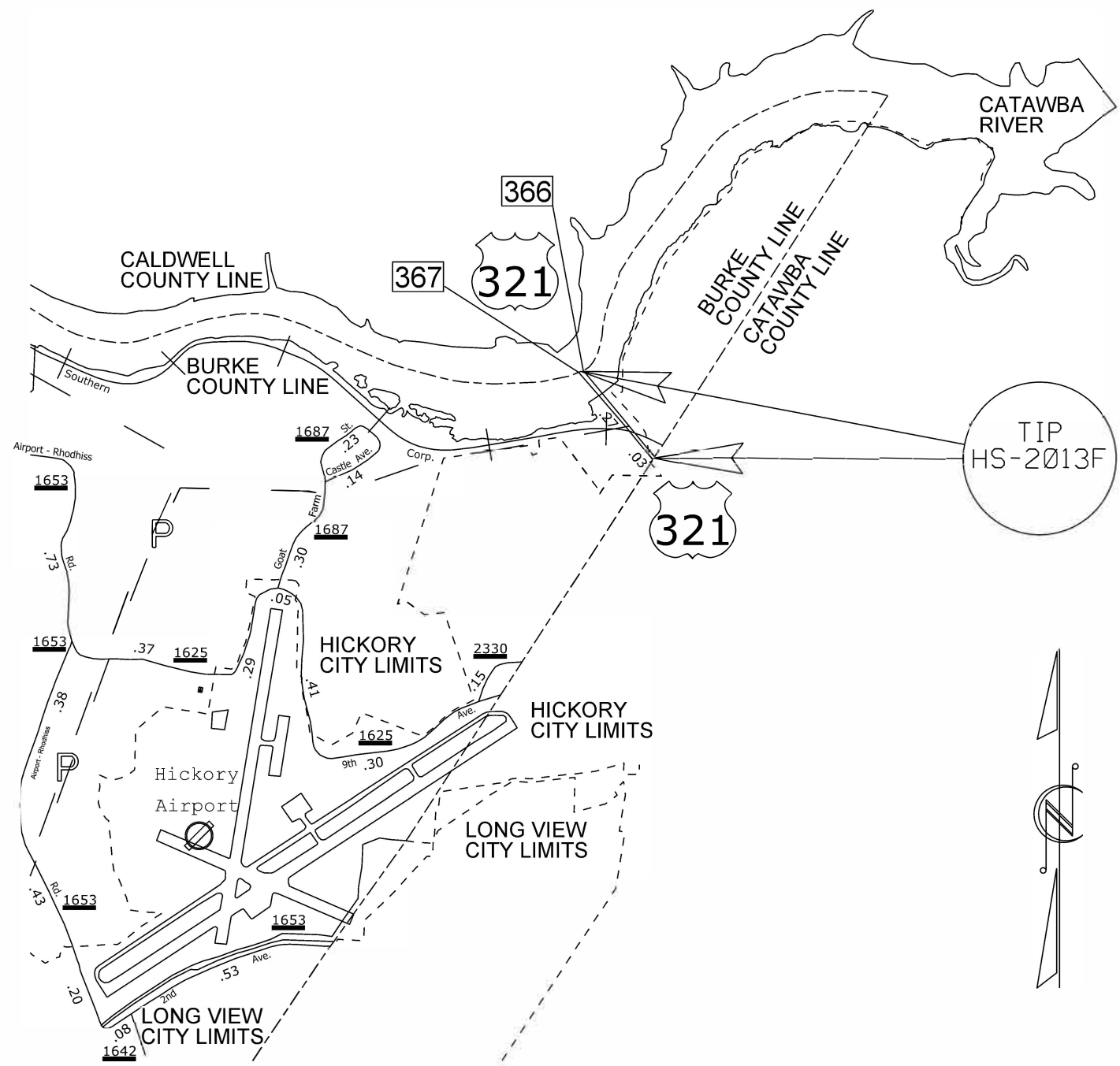
