

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. ALLOWABLE SOIL BEARING PRESSURE = 150 kPa
 B. #57 STONE: 16.50 kN/m³, $\phi = 34^\circ$, c=0
 C. ALL OTHER EARTH MATERIAL: 18.8 kN/m³, $\phi = 31^\circ$, c=0.

A MINIMUM PANEL EMBEDMENT OF 600mm 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.

THE PANEL SHALL BE RECTANGULAR SHAPED WITH A FLAT SURFACE ON THE FRONT FACE. THE PANELS SHALL HAVE A PLAIN GRAY FINISH.

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

THE WALL SHALL BE DESIGNED TO STEP OVER A 1.370m DIAMETER CONCRETE PIPE AND A 920mm DIAMETER STEEL PIPE AT THE WALL LOCATION SHOWN ON THE ROADWAY PLANS. THE PIPE LOCATIONS AND ELEVATIONS SHALL BE DETERMINED FROM THE ACTUAL CONDITIONS PRIOR TO DESIGNING THE WALL. THE SLOPE BETWEEN THE WALL AND THE PIPE HEADWALL IN FRONT OF THE WALL SHALL BE ADJUSTED TO MAINTAIN THE MINIMUM PANEL EMBEDMENT, A 2:1 (H:V) SLOPE OR FLATTER AND MINIMUM OF 920mm OF SOIL COVER BETWEEN THE BOTTOM OF THE LEVELING PAD AND THE TOP OF THE PIPES. A SECTION DETAIL OF THIS GEOMETRY SHALL BE INCLUDED IN THE 'MSE' WALL PLANS

CONCRETE COPING SHALL BE CAST-IN-PLACE AND ALL COPING JOINTS SHALL BE VERTICAL. TOP OF COPING ELEVATION MUST BE A MINIMUM OF 150mm ABOVE FINISHED GRADE TO AVOID SPOILOVER.

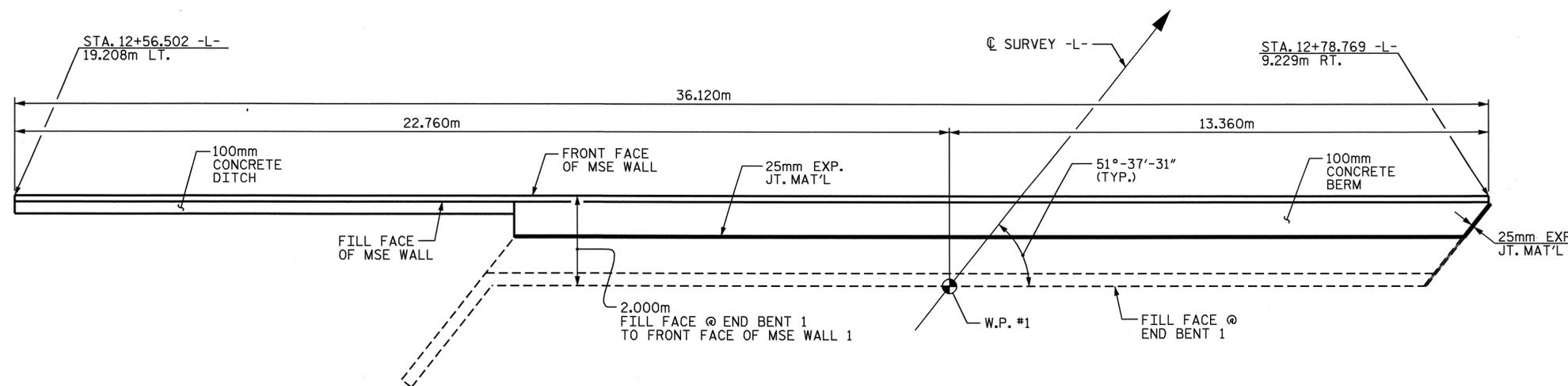
DETAILS REQUIRED FOR SKEWING REINFORCEMENT AROUND PILES SHALL BE INCLUDED IN THE MSE WALL PLANS. REINFORCEMENT SHALL NOT BE IN CONTACT WITH THE PILES. SEE "FOUNDATION LAYOUT" SHEET FOR END BENT PILE LOCATION AND LAYOUT.

