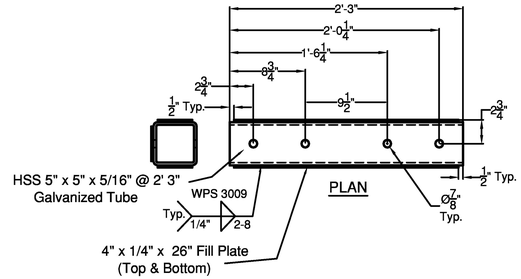
## BILL OF MATERIALS, (EACH) WW1 & WW3 CORNERS

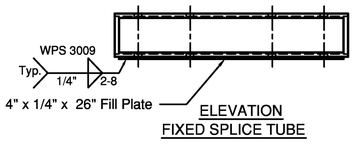
| ITEM # | QTY. | DESCRIPTION | MATERIAL (ASTM) |
|---|---|---|---|
| 2 | 3 | 3' I-POST, PUNCH 8', W/SPD @ 63' LG | A572 Gr. 50 |
| 2A | 1 | 3' I-POST, PUNCH 8', & 20' W/SPD @ 63' LG | A572 Gr. 50 |
| 3 | 2 | 3' I-END POST W/SPD @ 3'-8' LG | A572 Gr. 50 |
| 4 | 4 | W6X9 POST @ 7'-1/2' W/SPD & 5/8' HOLES (SPACING VARIES) | A572 Gr. 50 |
| 5 | 6 | 3' I-POST, HOLES 8' & VARIES', w/8X31 1/2' SPADE @7'-1/2' | A572 Gr. 50 |
| 7 | 1 | HSS 5X5 TUBE SPLICE @27' LG w/ 1/4' SHIMS | A500 Gr. B / A572 Gr 50 |
| 10 | 18 | REG BB SHELF ANGLES @ 4-1/2' | A572 Gr. 50 |
| 11 | 1 | DWY BB SHELF ANGLES @ 4-1/2' | A572 Gr. 50 |
| 12 | 1 | HSS 5X5 DBL BEND TUBE SPL @ 28' LG | A500 Gr. B / A572 Gr 50 |
| 13 | 8 | HSS 6X8' TRANS. TUBE B/O @ 6' LG | A500 Gr. B |
| 15 | 1 | HSS 6X6' BB @ 8'-10' KICKBACK, w/ CAP | A500 Gr. B / A36 |
| 16 | 0.5 | HSS 6X6' BB @ 17'-11 1/2', DRILL 3' CC | A500 Gr. B |
| 17 | 1 | HSS 6X6' BB TOP TRANS @ 24'-9 1/4' LG | A500 Gr. B |
| 18 | 1 | HSS 6X6' BB BTM TRANS @ 25'-5 3/16' LG | A500 Gr. B |
| 19 | 17 | 3/8' X 7 1/2' BOLT, NUT, & 2 FW | A307, A563, F436 |
| 20 | 19 | 1/2' x 1-1/2' BOLT, NUT, & FW | A307, A563, F436 |
| 21 | 16 | 9/16' x 1-1/2' BOLT, NUT, 2 FW & LW | A307, A563, F436, ASME B18.21.1 |
| 23 | 8 | 3/4' X 7-1/2' BOLT, NUT, 2 FW & LW | A325, A563, F436, ASME B18.21.1 |
| 24 | 8 | 7/8' X 7 1/2' CARR BOLT, NUT, FW & LW | A307, A563, F436, ASME B18.21.1 |
| 25 | 2 | 3/4' X 7 1/2' BOLT, NUT, 2 FW, & LW | A325, A563, F436, ASME B18.21.1 |
| 26 | 1 | PARAPET WALL CONNECTION | A572 Gr.50, A615 Gr.60, A500 Gr. B |

