

TYPICAL LEVELING PAD STEP DETAIL

NOTES

THE CONTRACTOR SHALL SUBMIT COMPLETE WORKING DRAWINGS/SHOP PLANS, ERECTION PLANS AND DESIGN CALCULATIONS FOR REVIEW AND APPROVAL PRIOR TO BEGINNING THE MSE WALL. SEE SPECIAL PROVISIONS.

THE MSE WALL SHALL BE DESIGNED IN ACCORDANCE WITH THE LATEST AASHTO ALLOWABLE STRENGTH DESIGN STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGE (INCLUDING INTERIMS), THE SPECIAL PROVISIONS AND THE PLANS.

THE SERVICE LIFE OF THE MSE WALL SHALL BE 100 YEARS.

ALL WALL BACKFILL MATERIAL WITHIN THE REINFORCED ZONE SHALL BE #57 WASHED CRUSHED STONE. SEE SECTION 1005 OF THE STANDARD SPECIFICATIONS FOR #57 STONE.

THE LEVELING PAD SHALL BE CAST-IN-PLACE AND MADE CONTINUOUS AT STEPS.

USE THE FOLLOWING VALUES FOR WALL DESIGN:

- A. #57 STONE: UNIT WEIGHT = 110 PCF, $\phi = 34^\circ$, $c=0$
- B. RETAINED MATERIAL: UNIT WEIGHT = 10 PCF, $\phi = 30^\circ$, $c=0$
- C. ALL OTHER EARTH MATERIAL AROUND WALL: UNIT WEIGHT = 120 LBS/FT³, $\phi = 30^\circ$, $c=0$
- D. ALLOWABLE BEARING PRESSURE, 2.0 TSF

A MINIMUM PANEL EMBEDMENT OF 3'-0" IS REQUIRED.

THE TOP OF WALL ELEVATION IS WHERE THE FINISHED GRADE BEHIND THE MSE WALL INTERSECTS THE BACK OF THE WALL. SHOW A DETAIL LABELING THE TOP OF WALL.

PLANS SUBMITTED FOR REVIEW SHALL INCLUDE THE FOLLOWING: PLAN VIEW, ELEVATION VIEWS, TYPICAL SECTIONS, LEVELING PAD STEP DETAIL, PANEL DETAIL, AND OBSTRUCTION AVOIDANCE DETAILS.

CONCRETE COPING SHALL BE CAST-IN-PLACE AND ALL COPING JOINTS SHALL BE VERTICAL. TOP OF COPING ELEVATION MUST BE A MINIMUM OF 6" ABOVE FINISHED GRADE TO AVOID SPILLOVER.

MSE WALLS, COPING, LEVELING PAD, 4" CONCRETE BERM, 4" CONCRETE DITCH, EXCAVATION AND BACKFILL SHALL BE PAID AT THE LUMP SUM PRICE FOR MSE RETAINING WALL AT STATION 38+00.00 -L-.

DRAINAGE MUST BE AWAY FROM THE WALL AT THE TOP AND BOTTOM.

SHOW ELEVATIONS AT TOP OF LEVELING PAD.

IN ELEVATION VIEW, SHOW THE TOP OF WALL, THE EXISTING GROUND LINE, AND THE PROPOSED GROUND LINE. SHOW ELEVATIONS FOR THE TOP OF WALL AT VERTICAL BREAK POINTS, AND AT NO GREATER THAN 50 FOOT INTERVALS. LABEL WHETHER THE ELEVATIONS IS FRONT FACE OR BACK FACE.

SHOW A DETAIL FOR FABRIC AND SOIL ABOVE THE #57 STONE WHERE APPROPRIATE.

SHOW THE LIMITS OF SOIL REINFORCEMENT AND THE #57 STONE.

SHOW THE WALL'S BEARING PRESSURE ON PLANS.

THE GROUNDWATER ELEVATION SHALL BE TAKEN AS THE EXISTING GROUND SURFACE ELEVATION.

SHOW DETAILS IN THE PLANS FOR SKEWING REINFORCING STRIPS OR MATS AROUND ANY OBSTRUCTIONS, SUCH AS GUARDRAILS, PAVED DITCHES, PAVEMENT STRUCTURES, AND DRAINAGE STRUCTURES. SOIL REINFORCING MUST NOT BE IN CONTACT WITH ANY OBSTRUCTIONS.

FINAL PLANS MUST BE ON REPRODUCIBLE SHEETS SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF NORTH CAROLINA.

