

# Appendix I:

## Additional Agency Correspondence

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# United States Department of the Interior

Office of the Secretary  
Office of Environmental Policy and Compliance  
1849 C Street, NW - MS 2629 - MIB  
Washington, D.C. 20240

In Reply Refer to:

April 30, 2020

9043.1  
ER 19/0417

*Electronically Filed*  
[David.Valenstein@dot.gov](mailto:David.Valenstein@dot.gov)

David Valenstein  
Senior Advisor – Major Projects & Credit Programs  
USDOT/FRA Office of Railroad Policy and Development  
55 M Street, SE  
Suite 400  
Washington, DC 20003

Subject: Final Section 4(f) Evaluation for the Long Bridge Project, Arlington, Virginia and Washington, D.C.

Dear Mr. Valenstein:

The U.S. Department of the Interior (Department) has reviewed the Final Section 4(f) Evaluation for the Long Bridge Project (the Project), which is to provide additional long-term railroad capacity and improve reliability of railroad service in the Long Bridge Corridor through a 1.8-mile railroad section between RO Interlocking in Arlington, Virginia, and L'Enfant Interlocking near 10th Street SW in the District of Columbia. The Project also includes a new bike-pedestrian crossing as part of the mitigation for use of Section 4(f)-protected property, which will be located upstream of the new railroad bridge and will provide connectivity over the Potomac River between Long Bridge Park in Arlington, Virginia to the District of Columbia.

The Department understands that the Federal Railroad Administration (FRA), jointly with the District Department of Transportation (DDOT) are the lead agencies that have prepared the Draft Environmental Impact Statement (EIS) and Section 4(f) Evaluation for the Project. The Virginia Department of Rail and Public Transportation (DRPT) is the named Project Sponsor for the future phases of the Long Bridge project.

In a letter dated October 28, 2019, the Department provided comments on the Draft EIS and Draft Section 4(f) Evaluation (see enclosure). The National Park Service (NPS) has been participating as a cooperating agency due to the use of property from the George Washington Memorial Parkway and the National Mall and Memorial Parks, and has been coordinating with FRA, DDOT, and DRPT during the development of the EIS. The Department understands that FRA is in the process of preparing a combined Final EIS / Record of Decision. Our comments

TRANSMITTED ELECTRONICALLY – NO HARDCOPY TO FOLLOW

are solely on the Final Section 4(f) Evaluation which was submitted to the Department for review on April 23, 2020.

As stated in the Draft EIS and Draft Section 4(f) Evaluation, both build alternatives have approximately the same layout (i.e., they would cover approximately the same surface area during and after construction). The Final Section 4(f) Evaluation determined that of the two build alternatives being considered, Alternative A best meets the purpose and need of the Project by providing two additional tracks across the Potomac River with fewer impacts to historic sites and environmental resources than Action Alternative B, and would cost substantially less than Action Alternative B. Therefore, Action Alternative A would cause the least overall harm in light of Section 4(f)'s preservation purpose and there is no prudent and feasible alternative to the use of Section 4(f) properties for this Project. FRA, DDOT, and DRPT have committed to minimize the harm to these resources associated with the Preferred Alternative by implementing the measures of the Section 106 Programmatic Agreement and the DRPT and NPS Mitigation Agreement.

Alternative A will require the permanent use of up to 0.5 acres and the temporary use of up to 3.8 acres of the George Washington Memorial Parkway. This includes affecting approximately 600 linear feet of the Mount Vernon Trail for the construction of the new bridge over the trail. Access to the Mount Vernon trail and the George Washington Memorial Parkway will remain open to visitors throughout construction. Alternative A will also require the permanent use of up to 1.9 acres and the temporary use of up to 3.4 acres of East and West Potomac Park; and permanent use of up to 0.53 acres.

In the Draft Section 4(f) Evaluation, FRA determined that the use of Hancock Park for construction access and staging was *de minimis*. At that time, the NPS did not concur with this finding, and determined that it was a temporary use under Section 4(f) as a third of this very small park would be unavailable for use by the public for a duration of three years. FRA has reduced their use of Hancock Park down to .09 acres for construction access in a location that already serves as access and has now determined that it meets the criteria for a temporary occupancy exception and would not constitute a Section 4(f) use.

Upon review of the Final Section 4(f), the Department concurs with the findings of the least harm analysis and FRA's determination. We agree that the Preferred Alternative will have impacts to Section 4(f) resources and have determined that most of these impacts will be mitigated through the implementation of a new bicycle-pedestrian crossing and through measures stipulated in the Section 106 Programmatic Agreement and the Mitigation Agreement between the DRPT and the NPS. The Preferred Alternative would also result in a new bicycle-pedestrian connection with Long Bridge Park, the Mount Vernon Trail, Ohio Drive SW, the National Mall and Memorial Parks, and East Potomac Park.

The Department understands the need to provide additional long-term railroad capacity and improve the overall reliability of railroad service and the rationale for expanded capacity within this corridor. However, the NPS is concerned with the potential impacts to NPS resources and looks forward to the continued collaboration with FRA, DDOT, and DRPT during design and project implementation to mitigate and minimize impacts to NPS resources.

If you have any questions or need additional information, please contact Tammy Stidham, Deputy Associate Area Director, Lands and Planning at 1100 Ohio Drive SW, Washington DC, 20242. Ms. Stidham can be reached by phone at (202) 619-7474 or email at [Tammy\\_Stidham@nps.gov](mailto:Tammy_Stidham@nps.gov).

We appreciate the opportunity to provide these comments.

Sincerely,

*Michaela Noble*

Michaela E. Noble  
Director, Office of Environmental Policy  
and Compliance

Enclosure:

cc: Anna Chamberlin, AICP, Long Bridge Project  
Tammy Stidham, NPS



# United States Department of the Interior

OFFICE OF THE SECRETARY  
Office of Environmental Policy and Compliance  
Custom House, Room 244  
200 Chestnut Street  
Philadelphia, Pennsylvania 19106-2904

IN REPLY REFER TO:

October 28, 2019

9043.1  
ER 19/0417

Anna Chamberlin, AICP  
Long Bridge Project  
55 M Street, SE  
Suite 400  
Washington, DC 20003-3515

Dear Ms. Chamberlin:

The Department of the Interior (Department) has reviewed the Draft Environmental Impact Statement (DEIS) and draft Section 4(f) Evaluation for the Long Bridge Project (the Project), which connects Arlington, Virginia to Washington D.C. The Department submits the following comments in accordance with provisions of the National Transportation Act of 1966, as amended 23 U.S.C. 138 and 49 U.S.C. 303, referred to as Section 4(f), and the applicable regulations at 23 C.F.R. 774, and other regulations and guidance.

The Department understands that the Federal Railroad Administration (FRA), jointly with the District Department of Transportation (DDOT) are the lead agencies that have prepared the DEIS and Draft Section 4(f) Evaluation for the Project. The Virginia Department of Rail and Public Transportation (DRPT) is the named Project Sponsor for the future phases of the Long Bridge project.

The purpose of the Project is to provide additional long-term railroad capacity and to improve the reliability of railroad service through the Long Bridge Corridor, a 1.8-mile railroad corridor between RO Interlocking in Arlington, Virginia, and L'Enfant Interlocking near 10th Street SW in the District of Columbia. The location of this proposal is in the Capitol Hill neighborhood of the District of Columbia (District) beneath eastbound Virginia Avenue SE from 2<sup>nd</sup> Street SE to 9<sup>th</sup> Street SE; Virginia Avenue Park between 9<sup>th</sup> and 11<sup>th</sup> Streets; and the 11<sup>th</sup> Street Bridge right-of-way. Construction is anticipated to start 2022 and last for approximately four to five years. The proposed new infrastructure includes a new two-track railroad bridge and a bicycle/pedestrian bridge over the Potomac River that will transect both the National Mall and Memorial Parks (NAMA) and the George Washington Memorial Parkway (GWMP). Because of the Project's impacts to these National Park Service (NPS) administrative units, the NPS is

serving as a cooperating agency on this project and has been coordinating with FRA, DDOT, and DPRT during the development of the DEIS.

As part of this DEIS and draft Section 4(f) Evaluation process, a number of different preliminary concepts were developed. Following an evaluation of these concepts several failed to meet the Project's overall purpose and need, and were dismissed from further analysis. The two action alternatives evaluated in the DEIS include:

- **Alternative A** - Action Alternative A would construct a new two-track railroad bridge over the Potomac River and the GWMP between the existing railroad bridge and the Metrorail Bridge. It would expand the Long Bridge Corridor from two to four tracks, including all necessary infrastructure improvements from RO Interlocking in Arlington, Virginia through LE Interlocking in the District. This alternative would retain the existing Long Bridge over the Potomac River as well as the railroad bridge over the GWMP.
- **Alternative B** - Similar to Action Alternative A, Action Alternative B would construct a new two-track railroad bridge over the Potomac River and the GWMP between the existing railroad bridge and the Metrorail Bridge. However, Action Alternative B would also replace the existing Long Bridge and the railroad bridge over the GWMP rather than keeping those bridges. In addition to replacing the bridge over the GWMP and Long Bridge, Action Alternative B would expand the Long Bridge Corridor from two to four tracks in the same manner as Action Alternative A.

As stated in the DEIS and draft Section 4(f) Evaluation, both build alternatives have approximately the same layout (i.e., they would cover approximately the same surface area during and after construction). Of the two build alternatives being considered, Alternative A was identified as being a preferred alternative in the DEIS and draft Section 4(f) Evaluation. Under both alternatives, a bicycle-pedestrian bridge with connections to Long Bridge Park, the Mount Vernon Trail, and Ohio Drive SW located between the Metrorail Bridge and a new upstream railroad bridge is being considered as potential mitigation for impacts to properties protected under Section 4(f).

After review of the DEIS and draft Section 4(f) Evaluation, the Department understands that, due to the current location, this project will result in significant permanent and temporary impacts of the following Section 4(f) resources:

- **The GWMP/Mount Vernon Memorial Highway** - Congress established the GWMP in May 1930, as one of the nation's premiere parkways, in the 1930s to commemorate the first President of the United States, provide scenic drives and connectivity to historic sites along the Potomac River, and create an aesthetic entryway into the District. The 25-mile parkway, administered by the NPS, runs along the Potomac River from the Mount Vernon Estate to Great Falls, Virginia. The Mount Vernon Memorial Highway (MVMH) is the original 15.2-mile segment of the GWMP commemorating the birth of George Washington.

- **Mount Vernon Trail (MVT)** – The MVT is an 18-mile paved trail for pedestrians and bicyclists that runs between George Washington's Mount Vernon Estate and Theodore Roosevelt Island and parallels the GWMP for its entire length. The MVT is a recreational resource within the park, however, it is not currently a contributing resource to the GWMP or MVMH Historic Districts.
  
- **East Potomac Park (EPP)** - East Potomac Park is one of the largest recreational spaces in the Washington, DC, core, occupying most of Hains Point between the Washington Channel and the Potomac River. It is almost 330 acres in size and extends southeast of West Potomac Park. East Potomac Park has been primarily developed for active recreation uses. The park currently contains a golf course with food service, one of the country's oldest miniature golf courses, a swimming pool, and a tennis facility. The area's roads are well used by bicyclists. Visitor services also include picnic facilities, restrooms, and a playground.
  
- **Hancock Park** - approximately 1.11-acre located between the existing railroad tracks, northeast of the LE Interlocking, west of 7<sup>th</sup> Street SW, south of Maryland Avenue SW, and east of the 9<sup>th</sup> Street SW Expressway. HP contains open space, walkways, landscaping and screening, and café tables and chairs.

Alternative A would require the permanent use of up to .5 acres for the new bridge structure along the western side of the exiting Long Bridge and approximately .62 acres from the new bicycle/pedestrian bridge. The new railroad bridge would pass over the MVT and GWMP roadway and would permanently occupy a portion of the vegetated area between the trail and the roadway, with 15-20 foot high retaining walls. Construction of the new bridge would result in removal of approximately 70 trees, including three larger trees with greater than 34-inch trunk diameters. Some of these trees date to the 1932 planting plan of the GWMP and were intended to visually screen the railroad bridge from the motorway. Temporary use of up to 3.8 acres of NPS-administered land from the GWMP and MVMH for construction access and staging.

Alternative A would require the permanent use of up to 2.75 acres for retaining walls, abutments, and bridges through the park and approximately .31 acres from the new bicycle/pedestrian from NPS property from EPP and WPP. The new railroad bridge would pass over East Ohio Drive and the two new tracks would require widening of the existing railroad embankment, affecting approximately 2.4 acres of the park. The widened railroad right-of-way would also permanently occupy a portion of NPS Parking Lot C, causing the permanent loss of up to 50 parking spaces. Construction staging areas and widening of the embankment would require removal of approximately 170 trees, including eight larger trees with greater than 34-inch trunk diameters and up to four Japanese cherry blossom plantings. The majority of the trees removed (150) would be small saplings under 12-inch trunk diameters that screen the railroad tracks. Temporary use of up to 5.7 acres of NPS property from EPP and WPP for construction access and staging.

FRA has determined that the use of Hancock Park is *de minimis*. The temporary use is for construction access and staging. The NPS does not concur with this finding as a third of this very small park will be unavailable for use by the public for a duration of three years. The NPS considered this a temporary use under Section 4(f).

The Department agrees with the statements in both the DEIS and Draft Section 4(f) Evaluation that the Project would result in a determination of “adverse effect” under Section 106 National Historical Preservation Act (Section 106) to GWMP, MVMH, EPP and WPP historic resources. The removal of contributing vegetation, especially mature trees that date to the GWMP’s 1932 planting plan and were intended to screen the railroad bridge from motorists, and the introduction of highly visible major infrastructure would diminish the historic integrity (specifically, the contributing vegetation), and inherent feeling of both the GWMP and MVMH. Action Alternative A would have an adverse effect on East and West Potomac Parks Historic District through incorporation of parkland and removal of up to four contributing Japanese cherry blossom plantings, which would diminish the integrity of setting, design, materials, and feeling of the park. Addition of the new bridge would also obstruct views of the existing Long Bridge from the north, diminishing the visual integrity of the contributing structure and resulting in an adverse effect. Due to a determination of adverse effect, NPS has been participating as a consulting party in the development of a Programmatic Agreement which is being prepared in consultation with the DC State Historic Preservation Office and other consulting parties.

With regard to the draft Section 4(f), the Department understands no feasible and prudent alternatives that avoid the use of Section 4(f) properties were identified and that the action alternatives evaluated have somewhat equal impacts to Section 4(f) properties. The draft Section 4(f) Evaluation does not make a determination regarding prudent and feasible, as defined in 23 CFR 774.17. Document states that FRA will complete the Final Section 4(f) Evaluation at the same time as the FEIS for the Project. It will include a determination of the impacts to Section 4(f) properties resulting from the Preferred Alternative and documentation of measures to minimize harm. As a result, the Department is not likely to concur at this time. The Department will require more information regarding alternatives, mitigation and minimization as well as FRA determination of prudent and feasible. Implementation of the bicycle/pedestrian bridge is an element that would be a benefit to the NPS properties being impacted and would enhance access and connectivity to and through NPS properties.

Finally, the Department understands the need to provide additional long-term railroad capacity and improve the overall reliability of railroad services and understands the rationale for expanded capacity to occur within this corridor. However, we also understand the major significant impacts the project will have on NPS property, visitor use, access, and experience, impacts to additional Section 4(f) resources and that the disruption during construction will last between four and five years. The Department remains concerned with significant impacts to NPS resources and looks forward to the continued collaboration with FRA, DDOT, and DPRT during this long-term planning process to continue to mitigate and minimize these impacts.

If you have any questions or concerns regarding these comments, please contact Tammy Stidham, Deputy Associate Area Director - Lands and Planning at 1100 Ohio Drive SW, Washington DC, 20242. Ms. Stidham can be reached by phone at (202) 619-7474 or email [Tammy\\_Stidham@nps.gov](mailto:Tammy_Stidham@nps.gov).

The Department appreciates the opportunity to provide these comments.

Sincerely,

A handwritten signature in black ink, appearing to read "Lindy Nelson", with a long horizontal flourish extending to the right.

Lindy Nelson  
Regional Environmental Officer

cc: Tammy Stidham, NPS



June 2, 2020

Mr. David Valenstein  
Senior Advisor – Major Projects & Credit Programs  
Office of Railroad Policy and Development  
U.S. Department of Transportation  
Federal Railroad Administration  
1200 New Jersey Avenue, SE  
Washington, DC 20590

RE: Long Bridge Project Section 4(f) Comments Regarding Hancock Park and the Plan of the City of Washington (L'Enfant Plan)

Dear Mr. Valenstein:

Thank you for consulting with the District of Columbia State Historic Preservation Officer (DC SHPO) regarding the Section 4(f) Evaluation for the Long Bridge Project. As you are aware, Hancock Park (aka Reservation 113) is a contributing element of the National Register of Historic Places-listed Plan of the City of Washington (aka L'Enfant Plan).

However, we concur with the Federal Railroad Administration's determination that temporary use of .09 acres of this park for construction access qualifies as a temporary occupancy for purposes of Section 4(f) of the U.S. Department of Transportation Act because the area to be used already serves as access; the use will be limited to three years; changes to the park will be minimal and will result in no permanent alterations; and because the park will be restored to existing conditions or better at the end of the three year period. We also understand that the Department of the Interior/National Park Service concurs with this finding.

If you should have any questions or comments regarding this matter, please contact me at [andrew.lewis@dc.gov](mailto:andrew.lewis@dc.gov) or 202-442-8841. Otherwise, we look forward to continued consultation under Section 106 of the National Historic Preservation Act, as appropriate.

Sincerely,

A handwritten signature in blue ink that reads "Andrew Lewis".

Andrew Lewis  
Senior Historic Preservation Officer  
DC State Historic Preservation Office

20-0532 / 17-0051



DEPARTMENT OF PARKS AND RECREATION

2100 Clarendon Boulevard, Suite 414, Arlington, VA 22201  
TEL 703-228-3323 FAX 703-228-3328 TTY 711 parks.arlingtonva.us

July 23, 2020

Marlys A. Osterhues  
Chief, Environment and Project Engineering  
USDOT/FRA Office of Railroad Policy and Development  
1200 New Jersey Avenue, SE  
Washington DC, 20590

**Re:** Long Bridge Project, Section 4(f) Concurrence for Long Bridge Park

Dear Ms. Osterhues,

Arlington County received your letter dated May 6, 2020 requesting Arlington County Department of Parks and Recreation concurrence with the Federal Railroad Administration's (FRA) determination regarding permanent and temporary impacts to Long Bridge Park from the Long Bridge Project (Project) in accordance with Section 4(f) of the United States Department of Transportation of 1966 (Section 4(f)) now codified at 49 USC 303 et seq. and implemented in 23 CFR 774.