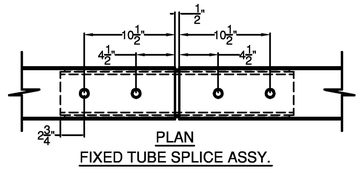
NOTE: ITEMS 16, 17 & 18 TO HAVE 30' RADIUS FOR WINGWALL #3

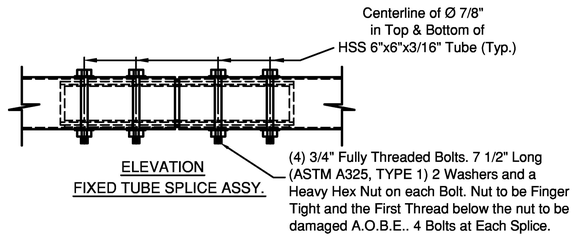
## HARDWARE NOTES

| ITEM # | FUNCTION |
|---|---|
| 19 | BOLT RAIL TO SHELF ANGLE (ITEM #10) |
| 20 | BOLT SHELF ANGLE (ITEM #'S 10 & 11) TO POST |
| 21 | BOLT BLOCK-OUTS (ITEM # 13) TO HEAVY POST (ITEM # 4) |
| 23 | (4) PER SPLICE TUBING (ITEM # 7), & (4) PER PARAPET WALL CONNECTION (ITEM # 26) |
| 24 | BOLT RAIL (ITEMS #'S 17, & 18 TO BLOCK-OUTS (ITEM # 13) [WHERE FASTENED] |
| 25 | BOLT DOUBLE BEND SPLICE TUBE (ITEM #12) TO RAIL (ITEM #18) & KICKBACK (ITEM #15) & ITEM #11) |



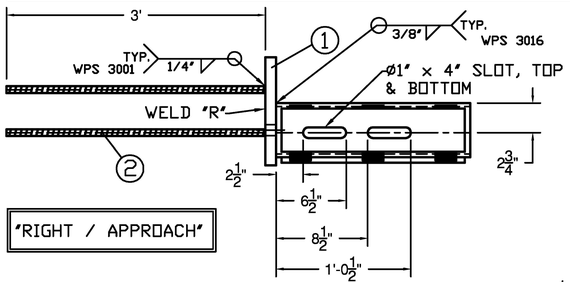




(ITEM # 7)

