

**VDOT** **HRBT EXPANSION** **JPA Updates – Temporary Pad** **HAMPTON ROADS**  
CONNECTIVE PARTNER

- Temporary Fill

64 **HDR** **MOTT MACDONALD**  
Design Joint Venture

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**VDOT** **HRBT EXPANSION** **JPA Updates – TBM Quay** **HAMPTON ROADS**  
CONNECTIVE PARTNER

- TBM Quay changed size and shape

September 2019

December 2019

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Design Joint Venture

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**VDOT** **HRBT EXPANSION** **Dredge Area** **HAMPTON ROADS**  
CONNECTIVE PARTNERS

- Dredge changed as per findings of Investigation work – Bathymetry August 2019
- Dredge for Construction

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**VDOT** **HRBT EXPANSION** **Dredge Area** **HAMPTON ROADS**  
CONNECTIVE PARTNERS

- Dredge for Demolition

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RFI Review




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■ RFI Summary to Date:

- 9/13 DEQ RFI Letter (letter response 10/11)
- 9/24 USACE PN
  - 10/25 EPA letter (email response 12/19/2019)
  - 9/29 Ms. Lyons (email response 10/2)
  - 10/25 Mr. Layton (email response 11/1; rev 12/9)
  - 10/25 DCR-DNH (email response 12/19/2019)
- 10/25 VMRC RFI Letter
  - APOs (11/12/2019)
  - Mooring piles and buoys (12/19/2019 JPA)
  - Willoughby Spit bulkhead and piers (12/19/2019 JPA Update)
- 11/19 USACE RFI Spreadsheet (12/19/2019 JPA Update)



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RFI Review




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■ RFI Summary to Date:

- 11/22 USCG RFI Letter
- 11/29 VMRC PN
  - Landowners – Private Property Impacts
- 10/1 and 11/6 Coordination Meetings – Response in Meeting Minutes
  - Reflected in 12/19/2019 JPA
- City of Norfolk (10/18/2019)
  - Reflected in 12/19/2019 JPA



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## Mitigation Workshop



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November 6 Mitigation Meeting Follow Up

- ▶ SAV advance release credits (TNC)
  - ▶ Very early stages of coordination
  - ▶ Not a viable option for HRBT
- ▶ Oyster reefs
  - ▶ Location of reef(s) TBD
  - ▶ Selection criteria based on highest probability of success
  - ▶ Location will be coordinated with IRT
- ☐ Tidal wetlands PRM
- ▶ Coordination Meetings (early 2020)
  - ▶ LRRT for oysters and subaqueous
  - ▶ Tidal wetland banks
  - ▶ VIMS for SAV
  - ▶ Watermen for clams



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## Mitigation Workshop



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- ▶ Clam compensation
  - ▶ Combined results from Versar and VIMS surveys
  - ▶ Used highest number from each location
    - ▶ 23,407 North Island
    - ▶ 72,227 South Island
    - ▶ 3,739 ST Dredging
  - ▶ 99,373 Total

**Versar Data**

Location	Average of Abundance (# per m <sup>2</sup> )	Meters of Impact	Abundance of Clams per Impact	Compensation (1.3:1 ratio)
North Island	0	60,018	0	0
South Island	3.79	14,672	55,559	72,227
South Trestle Dredging	0	31,953	0	0

**VIMS Data**

Location	Average of Abundance (# per m <sup>2</sup> )	Meters of Impact	Abundance of Clams per Impact	Compensation (1.3:1 ratio)
North Island	0.30	60,018	18,005	23,407
South Island	0.09	14,672	1,321	1,717
South Trestle Dredging	0.09	31,953	2,976	3,739



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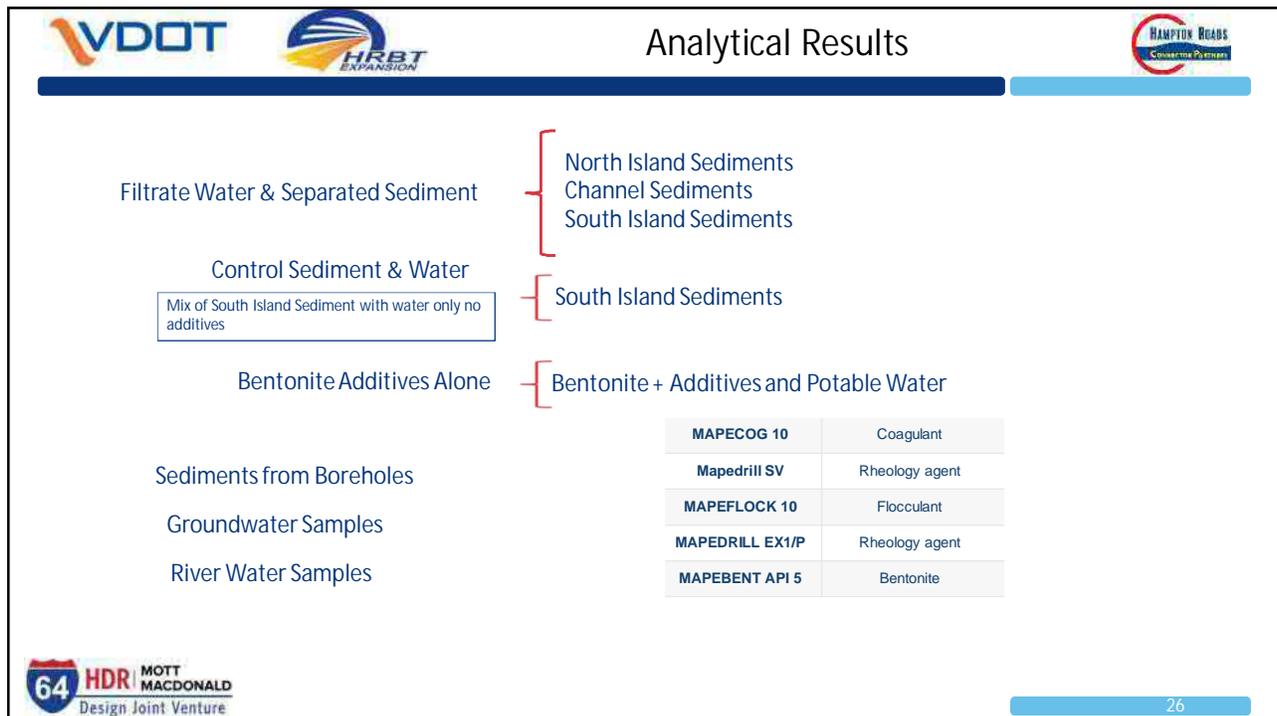
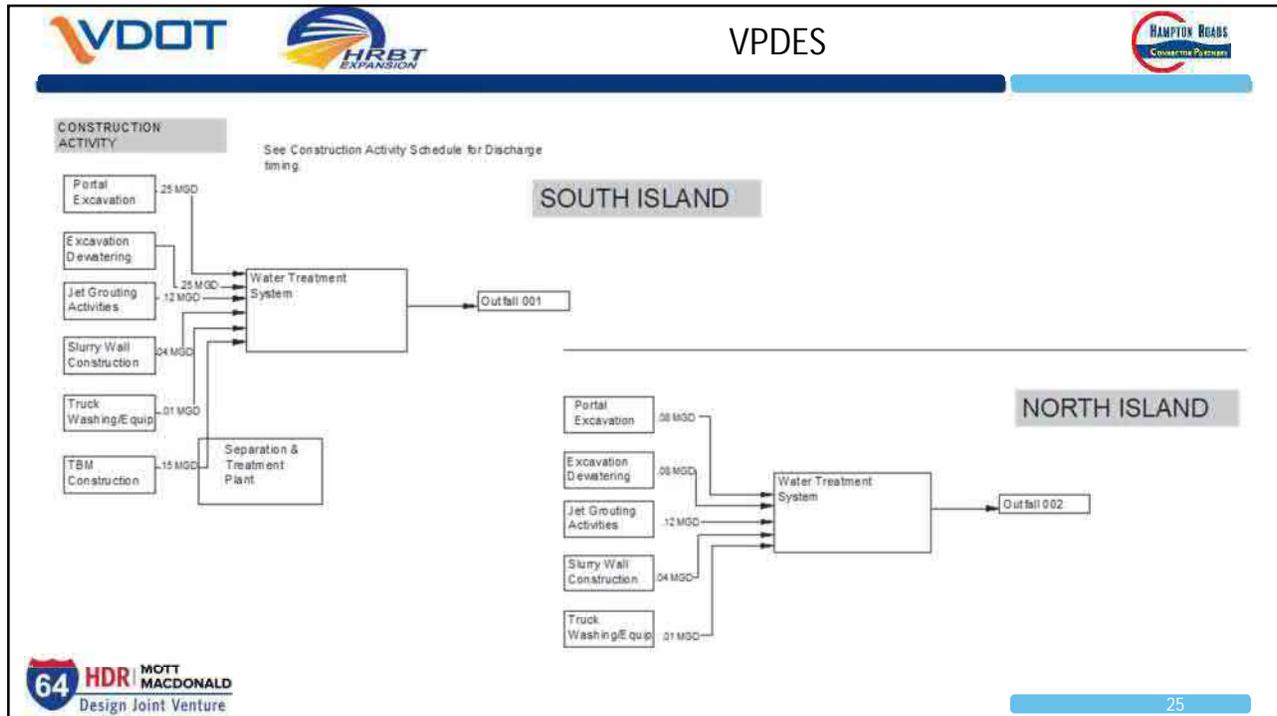
**VPDES**

