

GEOTECHNICAL ENGINEER

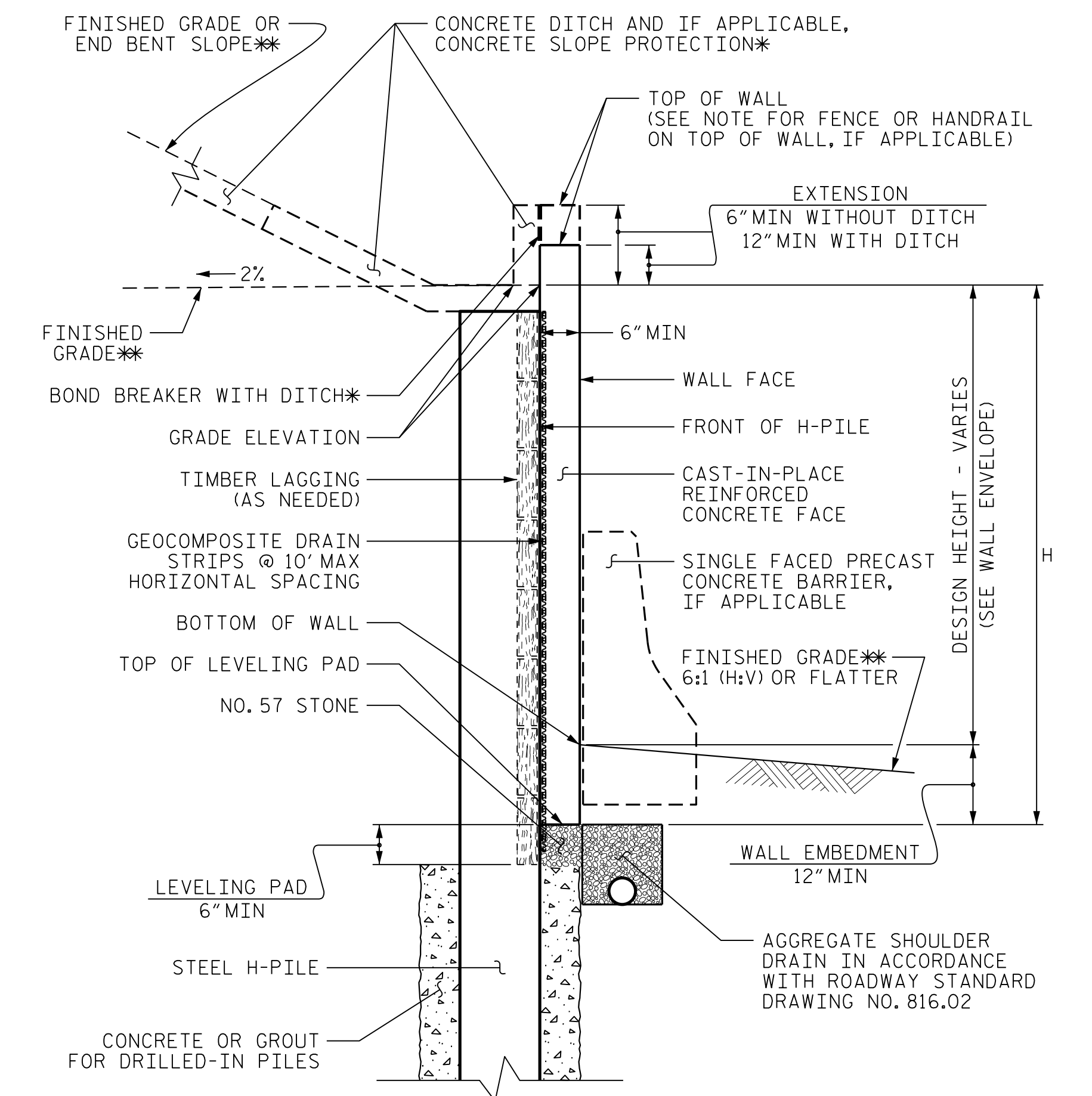
