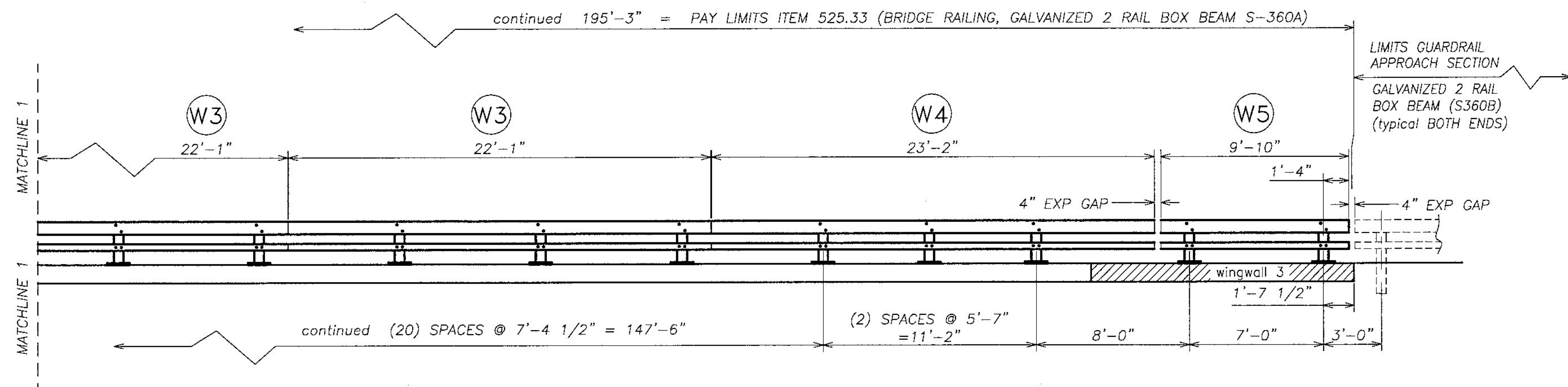


WEST SIDE RAILING ELEVATION
 LOOKING AT TRAFFIC FACE OF RAILING
 FACING WEST FROM CENTERLINE OF ROAD

BILL OF MATERIAL
 BOTH SIDES OF BRIDGE

Qty	mk	Description	Spec.
391 LF		ITEM 525.33 BRIDGE RAILING, GALVANIZED, 2 RAIL BOX BEAM	
56		BRIDGE RAILING POST W6 x 25 x 2'-2.375" OAH WITH 1 x 10 x 14 BASE PLATE (GLV)	A709 gr 50
16		SPLICE TUBE (FOR 8X4 RAIL) HSS 7 x 3 x 3/8 x 1'-8.000" OAL w/ TAPPED HOLES & 2 WELDED NUTS (GLV)	A500 gr B
16		SPLICE TUBE (FOR 4X4 RAIL) HSS 3 x 3 x 5/16 x 1'-8.000" OAL w/ TAPPED HOLES & 2 WELDED NUTS (GLV)	A500 gr B
2		EXP SPLICE (FOR 8X4 RAIL) HSS 7 x 3 x 3/8 x 1'-11.750" OAL w/ TAPPED HOLES & 2 WELDED NUTS (GLV)	
2		EXP SPLICE (FOR 4X4 RAIL) HSS 3 x 3 x 5/16 x 1'-11.750" OAL w/ TAPPED HOLES & 2 WELDED NUTS (GLV)	
2	W1	UPPER RAIL TUBE HSS 8 x 4 x 5/16 x 9'-5.000" OAL 1 end holes, 1 end slots (GLV)	A500 gr B
1	W2	UPPER RAIL TUBE HSS 8 x 4 x 5/16 x 19'-4.000" OAL holes both ends (GLV)	A500 gr B
12	W3	UPPER RAIL TUBE HSS 8 x 4 x 5/16 x 22'-1.000" OAL holes both ends (GLV)	A500 gr B
2	W4	UPPER RAIL TUBE HSS 8 x 4 x 5/16 x 23'-2.000" OAL 1 end holes, 1 end slots (GLV)	A500 gr B
2	W5	UPPER RAIL TUBE HSS 8 x 4 x 5/16 x 9'-10.000" OAL slots both ends (GLV)	A500 gr B
1	W6	UPPER RAIL TUBE HSS 8 x 4 x 5/16 x 19'-5.500" OAL holes both ends (GLV)	A500 gr B
2	W1	LOWER RAIL TUBE HSS 4 x 4 x 1/4 x 9'-5.000" OAL 1 end holes, 1 end slots (GLV)	A500 gr B
1	W2	LOWER RAIL TUBE HSS 4 x 4 x 1/4 x 19'-4.000" OAL holes both ends (GLV)	A500 gr B
12	W3	LOWER RAIL TUBE HSS 4 x 4 x 1/4 x 22'-1.000" OAL holes both ends (GLV)	A500 gr B
2	W4	LOWER RAIL TUBE HSS 4 x 4 x 1/4 x 23'-2.000" OAL 1 end holes, 1 end slots (GLV)	A500 gr B
2	W5	LOWER RAIL TUBE HSS 4 x 4 x 1/4 x 9'-10.000" OAL slots both ends (GLV)	A500 gr B
1	W6	LOWER RAIL TUBE HSS 4 x 4 x 1/4 x 19'-5.500" OAL holes both ends (GLV)	A500 gr B
56		ANCHOR SPACER PLATE PL 0.375 x 13.000 x 9.375	A709 gr 36
224		ANCHOR STUD DBL END PART THREAD - 1" DIA x 16.000 w/ 2.250" THD EACH END (GLV)	A449