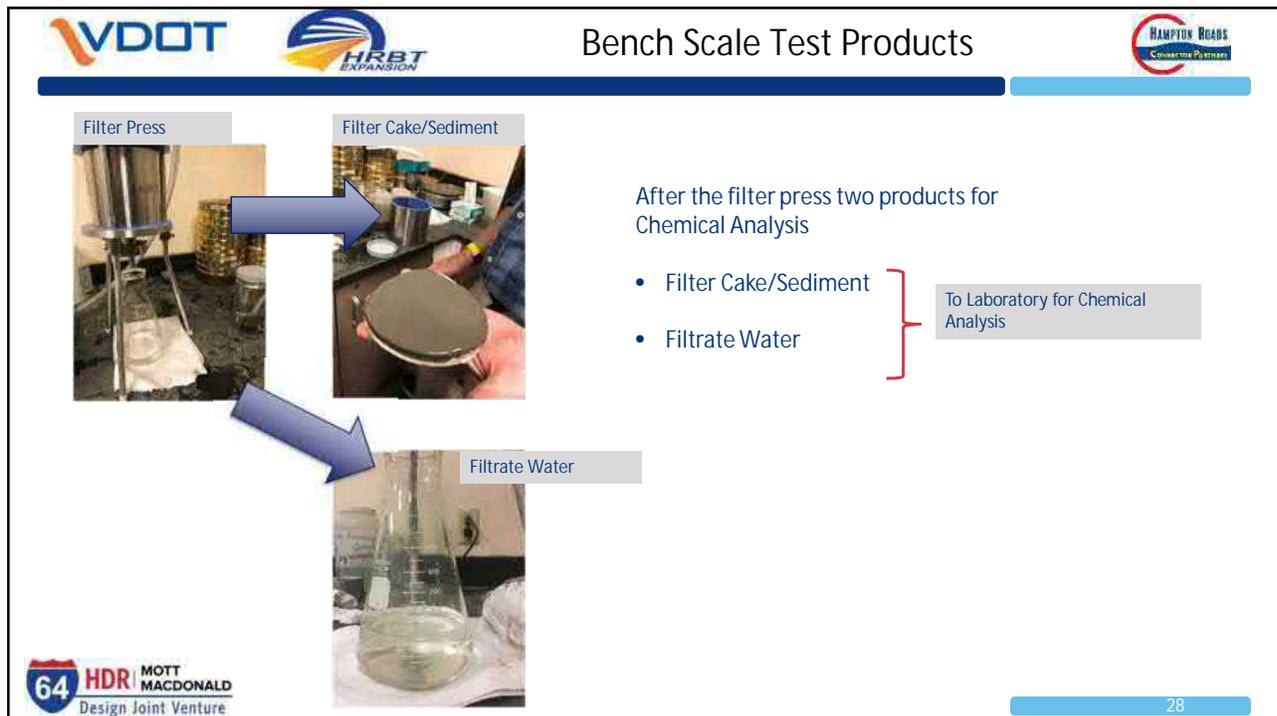
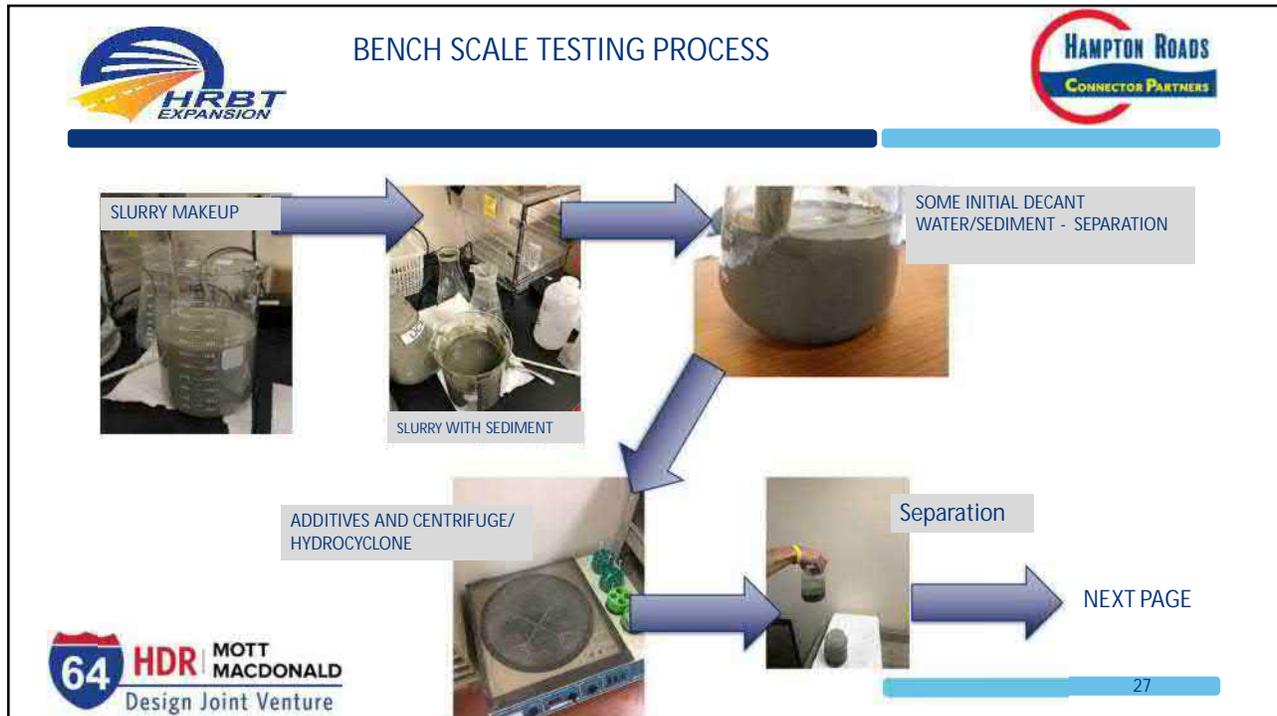
**VPDES Permit Information**

- VPDES Process water outfalls- 001, 002
- Bench scale testing for contamination in water and soil results
- Bentonite & Additive Testing
- Anticipated submittal date

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## Chemical Analysis



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**Whole Sediment Toxicity**  
10-day *Hyalella azteca*  
10-day *Chironomus dilutus*

**Whole Effluent Toxicity**  
48-hour *Daphnia magna* (or *Ceriodaphnia dubia*)  
96-hour *Pimephales promelas*

**Process Water Sample Analyses**

TAL Metals (list of 23 elements) SW846 6010 / 7470  
 Butyltins (sub) Kronos  
 PCB Congeners SW846 8082  
 PCB Aroclors SW846 8082  
 Organochlorine Pesticides SW846 8081A  
 Organochlorine Herbicides SW846 8151  
 VOCs SW846 8260B  
 SVOCs SW846 8270D  
 PAHs SW846 8270D SIM  
 Dioxins/Furans (2,3,7,8-TCDD / TCDF only) SW846 8290  
 Cyanide SW846 9012  
 pH EPA 150.1  
 Total Nitrate/Nitrite (as N) EPA 353.2  
 Ammonia (as N) EPA 350.1  
 Total Kjeldahl Nitrogen (TKN) EPA 351.2  
 Total Phosphorus EPA 365.4  
 Sulfide ASTM D5380  
 Total Organic Carbon (TOC) EPA 415.1

EPA-821-R-02-012

Sediment Sample Analyses

TAL Metals (list of 23 elements)  
 Hexavalent Chromium  
 Butyltins (sub)  
 PCB Congeners  
 PCB Aroclors  
 Organochlorine Pesticides  
 Organochlorine Herbicides  
 VOCs  
 SVOCs  
 PAHs  
 Dioxins/Furans (2,3,7,8-TCDD / TCDF only)  
 EOX (sub)  
 TPH - GRO (C6 - C10)  
 TPH - DRO / ORO (C10 - C34)  
 Cyanide  
 pH  
 Total Nitrate/Nitrite (as N)  
 Ammonia (as N)  
 Total Kjeldahl Nitrogen (TKN)  
 Total Phosphorus  
 Sulfide (sub)  
 Total Organic Carbon (TOC)  
 Potential Acidity (sub)  
 Neutralization Potential (sub)  
 ABA Accounting (sub)  
 Calcium Carbonate Equivalents (CCE) (sub)  
 Pyritic Sulfur (sub)  
 Saturated Paste pH & Conductivity (sub)  
 Flashpoint  
 Full TCLP

SW846 6010 / 7470  
 SW846 7196  
 Kronos  
 SW846 8082  
 SW846 8082  
 SW846 8081A  
 SW846 8151  
 SW846 8260B  
 SW846 8270D  
 SW846 8270D SIM  
 SW846 8290  
 SW846 9012  
 EPA 150.1  
 EPA 353.2  
 EPA 350.1  
 EPA 351.2  
 EPA 365.4  
 SW846 9034  
 Lloyd Kahn  
 Sobek 3.2.3  
 Sobek 3.2.3  
 calculated  
 ASTM D6316-  
 Sobek 3.2.6 / ASTM E1915-11  
 SW846 9045C  
 SW846 1010  
 SW846 1311 + various



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## Initial Results



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**Report of Analytical Results**

Client: Mott MacDonald  
 Lab ID: TM2047.1  
 Client ID: SI SLURRY WATER  
 Project: Hampton Roads Bridge Tunnel  
 SDC: TM2047  
 Lab File ID: 3MK0016.2

Sample Date: 13 NOV-19  
 Received Date: 13 NOV-19  
 Extract Date: 18 NOV-19  
 Extracted By: ACJHE  
 Extraction Method: SW846 5510C  
 Lab Prep Batch: WQ206781

Analysis Date: 20 NOV-19  
 Analyst: BE  
 Analysis Method: SW846 8151A  
 Matrix: M2  
 % Solids: NA  
 Report Date: 21 NOV-19

Compound	Qualifier	Result	Units	Dilution	PQL	ADJ PQL	ADJ MDL
Dalapon	U	5.2	ug/L	1	5	5.2	0.24
Diuron	U	3.2	ug/L	1	3	3.2	0.16
Dichloroprop	U	3.2	ug/L	1	3	3.2	0.29
2,4-D	U	3.2	ug/L	1	3	3.2	0.32
Silvex	U	3.3	ug/L	1	3	3.3	0.22
2,4,3-T	U	3.3	ug/L	1	3	3.3	0.57
2,4-DB	U	3.3	ug/L	1	3	3.3	0.59
Dinoseb	U	5.4	ug/L	1	5	5.4	0.24
3CPFP	U	110	ug/L	1	100	110	<55
MCPA	U	160	ug/L	1	100	160	<55
2,4-Dichlorophenoxyacetic Acid	U	83.4	ug/L	1	100	83.4	<55

