

## CONCRETE DITCH\* --- TOP OF WALL FINISHED -GRADE\* - PERMITTED CONST. JOINT WITH WWR $\rightarrow - +$ — CAST-IN-PLACE CONCRETE FACING 0" - 24"\* **←** 12" MIN ELEVATION\*\*

4" THICK —

WELDED WIRE

REINFORCEMENT (WWR)

 $6 \times 6$ -W1.4  $\times$  W1.4

## CONCRETE DITCH BEHIND WALL WITH CONCRETE FACING

\*SEE ROADWAY PLANS FOR CONCRETE DITCH AND FINISHED GRADE DETAILS. \*\*SEE WALL ENVELOPE FOR GRADE ELEVATIONS.

\*SEE CONCRETE DITCH BEHIND WALL DETAILS. \*\*SEE PLANS FOR FINISHED GRADE OR END BENT SLOPE DETAILS.

CAST-IN-PLACE FACE - TYPICAL SECTION

## NOTES:

REVIEWED BY: HAMM, J. R.

FOR SOLDIER PILE RETAINING WALLS, SEE SOLDIER PILE RETAINING WALLS PROVISION.

FOR STEEL BEAM GUARDRAIL, SEE ROADWAY PLANS AND SECTION 862 OF THE STANDARD SPECIFICATIONS.

A FENCE OR HANDRAIL IS REQUIRED ON TOP OF RETAINING WALL NO.3. SEE ROADWAY PLANS FOR FENCE OR HANDRAIL ATTACHMENT DETAILS.

DRILLED-IN H-PILES ARE REQUIRED FOR RETAINING WALL NO. 3.

USE A SOLDIER PILE RETAINING WALL WITH A CAST-IN-PLACE REINFORCED CONCRETE FACE FOR RETAINING WALL NO. 3.

BEFORE BEGINNING SOLDIER PILE WALL DESIGN FOR RETAINING WALL NO. 3, 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.

A FORM-LINED OR STAMPED AND STAINED ARCHITECTURAL FINISH IS REQUIRED FOR THE CAST-IN-PLACE REINFORCED CONCRETE FACE FOR RETAINING WALL NO.3.

DATE: 11/03/17

1) H = DESIGN HEIGHT + WALL EMBEDMENT 2) DESIGN LIFE = 100 YEARS 3) MINIMUM WALL EMBEDMENT ELEVATION = 1 FT 4) MINIMUM PILE PENETRATION INTO ROCK = N/A 5) IN-SITU ASSUMED MATERIAL PARAMETERS: UNIT WEIGHT,  $\gamma$  = 120 PCF FRICTION ANGLE,  $\phi$  = 30 DEGREES COHESION, C = O PSF

AT THE CONTRACTOR'S OPTION, USE A TEMPORARY SLOPE INSTEAD OF TEMPORARY SUPPORT OF EXCAVATIONS FOR RETAINING WALL NO. 3.

DESIGN RETAINING WALL NO. 3 FOR THE FOLLOWING:

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS **GEOTECHNICAL ENGINEERING UNIT** 

RETAINING WALL NO. 3 SOLDIER PILE WALL WITH CAST-IN-PLACE FACE

PROJECT REFERENCE NO. | SHEET NO.

DOCUMENT NOT CONSIDERED FINAL

**UNLESS ALL SIGNATURES COMPLETED** 

W-3

5/3/2018

GEOTECHNICAL **ENGINEER** 

39779

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**REVISIONS** BY DATE NO. DATE 3 | | 4 |

NGINEERING

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