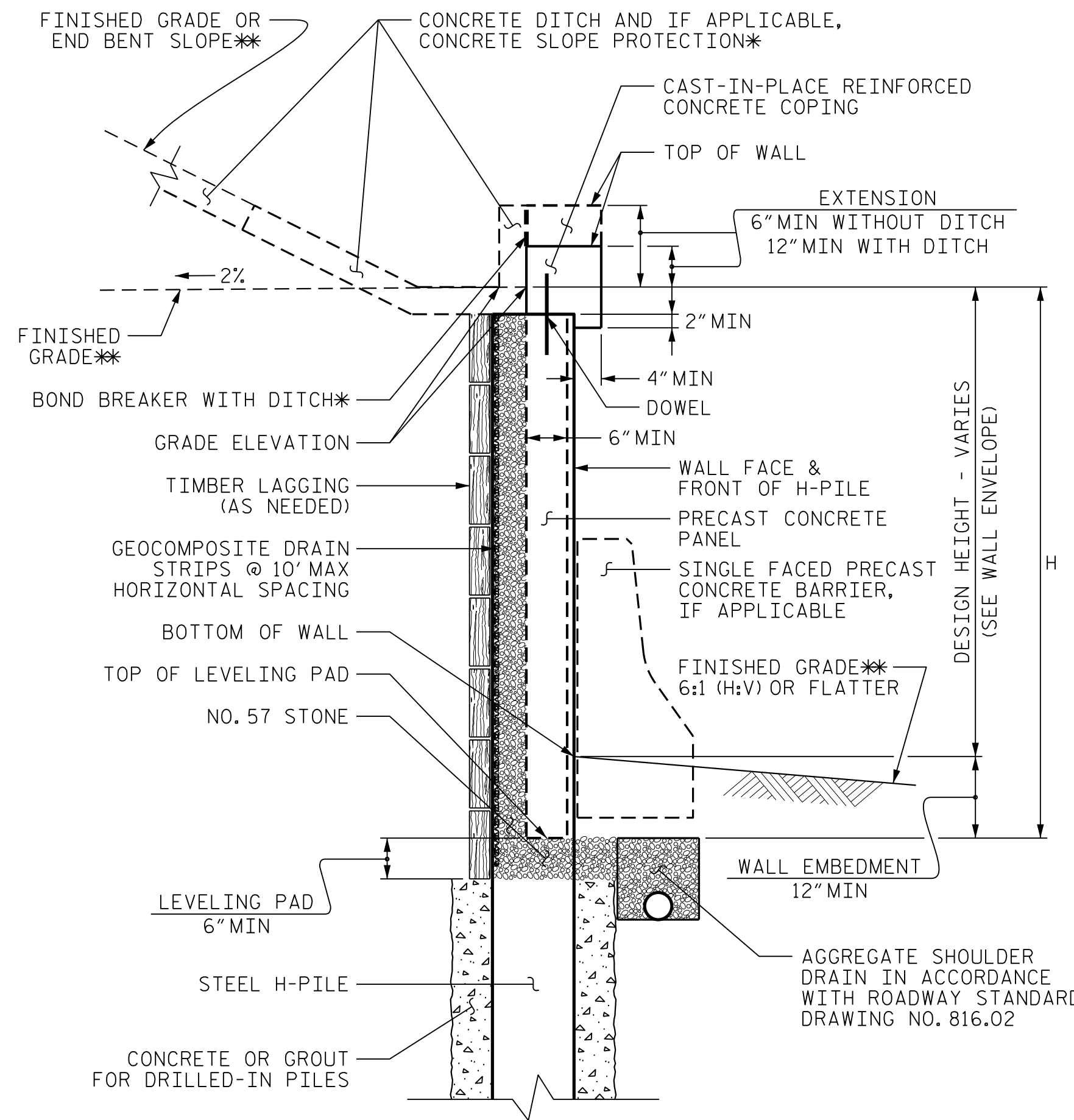
