

TO: Jon Moren, Timothy Ryan
FROM: James Bager, Resident Engineer: (917) 826-8002
DATE: February 4, 2012 to March 2, 2012
RE: Project Status Report - 4

Attachments:

Approvals:

1. No outstanding items.

Shop Drawings:

1. No outstanding items

Fabrication:

1. The span lock machinery supports and access platform has been completed and is scheduled to be delivered to the site during the week of 03/05/12.
2. The South leaf stringers and bracing is complete and is scheduled to be delivered to the site during the week of 03/05/12.

Construction, (North Leaf):

- **Mobilization**

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

- **Temporary Platform**

2. The Contractor moved the fascia and flanking span temporary platforms from the North leaf to the South leaf.

- **Painting**

3. **Painting:** Painting began on February 1, 2012. The painter cleaned and primed the Southeast bascule girder at the front rack stiffener repair. The painters completed the application of the primer onto the North leaf, except for the top of the Counterweight as well as touching up the primer on the remaining areas in the North leaf. The top of counterweight will be completed during a span opening.
4. The application of the top paint coat on the North Flanking span, counterweight area and the East and West girder elevations has been completed, except as noted above.
5. The bascule span components that will be replaced with new components on the South leaf (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. The Contractor restarted the painting operations on February 1st. The painters completed the cleaning and priming the remaining portions of existing steel on the north leaf.
7. The Contractor touched up previously primed areas that were disturbed by the steel repair operations.
8. The Contractor applied the top coat of paint to the East and West Girder elevations including the cantilevered brackets and the remaining areas in the North Flanking spans. The remaining portion still require top coating of paint is the inside area between the bascule girders and at top of the counterweight.
9. The toe joint diaphragms, rear rack stiffener repairs, miscellaneous bracing connection components and punch list items and the roadway grating have been installed or completed. The attachment of the roadway grating to the top flange of the new stringers by welding is ongoing and will continue into March.
10. The bolted connections and repairs for 95% of the north leaf and flanking span have been checked for proper torque. Remaining bolted connections to be checked for torque are the West and East cantilevered brackets for FB1, Heel and toe joint diaphragms, Stringer anchor bolts and end connection to FB1, lateral bracing connections between FB1 and FB2 and the longitudinal vertical bracing.
11. The Contractor completed the Northeast and Northwest bascule girder front and rear rack stiffener repairs with the installation of the rack bolts, shims and welding of the cap plate to the rack stiffener.
12. The Contractor completed the Southeast and Southwest bascule girder front rack stiffener repair including installation of the rack bolts and shims as well as the rivet replacement between the rack and bascule girder with 1” diameter bolts was completed for the South leaf.
13. The Contractor replaced the steel plates in the north counterweight with the new lead bricks and installed the new counterweight pocket cover.
14. The Contractor completed 4 bascule girder web repairs, except for final tightening and two additional girder web repairs are in progress on the Southeast and Southwest girders.
15. The Contractor began the demolition of the South leaf grating by precutting the grating, purlins and stringers with a torch. Removed the span lock access platform.
16. Installation of all girder repairs is 97% complete. Installation of Vertical Stiffeners on the bascule girders near the rack was completed on 01/09/12. One web repair near the rack on the Northwest girder cannot be completed until the span is operational due to the lack of clearance between the girder and the pier wall to operate the magnetic drill.

- **Machinery/ Electrical**

17. The Electrical upgrades have continued with the modification of the control desk and installation of new relays in the control cabinets. Installation of new navigation lighting conduit on the north leaf and new disconnect switch panels and junction boxes in the machinery room were completed.
18. The motor upgrades have been completed with the installation of the new motor brake and coupling grid elements and covers.

Tentative Schedule

- **Temporary Platform**

19. Mid May – Remove the temporary platforms from the North and South spans.

- **Painting – Weather Permitting**

20. Painting will continue, weather permitting, with the completion of the north leaf. The remaining work for the north span is located with the girder areas and consists of touching up previously primed surfaces and newly repaired locations, and applies a finish coat to all primed areas. The Contractor will continue the cleaning and priming of all existing steel in the South flanking and bascule spans.

- **Steel Repairs**

21. Week of March 5, 2012 – Continue of the demolition of the roadway grating in the proximity of FB4 and remove and replace FB4. Remove the cantilevered floorbeam brackets.

22. Week of March 12 – Continue of the demolition of the roadway grating in the proximity of FB1 and remove and replace FB1. Install the cantilevered floorbeam brackets at the west side of FB1 and FB4.

23. Week of March 19, 2012 – Continue the removal of the remaining existing roadway grating and stringers and bracing. Begin the installation of the bracing, bolsters and gusset plates on the South leaf.

24. Week of April 2, 2012 - Begin the installation of the stringer and diaphragms.

25. Week of April 16, 2012 – Begin installation of the south leaf roadway grating. Continue electrical work.

26. Week of April 30, 2012 – Replace the steel counterweight blocks with new lead blocks and remove temporary tie downs.

27. Week of May 7, 2012 – Begin performance of punch list items.

- **Machinery/ Electrical**

28. Week of March 5, 2012 – Install the North leaf Span lock rotary limit switch support and limit switch.

29. Week of March 5, 2012 – Begin the mechanical and electrical upgrades to the South bascule span.

30. Week of March 19, 2012 – Begin the South leaf machinery demolition and begin the installation of the span lock machinery.

31. Week of March 26, 2012 – Begin the installation of the South leaf machinery upgrades; auxiliary drive reducer, couplings, machinery and motor brakes.

32. Early May – Test Bridge electrical and mechanical upgrades and perform test opening of the South leaf.



Photo 1: The painters were preparing the span for one final application of primer to the cleaned steel and touch up of previously primed steel.



Photo 2: The painters were preparing the span for one final application of primer to the cleaned steel and touch up of previously primed steel.



Photo 3: The painters primed the fascia plate and touched up previously painted areas on the East fascia. Ready for the top finish coat to be applied.

