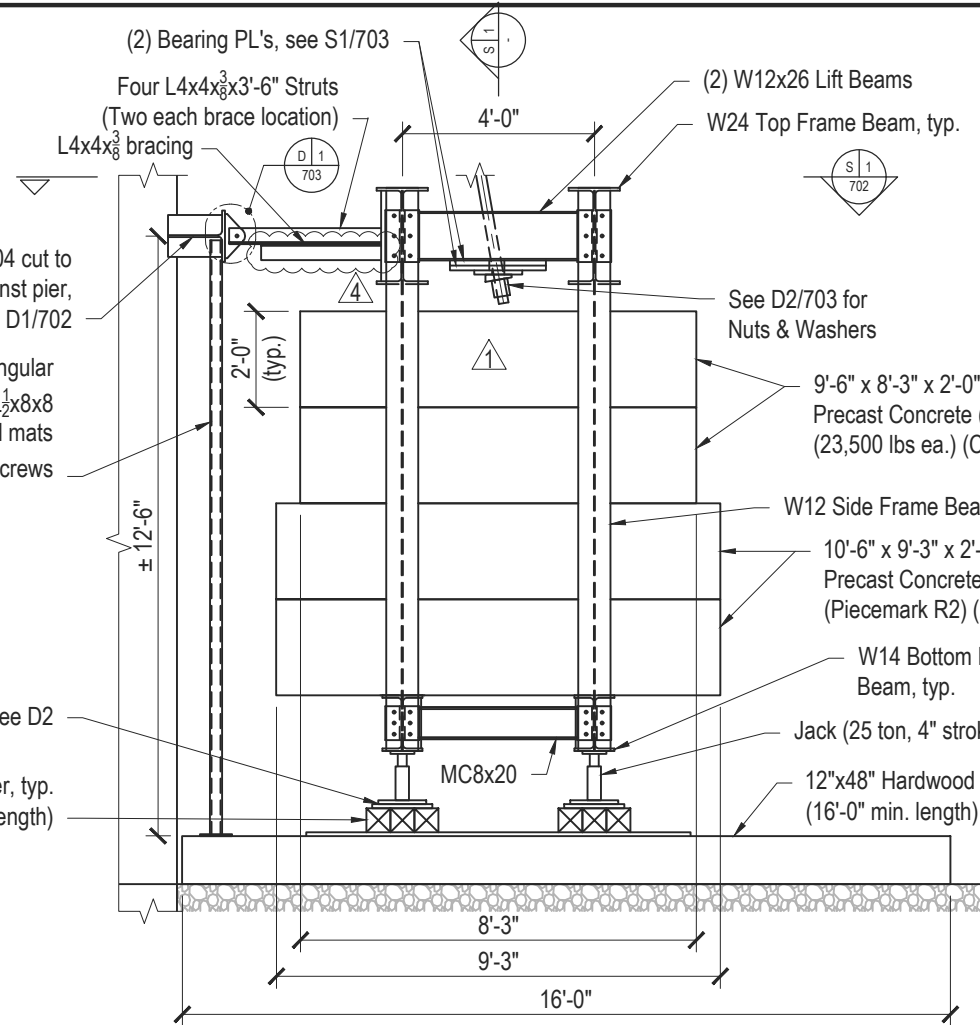


COUNTERWEIGHT OVERVIEW - PIER 1

Note: Top of pier to ground elevations based on Contractor Field Measurements

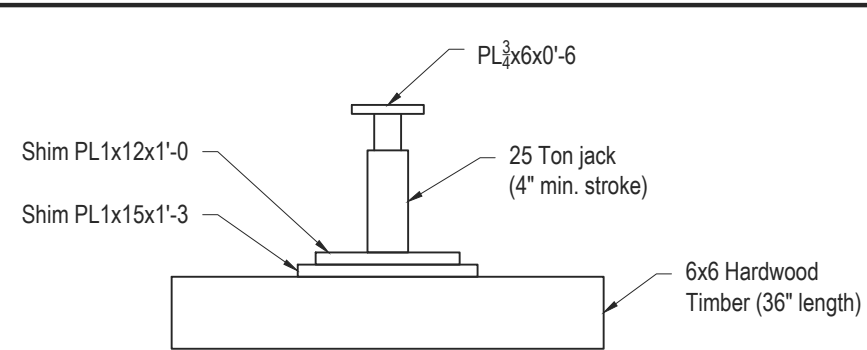


COUNTERWEIGHT ELEVATION

Note: All steel shall be Grade 50, min. (U.N.O.)
 105,000 lbs Precast concrete
 6,000 lbs Frame

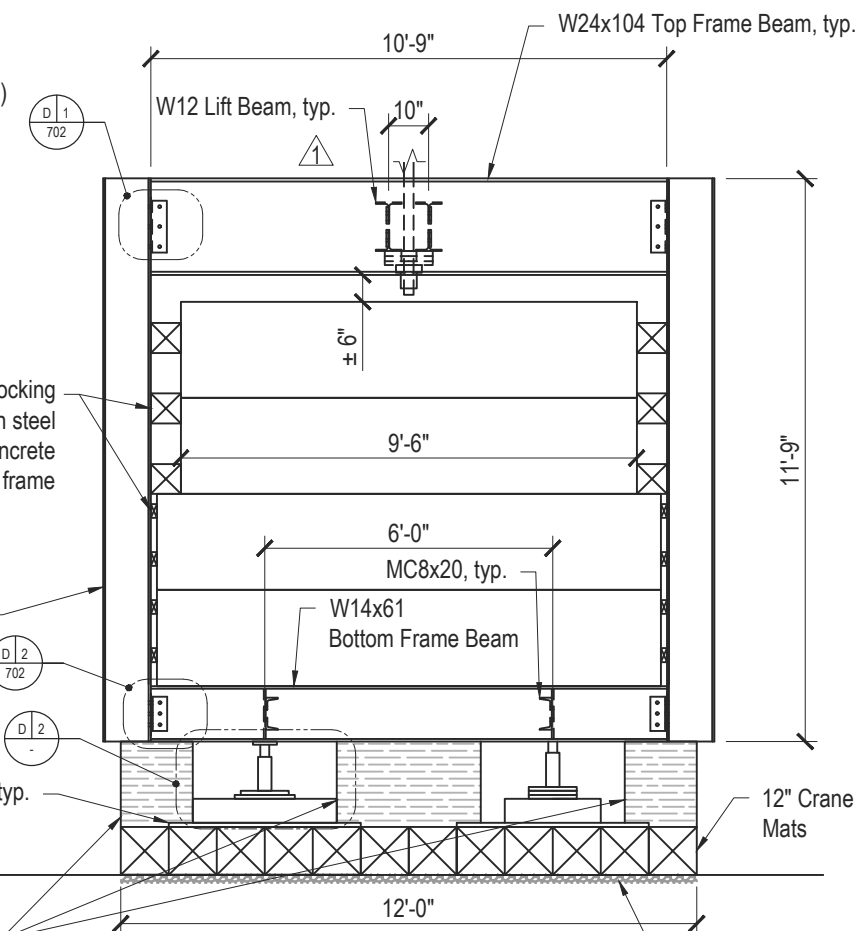
Suggested Erection Sequence:

1. Prepare soils under mat
2. Erect mats with hardwood dunnage
3. Erect W14 Bottom Frame
4. Erect Precast Panels
5. Erect Side Frame/Top Frame & Strut back to Pier
6. Wedge blocking between Precast Panels & Side Frame
7. Install Jacks
8. Install PT Bar
9. Energize Jacks
10. Remove enough of dunnage to allow CTWT to be suspended from truss.
11. Release jacks and suspend CTWT from truss.