MSE WALLS, COPING, LEVELING PAD, 100mm CONCRETE BERM, 100mm CONCRETE DITCH, EXCAVATION AND BACKFILL SHALL BE PAID AT THE LUMP SUM PRICE FOR MSE RETAINING WALL AT STATION 12+92.508 -L-.

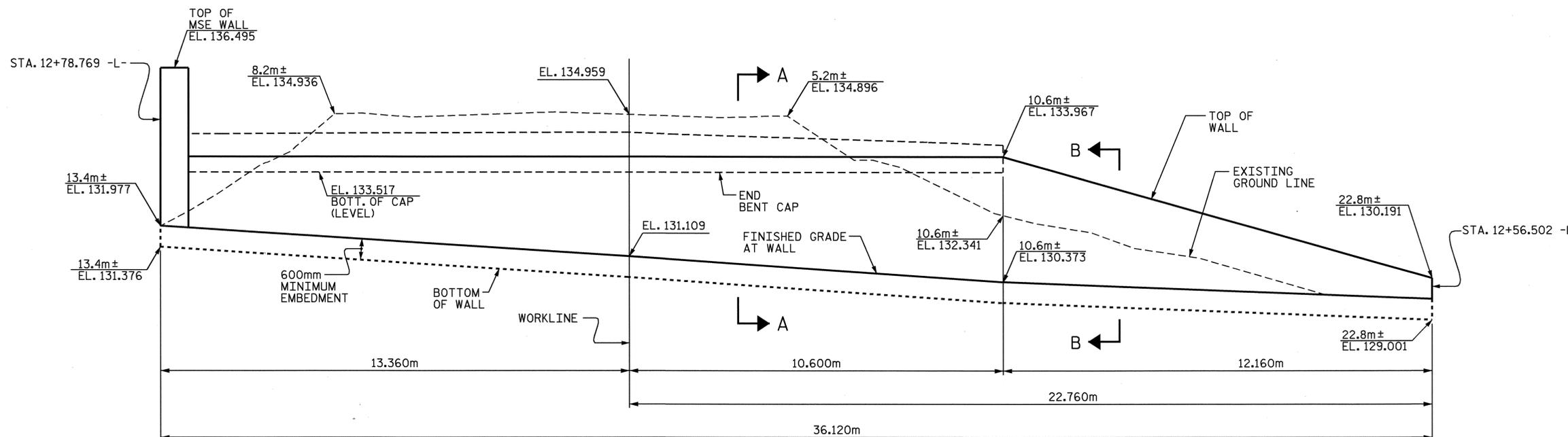
DRAINAGE MUST BE AWAY FROM THE WALL AT THE TOP AND BOTTOM.

SHOW ELEVATIONS AT TOP OF LEVELING PAD.

(NOTES CONTINUED ON SHEET 2 OF 3)



PLAN @ END BENT 1 (WALL 1)



FRONT FACE OF MSE RETAINING WALL 1

PROJECT NO. B-3256
WAKE COUNTY
 STATION: 12+92.508 -L-

SHEET 1 OF 4

BILL OF MATERIAL	
MSE RETAINING WALL AT STATION 12+92.508 -L- WALL 1	LUMP SUM
MSE RETAINING WALL AT STATION 12+92.508 -L- WALL 2	LUMP SUM
MSE RETAINING WALL AT STATION 12+92.508 -L- WALL 3	LUMP SUM



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

MSE WALL ENVELOPE @ END BENT 1 (WALL 1)

REVISIONS					SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		

TOTAL SHEETS 4

DRAWN BY : K. McCAULEY DATE : 10/29/03
 CHECKED BY : A. K. PASCHAL DATE : 12/29/03