

INDEX

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5	Railing, PF-1 and PS-1, Base Plate and Reinforcing Bar Bending Details

GENERAL NOTES:

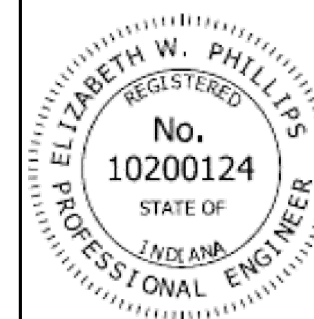
1. Intermediate railing splices shall be placed every 20 ft.
2. All chamfered edges shall be 3/4 in.
3. All reinforcing bars designated E shall be epoxy coated.



INDIANA DEPARTMENT OF TRANSPORTATION

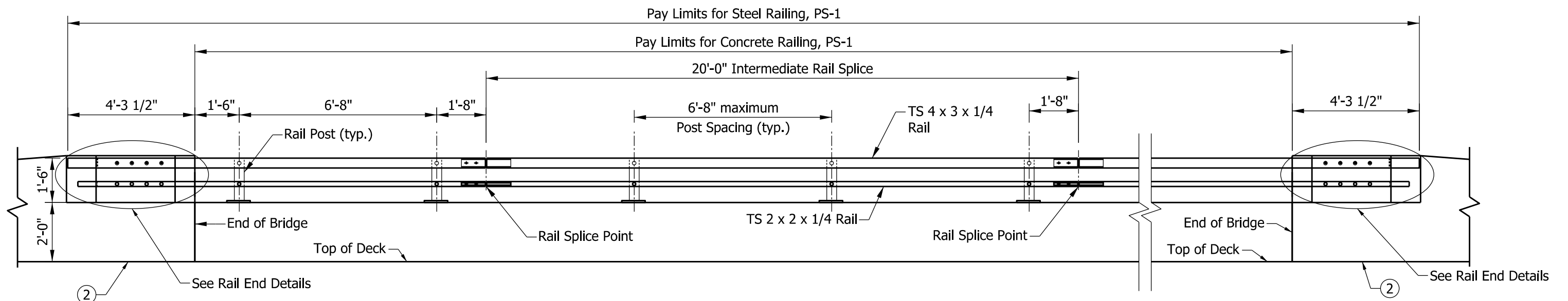
RAILING, PF-1 AND PS-1
INDEX AND GENERAL NOTES