448		HEAVY HEX NUT 1" (GLV)	A563 DH
224		ROUND WASHER (SAE) - 1" DIA SMALL (GLV)	F436
224		JAM NUT 1" (GALV)	A563 DH
224		ROUND HEAD POST BOLT slot or wrench head - no shoulder 3/4" DIA x 6" LG. FULL BODY (GLV)	A449 / A325
224		LOCK NUT 3/4" (GLV)	A563 DH
224		ROUND WASHER (SAE) 3/4" (GLV)	F436
144		HEX HEAD BOLT 5/8" DIA x 1.75" LG. (GLV)	A325
144		ROUND WASHER (SAE) 5/8" (GLV)	F436
16		SPACER PIPE - GALVANIZED 3/4" SCH. 40 x 1/2" LONG (GLV)	A53 gr B
56		BEARING PAD 0.125" THICK x 10.000 x 14.000 (NEOPRENE 80 duro +/-10)	aaasto M251



THE FOLLOWING DRAWINGS HAVE BEEN
 REVIEWED IN ACCORDANCE WITH THE VALUE
 ENGINEERING PROPOSAL.

Vermont Agency of Transportation
RECEIVED
 ON: January 22, 2016
 and Checked for
CONFORMANCE
 BY: Rob Young DATE: 02/18/2016

No.	Remarks	Date
0	Initial submittal	1/21/16
REVISIONS - APPLIES TO SET		

Approved Rejected Approved As Noted

This review is only for general conformance with the design concept and the information given in the Construction Documents. Corrections or comments made on the shop drawings during the review do not relieve the Contractor from compliance with the requirements of the Plans and Specifications. Review of a specific item shall not include review of an assembly of which an item is a component. The Contractor is responsible for dimensions to be confirmed and corrected at the job site; information that pertains solely to the fabrication process or to the means, methods, techniques, sequences and procedures of construction; coordination of the Work with that of other trades and performing all Work in a safe and satisfactory manner.

Date: 2/17/2016
 By: D. Kull

McFarland Johnson

HIGHWAY SAFETY CORP
 GLASTONBURY, CT
 860-633-9445

ITEM 525.33 BRIDGE RAILING, GALVANIZED 2 RAIL BOX BEAM (S-360A)
 ITEM 621.72 GUARDRAIL APPROACH, GALV 2 RAIL BOX BEAM (S-360B)

TOWN OF WAITSFIELD, VERMONT
 ROUTE VT 100 (MINOR ARTERIAL) BRIDGE #177
 WASHINGTON COUNTY BR# 013-4(39)

GENERAL CONTRACTOR: LAFAYETTE

HSC JOB NO. 2088
 SHEET NO. 1 of 4

DATE: 01-21-16 SCALE: NONE SIZE: D