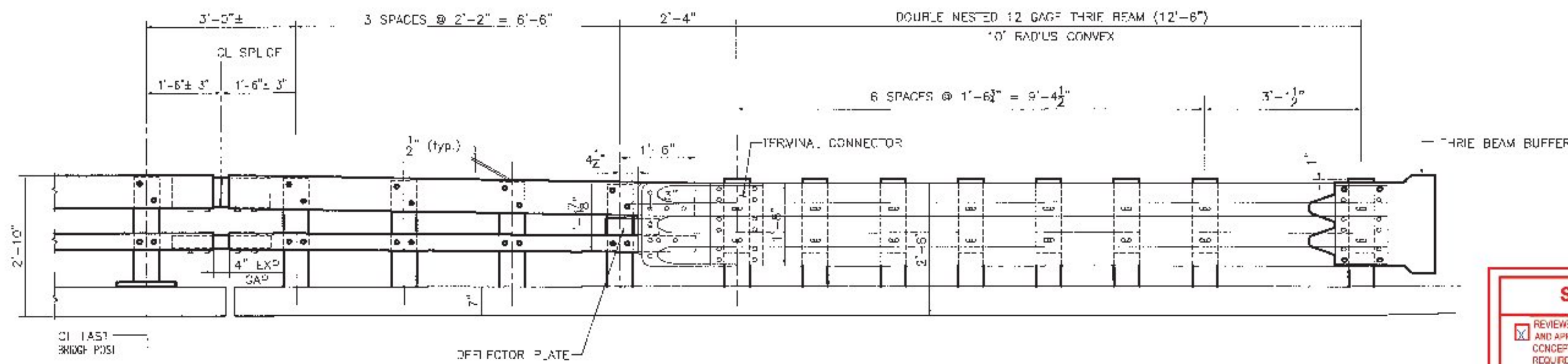
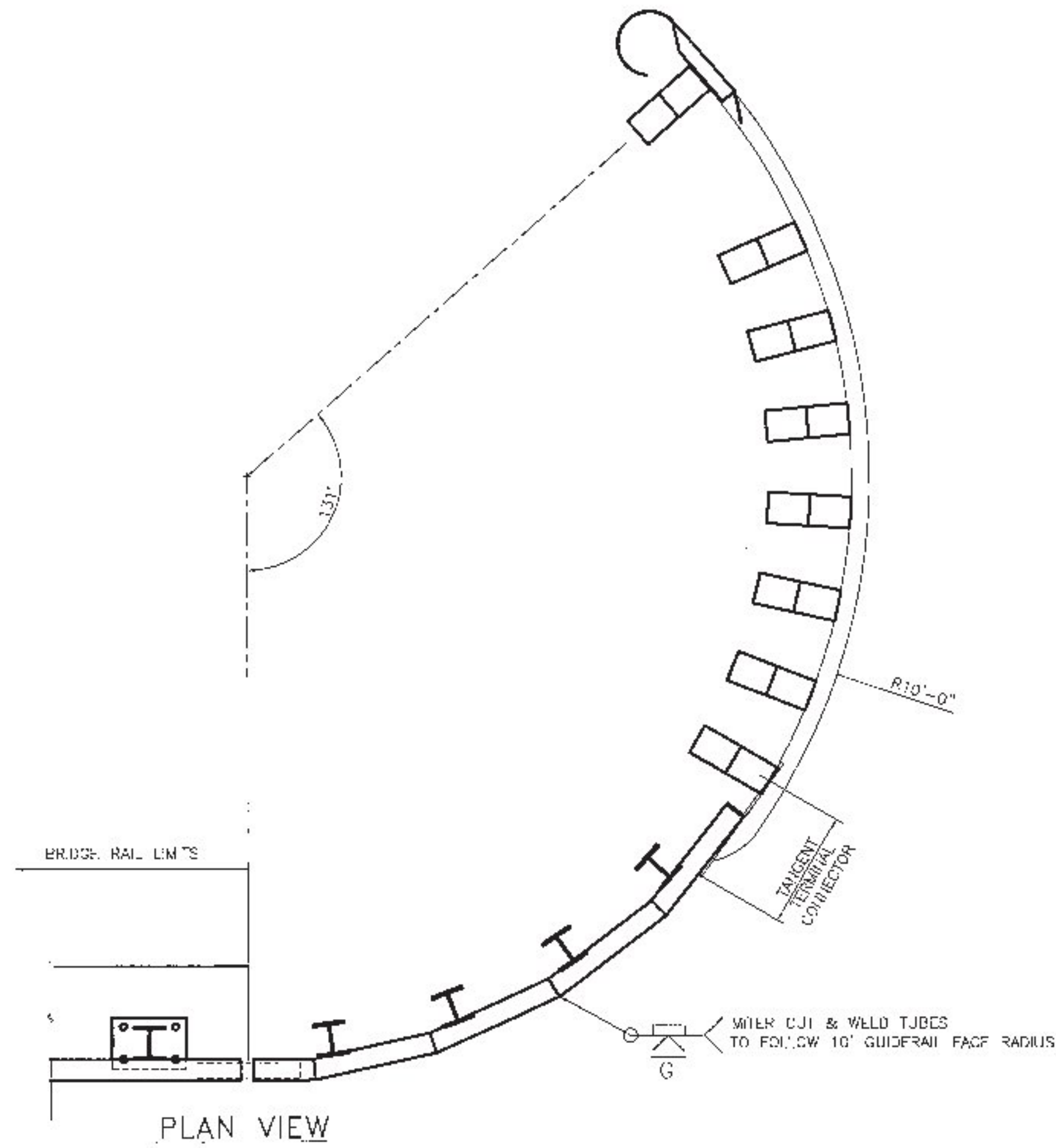


