

HANDRAIL

## NOTES

SUBMIT COMPLETE WORKING DRAWINGS / SHOP PLANS AND DESIGN CALCULATIONS FOR REVIEW AND APPROVAL BEFORE BEGINNING CONSTRUCTION OF CONCRETE CANTILEVER WALL. SEE CONCRETE CANTILEVER WALL SPECIAL PROVISION.

USE THE FOLLOWING VALUES FOR WALL DESIGN:

EARTH MATERIAL: Y=18.8 KN/M³, C=0, 0=30°

EMBED THE WALL A MINIMUM OF 610 MM FOR PROPOSED GRADE AT BACK OF WALL ELEVATION AND EXISTING GRADE, SEE WALL ENVELOPE.

USE FLAT EXPOSED WALL FACES.

DESIGN THE CONCRETE CANTILEVER WALL TO MEET ALL THE CRITERIA OF THE LATEST VERSION OF AASHTO ALLOWABLE STRENGTH DESIGN STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES AND ITS INTERIMS, THE SPECIAL PROVISIONS, AND THE PLANS.

ALL STRUCTURE EXCAVATION FOR THE CONSTRUCTION OF THE WALL WILL BE CONSTRUCTED INCIDENTIAL TO THE COST OF THE WALL.

RELOCATE ALL UTILITIES PRIOR TO CONSTRUCTION OF THE RETAINING WALLS. SEE UTILITY PLANS.

DETERMINE THE ALLOWABLE SOIL BEARING CAPACITY. VERIFY THAT THE SOIL MEETS THE ALLOWABLE BEARING CAPACITY BEFORE CONSTRUCTION OF THE WALL FOOTING.

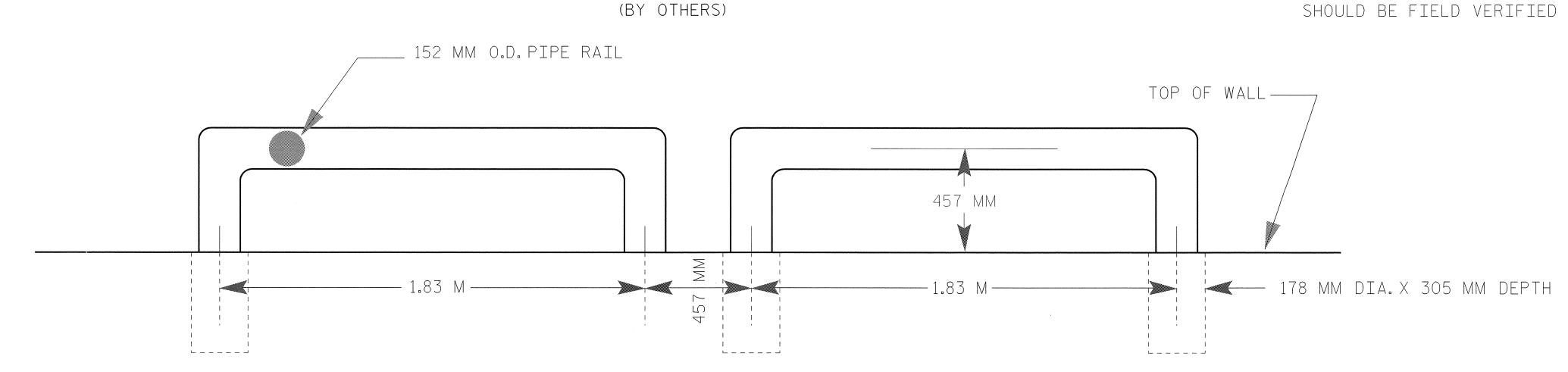
WEEP HOLES 76 MM IN DIAMETER SHALL BE PLACED ON 3.0 METER INTERVALS JUST ABOVE THE PROPOSED GROUND SURFACE AT THE FRONT OF THE WALL.

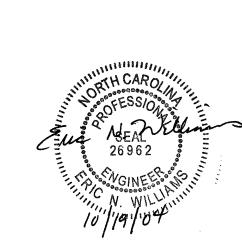
A STONE DRAIN CONSISTING OF 0.03 CUBIC METERS OF #78 M STONE CONTAINED IN A BAG OF POROUS FABRIC SHALL BE PLACED AT EACH WEEP HOLE. SUBDRAIN FINE AGGREGATE SHALL BE PLACED AROUND THE STONE DRAIN AT LEAST 305 MM THICK. A HORIZONTAL SUBRAIN LAYER SHALL BE PLACED ALONG THE BACK OF WALL BETWEEN THE STONE DRAIN OUT OF 305 MM THICK LAYER OF FINE AGGREGATE. A VERTICAL DRAIN OF SUBDRAIN FINE AGGREGATE AT LEAST 305 MM X 305 MM SQUARE IN CROSS SECTION SHALL BE PLACED AT EACH WEEP HOLE TO AN ELEVATION OF 610 MM BELOW THE SURFACE OF THE EMBANKMENT.

CLASS "A" CONCRETE IS TO BE USED THROUGHOUT FOR CONCRETE RETAINING WALLS.

AT A MINIMUM, USE 13 MM EXPANSION JOINT EVERY 7.5 M.

THE WALL ENVELOPE PROVIDED IS FROM THE BEST INFORMATION AVAILABLE. ACTUAL WALL ENVELOPE SHOULD BE FIELD VERIFIED BY THE CONTRACTOR BEFORE DESIGN AND CONSTRUCTION BEGINS.





PROJECT I	VO	U-29/3B	
GL	JILFORL	)	_COUNTY
STATION:	- Y / 4 -	STA.//+0	3.500

DEPARTMENT OF TRANSPORTATION RALEIGH

STATE OF NORTH CAROLINA

CONCRETE CANTILEVER RETAINING WALL DETAIL

REVISIONS						SHEET NO.	
).	BY:	DATE:	NO.	BY:	DATE:		
			3			TOTAL	
2			4			SHEETS	