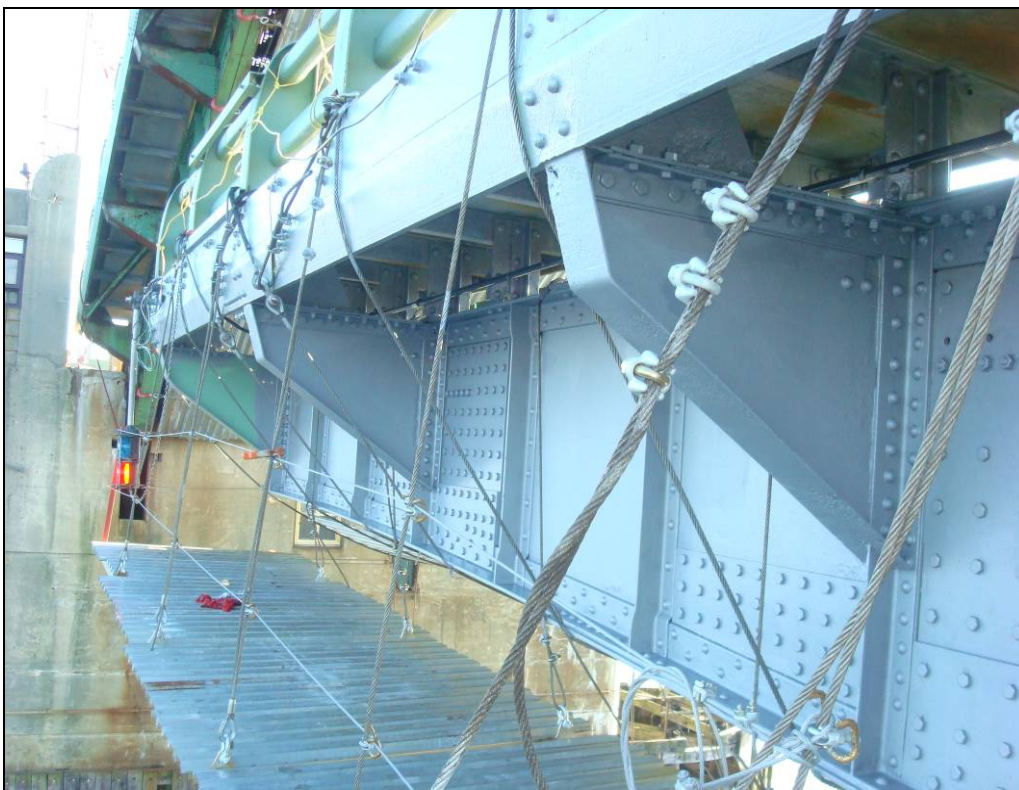


Photo 4: The painters primed the fascia plate and touched up previously painted areas on the East fascia. Ready for the top finish coat to be applied.



Photo 5: The painters primed the West fascia and touched up previously primed areas that were damaged due to the steel repairs.

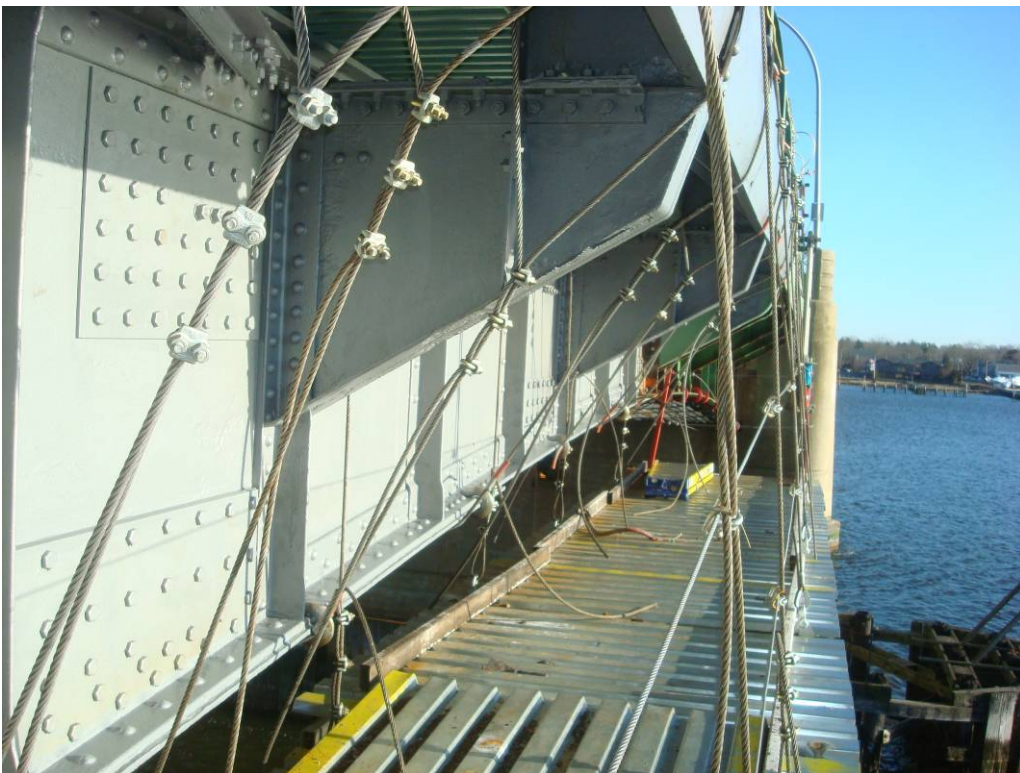


Photo 6: The painters primed the West fascia and touched up previously primed areas that were damaged due to the steel repairs.



Photo 7: The painters primed the Southeast bascule girder and a portion of the rack at the trunnion area. East face shown.

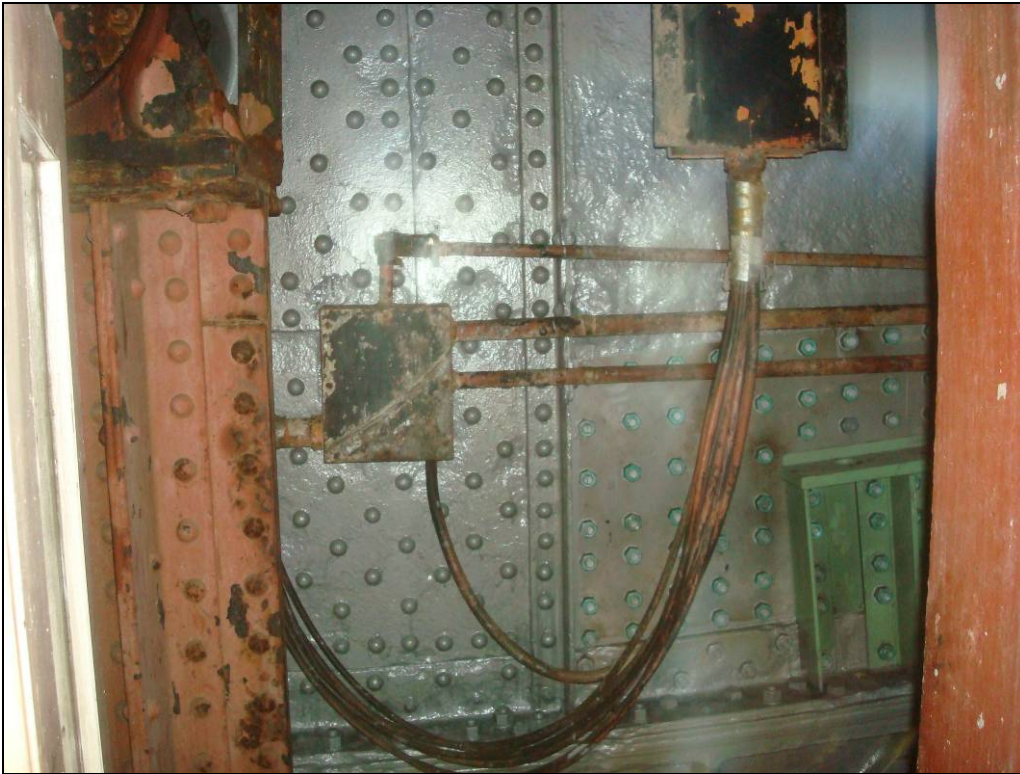


Photo 8: The painters primed the Southeast bascule girder and a portion of the rack at the trunnion area. East face shown.



Photo 9: The painters primed the Southeast bascule girder and a portion of the rack at the trunnion area. West face shown.



Photo 10: The painters primed the West fascia and touched up previously primed areas that were damaged due to the steel repairs.



Photo 11: The painters primed the West fascia and touched up previously primed areas that were damaged due to the steel repairs.