"U" flag - Undetected



**Report of Analytical**

Client: Mott MacDonald  
 Lab ID: TM1975.1  
 Client ID: SI SLURRY WATER  
 Project: Hampton Roads Bridge Tunnel  
 SDC: TM1975  
 Lab File ID: 3MK00073.1

Sample Date: 12 NOV-19  
 Received Date: 12 NOV-19  
 Extract Date: 13 NOV-19  
 Extracted By: ACJHE  
 Extraction Method: SW846  
 Lab Prep Batch: WQ2669

Compound	Qualifier	Result	Units
PCB 8	U	0.10	ug/L
PCB 18	U	0.10	ug/L
PCB 28	U	0.10	ug/L
PCB 52	U	0.021	ug/L
PCB 89	U	0.021	ug/L
PCB 144	U	0.021	ug/L
PCB 66	U	0.021	ug/L
PCB 101	U	0.021	ug/L
PCB 87	U	0.021	ug/L
PCB 77	U	0.021	ug/L
PCB 119	U	0.021	ug/L
PCB 184	U	0.021	ug/L
PCB 153	U	0.021	ug/L
PCB 109	U	0.021	ug/L
PCB 138	U	0.021	ug/L
PCB 167	U	0.021	ug/L
PCB 183	U	0.021	ug/L
PCB 126	U	0.10	ug/L
PCB 128	U	0.021	ug/L
PCB 156	U	0.021	ug/L
PCB 180	U	0.021	ug/L
PCB 170	U	0.021	ug/L
PCB 169	U	0.021	ug/L
PCB 195	U	0.10	ug/L
PCB 206	U	0.021	ug/L
PCB 209 (DCB)	U	0.021	ug/L
Tetrachloro-M-Xylene	+	29.7	%
PCB 103	+	19.2	%
PCB 192	+	25.0	%



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## Sediment Results



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INORGANIC ANALYSIS DATA SHEET

Lab Name: Katabdin Analytical Services      Client Field ID: MISED SLURRY  
 Matrix: SOIL      SDG Name: TM1193  
 Percent Solids: 45.0      Lab Sample ID: TM1193-001

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	LO
7429-90-3	ALUMINUM, TOTAL	4230			MS	5	
7440-26-0	ANTIMONY, TOTAL	0.32			MS	5	0
7440-38-2	ARSENIC, TOTAL	15.2			MS	5	0
7440-36-3	BARIUM, TOTAL	23.0			MS	5	0
7440-41-7	BERYLLIUM, TOTAL	0.499			MS	5	0
7440-43-9	CADMIUM, TOTAL	0.095	J		MS	5	0
7440-70-2	CALCIUM, TOTAL	30500			MS	5	
7440-47-3	CHROMIUM, TOTAL	70.5			MS	5	0
7440-48-4	COBALT, TOTAL	2.91			MS	5	0
7440-50-8	COPPER, TOTAL	2.93			MS	5	0
7439-89-6	IRON, TOTAL	38400			MS	5	
7439-92-1	LEAD, TOTAL	7.27			MS	5	0
7439-95-4	MAGNESIUM, TOTAL	2120			MS	5	
7439-96-5	MANGANESE, TOTAL	1516			MS	5	0
7439-97-6	MERCURY, TOTAL	0.002	U	X	CV	1	0.03
7440-02-0	NICKEL, TOTAL	6.34			MS	5	0
7440-09-7	POTASSIUM, TOTAL	1090			MS	5	1
7782-49-2	SELENIUM, TOTAL	0.16	J		MS	5	0
7440-22-4	SILVER, TOTAL	0.020	J		MS	5	0
7440-21-3	SODIUM, TOTAL	3580			MS	5	1
7440-28-0	TITANIUM, TOTAL	0.055	J		MS	5	0
7440-82-1	VANADIUM, TOTAL	26.1			MS	5	0
7440-86-6	ZINC, TOTAL	25.7			MS	5	1

Metals detections are consistent with sediments analyzed from previous borings made in April. Results on same order of magnitude as previously reported.



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## Permitting and Construction Schedule



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- JPA Update
  - Submittal December 19, 2019
  - Anticipated Permits April 2020
- USCG Bridge Permit
  - Submittal December 20, 2019
  - Anticipated Permit June 2020
- Rivers and Harbors Act – Section 408
  - Submittal December 19, 2019
  - Concurrence April 2020
- IHA
  - Submit Revision – Mid-January 2020
  - Anticipated Permit April 2020
- LOA
  - Submitted November 2019
  - Anticipated Permit September 2020



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## Upcoming Meetings



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- Post revision Submittal Meeting – January 2020
- Maritime Stakeholder Meeting – Mid January 2020
- VMRC Commissioners Meeting – February 2020
- Quarterly Compliance Meetings – Beginning May 2020

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**ATTACHMENT Q-2**  
**OFFICIAL**  
**CORRESPONDENCE**



Matthew J. Strickler  
Secretary of Natural Resources

Clyde E. Cristman  
Director



COMMONWEALTH of VIRGINIA  
DEPARTMENT OF CONSERVATION AND RECREATION

JPA Appendix Q  
Attachment Q-2  
Official Correspondence  
Responsible  
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

October 24, 2019

George Janek  
USACE-Norfolk District  
803 Front Street  
Norfolk, VA 23510

Re: NAO-1994-1166, Hampton Roads Bridge and Tunnel Expansion Project

Dear Mr. Janek:

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 our files, this site is located within the Hampton Roads Bridge Tunnel Conservation Site. Conservation sites are tools for representing key areas of the landscape that warrant further review for possible conservation action because of the natural heritage resources and habitat they support. Conservation sites are polygons built around one or more rare plant, animal, or natural community designed to include the element and, where possible, its associated habitat, and buffer or other adjacent land thought necessary for the element's conservation. Conservation sites are given a biodiversity significance ranking based on the rarity, quality, and number of element occurrences they contain; on a scale of 1-5, 1 being most significant. Hampton Roads Bridge Tunnel Conservation Site has been given a biodiversity significance ranking of B5, which represents a site of general significance. The natural heritage resources of concern at this site are:

<i>Gelochelidon nilotica</i>	Gull-billed tern	G5/S2B/NL/LT
<i>Thalasseus maximus</i>	Royal tern	G5/S2B/NL/NL
<i>Thalasseus sandvicensis</i>	Sandwich tern	G5/S1B/NL/NL
<i>Rynchops niger</i>	Black skimmer	G5/S2B,S1N/NL/NL
<i>Acipenser oxyrinchus</i>	Atlantic sturgeon	G3/S2/LE/LE

Due to the legal status of the Gull-billed tern and the Atlantic sturgeon, DCR recommends continued coordination with the National Oceanic and Atmospheric Administration National Marine Fisheries Service (NOAA Fisheries) and the Virginia Department of Game and Inland Fisheries (VDGIF), to ensure compliance with protected species legislation. DCR requests copies of any surveys, studies, and monitoring reports that are developed for this project.

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 Virginia Department of Conservation and Recreation (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 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).

Should you have any questions or concerns, please contact me at 804-225-2429. Thank you for the opportunity to comment on this project.

Sincerely,



Tyler Meader  
Natural Heritage Locality Liaison

Cc: Christine Vaccaro, NOAA Fisheries-Protected Species Division  
Amy Ewing, VDGIF





# COMMONWEALTH of VIRGINIA

## Marine Resources Commission

Building 96

380 Fenwick Road

Fort Monroe, VA 23651

Matthew J. Strickler  
Secretary of Natural Resources

Steven G. Bowman  
Commissioner

October 25, 2019

Hampton Roads Connector Partners JV  
Mr. Jose Ignacio Martin Alos Budalles  
c/o Mott MacDonald  
Attn: Mr. Douglas A. Gaffney  
3 Paragon Way  
Freehold, NJ 07728

Re: VMRC #19-1577

Dear Mr. Budalles:

This is in reference to your application to widen I-64 over approximately 10 miles from Settlers Landing Road in Hampton to the I-64/I-564 interchange in Norfolk, to include the expansion of existing roadways, construction of new bridge trestles, boring of two new two-lane tunnels, and expansion of existing portal islands. The processing number referenced above has been assigned to this proposal. Please refer to this number in all future correspondence pertaining to this project.

Please be advised that a permit **will** be required from the Marine Resources Commission for this proposed project. After an initial review of your application, it appears that additional information will be required before your application can be considered to be complete. This information is necessary in order to thoroughly evaluate your project.

Please provide plan view and cross sectional drawings showing the proposed bulkhead and pier construction in the Willoughby Spit area to include the dimensions of the proposed piers, and mean low and mean high water lines.

Please provide drawings for the proposed locations of mooring buoys and pilings in the Willoughby Bay and Hampton Flats area. Please include the total number of pilings and buoys as well as GPS coordinates for the location of each.

Please provide a list of adjacent property owners that are riparian and within 500 feet of the project limits.

*An Agency of the Natural Resources Secretariat*

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

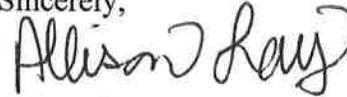
Telephone (757) 247-2200 (757) 247-2292 V/TDD Information and Emergency Hotline 1-800-541-4646 V/TDD

Mr. Jose Ignacio Martin Alos Budalles  
Page Two

October 25, 2019  
VMRC #19-1577

We are continuing to process your application, but must consider it to be incomplete pending receipt of the above-requested information. Should you have any questions regarding this matter, please feel free to call me at (757) 247-2254.