JACK DETAIL

* Minimum shims shown. Verify initial height of dunnage stacks after confirming actual height of jack. Initial height should assume 1 inch minimum stroke initial set.



COUNTERWEIGHT SECTION

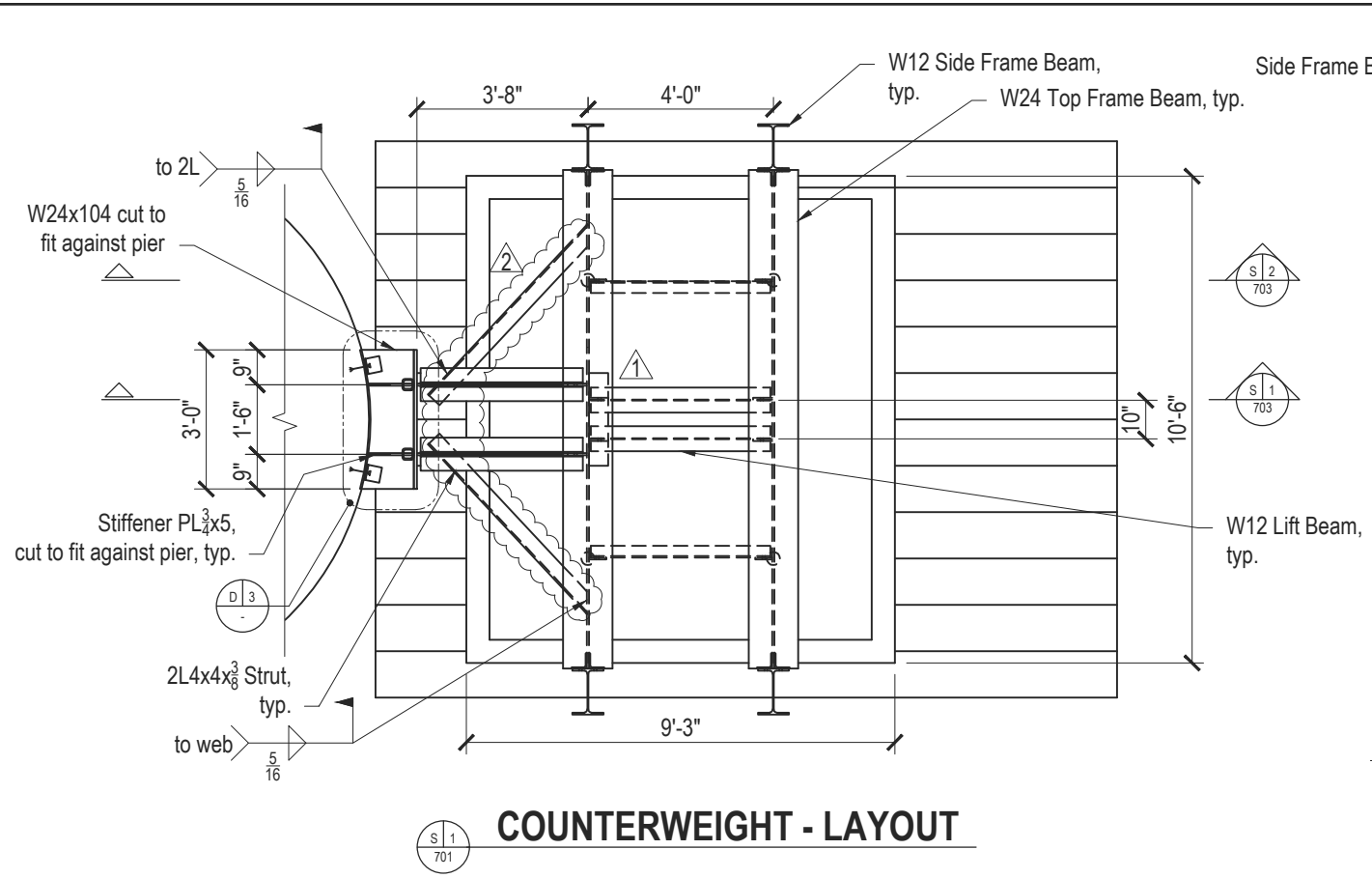
* Connection at Truss Chord is geometry-sensitive. Base elevation of mats must be maintained (i.e. either cut or fill as required)

Properly compact soils under mats and level as required with 3/4 inch gravel base (4 inch min.)*

