NAIL WALLS PROVISION.

## SHORING LOCATION NO. 4

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

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 -L- 63+64±, 2* LT, TO STATION -L- 64+37±, 2* LT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

- UNIT WEIGHT (γ) = 120 LB/CF
- FRICTION ANGLE (φ) = 30 DEGREES
- COHESION (c) = 0 LB/SF
- GROUNDWATER ELEVATION = 56.5 FT ±

DO NOT USE CANTILEVER, BRACED AND/OR ANCHORED SHORING FOR TEMPORARY SHORING FROM STATION -L- 63+64±, 2*LT, TO STATION -L- 64+37±, 2*LT.

AT THE CONTRACTOR* OPTION AND WHEN APPLICABLE, USE STANDARD TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION -L- 63+64±, 2*LT, TO STATION -L- 64+37±, 2*LT. SEE GEOTECHNICAL STANDARD DETAIL NO. 1801.02 FOR STANDARD TEMPORARY WALLS.

## SHORING LOCATION NO. 5

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

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 -L- 127+29±, 2* LT, TO STATION -L- 127+87±, 1* LT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

- UNIT WEIGHT (γ) = 105 LB/CF
- FRICTION ANGLE (φ) = 28 DEGREES
- COHESION (c) = 0 LB/SF
- GROUNDWATER ELEVATION = 61.0 FT ±

DO NOT USE A TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION -L- 127+29±, 2*LT, TO STATION -L- 127+87± 1*LT.

IT MAY BE PREFERRED TO USE A TEMPORARY SOIL NAIL WALL FOR TEMPORARY SHORING FROM STATION -L- 127+29±, 2*LT, TO STATION -L- 127+87± 1*LT. FOR TEMPORARY SOIL NAIL WALLS, SEE TEMPORARY SOIL NAIL WALLS PROVISION

## SHORING LOCATION NO. 6

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

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 -L- 127+29±, 5* RT, TO STATION -L- 127+87±, 5* RT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

- UNIT WEIGHT (γ) = 120 LB/CF
- FRICTION ANGLE (φ) = 30 DEGREES
- COHESION (c) = 0 LB/SF
- GROUNDWATER ELEVATION = 61.0 FT ±

DO NOT USE CANTILEVER, BRACED AND/OR ANCHORED SHORING FOR TEMPORARY SHORING FROM STATION -L- 127+29±, 5*RT, TO STATION -L- 127+87±, 5*RT.

AT THE CONTRACTOR* OPTION AND WHEN APPLICABLE, USE STANDARD TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION -L- 127+29±, 5*RT, TO STATION -L- 127+87±, 5*RT. SEE GEOTECHNICAL STANDARD DETAIL NO. 1801.02 FOR STANDARD TEMPORARY WALLS.

THE GEU RECOMMENDS INCLUDING THE TEMPORARY SHORING (SP11 R02) PROVISION IN THE CONTRACT FOR THE REFERENCED PROJECT. GEU WILL INCLUDE THE STANDARD SHORING PROVISION, TEMPORARY SOIL NAIL WALLS PROVISION AND GEOTECHNICAL STANDARD DETAIL NO. 1801.01 AND NO. 1801.02 IN THE CONTRACT. PLEASE CONTACT JINYOUNG PARK, PH.D., P.E. AT (919) 432-2256 OR JAMEY BATTS, P.E. AT (919) 413-6478 IF THERE ARE ANY QUESTIONS CONCERNING THIS MEMORANDUM.

THE TEMPORARY SHORING NOTES SHOWN ON THIS SHEET WERE PROVIDED THROUGH A SEALED DOCUMENT FROM NCDOT GEOTECHNICAL ENGINEERING UNIT. THE DOCUMENT WAS SUBMITTED TO SEPI, INC. ON NOVEMBER 8, 2021 AND SEALED BY A PROFESSIONAL ENGINEER, JINYOUNG PARK, Ph.D., P.E. LICENSE # 032171

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SEAL

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**DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED**

DIVISION OF HIGHWAYS * STATE OF NORTH CAROLINA * DEPARTMENT OF TRANSPORTATION * WORK ZONE TRAFFIC CONTROL

TEMPORARY SHORING NOTES

8/18/2025
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