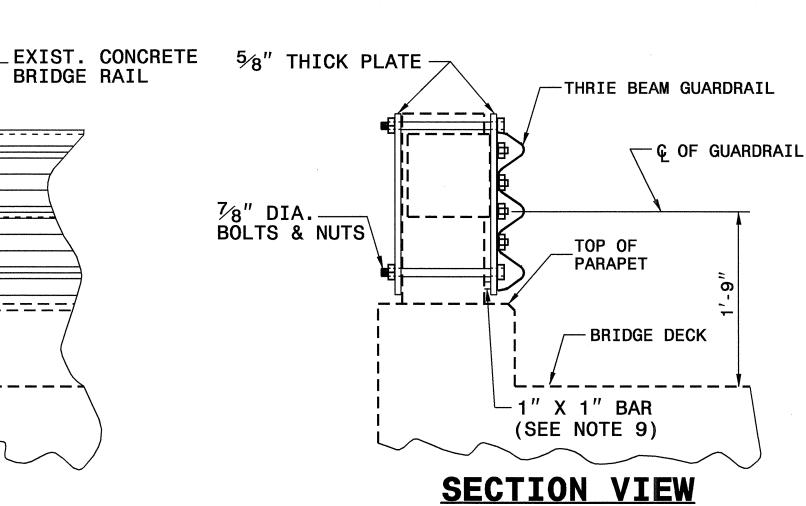


## PLAN VIEW 7 WELDED 7/8" DIA. STUDS WITH NUTS 4 - 7/8" DIA. BOLTS & NUTS AT CORNERS OF PLATE TYP. 2'-6" BRIDGE RAIL 78"x 118" SLOT (TYP.) FOR UNION TO RAIL SECTIONS 34"x $2\frac{1}{2}$ " SLOT (OPT.) TOP OF. i i-Φ-**PARAPET** -5/8" THICK PLATE 1" DIA. HOLES (TYP.) FOR ANCHOR STUDS



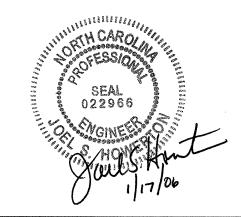
## **GENERAL NOTES:**

END SHOE

- 1. USE NUTS, BOLTS, AND WASHERS CONFORMING TO THE REQUIREMENTS OF A.S.T.M. A-307 AND GALVANIZED IN ACCORDANCE WITH SECTION 1076 OF STAND. SPECS.
- 2. TAP NUTS FOR THE 1/8" DIA. STUDS AND BOLTS AFTER GALVANIZING SEE A.S.T.M. A-563. 3. USE PLATES AND TUBES CONFORMING TO THE REQUIREMENTS OF A.S.T.M. A-36 AND
- GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH SECTION 1076 OF STAND. SPECS.
  4. ADDITIONAL FIELD HOLES MAY BE DRILLED IN STEEL RAIL AS DIRECTED BY THE ENGINEER. 5. INSTALL FACE OF GUARDRAIL AS NEAR AS POSSIBLE TO PLUMB WITH THE PARAPET FACE AT BRIDGE END POST SPACER TUBE LOCATION BY USING STANDARD OR ALTERED SPACER TUBES OR A COMBINATION THEREOF OR AS DIRECTED BY THE ENGINEER. FOR VERY SMALL PARAPET WIDTHS,
- GUARDRAIL MAY BE INSTALLED AGAINST BRIDGE RAIL WITHOUT SPACER TUBES.
- 6. DO NOT DRILL BRIDGE RAIL IN ORDER TO INSTALL GUARDRAIL ANCHOR UNIT. 7. USE THIS DETAIL ONLY FOR BRIGES WITH POST AND BEAM TYPE RAIL.
- 8. ATTACH 1" X 1" BAR AND THREADED STUDS TO PLATE WITH 14" WELDS ALL AROUND.
- 9. 1" X 1" BAR MAY NOT BE NEEDED ON BRIDGE RAILS WHERE FACE OF RAIL DOES NOT PROJECT BEYOND FACE OF POST
- 10. PROVIDE SHOP DRAWINGS OF THE PLATES TO THE ENGINEER FOR APPROVAL BEFORE FABRICATING THE PLATES.
- 11. LAP JOINTS IN THE DIRECTION OF TRAFFIC FLOW.
- 12. SEE ROADWAY STARDARD DRAWING 862.03 SHEET 4 FOR ADDITIONAL INFORMATION ON THE TYPE III ANCHOR UNIT

## **GUARDRAIL ATTACHMENT** TO BRIDGE POST

**ELEVATION VIEW** 



PROJECT SERVICES UNIT STANDARDS AND SPECIAL DESIGN Office 919-250-4128 FAX 919-250-4119

**GUARDRAIL ANCHOR UNIT** TYPE III MODIFIED FOR POST & BEAM RAIL

ORIGINAL BY: C.O. CUEVAS DATE: 12-00

MODIFIED BY: E.E. WARD DATE: 02-04

CHECKED BY: Xuls Last DATE: 1/17/06

FILE SPEC.: (usr\details\stand\bpiii.dgn