SEPTEMBER 2019

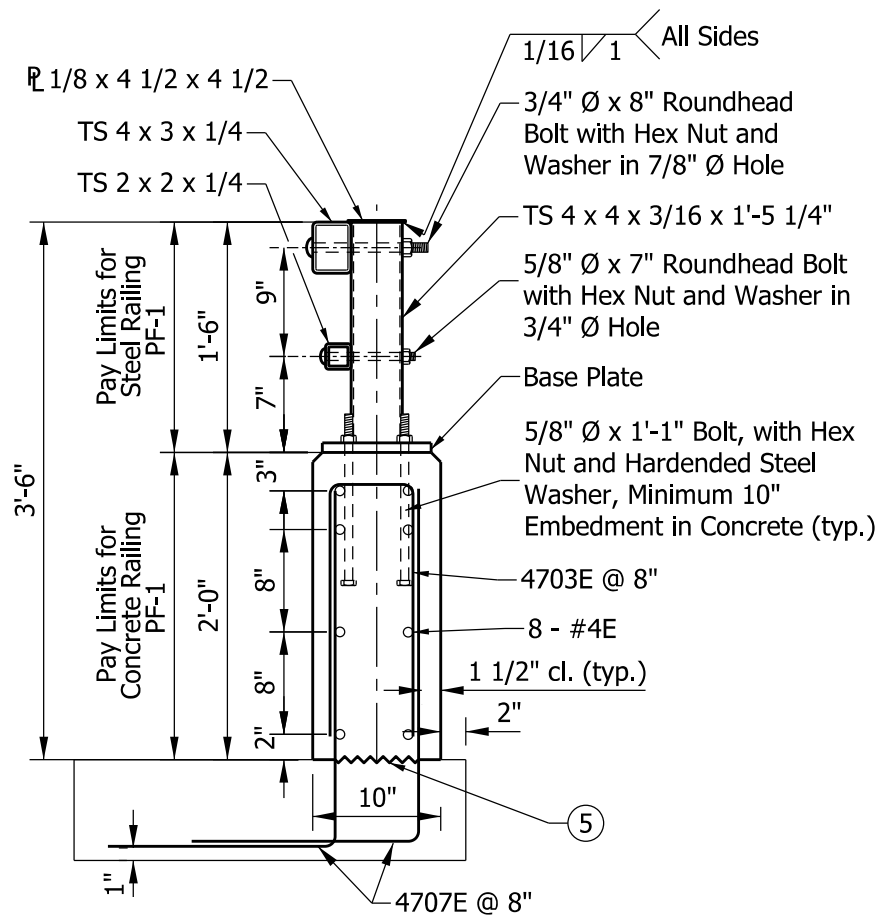
STANDARD DRAWING NO. E 706-BRPP-01



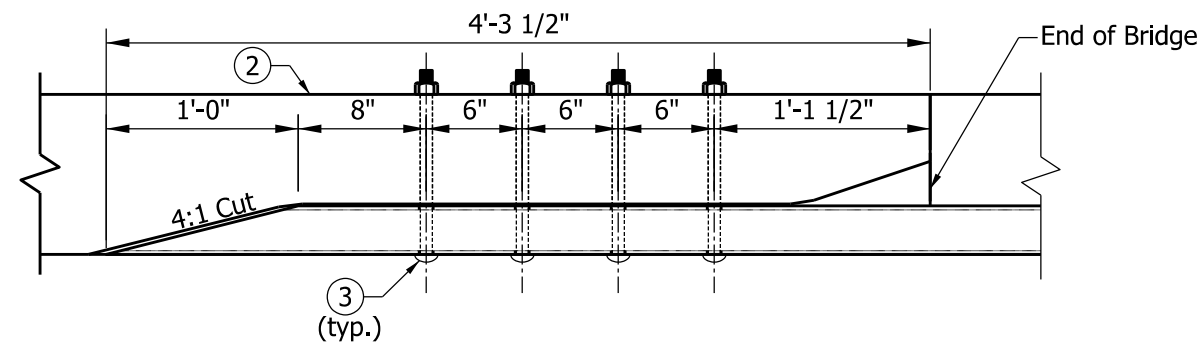
	5/2/2019
DESIGN STANDARDS ENGINEER	DATE
	6/5/2019
CHIEF ENGINEER	DATE



