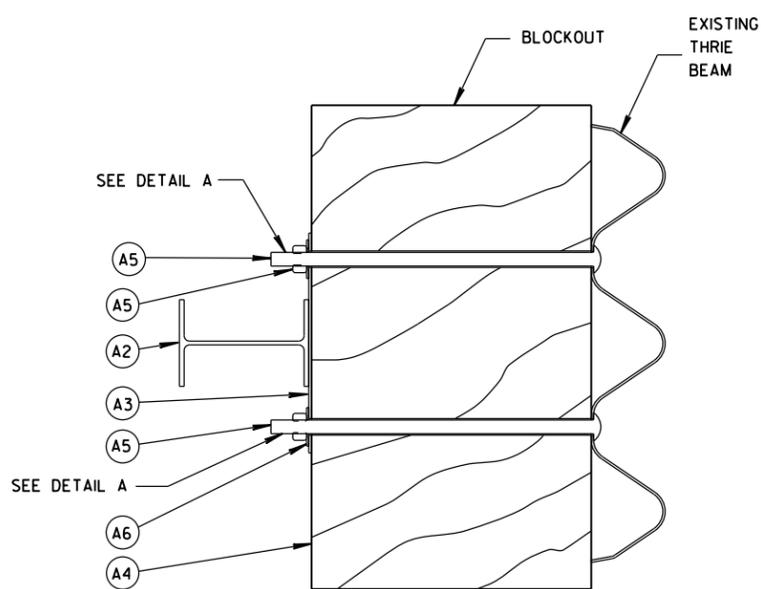


ELEVATION VIEW (BACKSIDE OF PARAPET)



SECTION A-A

NOTES: THRIE BEAM CONNECTION HARDWARE OMITTED FROM VIEWS FOR CLARITY

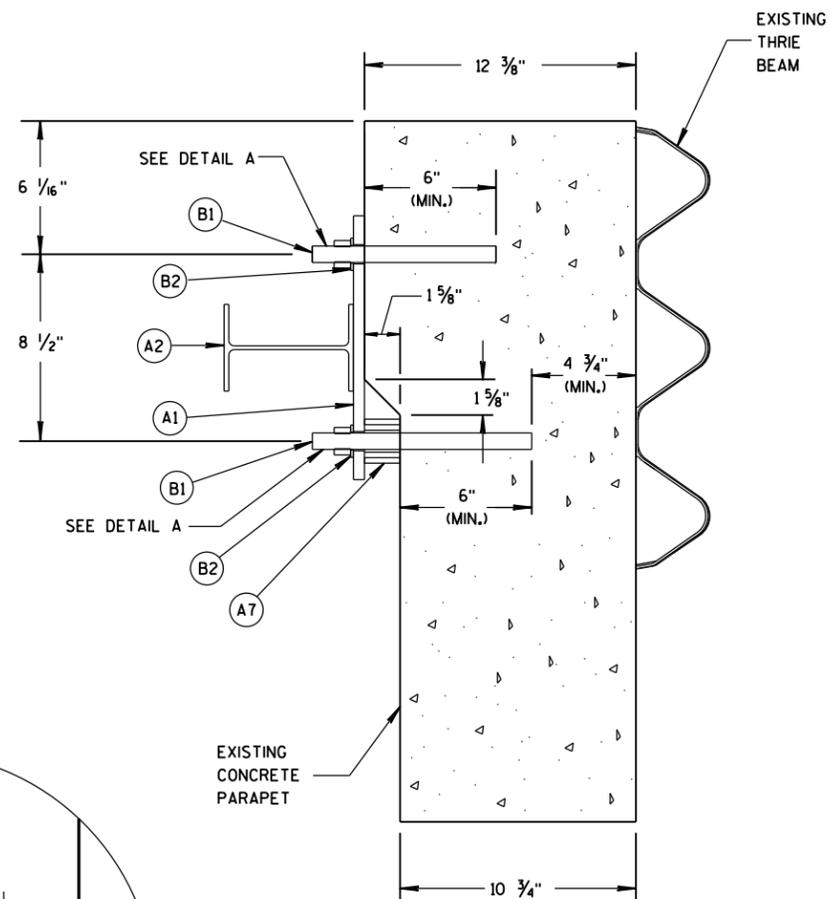
GENERAL NOTES

THE ADHESIVE USED TO SECURE THREADED RODS MUST HAVE MINIMUM BOND STRENGTHS OF 1800 PSI FOR EMBEDMENT SHOWN.

