

**RETAINING WALLS NOS, 1 TO 4
CULVERT TO MSE WALL TYPICAL DETAIL**

NOTES:

FOR MECHANICALLY STABILIZED EARTH (MSE) RETAINING WALLS, SEE MECHANICALLY STABILIZED EARTH RETAINING WALLS PROVISION. FOR STEEL BEAM GUARDRAIL, SEE ROADWAY PLANS AND SECTION 862 OF THE STANDARD SPECIFICATIONS.

AT THE CONTRACTOR'S OPTION, USE FINE AGGREGATE IN THE REINFORCED ZONE OF RETAINING WALL NOS. 1 TO 4.

A SEPARATION GEOTEXTILE IS REQUIRED AT THE BACK OF THE REINFORCED ZONE FOR RETAINING WALL NOS. 1 TO 4.

A DRAIN IS REQUIRED FOR RETAINING WALL NOS. 1 TO 4.

BEFORE BEGINNING MSE WALL DESIGN FOR RETAINING WALL NOS. 1 TO 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 NOS. 1 TO 4 FOR THE FOLLOWING:

- 1) DESIGN HEIGHT (H) = WALL HEIGHT + WALL EMBEDMENT
- 2) DESIGN LIFE = 100 YEARS
- 3) MAXIMUM FACTORED VERTICAL PRESSURE ON FOUNDATION MATERIAL = 6500 PSF
- 4) MINIMUM REINFORCEMENT LENGTH (L) = 0.8 H OR 6 FT, WHICHEVER IS LONGER
- 5) MINIMUM EMBEDMENT DEPTH = 2 FT
- 6) REINFORCED ZONE AGGREGATE PARAMETERS:

AGGREGATE TYPE*	UNIT WEIGHT (g) PCF	FRICTION ANGLE (f) DEGREES	COHESION (c) PSF
COARSE	110	38	0
FINE	115	34	0

*SEE MSE RETAINING WALLS PROVISION FOR COARSE AND FINE AGGREGATE MATERIAL REQUIREMENTS.

7) IN-SITU ASSUMED MATERIAL PARAMETERS:

MATERIAL TYPE	UNIT WEIGHT (g) PCF	FRICTION ANGLE (f) DEGREES	COHESION (c) PSF
RETAINED	120	30	0
FOUNDATION	120	28	0

DESIGN RETAINING WALL NOS. 1 TO 4 FOR A LIVE LOAD (TRAFFIC) SURCHARGE.

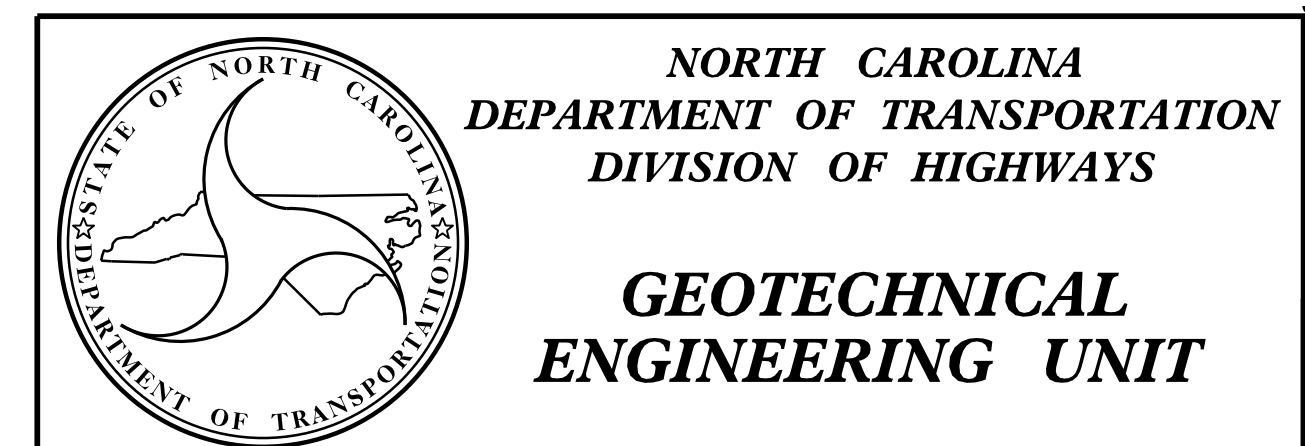
FOR RETAINING WALL NOS. 1 TO 4, DESIGN TRANSITIONS BETWEEN CULVERT HEAD WALL AND MSE WALL LOCATIONS. SEE POST BID CULVERT DESIGN FOR CULVERT LOCATION, FOOTING LOCATION, AND DEPTH.

DO NOT PLACE LEVELING PAD CONCRETE, AGGREGATE OR REINFORCEMENT FOR RETAINING WALLS NOS. 1 TO 4 UNTIL EXCAVATION DIMENSIONS AND FOUNDATION MATERIAL ARE APPROVED.

START RETAINING WALL CONSTRUCTION AFTER SURCHARGING HAS BEEN REMOVED AND CULVERT HAS BEEN CONSTRUCTED.

AT THE CONTRACTOR'S OPTION, "TEMPORARY SHORING FOR WALL CONSTRUCTION" MAY BE USED TO CONSTRUCT RETAINING WALL NOS. 1 TO 4. SEE MSE RETAINING WALLS PROVISION FOR TEMPORARY SHORING FOR WALL CONSTRUCTION.

PROJECT NO.: HB-0003
HAYWOOD COUNTY
STATION: SEE SHEETS W-1 & W-2
SHEET 4 OF 4



**RETAINING WALL NOS. 1 TO 4
CULVERT TO MSE WALL
TYPICAL DETAIL & NOTES**

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