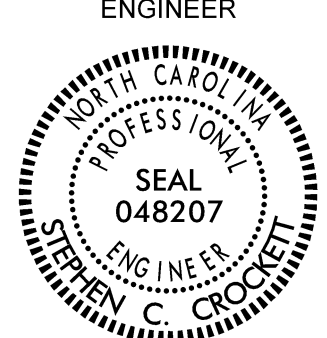
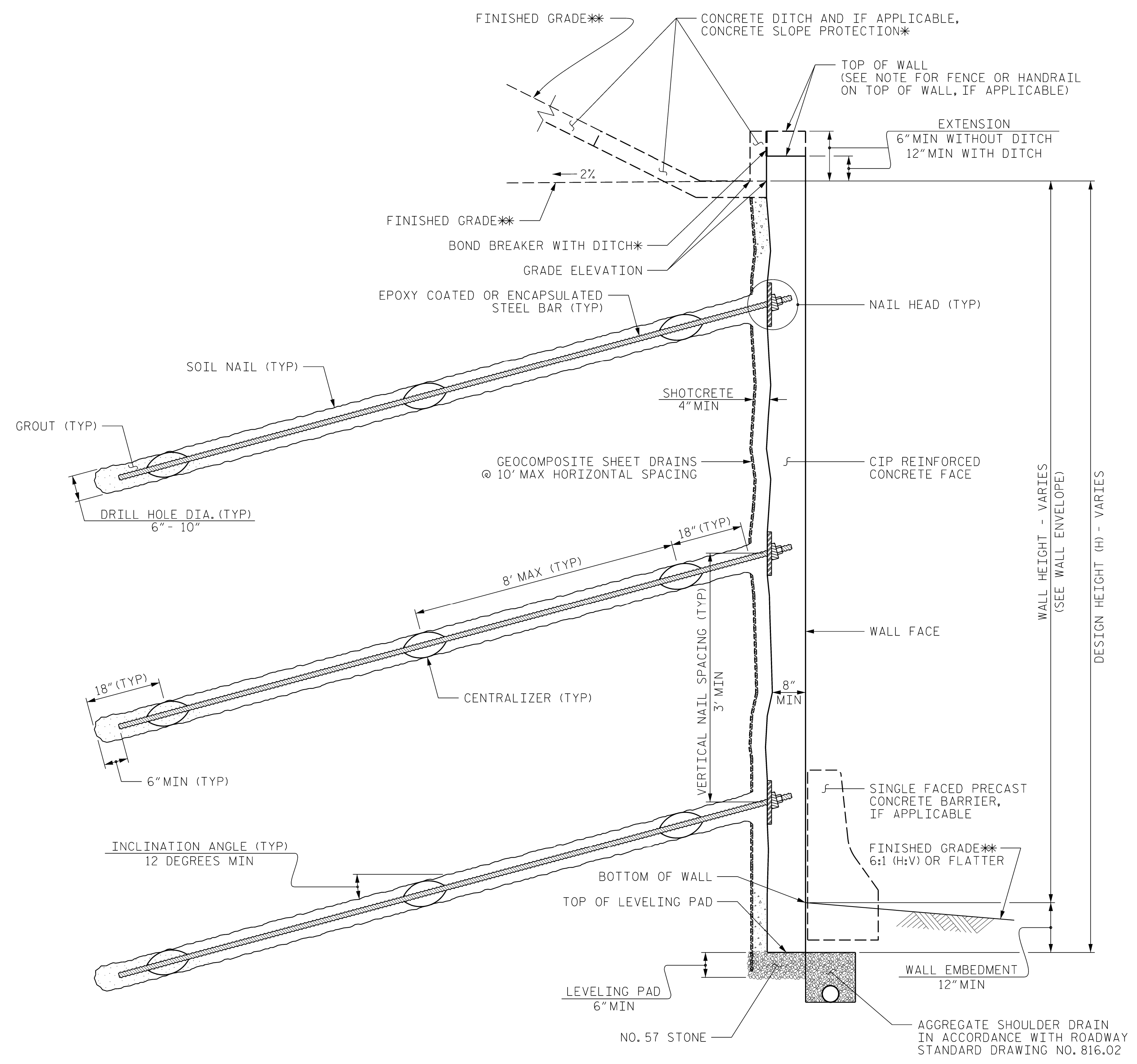