Please find attached an amended and signed concurrence clause. This amended concurrence clause states that this concurrence does not constitute a conveyance of any temporary or permanent interest in or access to park lands. Any temporary work or improvements will be subject to future agreement between Arlington County and the appropriate parties. That final conveyance of temporary or permanent interest will be based on final survey, negotiation, and agreement(s) between the County and appropriate parties when detailed information is available upon which to base final agreement(s).

For your convenience I have attached a redlined version of the original concurrence clause included in your May 6, 2020 letter.

Thank you for your attention to this matter. If you have any questions, please feel free to contact Erik Beach, Park Development Division Chief, at (703) 228-3318 or [ebeach@arlingtonva.us](mailto:ebeach@arlingtonva.us)

Respectfully,

A handwritten signature in cursive script that reads "Jane Rudolph".

Jane Rudolph, Director

cc:

Erik Beach, PDD  
Michelle Cowan, CMO  
Stephen MacIsaac, CAO  
Tim O'hora, DES  
Dan Malouff, DES

Attachment: Original Long Bridge Park Concurrence Clause with Redlined Changes

### Concurrence

Arlington County concurs that the proposed incorporation of park land within the Long Bridge Park by the Long Bridge Project would not adversely affect the activities, features, or attributes that make the Long Bridge Project eligible for Section 4(f) protection and therefore, the use of Long Bridge Park would be *de minimis* in accordance with 23 CFR 774.5. Arlington County also agrees that the proposed temporary occupancy of Long Bridge Project associated with construction of the Long Bridge Project meets the requirements for temporary occupancy exception per 23 CFR Part 774. This concurrence does not constitute a conveyance of any temporary or permanent interests in or access to park lands. Further, this concurrence is provided with the understanding that FRA or other appropriate parties will continue to coordinate with the Arlington County Department of Parks and Recreation during project development as specific details are determined and that further consultation will be undertaken with FRA or appropriate parties to ensure prior to granting of any temporary or permanent property interests that harm to the Long Bridge Park by the proposed project has been minimized and the conditions upon which this concurrence is based have not changed.



\_\_\_\_\_  
**Arlington County Signature for Concurrence**

\_\_\_\_7/23/2020\_\_\_\_\_  
**Date**

**Attachment: Original Long Bridge Park Concurrence Clause with Redlined Changes**

**Concurrence**

Arlington County concurs that the proposed incorporation of park land within the Long Bridge Park by the Long Bridge Project would not adversely affect the activities, features, or attributes that make the Long Bridge Project eligible for Section 4(f) protection and therefore, the use of Long Bridge Park would be *de minimis* in accordance with 23 CFR 774.5. Arlington County also agrees that the proposed temporary occupancy of Long Bridge Project associated with construction of the Long Bridge Project meets the requirements for temporary occupancy exception per 23 CFR Part 774. **This concurrence does not constitute a conveyance of any temporary or permanent interests in or access to park lands. Further, this concurrence is provided with the understanding that FRA or other appropriate parties will continue to coordinate with the Arlington County Department of Parks and Recreation during project development as specific details are determined and that further consultation will be undertaken with FRA or appropriate parties to ensure prior to granting of any temporary or permanent property interests that harm to the Long Bridge Park by the proposed project has been minimized and the conditions upon which this concurrence is based have not changed.**

\_\_\_\_\_  
**Arlington County Signature for Concurrence**

\_\_\_\_\_  
**Date**



**UNITED STATES DEPARTMENT OF COMMERCE**  
**National Oceanic and Atmospheric Administration**  
NATIONAL MARINE FISHERIES SERVICE  
GREATER ATLANTIC REGIONAL FISHERIES OFFICE  
55 Great Republic Drive  
Gloucester, MA 01930-2276

OCT 24 2019

Marlys Osterhues  
Chief, Environment and Project Engineering Division  
U.S. Department of Transportation  
Federal Railroad Administration  
Office of Railroad Policy and Development  
1200 New Jersey Avenue, SE  
Washington, DC 20590

Re: Long Bridge Project

Dear Ms. Osterhues:

We have completed our consultation under section 7 of the Endangered Species Act (ESA) in response to your letter dated September 3, 2019, regarding the above-referenced proposed project. We reviewed your (the action agency) consultation request document and related materials. Based on our knowledge and your materials, we concur with your conclusion that the proposed action is not likely to adversely affect any ESA-listed species under our jurisdiction.

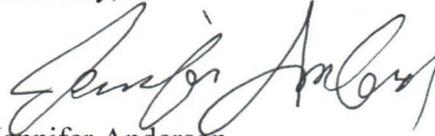
We would like to offer the following clarifications to complement your incoming request for consultation. With respect to the presence of Atlantic sturgeon in the action area, we would like to clarify that tagged Atlantic sturgeon have been detected in the Potomac River as far north as the Woodrow Wilson Bridge as recently as 2017 (B. King, DC DOEE; pers. comm); therefore, we do assume that they may be present. In your analysis of impacts from noise, we would like to clarify that if Atlantic sturgeon are impacted by the noise levels, they will have enough room to be able to move away from the sound source as the waterbody is sufficiently wide (2,200 ft) where work will occur. Any small behavioral movements will not be able to be meaningfully measured or detected, and are insignificant. Finally, in your analysis of increased vessel traffic, we would like to clarify that the effects are insignificant because the increased risk of interaction will be too small to be meaningfully measured, detected, or evaluated. These clarifications do not alter your analysis or conclusion and thus no further consultation pursuant to section 7 of the ESA is required.

Reinitiation of consultation is required and shall be requested by the Federal agency of by the Service, where discretionary Federal involvement or control over the action has been retained or is authorized by law and: (a) If new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered in the consultation; (b) If the identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in this consultation or; (c) If a new species is listed or critical habitat designated that may be affected by the identified action.



No take is anticipated or exempted. Should you have any questions about this correspondence please contact Brian Hopper at (410) 267-5649 or [brian.d.hopper@noaa.gov](mailto:brian.d.hopper@noaa.gov)). For questions related to Essential Fish Habitat, please contact David O'Brien, with our Habitat Conservation Division at (804) 684-7828 or [david.l.obrien@noaa.gov](mailto:david.l.obrien@noaa.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Jennifer Anderson". The signature is fluid and cursive, with a large initial "J" and "A".

Jennifer Anderson  
Assistant Regional Administrator  
for Protected Resources

EC: O'Brien, F/NER; Valenstein, FRA

ECO: GARFO-2019-03210

File Code: H:\Section 7 Team\Section 7\Non-Fisheries\Federal Railroad\Long Bridge Project



U.S. Department  
of Transportation

**Federal Railroad  
Administration**

1200 New Jersey Avenue, SE  
Washington, DC 20590

September 3, 2019

Jennifer Anderson  
NOAA'S National Marine Fisheries Service  
Protected Resources Division  
55 Great Republic Drive  
Gloucester, MA 01930

**Re: ESA Concurrence for Atlantic and Shortnose Sturgeon  
Long Bridge Project  
Arlington County, VA; District of Columbia**

Dear Ms. Anderson:

This letter updates the Federal Railroad Administration's (FRA's) previous request for Endangered Species Act (ESA) concurrence from the National Marine Fisheries Service (NMFS) for the Long Bridge Project (the Project) in Arlington County, Virginia and the District of Columbia (**Attachment 1 – Vicinity Map**). The NMFS's comments on the FRA's original request dated July 9, 2019 are addressed in this letter. The effects analysis is expanded and the critical habitat is clarified in accordance with information provided by the NMFS. Also, additional project-specific details are provided.

The biological assessment was completed based on information contained in your January 2, 2018 project review email (**Attachment 2**) referencing the potential presence of endangered Atlantic sturgeon (*Acipenser oxyrinchus oxyrinchus*) and endangered shortnose sturgeon (*A. brevirostrum*) within the Action Area. Shortnose sturgeon were protected in accordance with Section 1(c) of the Endangered Species Preservation Act of October 15, 1966 (80 Stat. 926; 16 U.S.C. 668aa(c)). Five distinct population segments (DPS) of Atlantic sturgeon were listed by Final Rule dated April 6, 2012 under 16 U.S.C. 1531-1543 (50 CFR 223 and 224). We have made the determination that the proposed activity may affect, but is not likely to adversely affect, the five DPS of Atlantic or shortnose sturgeon. We have also made the determination that the action may affect, but not adversely affect, Atlantic sturgeon critical habitat established by Final Rule dated September 18, 2017 (50 CFR 226). Our supporting analysis is provided below.

### **Proposed Project**

The Preferred Alternative for the Project consists of constructing a new two-track railroad bridge across the Potomac River, upstream of the existing Long Bridge. The existing two-track bridge is owned, operated, and maintained by CSX Transportation (CSXT). The existing bridge would be retained and remain in use. The two bridges combined would provide four-track capacity across the river. The existing

bridge serves CSXT freight trains, as well as passenger trains for Virginia Railway Express (VRE) and Amtrak. The bridge is composed of 22 approach spans with a double-span swing span over the channel. The total length of the bridge is 2,529 feet between abutments.

The proposed bridge would be essentially identical to the existing bridge in size and type. The upstream bridge would run parallel to the existing Long Bridge and the existing WMATA Yellow Line Bridge, between the two existing structures. Over the navigation channels, the proposed bridge would be a fixed span, with no ability to move or open for marine traffic. This fixed span condition would be similar to the adjacent bridges. The new bridge would also mimic the existing bridge in the placement of 22 in-water support piers that would be in line with the piers of the existing railroad bridge.

To mitigate for potential project-related impacts to properties under Section 4(f) of the United States Department of Transportation Act of 1966, the Federal Railroad Administration considered bike-pedestrian crossing options to connect Long Bridge Park, the Mount Vernon Trail, and East Potomac Park. A standalone bike-pedestrian bridge running parallel and just upstream of the new railroad bridge is proposed. This new bike-pedestrian bridge would also have 22 piers in line with the railroad bridge piers.

The attached Structures Study Report (**Attachment 3**) and Conceptual Engineering Plans (**Attachment 4**) provide additional details.

### **Project Purpose**

The purpose of the proposed project is to provide additional long-term railroad capacity and to improve the reliability of railroad service through the Long Bridge Corridor. Currently, there is insufficient capacity, resiliency, and redundancy to accommodate the projected demand in future railroad services. The Project is needed to address these issues and to ensure the Long Bridge Corridor continues to serve as a critical link connecting the local, regional, and national transportation network.

### **Project Schedule**

The project setup date is scheduled for April 4, 2022. Construction would proceed shortly after awarding of the contract. It is anticipated that the in-water construction would take two (2) years and overall project completion would take five (5) years. Construction for the new bike-pedestrian bridge would begin immediately following completion of the railroad construction and would take an additional two (2) years, with the majority of construction being in-water. The total combined duration for the railroad construction and bike-pedestrian bridge construction would be seven (7) years.

### **Applicable Time of Year Restrictions**

No specific time-of-year restrictions on in-stream construction work to avoid potential impacts to anadromous fish species, including sturgeon, were identified during coordination with the appropriate regulatory agencies. However, the Protected Resources Division of the National Oceanic and Atmospheric Administration (NOAA) Fisheries, Greater Atlantic Regional Fisheries Office indicated in an email dated January 2, 2019 that if the project will result in habitat modifications or temporarily render the Potomac River unsuitable for sturgeon, time of year restrictions for in-water work should be implemented. While no specific time of year restriction dates were provided in the NOAA Fisheries correspondence, the most likely period when sturgeon would pass through the Action Area would be during spawning runs of these species. Additional coordination with the District Department of Energy

and Environment (DOEE) and NMFS will occur in later phases of design to confirm potential construction restrictions.

### **Description of the Action Area**

The Action Area is defined as “all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action” (50 CFR 402.02). The National Oceanic and Atmospheric Administration (NOAA) Fisheries *Section 7 Program Technical Guidance* (NOAA 2016) provides technical assistance for determining the project Action Area. For this project, the Action Area includes approximately 2,000 feet upstream and downstream to address the potential for scour and sediment deposition to sturgeon habitat (**Attachment 5**). The Action Area also captures vessel traffic to ferry workers and supplies to and from the work site, as well as spud barges to be used during new bridge construction. These limits also cover the removal of excavated bottom sediments from cofferdams and drilled shafts during bridge construction. All removed sediments would be taken to an approved upland disposal site. The Action Area also extends approximately 500 feet around the upland limits of the project (**Attachment 5**).

### **Habitat within the Action Area**

The navigation channel is approximately 11 feet in depth at the shallowest point and reaches depths of up to 23 feet (**Attachment 6** - Figure 2.1 in Appendix D of the Long Bridge Project EIS). The bottom substrate grades up from the channel to both shorelines where water depths are approximately three feet. Submerged aquatic vegetation (SAV) beds are also present within the Action Area in Roaches Run and two SAV beds are present in the Potomac River. Tidal wetland habitat is sparse within the Action Area. Small areas of tidal emergent, shrub-scrub, and forested wetlands were mapped in the southern portion of the Action Area.

No existing data on the benthic macroinvertebrate community within the Action Area were available. The nearest monitoring site is in the Potomac River approximately 7.4 miles downstream of the Action Area. This tidal station was sampled annually for the last 10 years and was rated as Degraded or Severely Degraded (Llanso et al. 2015). It is likely that the Action Area supports a benthic macroinvertebrate community and opportunistic feeding and foraging by sturgeon may take place in the area. It is also likely that the existing bridge piers support a small macroinvertebrate community.

Water chemistry information indicate that dissolved oxygen (DO) remains generally above 5 mg/L, water temperatures are below 30°C, and salinity ranges from 0 to 0.5 parts per thousand (DOEE 2016). These fall within designated Critical Habitat for Atlantic sturgeon.

### **NMFS Listed Species in the Action Area**

#### Shortnose Sturgeon

Based on habitat conditions, including water depths, substrates, and salinities within the Action Area, immature and adult shortnose sturgeon may be present during most months of the year. However, within the freshwater tidal conditions present in the Project Action Area, it is most likely that reproductive adults would be present during winter and on spring spawning runs. Shortnose sturgeon typically spawn within channel habitats with firm bottom substrates (e.g., gravel, rubble, boulders) at the farthest upstream location to which they have access (NMFS 1998). Therefore, spawning may occur within rocky substrate below Little Falls upstream of the Action Area, requiring reproductive adults to pass through the Action

Area to access suitable spawning habitat. Overwintering sturgeon typically occur within deeper river channels within freshwater tidal rivers or near the freshwater/saltwater interface (Dadswell 1979, O'Herron et al. 1993, Bain 1997, Kynard et al. 2009). As noted above, the Action Area lies within the freshwater tidal portion of the Potomac River, and the navigation channel within the river is up to 23 feet deep, providing suitable overwintering habitat for shortnose sturgeon. Mud substrate foraging habitat for shortnose sturgeon also exists within the Action Area. Shortnose sturgeon are considered to be benthic omnivores, feeding on insects, crustaceans, and mollusks (NMFS 1998). Therefore, it is possible that shortnose sturgeon of all ages could be present within suitable foraging habitat within the Action Area during much of the year.

In all life-history phases, shortnose sturgeon in the Chesapeake Bay/Delaware River populations occur at least part of the year in freshwater reaches or the freshwater/saltwater interface of tidal rivers (Dadswell et al. 1984, Kynard 1997, NMFS 1998, Brundage & O'Herron 2009). However, data collected between 1996 and 2012, as part of a sturgeon tagging program initiated by the Maryland Fishery Resources Office (MFRO) and U.S. Fish and Wildlife Service (USFWS), included adult shortnose sturgeon captures in the more saline lower Chesapeake Bay and mouth of the Potomac River. Within the Potomac River, two telemetry-tagged adult female shortnose sturgeon, tracked between 2005 and 2007, remained primarily within a freshwater/saltwater reach of the river for foraging and winter habitat (Kynard et al. 2009). Recently, few captures of shortnose sturgeon have occurred within the Potomac River. In a Potomac River shortnose sturgeon netting study initiated in 2004 by the NPS, USGS, and the USFWS, one adult female shortnose sturgeon was captured and fitted with a radio transmitter in 2005 just above Indian Head, MD, off of Craney Island (Kynard et al. 2006). On April 10, 2006, it was tracked to Chain Bridge below Little Falls, having passed through the Action Area (Breece 2006). Other shortnose sturgeon were radio tagged and tracked during the project, but none were recorded within or near the Action Area. Therefore, even though suitable habitat exists within the Action Area for foraging, overwintering, and migration, evidence suggests that shortnose sturgeon would primarily be present during winter and early spring.

#### Atlantic Sturgeon

The Chesapeake Bay DPS includes all anadromous Atlantic sturgeon that are spawned in the watersheds that drain into the Chesapeake Bay and into coastal waters from the Delaware - Maryland border on Fenwick Island to Cape Henry, VA; Susquehanna, Potomac, James, York, Rappahannock, and Nottoway Rivers (ASSRT 2007). However, adult and sub adult individuals from any of the five DPSs may be present within the action area. The most likely life stages of Atlantic sturgeon to be present within the project Action Area would be reproductive adults migrating through the area to reach suitable spawning habitat at Little Falls and possibly early juvenile fish migrating between spawning areas and the freshwater/saltwater interface in the lower Potomac River. However, subadult Atlantic sturgeon could possibly be present within the Action Area as well.

Pre-spawning adults begin migrations in April in the Chesapeake Bay (Smith 1985, Smith & Clugston 1997). Therefore, reproductive adults would most likely be moving through the Action Area within the deeper navigation channel in April and May. Following spawning, adults would move back downriver to overwintering areas. In winter, Atlantic sturgeon typically occur in deeper waters in the offshore marine environment (NMFS 2007). Numerous captures of adult wild Atlantic sturgeon have occurred within the Potomac River (Mangold 2007, Mangold personal communication). However, no captures of Atlantic Sturgeon have occurred upstream of Indian Head, which is more than 20 river miles downstream from the Long Bridge Study Area (USFWS 2013). Only seven hatchery-reared Atlantic sturgeon were caught

within the Potomac River, all downriver of Cobb Island except for one capture off Colonial Beach and one near the mouth of Mattawoman Creek (Mangold 2007). Atlantic sturgeon are bottom feeders, consuming a wide variety of benthic prey. Prey items reported in the diet of Atlantic sturgeon include crustaceans, mollusks, amphipods, polychaete and oligochaete worms, insect larva, fish, and gastropods (NMFS 2007, Guilbard et al. 2007). Foraging habitat of juvenile and subadult Atlantic sturgeon is typically within the freshwater/saltwater interface of tidal rivers (NMFS 2007). So, while foraging habitat occurs within the Action Area, adults would only potentially be using it during migrations to and from potential spawning habitat upstream of the Action Area and early juvenile sturgeon moving out of the freshwater tidal reach into the upper Bay estuary.

