

**GUARDRAIL ANCHOR ASSEMBLY DETAILS**

**NOTES:**

THE GUARDRAIL ANCHOR ASSEMBLY SHALL CONSIST OF A 1/4" HOLD DOWN PLATE AND 7 - 7/8" Ø BOLTS WITH NUTS AND WASHERS.

THE HOLD-DOWN PLATE SHALL CONFORM TO AASHTO M270 GRADE 36. AFTER FABRICATION, THE HOLD-DOWN PLATE SHALL BE HOT-DIP GALVANIZED IN ACCORDANCE WITH AASHTO M111.

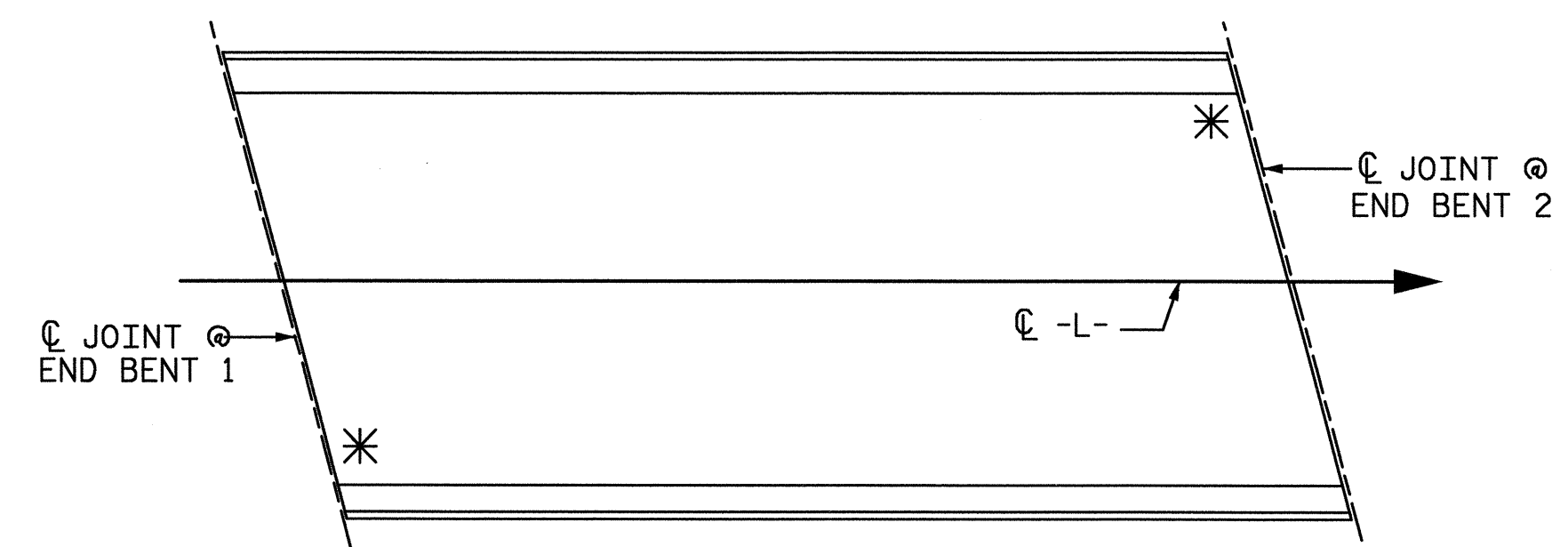
BOLTS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A307 AND NUTS SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M291. BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED. AT THE CONTRACTOR'S OPTION, STAINLESS STEEL BOLTS, NUTS AND WASHERS MAY BE USED AS AN ALTERNATE FOR THE 7/8" Ø GALVANIZED BOLTS, NUTS AND WASHERS. THEY SHALL CONFORM TO OR EXCEED THE MECHANICAL REQUIREMENTS OF ASTM A307. THE USE OF THIS ALTERNATE SHALL BE APPROVED BY THE ENGINEER.

AFTER INSTALLATION, THE EXPOSED THREAD OF THE BOLT SHALL BE BURRED WITH A SHARP POINTED TOOL.