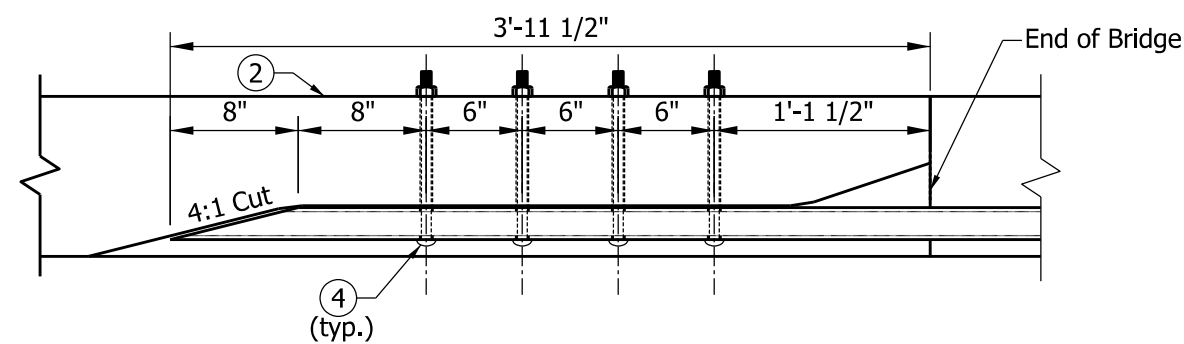
ELEVATION



TYPICAL SECTION



PLAN VIEW OF TS 4 X 3 X 1/4



PLAN VIEW OF TS 2 X 2 X 1/4

RAIL END DETAILS

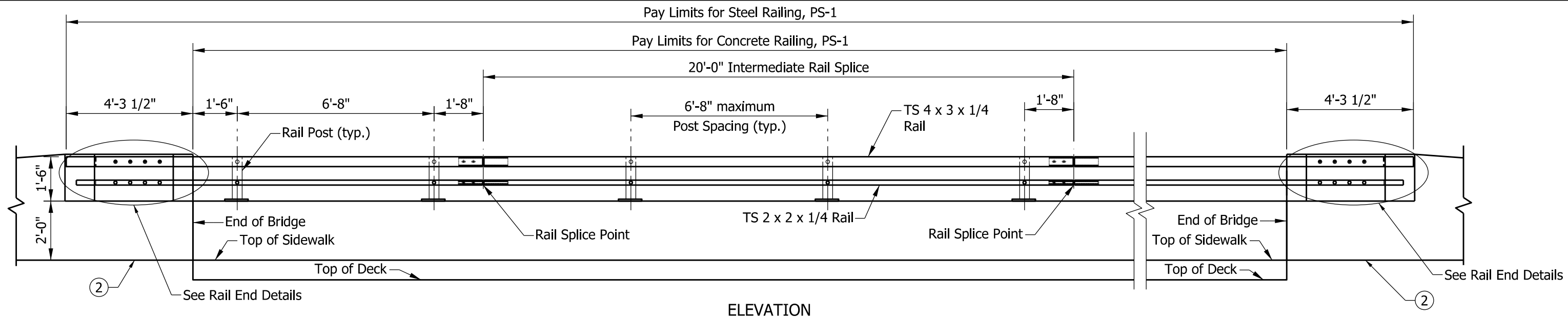
NOTES:

1. PF-1 railing is acceptable as MASH Test Level 3.
- ② Concrete bridge railing transition, TPF-1. See Standard Drawing series E 706-TTPP for details.
