

State of Vermont
PDD/Structures Design Section
National Life Building – Drawer 33
Montpelier, VT 05633-5001
www.aot.state.vt.us

Agency of Transportation

[phone] 802-828-0161
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May 27, 2015

J. A. McDonald, Inc.
PO Box 132
Lyndon Center, VT 05850

Project Name: Lincoln BRF 0188(8)

Structure Identification: TH 1, Bridge 19

The bridge railing fabrication drawings associated with Item 525.34, Bridge Railing, Galvanized 4 Rail Box Beam, have been reviewed and are being returned herewith.

All sheets are approved as noted.

You must provide notice to our fabrication inspector, Jeff Clark, as to the date fabrication represented by these drawings will begin. That notice must be received and acknowledged at least seven days prior to that date, as per Specification 506.03. Jeff may be contacted by phone at (802)828-0044 or email at jeff.clark@state.vt.us. Any material fabricated prior to the notification date is subject to rejection without further cause.

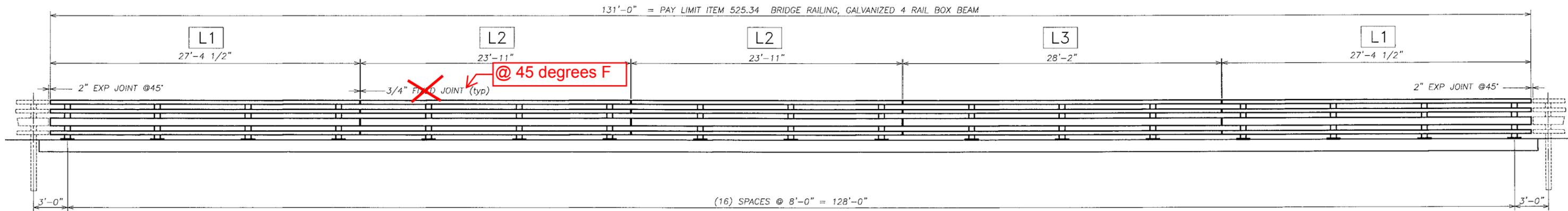
Sincerely,



Todd A. Sumner P.E.
Project Manager



TYPICAL RAILING PLAN VIEW



TYPICAL RAILING ELEVATION
LOOKING AT FACE OF RAIL FROM CENTERLINE OF ROAD
BOTH SIDES TYPICAL

BILL OF MATERIAL

ITEM 525.34 BRIDGE RAILING, GALVANIZED 4 RAIL BOX BEAM (262 LF)

Qty	mk	Description	Spec.
34		BRIDGE RAILING POST W6 x 25 x 3'-5.375" OAH WITH 1 x 10 x 14 BASE PLATE (GLV)	A709 gr 50
8		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
24		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
4	L1	RAIL TUBE 8 x 4 x 5/16 (GALV) 27'-4.500" LG	A500 gr B
4	L2	RAIL TUBE 8 x 4 x 5/16 (GALV) 23'-11.000" LG	A500 gr B
2	L3	RAIL TUBE 8 x 4 x 5/16 (GALV) 28'-2.000" LG	A500 gr B
12	L1	RAIL TUBE 4 x 4 x 1/4 (GALV) 27'-4.500" LG	A500 gr B
12	L2	RAIL TUBE 4 x 4 x 1/4 (GALV) 23'-11.000" LG	A500 gr B
6	L3	RAIL TUBE 4 x 4 x 1/4 (GALV) 28'-2.000" LG	A500 gr B
34		ANCHOR SPACER PLATE PL 0.375 x 13.000 x 9.375	A709 gr 36
138		ANCHOR STUD DBL END PART THREAD - 1" DIA x 14.000 LG (GLV)	A449
276		HEAVY HEX NUT 1" (GLV)	A563 DH
138		ROUND WASHER (SAE) - 1" DIA SMALL (GLV)	F436
138		JAM NUT 1" (GALV)	A563 DH
272		ROUND HEAD POST BOLT slot or wrench head - no shoulder 3/4" DIA x 6" LG. FULL BODY (GLV)	A449 / A325
272		LOCK NUT 3/4" (GLV)	A563 DH
272		(3/4") PLAIN ROUND WASHER TYPE A (GALV) 0.750" DIA USS LARGE (HI-CARBON)	F844
128		(5/8") HEX HEAD BOLT (GALV) 0.625" DIA x 1.750" LG.	A325
128		(5/8") PLAIN ROUND WASHER (GALV) 0.625" USS LARGE	F844
64		3/4" SPACER PIPE 0.750" DIA. (SCH 40) x 1/2" LG.	A53 gr B
34		BEARING PAD 0.125" THICK x 10.000 x 14.000 (NEOPRENE 80 duro +/-10)	aashto M251

No.	Remarks	Date
A	miscellaneous review corrections	5/19/15
0	Initial submittal	03-30-15

Vermont Agency of Transportation
RECEIVED
ON: **May 19, 2015**
and Checked for
CONFORMANCE
BY: Todd A. Sumner DATE: 05/27/2015

SUBMITTAL REVIEW

Review is only for general conformity to the contract drawings and specifications and shall not relieve the contractor of his entire responsibility under the contract, including, among other things, dimensions to be confirmed and correlated at the job site, and information that pertains to the fabrication processes or to techniques of construction.