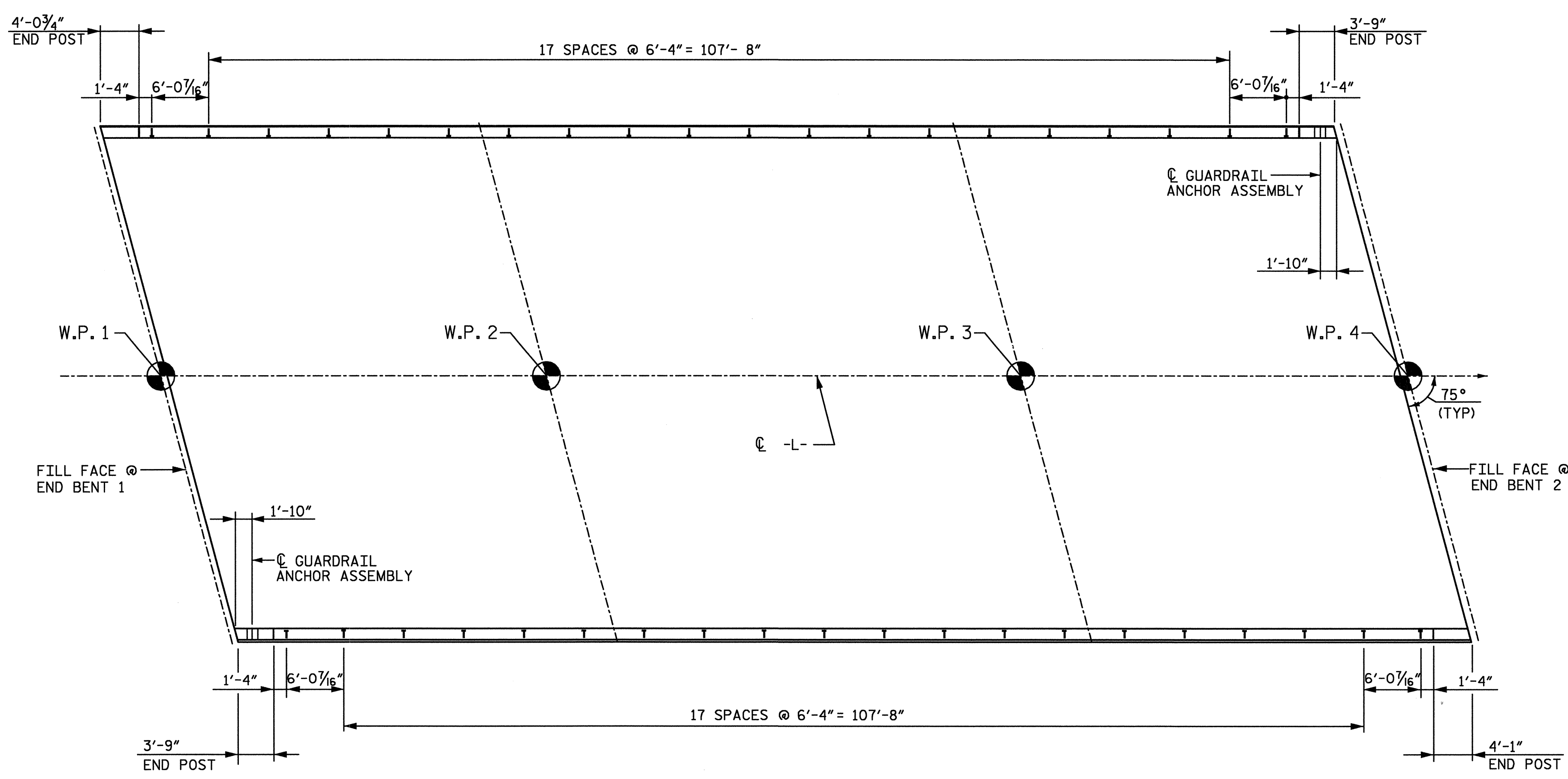
THE COST OF THE GUARDRAIL ANCHOR ASSEMBLIES WITH BOLTS, NUTS AND WASHERS COMPLETE IN PLACE, SHALL BE INCLUDED IN THE VARIOUS PAY ITEMS.

THE VERTICAL REINFORCING BARS MAY BE SHIFTED SLIGHTLY IN THE END POST TO CLEAR ASSEMBLY BOLTS.

THE 1/16" Ø HOLES SHALL BE FORMED OR DRILLED WITH A CORE BIT. IMPACT TOOLS WILL NOT BE PERMITTED. ANY CONCRETE DAMAGED BY THIS WORK SHALL BE REPAIRED TO THE SATISFACTION OF THE ENGINEER.

