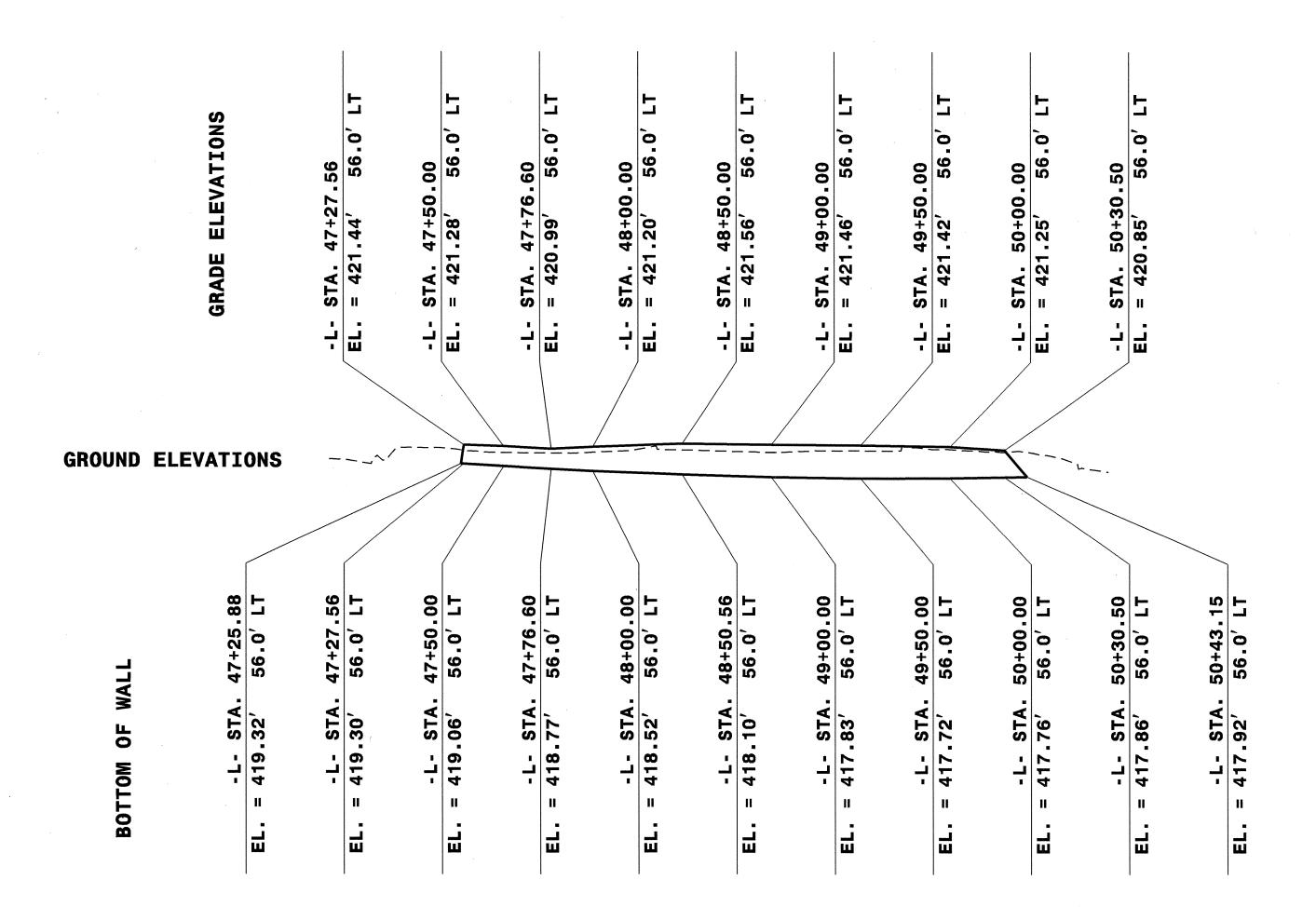
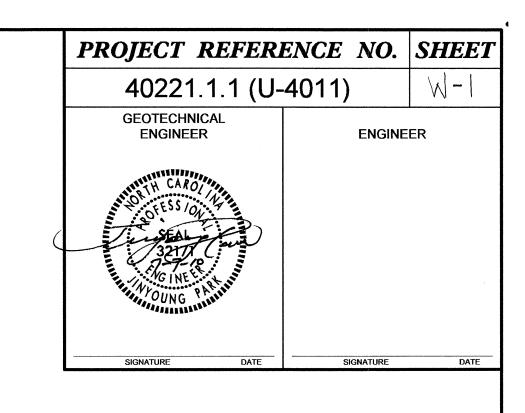