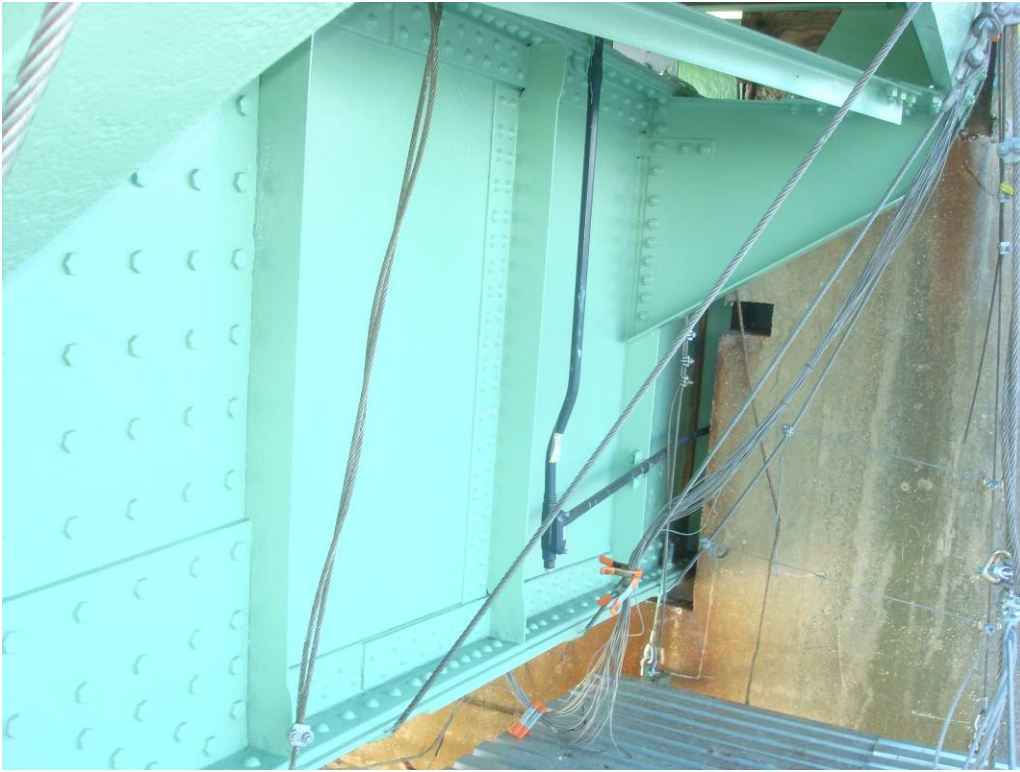


Photo 12: The painters primed the Southeast bascule girder and a portion of the rack at the trunnion area. East face shown.



Photo 13: The painters primed the Southeast bascule girder and a portion of the rack at the trunnion area. East face shown.



Photo 14: The application of the Acrolon 218 HS Acrylic Polyurethane finish coat in progress on the West bascule girder elevation.



Photo 15: The application of the Acrolon 218 HS Acrylic Polyurethane finish coat in progress on the West bascule girder elevation.

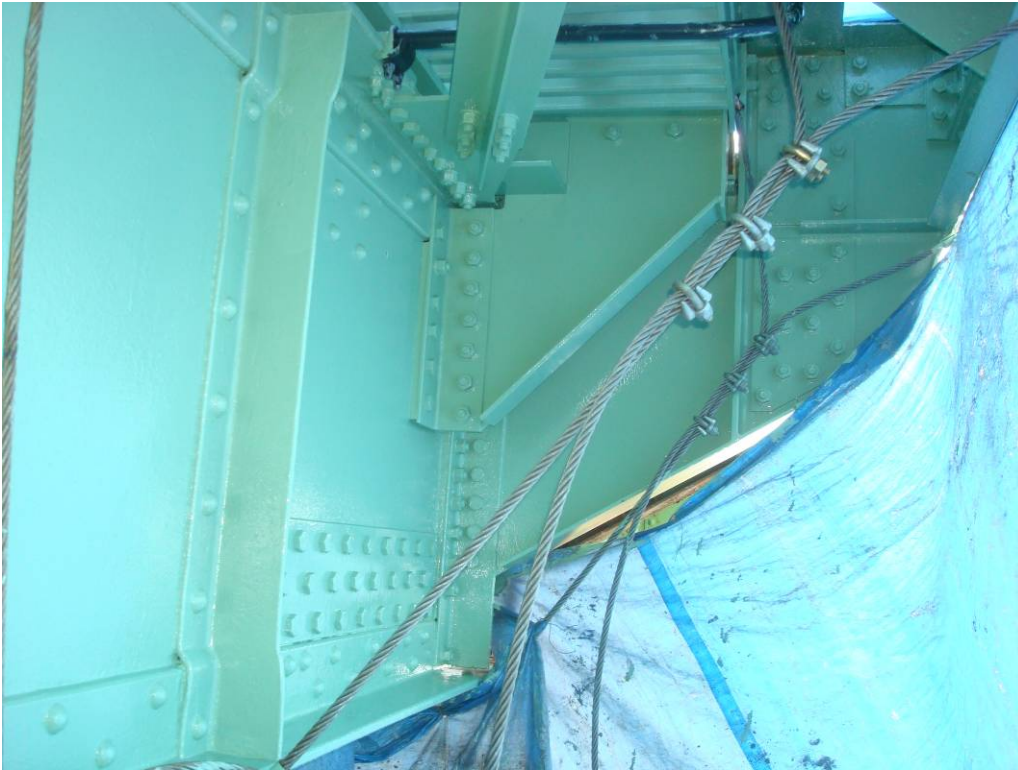


Photo 16: The application of the Acrolon 218 HS Acrylic Polyurethane finish coat in progress on the West bascule girder elevation.



Photo 17: The application of the Acrolon 218 HS Acrylic Polyurethane finish coat in progress on the West bascule girder elevation.



Photo 18: The application of the Acrolon 218 HS Acrylic Polyurethane finish coat on the West bascule girder at the east face of the rear rack has been completed.

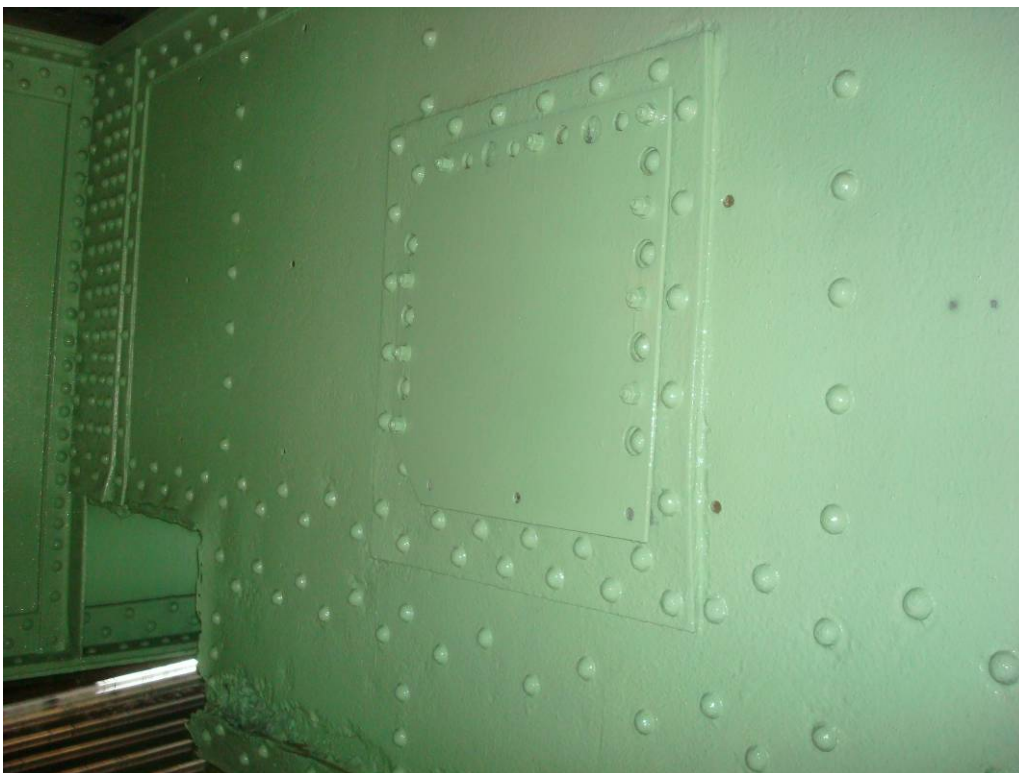


Photo 19: The application of the Acrolon 218 HS Acrylic Polyurethane finish coat on the West counterweight pocket cover has been completed.