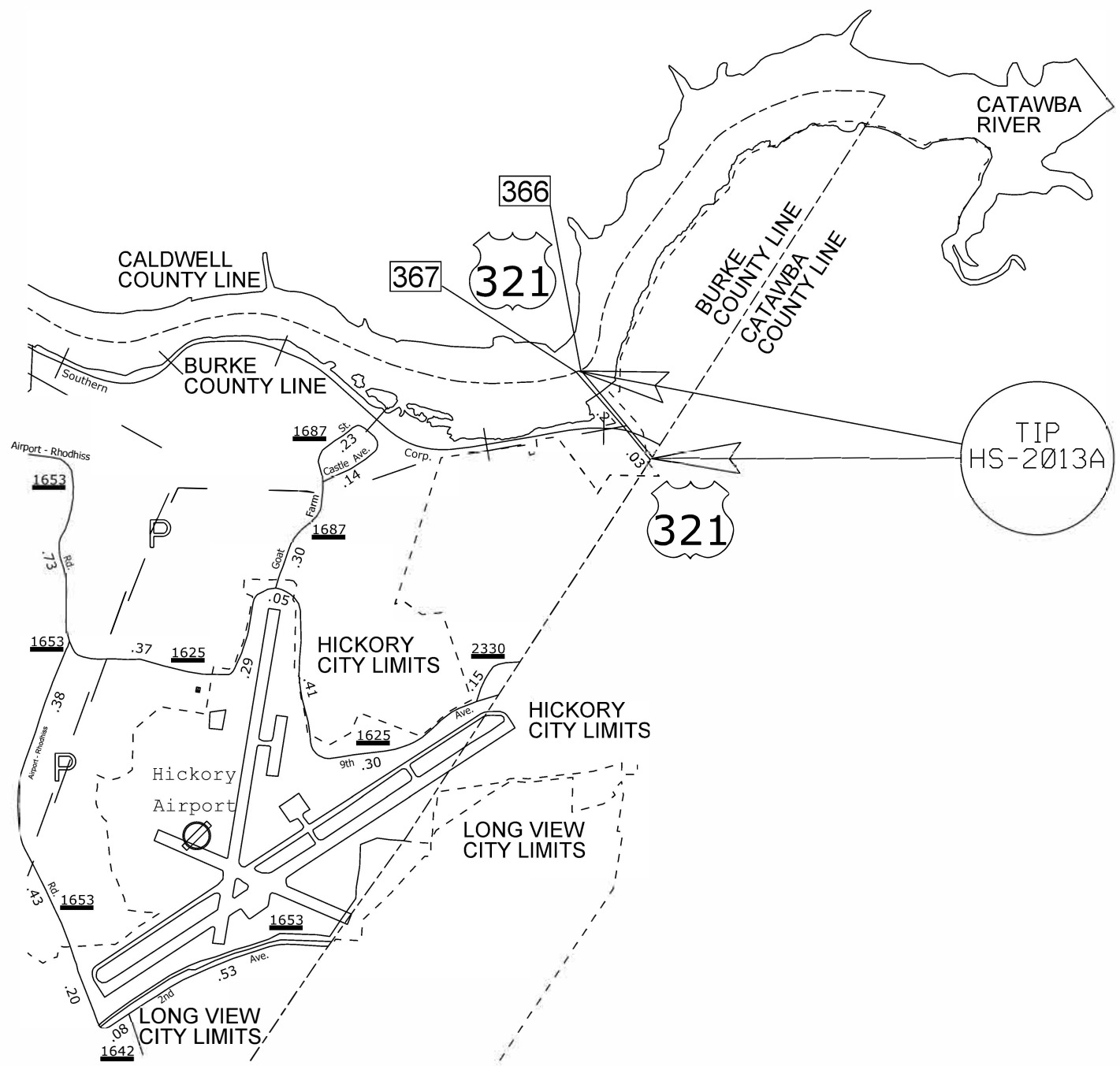