- ③ 3/4 in. diameter x 11 1/2 in. round-head bolt in 7/8 in. diameter hole. Hole shall be slotted as required for expansion.
- ④ 5/8 in. diameter x 10 1/2 in. round-head bolt in 3/4 in. hole. Hole shall be slotted as required for expansion.
- ⑤ Construction joint type A. See Standard Drawing E 702-CJTA-01 for details.

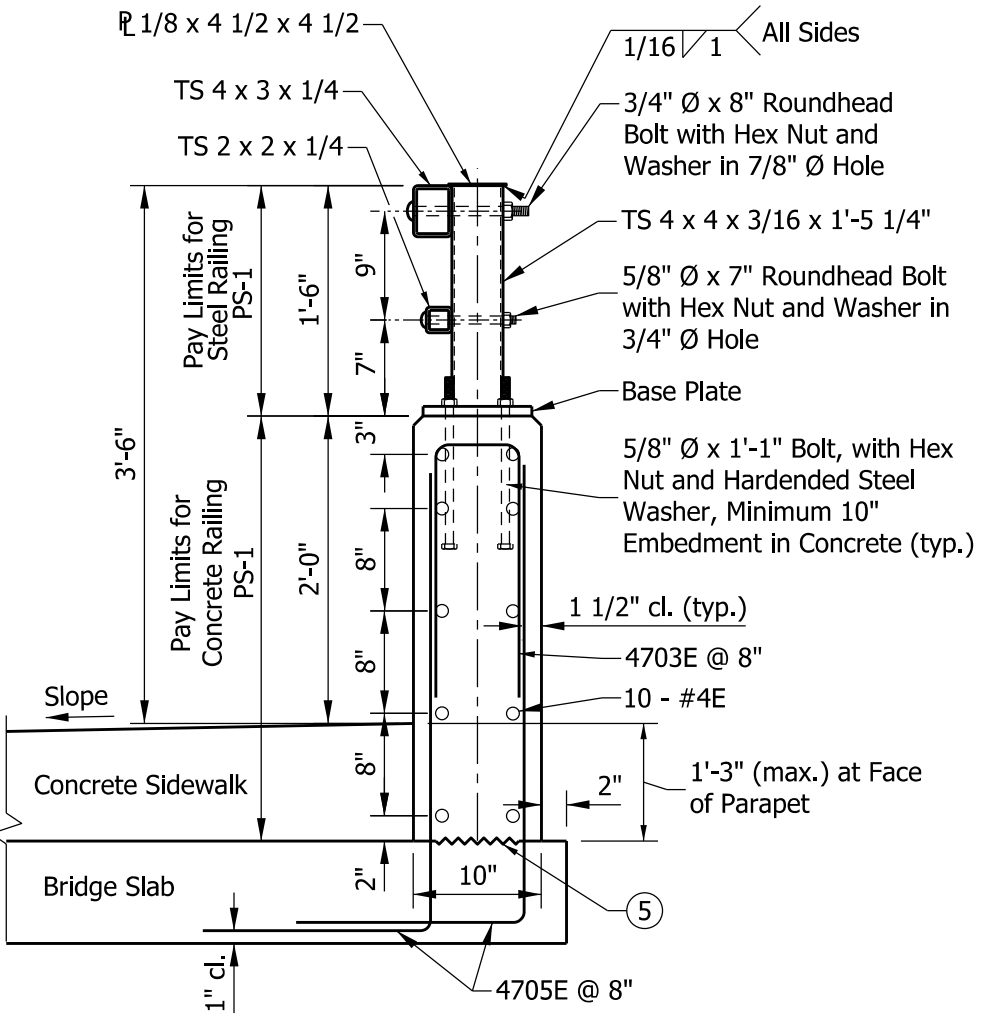
QUANTITIES FOR ONE RUNNING FOOT OF RAILING	
Concrete, class C	1.66 CFT
Reinforcing bars*	17.0 LBS

