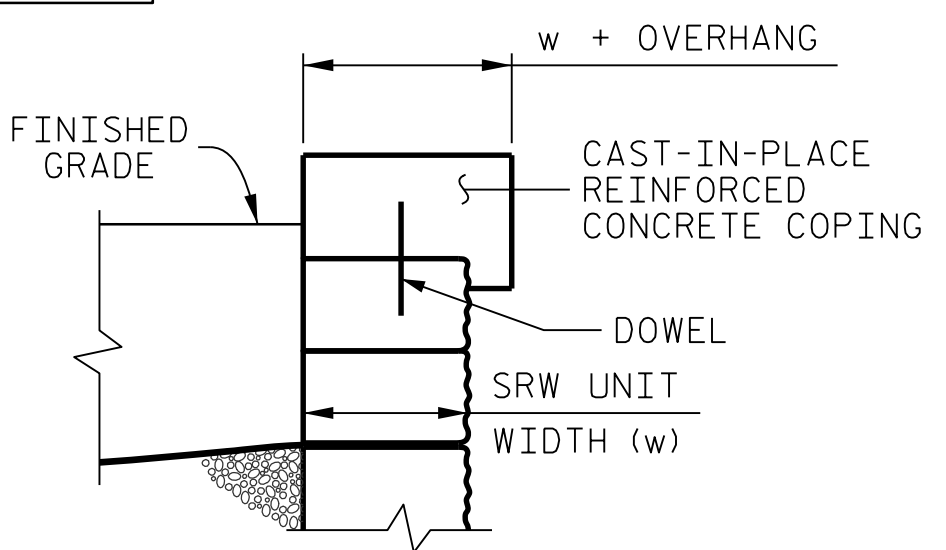


MSE WALL WITH SRW UNITS

CONTRACTOR SHALL SUBMIT A SAMPLE OF THREE (3) STANDARD SRW UNITS FROM AN APPROVED WALL COMPANY TO THE ENGINEER FOR REVIEW AND SELECTION BY CAMPBELL UNIVERSITY BEFORE BEGINNING MSE WALL DESIGN. THE WORKING DRAWING SUBMITTAL(S) FOR MSE WALLS SHALL INDICATE THE SELECTED SRW UNIT.

PLACE 1" EXPANSION JOINT MATERIAL BETWEEN FRONT FACE OF WALL AND CONCRETE STEPS AT RETAINING WALLS No. 1, No. 4 AND No. 5.

THE COST TO FURNISH AND INSTALL SLEEVES FOR CHAIN LINK FENCE POST SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE BID PER SQUARE FOOT FOR MECHANICALLY STABILIZED EARTH (MSE) RETAINING WALLS.



COPING DETAIL

NOTES - WALL No. 1

FOR MECHANICALLY STABILIZED EARTH (MSE) RETAINING WALLS, SEE MECHANICALLY STABILIZED EARTH RETAINING WALLS SPECIAL PROVISION.

USE AN MSE WALL SYSTEM WITH SEGMENTAL RETAINING WALL (SRW) UNITS THAT MEET ARTICLE 1040-4 OF THE STANDARD SPECIFICATIONS FOR RETAINING WALL No. 1.

AT THE CONTRACTOR'S OPTION, USE FINE AGGREGATE IN THE REINFORCED ZONE OF THE RETAINING WALL No. 1.

A DRAIN IS REQUIRED FOR RETAINING WALL No. 1

DESIGN RETAINING WALL No. 1 FOR THE FOLLOWING:

- 1) H = DESIGN HEIGHT + EMBEDMENT
- 2) MINIMUM DESIGN LIFE = 75 YEARS
- 3) MAXIMUM FACTORED VERTICAL PRESSURE ON FOUNDATION MATERIAL = 3,499 LB/SF.
- 4) MINIMUM REINFORCEMENT LENGTH (L) = 0.80 H OR 6 FEET, WHICHEVER IS LONGER.
- 5) MINIMUM EMBEDMENT ELEVATION 2.0 FEET BELOW GRADE.
- 6) REINFORCED ZONE AGGREGATE PARAMETERS:

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

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

7) IN-SITU ASSUMED MATERIAL PARAMETERS:

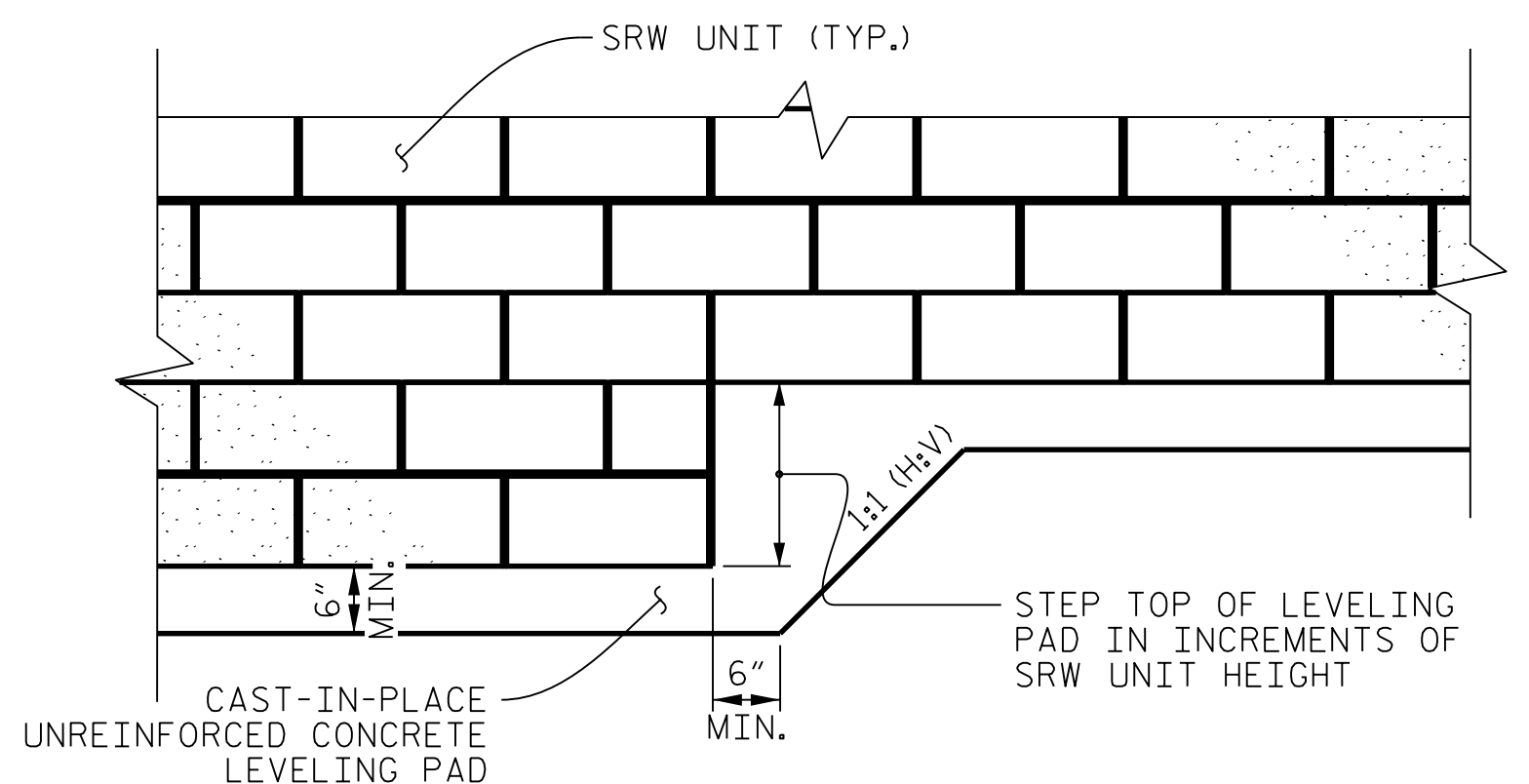
MATERIAL TYPE	UNIT WEIGHT (gamma) PCF	FRICTION ANGLE (phi) DEGREES	COHESION (c) PSF
BACKFILL	120	30	100
FOUNDATION	100	29	0

DO NOT PLACE LEVELING PAD CONCRETE, AGGREGATE OR REINFORCEMENT UNTIL EXCAVATION DIMENSIONS AND FOUNDATION MATERIAL ARE APPROVED.

AT THE CONTRACTOR'S OPTION, TEMPORARY SHORING FOR WALL CONSTRUCTION MAY BE USED TO CONSTRUCT RETAINING WALL No. 1.

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

EXISTING OR FUTURE OBSTRUCTION FROM PIPES AND INLETS WILL INTERFERE WITH REINFORCEMENT FOR RETAINING WALL No. 1.