Photo 20: The application of the Acrolon 218 HS Acrylic Polyurethane finish coat in progress on the West face of the East bascule girder has been completed.



Photo 21: The application of the Acrolon 218 HS Acrylic Polyurethane finish coat on the existing live load bearing stiffener has been completed.



Photo 22: The motor and machinery supports have been painted with Epoxy Mastic Aluminum.



Photo 23: The painters began moving the east fascia temporary platform from the north leaf to the south leaf. Looking north from the control house.



Photo 24: The west fascia temporary platform has been removed from the north leaf and installed onto the south leaf.



Photo 25: The Painter cleaning the bottom flange of the East girder near FB4 on the South leaf.



Photo 26: The East girder elevation looking at FB4 of the South leaf cleaned with hand and power tools.



Photo 27: The underside of the East fascia looking at FB4 of the South leaf cleaned with hand and power tools.



Photo 28: The East girder elevation looking at FB3 of the South leaf cleaned with hand and power tools.



Photo 29: The East girder elevation looking at FB3 of the South leaf primed with Epoxy Mastic Aluminum.

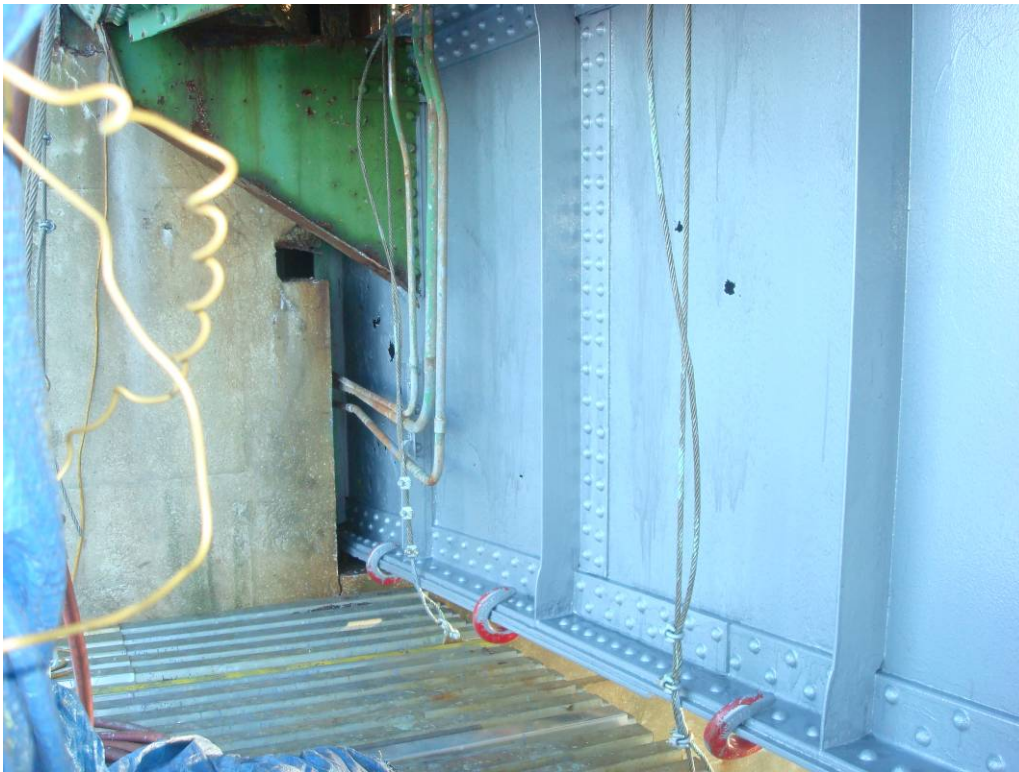


Photo 30: The East girder elevation looking at FB4 of the South leaf primed with Epoxy Mastic Aluminum.



Photo 31: The Southeast girder elevation between the FB1 and FB2 cleaned with hand and power tools.



Photo 32: The Southeast girder elevation between the FB1 and FB2 cleaned with hand and power tools looking South.



Photo 33: The Southwest girder elevation between the FB1 and FB2 cleaned with hand and power tools.

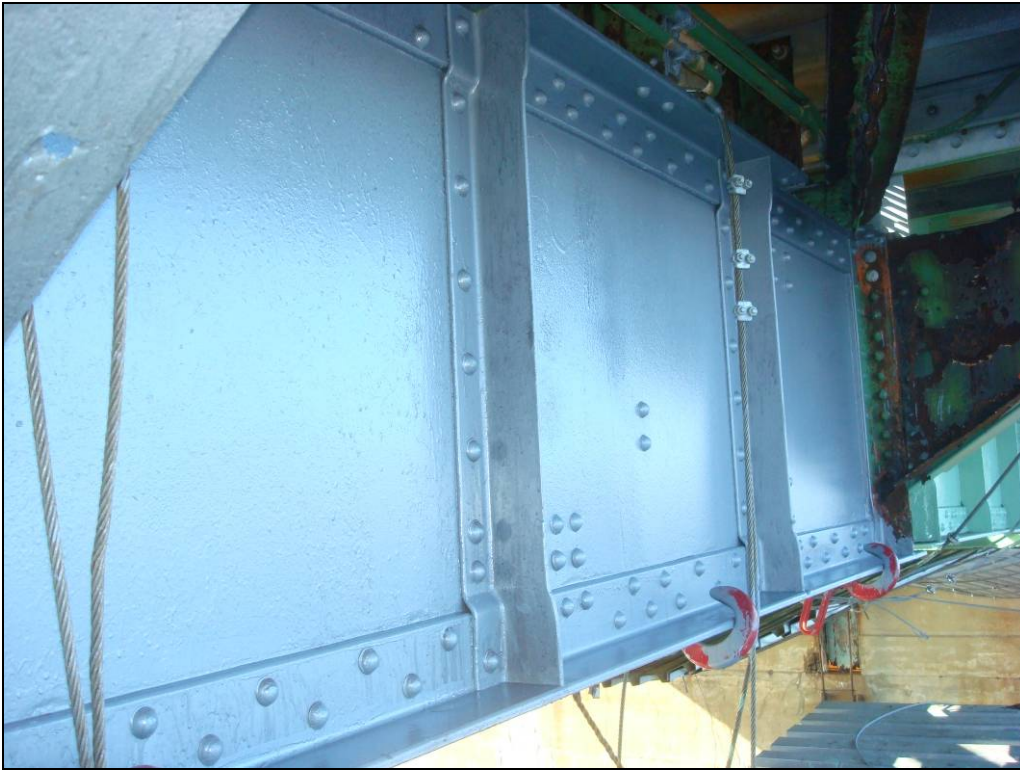


Photo 34: The Southeast girder elevation between the FB1 and FB2 primed with Epoxy Mastic Aluminum.



