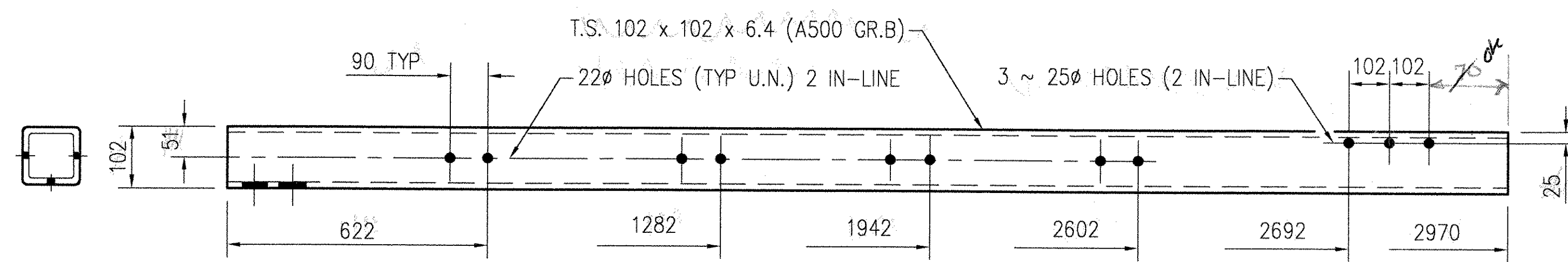
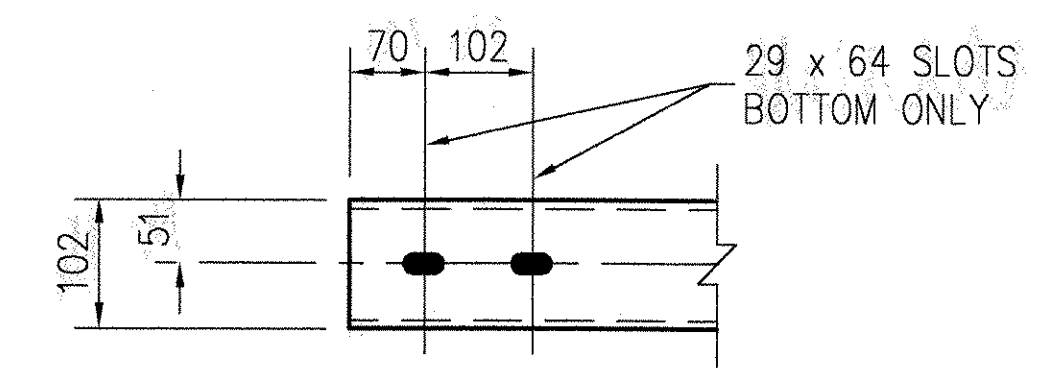


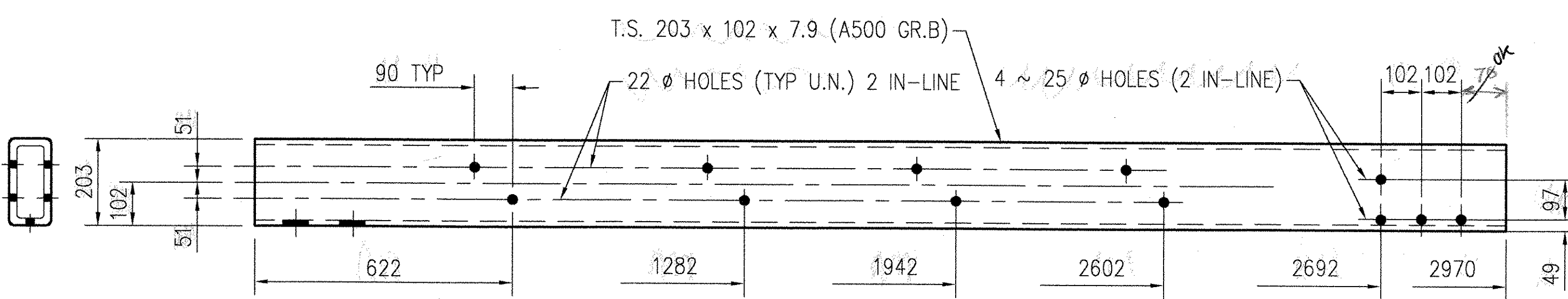
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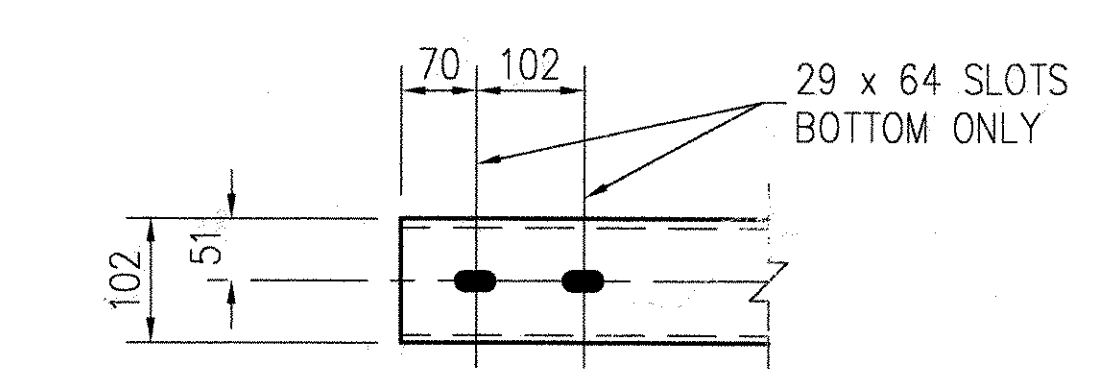
PC 30298 BOTTOM TUBE