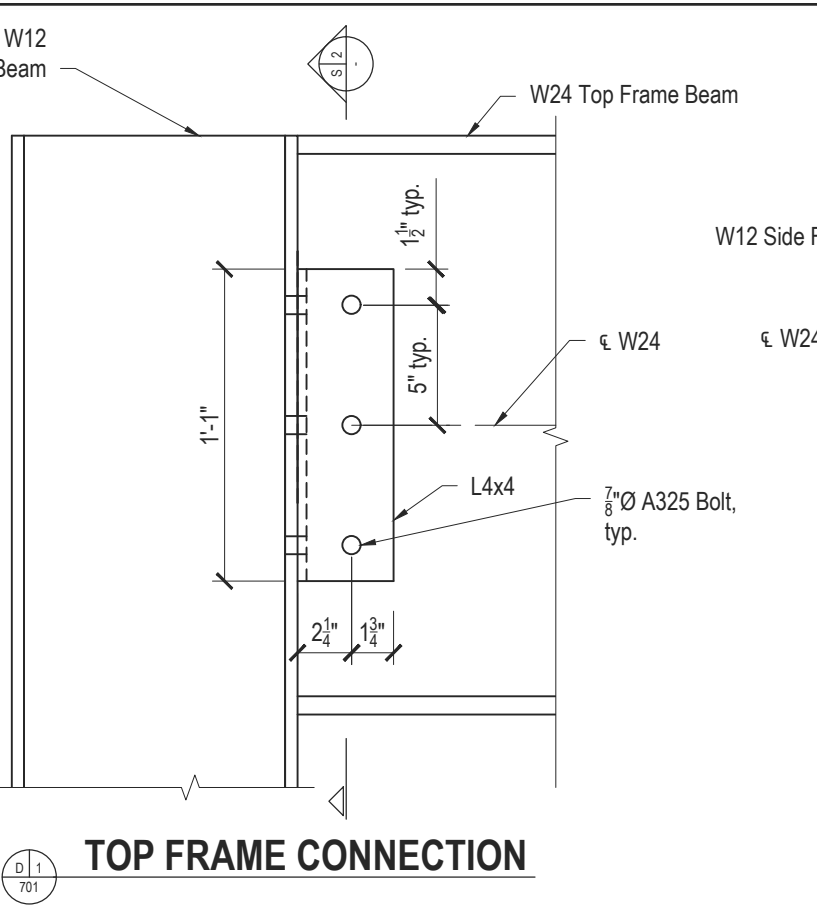
FOR INFORMATION ONLY

COUNTERWEIGHT DETAILS JFK BRIDGE REHABILITATION

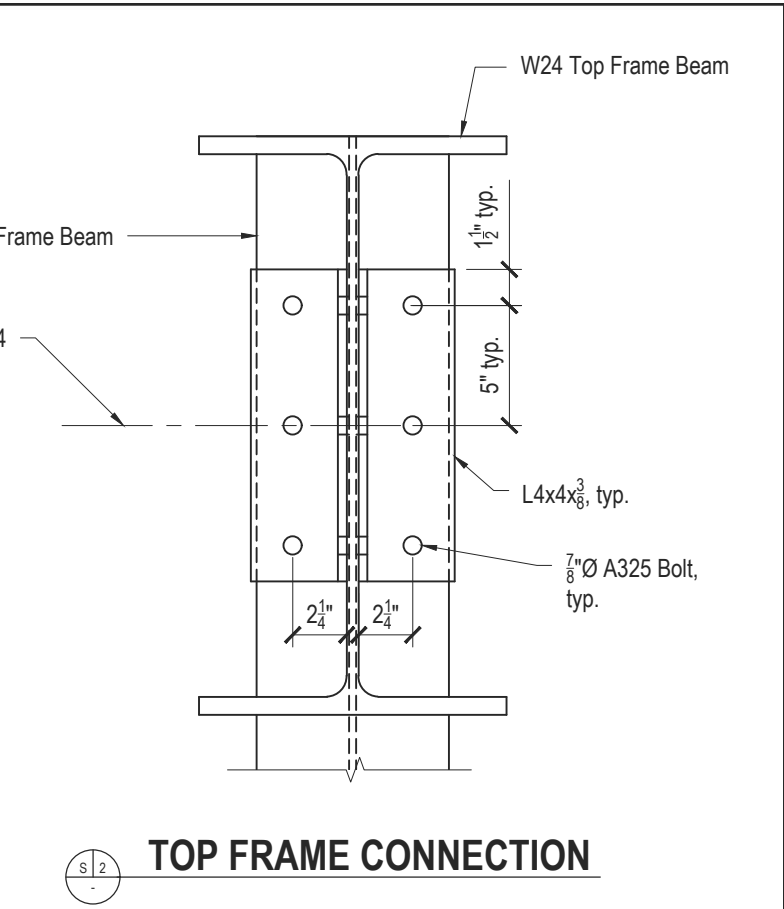
4	02-02-16	ADJ NOTE	JK	GENESIS STRUCTURES, INC. 104. W. 9TH, SUITE 200 KANSAS CITY, MO. 64105 (P) 816-421-1520 www.genesisstructures.com	DRAWN BY	CHCK'D BY
3	01-21-16	REVISED CALLOUT	JK		BP	DMR
2	12-14-15	REVISED BAR SIZE	JK		DATE	
1	11-16-15	REVISED DETAILS	DMR		10-12-15	
NO.	DATE	REMARKS	BY		SHEET NO.	
			PROJECT	G50-701		
			0593 - OHIO RIVER BRIDGE - DOWNTOWN			