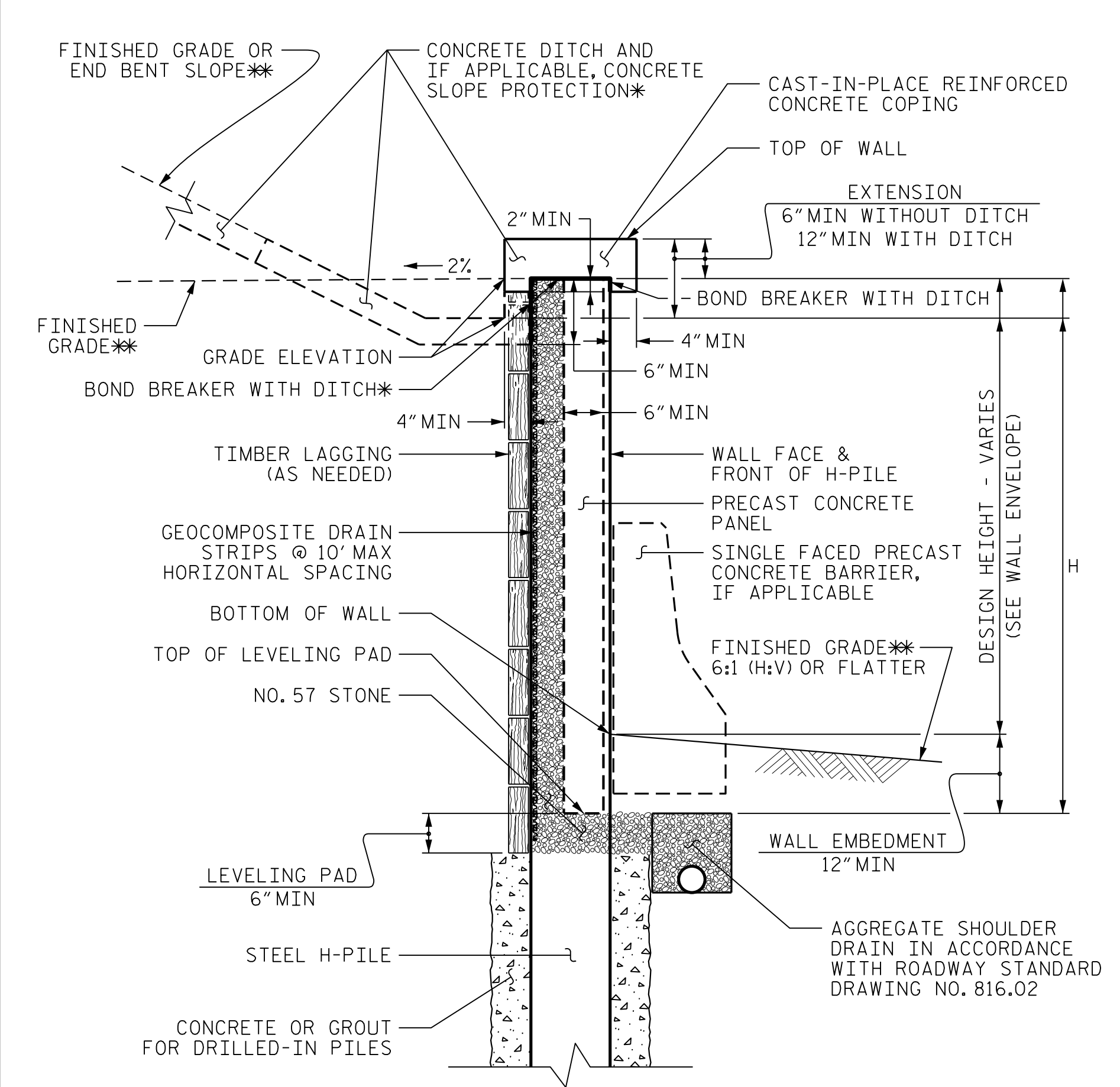
ENGINEER