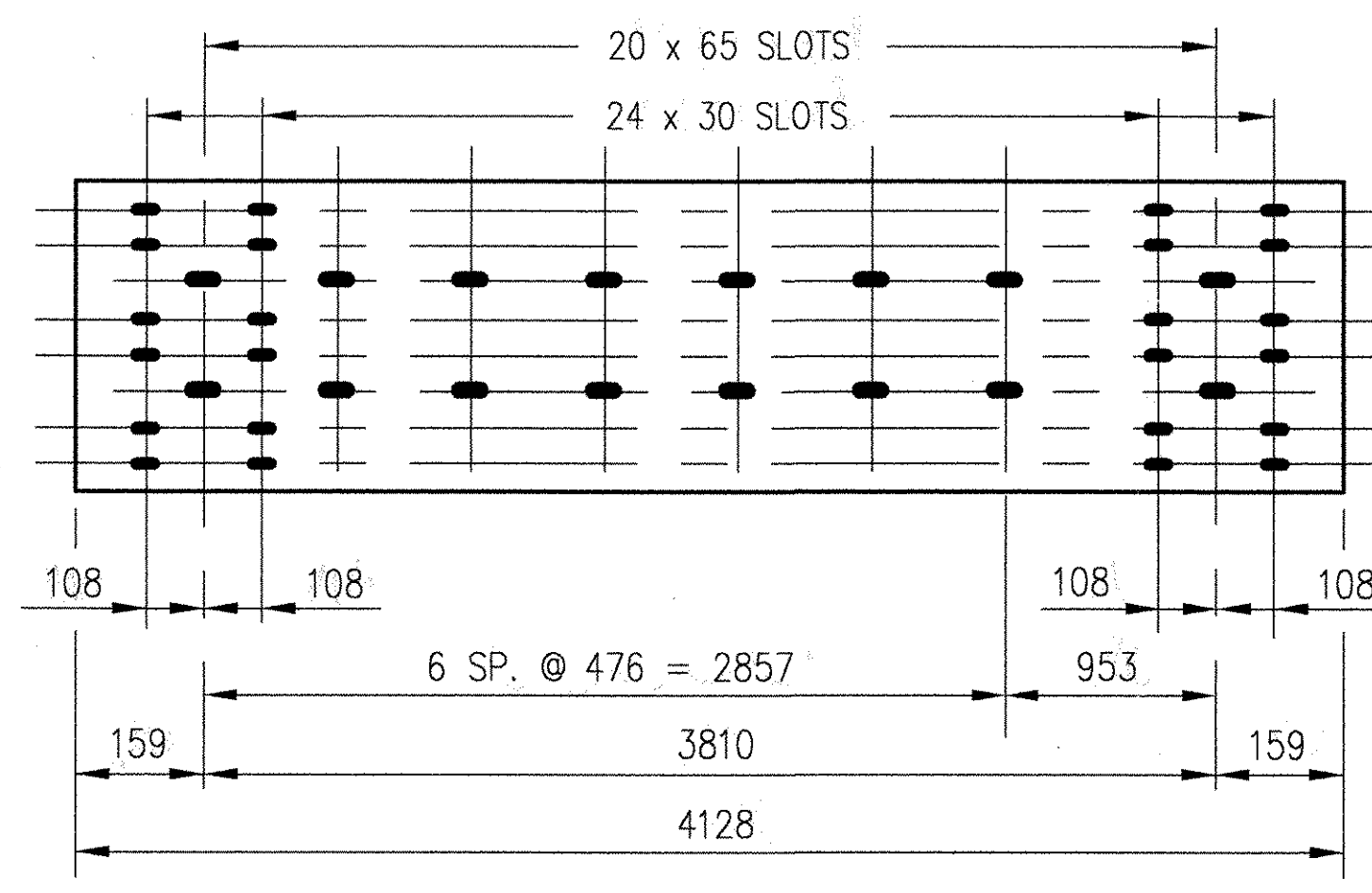
VIEW OF SLOTS ON THE BOTTOM



PC 30299 TOP TUBE



VIEW OF SLOTS ON THE BOTTOM



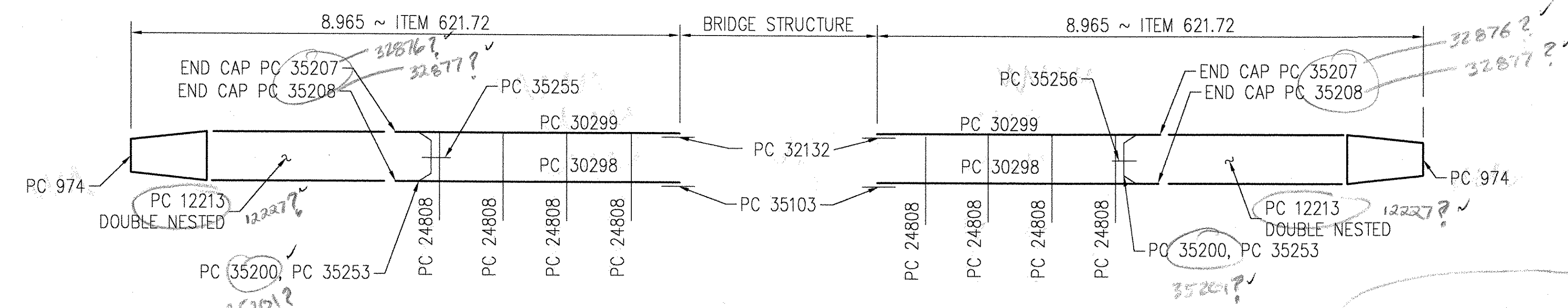
PC 12227 ~ THRIE BEAM (M-180)