NO EXCEPTIONS TAKEN
 MAKE CORRECTIONS NOTED
 RESUBMITTAL NOT REQUIRED
 AMEND AND RESUBMIT
 REJECTED - SEE REMARKS

BY: *Todd A. Sumner*
DATE: *5/26/15*

HIGHWAY SAFETY CORP
GLASTONBURY, CT
860-633-9445

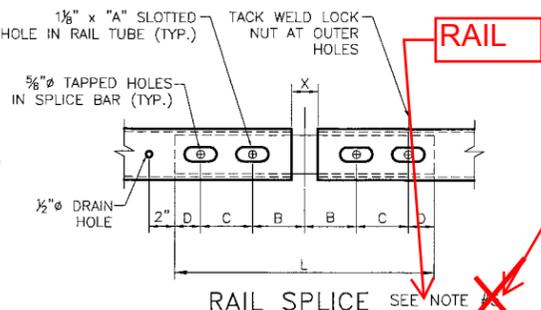
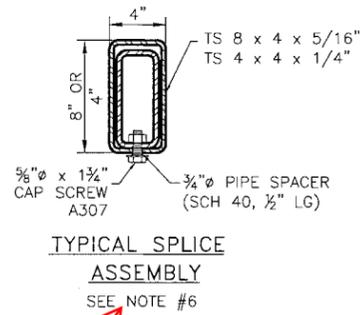
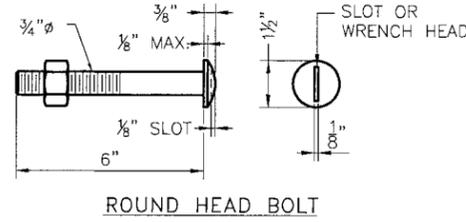
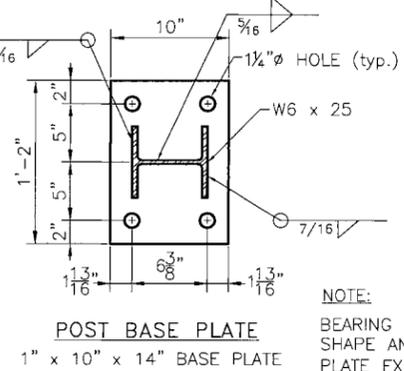
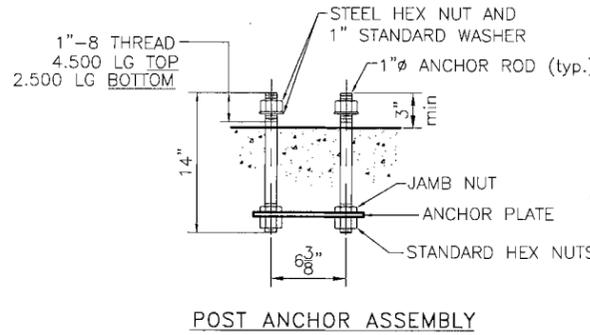
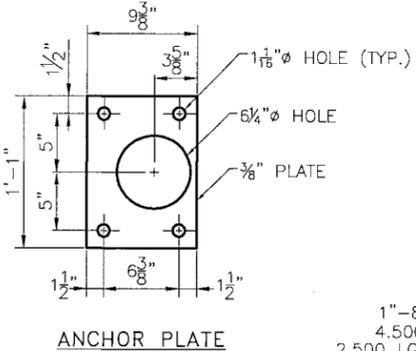
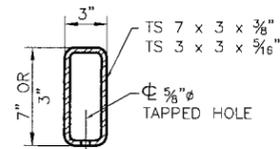
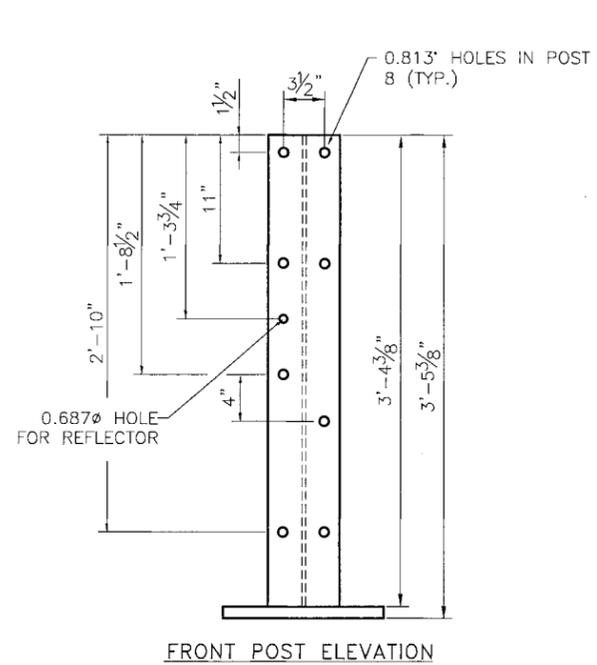
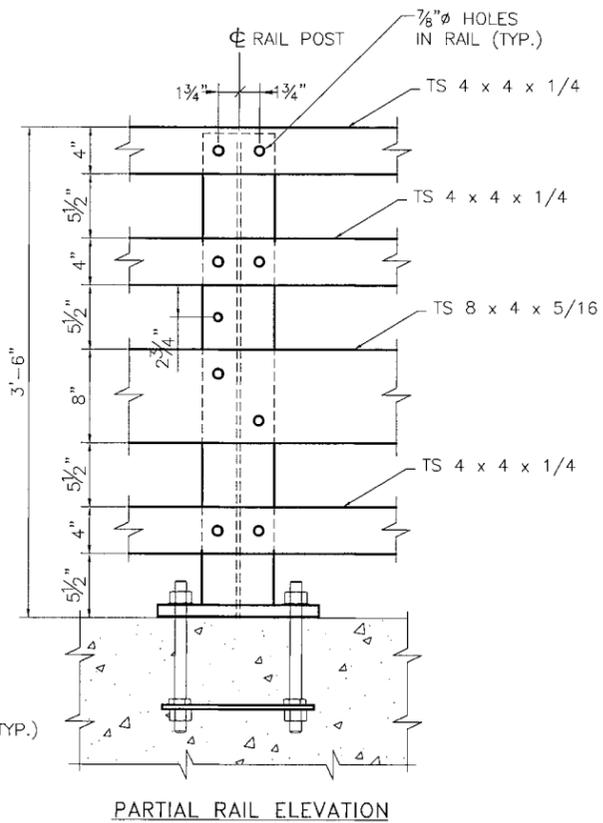
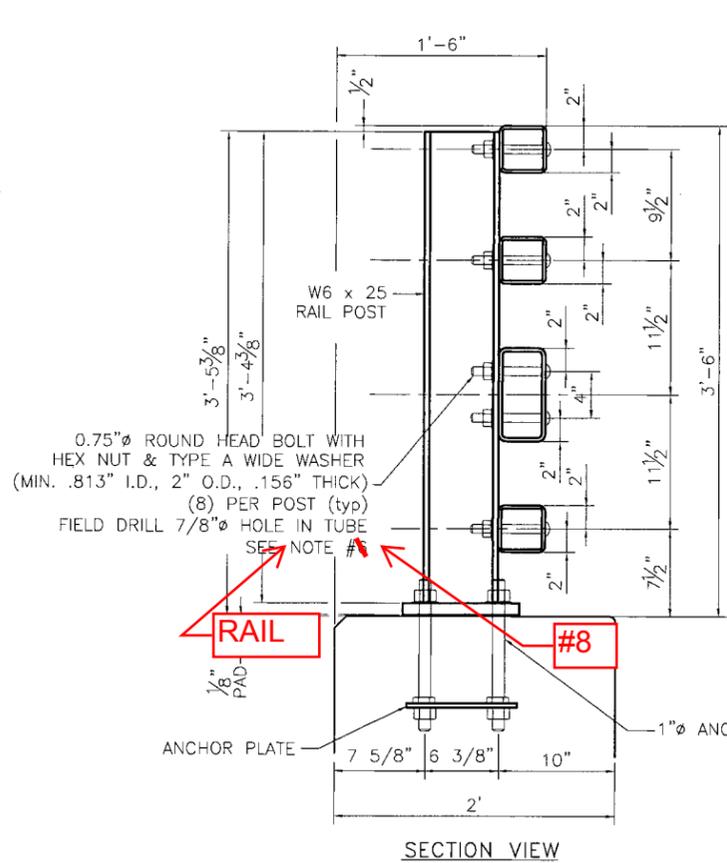
ITEM 525.34 BRIDGE RAILING, GALVANIZED 4 RAIL BOX BEAM
ITEM 621.73 GUARDRAIL APPROACH SECTION, GALVANIZED 4 RAIL BOX BEAM
TH1 EAST RIVER ROAD BRIDGE #19
TOWN OF LINCOLN, VT ADDISON COUNTY
BRF 0188 (8)