On August 17, 2017, NOAA Fisheries designated critical habitat for the five listed distinct population segments (DPSs) of Atlantic sturgeon found in U.S. waters (Gulf of Maine, New York Bight, and Chesapeake Bay DPSs: 81 FR 35701; Carolina and South Atlantic DPSs: 81 FR 36078). The action proposed for this project would occur in an area designated as critical habitat for the Atlantic sturgeon Chesapeake Bay DPS.

The critical habitat rules identified four essential physical and biological features necessary for the conservation of the species. The term “physical or biological features” is defined as the features that support the life-history needs of the species, including, but not limited to, water characteristics, soil type, geological features, sites, prey, vegetation, symbiotic species or other features. The four essential physical and biological features are:

1. Hard bottom substrate (e.g., rock, cobble, gravel, limestone, boulder, etc.) in low salinity waters (i.e., 0.0 to 0.5 parts per thousand range) for settlement of fertilized eggs, refuge, growth, and development of early life stages;
2. Aquatic habitat with a gradual downstream salinity gradient of 0.5 to 30 parts per thousand and soft substrate (e.g., sand, mud) downstream of spawning sites for juvenile foraging and physiological development;
3. Water of appropriate depth and absent physical barriers to passage (e.g., locks, dams, reservoirs, gear, etc.) between the river mouth and spawning sites necessary to support: (1) Unimpeded movement of adults to and from spawning sites; (2) seasonal and physiologically dependent movement of juvenile Atlantic sturgeon to appropriate salinity zones within the river estuary; and (3) staging, resting, or holding of subadults or spawning condition adults. Water depths in main river channels must also be deep enough (e.g.,  $\geq 1.2$  m) to ensure continuous flow in the main channel at all times when any sturgeon life stage would be in the river; and
4. Water, especially in the bottom meter of the water column, with the temperature, salinity, and oxygen values that, combined, support: (1) spawning; (2) annual and interannual adult, subadult, larval, and juvenile survival; and (3) larval, juvenile, and subadult growth, development, and recruitment (e.g., 13°C to 26°C for spawning habitat and no more than 30°C for juvenile rearing habitat, and 6 mg/L dissolved oxygen for juvenile rearing habitat).

Foraging habitat and water quality attributes appear suitable for some life stages of Atlantic sturgeon, and spawning habitat occurs upstream of the Action Area. However, as noted above, Atlantic sturgeon are unlikely to be present within the Action Area based on historic occurrences within the Potomac River.

## Effects Determination

### Habitat Modification

*Direct Effects* - The proposed bridge replacement project would result in the permanent disturbance of bottom sediments for the installation of 22 new bridge piers within the Potomac River. Each finished bridge pier would be approximately 8 feet by 42 feet in size, resulting in a permanent displacement of bottom substrate of approximately 7,392 square feet. The potential bike-pedestrian bridge would also have 22 in-water piers that would be approximately 6 feet in diameter. This would add another approximately 622 square feet of permanent impact to suitable sturgeon foraging habitat. Much of this displaced bottom substrate is suitable foraging habitat for shortnose and Atlantic sturgeon. Therefore, this would represent a worse case impact of approximately 8,014 square feet (0.18 acre) of suitable sturgeon foraging habitat. The Potomac River in this location is over 2,200 feet wide and the Action Area contains over 200 acres of suitable sturgeon foraging habitat. Therefore, the suitable foraging area permanently removed would be approximately 0.09 percent of the total Action Area, which is a relatively small area within the river, and plenty of foraging habitat would still be available to sturgeon. Therefore, the permanent impacts to sturgeon habitat would be localized, too small to be meaningfully measured or detected, and would be considered insignificant.

The project would also involve the temporary installation of finger piers and a spud barge during construction. To install the shafts that would anchor each pier to the river bottom, the area surrounding the pier locations would be dewatered. The construction of each pier would involve installation of sheet piles to create enclosed cofferdams. Because bridge piers would be constructed in dry conditions, the installation of the cofferdams and subsequent removal of sediment within the cofferdam would result in mortality to benthic invertebrates, and potentially fish, as well as temporary habitat loss while dewatered. Temporary habitat loss resulting from the construction would total 31,358 square feet in the Potomac River. The dewatering would also result in a localized loss of prey for sturgeon. Following construction and removal of cofferdams and temporary piers, the bottom substrate would be expected to recover to pre-construction conditions. Therefore, the potential effects to sturgeon habitat would be localized, short term, and discountable.

The Action Area mostly lacks vegetated wetlands, except for three tidal wetlands in the southern portion associated with Roaches Run Waterfowl Sanctuary. SAV beds are also present within the Action Area in Roaches Run and two SAV beds are present in the Potomac River. The SAV beds within the Potomac River total approximately 12 acres. There are no anticipated permanent or temporary impacts to wetlands from the construction. However, permanent and temporary impacts to SAV would occur from the construction of the new bridge. Permanent impacts to SAV totaling 1,750 square feet would occur from the placement of a new pier along the northern shoreline of the Potomac River. Additional temporary impacts to approximately 10,820 square feet of SAV would be required for installation of the finger piers along the northern shoreline of the river just upstream from Long Bridge. Following removal of the finger piers post construction, the substrate would be expected to once again become suitable for SAV colonization. The amount of permanent impact to SAV would be only 0.3 percent relative to the quantity of SAV within the Action Area and, therefore, would be insignificant.

Although there would be permanent loss of some SAV and benthic habitat and organisms from the proposed bridge project, this area (0.2 acre) is small relative to the size of the Action Area within the

Potomac River (>200 acres). Any sturgeon opportunistically foraging in the Action Area would reasonably be able to move to other areas within the same reach of the Potomac River where benthic organisms have not been removed or shaded. Also, once constructed, the 22 new in-water piers to support the new rail line and 22 smaller piers to support the bike-pedestrian bridge would provide aquatic invertebrate attachment sites, generating new foraging habitat for sturgeon. Therefore, effects on the availability of prey resources would be localized, too small to be meaningfully measured or detected, and may even be beneficial. The effects are therefore, insignificant.

*Indirect Effects* – Potential indirect effects to sturgeon habitat could occur from the displacement of sediments upstream or downstream from the immediate construction area. The disturbance of sediments for pile driving activities for bridge piers typically results in total suspended sediment concentrations of approximately 5.0 to 10.0 mg/L above background levels within approximately 300 feet of the pile driving location (FHWA 2012). Therefore, only minor sediment releases would occur during pile driving. Additionally, turbidity curtains would be used around all pile driving activities to further reduce any potential sediment releases from the construction site. Permanent indirect impacts could occur to sturgeon foraging habitat from potential scour around the new bridge piers, though this would likely be very minor and localized. Therefore, the alteration of sturgeon foraging habitat would be localized and insignificant.

In addition to minor permanent and temporary SAV impacts, the new bridge span would result in potential shading impacts to SAV totaling approximately 1,900 square feet. The shading from the additional two-track bridge spans may also reduce the potential spread of adjacent beds. Shading effects of the new bridge may reduce photosynthesis in the area, which forms the basis of benthic food chains, and may reduce the forage base in the shaded area. However, the relative area of effect is again small compared to the overall area of SAV and other foraging habitat in the Action Area. Therefore, the potential effects to sturgeon would be localized and insignificant.

### Suspended Sediment

Pile driving and removal have the potential to re-suspend bottom sediments in the vicinity of the construction activity. Resuspension of sediments can have a range of impacts to fish depending on the species and life stages. Lethal levels of total suspended solids (TSS) vary widely among species; one study, which included a representative of tolerant and sensitive species (white perch (*Morone americana*), spot (*Leiostomus xanthurus*), silversides (Atherinidae), bay anchovies (*Anchoa mitchilli*) and menhaden (*Brevoortia* spp.)) found that the tolerance of adult fish for suspended solids ranged from 580 mg/L to 24,500 mg/L (Sherk et al. 1975; NOAA Fisheries 2003). Common impacts to fishes can be classified as biological/physiological or behavioral. Among the biological/physiological impacts are: abrasion of gill membranes resulting in a reduction in the ability to absorb oxygen, decrease in dissolved oxygen concentrations in the surrounding waters and effects on growth rate. Behavioral responses by fishes to increased suspended sediment concentrations include impairment of feeding, impaired ability to locate predators and reduced breeding activity. Increased TSS can inhibit migratory movements as well. Fish, however, are mobile and generally avoid unsuitable conditions in the environment, such as large increases in suspended sediment and noise (Clarke and Wilber 2000). The effects of habitat avoidance are not expected to have widespread consequences for the ecology of the fish community based on their ability to move from the impacted area.

Burton (1993) indicated that concentrations of suspended solids can reach thousands of milligrams per liter before an acute reaction is observed. Lethal effects were demonstrated between concentrations of 580 mg/L for sensitive species and 700,000 mg/L for more tolerant species. Lethal effects were not observed until suspended sediment concentrations exceeded 750 mg/L, at which point 100 percent mortality was observed for bluefish, Atlantic menhaden and white perch. More tolerant species exhibited 50 percent mortality at concentrations above 2,500 mg/L, including silversides (2,500 mg/L), spot (20,340 mg/L), cunner (28,000 mg/L) and mummichog (39,000 mg/L).

While there are no studies on the effects of resuspended sediments on either the shortnose or Atlantic sturgeon, they are routinely encountered in turbid waters (Dadswell et al. 1984) and as such are thought to be highly tolerant of suspended sediment at the levels that are generated by marine construction activities (NOAA Fisheries 2011a). In fact, sturgeon feed on invertebrates that occur both on and within the bottom substrate, and have evolved to tolerate high concentrations of suspended sediment.

The act of feeding by sturgeon itself may lead to substantial resuspension of sediments. In a study of Atlantic sturgeon feeding patterns in the Bay of Fundy, sturgeon feeding activity has been linked to significant quantities of clay and silt becoming redistributed (Pearson et al. 2007). Within the area studied, these researchers estimated as much as 1,220 m<sup>3</sup> of sediment was resuspended during the six weeks during which peak sturgeon feeding activity occurred. NOAA Fisheries has also concluded that the effect of suspended sediment concentrations in the range of 10 mg/L to 350 mg/L from dredging, pile driving and other construction activities for a marina project in the Haverstraw Bay region would be insignificant to shortnose sturgeon (NOAA Fisheries 2011b). Citing the literature, concentrations of TSS that are expected to show adverse impacts to fish would be 580 mg/L for the most sensitive species, with 1,000 mg/L being more typical.

Currently, there are little data on the effect of turbidity and suspended sediments on the sturgeon. Sedimentation from construction activities is most likely to affect sturgeon by increasing turbidity in the action area and inhibiting normal behaviors such as migration, resting, and foraging. Dissolved oxygen (DO) may be reduced in areas where increased turbidity occurs. Because mobile juveniles, sub adults and adults will be in the action area, temporary effects to DO will not create adverse effects because the fish can move out of zones where increased turbidity is temporarily lowering DO.

To reduce turbidity from potential sediment releases during construction of the new bridge piers, work would be conducted behind cofferdams. This would allow pile driving of the pier supports in the dry avoiding releases of sediment that can occur if pile driving were to occur in-water. Installation of the sheet piles for the cofferdam can create minor sediment releases, but these will be installed using a vibratory hammer, which minimizes the disturbance to the bottom sediments. Likewise, the 22 six-foot diameter steel shafts that will support the bike-pedestrian bridge will be installed in the wet using a vibratory hammer. This will also result in minor sediment releases into the river. The total suspended sediment levels expected for pile driving (5.0 to 10.0 mg/L) are below those shown to have adverse effect on fish (580.0 mg/L for the most sensitive species, with 1,000.0 mg/L more typical; see summary of scientific literature in Burton 1993) and benthic communities (390.0 mg/L (EPA 1986)). Therefore, we expect any sturgeon encountering an area of increased turbidity to either swim through it or around it, as the area is sufficiently wide, without experiencing adverse effects. Also, as noted above, turbidity curtains would be used during this installation to contain any sediment releases. The expected sediment releases from these activities, therefore, are anticipated to be low, localized, and would occur over a short time frame necessary to construct the cofferdams and install the temporary piers. Consequently, the effects on

sturgeon of suspended sediment from the Long Bridge and bike-pedestrian bridge construction would be extremely unlikely and, therefore, discountable.

### Noise

Pile driving can impact fish as a result of pressure waves and sound waves. Pressure waves can kill or seriously injure fish by rupturing their swim bladders. The acoustic effects of pile driving can affect the hearing, swim bladders, and tissue of fish. In addition, pressure and sound waves can cause behavioral effects through displacement of individuals and avoidance from the vicinity of pile driving activities.

The bridge will be composed of 22 approach spans, with substructures comprised of reinforced concrete piers in the river and abutments on shore at the north and south ends of the bridge. To reduce turbidity from potential sediment releases during construction of the new bridge piers, the contractor would perform work behind cofferdams. Installation of the sheet piles for the cofferdam is typically installed using a vibratory hammer, which has lower sound levels than an impact hammer. The cofferdams would allow pile driving of the pier supports in the dry, minimizing the noise impacts caused driving those piles. Construction of the 22 6-foot-diameter steel shafts for the bike-pedestrian bridge piers would be done in the wet. Construction would also involve installing temporary finger piers and a spud barge in the wet. The spud barge would utilize two, 36-inch diameter spuds that would be dropped from a crane to penetrate the bottom and would not necessitate the use of a hammer. The finger piers would be built with three piles per support. The south side of the Action Area would extend approximately 100 feet out and require 18 24-inch diameter steel piles and the north side would extend approximately 300 feet out, requiring 60 24-inch-diameter steel piles. These piles would likely be installed using an impact hammer. The depth of pile driving will be dependent upon the depth of the water and the depth to pile refusal. The duration of driving of each pile would also vary with these variables. To mitigate the noise effects of pile driving, the project would start pile driving with several light taps to allow mobile fish to move away from the area. This soft start technique would involve a low-energy start-up (e.g., hammer operated at 50% capacity) over a period of 15 to 40 minutes to allow fish to leave the area. The use of cushion blocks would also be explored to further reduce noise and pressure wave effects.

Project-specific pile driving information, estimated sound levels, and distances to sturgeon injury and behavioral effects are presented in **Tables 1 and 2**. This information was obtained from the NMFS Greater Atlantic Regional Fisheries Office (GARFO) acoustics tool for proposed 24-inch steel sheets for the cofferdam construction and 24-inch steel piles for the temporary finger piers. For the bike-pedestrian bridge piers, two representative cast in steel shell sizes were used, as the GARFO acoustic tool did not show a 72-inch pipe example. The examples used are for a slightly smaller and larger steel pipe for comparison.

Exposure to underwater noise levels of 206 dBPeak and 150 dBsSEL can result in injury to sturgeon. These noise levels refer to the maximum instantaneous sound pressure in water and the single strike sound exposure level expressed in decibels. These injurious pressure levels are not expected to harm sturgeon during installation of the cofferdams for the main railroad bridge piers because the sheets will be installed using a vibratory hammer. Injurious pressure levels are also not expected during installation of the bike-pedestrian bridge piers or the temporary finger pier piles because of the initial use of the soft start pile driving technique, described above, that should warn sturgeon to move away from this zone before the higher levels are reached during full impact pile driving. Also, if during the drilling of test piles, it is determined that sound or pressure waves greatly exceed acceptable levels, cushion blocks would be used to further reduce potential fish impacts.

**Table 1. Proxy-based estimates for underwater noise.**

Type of Pile	Hammer Type	Estimated Peak Noise Level (dB <sub>Peak</sub> )	Estimated Pressure Level (dB <sub>RMS</sub> )	Estimated Single Strike Sound Exposure Level (dB <sub>sSEL</sub> )
24" AZ Steel Sheet	Vibratory	182	165	165
24" Steel Pipe	Impact	203	189	178
60" CISS Steel Pipe	Cushioned Impact	199	184	174
96" CISS Steel Pipe	Cushioned Impact	209	194	184

**Table 2. Estimated distances to sturgeon injury and behavioral thresholds.**

Type of Pile	Hammer Type	Distance (ft) to 206dB <sub>Peak</sub> (injury)	Distance (ft) to sSEL of 150 dB (surrogate for 187 dB <sub>cSEL</sub> injury)	Distance (ft) to Behavioral Disturbance Threshold (150 dB <sub>RMS</sub> )
24" AZ Steel Sheet	Vibratory	NA	40.0	40.0
24" Steel Pipe	Impact	NA	103.3	140.0
60" CISS Steel Pipe	Cushioned Impact	NA	58.0	78.0
96" CISS Steel Pipe	Cushioned Impact	16.0	78.0	98.0

In addition to the sound exposure criteria related to the energy received from a single pile strike, the potential for injury exists for multiple exposures to noise over a period of time. This cumulative sound exposure is accounted for by the cSEL threshold. It represents the cumulative sound energy over a specific time, such as the length of time to install a pile. When it is not possible to accurately calculate the distance to the 187 dB<sub>cSEL</sub>, the distance to the 150 dB<sub>sSEL</sub> is calculated. This 150 dB<sub>sSEL</sub> is the threshold at which sturgeon would suffer injury from a single strike sound wave exposure. Thus, to avoid injury to sturgeon, the maximum distance must be calculated to where the sound energy is attenuated to 150 dB<sub>sSEL</sub>. For this project, the distance to the 150 dB<sub>sSEL</sub> isopleth ranges from 230 to 339 feet (depending on the pile type). Therefore, to be exposed to potentially injurious levels of noise during installation of the piles, a sturgeon would need to be within 230 to 339 feet of the pile being driven to be exposed to this noise for any prolonged time period. This is extremely unlikely to occur as sturgeon would be expected to modify their behavior and move away from the area upon exposure to underwater noise levels of 150 dB<sub>RMS</sub> (the sound pressure threshold for causing behavioral effects to sturgeon). Given that sturgeon would be exposed to levels of noise that cause behavioral modification (at 295 to 459 ft, depending on the

pile) before being exposed to injurious levels of noise (at 230 to 339 ft), sturgeon would be expected to move away from the sound source and never be exposed to potentially injurious levels of underwater noise. If any sturgeon are within 339 feet of the pile at the time pile driving commences, injury to sturgeon is still not expected to occur. This is because the cSEL injury threshold is cumulative (requiring prolonged exposure to the noise at that level). Sturgeon would be expected to leave the area in a matter of seconds once pile driving commences. The initiation of daily pile driving with a soft start technique referenced above should also give any sturgeon in the area time to move out of the range of any injurious sound waves. Therefore, no injury to sturgeon is anticipated.