Photo 35: The Southeast girder under the fascia between the FB1 and FB2 primed with Epoxy Mastic Aluminum.



Photo 36: The Southwest girder elevation between the FB1 and FB2 primed with Epoxy Mastic Aluminum.

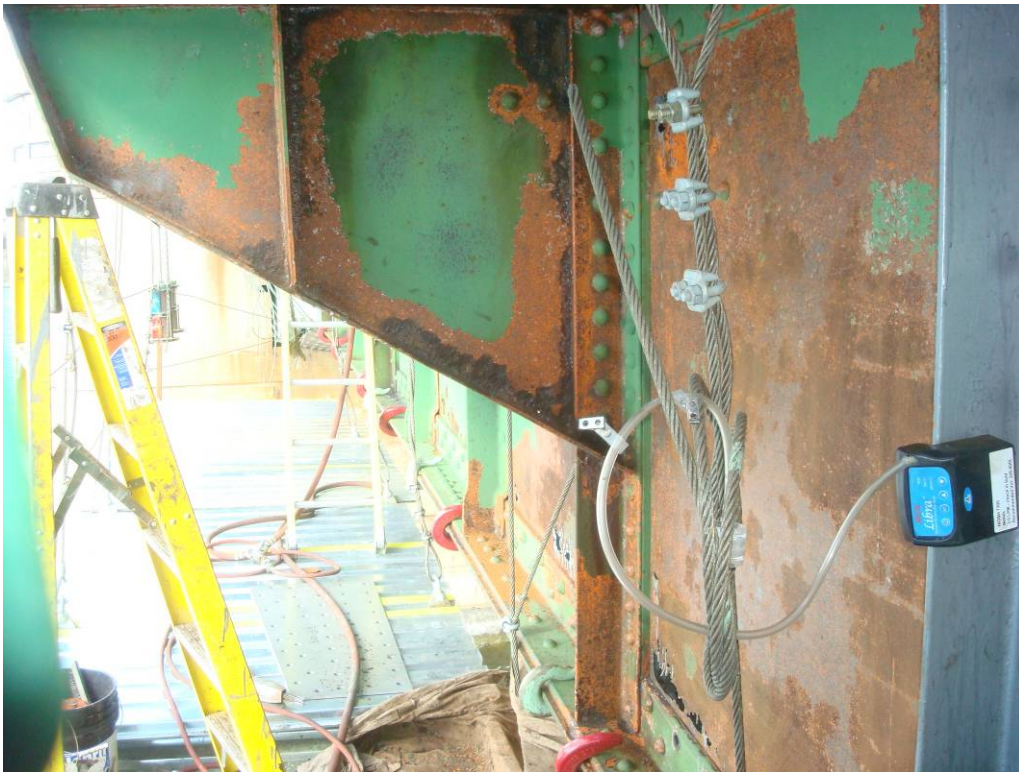


Photo 37: The Southwest girder and cantilevered bracket at FB3, looking North, cleaned with hand and power tools.



Photo 38: The Southwest girder and cantilevered bracket at FB3, looking South, cleaned with hand and power tools.



Photo 39: The Southeast girder underside of fascia between the FB3 and FB4 cleaned with hand and power tools looking North.



Photo 40: The Southwest girder cantilevered bracket at FB3 in progress of being primed with Epoxy Mastic Aluminum.



Photo 41: The Southwest girder elevation between the FB3 and FB4 and one girder panel towards FB2 primed with Epoxy Mastic Aluminum.



Photo 42: West girder looking towards FB1 of the South leaf painted with Epoxy Mastic Aluminum primer.



Photo 43: The East face of the Southeast bascule girder looking towards FB5 of the South leaf painted with Epoxy Mastic Aluminum primer.



Photo 44: The south face of FB5 and Counterweight of the South leaf painted with Epoxy Mastic Aluminum primer.



Photo 45: Field drilling of the shim to match the spacing of the existing holes of the toe joint.



Photo 46: Installing the first section of toe joint using the forklift.



Photo 47: Field drilling of the diaphragm to match the existing hole spacing in the toe joint casting.



Photo 48: Installation of toe joint in progress. The top flange of FB1 and the web of diaphragm is being field drilled for the installation of the HS bolts and the fastening of the toe joint.



Photo 49: Diaphragm with field drilled holes in place to match the spacing in the casting of the toe joint.



Photo 50: All but one section of the toe joint yet to be installed. All diaphragms installed except one between the stringer and the west girder.



Photo 51: The ironworkers in progress of field drilling the tie plate that connected the adjacent toe joint diaphragms together.



Photo 52: The ironworkers in progress of laying out the field drilled holes in the tie plate to match the hole spacing of the toe joint casting.



Photo 53: The final section of the toe joint diaphragm and cantilevered deck support installation completed.



Photo 54: The ironworkers in progress of installing the H.S. bolts for the final section of the toe joint



Photo 55: The ironworkers utilizing come-alongs to slide the grating deck into final position.



Photo 56: Welding the main bars of the new grating to the top flange of the stringers in progress.



Photo 57: General Configuration. The toe joint is installed and the grating has been pushed into final position.



Photo 58: The iron workers are in progress of completing miscellaneous bracing connections on the north bascule span.



Photo 59: The iron workers are in progress of performing the final tightening of the connections between the stringer and floorbeam on the north bascule span.



Photo 60: Cover plate installed over the section of mis-aligned holes of stringer connection plates to the diaphragms.



Photo 61: Cover plate installed over the gusset plate which was weld repaired to fix the misaligned holes at the bracing connection.



Photo 62: Cover plate installed over the gusset plate which was weld repaired to fix the misaligned holes at the bracing connection.



Photo 63: The West face of the East girder rack cap plate field welded to the rack stiffener. All four cap plate locations have been welded.

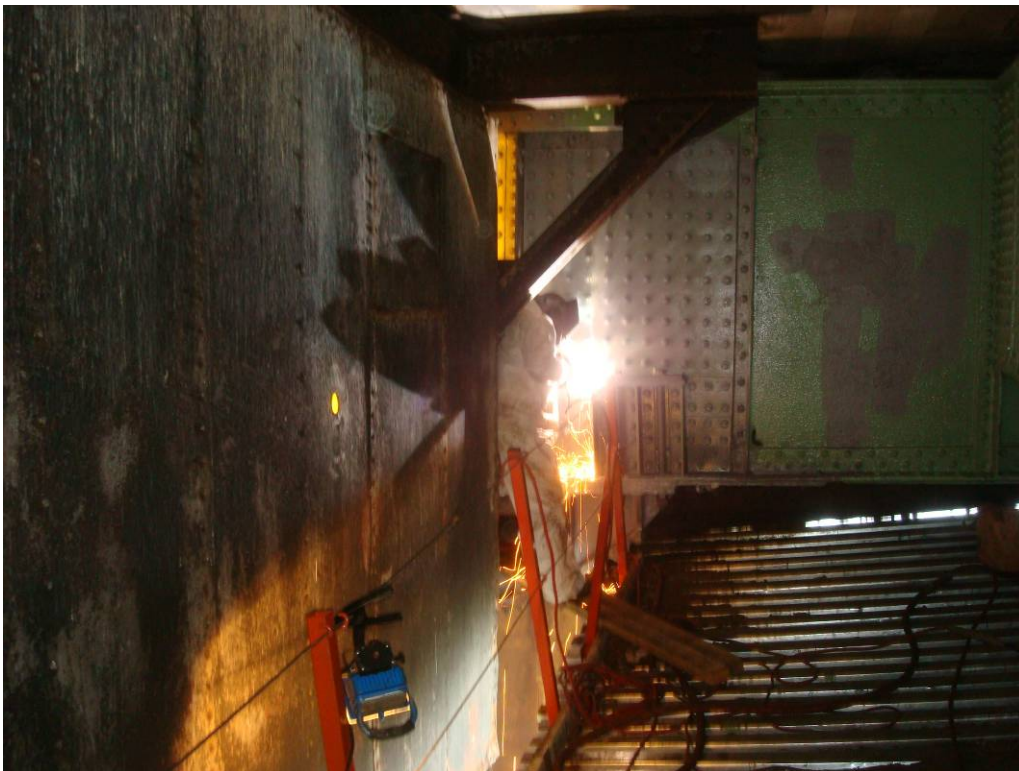


Photo 64: The East face of the West girder rack stiffener. The upper cap plate is being field welded to the rack plate in progress.



