

**Replacement of the 31ST Street, NW
Bridge over C&O Canal
(Bridge No. 3)
DCKA-2018-C-0056
FAP No:2017(037)**



**Construction Management Weekly Report
12/26/2020 – 1/01/2021**

Project Website: www.31stStreetBridge.com

1. EXECUTIVE SUMMARY

Project Description

Work under this contract consists of the replacement of the 31st Street Bridge over the C&O Canal in Georgetown. The existing two-span bridge superstructure is to be removed in its entirety and replaced by a new single-span, steel, multi-girder superstructure on new independent abutments constructed behind the existing canal walls. The proposed bridge will have a reinforced concrete deck. The existing canal walls are to remain in place with minor wall maintenance. The existing historic pier is to be removed, salvaged, rehabilitated, and reset in its original location, but will no longer support the bridge. Minor approach roadway reconstruction and sidewalk improvements are also part of the project. Service via existing utilities that currently hang on the bridge must be maintained throughout construction.

Proposed work will include but not be limited to:

- Installation of a temporary pedestrian bridge prior to construction in order to maintain pedestrian access across the C&O Canal at all times
- Installation of temporary structures required to laterally support existing Canal Walls
- Removal, salvage and restoration of the historic pier
- Installation of temporary utility supports during construction, protection of existing utilities, and coordination with utility companies for relocation prior to bridge replacement
- Removal, relocation and installation of various utility components, manholes, and related items
- Installation and removal of a portable dam system within the canal
- Removal, storage and reinstallation of existing streetlight poles and signposts
- Removal, storage and reinstallation of the stone monument, wooden signposts, and Canal Wall elements
- Removal and disposal of the existing bridge superstructure in its entirety, and construction of new abutments and superstructure
- Construction of
 - Granite curb
 - Brick gutter
 - PCC base with brick/tile sidewalk
 - Wheelchair/bicycle ramps
- Installation of pedestrian railing

2. STATUS OF CONSTRUCTION / PROGRESS SUMMARY

Progress Summary:

- Fort Myer Construction Company (FMCC) implemented the project detour on June 11, 2019 and set up the construction zone perimeter.
- The pedestrian bridge was delivered, assembled, and set on the abutments; and opened for use on June 28, 2019.
- NPS continues to maintain water flow in the canal, and the cofferdams are working properly.
- The pier footing investigation was completed, and the pier assessment/restoration plan has been submitted for review and comment.
- The water main relocation and installation of the canal wall support is completed.
- Demolition of existing bridge deck has been completed.
- Demolition of Verizon wood conduits (by Verizon) was completed.
- Removal of the beams located in the middle of Verizon conduits completed.
- Micropile drilling on the south and north sides of the bridge was completed on December 21, 2019.
- Placement of reinforcement and grout started on December 9, 2019 at the north side of the bridge and was completed on December 11, 2019.
- Cleaning and priming of the historic pier completed; UT and MT investigations were completed, and results distributed; pier assessment meeting held in the field January 21, 2020
- Pier assessment/rehabilitation report provided February 3, 2020 and distributed to stakeholders for review and comment. AECOM comments submitted February 14, 2020
- Pier footing meeting held on February 24, 2020; pier rehab meeting held on February 24, 2020. Both meetings to discuss path forward for all items related to the pier. Revised Pier Report (Rev 1) submitted on March 5, 2020 for review and comment. DDOT suspended stakeholder review on March 12, 2020; DDOT recommended using the spreadsheet to compile the defects and repairs in a tabular format, for clarity and tracking purposes. DDOT sent comments on March 17, 2020 and FMCC to resubmit accordingly. AECOM comments on Rev 2 submitted May 13, 2020. NPS comments on Rev 2 submitted May 22, 2020. FMCC submitted Submittal 67 Rev 3 on June 5, 2020 for review.
- Pepco outage completed March 17, 2020; next outage set for June 17, 2020.
- Verizon asbestos removal completed w/e March 20, 2020; split-duct work completed April 8, 2020; FMCC to complete Verizon work under DCI.
- Placement of concrete at north abutment complete; Placement of concrete at south abutment complete.
- Beam placement complete w/e of May 22, 2020.
- Placement of forms and rebar for bridge deck complete.
- Pepco confirmed outage was completed June 30, 2020. No more expected.
- Deck concrete pour completed on Thursday, July 30, 2020.
- Sidewalk concrete pour on bridge complete August 20, 2020.
- Removed deck/sidewalk forms from bridge August 29, 2020.
- Removal of temporary utility supports completed September 4, 2020.
- Diaphragm connections completed September 4, 2020.
- Repointing of canal wall (south side) completed; repointing of canal wall (north side) ongoing
- Installation of bridge railing ongoing; construction of SW wall ongoing

- Installation of granite curbs and inlets along sidewalk
- Construction of ADA ramps complete
- Utility Trench repair with PCC Pavement complete
- Placement of concrete for approach slabs complete (north side)
- Placement of roadway asphalt complete at approach roadways
- Pier rehabilitation complete (stitching completed; epoxy hole repairs completed; painting completed December 4, 2020)
- Placement of brick sidewalk on bridge completed
- Placement of brick sidewalk on approaches underway
- Re-adjustment of base plate at SE corner completed
- Removal of temporary pedestrian bridge completed
- Cleaning of brick sidewalks underway
- Superstructure and substructure punch list underway
- Final installation of dolphins underway
- Removal of coffer dam and bypass pipe underway; grading of canal bed underway

Ongoing Issues / Items: None at this time

New Issues / Items: None at this time

Action Items: None at this time

New Action Items: None at this time.