* Wt. of reinforcing bars doesn't include allowance for splices in longitudinal bars

INDIANA DEPARTMENT OF TRANSPORTATION	
RAILING, PF-1 ELEVATION, SECTION, AND RAIL END DETAIL	
SEPTEMBER 2019	
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	 DESIGN STANDARDS ENGINEER 5/2/2019 DATE
 CHIEF ENGINEER	6/5/2019 DATE



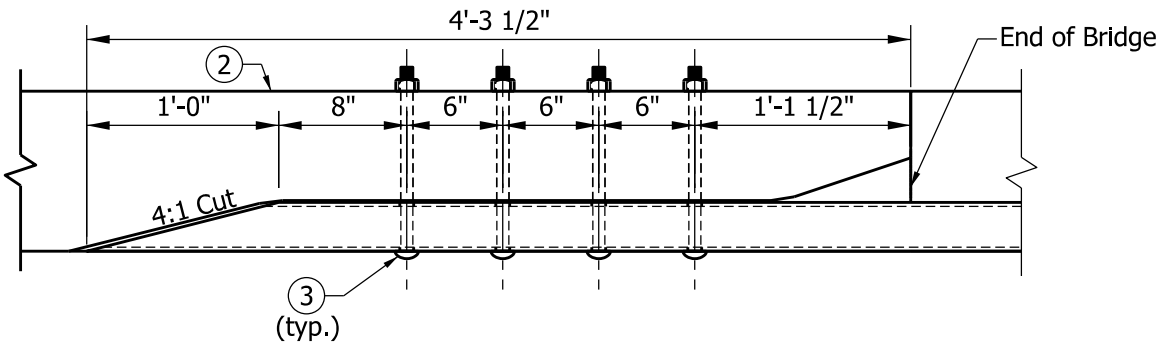
ELEVATION



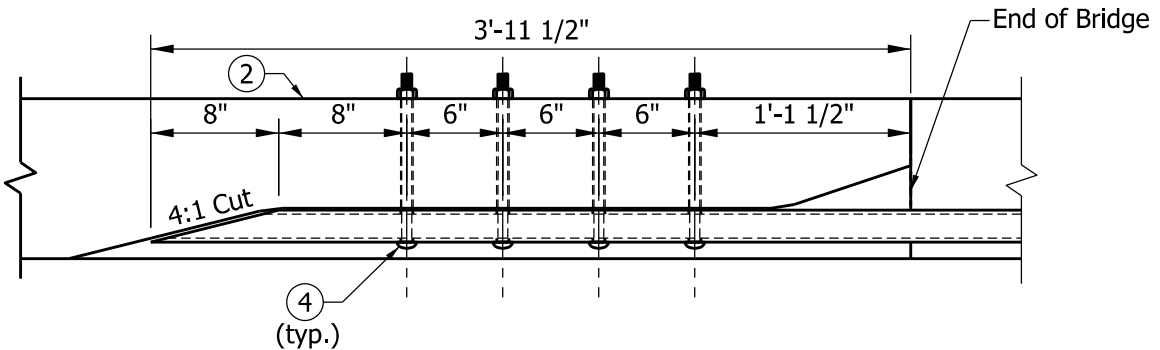
TYPICAL SECTION

QUANTITIES FOR ONE RUNNING FOOT OF RAILING	
Concrete, class C*	2.30 CFT
Reinforcing bars**	19.6 LBS

* Concrete colume based on an assumed 3'-3" total parapet height. Actual quantity will vary based on plan parapet height.
 ** Wt. of reinforcing bars doesn't include allowance for splices in longitudinal bars



PLAN VIEW OF TS 4 X 3 X 1/4



PLAN VIEW OF TS 2 X 2 X 1/4

RAIL END DETAILS

NOTES:

- PS-1 railing is acceptable as MASH Test Level 3.
- Concrete bridge railing transition, TPS-1. See Standard Drawing series E 706-TTPP for details.
- 3/4 in. diameter x 11 1/2 in. round-head bolt in 7/8 in. diameter hole. Hole shall be slotted as required for expansion.
- 5/8 in. diameter x 10 1/2 in. round-head bolt in 3/4 in. diameter hole. Hole shall be slotted as required for expansion.
- Construction joint type A. See Standard Drawing E 702-CJTA-01 for details.