GEOTECHNICAL ENGINEER  SEAL 048207 ENGINEER STEPHEN C. CROCKETT	ENGINEER
Designed by: Stephen Crockett CS048207048207	DATE: 5/14/2024
SIGNATURE DATE SIGNATURE DATE	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



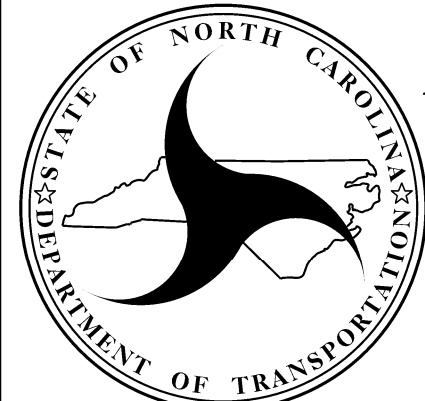
SOIL NAIL WALL - TYPICAL SECTION

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

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.
- FOR SINGLE FACED PRECAST CONCRETE BARRIER, SEE ROADWAY PLANS AND SECTION 857 OF THE STANDARD SPECIFICATIONS.
- A FENCE IS REQUIRED ON TOP OF RETAINING WALL NO. W601. SEE ROADWAY PLANS FOR FENCE OR HANDRAIL ATTACHMENT DETAILS.
- AN ASHLAR ARCHITECTURAL FINISH IS REQUIRED FOR THE CIP REINFORCED CONCRETE FACE FOR RETAINING WALL NO. W601.
- A DRystack ARCHITECTURAL FINISH IS REQUIRED FOR THE CIP REINFORCED CONCRETE FACE FOR RETAINING WALLS NO. W1001, AND W1101.
- BEFORE BEGINNING SOIL NAIL WALL DESIGN FOR RETAINING WALLS NO. W601, W1001, AND W1101, 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. W601, W1001, AND W1101 FOR THE FOLLOWING:
 - 1) DESIGN HEIGHT (H) = WALL HEIGHT + WALL EMBEDMENT
 - 2) DESIGN LIFE = 100 YEARS
 - 3) MINIMUM WALL EMBEDMENT DEPTH = 1.0 FT
 - 4) W601 IN-SITU ASSUMED MATERIAL PARAMETERS:
 - UNIT WEIGHT, γ = 120 PCF
 - FRICTION ANGLE, ϕ = 30 DEGREES
 - COHESION, c = 0 PSF
 - 5) W1001 IN-SITU ASSUMED MATERIAL PARAMETERS:
 - UNIT WEIGHT, γ = 125 PCF
 - FRICTION ANGLE, ϕ = 32 DEGREES
 - COHESION, c = 0 PSF
 - 6) W1101 IN-SITU ASSUMED MATERIAL PARAMETERS -W1101- STA.10+00 TO 13+00:
 - UNIT WEIGHT, γ = 130 PCF
 - FRICTION ANGLE, ϕ = 34 DEGREES
 - COHESION, c = 0 PSF
 - W1101 IN-SITU ASSUMED MATERIAL PARAMETERS -W1101- STA.13+00 TO 16+13.27:
 - UNIT WEIGHT, γ = 125 PCF
 - FRICTION ANGLE, ϕ = 32 DEGREES
 - COHESION, c = 0 PSF
- EXISTING OR FUTURE OBSTRUCTIONS SUCH AS FOUNDATIONS, GUARDRAIL, FENCE OR HANDRAIL POSTS, PAVEMENTS, PIPES, INLETS OR UTILITIES WILL INTERFERE WITH SOIL NAILS FOR RETAINING WALL NO. W601.

PREPARED BY: S. CROCKETT	DATE: 9/5/23
REVIEWED BY: J. HAMM	DATE: 9/7/23



**NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS**

**GEOTECHNICAL
ENGINEERING UNIT**

PROJECT NO.: I-2513AA/AB
 BUNCOMBE COUNTY
 STATION: VARIES
 SHEET 9 OF 11 WALL ID W601, W1001, W1101

REVISIONS						SHEET NO.
NO.	BY	DATE	NO.	BY	DATE	
1			3			W-9
2			4			