Sincerely,



Allison Lay  
Environmental Engineer

AL/tsb  
HM

cc: Douglas Gaffney, Mott MacDonald  
George Janek, U.S. Army Corps of Engineers  
Jeffrey Hannah, Department of Environmental Quality  
Scott Smizik, Department of Transportation





October 11, 2019\_revised November 1, 2019

HRCP-VDEQ-LTR-0001

Mr. Jeffrey M. Hannah  
Regional VWPP Program Manager  
Tidewater Regional Office  
Virginia Department of Environmental Quality  
5636 Southern Boulevard  
Virginia Beach, Virginia 23462

via email: jeffrey.hannah@deq.virginia.gov

Re: Response to DEQ Request for Additional Information #1  
Joint Permit Application #19-1577  
Hampton Roads Bridge Tunnel Expansion Project  
Norfolk and Hampton, Virginia

Dear Mr. Hannah:

This letter is in response to a letter received from your office on September 13, 2019 requesting additional information in support of the Joint Permit Application submitted for the above-referenced project. Each request is presented in bold below followed by our responses in italics.

**1. Section 1 of the application lists the applicant name as "Hampton Roads Connector Partners JV" with State Corporation Commission (SCC) ID number 30-1036637. According to the SCC website, there is no registered entity with this name, nor associated with that number. The applicant must be a legal entity, so please revise this section as needed or provide documentation of SCC registration.**

*Hampton Roads Connector Partners is an unincorporated joint venture. Therefore, it does not have its own SCC ID, but instead retains the corporate identities of its four member companies: Dragados USA, Inc. (SCC ID F1790874); Flatiron Constructors, Inc. (SCC ID F178756-5); Vinci Construction Grands Projets, Inc. (SCC ID F2020156); and Dodin Campenon Bernard Inc. (SCC ID F2085027).*

*Each member of Hampton Roads Connector Partners has recorded a fictitious name certificate in the City of Norfolk and the City of Hampton, adopting "Hampton Roads Connector Partners" as an assumed/fictitious name. These certificates appear in the SCC database when "Hampton Roads Connector Partners" is searched. Note that the name is "Hampton Roads Connector Partners," not "Hampton Roads Connector Partners JV."*

**2. We understand that 1) the project team has refined the accuracy of impacts and is providing updated information (email correspondence from agent 9/12/19); 2) subsurface marine borings, sediment analysis, and bench scale testing are pending; and 3) we have a JPA post-submission meeting scheduled for October 1, 2019. Additional information may be required pending the foregoing.**

*Noted. On September 12, 2019, HRCP provided updated impact plates and tables (Attachments G-1 and G-2, respectively) via email. The Nationwide Permit 6 was received September 19, 2019 and a notice to mariners was provided for the activity to start September 30, 2019. Marine borings are currently underway and bench scale test results are anticipated to be completed by November 19, 2019. HRCP*



was glad to hold the October 1, 2019 post-JPA submission meeting and remains committed to providing any additional information required by your office.

**3. A permit application fee is required for the proposed activity and to complete the application. Once the proposed impact information has been confirmed, DEQ will notify you of the fee amount.**

*Noted. HRCP will pay the required permit application fee upon notification by DEQ.*

**4. Please provide a written disclosure regarding the presence or absence of any surface waters and/or upland buffers under a deed restriction or conservation easement within the project limits.**

*HRCP is in the process of finalizing the reports from the title search. Although no known surface waters and/or upland buffers are expected to be under deed restriction or conservation easement within the project limits, HRCP will provide a definitive written disclosure by October 23, 2019.*

**5. Please complete the attached Project Access Agreement for all property owners within the project limits and return to me. If the project is entirely within VDOT right-of-way, please have signed by an authorized representative. The form is provided as a word document so that you may modify as needed.**

*As the owner, VDOT will complete the Project Access Agreement and the signed agreement will be provided to you under separate cover.*

Should you have any questions regarding the above responses or require additional information, please do not hesitate to contact me at 404-702-1030 or [jmartinalos@hrctp.com](mailto:jmartinalos@hrctp.com).

Regards,

A handwritten signature in blue ink, appearing to read "Jose Ignacio Martin Alos", with a horizontal line underneath.

Jose Ignacio Martin Alos  
Project Executive  
Hampton Roads Connector Partners

Attachments: None

cc: George Janek, USACE (via email: [george.a.janek@usace.army.mil](mailto:george.a.janek@usace.army.mil))  
Allison Lay, VMRC (via email: [allison.lay@mrc.virginia.gov](mailto:allison.lay@mrc.virginia.gov))  
Scott Smizik, VDOT (via email: [scott.smizik@vdot.virginia.gov](mailto:scott.smizik@vdot.virginia.gov))





## 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

November 5, 2019

Jose Ignacio Martin Alos, Project Executive  
Hampton Roads Connector Partners  
240 Corporate Blvd., 4<sup>th</sup> Floor  
Norfolk, VA 23502  
Via Email: [jmartinalos@hrcpjv.com](mailto:jmartinalos@hrcpjv.com)

RE: Federal Consistency Certification: I-64 Hampton Roads Bridge-Tunnel Expansion Project, Cities of Norfolk and Hampton, U.S. Army Corps of Engineers Individual Permit (DEQ 19-093F).

Dear Mr. Alos,

The Commonwealth of Virginia has completed its review of the federal consistency certification (FCC) for the above-referenced project. The Department of Environmental Quality (DEQ) is responsible for coordinating Virginia's review of federal consistency documents and responding to appropriate officials on behalf of the Commonwealth. This letter is in response to the FCC submission received on August 12, 2019. The FCC was submitted by the Hampton Roads Connector Partners as a requirement to obtain an U.S. Army Corps of Engineers (Corps) Individual Permit. The following agencies and planning district commissions (PDCs) participated in this review:

- Department of Environmental Quality (DEQ)
- Department of Game and Inland Fisheries (DGIF)
- Department of Conservation and Recreation (DCR)
- Department of Health (VDH)
- Department of Historic Resources (DHR)
- Virginia Institute of Marine Sciences (VIMS)
- Marine Resources Commission (VMRC or Commission)
- Hampton Roads PDC
- Crater PDC

The Department of Transportation and the cities of Norfolk and Hampton also were invited to comment.

I-64 Hampton Roads Bridge-Tunnel Expansion Project  
19-093F

## **PROJECT DESCRIPTION**

The Hampton Roads Connector Partners (applicant or HRCP) is applying for an individual permit from the U.S. Army Corps of Engineers (Corps) pursuant to Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act for the proposed Hampton Roads Bridge Tunnel Expansion project along the Interstate-64 highway corridor in the cities of Norfolk and Hampton, Virginia. The HRCP are the design-build contractors that have been hired by the Virginia Department of Transportation (VDOT) to complete the construction of the new transit infrastructure. The purpose of the project is to relieve congestion while improving accessibility, transit, emergency evacuation, and military and goods movement in the Hampton Roads region. The project includes two new two-lane tunnels and trestle bridges crossing the Hampton Roads channel between Norfolk and Hampton, and will widen the existing bridge-tunnel and its approaches from four general purpose lanes to eight lanes, including a new High Occupancy Toll (HOT) lane and a new inside shoulder. Additionally, the existing portal islands will be expanded. A part-time HOT lane will also be added in each direction of I-64 between Settlers Landing Road and the I-564 interchange in Norfolk.

## **PUBLIC PARTICIPATION**

In accordance with 15 CFR §930.2, a public notice of this proposed action with a public comment period of August 16, 2019 to September 20, 2019 was published in OEIR's Program Newsletter and on the DEQ website. 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 (CZMA) of 1972, as amended (16 USCA, CZMA § 307, § 1456(c)(3)(A)) and its implementing federal consistency regulations (15 CFR Part 930, subpart D), any applicant for a required listed federal license or permit to conduct an activity, in or outside of the coastal zone, affecting any land or water use or natural resource of the coastal zone of the Commonwealth shall provide in the application to the licensing or permitting agency a certification that the proposed activity complies with the enforceable policies of the Virginia Coastal Zone Management (CZM) Program and that such activity will be conducted in a manner consistent with the program. At the same time, the applicant shall furnish to DEQ a copy of the certification with all necessary information and data. The Commonwealth has six months after receipt of a complete FCC to concur or object to the applicant's finding of project consistency with the Virginia CZM Program. The Virginia CZM Program is comprised of a network of programs administered by several agencies. In order to be consistent with the Virginia CZM Program, all the applicable permits and

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approvals listed under the enforceable policies of the Virginia CZM Program must be obtained prior to commencing the project.

## **FEDERAL CONSISTENCY CONDITIONAL CONCURRENCE**

Based on our review of the consistency certification and the comments submitted by agencies administering the enforceable policies of the Virginia CZM Program, DEQ **conditionally concurs** that the proposal is consistent with the Virginia CZM Program provided all applicable permits and approvals are obtained and the conditions of the enforceable policies are adhered to as described below. In addition, in accordance with 15 CFR §930.58(a), the applicant is encouraged to consider potential project impacts to the advisory policies of the Virginia CZM Program (<https://www.deq.virginia.gov/Programs/EnvironmentalImpactReview/FederalConsistencyReviews.aspx#advisory>).

If, prior to construction, the project should change significantly and any of the enforceable policies of the Virginia CZM Program would be affected, pursuant to 15 CFR §930.66, the applicant must submit supplemental information to DEQ for review and approval. Other state approvals which may apply to this project are not included in this FCC. Therefore, the applicant must ensure that this project is constructed and operated in accordance with all applicable federal, state, and local laws and regulations.

### **Conditions of Concurrence with the FCC**

The conditions of the Commonwealth's concurrence include the following authorizations under the Virginia CZM Program:

- a permit issued by VMRC for encroachments on or over state-owned subaqueous beds authorized under § 28.2-1200 *et seq.* of the Virginia Code.
- a permit issued by VMRC or the local wetlands board for impacts to tidal wetlands not owned or leased by the Commonwealth or a political subdivision thereof, authorized under §28.2-1301 through §28.2-1320 of the Virginia Code.
- a permit issued by DEQ for impacts to non-tidal wetlands and surface waters authorized under the VWP Permit Program (9VAC25-210-10 *et seq.*).