Photo 65: The West face of the West girder rack cap plate field welded to the top of the front rack stiffener.

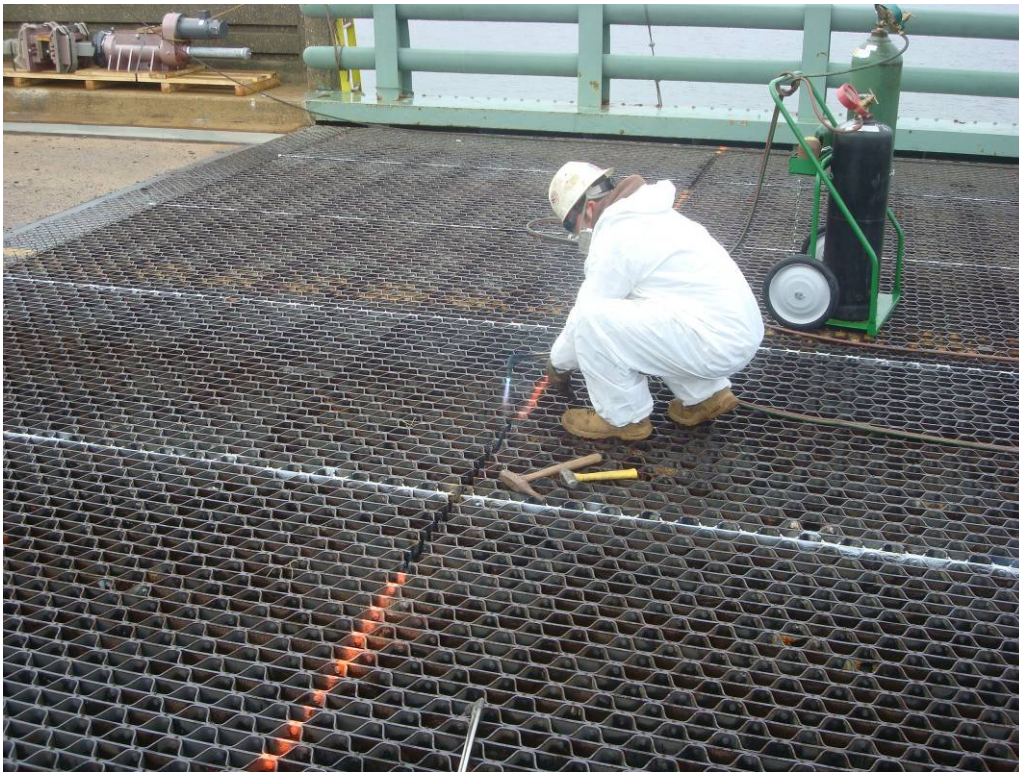


Photo 66: The Demolition of the south leaf has begun with cutting the grating into sections and at the purlins at the stringer connections.



Photo 67: East face of Southwest bascule girder with front rack stiffeners removed.



Photo 68: The Southwest girder (East face of girder) rack stiffener repair. Shims need to be completed.



Photo 69: The Southwest girder rivet replacement between the girder bottom flange and the rack casting. Existing rivets have been replaced with 1" diameter H.S. bolts on the west side.

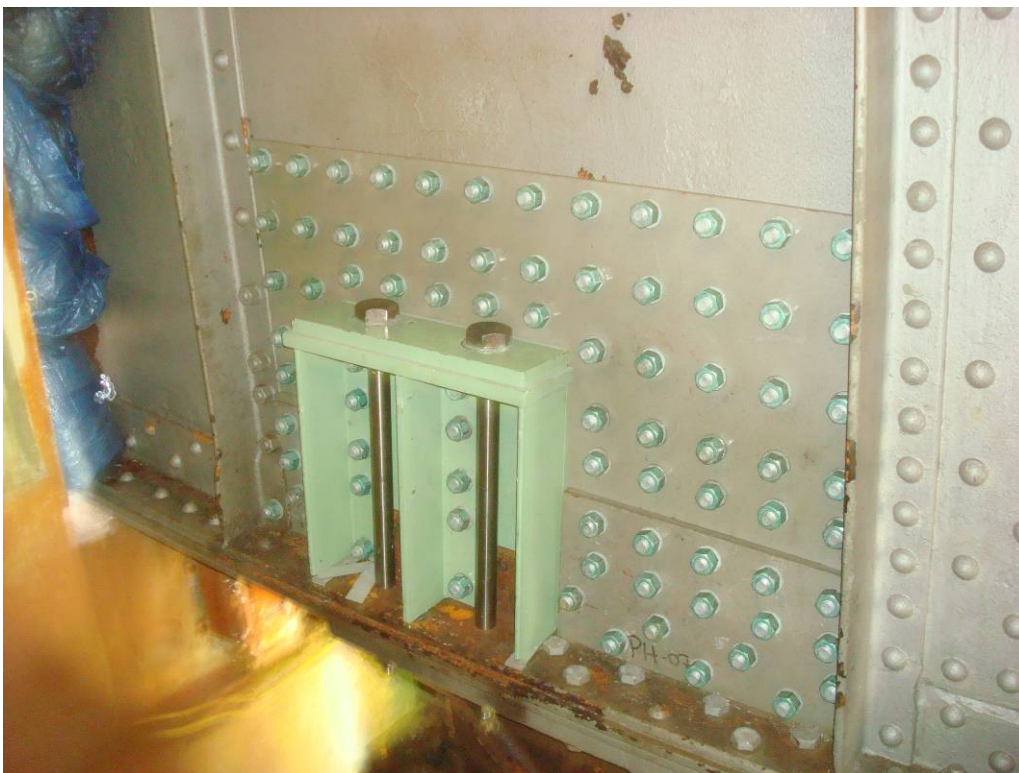


Photo 70: The Southwest girder (West face of girder) rack stiffener repair. Shims need to be completed.



Photo 71: The Southeast girder repairs between the FB1 and FB2 in progress. Field drilling holes in the girder web using the repair plate as template.