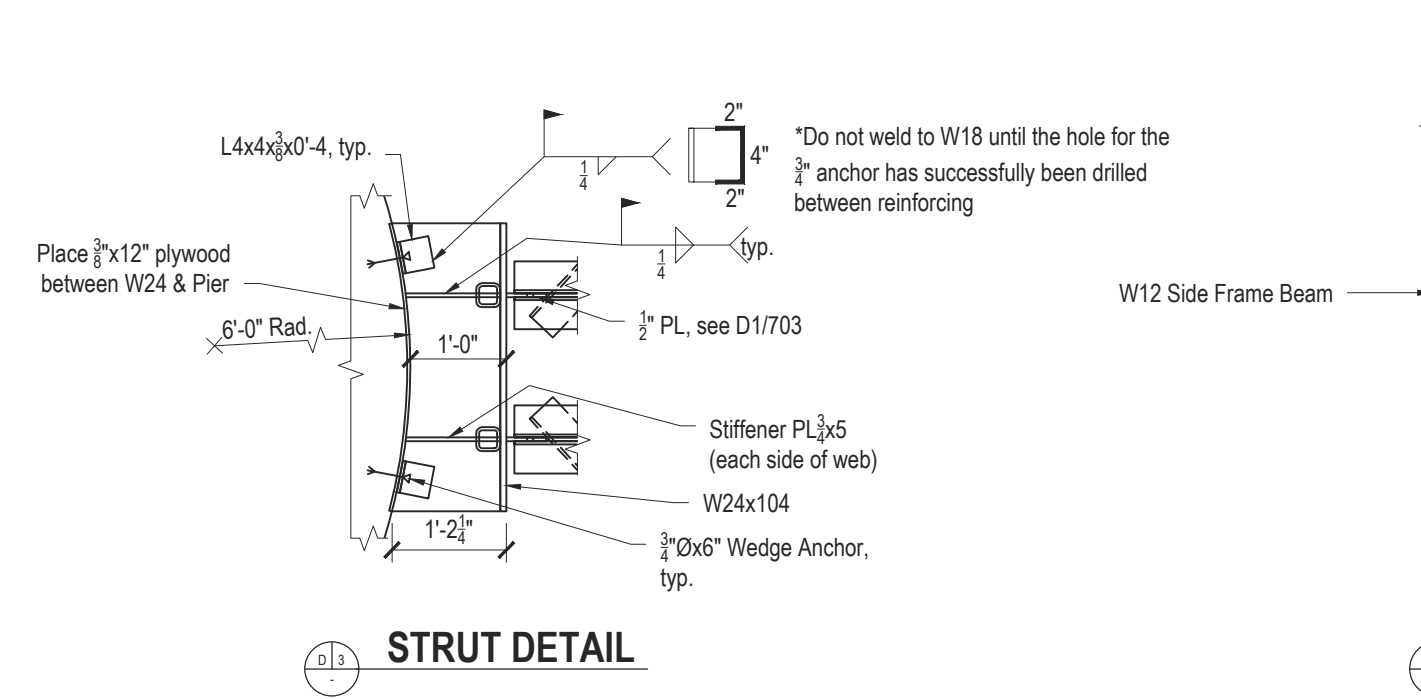
COUNTERWEIGHT - LAYOUT



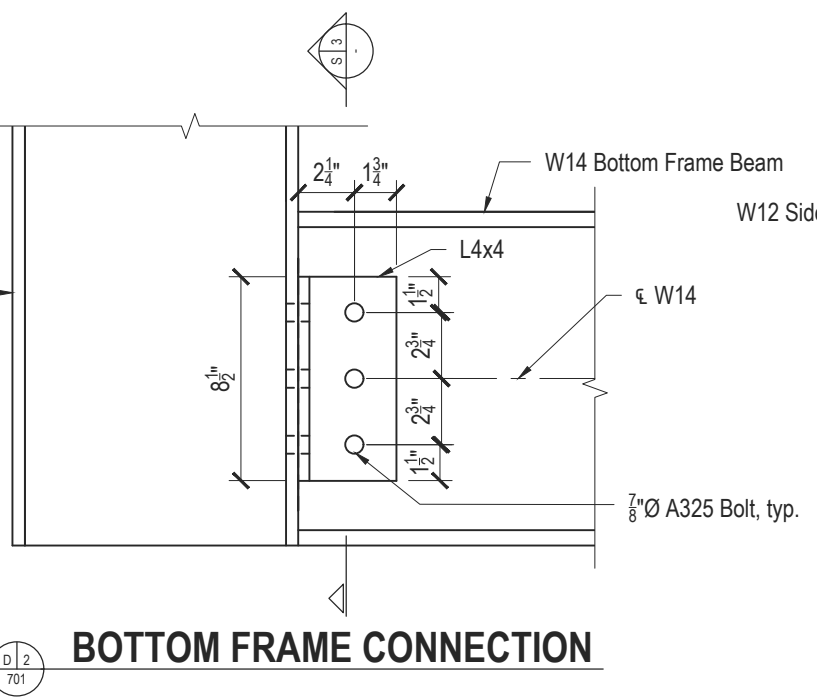
TOP FRAME CONNECTION



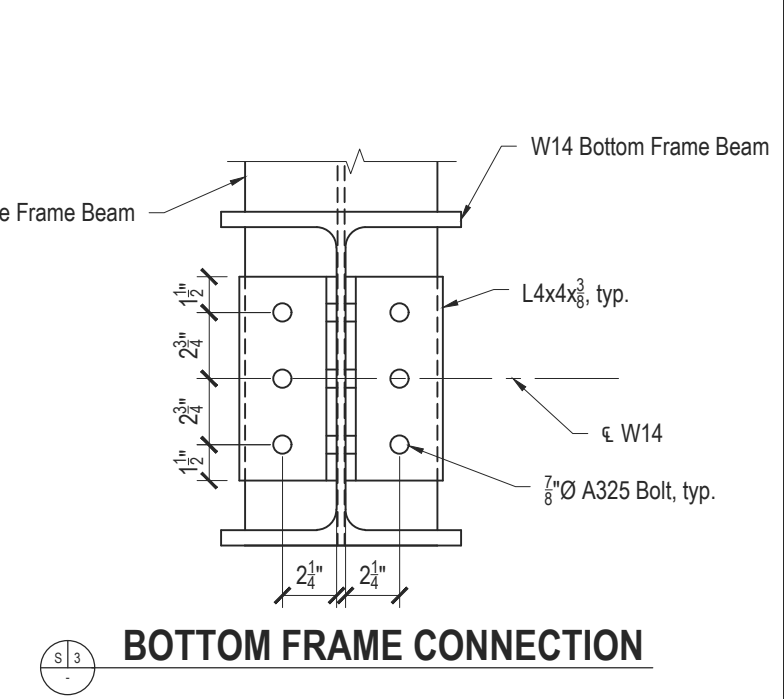
TOP FRAME CONNECTION



STRUT DETAIL




BOTTOM FRAME CONNECTION



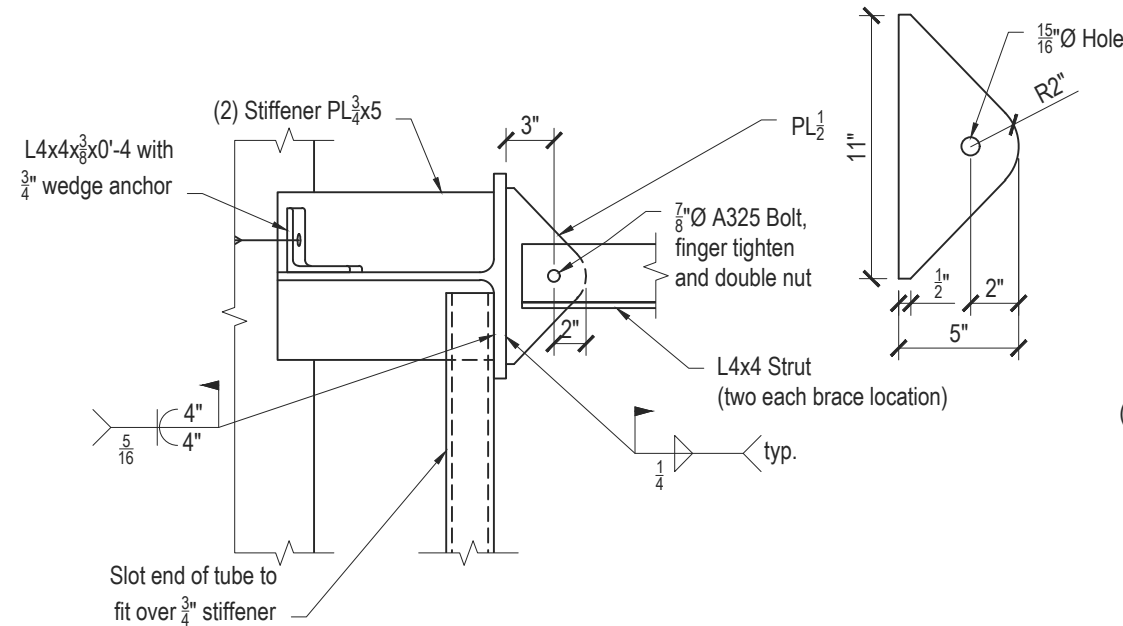
BOTTOM FRAME CONNECTION

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COUNTERWEIGHT DETAILS			
JFK BRIDGE REHABILITATION			
		GENESIS STRUCTURES, INC. 104. W. 9TH, SUITE 200 KANSAS CITY, MO. 64105 (P) 816-421-1520 www.genesisstructures.com	
PROJECT		DRAWN BY	
0593 - OHIO RIVER BRIDGE - DOWNTOWN		CHCK'D BY	
		BP DMR	
		DATE	
		10-12-15	
		SHEET NO.	
		G50-702	