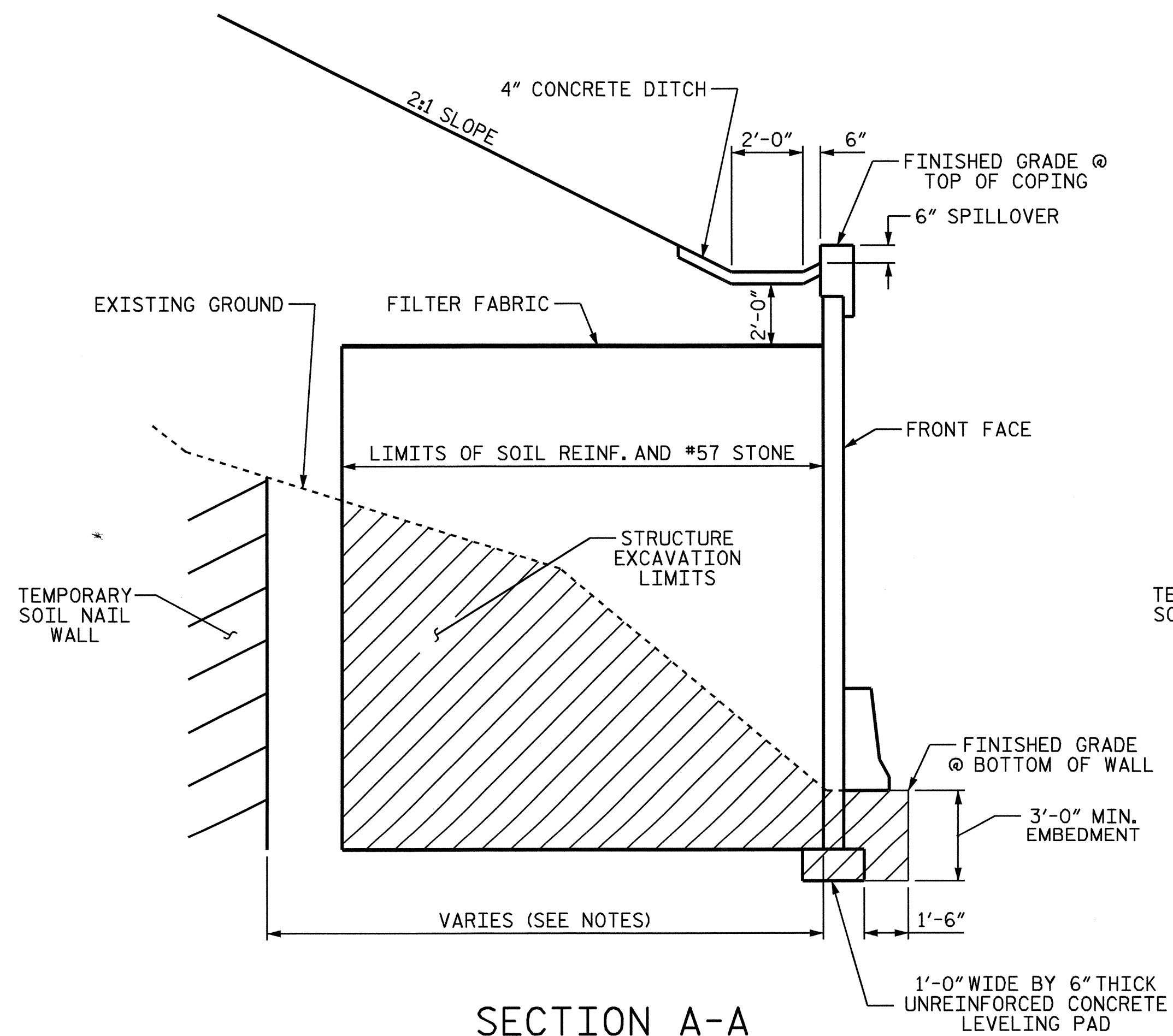
SUBMIT PLANS, WORKING DRAWINGS AND CALCULATIONS, INCLUDING SAMPLE HAND-CALCULATIONS, FOR REVIEW AND APPROVAL WITHIN AN APPROPRIATE TURN AROUND TIME.

CONSTRUCT JOINTS IN COPING IN ACCORDANCE WITH ARTICLE 825-10 OF THE STANDARD SPECIFICATIONS. LOCATED JOINTS IN ALL EXPOSED FACES OF THE COPING, AT 10 FOOT MAXIMUM CENTERS, TO COINCIDE WITH PANEL JOINTS. EVERY THIRD JOINT SHALL BE AN EXPANSION JOINT. STOP REINFORCING STEEL 2" OF EITHER SIDE OF EXPANSION JOINTS. OTHER JOINTS SHALL BE GROOVED CONTRACTION JOINTS, 1/2" DEPTH.