AS9001 CERTIFIED FABRICATOR

HSC JOB NO. **2041**
SHEET NO. **1 of 4**

GENERAL CONTRACTOR
SUB CONTRACTOR **LAFAYETTE**

DRAWN **PAR** CHECKED *[Signature]* DATE **03-27-15** SCALE **NONE** SIZE **D**



SPLICE & EXPANSION JOINT TABLE

"T"	"A"	"B"	"C"	"D"	"X"	"L"
INTERIOR	2 1/2"	4"	4"	2"	3/4"	1'-8"
< 3 1/4"	2 1/2"	4"	4"	2"	2"	1'-8"
* 5 1/4" - 2 1/4"	5 1/2"	5"	5"	2 1/2"	3"	2'-1"

"T" = TOTAL REQUIRED MOVEMENT
* = END SPLICE BAR

RAIL NOTES:

- ITEM 525.34, BRIDGE RAILING GALVANIZED 4 RAIL BOX BEAM SHALL INCLUDE POSTS, BASE PLATES, ANCHOR PLATES, ANCHOR RODS, PREFORMED PADS, RAIL ASSEMBLY BOLTS, NUTS, WASHERS, STUDS, STRUCTURAL TUBING, SPLICE BARS, PIPE SPACERS, ALL APPURTENANCES, AND GALVANIZING.
- BRIDGE RAIL POSTS SHALL BE SET NORMAL (90 DEGREES) TO THE PROFILE GRADE, EXCEPT ON GRADES OVER 5% WHERE POSTS SHALL BE SET VERTICAL.
- ENDS OF RAIL TUBE SECTIONS SHALL BE SAWED OR MILLED AND SHALL BE TRUE AND SMOOTH. ALL CUT EDGES OF ALL MATERIAL SHALL BE GROUND SMOOTH.
- EACH PIECE OF RAIL TUBING SHALL BE ATTACHED TO A MINIMUM OF THREE (3) POSTS.
- BOLT HOLES SHALL BE DRILLED OR PUNCHED. FLAME CUTTING MAY BE USED TO FINISH SLOTTED HOLES IF MECHANICALLY GUIDED.
- AT INTERIOR SPLICES, PIPE SPACERS SHALL BE USED ON ONLY ONE SIDE OF THE SPLICE TO ALLOW MOVEMENT ON THAT SIDE. ~~THE TOP AND BOTTOM RAIL~~ SHALL RECEIVE THE SAME TREATMENT, AT END SPLICES PIPE SPACERS SHALL BE USED ON BOTH SIDES OF THE SPLICE TO ALLOW MOVEMENT ON EACH SIDE.
- MILL OR SHOP TRANSVERSE WELDS SHALL NOT BE PERMITTED ON ANY RAIL ELEMENT. RAIL ELEMENTS USED ON ~~CURVES~~ SHALL USE 3/8" WALL TUBES AND SHALL BE SHOP FORMED TO THE REQUIRED CURVATURE.
- NO PUNCHING, DRILLING, CUTTING OR WELDING SHALL BE PERMITTED AFTER GALVANIZING. EXCEPT AS ALLOWED IN DETAILS A & B. DAMAGED AREAS OF GALVANIZING SHALL BE THOROUGHLY CLEANED, PRETREATED, AND PAINTED WITH TWO COATS OF ORGANIC ZINC-RICH GALVANIZING REPAIR PAINT. HAVING MIN. 94% ZINC BY WEIGHT. TO A THICKNESS EQUAL TO THE ORIGINAL COATING ACCORDING TO THE STANDARD SPECIFICATIONS AND ASTM A780.
- NUTS FOR 1" Ø THREADED ANCHOR RODS CONNECTING THE BASE PLATE TO THE CONCRETE SHALL BE TIGHTENED TO A SNUG FIT AND GIVEN AN ADDITIONAL 1/8 TURN.
- THREADS FOR ANCHOR RODS MAY BE ROLLED OR CUT. IF CUT THREADS ARE USED, BOLT DIA. SHALL NOT BE LESS THAN NOMINAL DIA. IF ROLLED THREADS ARE USED, ROD DIA. SHALL NOT BE LESS THAN ROOT DIA. OF THREADS.

MATERIAL NOTES:

- IN ACCORDANCE WITH SECTION 525 AND THE FOLLOWING:
- STRUCTURAL TUBING SHALL CONFORM TO THE REQUIREMENTS OF SUBSECTION 714.11 (ASTM A500, GRADE B, STRUCTURAL STEEL TUBING) RAIL TUBING SHALL MEET THE LONGITUDINAL CHARPY V-NOTCH REQUIREMENTS OF 15 FT/LBS AT 0' F. FOR ASTM A500, GRADE B, THE TEST SAMPLES SHALL BE TAKEN AFTER FORMING THE TUBES. CHARPY V-NOTCH IS NOT REQUIRED FOR SPLICE TUBES.
 - RAIL POSTS AND BASE PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A572 GR 50, EXCEPT ANCHOR PLATES ~~AND NUTS~~ A36. SEE SUBSECTION 732.03
 - 3/4" Ø ROUND HEAD BOLTS SHALL BE ASTM A325 OR A449. ALL OTHER BOLTS AND NUTS SHALL CONFORM TO ASTM A307 AND ASTM 563 GRADE A RESPECTIVELY OR BETTER. ANCHOR RODS SHALL CONFORM TO ASTM A449 EXCEPT THAT ASTM A307 NUTS MAY BE USED ON THE BOTTOM OF ANCHOR ASSEMBLY. WASHERS SHALL BE HARDENED STEEL COMMERCIAL TYPE A PLAIN WIDE WASHERS AND SHALL MEET THE DIMENSIONAL REQUIREMENTS OF A.N.S.I. B18.22.
 - IN ACCORDANCE WITH SUBSECTION 726.08, ALL STEEL COMPONENTS SHALL BE GALVANIZED AFTER FABRICATION IN CONFORMANCE TO AASHTO M232 (ASTM A153) AND AASHTO M111 (ASTM A123). THE GALVANIZING KETTLE SHALL HAVE 0.05 TO 0.09 PERCENT NICKEL. GALVANIZED SURFACES SHALL HAVE A UNIFORM APPEARANCE AND GALVANIZED MATERIAL SHALL BE PROPERLY STORED.
 - PREFORMED BEARING PADS (1/8" THICK) SHALL CONFORM TO AASHTO M251.
 - A DELINEATOR (SEE VAOT STANDARD DRAWING G-1 FOR DETAILS) SHALL BE INSTALLED AT NEAREST POST TO 30 FT SPACING. WHITE IS TO BE INSTALLED ON THE DRIVER'S RIGHT. ~~FOR ONE WAY BRIDGES, YELLOW IS TO BE INSTALLED ON THE DRIVER'S LEFT.~~ PAYMENT SHALL BE INCIDENTAL TO OTHER ITEMS.

