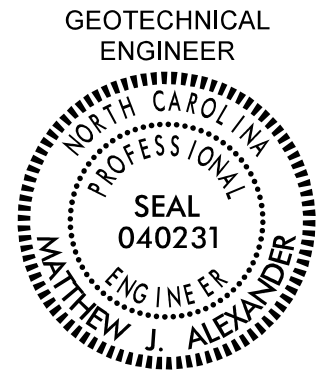


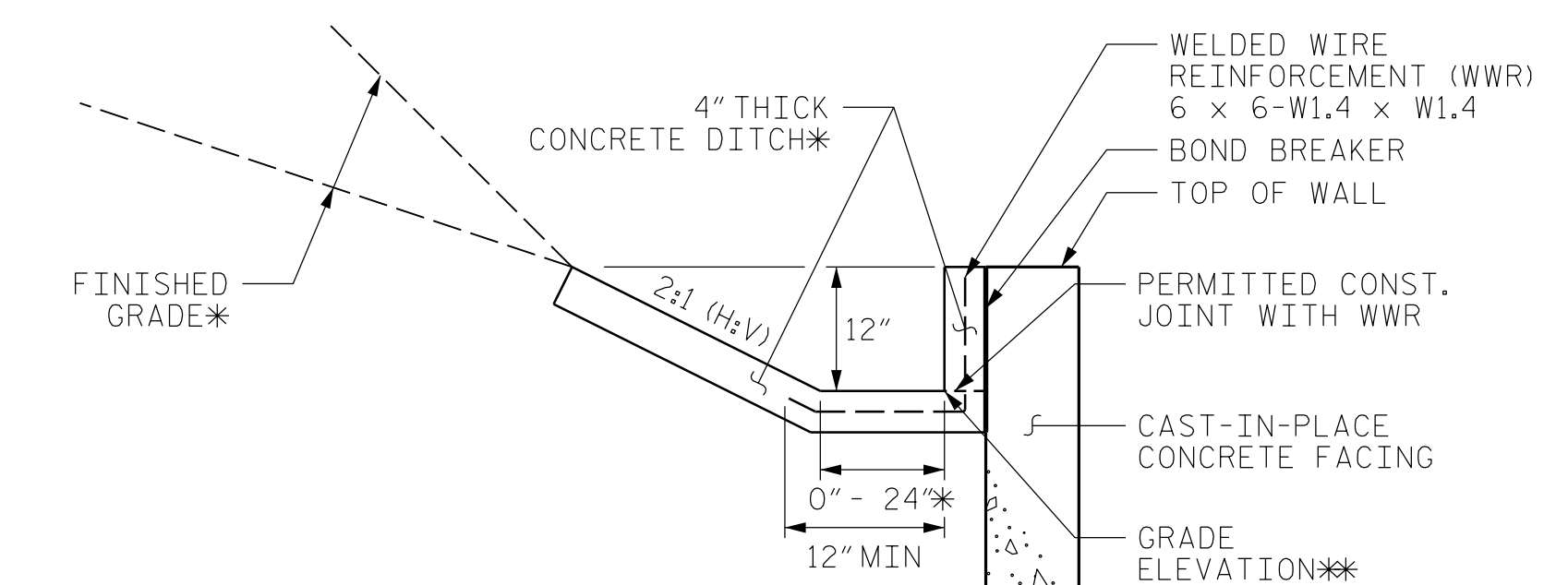
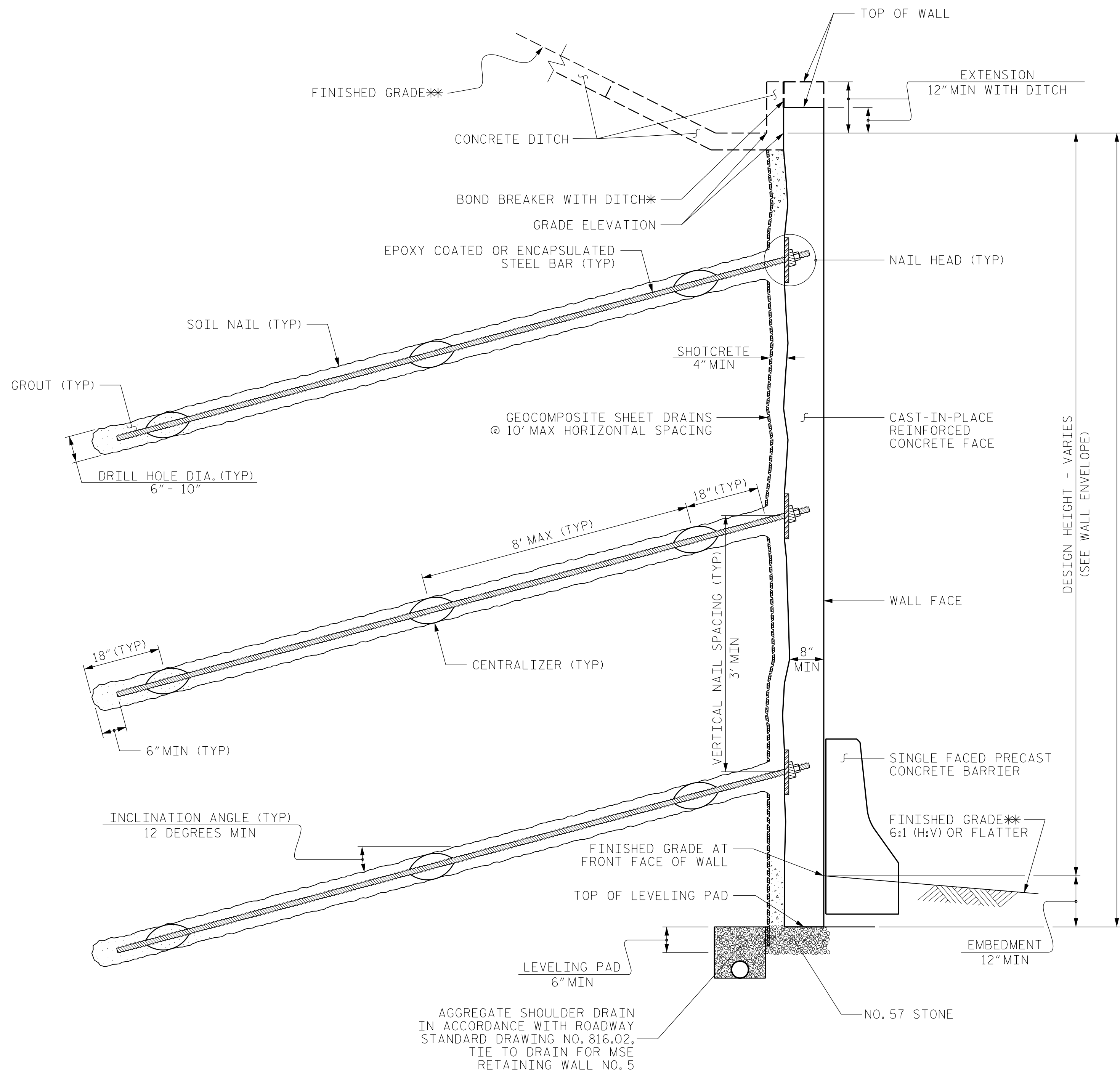
NOTES:

FOR SOIL NAIL RETAINING WALLS, SEE SOIL NAIL RETAINING WALLS PROVISION.
 FOR SINGLE FACED PRECAST CONCRETE BARRIER, SEE ROADWAY PLANS AND SECTION 857 OF THE STANDARD SPECIFICATIONS.
 WALL CONTRACTOR SHALL VERIFY IF AN ARCHITECTURAL FINISH IS REQUIRED FOR THE CAST-IN-PLACE REINFORCED CONCRETE FACE FOR RETAINING WALL NO. 5B.
 BEFORE BEGINNING SOIL NAIL WALL DESIGN FOR RETAINING WALL NO. 5B, 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.

GEOTECHNICAL DESIGN PARAMETERS:

DESIGN RETAINING WALL NO. 5B FOR THE FOLLOWING:
 1) H = DESIGN HEIGHT + EMBEDMENT
 2) DESIGN LIFE = 100 YEARS
 3) MINIMUM EMBEDMENT DEPTH BELOW FINISHED GRADE AT FRONT FACE = 2 FT FOR STRATIGRAPHY AT WALL LOCATION.
 4A) IN-SITU ASSUMED MATERIAL PARAMETERS FOR SILT (A-4):
 UNIT WEIGHT, $\gamma = 116$ LB/CF
 FRICTION ANGLE, $\phi = 41$ DEGREES
 COHESION, $c = 100$ LB/SF
 4B) IN-SITU ASSUMED MATERIAL PARAMETERS FOR SILTY SAND (A-2-5):
 UNIT WEIGHT, $\gamma = 92$ LB/CF
 FRICTION ANGLE, $\phi = 34$ DEGREES
 COHESION, $c = 100$ LB/SF
 4C) IN-SITU ASSUMED MATERIAL PARAMETERS FOR WEATHERED ROCK:
 UNIT WEIGHT, $\gamma = 135$ LB/CF
 FRICTION ANGLE, $\phi = 41$ DEGREES
 COHESION, $c = 500$ LB/SF

GEOTECHNICAL ENGINEER  SEAL 040231 MATTHEW J. ALEXANDER ENGINEER	ENGINEER _____ SIGNATURE
Discussed by: <i>Matthew Alexander</i> DATE: 8/10/2017	DATE: _____ SIGNATURE: _____ DATE: _____
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



CONCRETE DITCH BEHIND WALL WITH CONCRETE FACING

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

FOR CONCRETE DITCHES, SEE SECTION 850 OF THE STANDARD SPECIFICATIONS.

SOIL NAIL WALL - TYPICAL SECTION

*SEE CONCRETE DITCH BEHIND WALL DETAILS.
 **SEE PLANS FOR FINISHED GRADE.

PROJECT NO.: 34243.1.4 (I-4729A)
 POLK COUNTY
 STATION: 12+86.17 -RWALL_6- /
 SHEET 5 OF 5 29+78.88 -RP_F-

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 NC REGISTERED FIRM: F-0869

REVISIONS					
NO.	BY	DATE	NO.	BY	DATE
1			3		
2			4		

SHEET NO. W-13

PREPARED BY: M. J. ALEXANDER	DATE: 8/4/2017
REVIEWED BY: A. F. RIGGS	DATE: 8/4/2017