



Vermont Agency of Transportation
RECEIVED

CK'D BY T.Y. Lin International OK'D BY J. Olund

February 24, 2017

RESUBMIT No Approved AsNoted
BY D. Bonneau DATE 03/14/17

BILL OF MATERIAL

BOTH SIDES OF BRIDGE COMBINED

Qty	mk	Description	Spec.
86	LF	ITEM 525.45 BRIDGE RAILING, GALVANIZED, STEEL TUBING / CONCRETE COMBINATION RAIL	
12		TUBULAR RAILING POST ASSEMBLY x 1'-5.875" OAH (GLV)	
12		TUBE HSS 4 x 4 x 5/16 x 1'-4.812" LG	A500 gr B
12		BASE PLATE 0.750 x 8.500 x 10.000	A572 gr 50
12		CAP PLATE 0.312 x 3.625 SQ	A36
2		SPLICE BAR (FOR UPPER 4x3 RAIL) PL 2.250 x 3.250 x 28.000 (GLV)	A572 gr 50
2		SPLICE BAR (FOR LOWER 2x2 RAIL) PL 1.500 x 1.500 x 28.000 (GLV)	A572 gr 50
2	N1	UPPER RAIL TUBE 4 x 3 x 1/4 (GALV) 19 ft - 10.8125 in LG (splice holes 1 end, one end capped) w/ (4) wall connection slots	A500 gr B
2	N2	UPPER RAIL TUBE 4 x 3 x 1/4 (GALV) 18 ft - 1.3125 in LG (splice holes 1 end, one end capped) w/ (4) wall connection slots	A500 gr B
2	N1	LOWER RAIL TUBE 2 x 2 x 1/8 (GALV) 19 ft - 10.625 in LG (splice holes 1 end, one end capped) w/ (2) wall connection slots	A500 gr B
2	N2	LOWER RAIL TUBE 2 x 2 x 1/8 (GALV) 18 ft - 1.125 in LG (splice holes 1 end, one end capped) w/ (2) wall connection slots	A500 gr B
4		END CAP FOR UPPER RAIL TUBE PL 0.312 x 2.500 x 3.500 (WELDED INSIDE RAIL ENDS INDICATED ABOVE)	A36
4		END CAP FOR LOWER RAIL TUBE PL 0.312 x 1.750 SQ (WELDED INSIDE RAIL ENDS INDICATED ABOVE)	A36
24		ANCHOR SPACER PLATE PL 0.375 x 2.750 x 7.375	A36
48		ANCHOR STUD FULLY THREADED - 5/8" DIA x 13.000 (GLV)	A449
96		HEAVY HEX NUT 5/8" (GLV)	A563 DH
48		ROUND WASHER (SAE) - 5/8" DIA SMALL (GLV)	F436
48		SPRING LOCK WASHER - 5/8" DIA (GLV)	ASME D18.2
16		BOLT CARRIAGE 0.875-09 x 14.000 GALV (7/8) (for upper rail wall connection)	A307
16		HEX NUT HVY 0.875-09 HDG (3/4) A563	A563
16		WASHER ROUND 0.875 SAE GLV SMALL (7/8) HI-STR HARDENED	F436
16		SPRING LOCK WASHER - 7/8" DIA (GLV)	ASME D18.2
8		BOLT CARRIAGE 0.625-11 x 13.000 HDG (for lower rail wall connection)	A307
8		HEX NUT HVY 0.625-11 HDG (3/4) A563	A563
8		WASHER ROUND 0.625 SAE GLV SMALL (5/8) HI-STR HARDENED	F436
8		SPRING LOCK WASHER - 5/8" DIA (GLV)	ASME D18.2

12		BOLT POST .750-10x9.00 HDG slot or wrench head full dia body no shoulder 2" min thread (for upper rail connection)	A449
12		HEX NUT HVY 0.750-10 HDG (3/4) A563 DH	A563 DH
12		WASHER ROUND 0.750 SAE GLV SMALL (3/4) HI-STR HARDENED	F436
12		SPRING LOCK WASHER - 7/8" DIA (GLV)	ASME D18.2
12		BOLT POST .625-11x08.00 HDG slot or wrench head full dia body no shoulder 2" min thread (for lower rail connection)	A449
12		HEX NUT HVY 0.625-11 HDG (3/4) A563 DH	A563 DH
12		WASHER ROUND 0.625 SAE GLV SMALL (5/8) HI-STR HARDENED	F436
12		SPRING LOCK WASHER - 7/8" DIA (GLV)	ASME D18.2
8		BOLT HEX HEAD 0.875-09 x 05.500 HDG (7/8) (for upper rail splice)	A325
8		HEX NUT HVY 0.875-09 HDG (3/4) A563 DH	A563 DH
8		WASHER ROUND 0.875 SAE GLV SMALL (7/8) HI-STR HARDENED	F436
8		SPRING LOCK WASHER - 7/8" DIA (GLV)	ASME D18.2
8		BOLT HEX HEAD 0.625-11 x 03.000 HDG (5/8) (or lower rail splice)	A325
8		HEX NUT HVY 0.625-11 HDG (3/4) A563 DH	A563 DH
8		WASHER ROUND 0.625 SAE GLV SMALL (5/8) HI-STR HARDENED	F436
8		SPRING LOCK WASHER - 5/8" DIA (GLV)	ASME D18.2
12		BEARING PAD 0.125" THICK x 8.500 x 10.000 (NEOPRENE 80 duro +/-10)	ASTM D2240

T.Y. LIN INTERNATIONAL
THE STAMPED DOCUMENTS ARE HEREBY:
 APPROVED AS NOTED
 REVISE AND RESUBMIT
SEE TRANSMITTAL FOR ADDITIONAL INFORMATION AS APPLICABLE.
THIS REVIEW IS FOR GENERAL CONFORMANCE WITH DESIGN CONCEPT ONLY. ANY DEVIATION FROM THE PLANS OR SPECIFICATIONS NOT CLEARLY NOTED BY THE CONTRACTOR HAS NOT BEEN REVIEWED. REVIEW BY THE ENGINEER SHALL NOT RELIEVE THE CONTRACTOR OF THE CONTRACTUAL RESPONSIBILITY FOR ANY ERRORS OR DEVIATION FROM THE CONTRACT REQUIREMENTS.
JOSH OLUND Feb 28, 2017
REVIEWER DATE

HIGHWAY SAFETY CORP
GLASTONBURY, CT
860-633-9445

ITEM 525.45 BRIDGE RAILING GALVANIZED STEEL TUBING / CONCRETE COMBINATION
TH 2 (GLOVER ROAD) BRIDGE NO. 20
ORLEANS COUNTY
BARTON VILLAGE, VT BHF 0286 (5)

CERTIFIED FABRICATOR

HSC JOB NO. 2149
SHEET NO. 2 of 3

GENERAL CONTRACTOR LAFAYETTE
DRAWN PAR CHECKED DATE 01/23/17 SCALE NONE SIZE B