Vermont Agency of Transportation
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BY: **Todd A. Sumner** DATE: **05/27/2015**

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NO EXCEPTIONS TAKEN

MAKE CORRECTIONS NOTED RESUBMITTAL NOT REQUIRED

AMEND AND RESUBMIT

REJECTED - SEE REMARKS

BY: *John M. Staal*

DATE: *5/26/15*

HIGHWAY SAFETY CORP

GLASTONBURY, CT
860-633-9445

ITEM 525.34 BRIDGE RAILING, GALVANIZED 4 RAIL BOX BEAM
ITEM 621.73 GUARDRAIL APPROACH SECTION, GALVANIZED 4 RAIL BOX BEAM
TH1 EAST RIVER ROAD BRIDGE #19
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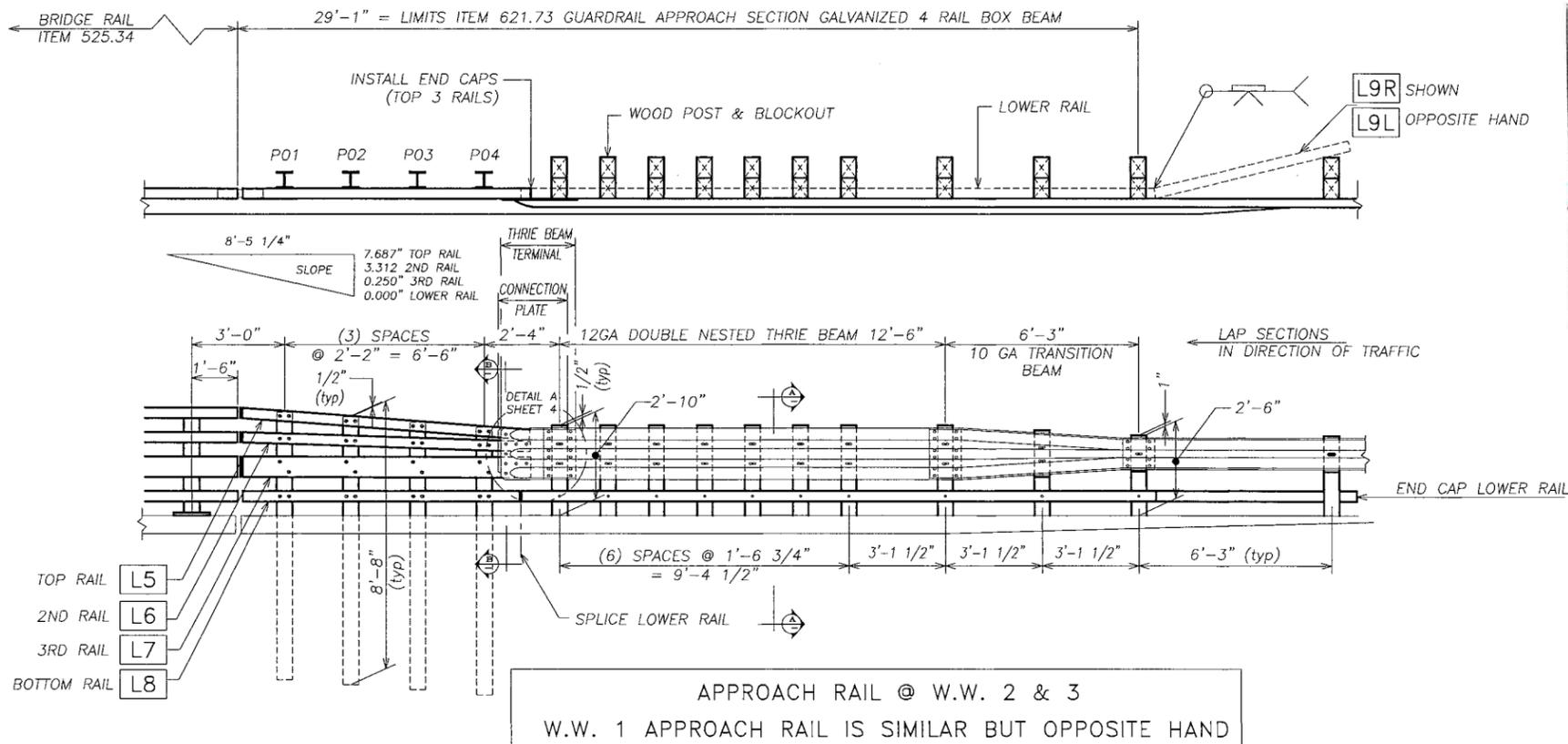
CERTIFIED FABRICATOR

