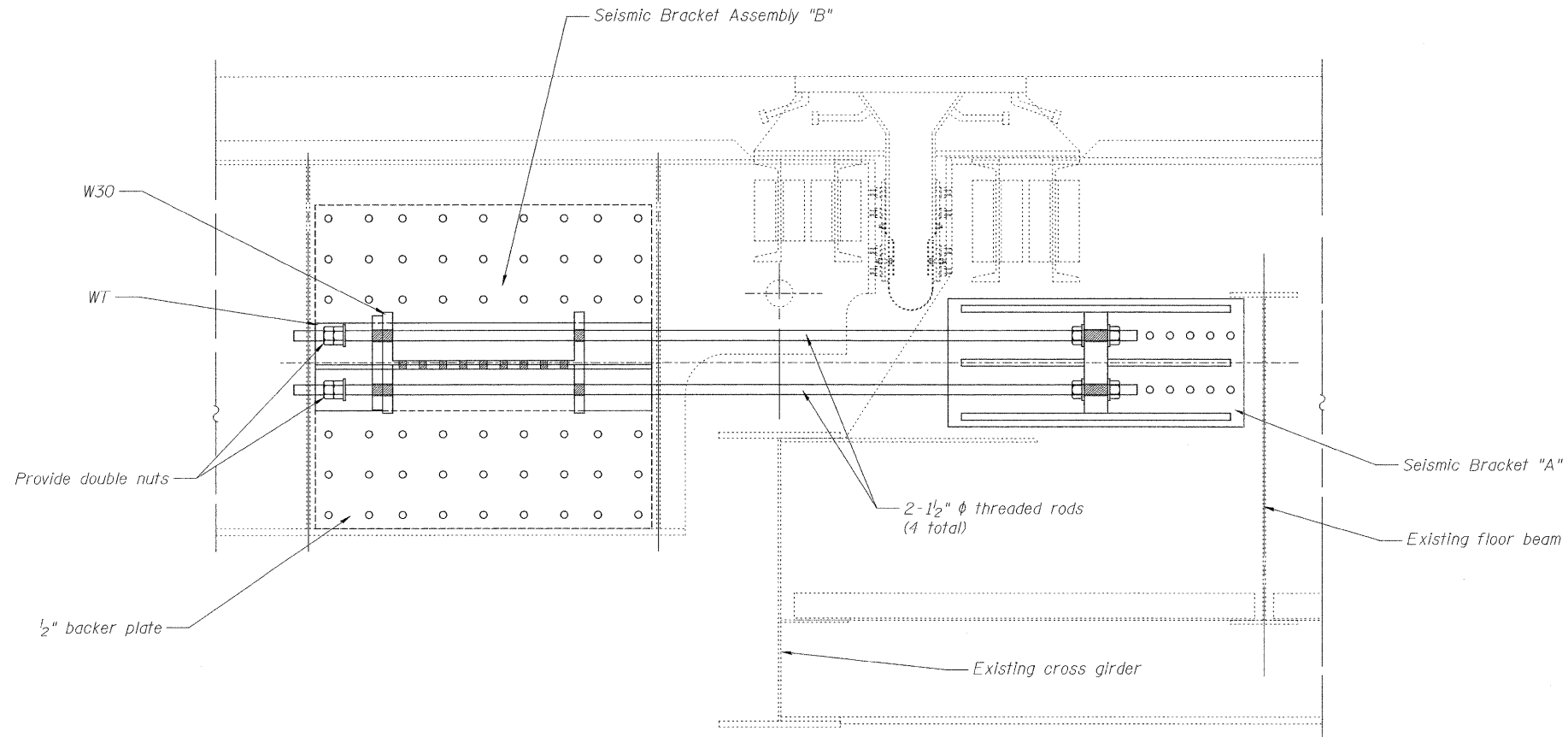


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



Note: Existing bearing not shown for clarity

SECTION B-B

NOTES:

All of the seismic steel brackets, threaded rods, bolts, washers, and nuts utilized in the seismic retrofit shall be hot dipped galvanized.

Four 1.50" diameter high strength ASTM A320 L7 hot dipped galvanized threaded rods shall be installed between the main girder and the two adjacent suspended girders. Each rod shall be installed with hot dipped galvanized washers and nuts. Each threaded rod shall be one continuous piece with couplers not allowed. The nuts utilized on the threaded rods shall be ASTM A194 Grade 4 heavy hex nuts. The washers utilized on the threaded rods shall be ASTM F436 circular Type 1 hardened steel washers. A seismic restraint system shall be installed at each main girder.

ASTM A325X bolts (threads excluded) with diameters of 1 inch shall be utilized to attach the seismic brackets to the existing main girders and the adjacent suspended girders, respectively. The nuts utilized with the A325 bolts shall be ASTM A194 Grade 4 heavy hex nuts. The washers utilized with the bolts shall be ASTM F436 circular Type 1 hardened steel washers.

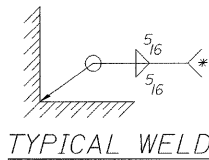
The seismic brackets shall be hot dipped galvanized according to ASTM A123, with a minimum coating grade of 50.

The high strength threaded rods, bolts, washers, and nuts shall be hot dipped galvanized according to ASTM A153 and ASTM F2329.

Brackets and connections are 110% stronger than the restrainer rod.

Approximate length of 1 1/2" ϕ threaded rod is $\pm 11'-0"$.

Contractor to field verify dimensions prior to fabrication.



* A partial joint penetration weld is acceptable in lieu of the above weld criteria, in areas where there is limited access to weld.

SEISMIC RESTRAINER NEAR PIERS 7 & 28 - 1

Work this sheet with sheets 24-28 of 36.

DESIGNED	NJM
CHECKED	RM
DRAWN	JVK
CHECKED	NJM



SHEET NO. 25	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	270	60B-I-8	MADISON	49	38
36 SHEETS		CONTRACT NO. 76A92			
FED. ROAD DIST. NO. 8 ILLINOIS FED. AID PROJECT					