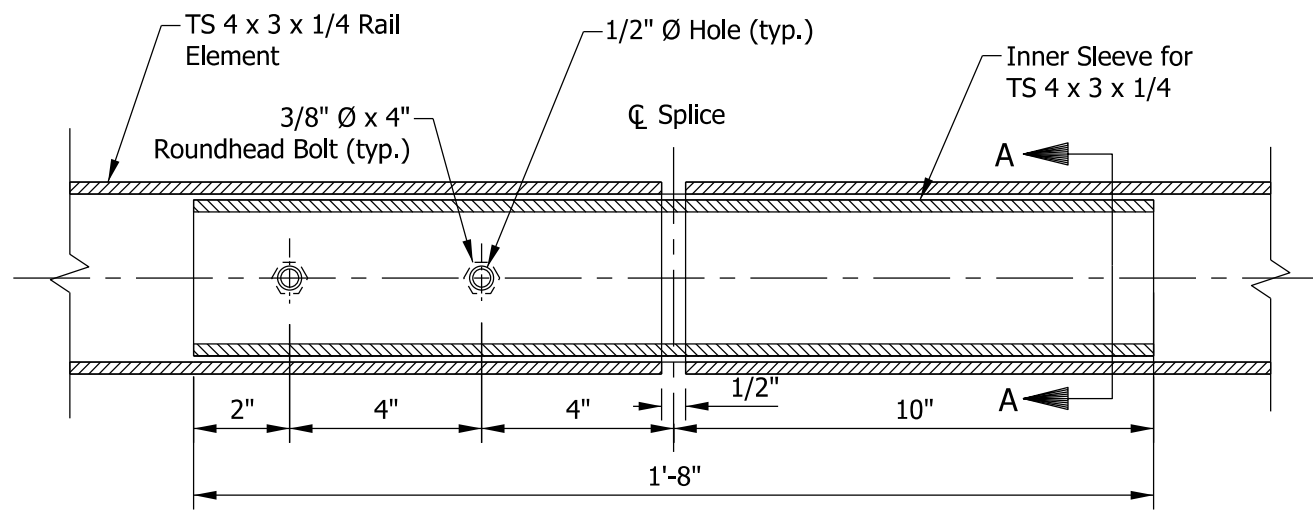
INDIANA DEPARTMENT OF TRANSPORTATION

RAILING, PS-1
ELEVATION, SECTION, AND RAIL END DETAIL

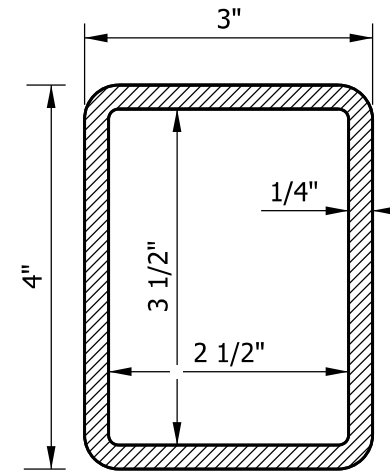
SEPTEMBER 2019

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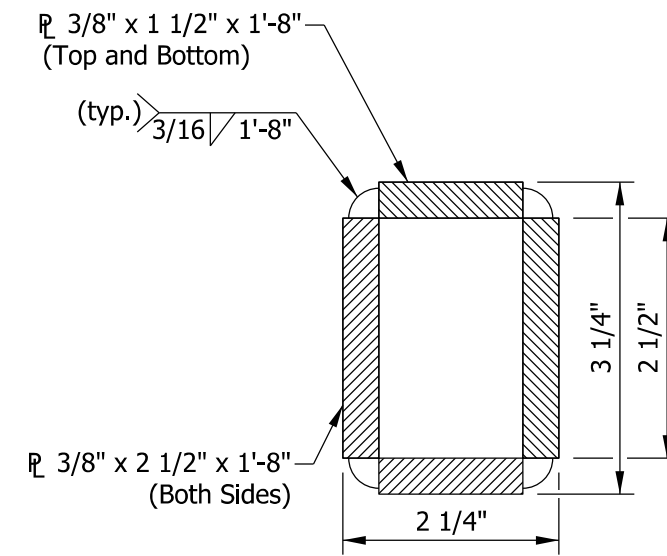
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		6/5/2019
	CHIEF ENGINEER	DATE



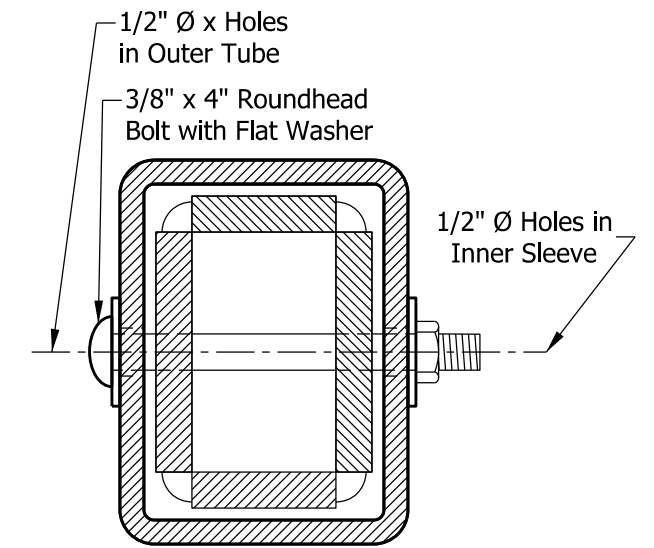
**SPLICE ASSEMBLY
FOR TS 4 X 3 X 1/4 RAIL**



