

NOTES

PROPRIETARY RETAINING WALL DESIGN CALCULATIONS AND PLANS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL. SEE SPECIAL PROVISIONS FOR MODULAR BLOCK RETAINING WALL.

MODULAR BLOCK RETAINING WALL SHALL BE DESIGNED TO MEET ALL THE CRITERIA OF THE LATEST VERSION OF AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES AND ITS INTERIMS.

THE SERVICE LIFE OF THE RETAINING WALL SHALL BE 75 YEARS.

ALL WALL BACKFILL MATERIAL WITHIN THE REINFORCED ZONE SHALL BE #57 WASHED CRUSHED STONE WITH STEEL REINFORCEMENT OR CLASS III MATERIAL WITH EXTENSIBLE REINFORCEMENT.

FOR DESIGN, USE AN ALLOWABLE SOIL BEARING PRESSURE OF 150 KPa AND THE FOLLOWING STRENGTH PARAMETERS:

- CLASS III BACKFILL: $\phi = 32^\circ, c = 0, \text{UNIT WEIGHT} = 18.8 \text{ KN/m}^3$
- #57 STONE BACKFILL: $\phi = 34^\circ, c = 0, \text{UNIT WEIGHT} = 17.3 \text{ KN/m}^3$
- ALL OTHER EARTH MATERIAL AROUND WALL: $\phi = 30^\circ, c = 0, \text{UNIT WEIGHT} = 18.8 \text{ KN/m}^3$

THE RETAINING WALL SHALL HAVE A MINIMUM WALL EMBEDMENT DEPTH OF 600mm BELOW THE FINAL GRADE LINE.

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

USE CAST IN PLACE COPING.

TOP OF WALL COPING SHALL BE A MINIMUM OF 75mm ABOVE THE FINISHED GRADE TO AVOID SPILLOVER.

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.

ALL ELEVATIONS ARE IN METERS.

FOR MODULAR BLOCK RETAINING WALL, SEE SPECIAL PROVISIONS.

FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.

PROPOSED STEEL PIPE RAIL SHALL BE CONSTRUCTED OF 37.5mm DIAMETER SCHEDULE 40 PLAIN END GALVANIZED STEEL PIPE MEETING THE REQUIREMENTS OF ASTM A53 AS SHOWN ON DETAILS IN PLANS. PIPE RAIL SHALL BE EMBEDDED 200mm INTO PROPOSED WALL WITH CHEMICAL OR CONCRETE GROUT ANCHORING SYSTEM AS DIRECTED BY THE ENGINEER. GALVANIZING SHALL BE DONE IN ACCORDANCE WITH SECTION 1076 OF THE STANDARD ROADWAY SPECIFICATIONS.