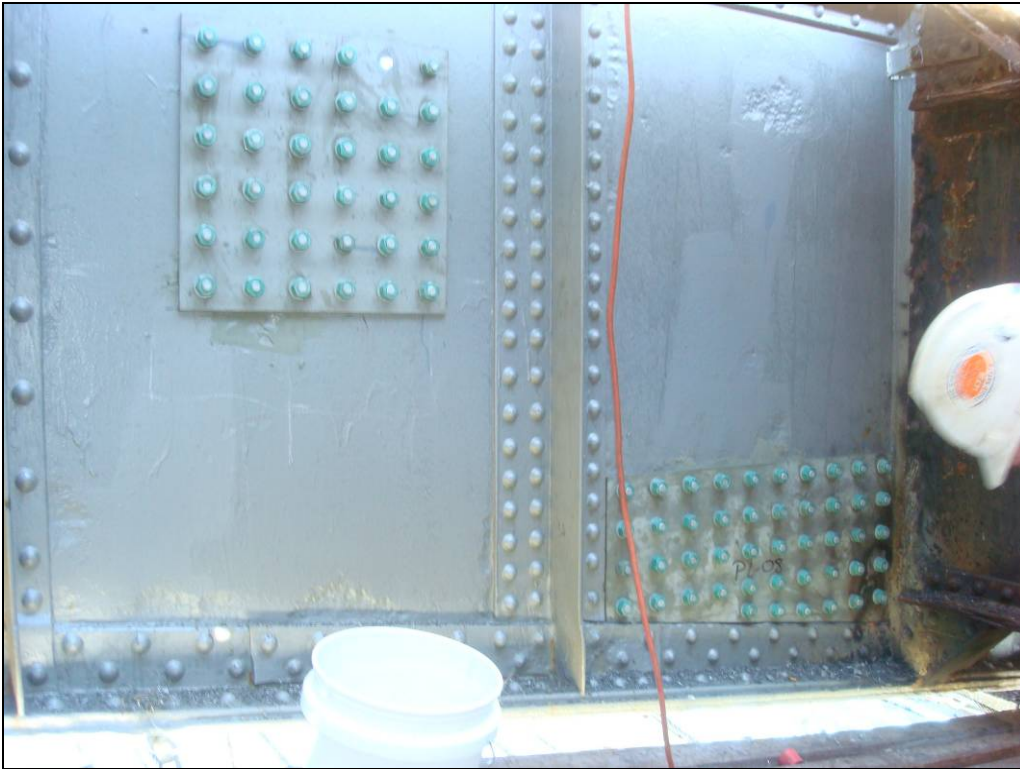


Photo 72: The Southeast girder repairs between the FB1 and FB2 in progress. The bolts still need to be tightened with an air impact wrench.

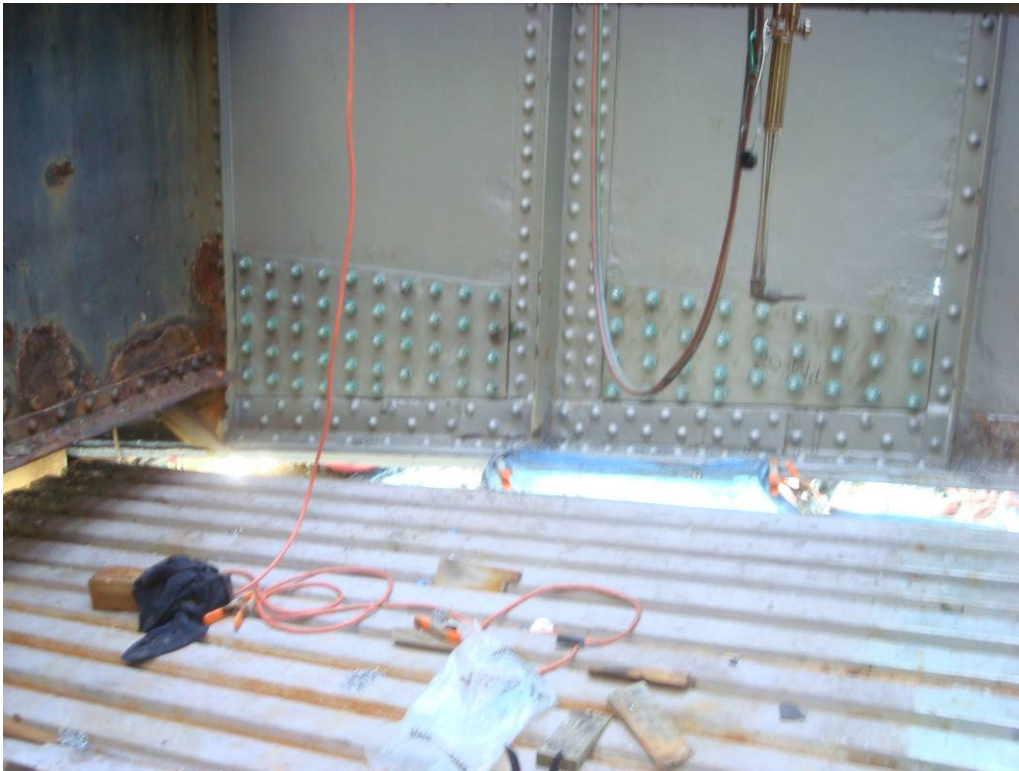


Photo 73: General configuration of the East face of the Southwest girder repairs between FB4 and FB3 installed. H.S. Bolts still need to be tightened with an air impact wrench.



Photo 74: Removal of steel ballast plates in progress.



Photo 75: West counterweight ballast pocket cleaned out.



Photo 76: New lead brick being installed into the west counterweight pocket in progress.



Photo 77: New lead brick in the west counterweight pocket in progress.



Photo 78: The ironworkers installed the west counterweight pocket cover plate.



Photo 79: General configuration of the lead ballast blocks in the Northwest pocket installed.



Photo 80: The temporary tie-down has been removed and the existing vertical stiffener has been re- installed.



Photo 81: The web of the temporary tie down was cut off and the flange of the temporary tie down will remain in place in lieu of leaving unbolted holes in the floorbeam web with the tie down removed.



Photo 82: Removal of rivets at rear south leaf bascule girder in preparation for tie down installation.



Photo 83: Installation of Temporary tie down between the FB5 and the East girder in progress.



Photo 84: Bottom Flange of FB5 of South leaf repair in progress using the new repair plate as a template for field drilling of holes into flange.



Photo 85: Bottom Flange of FB5 of South leaf repair in progress using the new repair plate as a template for field drilling of holes into flange.



Photo 86: Bottom Flange of FB5 of South leaf repair in progress using the new repair plate as a template for field drilling of holes into flange.



Photo 87: Installation of junction box for motor and machinery brake conductors in progress.



Photo 88: Wiring of machinery brake switch panel in progress.



Photo 89: New shut off panel mounted for the span motor on machinery room wall has been wired.



Photo 90: Motor brake installed.



Photo 91: New junction box for the machinery and motor brake tie into the bridge wiring.