SEAL 29869

SHANE C. CLARK

DocuSigned by: Shane C. Clark 10/27/2015

DATE SIGNATURE DATE



SOLDIER PILE WALL WITH PRECAST PANEL - TYPICAL SECTIONS

AT THE CONTRACTOR'S OPTION, CONNECT COPING TO PANELS WITH DOWELS OR EXTEND COPING DOWN BACK OF PANELS AND PILES.
 *SEE CONCRETE DITCH BEHIND WALL DETAILS.
 **SEE PLANS FOR FINISHED GRADE OR END BENT SLOPE DETAILS.

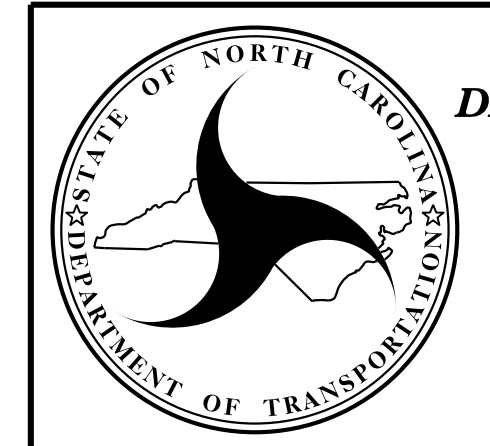
SOLDIER PILE WALL WITH CAST-IN-PLACE FACE - TYPICAL SECTION

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

NOTES:

- FOR SOLDIER PILE RETAINING WALLS, SEE SOLDIER PILE RETAINING WALLS PROVISION.
- FOR SINGLE FACED PRECAST CONCRETE BARRIER, SEE ROADWAY PLANS AND SECTION 857 OF THE STANDARD SPECIFICATIONS.
- A FENCE OR HANDRAIL MAYBE REQUIRED ON TOP OF RETAINING WALL NO. 6. SEE ROADWAY PLANS FOR FENCE OR HANDRAIL ATTACHMENT DETAILS.
- DRILLED-IN H-PILES ARE REQUIRED FOR RETAINING WALL NO. 6.
- USE A SOLDIER PILE RETAINING WALL WITH PRECAST CONCRETE PANELS THAT MEET SECTION 1077 OF THE STANDARD SPECIFICATIONS OR CONSTRUCT A CAST-IN-PLACE REINFORCED CONCRETE FACE FOR RETAINING WALL NO. 6.
- IF PILES ARE EXPOSED, PAINT GALVANIZED H-PILES BLACK IN ACCORDANCE WITH ARTICLE 442-12 OF THE STANDARD SPECIFICATIONS FOR RETAINING WALL NO. 6.
- BEFORE BEGINNING SOLDIER PILE WALL DESIGN FOR RETAINING WALL NO. 6, 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. 6 FOR THE FOLLOWING:
 - 1) H = DESIGN HEIGHT + WALL EMBEDMENT
 - 2) DESIGN LIFE = 100 YEARS
 - 3) MINIMUM WALL EMBEDMENT ELEVATION = 1 FT
 - 4) MINIMUM PILE PENETRATION INTO ROCK = 5 FT
 - 5) IN-SITU ASSUMED MATERIAL PARAMETERS ABOVE THE BOTTOM OF THE WALL:
 - UNIT WEIGHT, $\gamma = 120$ LB/CF
 - FRICTION ANGLE, $f = 30$ DEGREES
 - COHESION, $c = 0$ LB/SF
 - 6) IN-SITU ASSUMED MATERIAL PARAMETERS BELOW THE BOTTOM OF THE WALL:
 - UNIT WEIGHT, $\gamma = 120$ LB/CF
 - FRICTION ANGLE, $f = 30$ DEGREES
 - COHESION, $c = 0$ LB/SF
- NO SEPARATE RETAINING WALL INVENTORIES WERE PRODUCED FOR THIS PROJECT, SEE ROADWAY INVENTORY FOR SUBSURFACE INFORMATION

PREPARED BY: EJS	DATE: 10/15
REVIEWED BY: SCC	DATE: 10/15



NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

GEOTECHNICAL
ENGINEERING UNIT

PROJECT NO.: R-2409C

TRANSYLVANIA COUNTY

STATION: 67+53.00 -L- to 68+66.61 -L-

SHEET 2 OF 2

REVISIONS						SHEET NO.
NO.	BY	DATE	NO.	BY	DATE	
1			3			W-10
2			4			