SHOP DRAWING USING
METRIC
DIMENSIONS

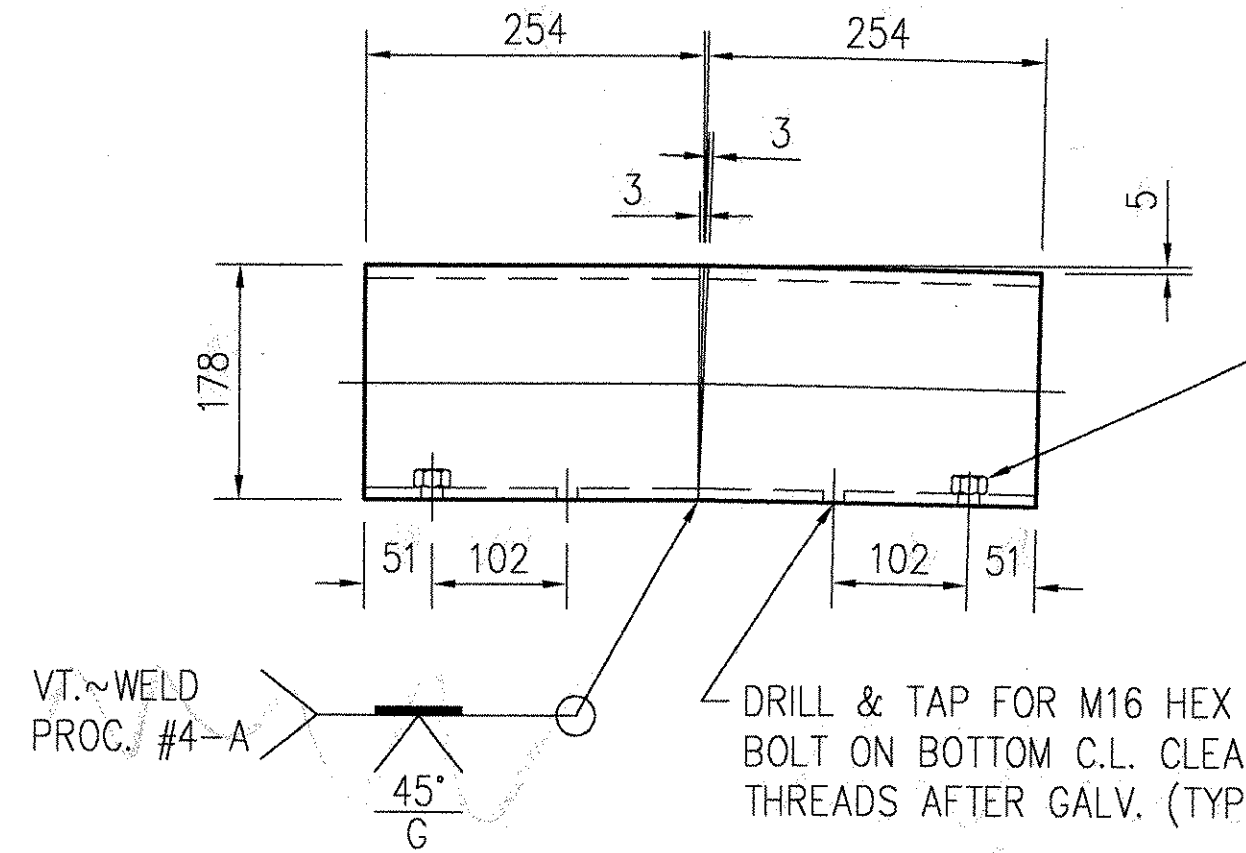
NOTES

- All work and materials shall conform to the provisions of Section 525 - Railings of the Standard Specifications for Construction.
- Tubing and Posts shall meet the requirements of section 732 - Railing Materials of The Standard Specifications for Construction.
- All exposed cut or sheared edges shall be rounded to 1.6mm radius and be free of burrs.
- Rail posts shall be set normal to grade.
- Sections of rail bar shall be attached to a minimum of two [2] rail posts and preferably to at least four [4] posts.
- Rail bar expansion joints shall be provided in any rail bay spanning a superstructure expansion joint. Expansion joint width shall be 65mm at 7 ° C and will be adjusted in the field by the Engineer.
- All parts shall be galvanized after fabrication in accordance with AASHTO M111, except that hardware shall meet the requirements of AASHTO M232. Parts shall be blast - cleaned prior to galvanizing in accordance with SSPC - SP40.
- Rail posts anchoring nuts shall be tightened to a snug fit and given an additional 45 degree turn.
- Any bending of rail shall be by shop procedure only.
- Holes in rails for rail bar attachment may be field drilled. Holes shall be coated with an approved zinc-rich paint prior to erection.
- Shop Inspection is required upon approval of drawings. Shop to call Vermont Agency of Transportation to schedule shop inspection. Contact: Mr. Christopher Williams (802) 828-2621
- Metric Measurements Note:**