In accordance with the *Federal Consistency Regulations* 15 CFR Part 930, section 930.4, this conditional concurrence is based on the applicant obtaining the necessary authorizations prior to initiating project activities. If the requirements of section 930.4, sub-paragraphs (a)(1) through (a)(3) are not met, this conditional concurrence becomes an objection under 15 CFR Part 930, section 930.63.

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## ANALYSIS OF ENFORCEABLE POLICIES

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.** The FCC (page 14) states that fisheries impacts associated with the project will be predominantly short-term, related to construction impacts. In-water, bottom-disturbing activities will result in increased turbidity, temporary underwater sound impacts, and disturbances to benthic communities. An Avoidance, Minimization, and Mitigation Plan is being developed for the project, which would address impacts to fish habitat.

**1(a) Agency Jurisdiction.** The fisheries management enforceable policy is administered by the VMRC (Virginia Code Section 28.2-200 to 28.2-713) and the Department of Game and Inland Fisheries (DGIF) (Virginia Code Section 29.1-100 to 29.1-570). In addition, the 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. The mission of this Division is to minimize the risk of disease from molluscan shellfish and crustacea products at the wholesale level by classifying shellfish waters for safe commercial and recreational harvest; by implementing a statewide regulatory inspection program for commercial processors and shippers; and by providing technical guidance and assistance to the shellfish and crustacea industries regarding technical and public health issues.

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

**1(b)(i) DGIF.** The DGIF notes that an Avoidance, Minimization, and Mitigation Plan (AMMP) is being developed for the project as part of the Section 404 permit, which would address impacts to fish habitat. Construction activities will be coordinated with the National Oceanic and Atmospheric Administration (NOAA) Fisheries Service (Fisheries).

**1(b)(ii) VMRC.** The project proposes to fill approximately 19.73 acres of submerged lands during the expansion of the portal islands. The fill of submerged lands will impact important marine resources in the area. One resource of concern to the Commission is the hard clam (*Mercenaria mercenaria*). A clam survey conducted by the Commission and the Virginia Institute of Marine Science in October 2018 found clam densities up to 0.3 clams per meter squared in the area impacted by the project. The proposed

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mitigation plan of purchasing chowder clams at a 1.3:1 replacement ratio to be placed on public clam grounds is appropriate.

Approximately 1,718 pilings will be installed during construction of the new bridge trestles. Adherence to best management practices (BMPs) is recommended to minimize impacts to marine fisheries.

There are two proposed safe harbor areas in the vicinity of the project for mooring of construction vessels when not in use. One is in the Willoughby Bay area, and the other is in the Hampton Flats area. The Hampton Flats area contains a public clam bed that was designated during a Commission meeting held on March 26, 1986. While the area is not currently popular for harvesting clams, the area could still have a population of clams that could be impacted. The Commission will consider permitting this area, but restrictions to protect the clam bed may be necessary.

**1(b)(iii) VDH DSS.** VDH DSS did not comment on shellfish resources.

**1(b)(iv) VIMS.** VIMS has been involved with the pre-application and application (JPA) review for the Hampton Roads Bridge-Tunnel Expansion project. The full review of the project, as presented in the JPA, is ongoing and VIMS expects to submit comprehensive comments on the project in mid-January 2020 to all permitting agencies (VMRC, DEQ, Corps). The review will include impacts to fishes (including Atlantic sturgeon), clams, oysters, benthic organisms, submerged aquatic vegetation, sediments, shorelines, and toxicity of additives and wastewater.

**1(c) VMRC Recommendations.** During the installation of any steel hollow pilings in waterways, the Commission recommends adherence to the following best management practices to reduce impacts to marine fishery resources:

1. The use of wooden pile cap cushions should impact hammers be needed for the installation of hollow steel pilings.
2. "Ramp-up" procedures prior to initiating any pile driving. Ramp-up procedures will include an initial set of three strikes from the impact hammer at 40% energy, followed by a 30 second waiting period, then two subsequent three-strike sets. During the ramp-up the contractor will monitor the project area and if sturgeon, marine mammals, or fish kills are sighted within the project area, then a shutdown will be implemented.
3. The use of a bubble curtain and isolation casing during the placement of hollow steel piles.

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**1(d) Conclusion.** Assuming adherence to erosion and sediment controls, the AMMP, construction best management practices and consultation with NOAA Fisheries, and adherence to any special conditions in the required VMRC permit for the project, the project would be consistent with the fisheries management enforceable policy of the Virginia CZM Program.

**2. Wetlands Management.** The FCC (page 19) states that there will be wetlands impacts associated with this project and that a Joint Permit Application (JPA) has been submitted to comply with the wetlands management program administered by VMRC and DEQ. Individual wetlands permits will be required by VMRC, DEQ, and the Corps for this project. Impacts to wetlands will be avoided and minimized to the maximum extent practicable and compensatory mitigation will be provided to result in no net loss of wetland acreage or function from the project.

**2(a) Agency Jurisdiction.** The State Water Control Board promulgates Virginia's water regulations, covering a variety of permits to include Virginia Pollutant Discharge Elimination System Permit, Virginia Pollution Abatement Permit, Surface and Groundwater Withdrawal Permit, and the Virginia Water Protection (VWP) Permit. The VWP permit is a state permit which governs wetlands, surface water, and surface water withdrawals/impoundments. It also serves as § 401 certification of the federal Clean Water Act § 404 permits for dredge and fill activities in waters of the U.S. The VWP Permit Program is under the Office of Wetlands and Stream Protection (OWSP). Tidal wetlands are regulated by VMRC under the authority of Virginia Code §28.2-1301 through §28.2-1320.

**2(b) Agency Findings.**

**2(b)(i) DEQ.** The DEQ Tidewater Regional Office (TRO) states that, as described, the project will impact tidal and non-tidal surface waters, including wetlands.

**2(b)(ii) VMRC.** Approximately 17,468 square feet of submerged aquatic vegetation (SAV) will be impacted either directly by pile driving, or indirectly by shading caused by new bridge trestles. Mitigation for impacts to SAV will be necessary. The preferred mitigation method is to fund the seeding of SAV beds in the area. Such funding has been used to support the seeding activities conducted by VIMS to support SAV restoration efforts. Other out-of-kind mitigation methods may be considered during the application process.

**2(c) Requirement.** A VWP Permit is required for impacts proposed to wetlands and streams pursuant to 9VAC25-210-10 *et seq.*

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A permit issued by VMRC or the local wetlands board for impacts to tidal wetlands not owned or leased by the Commonwealth or a political subdivision thereof is required, authorized under §28.2-1301 through §28.2-1320 of the Virginia Code.

**2(d) Conclusion.** Further coordination with and approvals from VMRC and DEQ are necessary in order for the project to be consistent with the wetlands management enforceable policy of the Virginia CZM Program (see **Federal Consistency Conditional Concurrence**, page 3).

**3. Subaqueous Lands Management.** The FCC (page 18) states that the project will cross four state-owned bottomlands: the James River, Willoughby Bay, Oastes Creek, and Bay Avenue. The existing bridges will either be extended or removed and rebuilt at all four crossings. Temporary construction-related effects such as temporary moorings and temporary trestles may also cross state-owned lands. A JPA has been submitted to VMRC to comply with the management program for subaqueous lands.

**3(a) Agency Jurisdiction.** The Virginia Marine Resources Commission (VMRC) regulates encroachments in, on or over state-owned subaqueous beds as well as tidal wetlands pursuant to Virginia Code §28.2-1200 through 1400. For nontidal waterways, VMRC states that it has been the policy of the Habitat Management Division to exert jurisdiction only over the beds of perennial streams where the upstream drainage area is 5 square miles or greater. The beds of such waterways are considered public below the ordinary high water line.

**3(b) Agency Finding.** The project proposes to fill approximately 19.73 acres of submerged lands during the expansion of the portal islands.

Dredging is proposed in the footprints of both portal island expansions to remove undesirable base material. This dredging will likely remove mud and other fine materials unsuitable for beneficial reuse. These materials should be disposed of at an appropriate upland area. Dredging is also proposed for barge access along the bridge trestles between the south island and the Norfolk side of the project. The material to be dredged at these locations is likely sand that would be suitable for beneficial use on nearby public beaches.

**3(c) Agency Recommendation.** Coordinate with both the City of Hampton and the City of Norfolk to determine which public beaches would benefit from nourishment using the sandy dredge materials from these locations.

**3(d) Requirement.** The project will require a VMRC permit for all work within state-owned submerged lands pursuant to § 28.2-1200 *et seq.* of the Virginia Code.

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**3(e) Conclusion.** Further coordination with and approvals from VMRC are necessary in order for the project to be consistent with the subaqueous lands management enforceable policy of the Virginia CZM Program (see **Federal Consistency Conditional Concurrence**, page 3).

**4. Air Pollution Control.** The FCC (page 25) notes that construction equipment and processes using stationary and non-mobile sources will be subject to air permitting compliance by DEQ, including Minor New Source Review permit, a State Operating Permit, and/or general permits. Additionally, the use of the tunnel will meet each conformity requirement of the Clean Air Act and its amendments and is not expected to exceed the National Ambient Air Quality Standards (NAAQS).

**4(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).

**4(b) Ozone Attainment Area.** The project site is located in an ozone attainment area and an emission control area for volatile organic compounds (VOCs) and oxides of nitrogen (NO<sub>x</sub>), which are contributors to ozone pollution.

#### **4(c) Requirements.**

**4(c)(i) Fugitive Dust.** During land-disturbing activities, fugitive dust must be kept to a minimum by using control methods outlined in 9VAC5-50-60 *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, water or suitable chemicals for dust control during the proposed demolition and construction operations and from material stockpiles;
- Install and use hoods, fans and fabric filters to enclose and vent the handling of dusty materials;
- Cover open equipment for conveying materials; and
- Promptly remove spilled or tracked dirt or other materials from paved streets and dried sediments resulting from soil erosion.