## SPLICE TUBE - FIXED

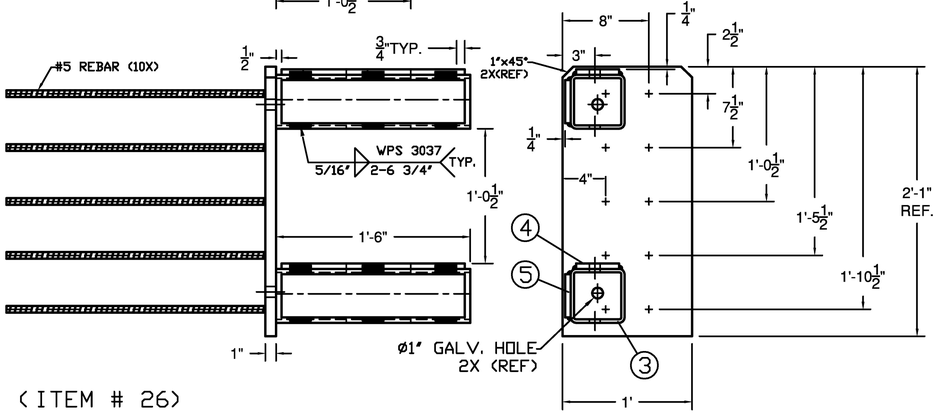
## BILL OF MATERIALS

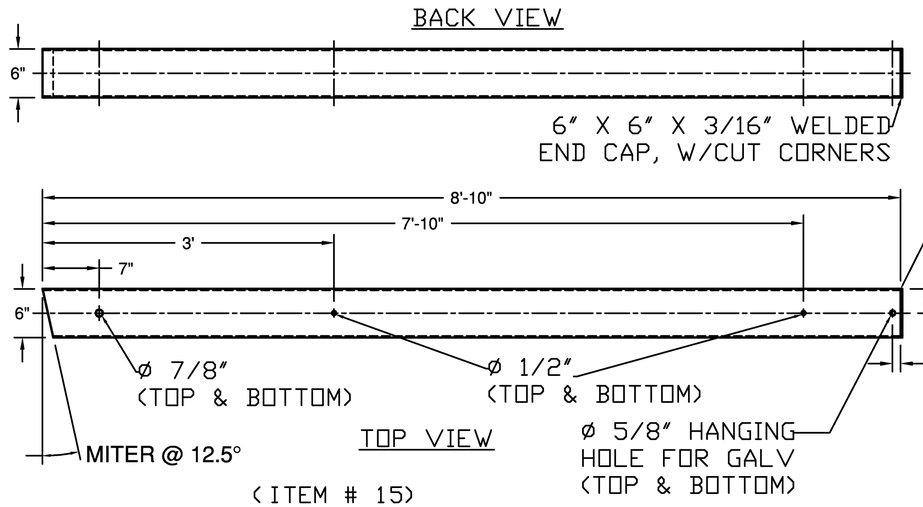
| ITEM # | QTY | DESCRIPTION | ASTM # |
|---|---|---|---|
| | | | |
| 1 | 1 | DBL TUBE WALL PLATE - 1' X 12' x 25' | ASTM A572 Gr. 50 |
| 2 | 10 | RAW, Ø5/8' REBAR @ 36' | A615, Gr. 60 |
| 3 | 2 | 5' X 5' X 5/16' TUBE W/ SLOTS @ 18' | ASTM A500 Gr. B |
| 4 | 2 | SHIM PL 1/2' X 4' X 17' W/ SLOTS | ASTM A36(ASTM A709 Gr. 36)CVN |
| 5 | 2 | SHIM PL 1/2' X 4' X 17' (W/O SLOTS) | ASTM A36(ASTM A709 Gr. 36)CVN |




PROTRUSIONS CAUSED BY WELDING OR GALVANIZING ARE NOT PERMITTED ON THE SPLICE TUBES AND FILL PLATES

'Left Shown'
Wing Wall 1 = 'Left'
Wing Wall 2 = 'Right'
Wing Wall 3 = 'Right'
Wing Wall 4 = 'Left'




ITEM #: 900.620 (TRANSITION) FR Lafayette - JAMAICA, EM13-016

SHEET 2 OF 8

APPROVED BY:

Vermont Agency of Transportation
RECEIVED
CK'D BY RK/JG/GL OK'D BY JS
July 25, 2013
RESUBMIT NO Approved
BY KH DATE 8-8-2013

# BRIDGE RAIL DETAILS SHEET

EM13-006, JAMAICA ER BRF 015-1 (23)
TOWN OF JAMAICA, WINDHAM COUNTY, VT RTE 30 (MINOR ARTERIAL), BRIDGE NO : 30

| R | NO. | DATE | DESCRIPTION | BY | R | NO. | DATE | DESCRIPTION | BY |
|---|---|---|---|---|---|---|---|---|---|
| E | 1 | 7/8/13 | REVISED PER 6/28/13 MARK UP | E.P. | E | | | | |
| V | 2 | 7/23/13 | REVISE PER 7/23/13 EMAIL | E.P. | V | | | | |


ELDERLEE, INC.
OAKS CORNERS, NEW YORK 14518
E-Mail:dlong@elderlee.com
Tel:315-789-6670 Fax:315-789-6615


| | | |
|---|---|---|
| DRAWN | E.P. | 5/30/13 |
| CHECKED | D.L. | 5/31/13 |
| APPROVED | . | . |
| SCALE | SCHEMATIC | |
| DRAWING NO. | FR LAFAYETTE - JAMAICA | |