GENERAL CONTRACTOR: *2041*

SUB CONTRACTOR: LAFAYETTE

DATE: 03-27-15

DRAWN: PAR CHECKED: NONE SIZE: D



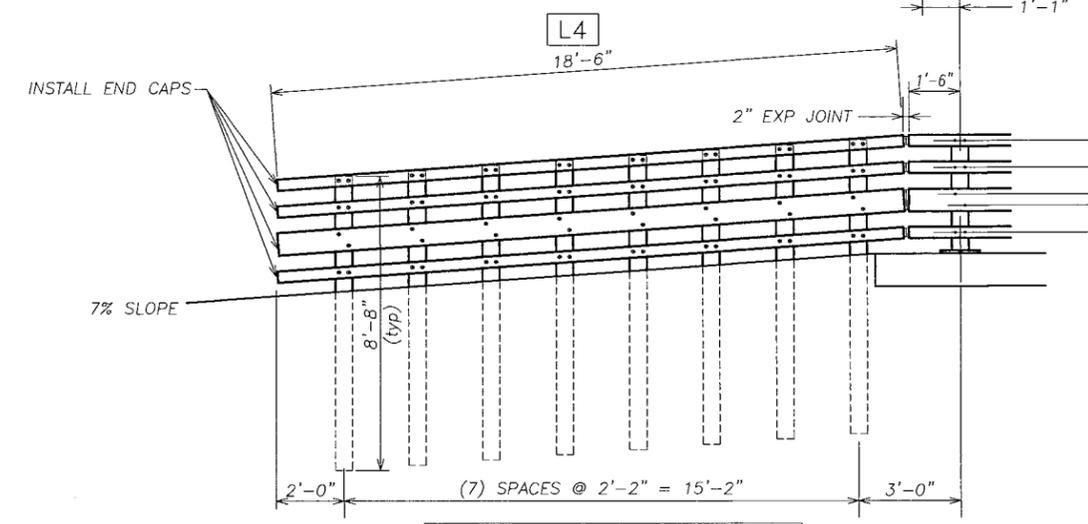
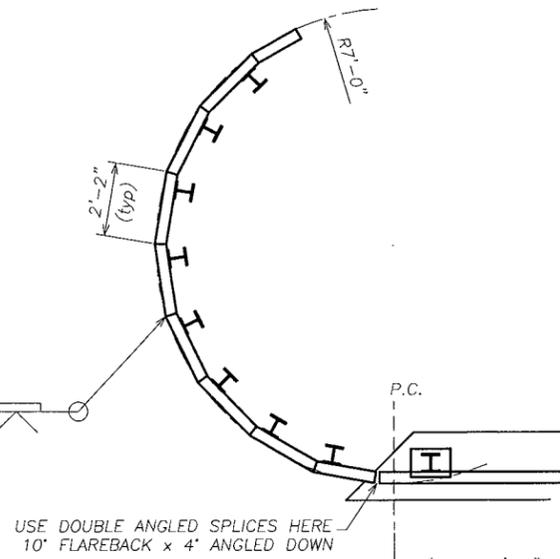
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BY: *John M. Staal*
 DATE: 5/20/15
 PJB AMERICAS, INC.

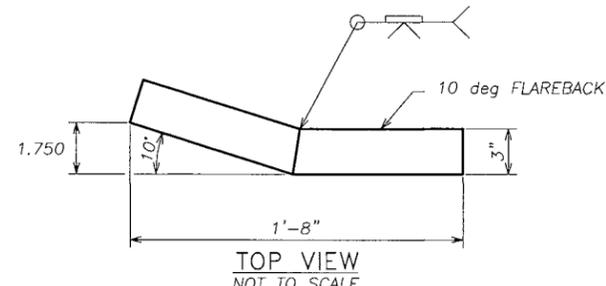
MITER CUT & WELD TUBE TO APPROXIMATE 7' RADIUS (2'-2" TYP CHORD LENGTHS SPACED TO AVOID INTERFERENCE WITH POSTS)



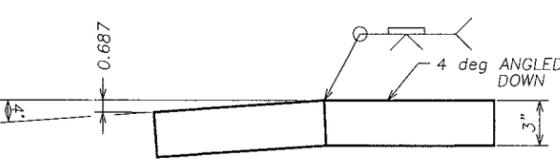
BILL OF MATERIAL

ITEM 621.73 GUARDRAIL APPROACH SECTION GALVANIZED 4 RAIL BOX BEAM (3 EA)

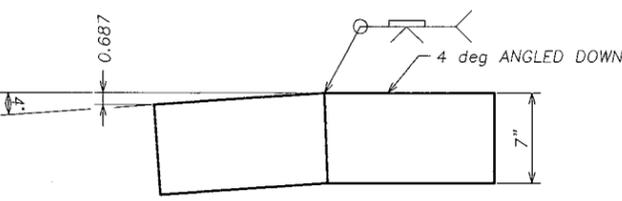
Qty	mk	Description	Spec.
3	P01	W6x25 APPROACH POST - #1 x 8'-8" OAL (GALV)	A709 gr 50
3	P02	W6x25 APPROACH POST - #2 x 8'-8" OAL (GALV)	A709 gr 50
3	P03	W6x25 APPROACH POST - #3 x 8'-8" OAL (GALV)	A709 gr 50
3	P04	W6x25 APPROACH POST - #4 x 8'-8" OAL (GALV)	A709 gr 50
3	L5	UPPER RAIL APPROACH TUBE TS 4 x 4 x 1/4" (GALV.) 9'-4.000" OAL	A500 Gr. B
3	L6	SECOND RAIL APPROACH TUBE TS 4 x 4 x 1/4" (GALV.) 9'-4.000" OAL	A500 Gr. B
3	L7	THIRD RAIL APPROACH TUBE TS 8 x 4 x 5/16" (GALV.) 9'-4.000" OAL	A500 Gr. B
3	L8	LOWER RAIL APPROACH TUBE TS 4 x 4 x 1/4" (GALV.) 8'-11.625" OAL	A500 Gr. B
2	L9R	RIGHT HAND FLAREBACK TS 4 x 4 x 1/4 (GLV) 27'-0.4375" OAL	A500 Gr. B
1	L9L	LEFT HAND FLAREBACK TS 4 x 4 x 1/4 (GLV) 27'-0.4375" OAL	A500 Gr. B
3		CONNECTION PLATE PL 0.375" x 20.000" x 27.000" (GALV)	A709 gr 36
3		END CAP FOR 8x4 TUBE 0.187 THICK PLATE 8.000 x 4.000 w/ WELDED TABS (GALV)	A709 gr 36
9		END CAP FOR 4x4 TUBE 0.187 THICK PLATE 4.000 x 4.000 w/ WELDED TABS (GALV)	A709 gr 36
3		top rail SPLICE TUBE HSS 3 x 3 x 5/16 x 1'-8.000" OAL w/ TAPPED HOLES & 2 WELDED NUTS (GLV) (angled down)	A500 gr B
3		2nd rail SPLICE TUBE HSS 3 x 3 x 5/16 x 1'-8.000" OAL w/ TAPPED HOLES & 2 WELDED NUTS (GLV) (angled down)	A500 gr B
3		3rd rail SPLICE TUBE (FOR 8X4 RAIL) HSS 7 x 3 x 3/8 x 1'-8.000" OAL w/ TAPPED HOLES & 2 WELDED NUTS (GLV) straight	A500 gr B
3		bottom rail SPLICE TUBE (FOR 4X4 RAIL) HSS 3 x 3 x 5/16 x 1'-8.000" OAL w/ TAPPED HOLES & 2 WELDED NUTS (GLV) straight	A500 gr B
24	4RR	WOOD POST 6 x 8 x 7'-0" (for thrie beam w/ rub rail hole)	TIMBER
24		WOOD BLOCKOUT 6 x 8 x 22.500	TIMBER
3	TRR	WOOD POST 6 x 8 x 7'-0" (for thrie transition w/ rub rail hole)	TIMBER
3		WOOD BLOCKOUT 6 x 8 x 18.000	TIMBER
3	R	WOOD POST 6 x 8 x 7'-0" (for w-beam rail w/ rub rail hole)	TIMBER
3		WOOD BLOCKOUT 6 x 8 x 14.000	TIMBER
30		WOOD BLOCKOUT 6 x 8 x 4.000 (for rubrail blockout)	TIMBER
3		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
120		ROUND HEAD POST BOLT slot or wrench head - no shoulder 3/4" DIA x 6" LG. FULL BODY (GLV)	A449 / A325
120		LOCK NUT 3/4" (GLV)	A563 DH
120		(3/4") PLAIN ROUND WASHER TYPE A (GALV) 0.750" DIA USS LARGE (HI-CARBON)	F844
48		(5/8") HEX HEAD BOLT (GALV) 0.625" DIA x 1.750" LG.	A325
48		(5/8") PLAIN ROUND WASHER (GALV) 0.625" USS LARGE	F844
48		3/4" SPACER PIPE 0.750" DIA. (SCH 40) x 1/2" LG.	A53 gr B
3		ROUND HEAD POST BOLT slot or wrench head - no shoulder 3/4" DIA x 2" LG. (GLV) w/ HEX NUT	A449
48		ROUND HEAD POST BOLT - oval shoulder 5/8" DIA x 1'-8" LG. (GALV) w/ DBL RECESS NUT, FLAT WASHER	A307
36		ROUND HEAD POST BOLT - oval shoulder 5/8" DIA x 1'-6" LG. (GALV) w/ DBL RECESS NUT, FLAT WASHER	A307
96		PANEL SPLICE BOLT 5/8 x 1-1/4" (GALV) w/ DOUBLE RECESSED NUT	A307
84		RECTANGULAR PLATE WASHER 0.187 x 1.750 x 3.000 (GALV)	A709 gr 36