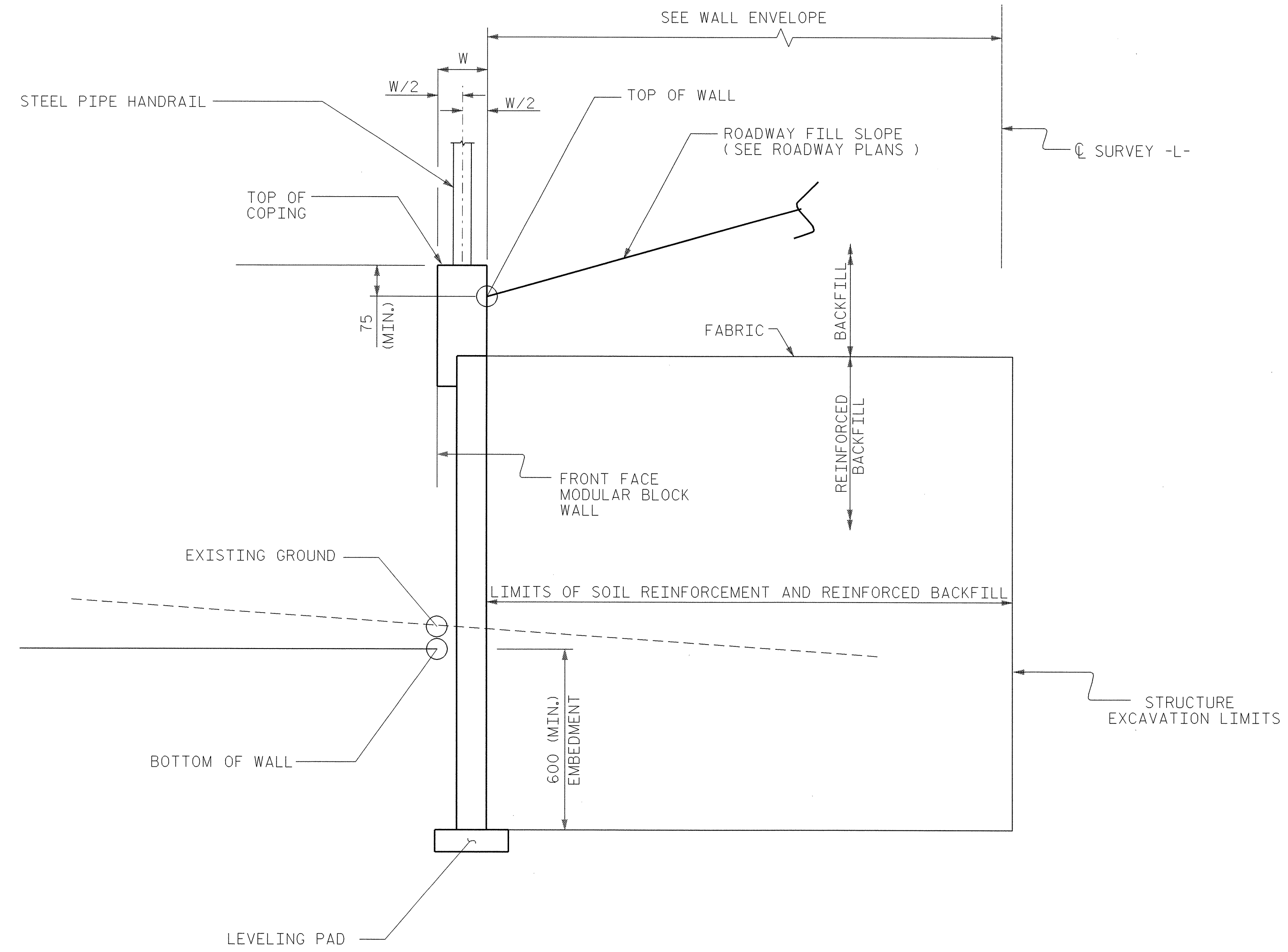
WELDING SHALL BE DONE IN ACCORDANCE WITH ARTICLE 1072-20 OF THE STANDARD SPECIFICATIONS

THE PROPOSED RAILING SHALL BE PRE-MEASURED AND CENTERED ON TOP OF WALL FOR POST SPACINGS. A ROTARY DRILL SHALL BE USED FOR DRILLING THE HOLES. NO IMPACT DRILLS SHALL BE ALLOWED, TO ELIMINATE ANY POSSIBILITY OF STRUCTURAL DAMAGES TO THE PROPOSED WALL.