**4(c)(ii) Open Burning.** If project activities change to include the burning of vegetative debris, this activity must meet the requirements under 9VAC5-130 *et seq.* of the regulations for open burning, and it may require a permit. The regulations provide for, but do not require, the local adoption of a model ordinance concerning open burning. The responsible agent should contact the locality to determine what local requirements, if any, exist.

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**4(c)(iii) Asphalt Paving.** In accordance with 9VAC5-45-760 *et seq.*, there are limitations on the use of “cut-back” (liquefied asphalt cement, blended with petroleum solvents) that may apply to paving activities 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.

**4(c)(iv) Fuel-Burning Equipment.** Fuel-burning equipment (boilers, generators, compressors, etc.) or any other air-pollution-emitting equipment may be subject to registration or permitting requirements under 9 VAC5-80, Article 6, Permits for New and Modified Sources.

**4(d) Agency Recommendation.** DEQ recommends that all precautions are necessary to restrict the emissions of VOCs and NO<sub>x</sub> during construction.

**4(e) Conclusion.** Provided the project complies with applicable requirements, it would be consistent with the air pollution control enforceable policy of the Virginia CZM Program.

**5. Coastal Lands Management.** The FCC (page 27) notes that 9VAC25-830-140 allows public roads to be built within Resource Protection Areas subject to certain conditions. The project will be compliant with the Chesapeake Bay Preservation Act.

**5(a) Agency Jurisdiction.** The DEQ Local Government Assistance Program (LGAP) administers the coastal lands management enforceable policy through 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) (9VAC 25-830-10 *et seq.*).

**5(b) Chesapeake Bay Preservation Areas.** In the cities of Norfolk and Hampton, 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 the local governments. The RPA includes tidal wetlands, certain non-tidal wetlands, and tidal shores. The RPA also includes 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 require less stringent performance criteria than RPAs. In the City of Norfolk the RMA consists of the land area adjacent to and landward of the Resource Protection Area and extends landward to include the remainder of the lot or parcel designated as a Resource Protection Area. When the landward boundary of the RPA falls within an improved public right-of-way, the RMA is defined as the remainder of the improved

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public right-of-way. In addition, the City has designated certain areas where development was concentrated and little of the natural environment remained on or before March 3, 1992 as Intensely Developed Areas (IDAs). These areas are intended to serve as redevelopment areas provided the General Performance Criteria are met. In the City of Hampton, the RMA is contiguous to the RPA for a distance of 100-feet in the landward direction. Hampton has also designated an IDA.

The project involves a major road transportation infrastructure project along the existing I-64 highway and the Hampton Roads Bridge Tunnel (HRBT) in Virginia. According to the City's GIS site the subject property is located within both the Norfolk and Hampton IDA and RMA; however, construction, installation, operation, and maintenance of public roads and their appurtenant structures within Chesapeake Bay Preservation Areas are exempt under 9VAC 25-830-150.B.1 of the Regulations, provided they are constructed in accordance with certain conditions.

**5(c) Requirements.** Construction, installation, operation, and maintenance of public roads and their appurtenant structures within Chesapeake Bay Preservation Areas are exempt under 9VAC25-830-150.B.1 of the Regulations, provided they are constructed in accordance with the following conditions:

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
3. Local water quality protection criteria at least as stringent as the above state requirements.

The exemption of public roads is further conditioned by the requirement to optimize road alignment and design in order to prevent or otherwise minimize the encroachment into the RPA and adverse effects on water quality.

**5(d) Conclusion.** Provided the project complies with applicable requirements, the proposed activity would be consistent with the coastal lands management enforceable policy of the Virginia CZM Program.

**6. Nonpoint Source Pollution Control.** The FCC (page 22) states that the project will result in 291 acres of temporary soil disturbance. Prior to land disturbing activities, stormwater management and erosion and sediment control plans will be developed. Best Management Practices (BMPs) will be utilized to manage stormwater. A post-development stormwater management plan will also be implemented.

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**6(a) Agency Jurisdiction.** The DEQ Office of Stormwater Management (OSM) administers the nonpoint source pollution control policy through the Virginia Erosion and Sediment Control Law and Regulations (VESCL&R) (§ 62.1-44.15:51 *et seq.*; 9VAC25-840) and the Virginia Stormwater Management Law and Regulations (VSWML&R) (§ 62.1-44.15:24 *et seq.*; 9VAC25-870). DEQ is responsible for the issuance, denial, revocation, termination and enforcement of the General VPDES Permit for Discharges of Stormwater from Construction Activities (previously known as General Permit for Discharges of Stormwater from Construction Activities or Virginia Stormwater Management Program (VSMP) permit) for the control of stormwater discharges regulated under the VSWML and the VSMP Regulations (§ 62.1-44.15 *et seq.*; VSMP Permit Regulations 9VAC 25-870-10 *et seq.*).

**6(b) Requirements.**

**6(b)(i) Erosion and Sediment Control Project-Specific Plan.** VDOT projects that involve land-disturbing activities of equal to or greater than 10,000 square feet (2,500 square feet or more in a Chesapeake Bay Preservation Area) must comply with the most current version of the VDOT erosion and sediment control (ESC) and stormwater management (SWM) Annual Standards and Specifications approved by DEQ. All regulated land-disturbing activities must have a project-specific ESC plan developed in accordance with the DEQ-approved VDOT ESC and SWM Annual Standards and Specifications. However, the project-specific ESC plan need not be submitted to DEQ for approval since VDOT has approved Annual Standards and Specifications. All regulated land-disturbing activities associated with the project, including on- and off-site access roads, staging areas, borrow areas, stockpiles, and soil intentionally transported from the project, must be covered by the project-specific ESC plan. Annual Standards and Specifications must be prepared in accordance with VESCL (§ 62.1-44.15:51 *et seq.*) and VESCR (9VAC25-840), and the most current version of the Virginia Erosion and Sediment Control Handbook.

**6(b)(ii) Stormwater Management Project-Specific Plan.** VDOT projects that result in land-disturbing activities equal to or greater than 1 acre (2,500 square feet in Chesapeake Bay Preservation Area) must comply with the most current version of the VDOT stormwater management (SWM) Annual Standards and Specifications approved by DEQ. All regulated land-disturbing activities must have a project specific SWM plan developed in accordance with the DEQ-approved VDOT SWM Annual Standards and Specifications. However, the project-specific SWM plan need not be submitted to DEQ for approval since VDOT has DEQ approved Annual Standards and Specifications. Annual Standards and Specifications must be prepared in accordance with the Virginia Stormwater Management Act (VSMA) and the Virginia Stormwater Management Program (VSMP) Permit Regulations. In accordance with 9VAC25-870-170 individual plans, to the maximum extent practicable, shall comply with any locality's VSMP authority's technical requirements adopted pursuant to the Act. It shall be the

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responsibility of the state agency to demonstrate that the locality's VSMP authority's technical requirements are not practicable for the project under consideration (Reference: VSMA §62.1-44.15 *et seq.*; VSMP Permit Regulations 9VAC25-870 *et seq.*).

**6(b)(iii) General Permit for Stormwater Discharges from Construction Activities (VAR10).** The operator or owner of a construction project involving land-disturbing activities equal to or greater than one acre is required to register for 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 and 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 on DEQ's website at <http://www.deq.virginia.gov/Programs/Water/StormwaterManagement/VSMPPermits/ConstructionGeneralPermit.aspx> (Reference: VSWML 62.1-44.15 *et seq.*; VSMP Permit Regulations 9VAC 25-870-10 *et seq.*).

**6(c) Conclusion.** Provided the project complies with above requirements, it would be consistent with the nonpoint source pollution control enforceable policy of the Virginia CZM Program.

**7. Point Source Pollution Control.** According to the FCC (page 23), the project will create new point source outfalls associated with process wastewaters from construction activities. Permanent outfalls will also be constructed on the north and south islands for tunnel pump station discharges to the James River, along with outfalls for site stormwater drainage and building floor drainage from oil and water separators. The HRCF will apply for VPDES permits for the new drainage pump station discharges.

**7(a) Agency Jurisdiction.** The point source program is administered by the State Water Control Board pursuant to Virginia Code §62.1-44.15. Point source pollution control is accomplished through the implementation of the National Pollutant Discharge Elimination System (NPDES) permit program established pursuant to §402 of the federal Clean Water Act and administered in Virginia as the VPDES permit program. The Water Quality Certification requirements of §401 of the Clean Water Act of 1972 is administered under the Virginia Water Protection Permit program.

**7(b) Agency Findings.** Industrial-related activities may require a water discharge permit. These activities include the discharge of pollutants to surface waters (regulated under the Virginia Pollutant Discharge Elimination System (VPDES) program), the land application of waste and wastewater (regulated under the Virginia Pollution Abatement Act), and surface or groundwater water withdrawals. Facilities with outdoor activities (industrial activities) that come into contact with stormwater may also require a permit.

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**7(c) Agency Recommendation.** Coordinate with the TRO VDPES program to determine the appropriate VDPES permits for the discharges associated with this project.

**7(d) Requirement.** A VPDES permit is required for the planned new outfalls and discharges associated with this project.

**7(e) Conclusion.** Provided the appropriate VPDES permit is obtained and adhered to, this project would be consistent with the point source pollution control enforceable policy of the Virginia CZM Program.

**8. Shoreline Sanitation.** The FCC (page 24) states that new, larger capacity septic systems will be constructed on the north and south islands to replace existing systems.

**8(a) Agency Jurisdiction.** The purpose of this program is to regulate the installation of septic tanks, set standards concerning soil types suitable for septic tanks, and specify minimum distances that tanks must be placed away from streams, rivers, and other waters of the Commonwealth. This program is administered by the Department of Health Division of Onsite Sewage and Water Services (DOSWS) under Virginia Code §32.1-164 through §32.1-165. VDH is responsible for adopting and implementing regulations for marinas, private wells, and onsite wastewater treatment and disposal.

**8(b) Agency Findings.** The project documentation indicates the onsite sewage systems operated by the applicant will be replaced with new systems in accordance with VDH regulations, which is appropriate.

