



-

- 2610



VARIES

43.72' TO 69.58'



ADE TO THIS LINE	ORIGINAL GROUND	_			
RETAINING WALL NU. 1 TYPICAL (NOT TO SCALE)					
STANDARD SEGMEN WALL QUANT	TAL GRAVITY ITIES				
RETAINING WALL NO.1 -WALL1- • 38	25 SOUARE FEET				
• WALL AREA IS MEASURED USING	THE DESIGN HEIGH	т •н•			
_					
F	יKOJECT NO.: <u>B</u>	<u>-5541</u> HA	YWOOD	COUN	ITY
	STATION: -L- ST	(A. 30+1)	5.79-32-	+35.	00_
NORTH CAROLINA	SHEEL I				
MENT OF TRANSPORTATION VISION OF HIGHWAYS	RETAIN MSE R PLAN VIEW	NING WA RETAININ AND WA	ALL NO. 1 NG WALL ALL ENVE	LOPE	=
		REVISION	NS		SHEET
JINEEKING UNII	NO. BY D 1 2	DATE NO. 3 4	BY _	DATE _	NO. W-1



OTECHNICAL	
INEERING UNIT	

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS

MSE RETAINING WALL TYPICL & COPING DETAILS REVISIONS

ΒY

RETAINING WALL NO. 1

	<u> </u>	5		50	<u>тЭ./</u>	
SH	EET	2	OF	3		

DATE NO.

3

4

STATION: -L- STA. 30+15.79-32+35.00

HAYWOOD COUNTY

DATE SHEET

W-2

PROJECT NO.: B-5541

ΒY

GEOTECHNICAL ENGINEER	ENGINEER
Scining Man (1997)	
7A7310E67F76411	
DOCUMENT NOT C UNLESS ALL SIGNA	ONSIDERED FINAL TURES COMPLETED

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 NO. 1.

A SEPARATION GEOTEXTILE IS REQUIRED AT THE BACK OF THE REINFORCED ZONE FOR RETAINING WALL NO. 1.

A DRAIN IS REQUIRED FOR RETAINING WALL NO. 1.

BEFORE BEGINNING MSE WALL DESIGN FOR RETAINING WALL NO. 1, 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. 1 FOR THE FOLLOWING: 1) DESIGN HEIGHT (H) = WALL HEIGHT + WALL EMBEDMENT

2) DESIGN LIFE = 100 YEARS

3) MAXIMUM FACTORED VERTICAL PRESSURE ON FOUNDATION MATERIAL = 10,000 PSF 4) MINIMUM REINFORCEMENT LENGTH (L) = 1.2H OR 6 FT, WHICHEVER IS LONGER 5) REINFORCED ZONE AGGREGATE PARÀMETERS:

AGGREGATE TYPE*	UNIT WEIGHT (Y) PCF	FRICTION ANGLE (φ) DEGREES	COHESION (c) PSF	
COARSE	110	38	0	
FINE	115	34	0	
*SEE MSE RETAINING WALLS PROVISION FOR COARSE AND FINE AGGREGATE MATERIAL REQUIREMENTS.				

6) IN-SITU ASSUMED MATERIAL PARAMETERS:

-,				
MATERIAL TYPE	UNIT WEIGHT (Y) PCF	FRICTION ANGLE (φ) DEGREES	COHESION (c) PSF	
RETAINED	120	30	0	
FOUNDATION	120	30	0	

REINFORCEMENT FOR RETAINING WALL NO. 1.



PRECAST PANELS LEVELING PAD STEP DETAIL

PREPARED BY: SY	DATE: 3/2025
REVIEWED BY: SCC	DATE: 3/2025

EXISTING OR FUTURE OBSTRUCTIONS SUCH AS FOUNDATIONS, GUARDRAIL, FENCE OR HANDRAIL POSTS, PAVEMENTS, PIPES, INLETS OR UTILITIES MAY INTERFERE WITH

DO NOT PLACE LEVELING PAD CONCRETE, AGGREGATE OR REINFORCEMENT FOR RETAINING WALL NO. 1 UNTIL EXCAVATION DIMENSIONS AND FOUNDATION MATERIAL ARE APPROVED.



OTECHNICAL	
INEERING UNIT	

NORTH CAROLINA
MENT OF TRANSPORTATION
VISION OF HIGHWAYS

REVISIONS DATE SHEET DATE NO. ΒY ΒY 3 1 W-3 4

RETAINING WALL NO. 1 MSE RETAINING WALL NOTES & LEVELING PAD STEP DETAIL

SHEET 3 OF 3

STATION: -L- STA. 30+15.79-32+35.00

HAYWOOD COUNTY

PROJECT NO.: B-5541

GEOTECHNICAL ENGINEER	ENGINEER
Bocusigned By Magaon Market Shipping Yang 03/20/2025 747310E67F76411 SIGNATURE DATE	SIGNATURE DATE
DOCUMENT NOT COUNTERS ALL SIGNA	ONSIDERED FINAL TURES COMPLETED