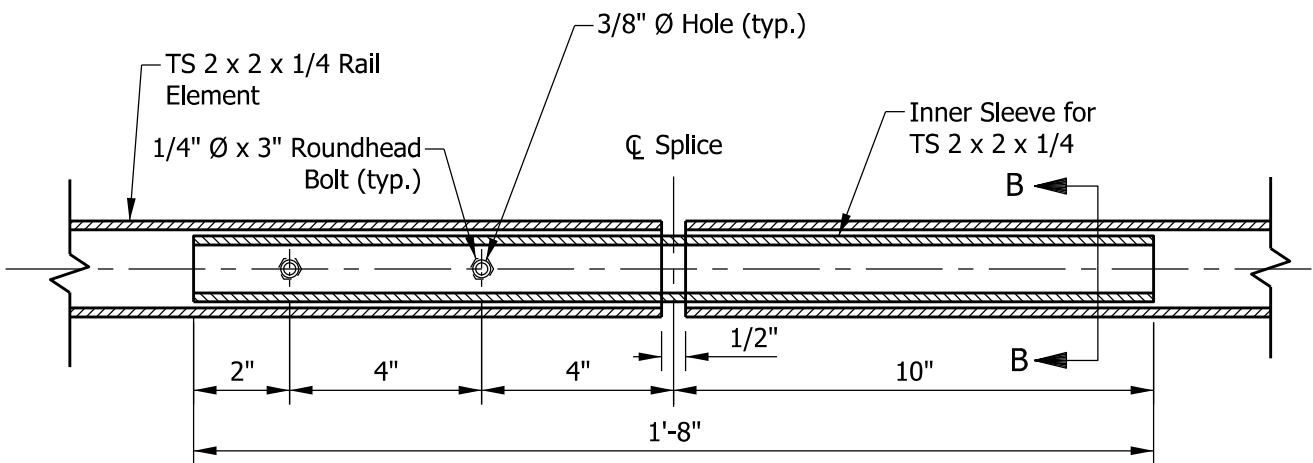
TS 4 x 3 x 1/4



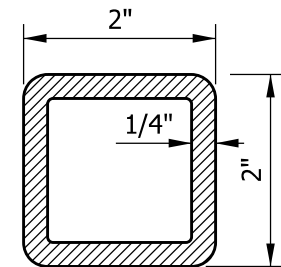
**INNER SLEEVE FOR
TS 4 x 3 x 1/4**



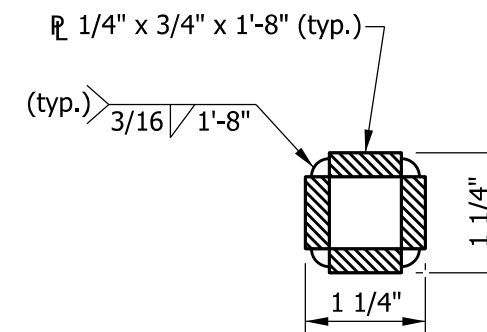
SECTION A-A



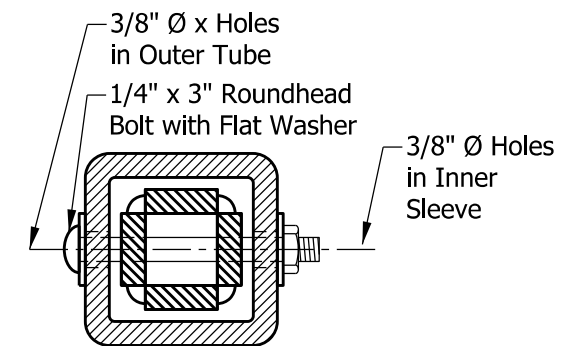
**SPLICE ASSEMBLY
FOR TS 2 X 2 X 1/4 RAIL**