SEGMENTAL RETAINING WALL (SRW) UNITS

LEVELING PAD STEP DETAIL

NOTES - WALL No. 3, WALL No. 4 AND WALL No. 5

FOR MECHANICALLY STABILIZED EARTH (MSE) RETAINING WALLS, SEE MECHANICALLY STABILIZED EARTH RETAINING WALLS SPECIAL PROVISION.

USE AN MSE WALL SYSTEM WITH SEGMENTAL RETAINING WALL (SRW) UNITS THAT MEET ARTICLE 1040-4 OF THE STANDARD SPECIFICATIONS FOR RETAINING WALLS No. 3, No. 4 AND No. 5.

AT THE CONTRACTOR'S OPTION, USE FINE AGGREGATE IN THE REINFORCED ZONE OF THE RETAINING WALLS No. 3, No. 4 AND No. 5.

A DRAIN IS REQUIRED FOR RETAINING WALLS No. 3, No. 4 AND No. 5.

DESIGN RETAINING WALLS No. 3, No. 4 AND No. 5 FOR THE FOLLOWING:

- 1) H = DESIGN HEIGHT + EMBEDMENT
- 2) MINIMUM DESIGN LIFE = 75 YEARS
- 3) MAXIMUM FACTORED VERTICAL PRESSURE ON FOUNDATION MATERIAL = 3,635 LB/SF.
- 4) MINIMUM REINFORCEMENT LENGTH (L) = 0.90 H OR 6 FEET, WHICHEVER IS LONGER.
- 5) MINIMUM EMBEDMENT ELEVATION 2.0 FEET BELOW GRADE.
- 6) REINFORCED ZONE AGGREGATE PARAMETERS:

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

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

7) IN-SITU ASSUMED MATERIAL PARAMETERS:

MATERIAL TYPE	UNIT WEIGHT (gamma) PCF	FRICTION ANGLE (phi) DEGREES	COHESION (c) PSF
RETAINED BACKFILL	120	30	100
FOUNDATION	100	29	0

DESIGN RETAINING WALLS No. 3, No. 4 AND No. 5 FOR A LIVE LOAD (TRAFFIC) SURCHARGE.

TEMPORARY SHORING IS REQUIRED FOR RETAINING WALLS No. 3, No. 4 AND No. 5 IN ACCORDANCE WITH THE TEMPORARY SHORING PROVISION. SEE TRAFFIC CONTROL PLANS.

VERIFY LOCATION AND ELEVATION OF ALSP PIPE ARCH CULVERT AND HEADWALLS BEFORE BEGINNING MSE WALL DESIGN OR CONSTRUCTION.

DO NOT PLACE LEVELING PAD CONCRETE, AGGREGATE OR REINFORCEMENT UNTIL EXCAVATION DIMENSIONS AND FOUNDATION MATERIAL ARE APPROVED.

FOR STEEL BEAM GUARDRAIL, SEE ROADWAY PLANS AND SECTION 862 OF THE STANDARD SPECIFICATION.

PROJECT NO. **W-5206AG**

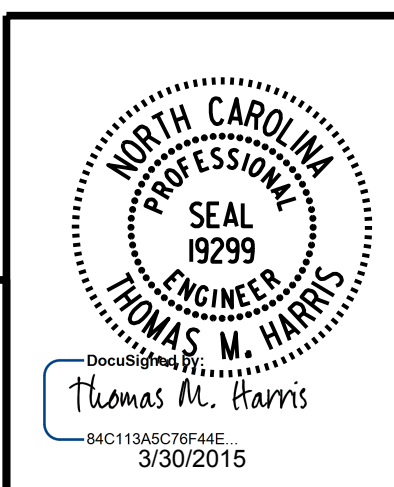
HARNETT COUNTY

STATION: **28+32.19 -L-**

SHEET 6 OF 6

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

PEDESTRIAN TUNNEL UNDER
US 421/NC 27 (-L-) BETWEEN
SR 2000 (WADE STEWART ROAD)
AND SR 2057 (HATCHER STREET)



PLANS PREPARED BY:
PARSONS
5540 CenterView Drive, Suite 217
Raleigh, NC 27606-3386
NC LICENSE No. F-0246
FOR NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

DRAWN BY : K. E. LOFTON	DATE : 12-14
CHECKED BY : T. M. HARRIS	DATE : 1-15
DESIGN ENGINEER : T. M. HARRIS	DATE : 1-15

REVISIONS						SHEET No. C-6
No.	BY:	DATE:	No.	BY:	DATE:	
1			3			TOTAL SHEETS
2			4			6