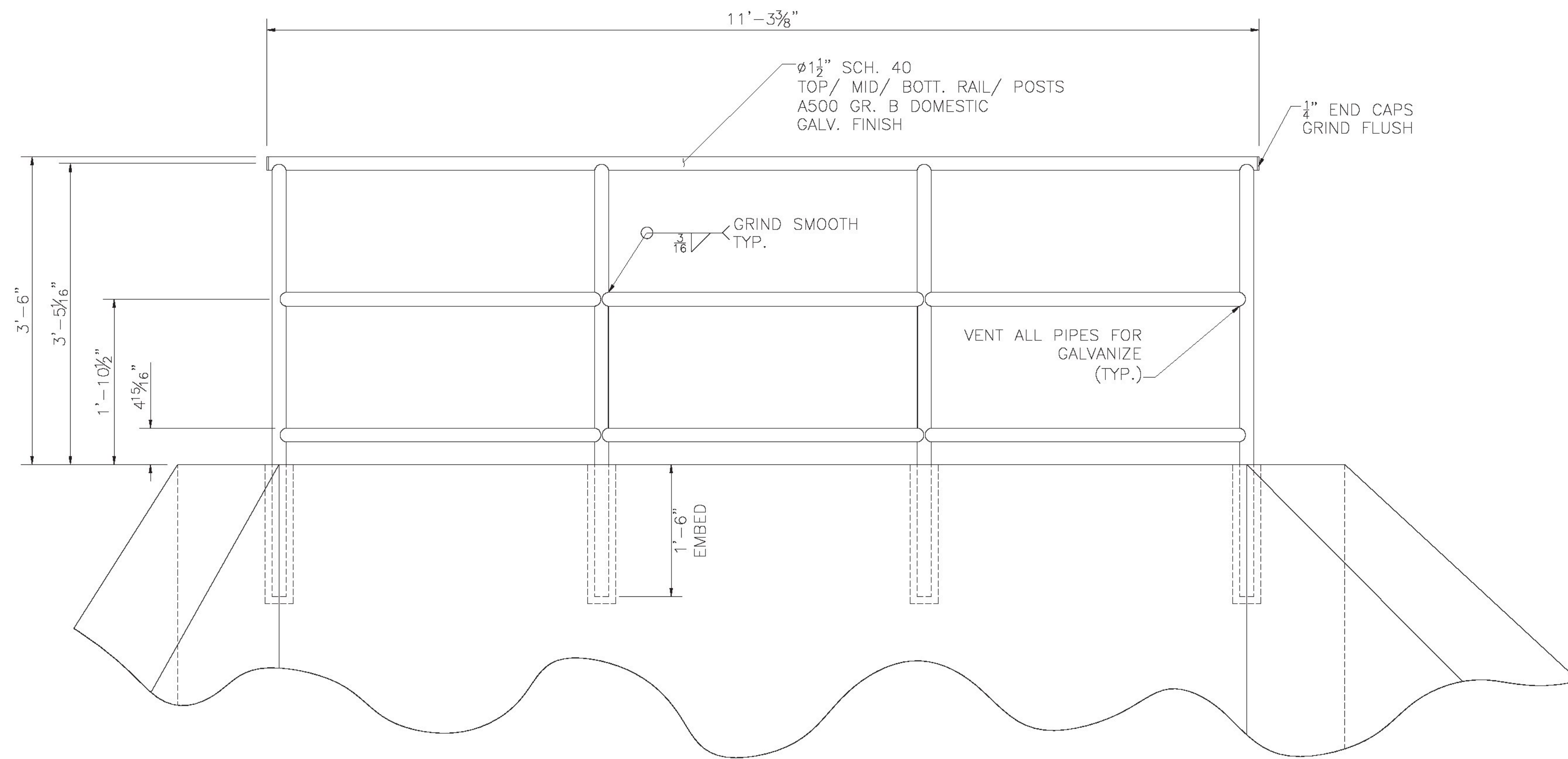


RAILING PLAN

Vermont Agency of Transportation Accepted
By Ken Upmal at 10:15 am, Apr 06, 2018

B. RENAUD BROS. INC. STEEL SALES & FABRICATION VERNON VT. USA	WELDING PROCEDURE		NO.		
	DATE: 2/26/2017	PROJECT NAME: PERU	RB-FW-001		
BY: A. DUNKLEE	PROJECT NO.	STP SCR(4)			
AWS CODE: D1.5	PQR REF. NO:	N/A			
MATERIAL SPECIFICATION:	ASTM 500 GR. B				
WELDING PROCESS:	SMAW				
MANUAL, SEMI-AUTOMATIC OR AUTOMATIC:	MANUAL				
WELDING POSITION:	ALL				
FILLER METAL SPECIFICATION:	ANSI/AWS A5.1-A5.5				
FILLER METAL CLASSIFICATION:	E7018				
FLUX:	N/A				
SHIELDING GAS:	N/A	FLOW RATE:	N/A		
SINGLE OR MULTIPLE PASS:	SINGLE				
SINGLE OR MULTIPLE ARC:	SINGLE				
WELDING CURRENT:	DC	APPROVAL STAMP			
WELDING POLARITY:	ELECTRODE POSITIVE				
WELDING PROGRESSION:	N/A				
ROOT TREATMENT:	REMOVE ALL IMPURITIES & GALV.				
PREHEAT & INTERPASS TEMPERATURE:	≥ 1 1/2" = 70°F 1 1/2" - 2 1/2" = 150°F OVER 2 1/2" = 225°F				
POSTHEAT TREATMENT:	N/A				
HEAT INPUT:	MIN: N/A MAX: N/A				
ELECTRODE STICKOUT:	N/A				
PASS NO.	ELECTRODE SIZE:	WELDING CURRENT AMPS	VOLTS	TRAVEL SPEED	JOINT DETAIL:
AS REQ.	3/32"	70-110		ADJUST AS REQ.	
	1/8"	70-170			
NOTES:					



