

**TO:** Jon Moren, Timothy Ryan

**FROM:** James Bager, Resident Engineer: (917) 826-8002

**DATE:** October 17, 2011 to November 23, 2011

**RE:** Project Status

***Attachments:***

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**Approvals:**

1. Mechanical Components; auxiliary drive and couplings are certified.
2. Bridge initial and final strain gauge procedures have been certified
3. Paint Type and color has been approved. Finish color is Federal Standard 595 FS34373, Semi-gloss.

**Shop Drawings:** Of the 21 submittals 17 have been certified, approximately 58 shop drawings out of 114 shop drawings

1. Grating deck drawings are certified
2. Girder Repair drawings are certified
3. Floorbeam FB5 repair plates, live load bearing and temporary tie downs are certified
4. Electrical drawings, limit and proximity switches, desk modifications are certified.
5. Machinery and motor brakes and the Span lock machinery have been certified.
6. Couplings for the motors and reducers has been field verified and the shop drawings are in progress.
7. Stringers, bracing, gusset plates and bolsters have been reviewed and returned to the Contractor for revisions. To be resubmitted for certifications. (44 drawings)

**Fabrication:**

1. Grating deck in progress, Fabrication has been completed currently in paint shop.
2. FB5 repairs plates and angles, and temporary tie downs have been delivered to the site on 11/07/11 for both the north and south leafs.
3. 90% of the bascule girder repair components for the north and south leafs has been delivered to the site on 11/18/10.
4. Remaining girder repair components are in progress.
5. Motor and machinery brakes, limit and proximity switches and control desk modifications are in progress. The motor and machinery brakes are tentatively scheduled to be completed and delivered to Iron Bridge during the week of 11/28/11
6. Span lock machinery and components are in progress.

## Construction (North Leaf):

- **Mobilization**

1. Contractor's mobilization is approximately 99% complete.

- **Temporary Platform**

2. **Temporary Platform** installation on North Leaf flanking span was mainly completed on 10/28/2011.
3. The Contractor began installing a temporary platform on the South leaf (approximately 65% complete) including additional swing staging to facilitate the replacement of the toe floorbeam, FB1, on the North leaf.

- **Painting**

4. **Painting:** Approximately 90% of the existing components of the north leaf has been cleaned with hand and power tools and primed with Epoxy Mastic Aluminum. Remaining areas to be cleaned and primed are the portion of the west bascule girder at the trunnion, knee braces at the intermediate floorbeams and the fascia (interior and exterior surfaces). Cleaning and priming operations will continue on the remaining surfaces. Finish coating of the primed surfaces will follow as weather permits.
5. The bascule span components that will be replaced with new components (end floorbeams FB1 and FB4, cantilevered brackets, roadway stringers, grating and lateral bracing) are Shop painted and will not be affected by the weather.

- **Steel Repairs**

6. Installation of the Temporary Tie downs is approximately 95% complete. The specific length H.S. Bolts required to complete the temporary tie downs were delivered on 11/23/11 and will be installed prior to the removal and replacement of the heel Floorbeam FB4.
7. The installation of the bottom flange of floorbeam FB5 is approximately 95% completed. The bottom flange repair of Floorbeam FB5 requires 2 additional angles near the west bascule girder. The spacing of the shop-drilled holes in the new angles that were delivered did not match the spacing of the existing holes in the floorbeam. The location for the angle was field measured and re-ordered by the Contractor.
8. The Installation of the bascule span side rack stiffeners is approximately 40% complete with the existing rack stiffeners being removed. Progress is slowed due to the heavily corroded conditions in the rack area and the number of plies of steel plates that the existing rivets and 1-9/16" diameter rack bolts were originally driven through. This work will continue.

- **Machinery**

9. The electrician has de-energized the north side machinery and traced and identified the control wires. The north leaf machinery components; machinery and motor brakes, couplings, auxiliary reducer has been dismantled and removed. The Contractor has field measured the shaft diameters of the main electric and auxiliary gas motors, auxiliary reversing unit and the main differential reducer.

## **Tentative Schedule**

- **Temporary Platform**

10. Week of November 28, 2011 - The temporary platform at the south leaf will continue to be installed in between the Bascule Girders and under a portion of the south side flanking span until 60% completed. The remaining temporary platform under the cantilevered brackets and the counterweight will not be installed until the south leaf is taken out of operation in February.