SHOWING 10deg ANGLED FLAREBACK (TYPICAL ALL SPLICES AT WW4 APPROACH) SEE SHEET 2 FOR ADDITIONAL SPLICE DIMENSIONS



(TYPICAL 3x3 SPLICES AT WW4 APPROACH) SHOWING 4deg ANGLED DOWNWARD



(TYPICAL 7x3 SPLICES AT WW4 APPROACH) SHOWING 4deg ANGLED DOWNWARD

BILL OF MATERIAL

ITEM 621.73 GUARDRAIL APPROACH SECTION GALVANIZED 4 RAIL BOX BEAM (1 EA @ WW 4)

Qty	mk	Description	Spec.
8	WW4	W6x25 APPROACH POST x 8'-8" OAL (GALV)	A709 gr 50
1		DBL ANGLE SPLICE (FOR 8X4 RAIL) HSS 7x3x3/8 x 1'-8.000" OAL w/ TAP HOLES & 2 WELD NUTS (GLV) (flareback 10 deg/angle 4 deg)	A500 gr B
3		DBL ANGLE SPLICE (FOR 4X4 RAIL) HSS 3x3x5/16 x 1'-8.000" OAL w/ TAP HOLES & 2 WELD NUTS (GLV) (flareback 10 deg/angle 4 deg)	A500 gr B
1	L4	RAIL TUBE 8 x 4 x 5/16 (GALV) 18'-6.000" LG miter cut & weld for 7' radius	A500 gr B
3	L4	RAIL TUBE 4 x 4 x 1/4 (GALV) 18'-6.000" LG miter cut & weld for 7' radius	A500 gr B
1		END CAP FOR 8x4 TUBE 0.187 THICK PLATE 8.000 x 4.000 w/ WELDED TABS (GALV)	A709 gr 36
3		END CAP FOR 4x4 TUBE 0.187 THICK PLATE 4.000 x 4.000 w/ WELDED TABS (GALV)	A709 gr 36
64		ROUND HEAD POST BOLT slot or wrench head - no shoulder 3/4" DIA x 6" LG. FULL BODY (GLV)	A449 / A325
64		LOCK NUT 3/4" (GLV)	A563 DH
64		(3/4") PLAIN ROUND WASHER TYPE A (GALV) 0.750" DIA USS LARGE (HI-CARBON)	F844
16		(5/8") HEX HEAD BOLT (GALV) 0.625" DIA x 1.750" LG.	A325
16		(5/8") PLAIN ROUND WASHER (GALV) 0.625" USS LARGE	F844
16		3/4" SPACER PIPE 0.750" DIA. (SCH 40) x 1/2" LG.	A53 gr B

Vermont Agency of Transportation
RECEIVED
 ON: **May 19, 2015**
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 BY: **Todd A. Sumner** DATE: **05/27/2015**

HIGHWAY SAFETY CORP
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 860-633-9445

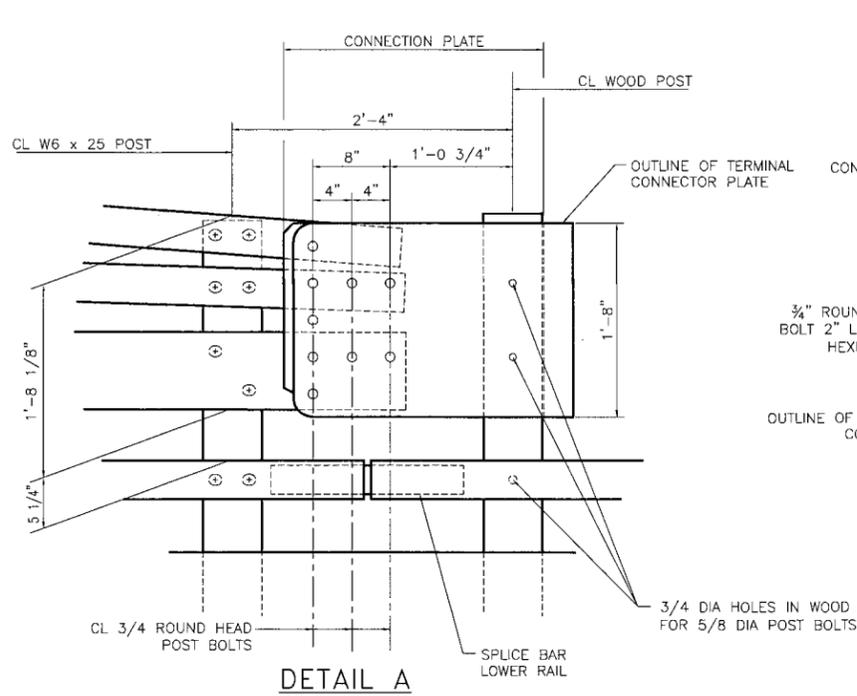
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GENERAL CONTRACTOR: **LAFAYETTE**
 SUB CONTRACTOR: **LAFAYETTE**