As noted above, behavioral effects, such as avoidance or disruption of foraging activities, may occur to sturgeon exposed to noise above 150 dB<sub>RMS</sub>. Noise levels are expected to be below 150 dB<sub>RMS</sub> at distances beyond approximately 295 to 459 feet from the pile being installed (depending on the pile type). Should sturgeon move into the Action Area where the 150 dB<sub>RMS</sub> isopleth extends, as described above, it is likely that sturgeon would modify their behavior to immediately move away from the ensonified area and out of the project Action Area. If any movements away from the ensonified area do occur, it is extremely unlikely that these movements would affect essential sturgeon behaviors (e.g., spawning, foraging, resting, and migration), as the area is not a spawning or overwintering area, and the Potomac River is sufficiently large to allow sturgeon to avoid the ensonified area while continuing to forage and migrate. Given that sturgeon would only need to move short distances to avoid disturbing levels of noise, any effects cannot be meaningfully measured or detected. Therefore, effects are localized and insignificant.

#### Increased Vessel Traffic

During project construction, a small incremental increase in vessel traffic in the Potomac River would occur (i.e., barges, support vessels, etc.). The approximate size and type of vessel (i.e., deep draft, cargo, barge etc.), travel routes, and number of trips is currently unknown. Sturgeon may be injured or killed as a result of being struck by boat hulls or by propellers. The factors relevant to determining the risk to these species from vessel strikes vary, but may be related to the size and speed of the vessels, navigational clearance (i.e., depth of water and draft of the vessel) in the area where the vessel is operating, and the behavior of individuals in the area (e.g., foraging, migrating, overwintering, etc.). There is a posted speed limit within the Potomac River upstream of the Arlington Memorial Bridge of 6 statute miles per hour. This lies upstream of the project Action Area; however, only recreation and a few commercial boats are able to navigate beneath the 18-foot vertical clearance of the existing Long Bridge. Therefore, the majority of vessel traffic within the Action Area is expected to be slow moving, minimizing potential collisions with sturgeon.

We have considered the likelihood that a temporary increase in vessel traffic associated with the in-water construction activities would increase the risk of interactions between listed species and vessels in the Action Area, in addition to the baseline conditions. The use of a barge and tugs would create a small, localized, temporary increase in related vessel traffic. Upon completion of the proposed action, the barge and tug traffic would be replaced by recreational vessel traffic. Given the existing volume of recreational vessel traffic in the immediate area and the total number of vessels operating in the Potomac River, the anticipated increase in traffic associated with this project is too small to be meaningfully measured or detected. Based on this information, we believe the effects of vessel traffic on sturgeon resulting from the in-water construction and disposal activities are localized and insignificant.

### Effects to Proposed Critical Habitat

New bridge piers and bridge abutments would permanently disturb bottom substrate, thus reducing available foraging habitat for adult shortnose or Atlantic sturgeon and disturbing Critical Habitat for Atlantic sturgeon. As noted under Habitat Modification above, 7,392 square feet of bottom substrate would be permanently disturbed by the 22 in-water piers proposed for the new railroad bridge, and 622 square feet would be permanently disturbed by installation of 22 piers for the bike-pedestrian bridge. This would represent 8,014 square feet (0.18 acre) of Atlantic sturgeon Critical Habitat impact as well. This area of permanently removed Critical Habitat foraging area is relatively small in the overall extent of the undisturbed adjacent area of the river (over 200 acres within the Action Area), and sufficient foraging habitat would still be available to sturgeon. Therefore, the permanent impacts to sturgeon and Atlantic sturgeon Critical Habitat would be considered localized and insignificant.

The Potomac River critical habitat unit contains all four of the listed physical features (referred to as physical or biological features (PBF)); however, the action area only contains three PBFs: PBF 2, 3, and 4, as PBF 1 is not present because the salinity level present in the action area exceeds that identified in PBF 1 (0-0.5 ppt).

Once critical habitat is designated, section 7(a)(2) of the ESA requires that a federal action not destroy or adversely modify the critical habitat. We have analyzed the potential impacts of the proposed action on this designated critical habitat, inclusive of the three PBFs present in the Potomac River action area that have been deemed essential to the conservation of the species and which may require special management considerations or protections. For each PBF, we identify those activities that may affect the PBF. For each feature that may be affected by the action, we then determine whether any effects to the feature are adverse, insignificant, discountable, or entirely beneficial. In making this determination, we consider the action's potential to affect how each PBF supports Atlantic sturgeon's conservation needs in the action area. Part of this analysis is consideration of whether the action will have effects on the ability of Atlantic sturgeon to access the feature, temporarily or permanently, and consideration of the effect of the action on the action area's ability to develop the feature over time. We have determined that the effects to these PBFs from the proposed action will be insignificant or discountable for the following reasons.

- PBF 1 –  
The Potomac River portion of the action area is characterized by soft sediments in mesohaline waters; therefore, spawning habitat, with hard bottom habitat and salinities between 0 and 0.5 ppt is not present. Based on this information, there will be no adverse effects to PBF 1.
- PBF 2 –  
The project has the potential to impact soft bottom substrates within transitional salinity zones between the river mouth and spawning sites suitable for juvenile foraging and physiological development; however, these impacts are limited to a maximum area of approximately 0.72 acre from the temporary finger pier and another 0.18 acre of permanent impact from the bridge footprint and the bike-pedestrian bridge (piles and shaded area), which represents approximately 0.45 percent of the action area. This is a very small portion of the action area, with only 0.09 percent (overall 0.18-acre bridge and bike-pedestrian bridge footprint including piles and shaded area) being affected permanently. The temporarily affected portion of the action area would be able to recover over time and would still be able to support juvenile foraging and physiological

development of Atlantic sturgeon after the construction of the bridge. Additionally, due to the expanse of the feature within the action area and the tidal nature of the waterbody, the project does not have the potential to impact salinity gradients. Based on the fact that this area is not known to support aggregating sturgeon, and sturgeon are likely to migrate through and opportunistically forage, the effects of a 0.09 percent permanent loss and 0.36 percent temporary impact to ubiquitous soft-sediment habitat on juvenile foraging or physiological development will be so small that they cannot be meaningfully measured, evaluated, or detected. Therefore, any effects on the value of PBF 2 in the action area to the conservation of the species are insignificant.

- PBF 3 –

The action area will maintain water of appropriate depth and no permanent physical barriers to passage will result from construction activities, nor will any temporary impediments to passage occur (i.e., turbidity, sound, vessel traffic) between the river mouth and spawning sites. Additionally, no shifts in salinity that may represent an impediment to passage, as a result of the project will occur. The action area is located within a tidal portion of the Potomac River with mesohaline waters, thus tidal flux plays a large role in the variability in the system. The construction of a new bridge adjacent to the existing bridge will not permanently alter salinity patterns in the action area.

The Potomac River at the bridge location is less than 0.5 mile in width with the greatest depths reaching up to 23 feet. The bridge itself is a pile supported structure allowing free passage of fish of all applicable life stages through the action area. The installation of a temporary finger pier could occupy approximately 0.36 percent of the river at the bridge site; however, this would not substantially alter velocities in the remaining width of the river and would allow free passage of fish throughout the remaining open portions of the river. Performance standards for the contract will include water clarity criteria and will ensure that underwater noise generated by construction activities will not prevent movements of the Atlantic sturgeon. Additionally, turbidity related to the project is under levels shown to elicit a response in sturgeon, and all vessel traffic will be temporary and does not represent an impediment to passage. Therefore, it is extremely unlikely that the effects of the action will impede the movement of adults to and from spawning sites or interfere with the seasonal and physiologically dependent movement of juvenile Atlantic sturgeon to appropriate salinity zones within the river estuary or impede the staging, resting, or holding of subadults or spawning condition adults in the present or future. Therefore, the effects to the value of PBF 3 to the conservation of the species are discountable.

- PBF 4 –

The project does not have the potential to cause permanent impacts to temperature and dissolved oxygen levels within the action area between the river mouth and potential spawning sites. The action also does not have the potential to impact temperature, salinity and dissolved oxygen levels that would affect annual and inter-annual adult, subadult, larval, and juvenile survival; and larval, juvenile, and subadult growth, development, and recruitment. No permanent impacts to salinity, dissolved oxygen, or temperature are anticipated to result from any aspect of the construction of the bridge, or vessel traffic related to the project. Because in-water activities will only have minor effects on overall depth within the action area, the action will not alter temperature regimes as a result of depth changes. Vessel traffic effects are extremely unlikely.

For DO, the only pathway for the proposed dredging to impact levels is through increased suspended sediments and turbidity. Sediments suspended during pile driving may have minor, temporary, localized effects on DO levels, but we expect sediment to settle out of the water column within several hours before effects would impact the value of the feature for any life stage of Atlantic sturgeon. Because the effects of the action to water quality are sporadic and intermittent, the action will not affect the ability of the feature to develop over time. To summarize, we expect the effects of the action on the value of PBF 4 to the conservation of the species to be too small to be meaningfully measured or detected, and are therefore, insignificant.

Based on the analysis of anticipated effects resulting from the proposed action in conjunction with the proposed avoidance and minimization measures to be employed, it is concluded that the action May Affect - Not Likely to Adversely Affect - the designated critical habitat for the Atlantic sturgeon (*Acipenser oxyrinchus oxyrinchus*) within the action area. Numerous best management practices and avoidance and minimization measures, as discussed previously, will be implemented based on the best available information in order to avoid and minimize effects of the project on the species and its critical habitat. Based on the best available scientific information, it is anticipated that the proposed action would result in discountable and insignificant effects to the Atlantic sturgeon critical habitat and that no destruction or adverse modification to its critical habitat will occur.

### Conclusions

Based on the analysis, we have determined that the construction of the Long Bridge Project may affect, but is not likely to adversely affect shortnose and Atlantic sturgeon and Atlantic sturgeon Critical Habitat. Additional impact minimization techniques will be investigated as the project moves into more detailed design phases, further reducing potential effects on shortnose and Atlantic sturgeon and Atlantic sturgeon Critical Habitat within the Action Area. We certify that we have used the best scientific and commercial data available to complete this analysis. We request your concurrence with this determination.

Sincerely,



Marlys Osterhues  
Chief, Environment and Project Engineering Division  
Office of Railroad Policy and Development

### Attachments:

- Attachment 1 – Vicinity Map
- Attachment 2: Project Review Email
- Attachment 3: Structures Study Report
- Attachment 4: Conceptual Engineering Plans
- Attachment 5: RTE Species Action Area
- Attachment 6: Potomac River Depths and Navigation Channel

cc: Anna Chamberlain, DDOT

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## COMMONWEALTH of VIRGINIA

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September 30, 2019

Mr. David Valenstein  
Senior Advisor for Major Projects and Credit Programs  
Federal Railroad Administration  
1200 New Jersey Avenue SE  
Washington, DC 20590  
Via email: [david.valenstein@dot.gov](mailto:david.valenstein@dot.gov)

RE: Federal Consistency Determination for the Long Bridge Project, U.S. Department of Transportation-Federal Railroad Administration, Arlington County, DEQ 19-094F.

Dear Mr. Valenstein:

The Commonwealth of Virginia has completed its review of the Federal Consistency Determination (FCD) for the above-referenced project. The Department of Environmental Quality (DEQ) is responsible for coordinating Virginia's review of FCDs submitted under the Coastal Zone Management Act and responding to appropriate officials on behalf of the Commonwealth. This letter is in response to the FCD dated July 7, 2019 (received August 8, 2019), submitted by the U.S. Department of Transportation-Federal Railroad Administration. The following agencies participated in this review:

Department of Environmental Quality  
Department of Game and Inland Fisheries  
Department of Conservation and Recreation  
Marine Resources Commission  
Department of Historic Resources  
Department of Health

In addition, Arlington County and the Northern Virginia Regional Commission were invited to comment on the proposal.

## **PROJECT DESCRIPTION**

The Federal Railroad Administration (FRA), District of Columbia Department of Transportation (DDOT) and the Virginia Department of Rail and Public Transportation (DRPT), propose to make improvements to the Long Bridge which crosses the Potomac River between Arlington, Virginia and Washington, D.C. The FRA is the lead federal agency, DDOT is the joint lead agency and DRPT (applicant) will be the Project Sponsor for final design and construction. The proposed project includes two elements:

- 1) the construction of a new railroad bridge with two tracks crossing the Potomac River and
- 2) a multi-use path that will also be bridged across the Potomac River.

Action Alternative A (Preferred Alternative) proposes the addition of a new two-track bridge over the George Washington Memorial Parkway (GWMP) and Potomac River while retaining the existing Long Bridge. The Project Area in Virginia is defined as the approximately 2,500 feet of the corridor between RO Interlocking and the southern shoreline of the Potomac River. The Project would tie into DRPT's proposed four-track crossover alignment at RO Interlocking by adding two new tracks northwest of the existing two tracks that lead to the Long Bridge. The two new tracks would continue north adjacent to Long Bridge Park and then cross over the GWMP on a new, 36-foot wide railroad northwest of the existing railroad bridge. After bridging the GWMP roadway, the new two tracks would be situated on fill over a short section supported by retaining walls before bridging over the Mount Vernon Trail (MVT) and Potomac River.

The southern end of the bike-pedestrian trail would connect to a path at the northern end of the Long Bridge Aquatic Center Project in Long Bridge Park, which is currently under construction and scheduled for completion in 2021. The bike-pedestrian path would then bridge over the GWMP, MVT, and the Potomac River on a separate, 15-foot wide bridge located 25 feet northwest (upstream) from the new railroad bridge. A ramp near the shoreline of the Potomac River would connect the bike-pedestrian bridge to the MVT.

## **PUBLIC PARTICIPATION**

In accordance with Title 15, Code of Federal Regulations (CFR), §930.2, the public was invited to participate in the review of the FCD. Public notice of this proposed action was published in the OEIR Program Newsletter and on the DEQ website from August 20, 2019 through September 13, 2019. No public comments were received in response to the notice.

## FEDERAL CONSISTENCY UNDER THE COASTAL ZONE MANAGEMENT ACT

Pursuant to the Coastal Zone Management Act of 1972 (CZMA), as amended, and the federal consistency regulations implementing the CZMA (15 CFR, Part 930, Subpart C, Section 930.30 *et seq.*), federal activities located inside or outside of Virginia's designated coastal management area that can have reasonably foreseeable effects on coastal resources or coastal uses must be implemented in a manner consistent, to the maximum extent practicable, with the Virginia Coastal Zone Management (CZM) Program. The Virginia CZM Program consists of a network of programs administered by several agencies. The DEQ coordinates the review of FCDs with agencies administering the [enforceable](#) and [advisory](#) policies of the Program.

## FEDERAL CONSISTENCY CONCURRENCE

Based on our review of the consistency determination and the comments submitted by agencies administering the enforceable policies of the Virginia CZM Program, DEQ concurs that the proposal is consistent to the maximum extent practicable with the Program provided all applicable permits and approvals are obtained as described below. If, prior to implementation, the proposed activities should change significantly and any of the enforceable policies of the Virginia CZM Program would be affected, pursuant to 15 CFR, Part 930, Subpart C, §930.46(a), FRA must submit supplemental information to DEQ for review and approval. However, other state approvals which may apply to this project are not included in this consistency concurrence. Therefore, the applicant must ensure that this project is constructed and operated in accordance with all applicable federal, state and local laws and regulations.

## FEDERAL CONSISTENCY ANALYSIS

According to information in the FCD, the proposed project would have no effect on the following enforceable policies: fisheries management, subaqueous lands management, wetlands management, dunes management, point source pollution control; and shoreline sanitation. The agencies responsible for the administration of the enforceable policies of the Virginia CZM Program generally agree with the determination. FRA must ensure that the proposed action is consistent with the aforementioned policies. In addition, the FRA is encouraged to consider the effects of the proposal on the advisory policies of the Virginia CZM Program, in accordance with 15 CFR §930.39(c) of the CZMA federal consistency regulations. The analysis which follows responds to the discussion of the enforceable policies of the Virginia CZM Program that apply to this project and review comments submitted by agencies that administer the enforceable policies.

**1. Fisheries Management.** According to the FCD (pages 5 and 6), the Project would not encroach into any aquatic habitat within the Commonwealth of Virginia and therefore would not affect aquatic biota. FRA coordination with the National Oceanic and Atmospheric Administration National Marine Fisheries Service (NOAA Fisheries) confirmed that no Essential Fish Habitat exists within the Project Area.

**1(a) Agency Jurisdiction.** The fisheries management enforceable policy is administered by the Virginia Marine Resources Commission (VMRC) (Virginia Code §28.2-200 to §28.2-713) and the Department of Game and Inland Fisheries (DGIF) (Virginia Code §29.1-100 to §29.1-570). In addition, the Virginia Department of Health (VDH) Division of Shellfish Sanitation (DSS) is responsible for protecting the health of the consumers of molluscan shellfish and crustacea by ensuring that shellfish growing waters are properly classified for harvesting, and that molluscan shellfish and crustacea processing facilities meet sanitation standards.

**1(b) Agency Findings.**

***(i) Virginia Marine Resources Commission***

VMRC finds that there are no fisheries or shellfish resources under its jurisdiction in close proximity to the project area. Therefore, no authorization is required from VMRC for potential project effects to fishery resources. Should the proposed project change, a new review by VMRC may be required.

***(ii) Department of Game and Inland Fisheries***

DGIF notes that the Potomac River has been designated a Confirmed Anadromous Fish Use Area. In addition, the federal-listed Endangered Atlantic sturgeon is known from the Potomac River.

***(iii) Virginia Department of Health***

VDH-DSS did not indicate that the project would impact shellfish waters under its jurisdiction.

**1(c) Recommendation.** DGIF recommends coordination with NOAA Fisheries Service and Maryland Department of Natural Resources regarding potential impacts upon the Potomac River and the species it supports.

**1(d) Conclusion.** The project is consistent to the maximum extent practicable with the fisheries management enforceable policy of the Virginia CZM Program, provided adherence to erosion and sediment controls.

For additional information regarding these comments, contact VMRC, Mark Eversole at (757) 247-8028 or [mark.eversole@mrc.virginia.gov](mailto:mark.eversole@mrc.virginia.gov), DGIF, Amy Ewing at (804) 367-2211 or [amy.ewing@dgif.virginia.gov](mailto:amy.ewing@dgif.virginia.gov), and/or VDH-DSS, Adam Wood at (804) 864-7479 or [adam.wood@vdh.virginia.gov](mailto:adam.wood@vdh.virginia.gov).

**2. Subaqueous Lands Management.** According to the FCD (page 6), the Project would not affect subaqueous lands within the Commonwealth of Virginia. The Potomac

River at the Project Area is within the District of Columbia, and none of the subaqueous river bottom falls within the Commonwealth of Virginia.