- **Painting**

11. Week of November 28, 2011- Continue cleaning and priming the remaining areas of bascule girders. Begin adding the finish coat to the primed areas of the bascule girders and floorbeams that do not required additional repairs.
12. Week of December 5, 2011 – Begin cleaning and priming the girders and floorbeams of the South leaf, weather permitting.

- **Steel Repairs**

13. Week of November 28, 2011 – Continued the span side Rack stiffener replacement for both the East and West Girders. The Contractor will add an additional Iron worker, (total 3) for the week of 11/28/11 and another iron worker (total 4) for the week of 12/05/11
14. Week of December 12, 2011- Begin the removal and replacement of the Heel Floorbeam FB4
15. Week of December 19, 2011 – Begin the removal and replacement of the Toe Floorbeam FB1.

- **Machinery**

16. Week of December 15, 2011- Install couplings and brakes to motors and reducers.
17. Span Lock Machinery tentatively scheduled delivery is mid January.



Photo 1: Contractor Mobilization



Photo 2: Installation of temporary work platform of North leaf.



Photo 3: Installation of Temporary work platform.

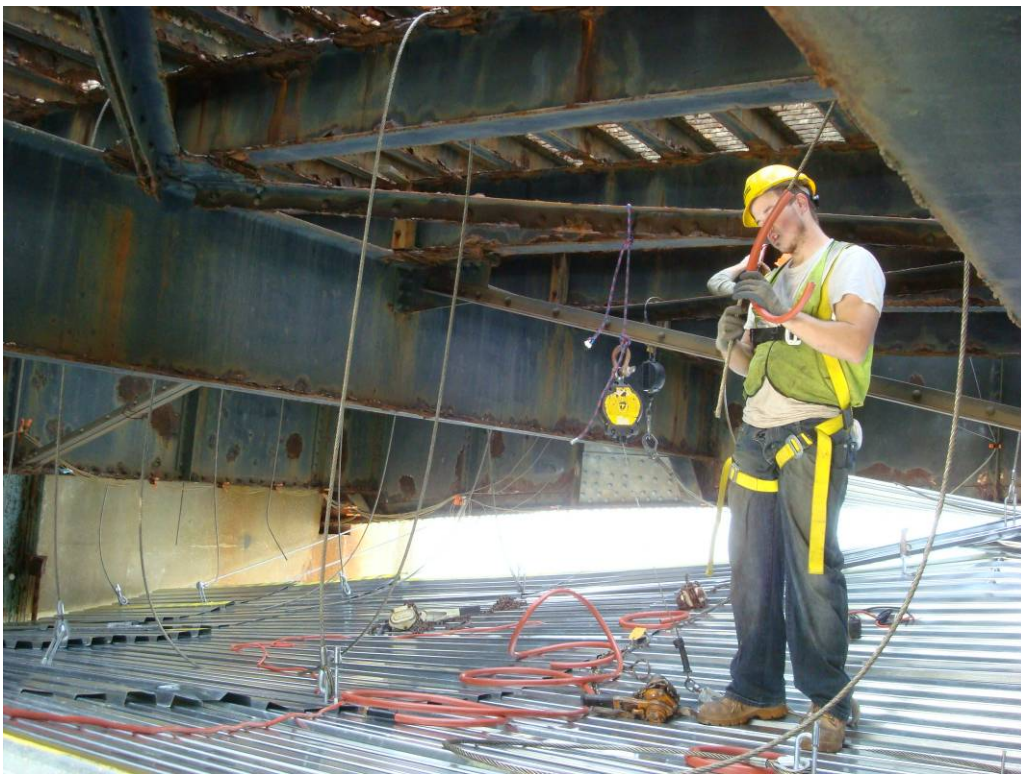


Photo 4: Installation of temporary work platform.



Photo 5: Installation of temporary work platform.



Photo 6: Access openings in North leaf grating deck. Background opening accesses the west cantilevered brackets. Foreground opening accesses between the girders.



Photo 7: Temporary platform at West side of Bascule span under the cantilevered brackets. Note the bascule girder has been cleaned and primed.