WALL NO. 1 PLAN VIEW, NTS



WALL NO. 1 ENVELOPE, NTS
- EXPOSED WALL FACE -

PREPARED BY:	JINYOUNG PARK	DATE: 05/2010
REVIEWED BY:	JAMES R. BATTS	DATE: 05/2010



RETAINING WALL TYPICAL SECTION					
STA.	OFFSET FROM Q	GRADE ELEV.	BOTTOM OF WALL ELEV.	DESIGN HEIGHT	
-L- 47+25.88	56 . 00′ LT	419.32	419.32	0.00′	
-L- 47+27.56	56.00′ LT	421.44	419.30	2.14′	
-L- 47+50.00	56.00′ LT	421.28	419.06	2.22′	
-L- 47+76.60	56.00′ LT	420.99	418.77	2.22′	
-L- 48+00.00	56 . 00′ LT	421.20	418.52	2.68′	
-L- 48+50 . 00	56.00′ LT	421.56	418.10	3.46′	
-L- 49+00.00	56.00′ LT	421.46	417.83	3.63′	
-L- 49+50 . 00	56 . 00′ LT	421.42	417.72	3.70′	
-L- 50+00.00	56.00′ LT	421.25	417.76	3.49′	
-L- 50+30 . 50	56 . 00′ LT	420.85	417.86	2.99′	
-L- 50+43.I5	56.00′ LT	417.92	417.92	0.00′	