**2(a) Agency Jurisdiction.** The management program for subaqueous lands establishes conditions for granting or denying permits to use state-owned bottomlands based on considerations of potential effects on marine and fisheries resources, tidal wetlands, adjacent or nearby properties, anticipated public and private benefits, and water quality standards established by the Department of Environmental Quality. The program is administered by the Virginia Marine Resources Commission (Virginia Code §28.2-1200 to §28.2-1213).

**2(b) Agency Findings.** VMRC concurs that no impacts are expected to state-owned submerged lands. Should the proposed project change, a new review by VMRC may be required.

**2(c) Conclusion.** The proposed action is consistent to the maximum extent practicable with the subaqueous lands management enforceable policy of the Virginia CZM Program.

For additional information on the above comments, contact VMRC, Mark Eversole at (757) 247-8028 or [mark.eversole@mrc.virginia.gov](mailto:mark.eversole@mrc.virginia.gov).

**3. Wetlands Management.** According to the FCD (page 6), wetlands and other waters of the U.S. within the study area were delineated and flagged in the field. The delineated boundaries were field reviewed and approved by the U.S. Army Corps of Engineers (Corps). The FCD concludes that no wetland impacts would result from the construction of the Project.

**3(a) Agency Jurisdiction.** The wetlands management enforceable policy is administered by the Virginia Marine Resources Commission (tidal wetlands) (Virginia Code §28.2-1301 through 28.2-1320) and the Department of Environmental Quality through the Virginia Water Protection Permit program (tidal and non-tidal wetlands) (Virginia Code §62.1-44.15:20 and Water Quality Certification pursuant to Section 401 of the Clean Water Act).

**3(b) Agency Findings.**

*(i) Virginia Marine Resources Commission*

VMRC finds that the project will result in impacts to adjacent tidal wetlands in the project area. However, as proposed, VMRC has no objection to the consistency findings provided by the applicant.

***(ii) Department of Environmental Quality***

The Virginia Water Protection (VWP) Permit program at the DEQ Northern Regional Office (NRO) did not indicate that the project would impact wetlands under its jurisdiction.

**3(c) Requirements.**

***(i) Virginia Marine Resources Commission***

The project will require a permit from VMRC for the proposed impacts to tidal wetlands under its jurisdiction within the project area. The applicant must submit a Joint Permit Application (JPA) to VMRC for the bridge and path construction before installation.

***(ii) Department of Environmental Quality***

The VWP Permit staff at DEQ-NRO reserves the right to provide comments upon receipt of a JPA requesting authorization to impact state surface waters. DEQ VWP Permit staff will review the JPA in accordance with the VWP permit program regulations and current program guidance.

**3(d) Recommendations.** In general, DEQ recommends that stream and wetland impacts be avoided to the maximum extent practicable. To minimize unavoidable impacts to wetlands and waterways, DEQ recommends the following practices:

- Operate machinery and construction vehicles outside of stream-beds and wetlands; use synthetic mats when in-stream work is unavoidable.
- Preserve the top 12 inches of trench material removed from wetlands for use as wetland seed and root-stock in the excavated area.
- Erosion and sediment controls should be in place prior to clearing and grading, and maintained in good working order to minimize impacts to state waters. The controls should remain in place until the area is stabilized.
- Place heavy equipment, located in temporarily impacted wetland areas, on mats, geotextile fabric, or use other suitable measures to minimize soil disturbance, to the maximum extent practicable.
- Restore all temporarily disturbed wetland areas to pre-construction conditions and plant or seed with appropriate wetlands vegetation in accordance with the cover type (emergent, scrub-shrub, or forested). The applicant should take all appropriate measures to promote revegetation of these areas. Stabilization and restoration efforts should occur immediately after the temporary disturbance of each wetland area instead of waiting until the entire project has been completed.
- Place all materials which are temporarily stockpiled in wetlands, designated for use for the immediate stabilization of wetlands, on mats, geotextile fabric in order to prevent entry in state waters. These materials should be managed in a manner that prevents leachates from entering state waters and must be entirely removed within thirty days following completion of that construction activity. The

disturbed areas should be returned to their original contours, stabilized within thirty days following removal of the stockpile, and restored to the original vegetated state.

- Flag or clearly mark all non-impacted surface waters within the project or right-of-way limits that are within 50 feet of any clearing, grading, or filling activities for the life of the construction activity within that area. The project proponent should notify all contractors that these marked areas are surface waters where no activities are to occur.
- Employ measures to prevent spills of fuels or lubricants into state waters.

**3(e) Conclusion.** The project will be consistent to the maximum extent practicable with the wetlands management enforceable policy of the Virginia CZM Program, provided the applicant obtains and complies with any necessary permitting for wetland impacts.

**4. Nonpoint Source Pollution Control.** The FCD (page 6) states that, the Project would comply with the Virginia Erosion and Sediment Control Program and Virginia Stormwater Management Program (VSMP), both of which are administered by DEQ.

**4(a) Agency Jurisdiction.** The DEQ Office of Stormwater Management (OSWM) administers the nonpoint source pollution control enforceable policy of the Virginia CZM Program through Virginia Erosion and Sediment Control Law and *Regulations (VESCL&R)* and Virginia Stormwater Management Law and *Regulations (VSWML&R)*. In addition, DEQ is responsible for the issuance, denial, revocation, termination and enforcement of the Virginia Stormwater Management Program (VSMP) General Permit for Stormwater Discharges from Construction Activities related to municipal separate storm sewer systems (MS4s) and construction activities for the control of stormwater discharges from MS4s and land disturbing activities under the Virginia Stormwater Management Program.

#### **4(b) Requirements.**

##### ***(i) Erosion and Sediment Control Project-Specific Plans***

If the state agency has no previously DEQ-approved Annual Standards and Specifications and the project results in a land-disturbing activity of equal to or greater than 10,000 square feet (2,500 square feet in Chesapeake Bay Preservation Area or local thresholds when they are more stringent than state requirements), the applicant must prepare a project-specific ESC plan and submit it to DEQ-NRO for review and approval. The ESC plan must be approved prior to commencing land-disturbing activity at the project site. All regulated land-disturbing activities associated with the project, including on- and off-site access roads, staging areas, borrow areas, stockpiles, and soil transported from the project site, must be covered by the project-specific ESC plan. The ESC plan must be prepared in accordance with the VESCL and VESCR and the most current version of the *Virginia Erosion and Sediment Control Handbook*.

***(ii) Stormwater Management Project-Specific Plans***

For state-agency projects that involve a land-disturbing activity of equal to or greater than one acre (2,500 square feet in areas designated as subject to the Chesapeake Bay Preservation Area Regulations) and if the state agency has no previously DEQ-approved Annual Standards and Specifications, the applicant must prepare a project-specific stormwater management (SWM) plan and submit it for review and approval to DEQ-NRO. An approved plan is required prior to initiation of any regulated activities at the project site. The project-specific SWM plan must be prepared in accordance with the VSWML and the Virginia Stormwater Management Program (VSMP) Permit Regulations. In accordance with 9 VAC 25-870-160 individual plans, to the largest extent practicable, shall comply with any locality's VSMP authority's technical requirements adopted pursuant to the Act. It shall be the responsibility of the state agency to demonstrate that the locality's VSMP authority's technical requirements are not practicable for the project under consideration.

***(iii) General Permit for Discharges of Stormwater from Construction Activities (VAR10)***

The owner/operator of projects involving land-disturbing activities of equal to or greater than one acre is required to apply for registration coverage under the General Permit for Discharges of Stormwater from Construction Activities and develop a project-specific stormwater pollution prevention plan (SWPPP).

- The SWPPP must be prepared prior to submission of the registration statement for coverage under the General Permit.
- The SWPPP must address water quality and quantity in accordance with the VSMP Permit Regulations.

General information and registration forms for the general permit are available at <http://www.deq.virginia.gov/Programs/Water/StormwaterManagement/VSMPPermits/ConstructionGeneralPermit.aspx>.

**4(c) Recommendation.** DEQ-NRO recommends that consideration should be given to using permeable paving where appropriate, and that denuded areas are promptly revegetated following construction.

**4(d) Conclusion.** The project is consistent to the maximum extent practicable with the nonpoint source pollution control enforceable policy of the Virginia CZM Program, provided the applicant complies with the requirements described above.

**5. Air Pollution Control.** The FCD (page 7) states that the project is located in an area considered a non-attainment area for 8-hour ozone and a maintenance area for carbon monoxide (CO) and PM2.5. Therefore, the Project must comply with Virginia's General Conformity Regulation for non-attainment and maintenance areas. Because the Project will generate <100 tons per year of volatile organic compounds and oxides of nitrogen,

no conformity determination is required and compliance with the General Conformity provisions is demonstrated.

**5(a) Agency Jurisdiction.** The DEQ air program implements the federal Clean Air Act to provide a legally enforceable State Implementation Plan for the attainment and maintenance of the National Ambient Air Quality Standards. This program is administered by the State Air Pollution Control Board at DEQ (Virginia Code §10-1.1300 through §10.1-1320).

**5(b) Agency Findings.** According to the DEQ Air Division, the project site is located in an ozone (O<sub>3</sub>) nonattainment area and emission control area for volatile organic compounds (VOCs) and oxides of nitrogen (NO<sub>x</sub>).

**5(c) Recommendation.** All precautions should be taken to restrict the emissions of VOCs and NO<sub>x</sub> during construction principally by controlling or limiting the burning of fossil fuels.

**5(d) Requirements.**

**(i) Fugitive Dust**

During construction, fugitive dust must be kept to a minimum by using control methods outlined in 9 VAC 5-50-60 *et seq.* of the *Regulations for the Control and Abatement of Air Pollution*. These precautions include, but are not limited to, the following:

- Use, where possible, of water or chemicals for dust control;
- Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials;
- Covering of open equipment for conveying materials; and
- Prompt removal of spilled or tracked dirt or other materials from paved streets and removal of dried sediments resulting from soil erosion.

**(ii) Open Burning**

Should the project include the open-burning of construction or demolition material, or use of special incineration devices, this activity must meet the requirements under 9 VAC 5-130 *et seq.* of the *Regulations* for open burning, and may require a permit. The *Regulations* provide for, but do not require, the local adoption of a model ordinance concerning open burning. The applicant should contact local fire officials to determine what local requirements, if any, exist.

**(iii) Asphalt Paving**

There are some limitations under 9 VAC 5-40-5490 in the *Regulations*, on the use of “cut-back” (liquefied asphalt cement, blended with petroleum solvents) that may apply in the construction of roads or paths associated with the project. The asphalt must be

“emulsified” (predominantly cement and water with a small amount of emulsifying agent) except when specified circumstances apply. Moreover, there are time-of-year restrictions on its use during the months of April through October in VOC emission control areas.

**(iv) Fuel Burning Equipment**

The use of fuel burning equipment (e.g. boilers and generators), may require permitting from DEQ prior to beginning construction (9 VAC 5-80, Article 6, Permits for New and Modified Sources). The applicant should contact DEQ-NRO for guidance on whether this provision applies.

**5(e) Conclusion.** The project will be consistent to the maximum extent practicable with the air pollution control enforceable policy of the Virginia CZM Program, provided the applicant obtains all applicable approvals prior to construction.

**6. Coastal Lands Management.** The FCD (page 7) states that a portion of the Project within Virginia is located within the Chesapeake Bay Preservation Area (CBPA). Several Resource Protection Area (RPA) buffers are present within the Project Area along the southwest shoreline of the Potomac River, on the northern boundary of Roaches Run, and along tidal wetlands contiguous to Roaches Run. Due to the nature of the bridge construction project, encroachment into the RPA is unavoidable. The FCD notes that the project may qualify for Exemption A under Arlington County Code Chapter 61, Chesapeake Bay Preservation Ordinance § 61-15 *Exemptions for public utilities, railroads, public roads, and facilities.*

**6(a) Agency Jurisdiction.** The DEQ Local Government Assistance Program (LGAP) administers the coastal lands management enforceable policy of the Virginia CZM Program which is governed by the Chesapeake Bay Preservation Act (Bay Act) (Virginia Code §62.1-44.15 *et seq.*) and *Chesapeake Bay Preservation Area Designation and Management Regulations (Regulations)* (9 VAC 25-830-10 *et seq.*).

**6(b) Agency Comments.** In Arlington County, the areas protected by the Bay Act, as locally implemented, require conformance with performance criteria. These areas include RPAs and Resource Management Areas (RMAs) as designated by each locality. RPAs include:

- tidal wetlands;
- certain non-tidal wetlands;
- tidal shores; and
- a 100-foot vegetated buffer area located adjacent to and landward of these features and along both sides of any water body with perennial flow.

RMAs, which require less stringent performance criteria, include all areas of the County not included in the RPA.

**6(c) Requirements.** DEQ-LGAP confirms that, in accordance with 9 VAC 25-830-150 B of the *Regulations*, the construction, installation, operation, and maintenance of railroads and their appurtenant structures are conditionally exempt from the *Regulations*, provided they are constructed in accordance with the following:

1. regulations promulgated pursuant to the Erosion and Sediment Control Law (§ 10.1-560 *et seq.* of the Code of Virginia) and the Stormwater Management Act (§ 10.1-603.1 *et seq.* of the Code of Virginia);
2. an erosion and sediment control plan and a stormwater management plan approved by DEQ or local water quality protection criteria at least as stringent as the above state requirements; or
3. water quality protection criteria as established by Arlington County at least as stringent as the above state requirements.

**6(d) Conclusion.** The proposed project is consistent to the maximum extent practicable with the coastal lands management enforceable policy of the Virginia CZM Program, provided the applicant adheres to the above requirements.

## **ADDITIONAL ENVIRONMENTAL CONSIDERATIONS**

In addition to the enforceable policies of the Virginia CZM Program, comments were provided with respect to other applicable requirements and recommendations. The applicant must ensure that this project is constructed and operated in accordance with all applicable federal, state, and local laws and regulations.

### **1. Solid and Hazardous Waste Management.**

**1(a) Agency Jurisdiction.** On behalf of the Virginia Waste Management Board, the [DEQ Division of Land Protection and Revitalization \(DLPR\)](#) is responsible for carrying out the mandates of the Virginia Waste Management Act (Virginia Code §10.1-1400 *et seq.*), as well as meeting Virginia's federal obligations under the Resource Conservation and Recovery Act and the Comprehensive Environmental Response Compensation Liability Act, commonly known as Superfund.

Virginia:

- Virginia Waste Management Act, Virginia Code § 10.1-1400 *et seq.*
- *Virginia Solid Waste Management Regulations*, 9 VAC 20-81
  - (9 VAC 20-81-620 applies to asbestos-containing materials)
- *Virginia Hazardous Waste Management Regulations*, 9 VAC 20-60
  - (9 VAC 20-60-261 applies to lead-based paints)
- *Virginia Regulations for the Transportation of Hazardous Materials*, 9 VAC 20-110.

Federal:

- Resource Conservation and Recovery Act (RCRA), 42 U.S. Code sections 6901 *et seq.*
- U.S. Department of Transportation *Rules for Transportation of Hazardous Materials*, 49 *Code of Federal Regulations*, Part 107
- Applicable rules contained in Title 40, *Code of Federal Regulations*.

DEQ-DLPR also administers laws and regulations on behalf of the State Water Control Board governing Petroleum Storage Tanks (Virginia Code § 62.1-44.34:8 *et seq.*), including Aboveground Storage Tanks (9 VAC 25-91 *et seq.*) and Underground Storage Tanks (9 VAC 25-580 *et seq.* and 9 VAC 25-580-370 *et seq.*), also known as 'Virginia Tank Regulations' and § 62.1-44.34:14 *et seq.* which covers oil spills.

**1(b) Agency Findings.** DEQ-DLPR staff conducted a search of solid and hazardous waste databases (including petroleum releases) to identify waste sites in close proximity (500-foot radius) to the project area. DLPR identified two Virginia Remediation Program (VRP) sites, and five petroleum release sites within the project area which might impact the project.

**(i) Virginia Remediation Program**

1. VRP Number VRP00334, Arlington Industrial Property-North Tract, Old Jefferson Davis Highway, Arlington. Site Type: Industry.
2. VRP Number VRP00152, SEI-Arlington Acquisition Corp. Site, 399 Old Jefferson Davis Hwy, Arlington. Site Type: Other.

**(ii) Petroleum Releases**

1. PC Number 19993399, Cardinal Concrete, 450 Old Jefferson Davis Hwy, Arlington, Virginia 22201, Release Date: 06/01/1999, Status: Closed.
2. PC Number 19911566, RF and P Facility, 400 Blk Old Jefferson Davis Hwy, Arlington, Virginia 22201, Release Date: 04/24/1191, Status: Closed.
3. PC Number 19920213, Exxon 25644, 355 Old Jefferson Davis Hwy, Arlington, Virginia 22202, Release Date: 07/30/1991, Status: Closed.
4. PC Number 19910038, Exxon 25644, 355 Old Jefferson Davis Hwy, Arlington, Virginia 22202, Release Date: 05/04/1990, Status: Closed.
5. PC Number 19869985, Exxon 25644, 355 Old Jefferson Davis Hwy, Arlington, Virginia 22202, Release Date: 01/10/1986, Status: Closed.

In addition, a zip code (22202) based database search did not find any waste sites of possible concern.

### **1(c) Requirements.**

#### ***(i) Waste Management***

Any soil, sediment or groundwater that is suspected of contamination or wastes that are generated must be tested and disposed of in accordance with applicable federal, state, and local laws and regulations. All construction waste must be characterized in accordance with the *Virginia Hazardous Waste Management Regulations* prior to management at an appropriate facility.

#### ***(ii) Asbestos-Containing Materials and Lead-Based Paint***

Any structures being demolished, renovated, or removed should be checked for asbestos-containing materials (ACM) and lead-based paint (LBP) prior to demolition. If ACM or LBP are found, in addition to the federal waste-related regulations mentioned above, State regulations 9 VAC 20-81-620 (ACM) and 9 VAC 20-60-261 (LBP) must be followed.

#### ***(iii) Petroleum Contamination***

If evidence of a petroleum release is discovered during construction, it must be reported to DEQ-NRO in accordance with Virginia Code § 62.1-44.34.8 through 9 and 9 VAC 25-580-10 *et seq.* The disposal of contaminated soils and groundwater must be done in accordance with DEQ regulatory guidelines.

#### ***(iv) Petroleum Storage Tanks***

The use of above-ground storage tanks (ASTs) with a capacity of greater than 660 gallons for temporary fuel storage (>120 days) during construction must follow the requirements in 9 VAC 25-91-10 *et seq.*

### **1(d) Recommendations.**

#### ***(i) Petroleum Releases***

The identification of any petroleum release sites should be investigated by the applicant to determine the exact location, nature and extent of any petroleum release and its potential to impact the proposed project. The applicant should contact the DEQ-NRO Tanks Program at (703) 583-3800, for additional information about the Pollution Complaint (PC) cases.