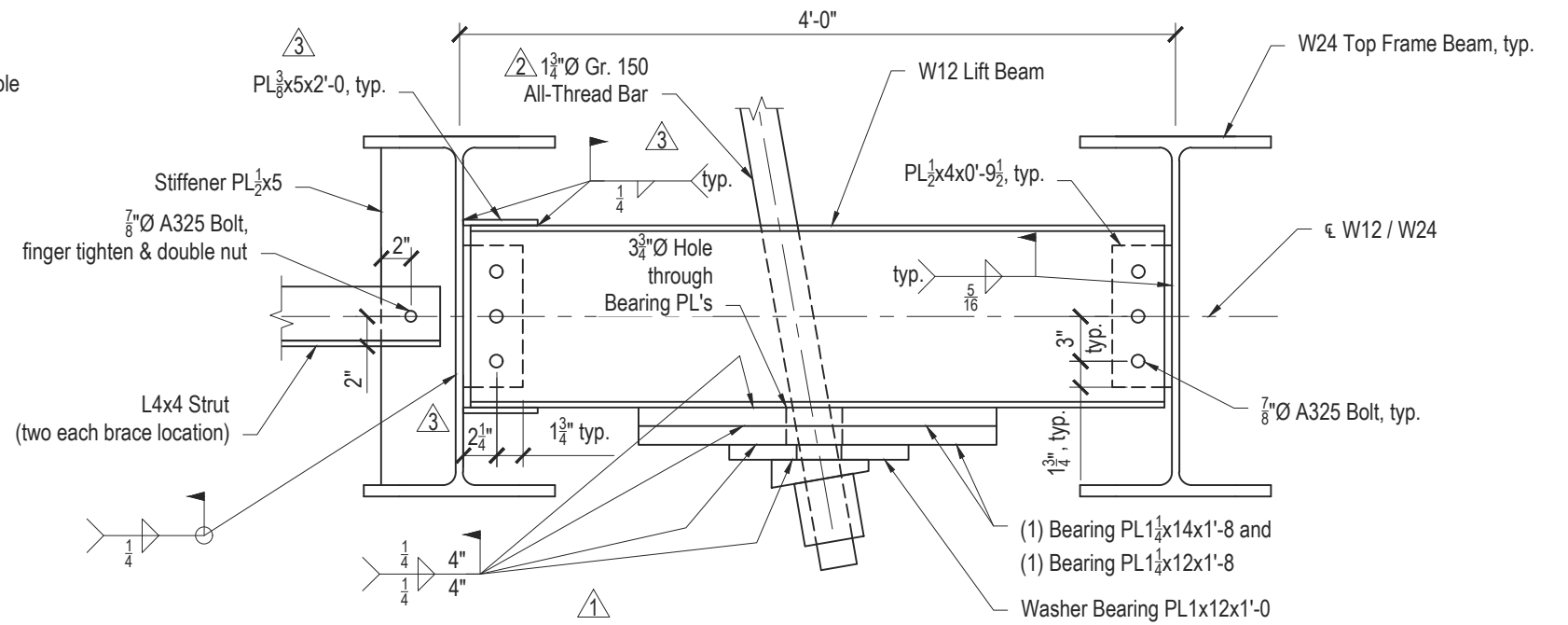
NO.	DATE	REMARKS	BY
2	02-02-16	ADDL BRACING	JK
1	12-29-15	REVISED DETAIL	BP

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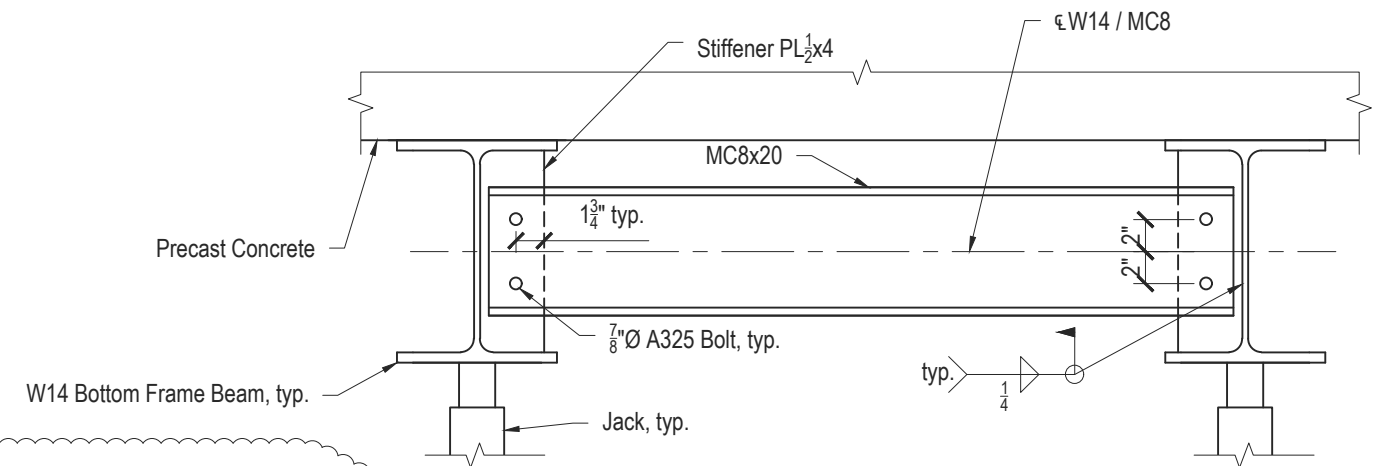
STRUT PIN DETAIL

D 1
701



LIFT BEAM / STRUT SECTION

S 1
702



CHANNEL BRACING SECTION

S 2
702

ELIMINATED DETAIL 2, SECTION 3 and SECTION 4

FOR INFORMATION ONLY

NO.	DATE	REMARKS	BY
4	01-21-16	ELIMINATED DETAILS	JK
3	12-29-15	REVISED DETAILS	BP
2	12-14-15	ADDITIONAL NOTES & BAR SIZE	JK
1	11-16-15	REVISED DETAILS	DMR