All Hardware, Steel Plates, Sections, Tube Shapes, and required holes for the Hardware used in fabrication of the Bridge Rails will be converted with "Hard Conversion" to nearest available English measurements.

ISSUED
JUN 19 2002
TRINITY INDUSTRIES, INC.
1170 N. STATE STREET
GIRARD, OHIO 44020



KEY LAYOUT (VIEWING TRAFFIC FACE) NORTHWEST SIDE
KEY LAYOUT (VIEWING NON TRAFFIC FACE) NORTHEAST SIDE
BRIDGE NO. 161



PC#32132 ~ SPLICE (T.S. 178 x 76 x 9.5 x 508) (A500 GR B)

TACK WELD A GALVANIZED LOCK NUT PC# 3352C AFTER GALVANIZING AT BOTH ENDS OF SPLICE. REPAIR GALV. AS NECESSARY. FOR PROPER ALIGNMENT OF THE LOCK NUT, A BOLT MUST BE PLACED THRU. THE TAPPED HOLE THEN APPLY NUT AND TACK WELD IN PLACE.
DRILL & TAP FOR M16 HEX BOLT ON BOTTOM C.L. CLEAN THREADS AFTER GALV. (TYP.)

- NOTE:** FIELD DRILL BOTTOM RAIL CONNECTION HOLES IN POSTS. REPAIR GALVANIZING AS NECESSARY.
- NOTE:** ALL WOOD COMPONENTS, NOT BY TRINITY

RECEIVED
JUN 27 2002
APPROVED *Asud!*
BY *CPW* DATE 7/18/02

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FOR DETAILS SEE 30-1004148-D2 APPROVAL DRAWING

STRUCT. COPY.	
PAY ITEM 621.72 BRIDGE APPROACH RAIL T2	
STATE OF VERMONT AGENCY OF TRANSPORTATION US ROUTE 5 TOWN OF BARTON COUNTY OF ORLEANS STATE PROJECT NO. STP 0113 (58) S BRIDGE NO. 161	DRAWN JRS CHECKED S.H. SCALE N.T.S. DATE 06/05/02 ENG. FILE # 30-1004148-D1 SHT.No. D1 OF 2 TRINITY SALES ORDER NO. (30) 1004148
CUSTOMER NORTHLAND SPECIALTIES P.O. No. VERBAL	REMARKS
TRINITY INDUSTRIES, INC. HIGHWAY SAFETY PRODUCTS 2525 STEMMONS FREEWAY, DALLAS, TX 75207	