**8(c) VDH Recommendation.** Given the scale and length of the project, VDH recommends the applicant locate any and all onsite sewage systems and private wells within 100 feet of the project boundary to ensure systems and wells serving adjacent properties are not impacted. If the applicant determines that adjacent onsite sewage systems or private wells will be impacted, they should be replaced in accordance with VDH regulations.

**8(d) Conclusion.** Provided the onsite septic systems are replaced in accordance with VDH Sewage Handling and Disposal Regulations (12VAC5-610), the project would be consistent with the shoreline sanitation enforceable policy of the Virginia CZM program.

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## ADDITIONAL ENVIRONMENTAL CONSIDERATIONS

In addition to the enforceable policies of the Virginia CZM Program, comments also were provided with respect to applicable requirements and recommendations of the following programs:

### 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 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 (RCRA) and the Comprehensive Environmental Response Compensation Liability Act (CERCLA), commonly known as Superfund. The DEQ Division of Land Protection and Revitalization also administers those 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 (9VAC25-91 *et seq.*) and Underground Storage Tanks (9VAC25-580 *et seq.* and 9VAC25-580-370 *et seq.*), also known as Virginia Tank Regulations, and § 62.1-44.34:14 *et seq.* which covers oil spills.

Virginia:

- Virginia Waste Management Act, Virginia Code § 10.1-1400 *et seq.*
- Virginia Solid Waste Management Regulations, 9VAC20-81
  - (9VAC20-81-620 applies to asbestos-containing materials)
- Virginia Hazardous Waste Management Regulations, 9VAC20-60
  - (9VAC20-60-261 applies to lead-based paints)
- Virginia Regulations for the Transportation of Hazardous Materials, 9VAC20-110

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

**1(b) Database and Records Search.** The DEQ Division of Land Protection and Revitalization (DLPR) conducted a search (200-foot radius of project corridor) of solid and hazardous waste databases (including petroleum releases) to identify waste sites in close proximity to the project corridor. The search identified eleven petroleum release sites within the project corridor, which might affect the project. Three of the petroleum

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releases appear to be associated with the Hampton Roads Bridge-Tunnel and/or the I-64 corridor.

*Petroleum Releases associated with the I-64 and Hampton Roads Bridge-Tunnel (refer to attached DLPR comment memorandum for full listing of identified releases):*

1. PC Number 19992249, HRBT TOLL FACILITIES, 33 Pine Chapel Rd, Hampton, Virginia 23666, Release Date: 09/18/1998, Status: Closed.
2. PC Number 20025072, VDOT – Hampton Roads Bridge Tunnel – North Is, 204 National Avenue – I-64, Hampton, Virginia 23663, Release Date: 02/27/2002, Status: Closed.
3. PC Number 19910514, VDOT, I-64 & Granby Street, Norfolk, Virginia 23510, Release Date: 10/04/1990, Status: Closed.

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

- Test and dispose of any soil that is suspected of contamination or wastes that are generated during construction-related activities in accordance with applicable federal, state and local laws and regulations.
- The installation and use of an AST (>660 gallons) for temporary fuel storage (>120 days) during the project must follow the requirements in 9VAC25-91-10 *et seq.*
- Report evidence of a petroleum release, if discovered during construction of this project, to DEQ TRO, as authorized by Code of Virginia § 62.1-44.34.8-9 and 9 Virginia Administrative Code 25-580-10 *et seq.*
- All structures being renovated, demolished, or removed should be checked for asbestos-containing materials (ACM) and lead-based paint (LBP) prior to demolition. If ACM and LBP are found, in addition to the federal waste-related regulations mentioned above, state regulations 9VAC20-81-640 for ACM and 9VAC20-60-261 for LBP must be followed.

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

- Evaluate the identified petroleum release sites in close proximity to the project site to determine if the project could affect or be affected by the releases. 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 may contact the DEQ's Tidewater Regional Office at (757) 518-2000 (Tanks Program) for further information about the PC cases.

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- DEQ encourages all projects and facilities to implement pollution prevention principles, including:
  - the reduction, reuse and recycling of all solid wastes generated; and
  - the minimization and proper handling of generated hazardous wastes.

## 2. Natural Heritage Resources.

### 2(a) Agency Jurisdiction.

**2(a)(i) The Virginia Department of Conservation and Recreation's (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), authorized 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).

**2(a)(ii) The 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.

**2(b) Agency Findings.** According to the DCR DNH Biotics Data System, this site is located within the Hampton Roads Bridge Tunnel Conservation Site, which has a biodiversity significance ranking of B5, which represents a site of general significance. The natural heritage resources of concern at this site are:

<i>Gelochelidon nilotica</i>	Gull-billed tern	G5/S2B/NL/LT
<i>Thalasseus maximus</i>	Royal tern	G5/S2B/NL/NL
<i>Thalasseus sandvicensis</i>	Sandwich tern	G5/S1B/NL/NL
<i>Rynchops niger</i>	Black skimmer	G5/S2B,S1N/NL/NL

In addition, the Atlantic sturgeon (*Acipenser oxyrinchus*, G3/S2/LE/LE) has been documented within the project site.

**2(c) Agency Findings – Threatened and Endangered Plant and Insect Species.** DCR states that the current activity will not affect any documented state-listed plant and insect species.

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**2(d) Agency Findings – Natural Area Preserves.** There are no State Natural Area Preserves under DCR’s jurisdiction in the project vicinity.

**2(e) Agency Recommendations.** Due to the legal status of the Gull-billed tern and the Atlantic sturgeon, DCR recommends continued coordination with the National Oceanic and Atmospheric Administration National Marine Fisheries Service (NOAA Fisheries), to ensure compliance with protected species legislation. DCR requests copies of any surveys, studies, and monitoring reports that are developed for this project.

Contact DCR DNH and re-submit project information and a 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.

### **3. Planning and Recreational Resources.**

**3(a) Agency Jurisdiction.** DCR’s Division of Planning and Recreational Resources administers the Virginia Scenic Rivers (Virginia Code § 10.1-200), Virginia Byways (Virginia Code §33.2-405 through 33.2-408), and state trails programs (Virginia Code §10.1-204) and is responsible for developing the Virginia Outdoors Plan (VOP), the state’s comprehensive outdoor recreation and open space plan (Virginia Code §10.1-200). The VOP recognizes the importance of scenery to Virginians and many of the top ten activities are water based.

**3(b) Agency Findings.** According to the information currently in DCR’s files, the Norfolk Boat Ramp on Willoughby Bay is a Land & Water Conservation Fund (LWCF) protected parcel and adjacent to the project route. The Land and Water Conservation Fund Program was established in 1965 for the purpose of the acquisition and development of outdoor recreation areas to be maintained in perpetuity in accordance with Section 6 (f) (3) of the Land and Water Conservation Fund Act of 1965, as amended. Section 6 (f) (3) states that no property acquired or developed with assistance under this section shall, without the approval of the Secretary [of Interior], be converted to other than public outdoor recreation uses. The Secretary shall approve such conversion only if he finds it to be in accord with the then existing comprehensive statewide comprehensive outdoor recreation plan and only upon such conditions as he deems necessary to assure the substitution of other recreation properties of at least equal fair market value and of reasonably equivalent usefulness and location.

**3(c) Agency Recommendation.** Coordinate with the City of Norfolk regarding the LWCF protected parcel and confirm there is no impact to the 6(f) boundary of the Norfolk Boat Ramp.

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#### **4. Floodplain Management.**

**4(a) Agency Jurisdiction.** DCR is the lead coordinating agency for the Commonwealth's floodplain management program and the National Flood Insurance Program (Executive Memorandum 2-97).

**4(b) Agency Findings.** 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. DCR's Floodplain Management Program does not have regulatory authority for projects in the SFHA.

**4(c) Requirement.** The applicant must reach out to 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.

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.

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)

**4(d) Agency Recommendation.** For state projects, DCR recommends that compliance documentation be provided prior to the project being funded. For federal projects, the

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applicant/developer is encouraged reach out to the local floodplain administrator and comply with the community's local floodplain ordinance.

## 5. Wildlife Resources.

**5(a) Agency Jurisdiction.** DGIF, 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).

### 5(b) Agency Recommendations.

- Adhere to erosion and sediment controls, the Avoidance, Minimization, and Mitigation Plan, and construction BMPs.
- Continue to consult with NOAA Fisheries and VMRC on this project.

## 6. Public Water Supply.

**6(a) Agency Jurisdiction.** The 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.

**6(b) Agency Findings.** VDH ODW identified the City of Norfolk's In-town Lakes (PWS ID 3710100) surface water intakes within a five-mile radius of the project site. The Peninsula Heath District Williamsburg Environmental Health Office stated that the area is served by public water and sewer utilities.

### 6(c) Agency Recommendations.

- Implement best management practices, including erosion and sediment controls and spill prevention controls and countermeasures, on the project site.
- Properly manage materials while on site and during transport to prevent impacts to nearby surface water.

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**6(d) Requirement.** Potential impacts to public water distribution systems or sanitary sewage collection systems must be verified by the local utility according to VDH ODW.

**7. Pesticides and Herbicides.** In general, when pesticides or herbicides must be used, their use should be strictly in accordance with manufacturers' recommendations. In addition, we recommend that Dominion use the least toxic pesticides or herbicides effective in controlling the target species to the extent feasible. For more information on pesticide or herbicide use, contact VDACS (804-371-6560).

## **8. Historic and Archaeological Resources.**

**8(a) Agency Jurisdiction.** The Department of Historic Resources (DHR) conducts reviews of projects to determine their effect on historic structures or cultural resources under its jurisdiction. DHR, as the designated State's Historic Preservation Office, ensures that federal actions comply with *Section 106 of the National Historic Preservation Act of 1966 (NHPA)*, as amended, and its implementing regulation at 36 CFR Part 800. The *NHPA* 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. Section 106 also applies if there are any federal involvements, such as licenses, permits, approvals or funding.