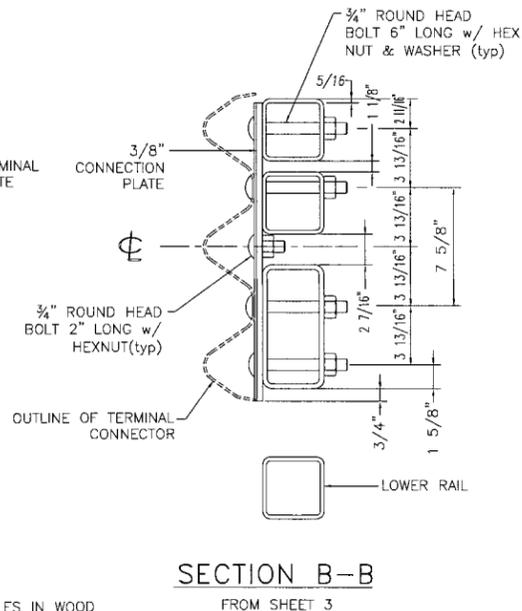
HSC JOB NO. **2041**
 SHEET NO. **3 of 4**

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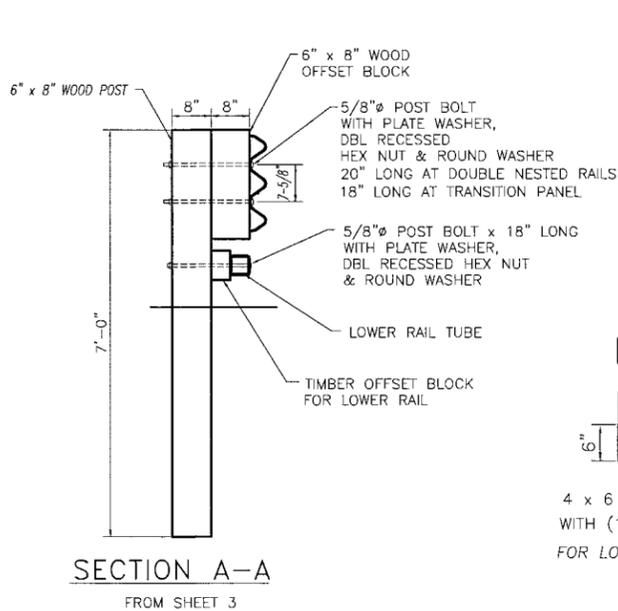


DETAIL A
FROM SHEET 3

PORTIONS OF OVERLAPPING THRIE BEAM RAIL AND TERMINAL CONNECTOR ELIMINATED FROM THIS VIEW FOR CLARITY

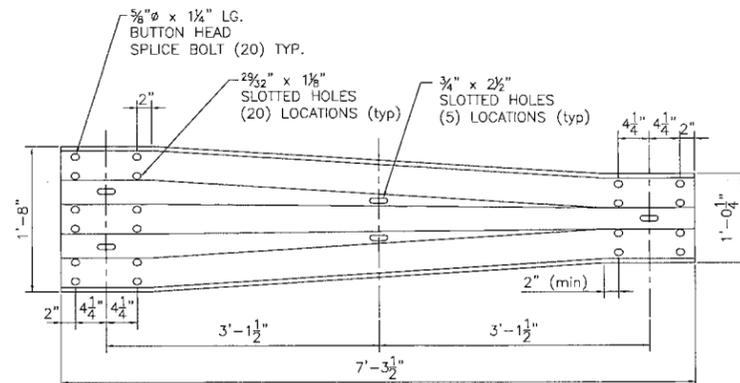


SECTION B-B
FROM SHEET 3

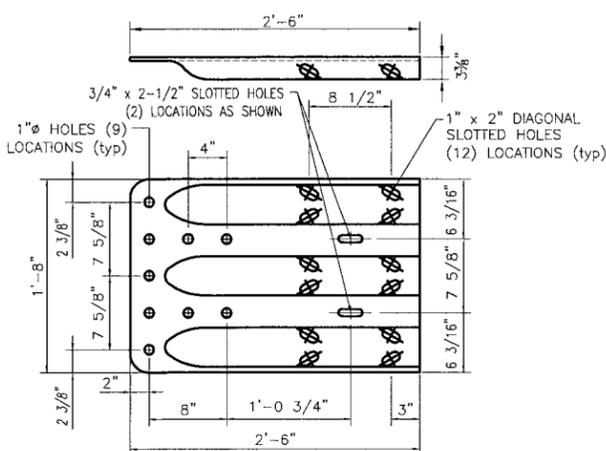


SECTION A-A
FROM SHEET 3

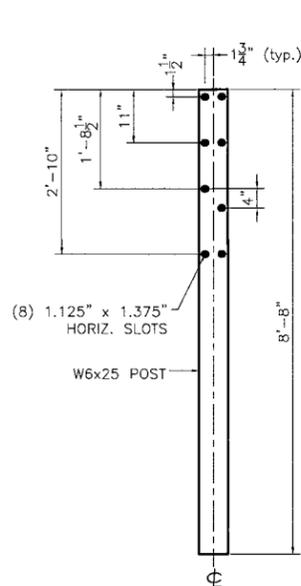
4 x 6 TIMBER BLOCK WITH (1) 3/4\"/>



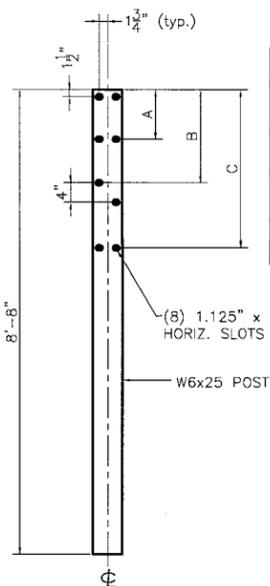
THRIE TRANSITION PANEL
10 GAUGE (AASHTO M180 B2)



TERMINAL CONNECTOR
10 GAUGE (AASHTO M180 B2)