Photo 8: Temporary platform at East side of Bascule span under the cantilevered brackets. Note the bascule girder has been cleaned and primed.



Photo 9: Temporary platform at West side of North Flanking span. Access required for Floorbeam FB5 strengthening and installation of temporary bascule span tie downs.



Photo 10: Collection of debris from the hand and power tool cleaning, approximately 7500# of rust has been removed to date on the north leaf and flanking span.



Photo 11: West bascule girder cleaned with hand and power tools. Looking North.



Photo 12: West bascule girder primed with Epoxy Mastic Aluminum.



Photo 13: North face of Intermediate Floorbeam FB2 cleaned with hand and power tools.



Photo 14: South face of Intermediate Floorbeam FB2 cleaned with hand and power tools.



Photo 15: South face of Intermediate Floorbeam FB2 primed with Epoxy Mastic Aluminum.



Photo 16: South Face of Intermediate Floorbeam FB3 primed with Epoxy Mastic Aluminum. Stringers and lateral bracing not painted to be replaced.



Photo 17: East bascule girder cleaned with hand and power tools. Looking South.



Photo 18: East bascule girder cleaned with hand and power tools. Looking South.

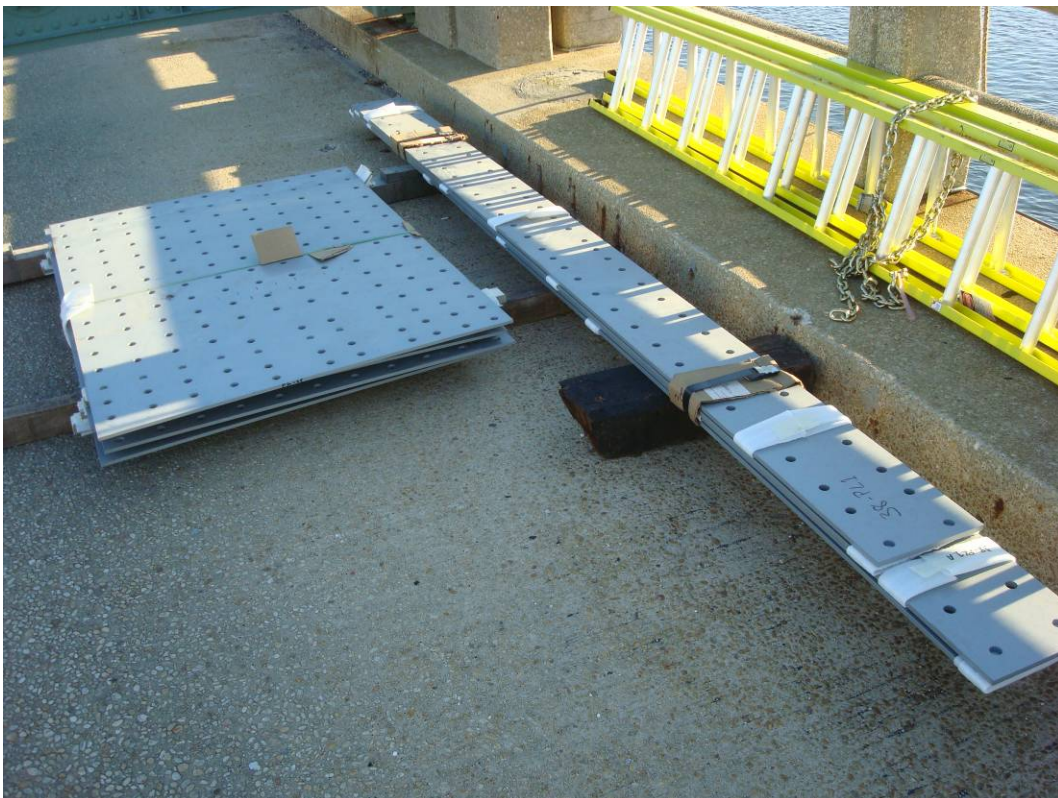


Photo 19: North and South Floorbeam FB5 repair components delivered to site.



Photo 20: Floorbeam FB5, Field drilling of existing steel using the new cover plates as a template.



Photo 21: Floorbeam FB5, Bottom flange strengthening plate repair nearly completed.