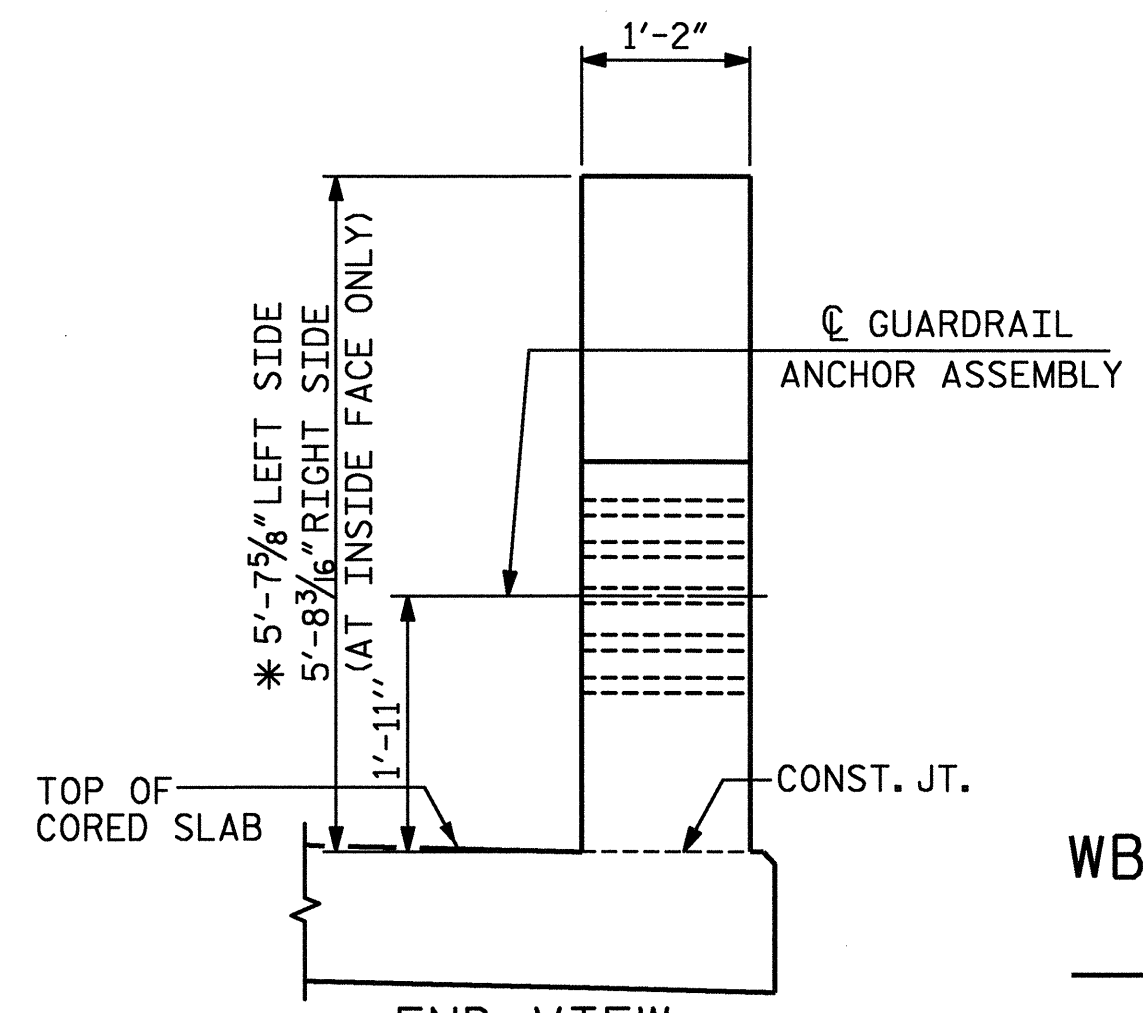


**SKETCH SHOWING POINTS OF ATTACHMENT**  
\* LOCATION OF GUARDRAIL ATTACHMENT



**LOCATION OF GUARDRAIL ANCHOR AT END POST**

NOTE: DIMENSIONS ARE MEASURED ALONG BACK OF PARAPET



**END VIEW**  
(TWO BAR METAL RAIL)  
(RIGHT SIDE SHOWN)  
\* FOR CONSTRUCTION OF PARAPETS AND SIDEWALK, SEE PROVISIONS.

WBS. NO. 37017  
WAKE COUNTY  
STATION: 14+04.00 -L-  
REPLACES BRIDGE NO. 133

STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
RALEIGH  
STANDARD  
GUARDRAIL ANCHORAGE  
DETAILS  
FOR METAL RAILS

559 Jones Franklin Rd. Suite 164  
Raleigh, N.C. 27606  
Tel: 919 851 8077  
Fax: 919 851 8107

1-12-06

WETHERILL ENGINEERING

TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN  
CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION

JUNE		REVISIONS		SHEET NO.
				5-12
NO.	BY:	DATE:	NO.	DATE:
1			3	
2			4	
TOTAL SHEETS				23

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ASSEMBLED BY : J. PENDERGRAFT	DATE : 2/05
CHECKED BY : J. DILWORTH	DATE : 2/05
DRAWN BY : EEM	6/94
CHECKED BY : RGW	6/94
REV. 8/16/99	RWW/LES
REV. 10/17/00	RWW/LES
REV. 5/17/03	RWW/JTE