TS 2 x 2 x 1/4



**INNER SLEEVE FOR
TS 2 x 2 x 1/4**



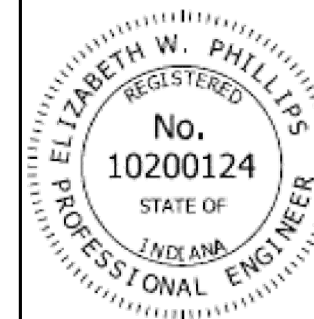
SECTION B-B

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RAILING, PF-1 AND PS-1
STEEL TUBE AND RAIL SPLICE DETAILS

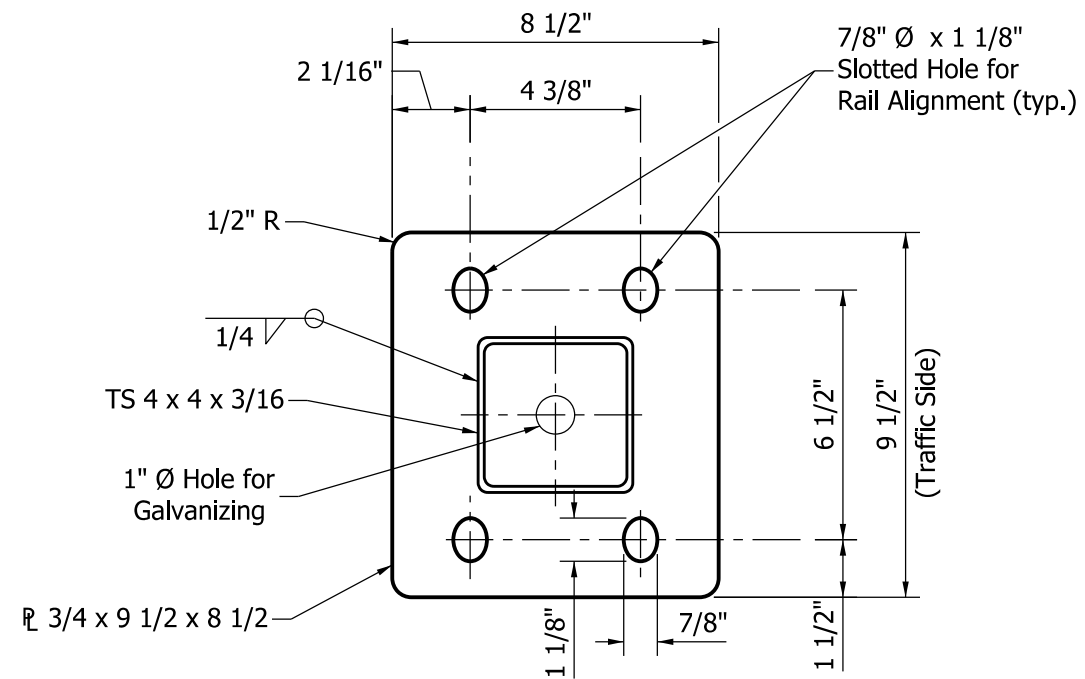
SEPTEMBER 2019

STANDARD DRAWING NO. E 706-BRPP-04

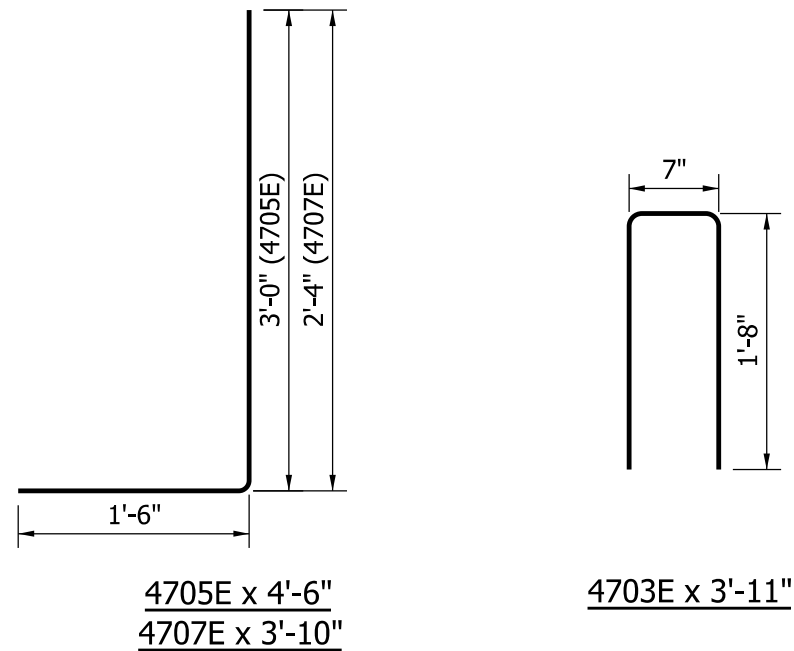


Elizabeth W. Phillips
DESIGN STANDARDS ENGINEER 5/2/2019
DATE

[Signature]
CHIEF ENGINEER 6/5/2019
DATE



BASE PLATE DETAIL



NOTES:

1. See Standard Drawing E 703-BRST-01 for reinforcing-bar bending details and notes.

INDIANA DEPARTMENT OF TRANSPORTATION	
RAILING, PF-1 and PS-1 BASE PLATE AND REINFORCING BAR BENDING DETAILS SEPTEMBER 2019	
STANDARD DRAWING NO.	E 706-BRPP-05
	 DESIGN STANDARDS ENGINEER 5/2/2019 DATE
	 CHIEF ENGINEER 6/5/2019 DATE