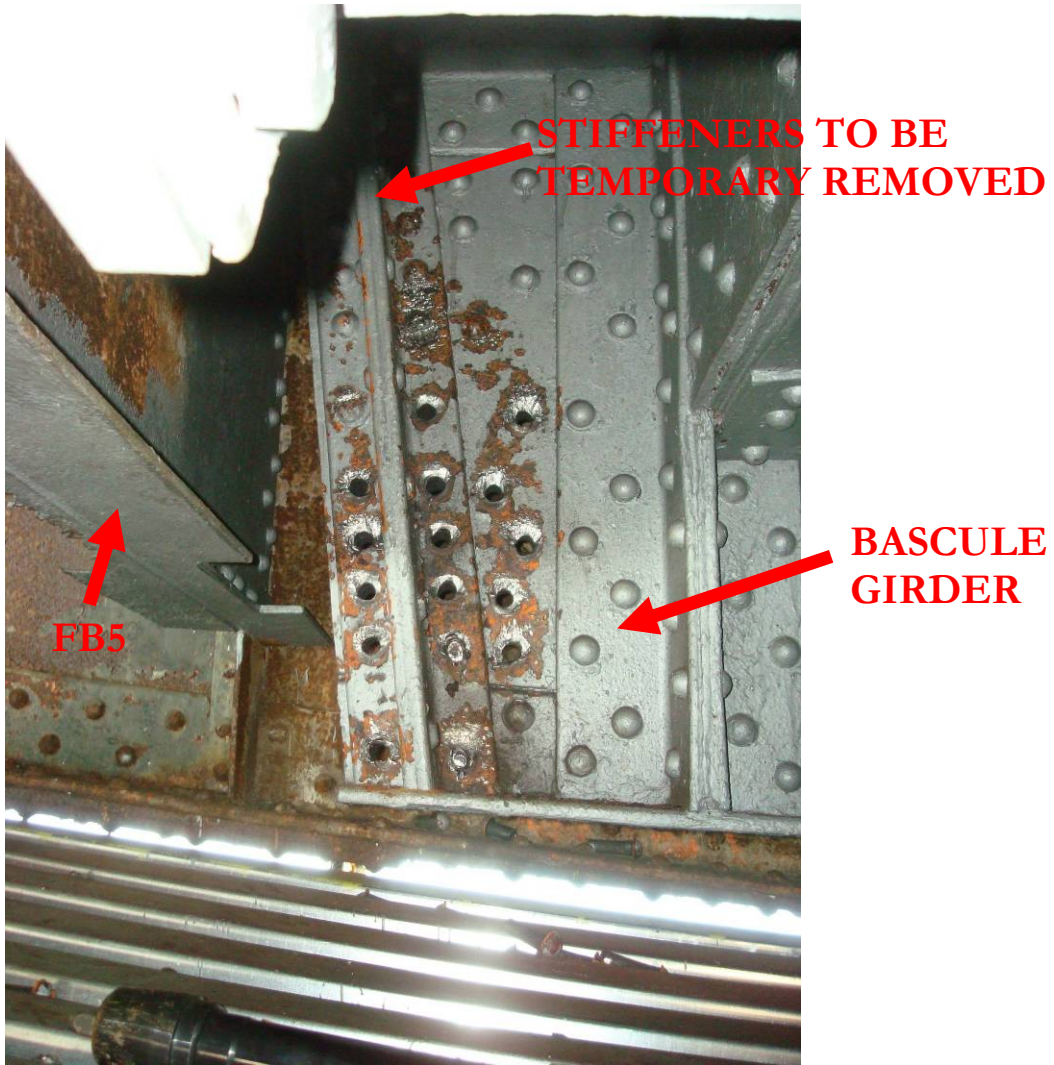


Photo 22: East Bascule girder and Floorbeam FB5, Removal of existing rivets and vertical stiffener angles required for temporary tie down. West Bascule girder similar.