TOTAL BILL OF MATERIA	AL	
SEGMENTAL GRAVITY RETAINING WALLS	1150	SQUARE FEET



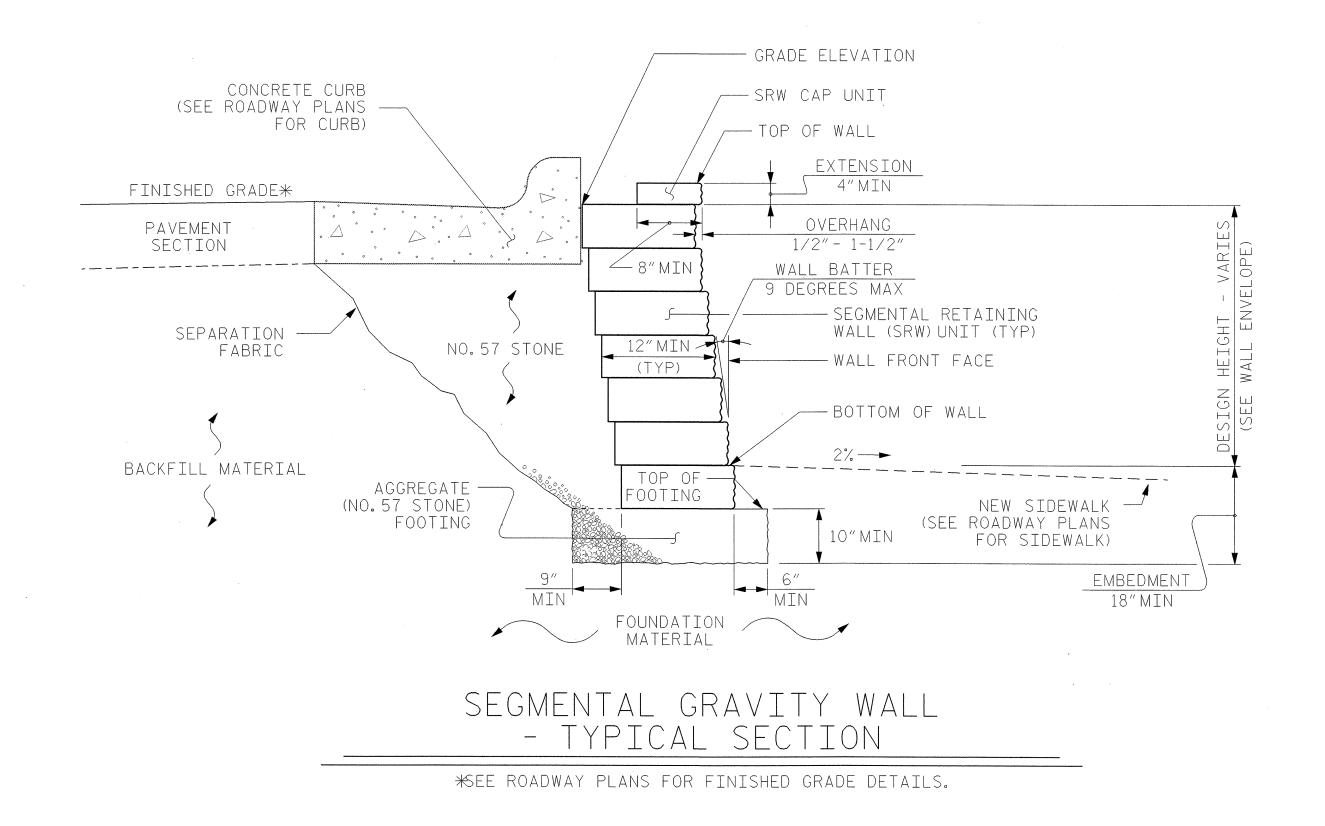
NORTH CAROLLA ACKNOWLE

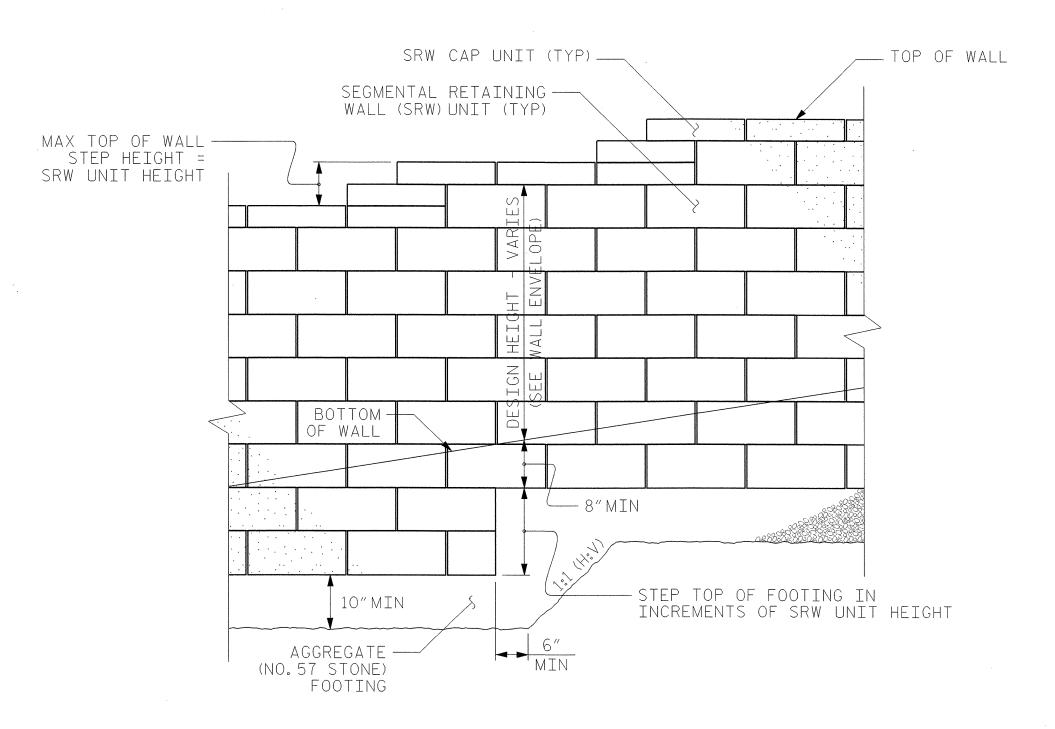
X EASTERN REGIONAL OFFICE
 ☐ WESTERN REGIONAL OFFICE
 ☐ CONTRACT OFFICE

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SEGMENTAL GRAVITY RETAINING WALL NO. 1 ENVELOPE

REVISIONS					
BY	DATE	NO.	BY	DATE	
		3			
		4			





SEGMENTAL GRAVITY WALL - TYPICAL ELEVATION

PREPARED BY: JINYOUNG PARK DATE: 05/2010

REVIEWED BY: JAMES R. BATTS DATE: 05/2010

PROJECT REFERENCE NO. SHEET

40221.1.1 (U-4011)

GEOTECHNICAL
ENGINEER

ENGINEER

SIGNATURE

DATE

SIGNATURE

DATE

SIGNATURE

DATE

NOTES:

FOR SEGMENTAL GRAVITY RETAINING WALLS, SEE SEGMENTAL GRAVITY RETAINING WALLS PROVISION.

USE SRW UNITS WITH A A NATURAL STONE TYPE FACE FOR RETAINING WALL NO.1.

USE SRW UNITS WITH A EARTH TONE COLOR FOR RETAINING WALL NO.1.

A DRAIN PIPE IS NOT REQUIRED FOR RETAINING WALL NO.1.

BEFORE BEGINNING SEGMENTAL GRAVITY 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 WALL HEIGHTS EQUAL TO THE DESIGN HEIGHT PLUS DEPTH TO TOP OF FOOTING (DIFFERENCE BETWEEN GRADE ELEVATION AND TOP OF FOOTING ELEVATION).

DESIGN RETAINING WALL NO.1 FOR THE FOLLOWING:
1) MINIMUM DESIGN LIFE = 75 YEARS
2) MAXIMUM FACTORED RESISTANCE = 3500 PSF
3) IN-SITU ASSUMED MATERIAL PARAMETERS:

MATERIAL TYPE	UNIT WEIGHT (Y) PCF	FRICTION Angle (ф) Degrees	COHESION (c) PSF
BACKFILL	120	30	0
FOUNDATION	120	30	0

DESIGN RETAINING WALL NO.1 FOR A LIVE LOAD (TRAFFIC) SURCHARGE.

VERIFY ANY UTILITY CONFLICT BEFORE BEGINNING SEGMENTAL GRAVITY WALL DESIGN OR CONSTRUCTION.

DO NOT PLACE NO.57 STONE FOR FOOTINGS FOR RETAINING WALL NO.1 UNTIL OBTAINING APPROVAL OF THE EXCAVATION DEPTH AND FOUNDATION MATERIAL.

GEOTECHNICAL ENGINEERING UNIT

★ EASTERN REGIONAL OFFICEWESTERN REGIONAL OFFICECONTRACT OFFICE

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SEGMENTAL GRAVITY RETAINING WALL NO. 1