PROJECT NO.	SHEET NO.	TOTAL SHEETS
TIP HS-2013A AND TIP HS-2013F		

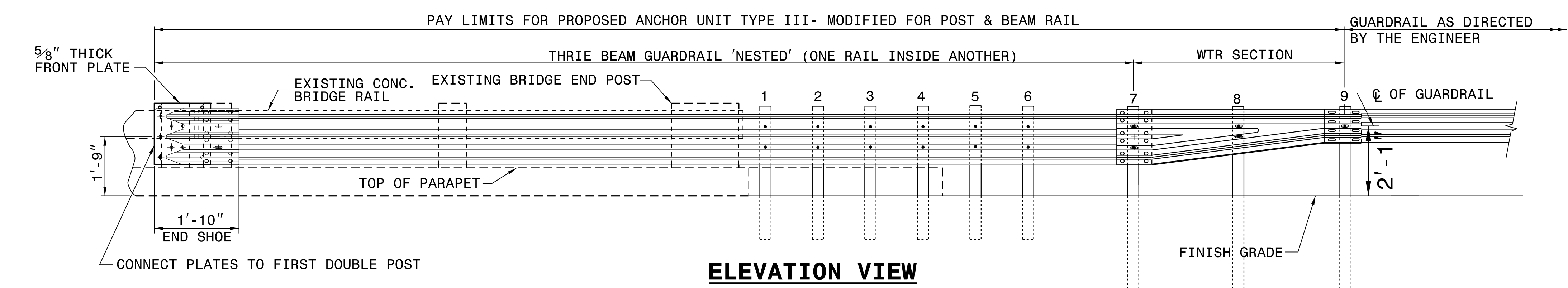


TIP HS-2013A  
US 321 AT BRIDGE  
# 366 & 367 AT THE  
CATAWBA COUNTY LINE.  
 INSTALL GUARDRAIL.

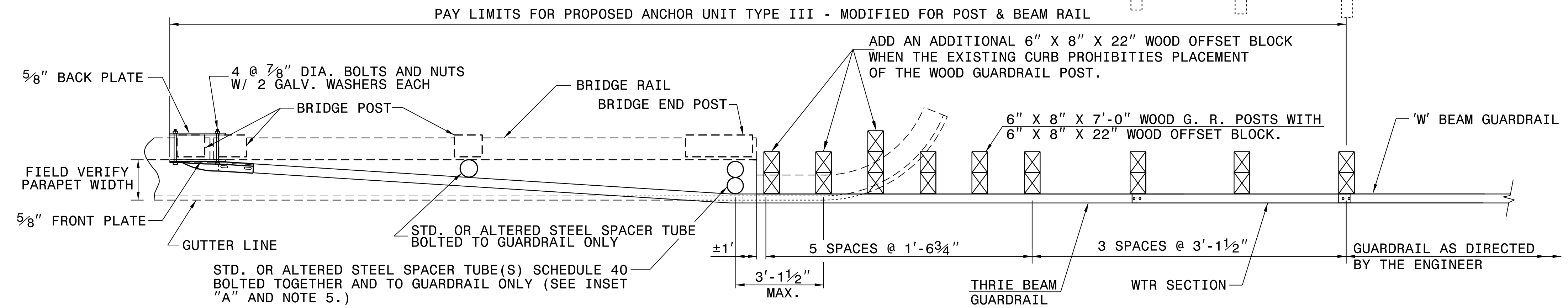
TIP HS-2013F  
US 321 FROM CATAWBA  
COUNTY LINE TO  
CALDWELL COUNTY LINE.  
 UPGRADE GUARDRAIL.