#### ***(ii) Pollution Prevention***

DEQ encourages all construction projects and facilities to implement pollution prevention principles, including the reduction, reuse, and recycling of all solid wastes

generated. All generation of hazardous wastes should be minimized and handled appropriately.

For additional questions or further information regarding waste comments, contact DEQ-DLPR, Carlos Martinez at (804) 698-4575 or [carlos.martinez@deq.virginia.gov](mailto:carlos.martinez@deq.virginia.gov).

**2. Pesticides and Herbicides.** DEQ recommends that the use of herbicides or pesticides for construction or landscape maintenance should be in accordance with the principles of integrated pest management. The least toxic pesticides that are effective in controlling the target species should be used to the extent feasible. Contact the Department of Agriculture and Consumer Services at (804) 786-3501 for more information.

### **3. Natural Heritage Resources.**

#### **3(a) Agency Jurisdiction.**

(i) **[The Virginia Department of Conservation and Recreation \(DCR\) Division of Natural Heritage \(DNH\)](#)**

DNH's mission is conserving Virginia's biodiversity through inventory, protection and stewardship. The Virginia Natural Area Preserves Act (Virginia Code §10.1-209 through 217), authorizes DCR to maintain a statewide database for conservation planning and project review, protect land for the conservation of biodiversity, and the protect and ecologically manage the natural heritage resources of Virginia (the habitats of rare, threatened and endangered species, significant natural communities, geologic sites, and other natural features).

(ii) **[Virginia Department of Agriculture and Consumer Services \(VDACS\)](#)**

The Endangered Plant and Insect Species Act of 1979 (Virginia Code Chapter 39 §3.1-1020 through 1030) authorizes VDACS to conserve, protect and manage endangered and threatened species of plants and insects. Under a Memorandum of Agreement established between VDACS and the DCR, DCR represents VDACS in comments regarding potential impacts on state-listed threatened and endangered plant and insect species.

#### **3(b) Agency Findings.**

(i) ***Natural Heritage Resources***

According to the information currently in DCR's Biotics Data System (Biotics), natural heritage resources have not been documented within the project boundary including a 100 foot buffer. The absence of data may indicate that the project area has not been surveyed, rather than confirm that the area lacks natural heritage resources. In addition, the project boundary does not intersect any of the predictive models identifying

potential habitat for natural heritage resources.

***(ii) State-listed Plant and Insect Species***

DCR-DNH finds that the activity will not affect any documented state-listed plants or insects at the site.

***(iii) State Natural Area Preserves***

DCR files do not indicate the presence of any State Natural Area Preserves under the agency's jurisdiction in the project vicinity.

**3(c) Recommendations.** Contact DCR-DNH to secure updated information on natural heritage resources if the scope of the project changes or six months pass before the project is implemented, since new and updated information is continually added to the Biotics Data System.

**4. Wildlife Resources and Protected Species.**

**4(a) Agency Jurisdiction.** The [Virginia Department of Game and Inland Fisheries \(DGIF\)](http://www.dgif.virginia.gov), as the Commonwealth's wildlife and freshwater fish management agency, exercises enforcement and regulatory jurisdiction over wildlife and freshwater fish, including state- or federally-listed endangered or threatened species, but excluding listed insects (Virginia Code, Title 29.1). DGIF is a consulting agency under the U.S. Fish and Wildlife Coordination Act (16 U.S. Code §661 *et seq.*) and provides environmental analysis of projects or permit applications coordinated through DEQ and several other state and federal agencies. DGIF determines likely impacts upon fish and wildlife resources and habitat, and recommends appropriate measures to avoid, reduce or compensate for those impacts. For more information, see the DGIF website at [www.dgif.virginia.gov](http://www.dgif.virginia.gov).

**4(b) Agency Recommendations.**

***(i) General Wildlife Resources***

DGIF recommends the following measures to minimize the adverse impacts of linear utility/road project development on wildlife resources:

- Avoid and minimize impacts to undisturbed forest, wetlands, and streams to the fullest extent practicable.
- Maintain undisturbed naturally vegetated buffers of at least 100 feet in width around all on-site wetlands and on both sides of all perennial and intermittent streams.
- Conduct significant tree removal and ground clearing activities outside of the primary songbird nesting season of March 15 through August 15.
- Adhere to erosion and sediment controls during ground disturbance.

- Use matting made from natural/organic materials such as coir fiber, jute, and/or burlap to minimize potential wildlife entanglements resulting from use of synthetic/plastic erosion and sediment control matting.

Adherence to these general recommendations may be infeasible in some situations. DGIF staff is available to work with the applicant to develop project-specific measures as necessary to minimize project impacts upon wildlife resources.

### ***(ii) Northern Long-Eared Bat***

DGIF recommends coordination with the U.S. Fish and Wildlife Service (USFWS) regarding potential impacts upon the federal-listed Threatened Northern long-eared bat associated with tree removal.

## **5. Public Water Supply.**

**5(a) Agency Jurisdiction.** [Virginia Department of Health \(VDH\) Office of Drinking Water \(ODW\)](#) reviews projects for the potential to impact public drinking water sources (groundwater wells, springs and surface water intakes). VDH administers both federal and state laws governing waterworks operation.

**5(b) Agency Findings.** VDH-ODW finds that there are no public groundwater wells within a 1-mile radius of the project site, no surface water intakes located within a 5-mile radius of the project site, and the project is not within the watershed of any public surface water intakes.

**5(c) Requirements.** Potential impacts to public water distribution systems must be verified by the local utility.

**5(d) Conclusion.** VDH-ODW concludes that there are no apparent impacts to public drinking water sources due to this project.

For additional information, contact VDH-ODW, Arlene Fields Warren at (804) 864-7781 or [arlene.warren@vdh.virginia.gov](mailto:arlene.warren@vdh.virginia.gov).

## **6. Historic and Archaeological Resources.**

**6(a) Agency Jurisdiction.** The Virginia [Department of Historic Resources \(DHR\)](#) conducts reviews of both federal and state projects to determine their effect on historic properties. Under the federal process, DHR is the State Historic Preservation Office (SHPO), and ensures that federal undertakings-including licenses, permits, or funding-comply with Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulation at 36 CFR Part 800. Section 106 requires federal agencies to consider the effects of federal projects on properties that are listed or eligible for listing on the National Register of Historic Places. For state projects or activities on state lands, DHR is afforded an opportunity to review and comment on (1)

the demolition of state property; (2) major state projects requiring an EIR; (3) archaeological investigations on state-controlled land; (4) projects that involve a landmark listed in the Virginia Landmarks Register; (5) the sale or lease of surplus state property; (6) exploration and recovery of underwater historic properties; and (7) excavation or removal of archaeological or historic features from caves. Please see DHR's website for more information about applicable state and federal laws and how to submit an application for review:

<http://www.dhr.virginia.gov/StateStewardship/Index.htm>.

**6(b) Agency Findings.** DHR did not indicate any concerns with the proposal. The FRA is currently in consultation with DHR on this project (file #2016-0932). A Programmatic Agreement (PA) is being drafted.

**6(c) Requirement.** FRA must continue to coordinate with DHR on the completion of the PA.

## **7. Floodplain Management.**

**7(a) Agency Jurisdiction.** The [DCR Division of Dam Safety and Floodplain Management \(DSFM\)](#) is the lead coordinating agency for the Commonwealth's floodplain management program and the National Flood Insurance Program (Executive Memorandum 2-97). Pursuant to §10.1-603 of the Virginia Code and in accordance with 44 CFR section 60.12 of the National Flood Insurance Program Regulations for Floodplain Management and Flood Hazard Identification, all construction or land-disturbing activities initiated by an agency of the Commonwealth, or by its contractor, in floodplains shall be submitted to the locality and comply with the locally adopted floodplain management ordinance. New state-owned buildings shall not be constructed within a 100-year floodplain unless a variance is granted by the director of the [Division of Engineering and Buildings \(DEB\) at the Department of General Services \(DGS\)](#) as Building Official for state-owned buildings (Virginia Code, §36-98.1). If a locality is not participating in the National Flood Insurance Program, the project does not need to be reviewed by the locality. State agencies shall submit building construction projects to the Building Official for state-owned buildings for review.

**7(b) National Flood Insurance Program.** According to the DCR Floodplain Management Program staff, the National Flood Insurance Program (NFIP) is administered by the Federal Emergency Management Agency (FEMA), and communities who elect to participate in this voluntary program manage and enforce the program on the local level through that community's local floodplain ordinance. Each local floodplain ordinance must comply with the minimum standards of the NFIP, outlined in 44 CFR 60.3; however, local communities may adopt more restrictive requirements in their local floodplain ordinance, such as regulating the 0.2% annual chance flood zone (shaded Zone X).

All development within a Special Flood Hazard Area (SFHA) or floodplain, as shown on the locality's Flood Insurance Rate Map (FIRM), must be permitted and comply with the

requirements of the local floodplain ordinance. As per Executive Memorandum 2-97, development in a floodplain by an agency of the Commonwealth, or by its contractor, shall comply with the locally adopted floodplain management ordinance.

The NFIP defines development as “*any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials.*” (44 CFR 59.1).

The NFIP defines Special Flood Hazard Area (SFHA) as “*the land in the flood plain within a community subject to a 1 percent or greater chance of flooding in any given year. The area may be designated as Zone A on the FHBM. After detailed ratemaking has been completed in preparation for publication of the flood insurance rate map, Zone A usually is refined into Zones A, AO, AH, A1-30, AE, A99, AR, AR/A1-30, AR/AE, AR/AO, AR/AH, AR/A, VO, or V1-30, VE, or V.*” (44 CFR 59.1).

**7(c) Requirements.** The DCR Floodplain Management Program does not have regulatory authority for projects in the SFHA. The applicant must coordinate with the local floodplain administrator for an official floodplain determination. If the project is located in the SFHA, the project must comply with Arlington County’s local floodplain ordinance and obtain a local permit. Failure to comply with the local floodplain ordinance could result in enforcement action from the locality. In addition, new state-owned buildings shall not be constructed in the SFHA unless a variance is granted by the Department of General Services.

**7(d) Recommendations.** DCR recommends that compliance documentation for state projects be provided prior to the project being funded. For federal projects, the applicant is encouraged reach out to the local floodplain administrator and comply with the community’s local floodplain ordinance. Use the Virginia Flood Risk Information System (VFRIS) to find flood zone information at [www.dcr.virginia.gov/vfris](http://www.dcr.virginia.gov/vfris). Local floodplain administrator contact information may be found on DCR’s Local Floodplain Management Directory at [www.dcr.virginia.gov/dam-safety-and-floodplains/floodplain-directory](http://www.dcr.virginia.gov/dam-safety-and-floodplains/floodplain-directory).

**8. Pollution Prevention.** DEQ advocates that principles of pollution prevention and sustainability be used in all construction projects as well as in facility operations. Effective siting, planning, and on-site BMPs will help to ensure that environmental impacts are minimized. However, pollution prevention and sustainability techniques also include decisions related to construction materials, design, and operational procedures that will facilitate the reduction of wastes at the source.

**8(a) Recommendations.** We have several pollution prevention recommendations that may be helpful in the construction and operation of this project:

- Consider development of an effective Environmental Management System (EMS). An effective EMS will ensure that the proposed facility is committed to

minimizing its environmental impacts, setting environmental goals, and achieving improvements in its environmental performance. DEQ offers EMS development assistance and it recognizes facilities with effective Environmental Management Systems through its Virginia Environmental Excellence Program (VEEP). VEEP provides recognition, annual permit fee discounts, and the possibility for alternative compliance methods.

- Consider environmental attributes when purchasing materials. For example, the extent of recycled material content, toxicity level, and amount of packaging should be considered and can be specified in purchasing contracts.
- Consider contractors' commitment to the environment (such as an EMS) when choosing contractors. Specifications regarding raw materials and construction practices can be included in contract documents and requests for proposals.
- Choose sustainable materials and practices for construction and design. These could include asphalt and concrete containing recycled materials, and integrated pest management in landscaping, among other things.
- Integrate pollution prevention techniques into the project's maintenance and operation. Maintenance facilities should be designed with sufficient and suitable space to allow for effective inventory control and preventative maintenance.

DEQ's Office of Pollution Prevention provides information and technical assistance relating to pollution prevention techniques and EMS. For more information, contact DEQ's Office of Pollution Prevention, Meghann Quinn at (804) 698-4021.

## **REGULATORY AND COORDINATION NEEDS**

**1. Wetlands Management.** Proposed impacts to tidal wetlands under VMRC jurisdiction will require a permit in accordance with Virginia Code §28.2-1301 through §28.2-1320. In addition, review under the Virginia Water Protection Permit program may be required pursuant to Virginia Code §62.1-44.15:20 *et seq.* A JPA may be submitted to VMRC to initiate the review process. For additional information and coordination, contact VMRC, Mark Eversole at (757) 247-8028 or [mark.eversole@mrc.virginia.gov](mailto:mark.eversole@mrc.virginia.gov), and/or the VWP Permit program at DEQ-NRO, Trisha Beasley at (703) 583-3940 or [trisha.beasley@deq.virginia.gov](mailto:trisha.beasley@deq.virginia.gov).

## **2. Erosion and Sediment Control and Stormwater Management.**

**2(a) Erosion and Sediment Control and Stormwater Management.** This project must comply with Virginia's *Erosion and Sediment Control Law* (Virginia Code § 62.1-44.15:61) and *Regulations* (9 VAC 25-840-30 *et seq.*) and *Stormwater Management Law* (Virginia Code § 62.1-44.15:31) and *Regulations* (9 VAC 25-870-210 *et seq.*) as administered by DEQ in Virginia. Activities that disturb 2,500 square feet or more in CBPA's would be regulated by *VESCL&R* and *VSWML&R*. Erosion and sediment control and stormwater management requirements should be coordinated with the DEQ Northern Regional Office, Kelly Vanover at (804) 837-1073 or [kelly.vanover@deq.virginia.gov](mailto:kelly.vanover@deq.virginia.gov).

**2(b) General Permit for Stormwater Discharges from Construction Activities (VAR10).** For land-disturbing activities of equal to or greater than one acre, the applicant is required to apply for registration coverage under the Virginia Stormwater Management Program General Permit for Discharges of Stormwater from Construction Activities (9 VAC 25-880-1 *et seq.*). Specific questions regarding the Stormwater Management Program requirements should be directed to DEQ, Holly Sepety at (804) 698-4039 or [holly.sepety@deq.virginia.gov](mailto:holly.sepety@deq.virginia.gov).

**3. Air Pollution Control.** Guidance on minimizing the emission of volatile organic compounds (VOCs) and oxides of nitrogen (NO<sub>x</sub>) during construction may be obtained from DEQ-NRO. Activities associated with this project may be subject to air regulations administered by DEQ. The state air pollution regulations that may apply to the construction phase of the project are:

- fugitive dust and emissions control (9 VAC 5-50-60 *et seq.*);
- open burning restrictions (9 VAC 5-130);
- fuel-burning equipment (9 VAC 5-80 *et seq.*); and
- asphalt paving operations (9 VAC 5-40-5490).

The applicant should contact the appropriate local fire officials for information on any local requirements pertaining to open burning. For more information, contact DEQ-NRO, James LaFratta at (703) 583-3928 or [james.lafratta@deq.virginia.gov](mailto:james.lafratta@deq.virginia.gov).

**4. Coastal Lands Management.** The project must comply with the requirements of the Bay Act (Virginia Code §§ 62.1-44.15:67 through 62.1-44.15:78) and *Regulations* (9 VAC 25-830-10 *et seq.*) as administered by DEQ. The development of roads and bridges are exempt under 9 VAC 25-830-150.B.1 of the *Regulations* provided certain conditions are met. For additional information and coordination, contact the DEQ-OLGP, Daniel Moore at (804) 698-4520 or [daniel.moore@deq.virginia.gov](mailto:daniel.moore@deq.virginia.gov).

## **5. Solid and Hazardous Wastes.**

**5(a) Solid and Hazardous Waste Management Regulations.** All solid waste, hazardous waste, and hazardous materials must be managed in accordance with all applicable federal, state, and local environmental regulations. For additional information concerning location and availability of suitable waste management facilities in the project area or if free product, discolored soils, or other evidence of contaminated soils are encountered, contact DEQ-NRO, Richard Doucette at (703) 583-3813 or [richard.doucette@deq.virginia.gov](mailto:richard.doucette@deq.virginia.gov).

**5(b) Asbestos-Containing Material.** The owner or operator of a demolition activity, prior to the commencement of the activity, is responsible to thoroughly inspect affected structures for the presence of asbestos, including Category I and Category II nonfriable asbestos containing material (ACM). Upon classification as friable or non-friable, all waste ACM shall be disposed of in accordance with the Virginia Solid Waste Management Regulations (9 VAC 20-80-640), and transported in accordance with the

Virginia regulations governing Transportation of Hazardous Materials (9 VAC 20-110-10 et seq.). Contact the DEQ-NRO, Richard Doucette at (703) 583-3813 or [richard.doucette@deq.virginia.gov](mailto:richard.doucette@deq.virginia.gov) and the Department of Labor and Industry, Doug Wiggins (540) 562-3580 ext. 131 for additional information.

**5(c) Lead-Based Paint.** This project must comply with the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) regulations, and with the Virginia Lead-Based Paint Activities Rules and Regulations. For additional information regarding these requirements contact the Department of Professional and Occupational Regulation at (804) 367-8500.

**5(d) Petroleum Contamination.** In accordance with Virginia Code §§ 62.1-44.34.8 through 9 and 9 VAC 25-580-10 et seq., contact DEQ-NRO, Randy Chapman at (703) 583-3816 or [randy.chapman@deq.virginia.gov](mailto:randy.chapman@deq.virginia.gov), if evidence of a petroleum release is discovered during construction of this project.

**5(e) Petroleum Storage Tanks.** The use of above-ground ASTs with a capacity of greater than 660 gallons for temporary fuel storage (>120 days) must be conducted in accordance with 9 VAC 25-91-10 et seq. Contact DEQ-NRO, Randy Chapman at (703) 583-3816 or [randy.chapman@deq.virginia.gov](mailto:randy.chapman@deq.virginia.gov), for additional details.

**6. Natural Heritage Resources.** Contact DCR-DNH, Rene Hypes at (804) 371-2708 or [rene.hypes@dcr.virginia.gov](mailto:rene.hypes@dcr.virginia.gov), to secure updated information on natural heritage resources if the scope of the project changes and/or six months has passed before it is utilized, since new and updated information is continually added to the Biotics Data System.