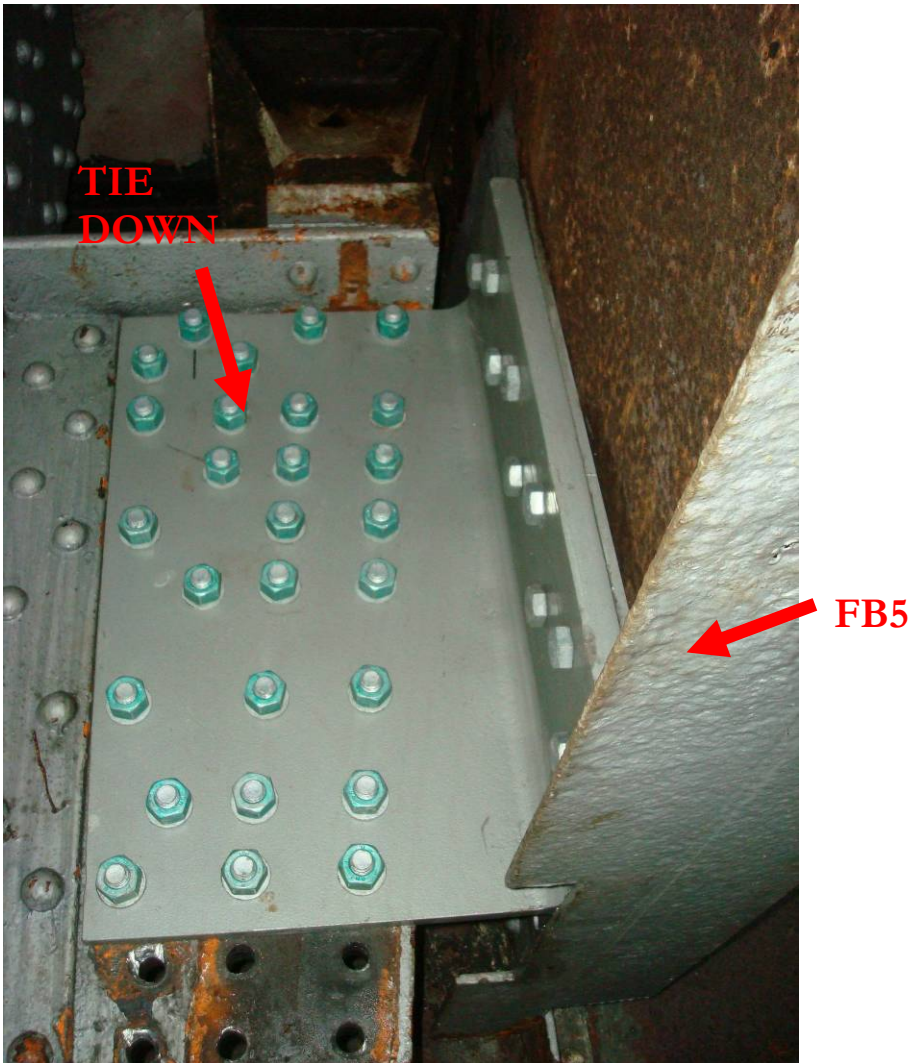


Photo 23: West Bascule girder and Floorbeam FB5, Temporary tie down in position and bolted to FB5 and the Bascule girder. East bascule girder similar.



Photo 24: West Bascule girder and Floorbeam FB5, Temporary tie down in position and bolted to FB5 and the Bascule girder. East bascule girder similar. H.S. Bolts between FB5 and Bracket to be replaced with the correct length prior to bascule span FB4 replacement.



Photo 25: West Bascule girder at the span side rack stiffeners. Stiffeners have been removed and a temporary angle with a hydraulic press is being used to remove the remaining portion of the rack bolts from the bottom flange.



Photo 26: East Bascule girder at the span side rack stiffeners. Stiffeners have been removed from one face only since three rivets remain to be removed as well as the remaining portion of the rack bolts within the bottom flange. Iron workers moved to the west girder while this section of the bascule girder will be hand and power tool cleaned and primed by the Painters.



Photo 27: 2<sup>nd</sup> Steel Delivery- 6 pallets consisting of 90% of the bascule girder repair plates for both the north and south leafs.



Photo 28: North leaf machinery components; machinery and motor brakes, couplings and brake hubs have been removed.



Photo 29: North leaf machinery components- The Contractor field measured the shaft diameters of the main electric and auxiliary gas motors, auxiliary reversing unit and the main differential reducer so that the openings of the new components will sized correctly.



Photo 30: South Leaf –Temporary Platform.



Photo 31: Swing stages to facilitate FB1 replacement.