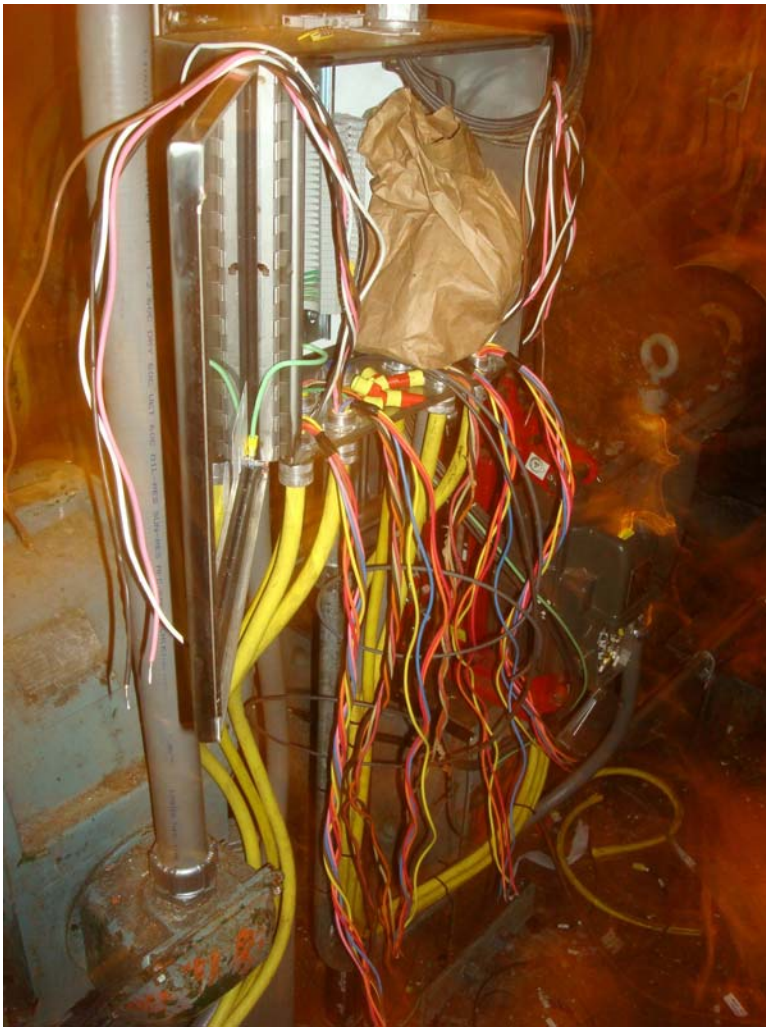


Photo 92: The wiring for the motor and machinery brake and limit switches is in progress.



Photo 93: The wiring for the limit switch for the reverser drive is in progress.



Photo 94: Ongoing electrical work and testing in progress.



Photo 95: Navigation lighting droop cable installed.



Photo 96: Final assembly of the machinery and motor coupler with the installation of the steelflex grid element between the motor and machinery in progress.

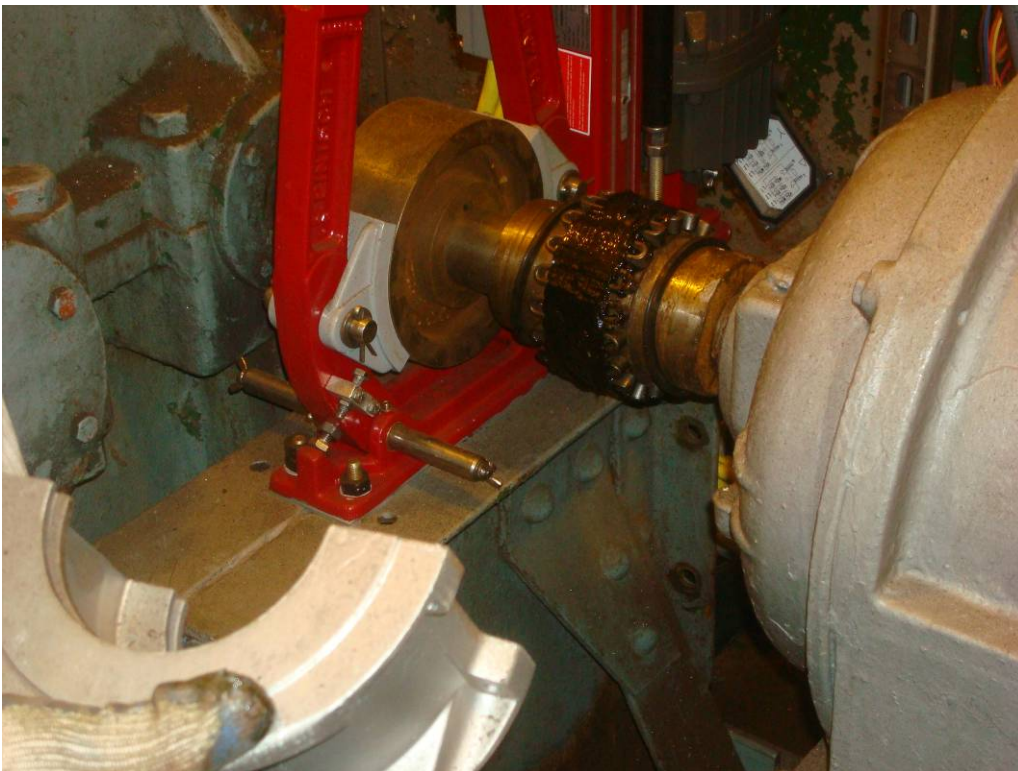


Photo 97. Long Term Grease applied to coupler between the motor and machinery.

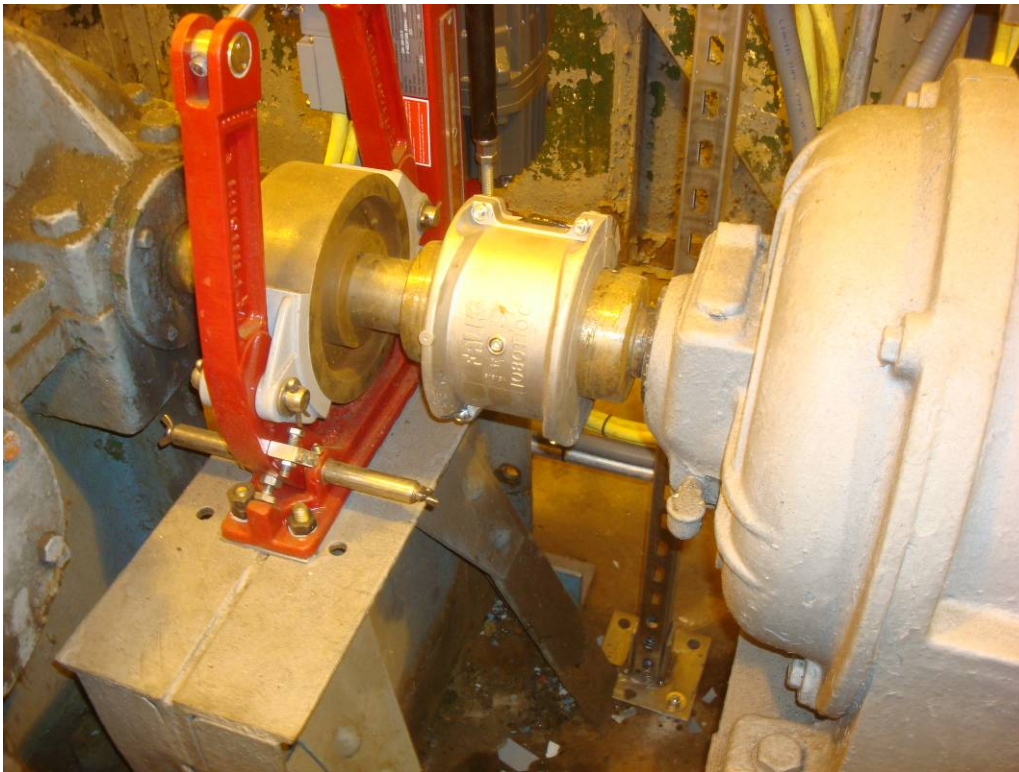


Photo 98. The final assembly of the machinery and motor coupler has been completed with the cover of the coupler installed.



Photo 99: North Leaf opened on Tuesday 2/28/12. Note that the Final section of grating was also installed.