## **7. Wildlife Resources and Protected Species.**

**7(a) Northern Long-Eared Bat.** Coordinate with the USFWS Virginia Field Office at (804) 693-6694, regarding potential impacts upon the federal-listed Threatened Northern long-eared bat associated with tree removal.

**7(b) Wildlife Protection.** Contact DGIF, Amy Ewing at (804) 367-2211 or [amy.ewing@dgif.virginia.gov](mailto:amy.ewing@dgif.virginia.gov), on recommendations for the general protection of wildlife resources associated with the reconstruction.

**8. Historic and Archaeological Resources.** In accordance with Section 106 of the National Historic Preservation Act, as amended, and its implementing regulation 36 CFR 800, FRA must continue to coordinate with DHR on the completion and execution of a Programmatic Agreement. For additional information and coordination, contact DHR, Adrienne Birge-Wilson at (804) 482-60920 or [adrienne.birge-wilson@dhr.virginia.gov](mailto:adrienne.birge-wilson@dhr.virginia.gov).

**9. Floodplain Management.** The propose project must comply with Arlington County's local floodplain ordinance. For additional information and coordination, contact

Long Bridge Project  
FRA FCD, DEQ 19-094F

Arlington County, Elizabeth Thurber, PE at (703) 228-3363 or [ethurber@arlingtonva.us](mailto:ethurber@arlingtonva.us).  
For information on any applicable state building floodplain requirements contact DGS-  
DEB, Mike Coppa at (804) 786-4398 or [mike.coppa@dgs.virginia.gov](mailto:mike.coppa@dgs.virginia.gov).

**10. Water Supply and Wastewater Treatment.** Contact the Arlington County  
Department of Environmental Services at (7037) 228-5000, to ensure that the project  
meets local requirements with respect to any impacts on water and sewer infrastructure.

Thank you for the opportunity to review and respond to the FCD for the Long Bridge  
Project in Arlington County. The detailed comments submitted by reviewing agencies  
are attached. Please contact me at (804) 698-4204 or John Fisher at (804) 698-4339  
for clarification of these comments.

Sincerely,



Bettina Rayfield, Program Manager  
Environmental Impact Review and Long-Range  
Priorities

Enclosures

Ec: Amy Ewing, DGIF  
Robbie Rhur, DCR  
Tony Watkinson, VMRC  
Roger Kirchen, DHR  
Arlene Fields Warren, VDH  
James Cromwell, VDOT  
Mark Schwartz, Arlington County  
Bob Lazaro, NOVA Region  
Katherine Youngbluth, DDOT

DEPARTMENT OF ENVIRONMENTAL QUALITY  
DIVISION OF AIR PROGRAM COORDINATION

ENVIRONMENTAL REVIEW COMMENTS APPLICABLE TO AIR QUALITY

TO: John E. Fisher

DEQ - OEIR PROJECT NUMBER: **DEQ #19-094F**

PROJECT TYPE:  STATE EA / EIR  FEDERAL EA / EIS  SCC

**X CONSISTENCY DETERMINATION**

PROJECT TITLE: **Long Bridge Project**

PROJECT SPONSOR: **USDOT/Federal Railroad Administration**

PROJECT LOCATION:  NONATTAINMENT  
AND EMISSION CONTROL AREA FOR NOX & VOC

REGULATORY REQUIREMENTS MAY BE APPLICABLE TO:  CONSTRUCTION  
 OPERATION

**STATE AIR POLLUTION CONTROL BOARD REGULATIONS THAT MAY APPLY:**

1.  9 VAC 5-40-5200 C & 9 VAC 5-40-5220 E – STAGE I
2.  9 VAC 5-45-760 et seq. – Asphalt Paving operations
3.  **9 VAC 5-130 et seq. – Open Burning**
4.  **9 VAC 5-50-60 et seq. Fugitive Dust Emissions**
5.  9 VAC 5-50-130 et seq. - Odorous Emissions; Applicable to \_\_\_\_\_
6.  9 VAC 5-60-300 et seq. – Standards of Performance for Toxic Pollutants
7.  9 VAC 5-50-400 Subpart\_\_\_\_\_, Standards of Performance for New Stationary Sources, designates standards of performance for the \_\_\_\_\_
8.  9 VAC 5-80-1100 et seq. of the regulations – Permits for Stationary Sources
9.  9 VAC 5-80-1605 et seq. Of the regulations – Major or Modified Sources located in PSD areas. This rule may be applicable to the \_\_\_\_\_
10.  9 VAC 5-80-2000 et seq. of the regulations – New and modified sources located in non-attainment areas
11.  9 VAC 5-80-800 et seq. Of the regulations – State Operating Permits. This rule may be applicable to \_\_\_\_\_

**COMMENTS SPECIFIC TO THE PROJECT:**

**All precautions are necessary to restrict the emissions of volatile organic compounds (VOC) and oxides of nitrogen (NO<sub>x</sub>).**



(Kotur S. Narasimhan)  
Office of Air Data Analysis

**DATE: August 13, 2019**



**MEMORANDUM**

**TO:** John Fisher, DEQ/EIR Environmental Program Planner

**FROM:** Carlos A. Martinez, Division of Land Protection & Revitalization Review Coordinator

**DATE:** August 28, 2019

**COPIES:** Sanjay Thirunagari, Division of Land Protection & Revitalization Review Manager; file

**SUBJECT:** Environmental Impact Review: EIR Project No 19-094F Long Bridge Project in Arlington, Virginia.

The Division of Land Protection & Revitalization (DLPR) has completed its review of the USDOT/Federal Railroad Commission's August 13, 2019 EIR for the Long Bridge Project in Arlington, Virginia.

Solid and hazardous waste issues were not addressed in the submittal. The submittal did not indicate that a search of Federal or State environmental databases was conducted. DLPR staff conducted a search (500 ft. radius) of the project area of solid and hazardous waste databases (including petroleum releases) to identify waste sites in close proximity to the project area. DLPR identified two (2) VRP sites, and five (5) petroleum release sites within the project area which might impact the project. Additionally, no waste sites of possible concern were located within the zip code of the project area, 22202.

DLPR staff has reviewed the submittal and offers the following comments:

***Hazardous Waste/RCRA Facilities – none in close proximity to the project area.***

***CERCLA Sites – none in close proximity to the project area.***

***Formerly Used Defense Sites (FUDS) – none in close proximity to the project area.***

***Solid Waste – none in close proximity to the project area.***

**Virginia Remediation Program (VRP) – Two (2) found in close proximity to the project area.**

- 1. VRP Number VRP00334, Arlington Industrial Property – North Tract, Old Jefferson Davis Highway, Arlington. Site Type: Industry.**
- 2. VRP Number VRP00152, SEI-Arlington Acquisition Corp. Site, 399 Old Jefferson Davis Hwy, Arlington. Site Type: Other.**

**Petroleum Releases – Five (5) found in close proximity to the project area.**

- 1. PC Number 19993399, Cardinal Concrete, 450 Old Jefferson Davis Hwy, Arlington, Virginia 22201, Release Date: 06/01/1999, Status: Closed.**
- 2. PC Number 19911566, RF and P Facility, 400 Blk Old Jefferson Davis Hwy, Arlington, Virginia 22201, Release Date: 04/24/1991, Status: Closed.**
- 3. PC Number 19920213, Exxon 25644, 355 Old Jefferson Davis Hwy, Arlington, Virginia 22202, Release Date: 07/30/1991, Status: Closed.**
- 4. PC Number 19910038, Exxon 25644, 355 Old Jefferson Davis Hwy, Arlington, Virginia 22202, Release Date: 05/04/1990, Status: Closed.**
- 5. PC Number 19869985, Exxon 25644, 355 Old Jefferson Davis Hwy, Arlington, Virginia 22202, Release Date: 01/10/1986, Status: Closed.**

*Please note that the DEQ's Pollution Complaint (PC) cases identified should be further evaluated by the project engineer or manager to establish the exact location, nature and extent of the petroleum release and the potential to impact the proposed project. In addition, the project engineer or manager should contact the DEQ's Northern Regional Office at (703) 583-3800 (Tanks Program) for further information about the PC cases.*

**PROJECT SPECIFIC COMMENTS**

None

**GENERAL COMMENTS**

**Soil, Sediment, Groundwater, and Waste Management**

Any soil, sediment or groundwater that is suspected of contamination or wastes that are generated must be tested and disposed of in accordance with applicable Federal, State, and local laws and regulations. Some of the applicable state laws and regulations are: Virginia Waste Management Act, Code of Virginia Section 10.1-1400 *et seq.*; Virginia Hazardous Waste Management Regulations (VHWMR) (9VAC 20-60); Virginia Solid Waste Management Regulations (VSWMR) (9VAC 20-81); Virginia Regulations for the Transportation of Hazardous Materials (9VAC 20-110). Some of the applicable Federal laws and regulations are:

the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. Section 6901 *et seq.*, and the applicable regulations contained in Title 40 of the Code of Federal Regulations; and the U.S. Department of Transportation Rules for Transportation of Hazardous Materials, 49 CFR Part 107.

**Pollution Prevention – Reuse - Recycling**

Please note that DEQ encourages all construction projects and facilities to implement pollution prevention principles, including the reduction, reuse, and recycling of all solid wastes generated. All generation of hazardous wastes should be minimized and handled appropriately.

If you have any questions or need further information, please contact Carlos A. Martinez by phone at (804) 698-4575 or email [carlos.martinez@deq.virginia.gov](mailto:carlos.martinez@deq.virginia.gov).



Fisher, John &lt;john.fisher@deq.virginia.gov&gt;

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**Re: NEW PROJECT USDOT/FRA Long Bridge Project DEQ #19-094F**

1 message

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**Holland, Benjamin** <benjamin.holland@deq.virginia.gov>  
To: John Fisher <John.Fisher@deq.virginia.gov>

Tue, Sep 3, 2019 at 1:23 PM

Northern Regional Office comments regarding the Federal Consistency Determination for *Long Bridge Project, Arlington County, DEQ #19-094S*, are as follows:

**Land Protection Division** – The project manager is reminded that if any solid or hazardous waste is generated/encountered during construction, the project manager would follow applicable federal, state, and local regulations for their disposal.

**Air Compliance/Permitting** - The project manager is reminded that during the construction phases that occur with this project; the project is subject to the Fugitive Dust/Fugitive Emissions Rule 9 VAC 5-50-60 through 9 VAC 5-50-120. In addition, should any open burning or use of special incineration devices be employed in the disposal of land clearing debris during demolition and construction, the operation would be subject to the Open Burning Regulation 9 VAC 5-130-10 through 9 VAC 5-130-60 and 9 VAC 5-130-100.

**Virginia Water Protection Permit (VWPP) Program** – The project manager is reminded that a VWP permit from DEQ may be required should impacts to surface waters be necessary. DEQ VWP staff recommends that the avoidance and minimization of surface water impacts to the maximum extent practicable as well as coordination with the US Army Corps of Engineers. Upon receipt of a Joint Permit Application for the proposed surface water impacts, DEQ VWP Permit staff will review the proposed project in accordance with the VWP permit program regulations and current VWP permit program guidance. VWPP staff reserve the right to provide comment upon receipt of a permit application requesting authorization to impact state surface waters, and at such time that a wetland delineation has been conducted and associated jurisdiction determination made by the U.S. Army Corps of Engineers.

**Erosion and Sediment Control and Storm Water Management:** DEQ has regulatory authority for the Virginia Pollutant Discharge Elimination System (VPDES) programs related to municipal separate storm sewer systems (MS4s) and construction activities. Erosion and sediment control measures are addressed in local ordinances and State regulations. Additional information is available at <http://www.deq.virginia.gov/Programs/Water/StormwaterManagement.aspx>. Non-point source pollution resulting from this project should be minimized by using effective erosion and sediment control practices and structures. Consideration should also be given to using permeable paving for parking areas and walkways where appropriate, and denuded areas should be promptly revegetated following construction work. If the total land disturbance exceeds 10,000 square feet, an erosion and sediment control plan will be required. Some localities also require an E&S plan for disturbances less than 10,000 square feet. A stormwater management plan may also be required. For any land disturbing activities equal to one acre or more, you are required to apply for coverage under the VPDES General Permit for Discharges of Storm Water from Construction Activities. The Virginia Stormwater Management Permit Authority may be DEQ or the locality.

On Tue, Aug 13, 2019 at 11:40 AM Fulcher, Valerie <valerie.fulcher@deq.virginia.gov> wrote:

**Good morning - this is a new OEIR review request/project:**

**Document Type: Federal Consistency Determination**

**Project Sponsor: USDOT/Federal Railroad Administration**

**Project Title: Long Bridge Project**

**Location: Arlington County**

**Project Number: DEQ #19-094F**



# COMMONWEALTH of VIRGINIA

## DEPARTMENT OF ENVIRONMENTAL QUALITY

Street address: 1111 East Main Street, Suite 1400, Richmond, VA 23219

Mailing address: P.O. Box 1105, Richmond, Virginia 23218

[www.deq.virginia.gov](http://www.deq.virginia.gov)

Matthew J. Strickler  
Secretary of Natural Resources

David K. Paylor  
Director

(804) 698-4000  
1-800-592-5482

### MEMORANDUM

**TO:** John Fisher, DEQ Environmental Impact Review Coordinator

**FROM:** Daniel Moore, DEQ Principal Environmental Planner

**DATE:** September 25, 2019

**SUBJECT:** DEQ #19-094F: USDOT/FRA – Long Bridge Project, Arlington County

We have reviewed the Federal Consistency Determination for the above-referenced project and offer the following comments regarding consistency with the provisions of the *Chesapeake Bay Preservation Area Designation and Management Regulations* (Regulations):

In Arlington County the areas protected by the *Chesapeake Bay Preservation Act*, as locally implemented, require conformance with performance criteria. These areas include Resource Protection Areas (RPAs) and Resource Management Areas (RMAs) as designated by each locality. RPAs include tidal wetlands, certain non-tidal wetlands and tidal shores. RPAs also include a 100-foot vegetated buffer area located adjacent to and landward of these features and along both sides of any water body with perennial flow. All areas of Arlington County not included in the RPA are designated as RMAs.

The project proposal includes potential improvements to Long Bridge and related railroad infrastructure. Alternative A (the Preferred Alternative) proposes the addition of a new two-track bridge over the George Washington Memorial Bridge and Potomac River while retaining the existing Long Bridge. Alternative B proposes to replace the existing Long Bridge as well as adding a new two-track bridge. Other proposed changes to the track structure and operation are similar between the two alternatives.

Construction, installation, operation and maintenance of railroads and their appurtenant structures within RPA lands are conditionally exempt from the *Chesapeake Bay Preservation Area Designation and Management Regulations*, § 9 VAC 10-20-150 B, provided they are constructed in accordance with:

1. regulations promulgated pursuant to the *Erosion and Sediment Control Law* and the *Stormwater Management Act*;
2. an erosion and sediment control plan and a stormwater management plan approved by the Virginia Department of Environmental Quality, or;
3. water quality protection criteria as established by Arlington County at least as stringent as the above state requirements.

Provided adherence to the above requirements, the proposed activity would be consistent with the *Chesapeake Bay Preservation Act* and the Regulations.



Fisher, John &lt;john.fisher@deq.virginia.gov&gt;

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**Re: NEW PROJECT USDOT/FRA Long Bridge Project DEQ #19-094F**

1 message

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**Gavan, Lawrence** <larry.gavan@deq.virginia.gov>  
To: "Fisher, John" <john.fisher@deq.virginia.gov>

Tue, Aug 13, 2019 at 3:24 PM

**(a) Agency Jurisdiction.** The Department of Environmental Quality (DEQ) administers the Virginia Erosion and Sediment Control Law and Regulations (VESCL&R) and the Virginia Stormwater Management Law and Regulations (VSWML&R).

**3(b) Erosion and Sediment Control Project-Specific Plans.** If the state agency has no previously DEQ-approved Annual Standards and Specifications and the project results in a land-disturbing activity of equal to or greater than 10,000 square feet (2,500 square feet in Chesapeake Bay Preservation Area or local thresholds when they are more stringent than state requirements), the applicant must prepare a project-specific ESC plan and submit it to the DEQ Regional Office for review and approval. The ESC plan must be approved prior to commencing land-disturbing activity at the project site. All regulated land-disturbing activities associated with the project, including on- and off-site access roads, staging areas, borrow areas, stockpiles, and soil transported from the project site, must be covered by the project-specific ESC plan. The ESC plan must be prepared in accordance with the VESCL and VESCR and the most current version of the *Virginia Erosion and Sediment Control Handbook*.

**3(c) Stormwater Management Project-Specific Plans.** For state-agency projects that involve a land-disturbing activity of equal to or greater than one acre (2,500 square feet in areas designated as subject to the Chesapeake Bay Preservation Area Regulations) and if the state agency has no previously DEQ-approved Annual Standards and Specifications the Applicant must prepare a project-specific stormwater management (SWM) plan and submit it for review and approval to the DEQ Regional Office. An approved plan is required prior to initiation of any regulated activities at the project site. The project-specific SWM plan must be prepared in accordance with the VSWML and the Virginia Stormwater Management Program (VSMP) Permit Regulations. In accordance with 9VAC25-870-160 individual plans, to the largest extent practicable, shall comply with any locality's VSMP authority's technical requirements adopted pursuant to the Act. It shall be the responsibility of the state agency to demonstrate that the locality's VSMP authority's technical requirements are not practicable for the project under consideration.

**3(d) General Permit for Stormwater Discharges from Construction Activities (VAR10).** The owner/operator of projects involving land-disturbing activities of equal to or greater than one acre is required to apply for registration coverage under the General Permit for Discharges of Stormwater from Construction Activities and develop a project-specific stormwater pollution prevention plan (SWPPP).

- The SWPPP must be prepared prior to submission of the registration statement for coverage under the General Permit.
- The SWPPP must address water quality and quantity in accordance with the VSMP Permit Regulations.

General information and registration forms for the general permit are available at <http://www.deq.virginia.gov/Programs/Water/StormwaterManagement/VSMPPermits/ConstructionGeneralPermit.aspx>

On Tue, Aug 13, 2019 at 11:40 AM Fulcher, Valerie <valerie.fulcher@deq.virginia.gov> wrote:

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Fisher, John &lt;john.fisher@deq.virginia.gov&gt;

**ESSLog# 40060\_19-094F\_LongBridge\_DGIF\_AME20190906**

1 message

**Ewing, Amy** <amy.ewing@dgif.virginia.gov>  
To: John Fisher <john.fisher@deq.virginia.gov>

Fri, Sep 6, 2019 at 3:13 PM

John,

We have reviewed the subject project that proposes to construct a new bridge across the Potomac River and perform updates to an existing bridge. The Potomac River has been designated a Confirmed Anadromous Fish Use Area. In addition, federal Endangered Atlantic sturgeon are known from the Potomac River. We recommend coordination with NOAA Fisheries Service and Maryland Department of Natural Resources regarding potential impacts upon this unique resource and the species it supports.