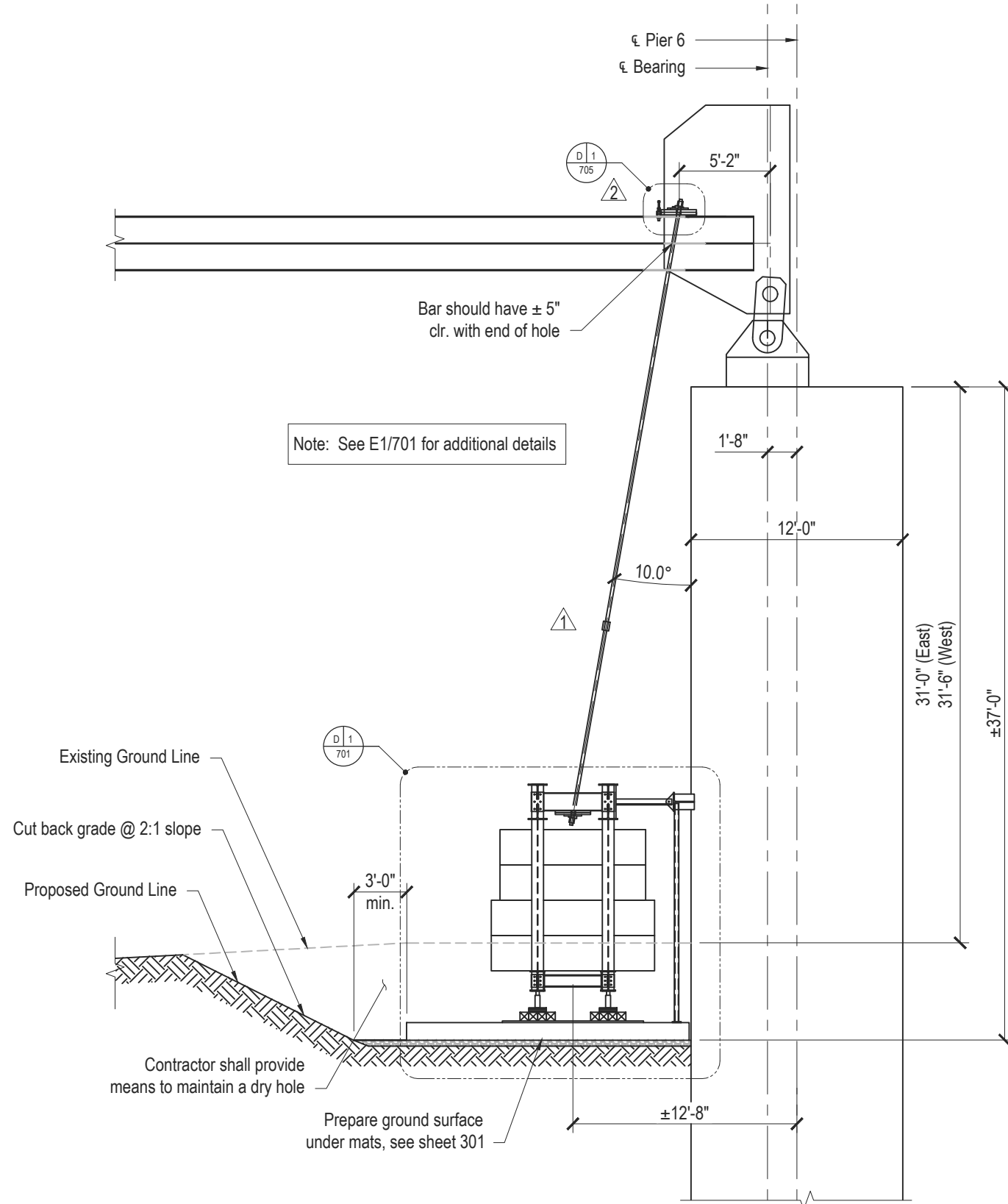
COUNTERWEIGHT DETAILS
JFK BRIDGE REHABILITATION

GENESIS STRUCTURES, INC.
104. W. 9TH, SUITE 200
KANSAS CITY, MO. 64105
(P) 816-421-1520
www.genesisstructures.com

PROJECT: 0593 - OHIO RIVER BRIDGE - DOWNTOWN

DRAWN BY: BP
CHK'D BY: DMR
DATE: 10-12-15
SHEET NO.: G50-703

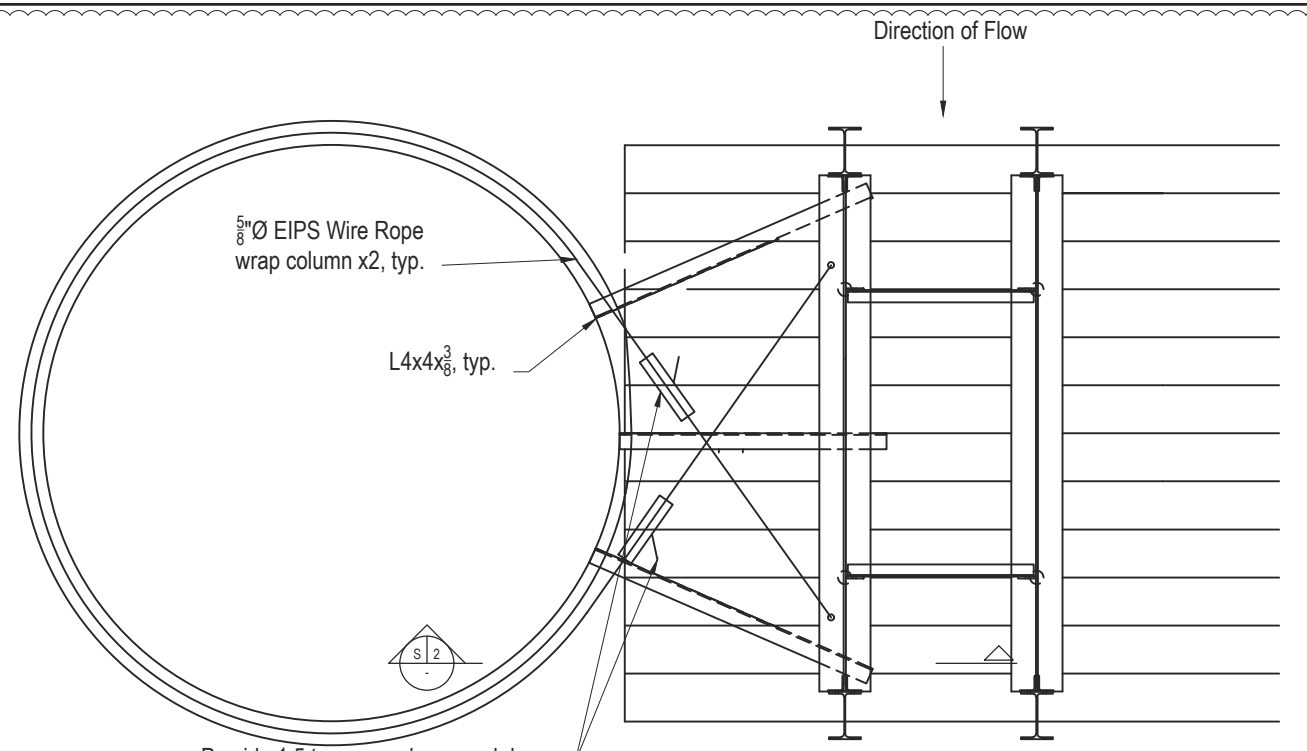
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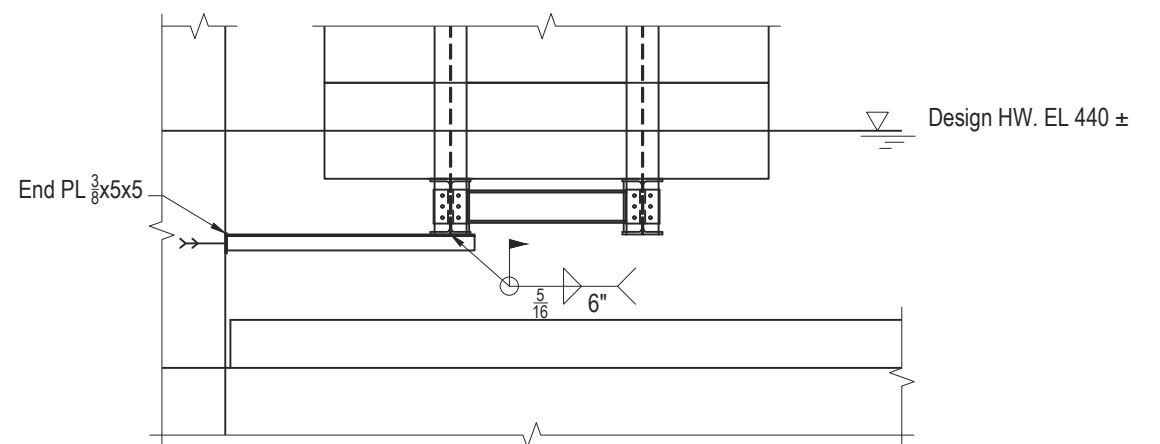
Note: See E1/701 for additional details