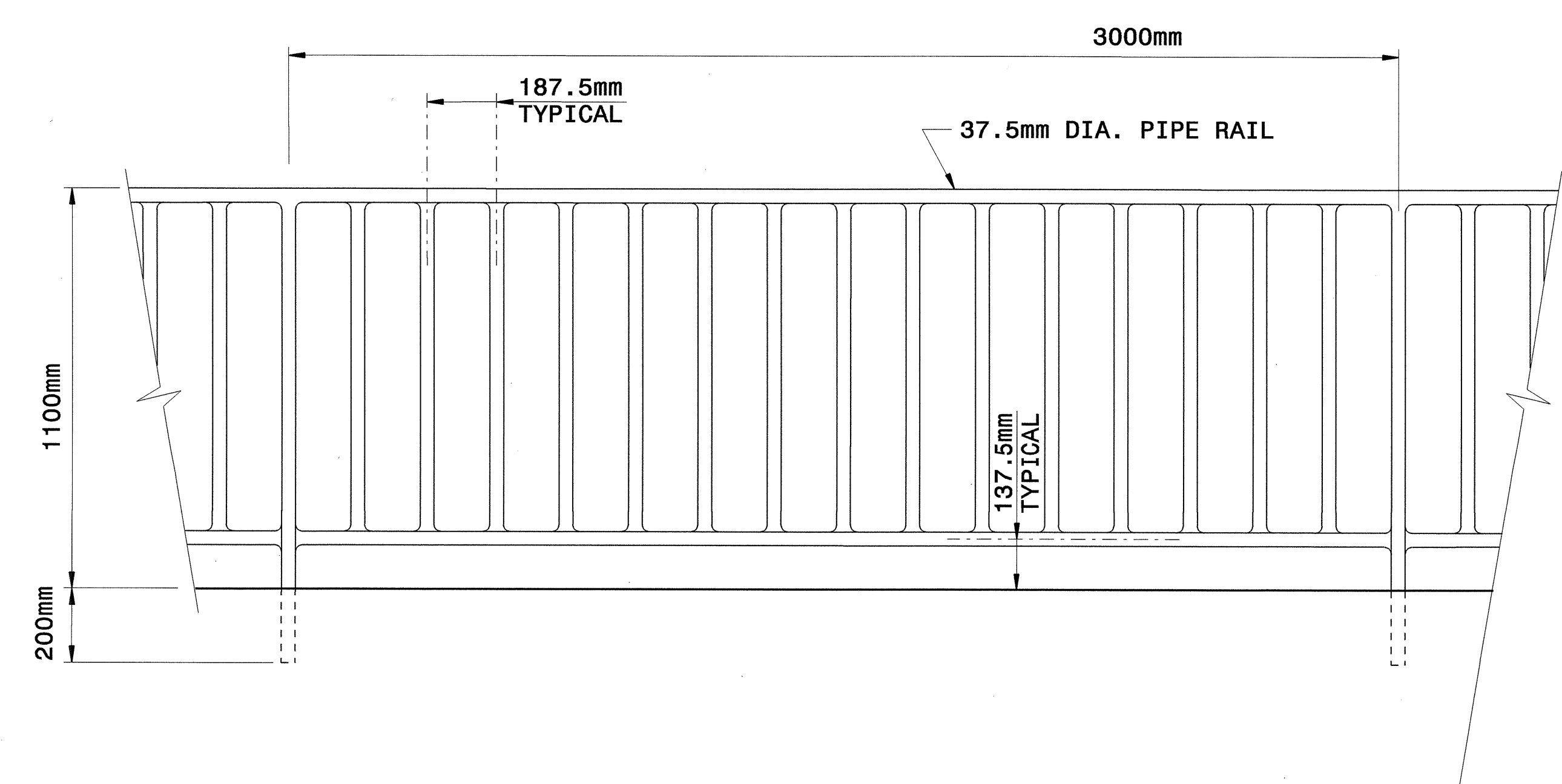
ALL DESIGN IS A RECOMMENDED GUIDE TO THIS PIPE RAIL APPLICATION. FINAL ENGINEERING JUDGEMENT SHALL BE AT THE DISCRETION OF THE ENGINEER.

PAINTING SHALL BE DONE IN ACCORDANCE WITH SECTION 442 OF THE ROADWAY SPECIFICATIONS.

VERIFY SOIL BEARING PRESSURE BEFORE WALL CONSTRUCTION.



TYPICAL SECTION



ELEVATION OF HANDRAIL

PROJECT NO. U-2913B
GUILFORD COUNTY
 STATION: -L- STA. 57+34.74



STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH					
MODULAR BLOCK RETAINING WALL DETAIL					
REVISIONS					
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		
					SHEET NO.
					TOTAL SHEETS