**BURKE COUNTY**

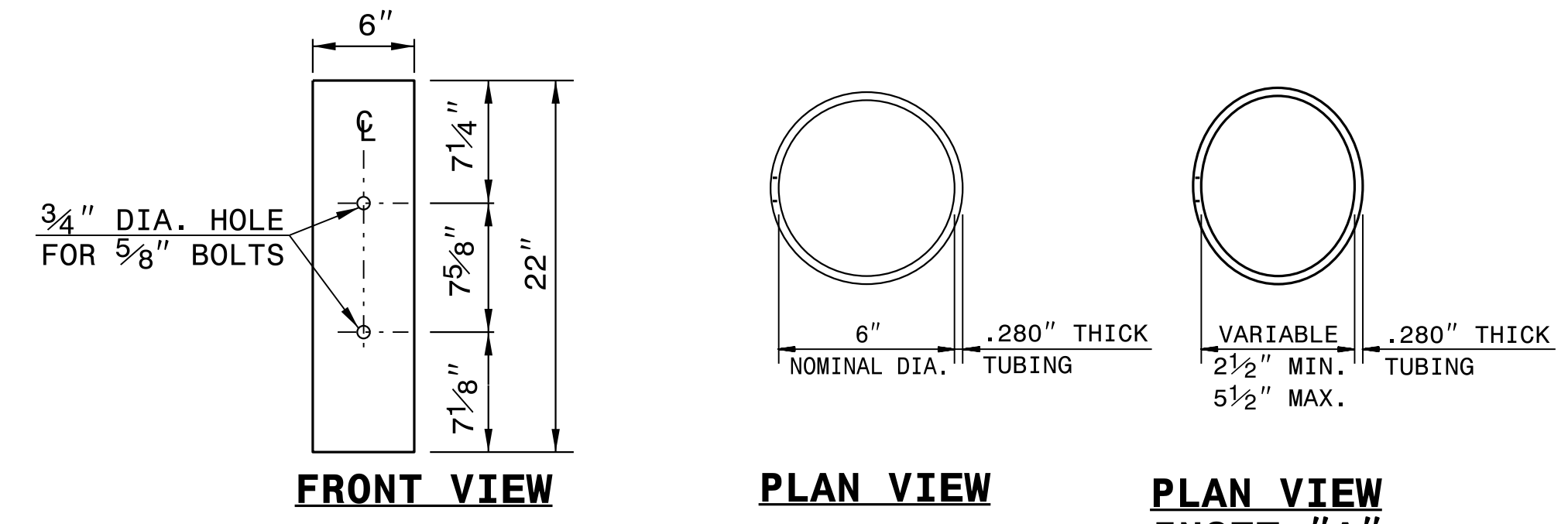




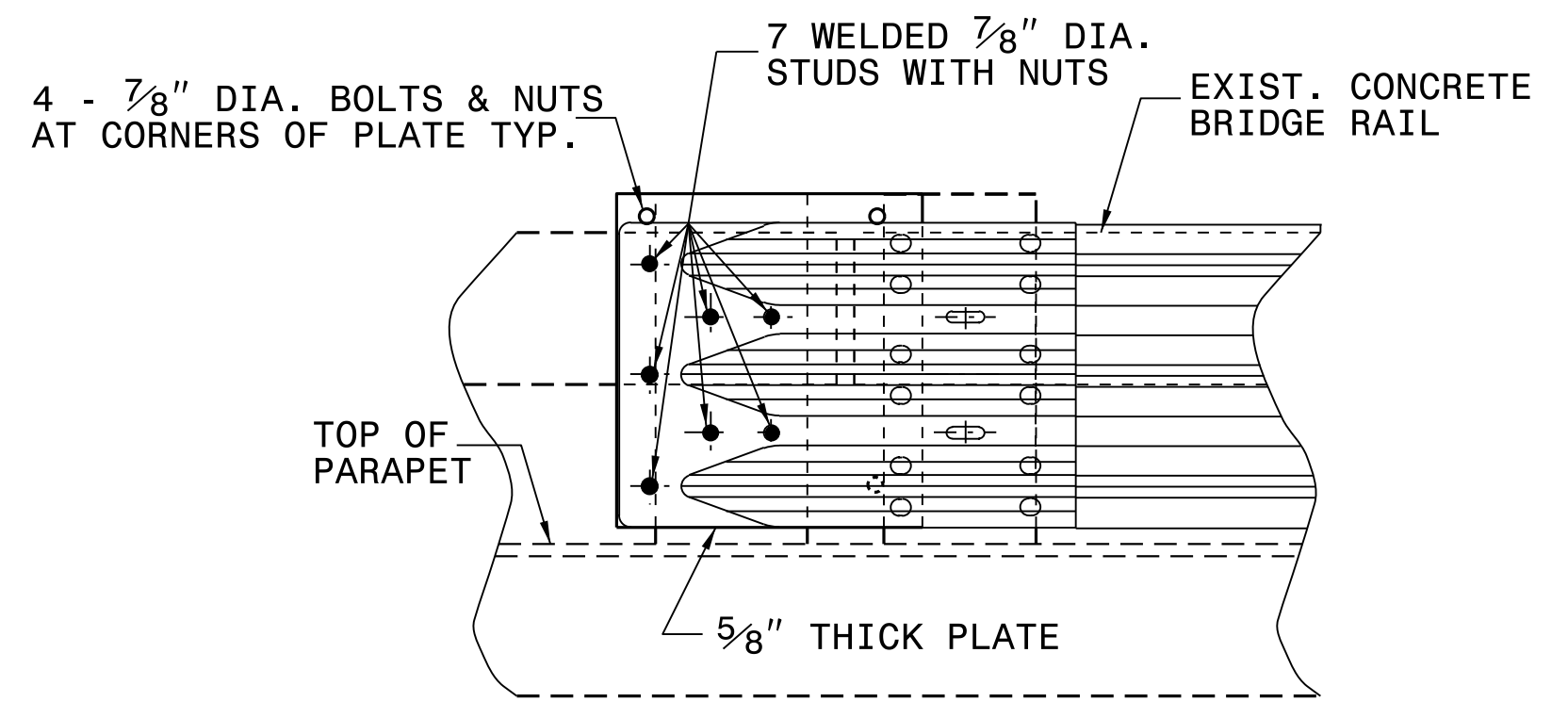
**ELEVATION VIEW**



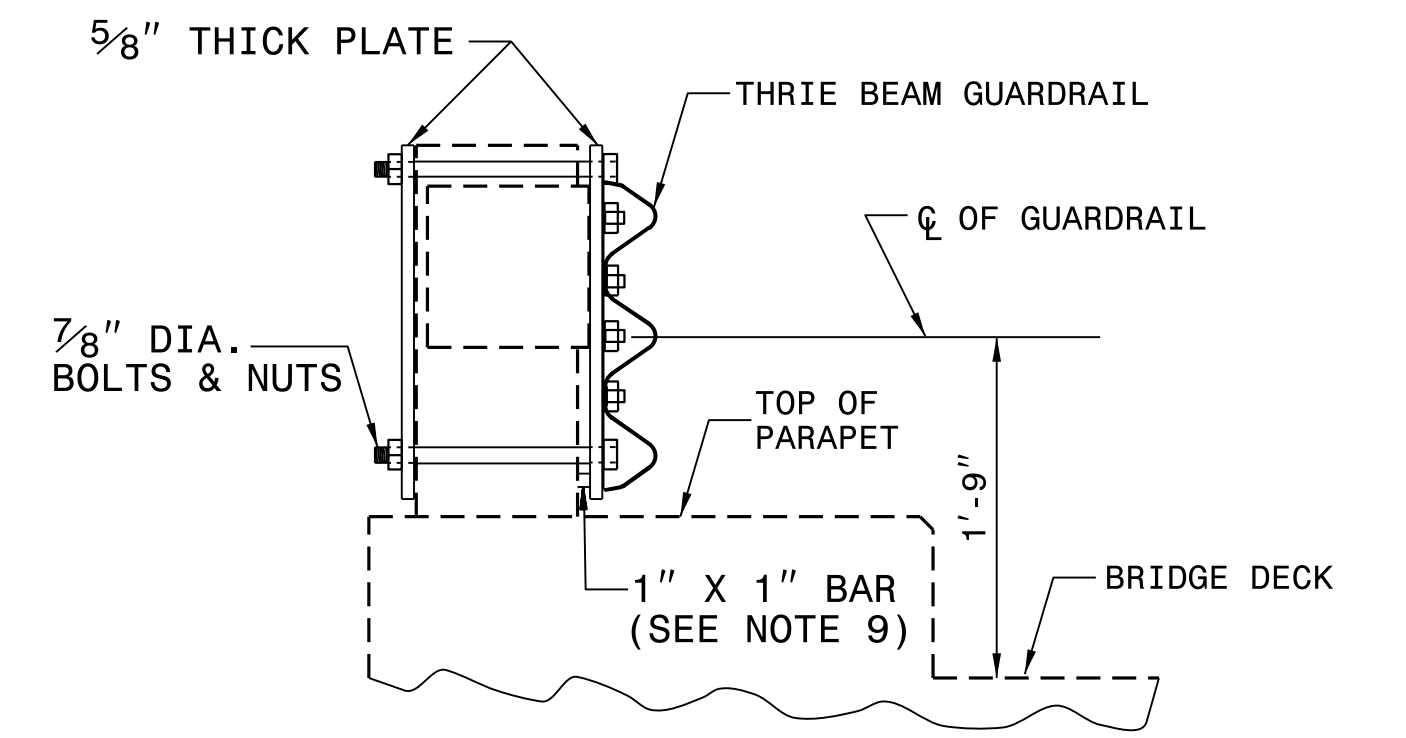
**PLAN VIEW**



**STEEL SPACER TUBE**

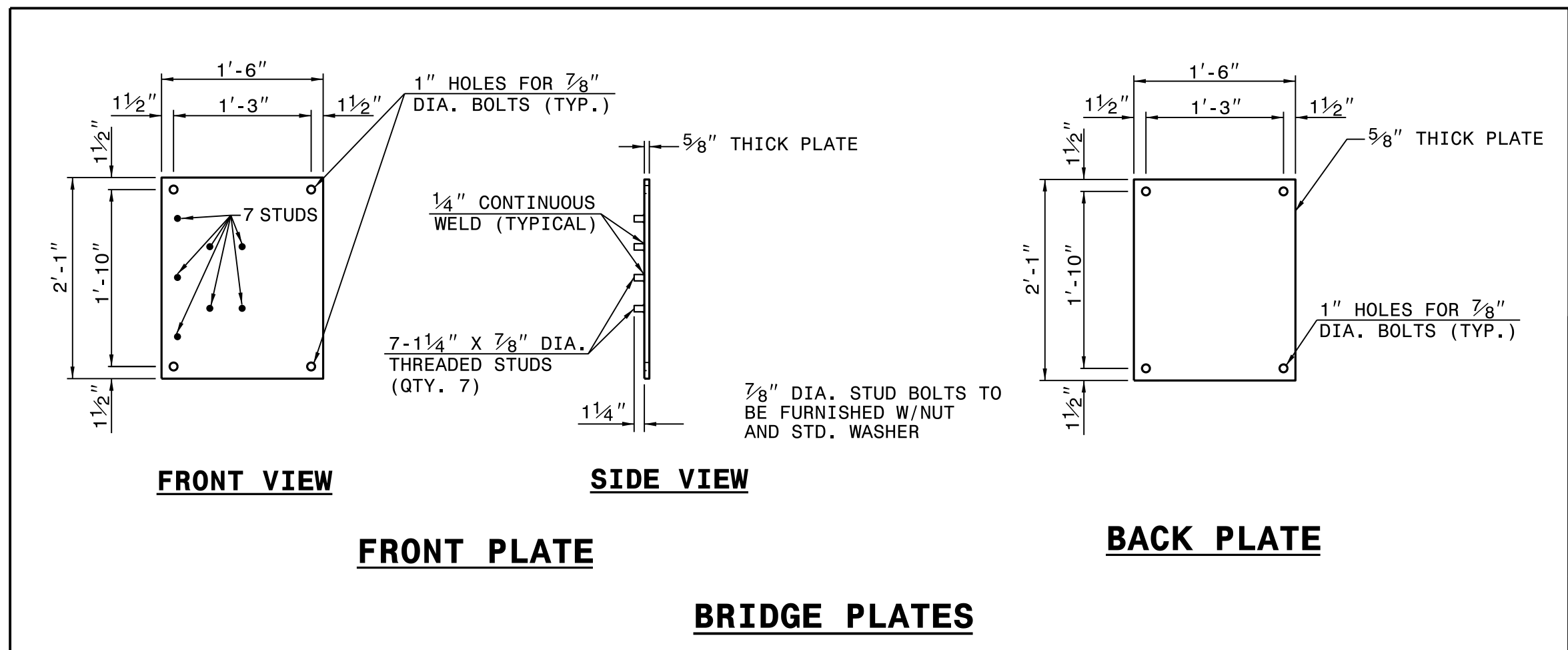


**ELEVATION VIEW**



**SECTION VIEW**

- GENERAL NOTES:**
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 7/8" 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 1/4" 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 STANDARD DRAWING 862.03 SHEET 3 FOR ADDITIONAL INFORMATION ON THE TYPE III ANCHOR UNIT



**FRONT VIEW**

**SIDE VIEW**

**FRONT PLATE**

**BACK PLATE**

**BRIDGE PLATES**



DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

**CONTRACT STANDARDS AND DEVELOPMENT UNIT**  
Office 919-707-6950 FAX 919-250-4119

**TYPE III MODIFIED FOR POST AND BEAM RAIL**

ORIGINAL BY: E.E. WARD DATE: 01-03  
MODIFIED BY: JS Howerton DATE: 01-18  
CHECKED BY: DATE:  
FILE SPEC.: s:\details\stand\bpii original.dgn

24-JAN-2018 14:51 S:\Contracts\Special\Details\stand\bp\_iii\_original.dgn J:\power\ton AT\_CSD-292595