ANY EXISTING THROUGH-BOLT INTERFERING WITH THE PLACEMENT OF THIS COMPONENT SHALL BE REPLACED WITH A SHORTER EPOXED BOLT.

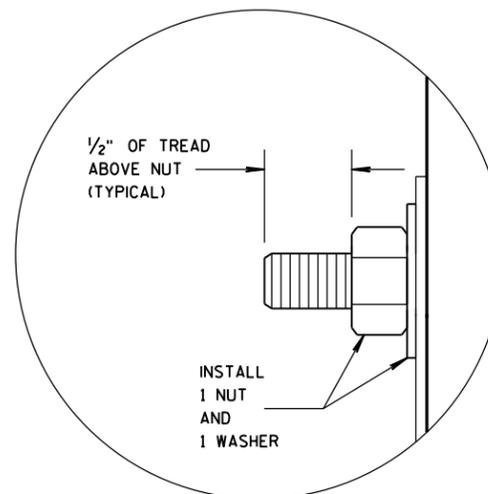
1 SEE OTHER PARTS OF THE PLAN OR STANDARD SPECIFICATIONS.

2 TYPICAL BRIDGE PARAPET SHOWN. FOR OTHER RIGID BARRIERS WITH VERTICAL BACK OMIT PART (A7).



SECTION B-B

NOTES: THRIE BEAM CONNECTION HARDWARE OMITTED FROM VIEWS FOR CLARITY.



DETAIL A

| CONCRETE PARAPET LF RETROFIT BILL OF MATERIALS | | | | |
|--|------|--|------------------------|--|
| ITEM NO. | QTY. | DESCRIPTION | MATERIAL SPECIFICATION | COMMENTS |
| (A1) | 1 | 16" x 12" x 1/2" BASE PLATE | ASTM A572 GR. 50 | - |
| (A2) | 1 | 38" LONG W6x9 BEAM | ASTM A992 GR. 50 | - |
| (A3) | 1 | 6" x 10" x 1/8" BACKUP PLATE | ASTM A36 | - |
| (A4) | 1 | 6" x 12 3/4" x 22" BLOCKOUT | 1 | - |
| (A5) | 2 | 5/8" DIA. POST BOLT AND DOUBLE RECESSED (DR) HEAVY HEX NUT | 1 | - |
| (A6) | 2 | 5/8" DIA. FLAT WASHER | GRADE 5 | - |
| (A7) | 3 | 2" x 2" x 1/4" SQUARE TUBE 1 5/8" LONG | ASTM A36 | MULTIPLE 3/4" DIA. FLAT WASHERS (B2) CAN BE USED |
| (B1) | 4 | 3/4" DIA. - 10 UNC THREADED ROD | ASTM A193 TYPE B7 | - |
| (B2) | 4 | 3/4" DIA. FLAT WASHER | ASTM F436 | - |
| (B3) | 4 | 3/4" DIA. DOUBLE RECESSED (DR) HEAVY HEX NUT | 1 | - |

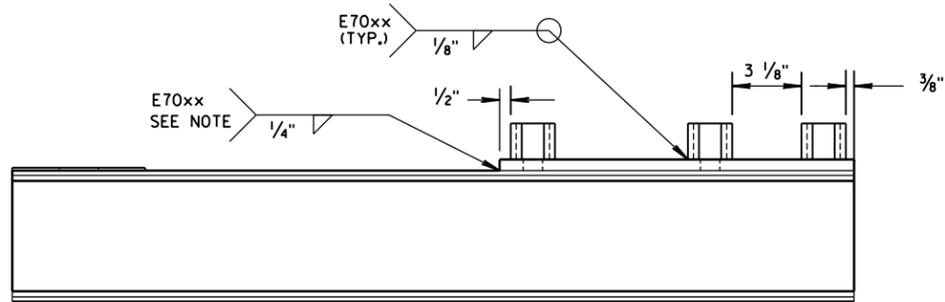
RETROFIT CANTILEVER BLUNT END
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