3. MEETINGS / PROJECT COORDINATION

- Progress Meeting #37 will be held on Wednesday January 6, 2021 at 10AM via ZOOM Telecon
- Superstructure punch list meeting was held on Tuesday, December 29, 2020 at 10AM on-site

4. DAILY WORK PERFORMED

Field construction activities performed during this period:

Saturday – 12/26/2020

- The 31st Street detour remained in effect and FMCC continued providing local and business traffic access at M and K Streets.
- The contractor did not work on this date.

Sunday – 12/27/2020

- The 31st Street detour remained in effect and FMCC continued providing local and business traffic access at M and K Streets.
- The contractor did not work on this date.

Monday – 12/28/2020

- The 31st Street detour remained in effect and FMCC continued providing local and business traffic access at M and K Streets. West sidewalk remained opened for pedestrian traffic.
- The contractor continued the removal of the downstream cofferdam and continued picking up the sandbags.
- The contractor continued the installation of wire rope for the dolphins (Timber Finders) around the pier.
- The contractor conducted general site cleaning and continued pumping water from the upstream section of the canal.

Tuesday – 12/29/2020

- The 31st Street detour remained in effect and FMCC continued providing local and business traffic access at M and K Streets. West sidewalk remained opened for pedestrian traffic.
- The contractor continued the removal of the downstream cofferdam. The contractor completed picking up the sandbags and started the removal of rip rap from the pipe outlet located at the east side of the cofferdam.
- The contractor continued the installation of wire rope for the dolphins (Timber Finders) around the pier.
- The contractor continued pumping water from the upstream section of the canal. Per NPS direction, the contractor cut the top of dolphins and maintained 12-foot height.
- The contractor completed the installation of railing post at the southeast corner of the bridge.
- DDOT/ Volkert / FMCC conducted the superstructure walk-through at 10:00 AM.

Wednesday – 12/30/2020

- The 31st Street detour remained in effect and FMCC continued providing local and business traffic access at M and K Streets. West sidewalk remained opened for pedestrian traffic.
- The contractor removed the draining pipe connecting the cofferdams and the remaining filter fabric from the downstream cofferdam.
- The contractor dismantled and removed the staircase located inside the canal at the NW side of the bridge.
- The contractor continued the grading work at the bottom of the canal around the pier.
- The contractor continued working on the restoration of the site to its preconstruction condition. The contractor reset the concrete barriers at the boat dock section, placed topsoil in tree boxes and on areas located at the NE & SE corners. The contractor adjusted the stone monument at the NW corner to its preconstruction height and filled the scour hole at the downstream section of the pipe.
- The contractor continued the installation of wire rope for the dolphins (Timber Finders) around the pier. Cutting the top of dolphins continued.
- The contractor continued pumping water from the upstream section of the canal.

Thursday – 12/31/2020

- The 31st Street detour remained in effect and FMCC continued providing local and business traffic access at M and K Streets. West sidewalk remained opened for pedestrian traffic.
- The contractor completed the installation of wire rope for the dolphins (Timber Finders) around the pier. Cutting the top of dolphins and installation of bolts at the bottom of the dolphins completed.
- The contractor conducted general site cleaning.

Friday – 1/01/2021

- The 31st Street detour remained in effect and FMCC continued providing local and business traffic access at M and K Streets.
- NEW YEAR DAY; the contractor did not work on this date

4. PUBLIC OUTREACH

Public Outreach performed during this period:

- Responded to citizen and business inquiries.

5. INSPECTION & MATERIAL TESTS PERFORMED

- Concrete placed for sidewalk base was tested for temperature, slump, air contents and batch to placement time. One set of six cylinders was cast for compressive strength testing.

6. CHANGE ORDERS / TASK ORDER

- Change Order No. 1 submitted to DDOT (Bedrock excavation, Pepco conduit demo, beam removal) March 12, 2020.
- Change Order No. 2 to include micropile VE package under review with DDOT.
- Change Order No. 3 provided 90-day time extension to FMCC.
- Change Order No. 4 provided additional 45-day no-cost time extension to FMCC.
- Change Order No. 5 (previously CO #4) under review with DDOT.
- Change Order No. 6 under review with DDOT.

7. DBE PARTICIPATION SUMMARIES

- No DBE work performed at this time.

8. ACCIDENTS / INCIDENTS

- There were no reported accidents within the project limits this week.

9. PHOTOS OF WORK PERFORMED THIS PERIOD



Removal of Downstream Cofferdam



Network: Dec 28, 2020 at 11:32:54 AM EST

Filter Fabric Removal at Upstream Cofferdam



Network: Dec 28, 2020 at 2:33:09 PM EST

Installation of Wire Rope Around the Dolphins



Network: Dec 29, 2020 at 8:52:35 AM EST

Installation of Wire Rope Around the Dolphins



Network: Dec 29, 2020 at 11:27:03 AM EST

Superstructure Walk-thru



Removal of the 24-inch Conveyance Pipe



Grading the Canal Bed



Network Dec 30, 2020 at 8:22:04 AM EST

Restoring the Concrete Barriers at the Boat Section



Network: Dec 30, 2020 at 1:46:04 PM EST

Grading at the Bottom of the Canal



Cutting the Top of the Dolphins



Restoring the SE Section of Canal Wall



Network: Dec 31, 2020 at 8:58:04 AM EST

Seeding at the NE Section of the Canal Wall



Network: Dec 31, 2020 at 12:14:04 PM EST

Washing the Bridge Deck