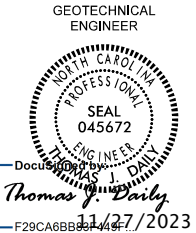
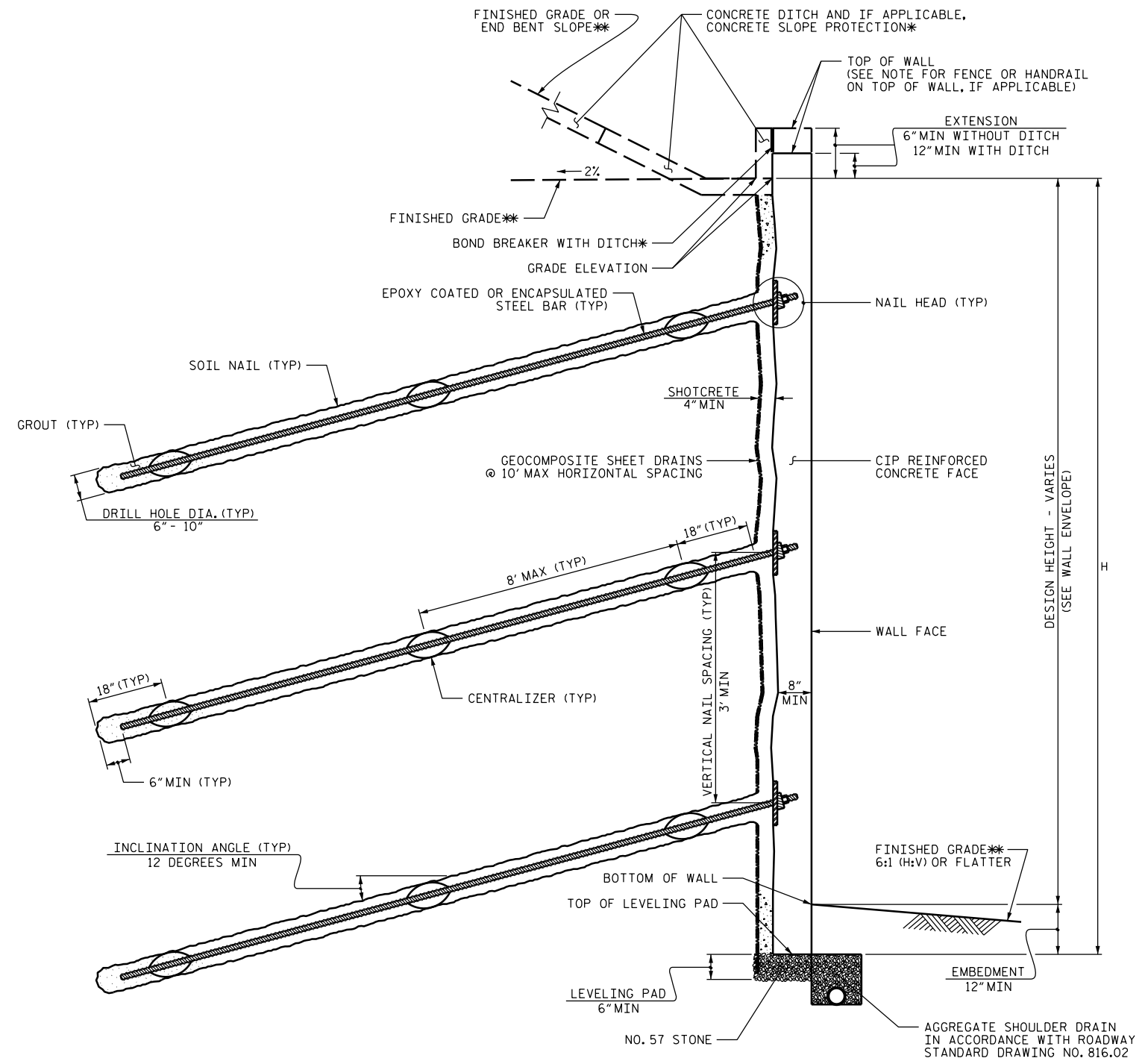


GEOTECHNICAL ENGINEER  Thomas J. Daily F29CA6BB8444 1/27/2023	ENGINEER _____ SIGNATURE DATE
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



NOTES:

- FOR SOIL NAIL RETAINING WALLS, SEE SOIL NAIL RETAINING WALLS PROVISION.
- FOR STEEL BEAM GUARDRAIL, SEE ROADWAY PLANS AND SECTION 862 OF THE STANDARD SPECIFICATIONS.
- SEE SHEET 2C-8 OF THE ROADWAY PLANS FOR FENCE OR HANDRAIL ATTACHMENT DETAILS. SUBMIT THE HANDRAIL ATTACHMENT DETAILS WITH THE DESIGN PACKAGE FOR REVIEW.
- A SIMULATED STONE FORM LINER FINISH IS REQUIRED FOR THE CIP REINFORCED CONCRETE FACE FOR RETAINING WALL NO. 4.
- BEFORE BEGINNING SOIL NAIL WALL DESIGN FOR RETAINING WALL NO. 4, 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. 4 FOR THE FOLLOWING:
 - 1) H = DESIGN HEIGHT + EMBEDMENT
 - 2) DESIGN LIFE = 100 YEARS
 - 3) MINIMUM EMBEDMENT ELEVATION = 2666.4 FT
 - 4) IN-SITU ASSUMED MATERIAL PARAMETERS:
 - UNIT WEIGHT, $\gamma = 110$ PCF
 - FRICTION ANGLE, $\phi = 26$ DEGREES
 - COHESION, $c = 100$ PSF
- DESIGN RETAINING WALL NO. 4 FOR A LIVE LOAD (TRAFFIC) SURCHARGE.
- EXISTING OR FUTURE OBSTRUCTIONS SUCH AS FOUNDATIONS, GUARDRAIL, FENCE OR HANDRAIL POSTS, PAVEMENTS, PIPES, INLETS OR UTILITIES MAY INTERFERE WITH SOIL NAILS FOR RETAINING WALL NO. 4.

ESTIMATED SOIL NAIL WALL QUANTITY			
RETAINING WALL NO.	TOTAL QUANTITY (SQUARE FEET)	SOIL NAIL VERIFICATION TEST	SOIL NAIL PROOF TEST
4	1847	1	10

SOIL NAIL WALL - TYPICAL SECTION

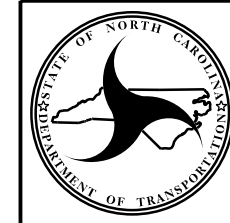
*SEE CONCRETE DITCH BEHIND WALL DETAILS.
 **SEE PLANS FOR FINISHED GRADE OR END BENT SLOPE DETAILS.

PROJECT NO.: U-5839
 HAYWOOD COUNTY
 STATION: 47+00 -L-

PREPARED BY: J. DAILY	DATE: 5/18/23
REVIEWED BY: K. HILL	DATE: 5/18/23



9751 SOUTHERN PINE BLVD
 CHARLOTTE, NC 28273
 (704) 523-4726



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

REVISIONS						SHEET NO. W-11
NO.	BY	DATE	NO.	BY	DATE	
1			3			
2			4			