6

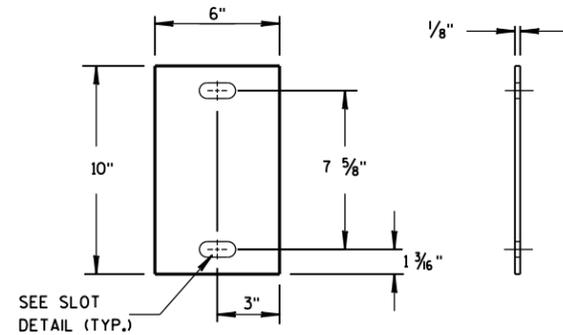
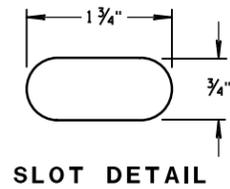
6

S.D.D. 14 B 48-1a

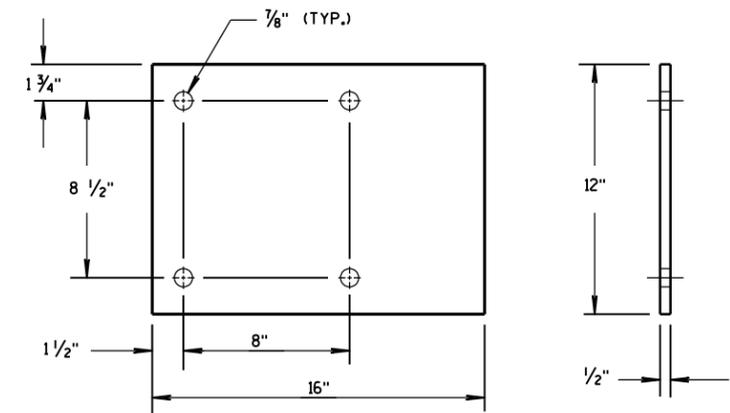
S.D.D. 14 B 48-1a



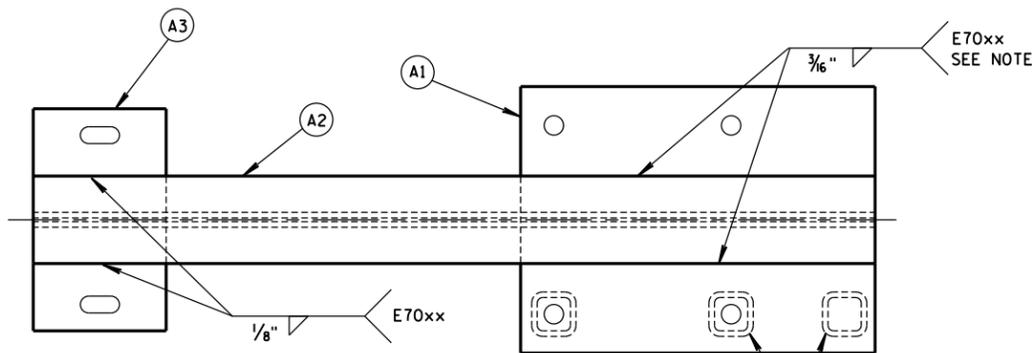
PLAN VIEW



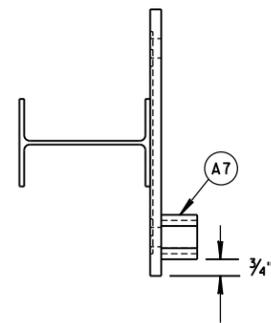
BLACKUP PLATE (A3)



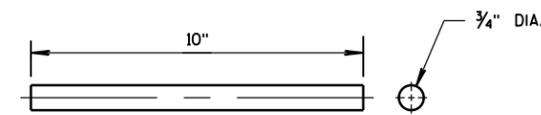
BASE PLATE (A1)