BILL OF MATERIAL

Qty	mk	Description	Spec.
4 EA		ITEM 621.72 GUARDRAIL APPROACH SECTION, GALVANIZED, 2 RAIL BOX BEAM	
4	01	W6x25 APPROACH POST - #1 x 8'-0" OAL (GALV)	A709 gr 50
4	02	W6x25 APPROACH POST - #2 x 8'-0" OAL (GALV)	A709 gr 50
4	03	W6x25 APPROACH POST - #3 x 8'-0" OAL (GALV)	A709 gr 50
4	04	W6x25 APPROACH POST - #4 x 8'-0" OAL (GALV)	A709 gr 50
		BRIDGE RAILING POST W6 x 25 x 2'-2.375" OAH WITH 1 x 10 x 14 BASE PLATE (GLV)	A709 gr 50
3		UPPER RAIL APPROACH TUBE HSS 8 x 4 x 5/16 x 9'-4.000" w/ 3,500 SLOTS FOR 4" EXP GAP (GALV)	A500 gr B
3		LOWER RAIL APPROACH TUBE HSS 4 x 4 x 5/16 x 9'-4.000" w/ 3,500 SLOTS FOR 4" EXP GAP (GALV)	A500 gr B
1		UPPER APP TUBE HSS 8 x 4 x 5/16 x 9'-4.000" w/ 3,500 SLOTS FOR 4" EXP GAP (GALV) miter cut & weld 10'R	A500 gr B
1		LOWER APP TUBE HSS 4 x 4 x 5/16 x 9'-4.000" w/ 3,500 SLOTS FOR 4" EXP GAP (GALV) miter cut & weld 10'R	A500 gr B
4		CONNECTION PLATE PL 0.375" x 20.000" x 27.000" (GALV)	A709 gr 36
2		DEFLECTOR PLATE (RIGHT) PL 0.375 x 4.000 x 13.375 (GALV)	A709 gr 36
2		DEFLECTOR PLATE (LEFT) PL 0.375 x 4.000 x 13.375 (GALV)	A709 gr 36
4		END CAP FOR 8x4 TUBE 0.187 THICK PLATE 8.000 x 4.000 w/ WELDED TABS (GALV)	A709 gr 36
4		END CAP FOR 4x4 TUBE 0.187 THICK PLATE 4.000 x 4.000 w/ WELDED TABS (GALV)	A709 gr 36
4		(ANGLED) SPLICE TUBE (EXPANSION) FOR 8x4 UPPER RAIL HSS 7 x 3 x 3/8 x 1'-11.750" OAL (GALV)	A500 gr B
4		SPLICE TUBE (EXPANSION) FOR 4x4 LOWER RAIL HSS 3 x 3 x 5/16 x 1'-11.750" OAL (GALV)	A500 gr B
32		WOOD POST (WP1) 6 x 8 x 7'-0"	TIMBER
32		WOOD BLOCKOUT (WB1) 6 x 8 x 1'-6"	TIMBER
3		WOOD POST (WP2) 6 x 8 x 7'-0"	TIMBER
3		WOOD BLOCKOUT (WB2) 6 x 8 x 1'-6"	TIMBER
3		WOOD POST (WP3) 6 x 8 x 7'-0"	TIMBER
3		WOOD BLOCKOUT (WB3) 6 x 8 x 1'-2"	TIMBER
4		THRIE FLAT LIP BRIDGE SHOE (MODIFIED) 10 GA. GALV	aashto M180 B2
3		THRIE TRANSITION PANEL 6'-3" / 3'-1 1/2" 10 GA. GALV.	aashto M180 B2
6		THRIE PANEL 12'-6" / 1'-6 3/4" 12 GA. GALV.	aashto M180 A2
2		THRIE PANEL 12'-6" / 1'-6 3/4" 12 GA. GALV. shop curve 10'R convex	aashto M180 A2
1		THRIE BEAM BUFFER END 12 GA. GALV	aashto M180 A2
92		ROUND HEAD POST BOLT slot or wrench head - no shoulder 3/4" DIA x 6" LG. (GLV) w/ LOCK NUT & FLAT WASHER	A449
4		ROUND HEAD POST BOLT slot or wrench head - no shoulder 3/4" DIA x 2" LG. (GLV) w/ HEX NUT	A449
8		ROUND HEAD POST BOLT - oval shoulder 5/8" DIA x 1'-8" LG. (GALV) w/ DBL RECESS NUT, FLAT WASHER	A307
65		ROUND HEAD POST BOLT - oval shoulder 5/8" DIA x 1'-6" LG. (GALV) w/ DBL RECESS NUT, FLAT WASHER	A307
32		HEX HEAD BOLT 5/8 x 1-3/4" (GALV) w/ FLAT WASHER	A325
132		PANEL SPLICE BOLT 5/8 x 1-1/4" (GALV) w/ DOUBLE RECESSED NUT	A307
73		RECTANGULAR PLATE WASHER 0.187 x 1.750 x 3.000 (GALV)	A709 gr 36
32		SPACER PIPE - GALVANIZED 3/4" SCH. 40 x 1/2" LONG (GLV)	A53 gr B