The calculation is not properly done and is difficult to understand. However, we performed our own independent analysis on the railings and posts and found that the 1 1/2" pipes are within the allowable stress limit and are acceptable.

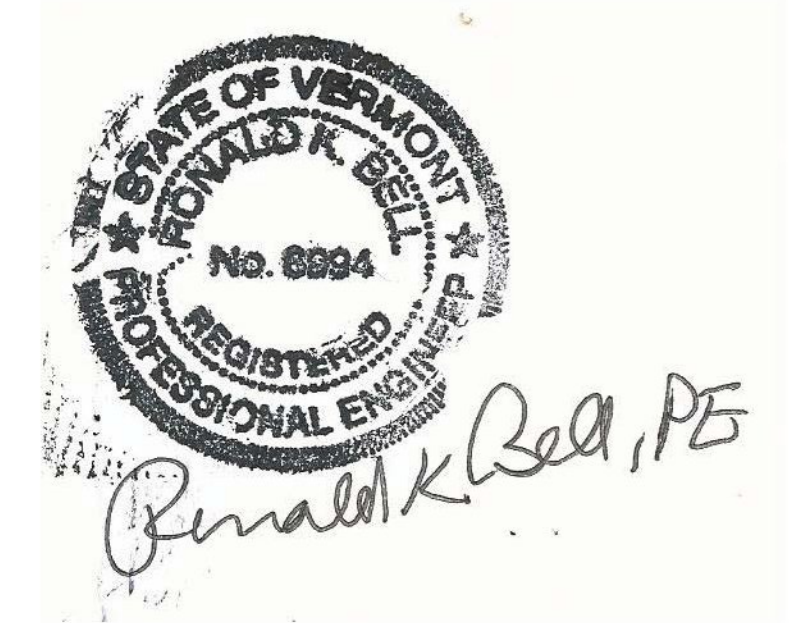
SUBMITTAL REVIEW

<input checked="" type="checkbox"/>	NO EXCEPTIONS TAKEN
<input type="checkbox"/>	MAKE CORRECTIONS NOTED
<input type="checkbox"/>	REVISE AND RESUBMIT
<input type="checkbox"/>	REJECTED

CHECKING IS ONLY FOR GENERAL CONFORMANCE WITH THE DESIGN CONCEPT OF THE PROJECT AND GENERAL COMPLIANCE WITH THE INFORMATION GIVEN IN THE CONTRACT DOCUMENTS. ANY ACTION SHOWN IS SUBJECT TO THE REQUIREMENTS OF THE PLANS AND SPECIFICATIONS. CONTRACTOR IS RESPONSIBLE FOR DIMENSIONS WHICH SHALL BE CONFIRMED AND CORRELATED AT THE JOB SITE; FABRICATION PROCESSES AND TECHNIQUES OF CONSTRUCTION; COORDINATION OF HIS WORK WITH THAT OF ALL OTHER TRADES; AND THE SATISFACTORY PERFORMANCE OF THE WORK.

GREEN INTERNATIONAL AFFILIATES, INC.
CIVIL AND STRUCTURAL ENGINEERS

CHECKED BY MS DATE 4/05/2018
SIGNED BY BK DATE 4/05/2018



NOTES:
ALL EXPOSED EDGES GRIND TO A 1/16" RADIUS
ALL MATERIALS TO BE DOMESTIC
ALL WELDING TO BE PERFORMED BY VTrans QUALIFIED WELDER

MATERIALS	A500 GR. B
HOLE SIZE	N/A
BOLT SPECS.	N/A
FINISH	GALV.

SHEET NAME: RAIL LAYOUT

PROJECT NAME:	PERU	SHEET NO. 1 OF 1
PROJECT NO:	STP SCR(4)	
PROJECT OWNER:	VTrans	12R3 OF 45
DRAWN BY:	A.D.	
CHK'D BY:	C.E.	
DATE:	2/26/18	

REV. NO.	DATE:	B. RENAUD BROS. INC. STEEL SALES & FABRICATION VERNON VT. USA 283 FT. BRIDGMAN RD. VERNON VT., 05554 PH. (802) 251-7383 FAX (802) 251-7308