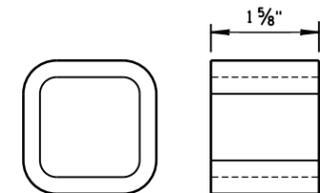
ELEVATION VIEW



END VIEW



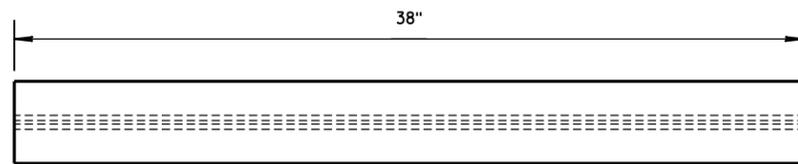
THREADED ROD (B1)



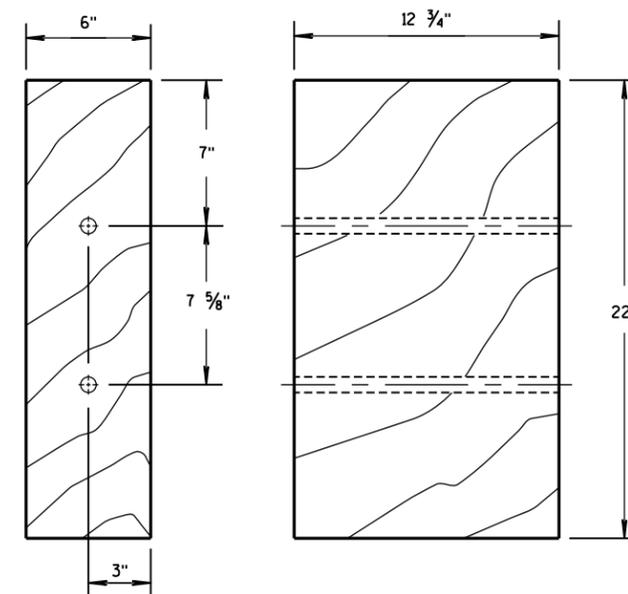
SQUARE TUBE (A7)

NOTES:
WELDS ON OPPOSITE PLANES (i.e., VERTICAL AND LONGITUDINAL) SHALL NOT BE CONNECTED.

WELD DETAIL



W6x9 BEAM (A2)



BLOCKOUT (A4)

ANCHOR PLATE ASSEMBLY PARTS

RETROFIT CANTILEVER
BLUNT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
DATE June 2014 /S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER
FHWA

Retrofit Cantilever Blunt End

References:

- [Standard Spec 614](#)
- [FDM 11-45-2](#)
- TRP 03-266-12

Bid items associated with this drawing:

| <u>ITEM NUMBER</u> | <u>DESCRIPTION</u> | <u>UNIT</u> |
|--------------------|---|-------------|
| 614.0212 | Steel Thrie Beam Structure Approach Retrofit Cantilever Blunt End | EACH |

Standardized Special Provisions associated with this drawing:

| <u>STSP NUMBER</u> | <u>TITLE</u> |
|--------------------|--------------|
| NONE | |

Other SDDs associated with this drawing:

- [SDD 14b20](#) Steel Thrie Beam Structure Approach

Design Notes:

Use this retrofit alternative on 3R projects with an existing Class A thrie beam transition that is missing the first post upstream of a blunt end bridge parapet and it is not possible to install a new post. A flume, wing wall, shallow pipe or other object can prevent installing a post.

Prior to using this alternative, review if installing a new thrie beam transition or removing the obstruction is feasible. Document this review in the DSR. Review [FDM 11-45-2.5](#) and [FDM 11-45 Attachment 2.5](#) to determine using the retrofit alternative is feasible. Type of work near thrie beam transition may influence what options are available.

Retrofit alternative is not for new installations of thrie beam transitions or new bridge parapets. These installations should be designed to accommodate all posts and proper grading of the thrie beam transition

Do not use this retrofit alternative in combination with other retrofits or thrie beam deficiencies. If other deficiencies can be repaired, (e.g. torn thrie beam rail or busted post is repaired...) then it is acceptable to use retrofit alternative. If a significant amount of repair is required, installing a new transition may be the best choice

Review parapet for adequate thickness, embedment depth, cover, and condition. If these are not reviewed, installing retrofit alternative may damage or increase the damage to and existing parapet.

Contact Person:

Erik Emerson (608) 266-2842