COUNTERWEIGHT OVERVIEW - PIER 6

Note: Top of pier to ground elevations based on Contractor Field Measurements



STREAM FLOW BRACING



SECTION

cable in bottom flange not shown

Flood Contingency Plan Notes:

1. Stream Flow Bracing shall be installed if stream flow is expected to rise to a level that partially submerges the CTWT frame or concrete blocks.
2. Anticipated maximum Design HW = EL 440.
3. Only Pier 1 CTWT's are anticipated to be effected by Design HW.
4. If CTWT's become partially submerged, provide approximately 12,000 lbs of ballast to deck area between L0 and L1. This ballast may include reinforcing steel, precast barrier, deck panels or machinery. This ballast shall remain until river elevation drops below CTWT stacks.

**COUNTERWEIGHT DETAILS
JFK BRIDGE REHABILITATION**

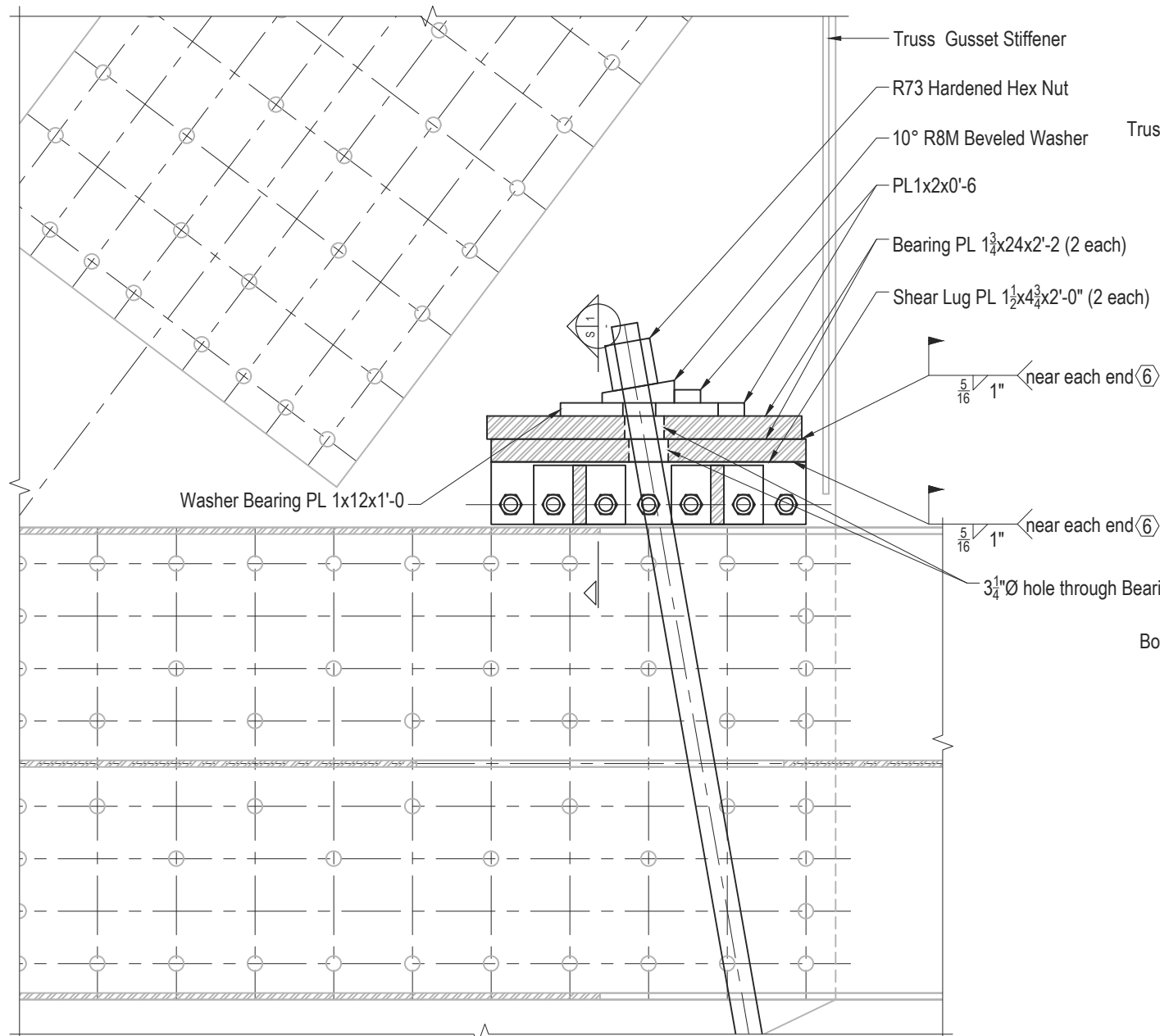
	GENESIS STRUCTURES, INC. 104. W. 9TH, SUITE 200 KANSAS CITY, MO. 64105 (P) 816-421-1520 www.genesisstructures.com		DRAWN BY BP	CHCK'D BY DMR
	PROJECT 0593 - OHIO RIVER BRIDGE - DOWNTOWN		DATE 10-12-15	SHEET NO. G50-704