NE APPROACH RAIL ELEVATION

SHOP DRAWING REVIEW

REVIEWED AS REQUIRED BY THE CONSTRUCTION CONTRACT DOCUMENTS AND APPROVED, BUT ONLY FOR CONFORMANCE TO THE DESIGN CONCEPT OF THE WORK, AND SUBJECT TO FURTHER LIMITATIONS AND REQUIREMENTS CONTAINED IN THE CONSTRUCTION CONTRACT DOCUMENTS.

REJECTED REVISED AND RE-QUEMANT APPROVED AS NOTED

CORRECTIONS OR COMMENTS MADE ON THE SHOP DRAWINGS DURING THIS REVIEW DID NOT RELIEVE CONTRACTOR FROM COMPLIANCE WITH REQUIREMENTS OF THE DRAWINGS AND SPECIFICATIONS. THIS CHECK IS ONLY FOR REVIEW OF GENERAL CONFORMANCE WITH THE DESIGN CONCEPT OF THE PROJECT AND GENERAL COMPLIANCE WITH THE INFORMATION GIVEN IN THE CONTRACT DOCUMENTS. THE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING AND CORRELATING ALL QUANTITIES AND DIMENSIONS, SELECTING FABRICATION PROCEDURES AND TECHNIQUES OF CONSTRUCTION, COORDINATING THEIR WORK WITH THAT OF ALL OTHER TRADES, AND PERFORMING THEIR WORK IN A SAFE AND SATISFACTORY MANNER.

CLD Consulting Engineers
340 Commercial Street
Arlingford, VT 05701
888-888-8225

Job Number: 120174
Reviewed by: AEG
Date: 05/14/2014

HIGHWAY SAFETY CORP
GLASTONBURY, CT
860-633-9445

ITEM 621.72 GUARDRAIL APPROACH SECTION, GALVANIZED 2 RAIL BOX BEAM (S-3672)

BRO 1449(31)
ROARING BROOK ROAD (TH2) BRIDGE #8
TOWN OF BARTON, ORLEANS COUNTY VT

GENERAL CONTRACTOR: VT REC

CERTIFIED FABRICATOR

REC JOB NO. 2045

SHEET NO. 4 of 4

DATE: 04-22-15