STEEL POST AT WINGWALL 4

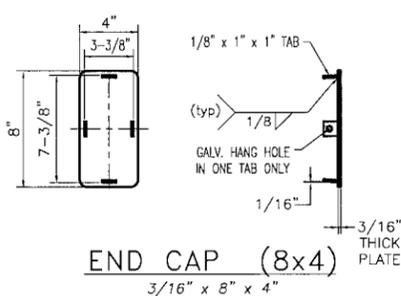


STEEL POST AT WINGWALLS 1, 2 & 3

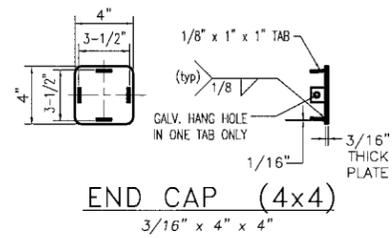
STEEL POST CHART

No.	A	B	C
P01	10.250	19.250	32.687
P02	9.125	17.312	30.750
P03	8.000	15.437	28.750
P04	6.875	13.500	26.875

26.875"



END CAP (8x4)
3/16" x 8" x 4"



END CAP (4x4)
3/16" x 4" x 4"

SUBMITTAL REVIEW

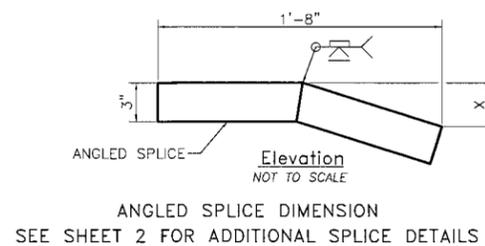
Review is only for general conformity to the contract drawings and specifications and shall not relieve the contractor of his entire responsibility under the contract, including, among other things, dimensions to be confirmed and correlated at the job site, and information that pertains to the fabrication processes or to techniques of construction.

NO EXCEPTIONS TAKEN
 MAKE CORRECTIONS NOTED
 RESUBMITTAL NOT REQUIRED
 AMEND AND RESUBMIT
 REJECTED - SEE REMARKS

BY: *Alan M. Staal*
 DATE: *5/26/15*

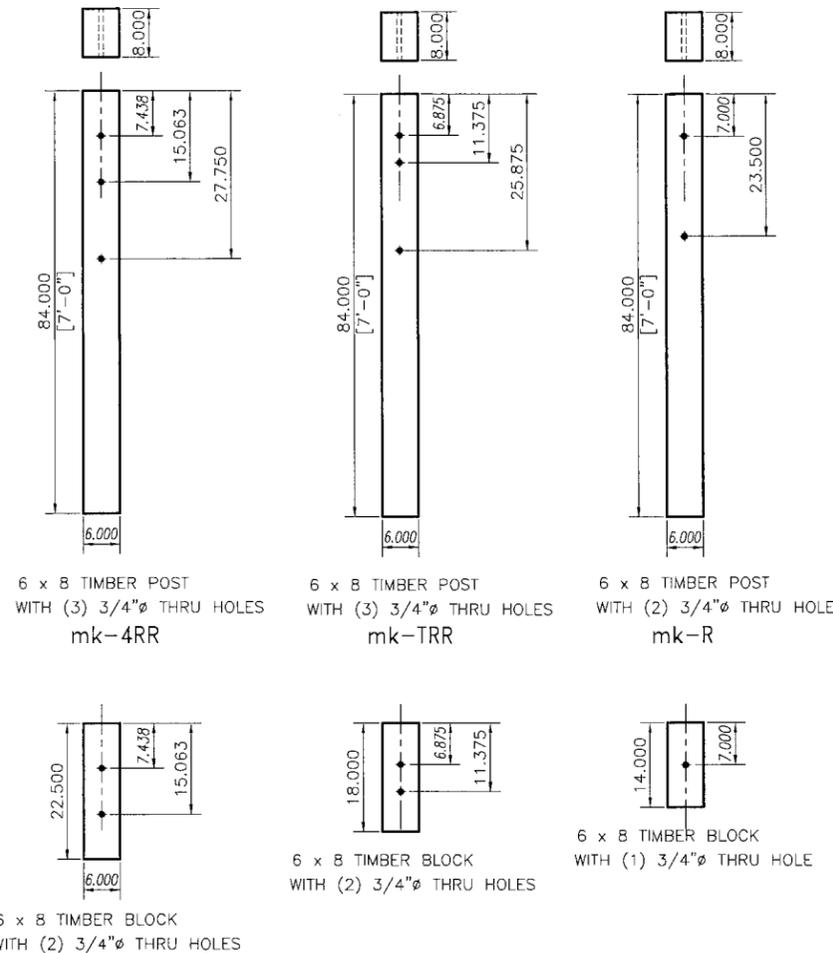
NOTES:

- ALL BRIDGE APPROACH RAIL MATERIALS, DIMENSIONS, SIZES, AND NOTES SHALL BE THE SHAME AS THOSE OF THE BRIDGE RAIL UNLESS OTHERWISE NOTED. SEE BRIDGE RAIL SHEETS FOR NOTES AND ADDITIONAL INFORMATION.
- CARRIAGE BOLTS SHALL BE ASTM A307, AND NUTS SHALL BE ASTM A563 GRADE A OR BETTER (GALVANIZED).
- WELD SPlice BAR AND RAIL TUBES TO FIT BEND. USE COMPLETE JOINT PENETRATION BUTT WELD (B-U2).
- PAYMENT FOR GUARDRAIL APPROACH SECTION, GALVANIZED 4 RAIL BOX BEAM SHALL INCLUDE THE TERMINAL CONNECTOR, THE CONNECTION PLATE, RAIL, POSTS, BLOCKS AND ATTACHMENT HARDWARE.
- ALL APPROACH SPICES SHALL BE LAPPED IN THE DIRECTION OF TRAFFIC
- SEE SHEET 3 FOR ADDITIONAL MODIFIED APPROACH DETAILS AT WINGWALL 4



X	
TOP SPLICE	SECOND SPLICE
.687"	.375"

NOTE: THIRD SPLICE TO BE PROVIDED STRAIGHT DUE TO A VERY SHALLOW "X" DIMENSION.



Vermont Agency of Transportation

RECEIVED

ON: **May 19, 2015**

and Checked for

CONFORMANCE

BY: **Todd A. Sumner** DATE: **05/27/2015**

HIGHWAY SAFETY CORP
GLASTONBURY, CT
860-633-9445

ITEM 525.34 BRIDGE RAILING, GALVANIZED 4 RAIL BOX BEAM
 ITEM 621.73 GUARDRAIL APPROACH SECTION, GALVANIZED 4 RAIL BOX BEAM
 TH1 EAST RIVER ROAD BRIDGE #19
 TOWN OF LINCOLN, VT ADDISON COUNTY
 BR# 0188 (B)

CERTIFIED FABRICATOR

GENERAL CONTRACTOR: **2041**
 SHEET NO.: **4 of 4**
 SUB CONTRACTOR: **LAFAYETTE**
 DRAWN: **PAR** CHECKED: **DATE 03-27-15** SCALE: **NONE** SIZE: **D**