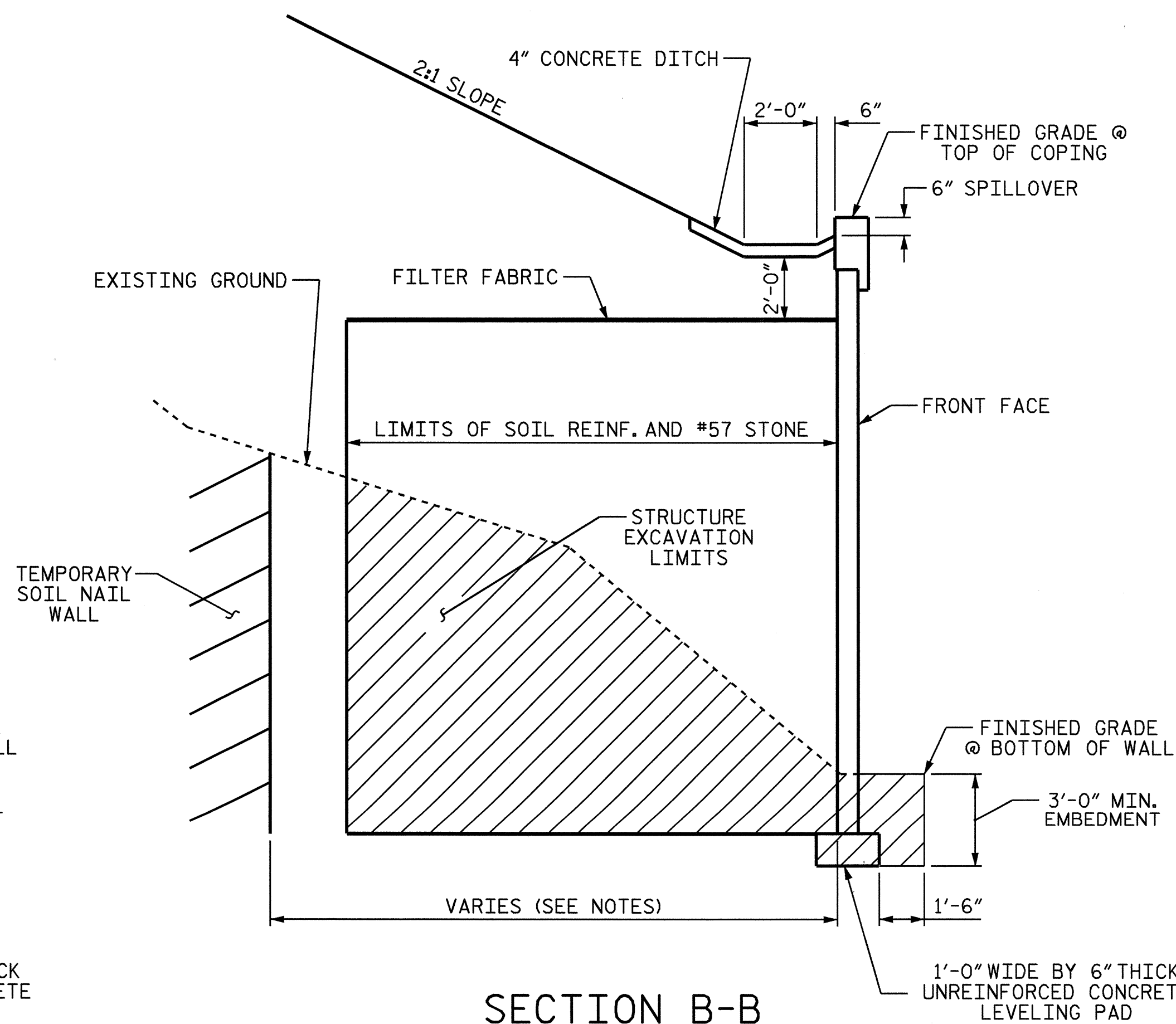
NOTE ON CONTRACTOR'S WORKING DRAWINGS: "VERIFY BEARING CAPACITY OF THE WALL FOUNDATION SOILS IN THE FIELD."

CONSTRUCT A TEMPORARY SOIL NAIL WALL AS SHOWN IN THE PLANS OR AS DIRECTED BY THE ENGINEER. SEE TEMPORARY SOIL NAIL WALL SPECIAL PROVISIONS.

THE TEMPORARY SOIL NAIL WALL SHALL BE OFFSET BEHIND THE MSE WALL A DISTANCE OF AT LEAST 0.8 TIMES THE HEIGHT OF THE MSE WALL AT ANY GIVEN LOCATION.



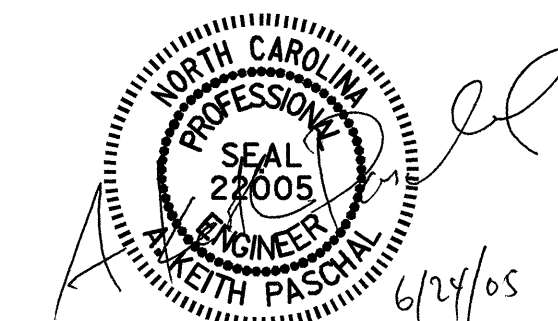
SECTION A-A



SECTION B-B

DRAWN BY : T. A. HARRIS DATE : 5/12/05
 CHECKED BY : O. PUTIGER DATE : 5/16/05

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 kpaschal



PROJECT NO. R-4733
 HAYWOOD COUNTY
 STATION: 38+00.00 -L-

SHEET 2 OF 2

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

MSE
 RETAINING WALL
 DETAILS

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	2-K
1			3			TOTAL SHEETS
2			4			