NO.	DATE	REMARKS	BY
3	02-02-16	STREAM FLOW BRACING	JK
2	01-21-16	REVISED CALLOUT	JK
1	11-16-15	REVISED DETAIL	DMR

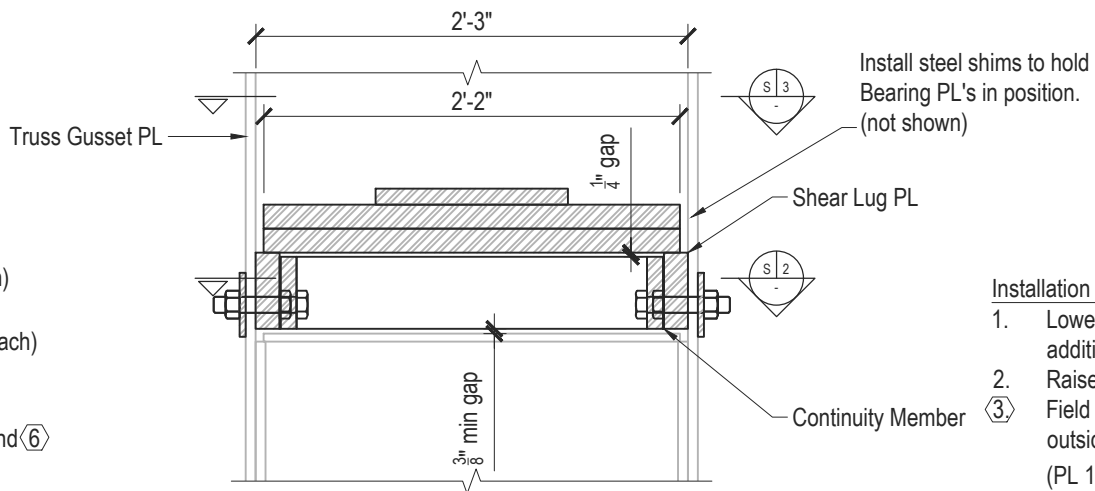
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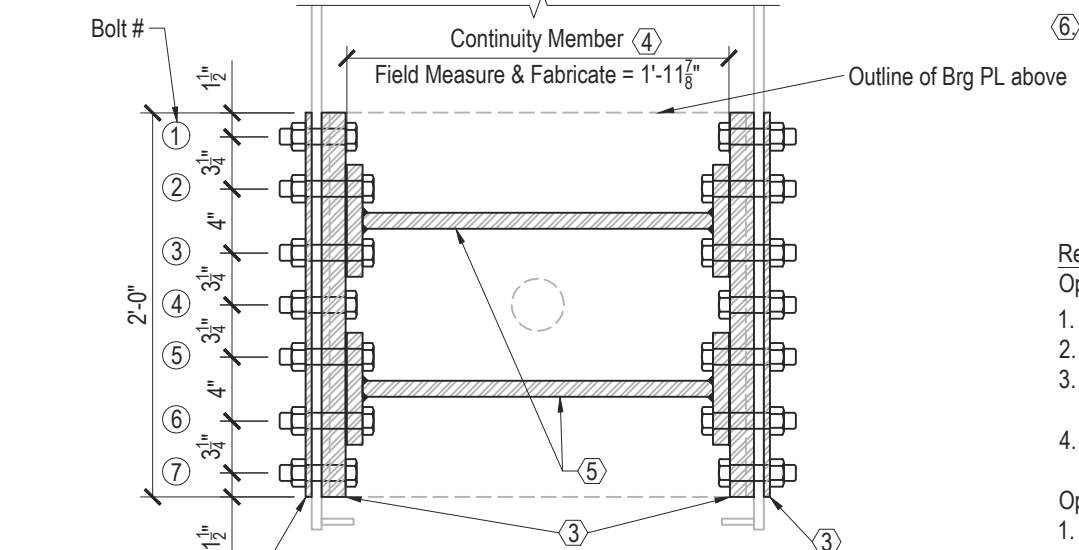
HALF SECTION



SECTION

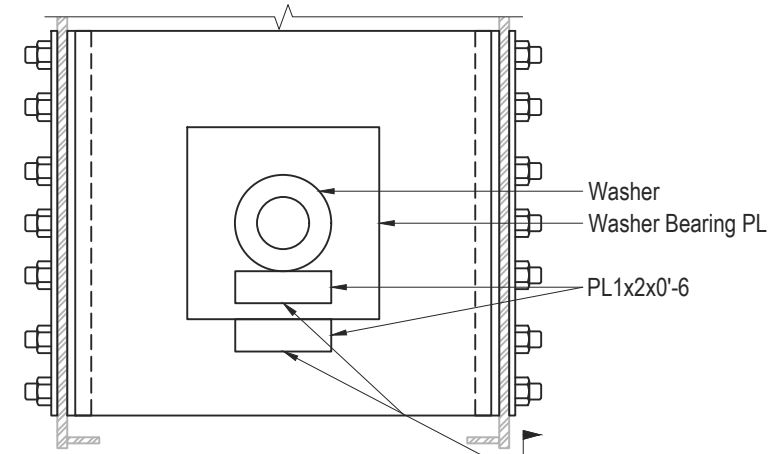
Install steel shims to hold Bearing PL's in position. (not shown)

- Installation Sequence Notes:**
- Lower "existing" PT bar to allow installation of additional structural elements.
 - Raise or remove "existing" Brg Plates. Field drill all holes (using lug as template) from outside face of gusset. Install Shear Lug PLs (PL 1 1/2x4 3/4x2'-0") in position on inside and PL Washer (PL 3/8x4x2'-0") on outside using only bolt ①, ④ & ⑦ thru existing gusset.
 - Field measure prior to fabrication. Fabricate Continuity Members short by 1/8". Provide 1/16" shims for tight fit.
 - Position Continuity Members and field drill holes 2, 3, 5 & 6 thru holes in gusset and Shear Lug. Install and torque all bolts.
 - Field weld Brg PL to Brg PL and to Brg PL to Shear Lug PL as indicated.



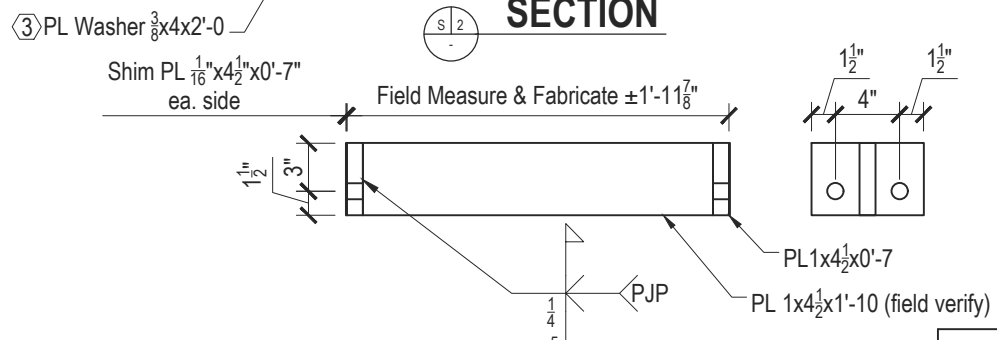
SECTION

- Removal Sequence Notes:**
- Option 1 - Leave in place
- Remove PT bar and (2) 1 3/4" Brg Plates.
 - Leave remaining members in place.
 - All remaining members shall receive the full contract specified paint system.
 - All damaged paint shall be repaired.
- Option 2 - Full Removal
- Removal all temporary members, including bearing plates, shear lugs and temporary bolts.
 - Fill holes with fully tensioned high strength bolts.
 - Paint bolts with contract specified paint system.
 - All damaged paint shall be repaired.



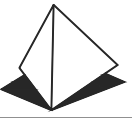
SECTION

Note: Continuity members below not shown for clarity



CONTINUITY MEMBER

NO.	DATE	REMARKS	BY

COUNTERWEIGHT DETAILS		JFK BRIDGE REHABILITATION	
 GENESIS STRUCTURES, INC. 104. W. 9TH, SUITE 200 KANSAS CITY, MO. 64105 (P) 816-421-1520 www.genesisstructures.com		DRAWN BY	CHK'D BY
		JK	DMR
PROJECT		DATE	
		01-21-16	
0593 - OHIO RIVER BRIDGE-DOWNTOWN		SHEET NO.	
		G50-705	