To minimize the adverse impacts of linear utility/road project development on wildlife resources, we offer the following general recommendations: avoid and minimize impacts to undisturbed forest, wetlands, and streams to the fullest extent practicable; maintain naturally vegetated buffers of at least 100 feet in width around wetlands and on both sides of perennial and intermittent streams, where practicable; conduct significant tree removal and ground clearing activities outside of the primary songbird nesting season of March 15 through August 15; and, implement and maintain appropriate erosion and sediment controls throughout project construction and site restoration. To minimize potential wildlife entanglements resulting from use of synthetic/plastic erosion and sediment control matting, we recommend use of matting made from natural/organic materials such as coir fiber, jute, and/or burlap. We understand that adherence to these general recommendations may be infeasible in some situations. We are happy to work with the applicant to develop project-specific measures as necessary to minimize project impacts upon the Commonwealth's wildlife resources.

We recommend coordination with the USFWS regarding potential impacts upon federally Threatened northern long-eared bats associated with tree removal.

This project is located within 2 miles of a documented occurrence of a state or federal threatened or endangered plant or insect species and/or other Natural Heritage coordination species. Therefore, we recommend coordination with VDCR-DNH regarding the protection of these resources.

Assuming adherence to erosion and sediment controls, we find this project consistent with the Fisheries Management Section of the CZMA.

Amy

**Amy Ewing***Environmental Services Biologist**Manager, Fish and Wildlife Information Services*

P 804.367.2211

**Virginia Department of Game & Inland Fisheries***CONSERVE. CONNECT. PROTECT.*

A 7870 Villa Park Drive, P.O. Box 90778, Henrico, VA 23228

[www.dgif.virginia.gov](http://www.dgif.virginia.gov)



Fisher, John &lt;john.fisher@deq.virginia.gov&gt;

## Re: NEW PROJECT USDOT/FRA Long Bridge Project DEQ #19-094F

1 message

**Birge-wilson, Adrienne** <adrienne.birge-wilson@dhr.virginia.gov>  
 To: "Fisher, John (DEQ)" <John.Fisher@deq.virginia.gov>

Thu, Sep 5, 2019 at 2:12 PM

John- The FRA is currently in consultation with DHR on this project (file #2016-0932). A Programmatic Agreement is being drafted, but I am not sure when it will be executed.

V/R,

### Adrienne Birge-Wilson

Review and Compliance Division  
 Virginia Department of Historic Resources  
 2801 Kensington Avenue  
 Richmond, VA 23221  
 (804) 482-6092  
 adrienne.birge-wilson@dhr.virginia.gov

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On Tue, Aug 13, 2019 at 3:43 PM Kirchen, Roger <roger.kirchen@dhr.virginia.gov> wrote:

*Roger W. Kirchen, Director  
 Review and Compliance Division  
 Department of Historic Resources  
 2801 Kensington Avenue  
 Richmond, VA 23221  
 phone: 804-482-6091  
 www.dhr.virginia.gov*

----- Forwarded message -----

From: **Fulcher, Valerie** <valerie.fulcher@deq.virginia.gov>

Date: Tue, Aug 13, 2019 at 11:40 AM

Subject: NEW PROJECT USDOT/FRA Long Bridge Project DEQ #19-094F

To: rr dgif-ESS Projects <essprojects@dgif.virginia.gov>, Roberta Rhur <robbie.rhur@dcr.virginia.gov>, odwreview (VDH) <odwreview@vdh.virginia.gov>, Carlos Martinez <carlos.martinez@deq.virginia.gov>, Kotur Narasimhan <kotur.narasimhan@deq.virginia.gov>, Lawrence Gavan <larry.gavan@deq.virginia.gov>, Daniel Moore <daniel.moore@deq.virginia.gov>, Holly Sepety <holly.sepety@deq.virginia.gov>, Benjamin Holland <benjamin.holland@deq.virginia.gov>, Roger Kirchen <roger.kirchen@dhr.virginia.gov>, Anthony Watkinson <tony.watkinson@mrc.virginia.gov>, Bob Lazaro <rlazaro@novaregion.org>, <countymanager@arlingtonva.us>  
 Cc: John Fisher <john.fisher@deq.virginia.gov>

**Good morning - this is a new OEIR review request/project:**

**Document Type: Federal Consistency Determination**

**Project Sponsor: USDOT/Federal Railroad Administration**

**Project Title: Long Bridge Project**

**Location: Arlington County**

**Project Number: DEQ #19-094F**



Fisher, John &lt;john.fisher@deq.virginia.gov&gt;

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**Re: NEW PROJECT USDOT/FRA Long Bridge Project DEQ #19-094F**

1 message

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**Warren, Arlene** <arlene.warren@vdh.virginia.gov>  
To: John Fisher <john.fisher@deq.virginia.gov>

Wed, Sep 4, 2019 at 5:12 PM

**Project Name: USDOT/FRA Long Bridge Project****Project #: 19-094 F**

UPC #: N/A

**Location: Arlington Co.**

VDH – Office of Drinking Water has reviewed the above project. Below are our comments as they relate to proximity to **public drinking water sources** (groundwater wells, springs and surface water intakes). Potential impacts to public water distribution systems or sanitary sewage collection systems **must be verified by the local utility.**

There are no public groundwater wells within a 1-mile radius of the project site.

There are no surface water intakes located within a 5-mile radius of the project site.

The project is not within the watershed of any public surface water intakes.

There are no apparent impacts to public drinking water sources due to this project.

*The Virginia Department of Health – Office of Drinking Water appreciates the opportunity to provide comments. If you have any questions, please let me know.*

Best Regards,

Arlene Fields Warren

**GIS Program Support Technician****Office of Drinking Water****Virginia Department of Health**

109 Governor Street

Richmond, VA 23219

(804) 864-7781

On Tue, Aug 13, 2019 at 11:40 AM Fulcher, Valerie <valerie.fulcher@deq.virginia.gov> wrote:

**Good morning - this is a new OEIR review request/project:**

**Document Type: Federal Consistency Determination**

**Project Sponsor: USDOT/Federal Railroad Administration**



# COMMONWEALTH of VIRGINIA

*Marine Resources Commission*  
380 Fenwick Road  
Bldg 96  
Fort Monroe, VA 23651-1064

Matthew J. Strickler  
Secretary of Natural Resources

Steven G. Bowman  
Commissioner

August 15, 2019

Department of Environmental Quality  
Attn: John Fisher  
Office of Environmental Impact Review  
1111 East Main St.  
Richmond, VA 23219

Re: Federal Consistency Determination  
Long Bridge Project  
DEQ #19-094F

Dear Mr. Fisher

This will respond to the request for comments regarding the Federal Consistency Determination for the Long Bridge project (DEQ #19-094F), prepared by the Federal Railroad Administration (FRA). Specifically, the FRA has proposed to construct a new railroad bridge over the Potomac River to address a current transportation bottleneck as well as future use and to construct a multi-use path also crossing the river. The project is located in Arlington County, Virginia.

We received the applicant's provided project description and documents and this project WILL require a permit from this agency for the proposed impacts to tidal wetlands within the project area. The applicant must submit a Joint Permit Application for the aforementioned bridge and path construction before installation.

Please be advised that the Virginia Marine Resources Commission (VMRC) pursuant to Chapter 12, 13, & 14 of Title 28.2 of the Code of Virginia administers permits required for submerged lands, tidal wetlands, and beaches and dunes. The VMRC administers the enforceable policies of fisheries management, subaqueous lands, tidal wetlands, and coastal primary sand dunes and beaches which comprise some of Virginia's Coastal Zone Management Program. VMRC staff has reviewed the submittal and offers the following comments:

Fisheries and Shellfish: None in close proximity to the project area

State-owned Submerged Lands: No impacts expected

Tidal Wetlands: Impacts to adjacent tidal wetlands in the project area

Beaches and Coastal Primary Sand Dunes: None in close proximity to the project area

As such, this project has a foreseeable impact on the VMRC's enforceable policies and will require a

*An Agency of the Natural Resources Secretariat*

[www.mrc.virginia.gov](http://www.mrc.virginia.gov)

Telephone (757) 247-2200 (757) 247-2292 V/TDD Information and Emergency Hotline 1-800-541-4646 V/TDD

I-65

Department of Environmental Quality  
August 15, 2019  
Page Two

permit. As proposed, we have no objection to the consistency findings provided by the applicant. Should the proposed project change, a new review by this agency may be required relative to these jurisdictional areas.

If you have any questions please contact me at (757) 247-8028 or by email at [mark.eversole@mrc.virginia.gov](mailto:mark.eversole@mrc.virginia.gov). Thank you for the opportunity to comment.

Sincerely,

A handwritten signature in black ink, appearing to read "Mark Eversole", written in a cursive style.

Mark Eversole  
Environmental Engineer, Habitat Management

MCE/keb  
HM

Matthew J. Strickler  
Secretary of Natural Resources

Clyde E. Cristman  
Director



Rochelle Altholz  
Deputy Director of  
Administration and Finance

Russell W. Baxter  
Deputy Director of  
Dam Safety & Floodplain  
Management and Soil & Water  
Conservation

Thomas L. Smith  
Deputy Director of Operations

**COMMONWEALTH of VIRGINIA**  
DEPARTMENT OF CONSERVATION AND RECREATION

**MEMORANDUM**

DATE: September 5, 2019  
TO: John Fisher, DEQ  
FROM: Roberta Rhur, Environmental Impact Review Coordinator  
SUBJECT: DEQ 19-094F, Long Bridge Project

**Division of Natural Heritage**

The Department of Conservation and Recreation's Division of Natural Heritage (DCR) has searched its Biotics Data System for occurrences of natural heritage resources from the area outlined on the submitted map. Natural heritage resources are defined as the habitat of rare, threatened, or endangered plant and animal species, unique or exemplary natural communities, and significant geologic formations.

According to the information currently in Biotics, natural heritage resources have not been documented within the submitted project boundary including a 100 foot buffer. The absence of data may indicate that the project area has not been surveyed, rather than confirm that the area lacks natural heritage resources. In addition, the project boundary does not intersect any of the predictive models identifying potential habitat for natural heritage resources.

There are no State Natural Area Preserves under DCR's jurisdiction in the project vicinity.

Under a Memorandum of Agreement established between the Virginia Department of Agriculture and Consumer Services (VDACS) and the DCR, DCR represents VDACS in comments regarding potential impacts on state-listed threatened and endangered plant and insect species. The current activity will not affect any documented state-listed plants or insects.

New and updated information is continually added to Biotics. Please re-submit project information and map for an update on this natural heritage information if the scope of the project changes and/or six months has passed before it is utilized.

The Virginia Department of Game and Inland Fisheries (VDGIF) maintains a database of wildlife locations, including threatened and endangered species, trout streams, and anadromous fish waters that may contain information not documented in this letter. Their database may be accessed from <http://vafwis.org/fwis/> or contact Ernie Aschenbach at 804-367-2733 or [Ernie.Aschenbach@dgif.virginia.gov](mailto:Ernie.Aschenbach@dgif.virginia.gov).

**Division of Dam Safety and Floodplain Management**

**Floodplain Management Program:**

600 East Main Street, 24<sup>th</sup> Floor | Richmond, Virginia 23219 | 804-786-6124

*State Parks • Soil and Water Conservation • Outdoor Recreation Planning  
Natural Heritage • Dam Safety and Floodplain Management • Land Conservation*

The National Flood Insurance Program (NFIP) is administered by the Federal Emergency Management Agency (FEMA), and communities who elect to participate in this voluntary program manage and enforce the program on the local level through that community's local floodplain ordinance. Each local floodplain ordinance must comply with the minimum standards of the NFIP, outlined in 44 CFR 60.3; however, local communities may adopt more restrictive requirements in their local floodplain ordinance, such as regulating the 0.2% annual chance flood zone (shaded X Zone).

All development within a Special Flood Hazard Area (SFHA) or floodplain, as shown on the locality's Flood Insurance Rate Map (FIRM), must be permitted and comply with the requirements of the local floodplain ordinance. As per Executive Memorandum 2-97, development in a floodplain by an agency of the Commonwealth, or by its contractor, shall comply with the locally adopted floodplain management ordinance. Additionally, new state-owned buildings shall not be constructed in the SFHA unless a variance is granted by the Department of General Services. Projects conducted by federal agencies within the SFHA must comply with Executive Order 11988: Floodplain Management.

The NFIP defines development as *"any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials."* (44 CFR 59.1)

The NFIP defines Special Flood Hazard Area (SFHA) as *"the land in the flood plain within a community subject to a 1 percent or greater chance of flooding in any given year. The area may be designated as Zone A on the FHBM. After detailed ratemaking has been completed in preparation for publication of the flood insurance rate map, Zone A usually is refined into Zones A, AO, AH, A1-30, AE, A99, AR, AR/A1-30, AR/AE, AR/AO, AR/AH, AR/A, VO, or V1-30, VE, or V."* (44 CFR 59.1)

DCR's Floodplain Management Program does not have regulatory authority for projects in the SFHA. The applicant/developer must contact the local floodplain administrator for an official floodplain determination, and if the project is located in the SFHA, this project must comply with the community's local floodplain ordinance, including receiving a local permit. Failure to comply with the local floodplain ordinance could result in enforcement action from the locality. For state projects, DCR recommends that compliance documentation be provided prior to the project being funded. For federal projects, the applicant/developer is encouraged reach out to the local floodplain administrator and comply with the community's local floodplain ordinance.

To find flood zone information, use the Virginia Flood Risk Information System (VFRIS): [www.dcr.virginia.gov/vfris](http://www.dcr.virginia.gov/vfris)

To find local floodplain administrator contact information, use DCR's Local Floodplain Management Directory: [www.dcr.virginia.gov/dam-safety-and-floodplains/floodplain-directory](http://www.dcr.virginia.gov/dam-safety-and-floodplains/floodplain-directory)

The remaining DCR divisions have no comments regarding the scope of this project. Thank you for the opportunity to comment.

U.S. Department of  
Homeland Security

United States  
Coast Guard



Commander  
Fifth Coast Guard District

431 Crawford Street  
Portsmouth, VA 23704  
Staff Symbol: dpb  
Phone: (757)398-6587  
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16591  
14 NOV 2019

Mr. David Valenstein  
Senior Advisor – Major Projects & Credit Programs  
Office of Railroad Policy and Development  
Federal Railroad Administration  
1200 New Jersey Ave, SE  
Washington, DC 20590

Dear Mr. Valenstein:

Coast Guard has completed its review of the comments received during preliminary public notice (D05PPN-04-2019) that closed on October 3, 2019.

We received general comments concerning navigation and recommendations concerning a minimum vertical clearance for the proposed Long Bridge, at mile 109.8, and pedestrian bridge, at mile 109.81, across the Potomac River, at Washington DC. However, the comments did not contain sufficient vessel specific information to make a conclusion concerning a minimum vertical clearance for the bridge.

The Coast Guard is currently distributing a survey via marina/yacht club owners/managers to vessel owners at their facility, requesting vessel specific information. The survey will be open through December 13, 2019. Any comments received will be considered by the Coast Guard in making a preliminary navigation clearance determination (PNCD) with the minimum navigational (horizontal and vertical) clearances required for the subject proposed bridge. The Coast Guard anticipates making a PNCD within 30 days following closure of the survey comment period.

Please contact Mr. Mickey Sanders, project officer, at the above telephone number or email address if you have any questions regarding our comments or requirements.

Sincerely,

A handwritten signature in blue ink that reads "Hal R. Pitts".

HAL R. PITTS  
Bridge Program Manager  
By direction

Copy: Ms. Anna Chamberlin, District Department of Transportation  
CG Sector Maryland-National Capital Region, Waterways Management

U.S. Department of  
Homeland Security

United States  
Coast Guard



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16591  
5 MAR 2020

Mr. David Valenstein  
Senior Advisor – Major Projects & Credit Programs  
Office of Railroad Policy and Development  
Federal Railroad Administration  
1200 New Jersey Ave, SE  
Washington, DC 20590

Dear Mr. Valenstein:

The Coast Guard has reviewed the Navigation Study dated July 22, 2019, for the Long Bridge in Washington, DC. Based on a preliminary review of this study and the information available as of the date of this letter, the Coast Guard does not foresee anything that would prevent a bridge permit from being issued. The Preliminary Navigation Clearance Determination (PNCD) and information below are provided to assist Federal Railroad Administration (FRA) in preparing and submitting a bridge permit application.

The Coast Guard has made a PNCD that a fixed bridge that carries the Long Bridge across the Potomac River, at mile 109.8 and a pedestrian bridge, at mile 109.81, at Washington, DC, will provide for the current and prospective reasonable needs of navigation. The proposed project is to modify the Long Bridge by building a second two-track railroad bridge structure and a new pedestrian bridge between the existing Long Bridge and Charles R. Fenwick (DC Metrorail) Bridge and retain the existing two-track railroad bridge structure at the same location. The existing drawbridge in the permanently closed position has a vertical clearance of 18 feet above mean high water and 100 feet of horizontal clearance through the main navigation span of the bridge. The proposed fixed bridges should provide at least 20 feet of vertical clearance above mean high water and at least 100 feet of horizontal clearance through the main navigation span of the bridge.

Please note that this PNCD is not binding, does not constitute an approval or final agency action, and **expires three (3) years from the date of this correspondence**. A final determination can only be made in accordance with regulation and after FRA submits a complete bridge permit application to the Coast Guard. If a complete bridge permit application is not submitted within three (3) years from the date of this correspondence, an updated Navigation Impact Report as described in appendix A of the Coast Guard's Bridge Permit Application Guide, COMDTPUB P16591.3D, should be prepared and submitted in order to obtain a new PNCD.

16591  
5 MAR 2020

Mr. Mickey Sanders, at the above listed address or telephone number, has been assigned as the Coast Guard's Bridge Permit project officer. Please maintain frequent and regular contact with the project officer to ensure efficient and effective project administration.

Sincerely,

A handwritten signature in blue ink that reads "Hal R. Pitts". The signature is written in a cursive style with a large initial "H" and "P".

HAL R. PITTS  
Bridge Program Manager  
By direction

Encl: Bridge Permit Application Guide, COMDTPUB P16195.3D and BPAG Applicant  
Template located at (<https://go.usa.gov/xRFk2>)

Copy: CG Sector Maryland-National Capital Region, Waterways Management