**8(b) Agency Comments.** DHR has been consulting closely with the Federal Highway Administration (FHWA) and VDOT on this project since 2015, in accordance with Section 106 of the National Historic Preservation Act (as amended). The Corps typically defers to the FHWA as the lead federal agency to fulfill its Section 106 responsibilities.

**8(c) Requirement.** As necessary, the Corps or its agent should coordinate directly with DHR pursuant to Section 106 of the National Historic Preservation Act (as amended) and its implementing regulations codified at 36 CFR Part 800 which require Federal agencies to consider the effects of their undertakings on historic properties.

## **9. Locality Comments.**

**9(a) Jurisdiction.** In accordance with CFR 930, Subpart A, § 930.6(b) of the Federal Consistency Regulations, DEQ, on behalf of the state, is responsible for securing necessary review and comment from other state agencies, the public, regional government agencies, and local government agencies, in determining the Commonwealth's concurrence or objection to a federal consistency certification.

**9(b) Regional Comments.** The Hampton Roads PDC (HRPDC) stated that the proposed project appears to be consistent with local and regional plans and policies. The Hampton Roads Transportation Planning Organization (HRTPO) is the regional

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transportation planning organization for Hampton Roads. The HRTPO is responsible for developing the Long-Range Transportation Plan for the region. The proposed project is included in the Hampton Roads 2040 Long-Range Transportation Plan and is considered one of the Hampton Roads region's priority projects.

This project passes over or through several parts of Norfolk and Hampton that are likely to be affected by sea level rise in the form of more frequent flooding and storm surge (please see the attached map). The HRPDC has adopted a regional sea level rise policy recommending that sea level rise should be accounted for in the planning and design of new projects.

**9(c) Regional Recommendation.** For long-range projects such as this, the HRPDC recommends incorporating at least 4.5 feet of sea level rise into the design of the project. However, given the cost and expected lifespan of the project, HRPDC recommends that VDOT consider conducting a full cost-benefit analysis of various strategies that could be used to adapt the project to different climatic conditions in the future. In addition, it is recommended that VDOT explicitly assess what the planned lifespan or replacement cycle would be for this project to determine the appropriate course of action. HRPDC recommends that VDOT coordinate with the cities of Hampton and Norfolk, both of which are currently engaged in long-term resiliency planning initiatives, to determine if and how construction of the HRBT expansion should integrate with local efforts.

## REGULATORY AND COORDINATION NEEDS

**1. Fisheries Management.** Continue to consult with NOAA Fisheries (Christine Vaccaro, [christine.vaccaro@noaa.gov](mailto:christine.vaccaro@noaa.gov)) on this project. Coordinate with VMRC (Allison Lay, 757-247-2254) with questions regarding the recommended best management practices to reduce impacts to marine fishery resources.

**2. Wetlands Management.** Further coordination with and approvals from VMRC and DEQ are necessary in order for the project to be consistent with the wetlands management enforceable policy of the Virginia CZM Program (see **Federal Consistency Conditional Concurrence**, page 3).

The project must comply with any Virginia Water Protection Program (Virginia Code § 62.1-44.15 *et seq.*; 9VAC25-210 *et seq.*) requirements. A VWP Permit is required for impacts to non-tidal wetlands and streams pursuant to 9VAC25-210-10 *et seq.* Contact DEQ (Jeffrey Hannah, 757-518-2146) for additional information.

A permit issued by VMRC or the local wetlands board for impacts to tidal wetlands not owned or leased by the Commonwealth or a political subdivision thereof, authorized

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under §28.2-1301 through §28.2-1320 of the Virginia Code is required. Coordinate with VMRC (Allison Lay, 757-247-2254) with questions regarding the JPA review process and required wetlands permit.

**3. Subaqueous Lands Impacts.** Further coordination with and approvals from VMRC are necessary in order for the project to be consistent with the subaqueous lands management enforceable policy of the Virginia CZM Program (see **Federal Consistency Conditional Concurrence**, page 3).

Pursuant to section 28.2-1204 of the Code of Virginia, the VMRC has jurisdiction over any encroachments in, on or over any state-owned rivers, streams or creeks in the Commonwealth. The proposed project will require a VMRC permit for all work within state-owned submerged lands and the JPA is currently under review. Contact VMRC (Allison Lay, 757-247-2254) regarding the status of the JPA.

Coordinate with both the City of Hampton (757-727-6392) and the City of Norfolk (757-664-4242) to discuss the beneficial reuse of dredge materials from the project for beach nourishment.

**4. Coastal Lands Management.** The project must be conducted in a manner that is consistent with the coastal lands management enforceable policy of the Virginia CZM Program as administered by DEQ pursuant to the Chesapeake Bay Preservation Act (Virginia Code 62.1-44.15 *et seq.*) and the Chesapeake Bay Preservation Area Designation and Management Regulations (9VAC25-830 *et seq.*). For additional information contact Daniel Moore (804-698-4520).

**5. Erosion and Sediment Control Plan.** The project must comply with VDOT's approved Annual Standards and Specifications for erosion and sediment control. A project-specific ESC Plan must be prepared for projects involving land-disturbing activities equal to or greater than 2,500 square feet in a Chesapeake Bay Preservation Area. However, a project-specific ESC Plan is not required to be submitted to DEQ. All plans must be prepared in accordance with the Virginia Erosion and Sediment Control Handbook, the Virginia ESC Law §62.1-44.15 *et seq.* and Regulations 9VAC25-840-30. Contact DEQ (Hannah Zegler at [Hannah.Zegler@deq.virginia.gov](mailto:Hannah.Zegler@deq.virginia.gov)) for additional information if necessary.

**6. Stormwater Management Plan.** As with the ESC Plan, VDOT is required to prepare a project-specific Stormwater Management Plan for all projects involving land-disturbing activities equal to or greater than one acre (2,500 square feet in Chesapeake Bay Preservation Area). However, these plans need not be submitted to DEQ for approval. All standards and specifications and plans must be prepared in accordance with the current versions of the Virginia Stormwater Management Law (§62.1-44.15 *et seq.*) and

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the *Virginia Stormwater Management Permit Regulations* (VSMP Permit Regulations 9VAC25-870 *et seq.*).

**7. General Permit for Stormwater Discharges from Construction Activities**

**(VAR10).** The operator or owner of a construction activity involving land disturbance of equal to or greater than 1 acre is required to register for coverage under the General Permit for Discharges of Stormwater from Construction Activities and develop a project specific stormwater pollution prevention plan (SWPPP). Specific questions regarding the Stormwater Management Program requirements should be directed to DEQ TRO (Courtney Smith, 757-493-1072).

**8. Air Pollution Control.** Guidance on minimizing the emission of VOCs and NO<sub>x</sub> during construction may be obtained from DEQ TRO. Contact DEQ TRO (Laura Corl at 757-518-2178) for additional information on air quality regulations if necessary.

**9. Shoreline Sanitation.** Coordinate with VDH (Lance Gregory, 804-864-7491) to ensure the onsite septic systems are replaced in accordance with the VDH Sewage Handling and Disposal Regulations (12VAC5-610).

**10. Solid and Hazardous Wastes.** Report petroleum contaminated soils and or groundwater to the DEQ TRO (Tom Madigan at 757-518-2115). Contact DEQ TRO (Tom Madigan) regarding the installation and use of aboveground storage tanks for temporary fuel storage. For questions related to waste management regulations contact Sean Priest (757-518-2141).

**10(a) Asbestos-Containing Material.** It is the responsibility of the owner or operator of a renovation or demolition activity, prior to the commencement of the renovation or demolition, to thoroughly inspect the affected part of the facility where the operation will occur for the presence of asbestos, including Category I and Category II nonfriable asbestos-containing material (as applicable). Upon classification as friable or non-friable, all asbestos-containing material shall be disposed of in accordance with the Virginia Solid Waste Management Regulations (9VAC20-81-640) and transported in accordance with the Virginia regulations governing Transportation of Hazardous Materials (9VAC20-110-10 *et seq.*). Contact the DEQ Division of Land Protection and Revitalization (Carlos Martinez at 804-698-4575) and the Department of Labor and Industry (804-371- 2327) for additional information.

**10(b) Lead-Based Paint.** If applicable, 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 (804-367-8500).

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**11. Natural Heritage Resources.** Contact the DCR DNH (804-371-2708) and re-submit project information and a 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.

Continue to coordinate with NOAA Fisheries (Christine Vaccaro, [christine.vaccaro@noaa.gov](mailto:christine.vaccaro@noaa.gov)), to ensure compliance with protected species legislation. DCR requests copies of any surveys, studies, and monitoring reports that are developed for this project.

**12. Planning and Recreational Resources.** Coordinate with the City of Norfolk (City Planning, 757-664-4752) regarding the LWCF protected parcel and confirm there is no impact to the 6(f) boundary of the Norfolk Boat Ramp. If you have any question or concerns please contact Jett Johnson [jett.johnson@dcr.virginia.gov](mailto:jett.johnson@dcr.virginia.gov).

**13. Wildlife Resources.** Contact DGIF (Ernie Aschenbach, 804-367-2733) for additional information as necessary on its recommendations.

**14. Waterworks.** Potential impacts to public water distribution systems or sanitary sewage collection systems must be verified by the local utility according to VDH ODW. Contact VDH ODW (Arlene Warren at [Arlene.Warren@vdh.virginia.gov](mailto:Arlene.Warren@vdh.virginia.gov)) for additional information about its comments if necessary.

**15. Historic Resources.** As necessary, the Corps or its agent should coordinate directly with DHR (Marc Holma, 804-482-6090) pursuant to Section 106 of the National Historic Preservation Act (as amended) and its implementing regulations codified at 36 CFR Part 800 which require Federal agencies to consider the effects of their undertakings on historic properties.

**16. Point Source Pollution Control.** Coordinate with the TRO VDPES program ([TRO.VPDESPermits@deq.virginia.gov](mailto:TRO.VPDESPermits@deq.virginia.gov)) to determine the appropriate VDPES permits for the discharges associated with this project. Additionally, visit DEQ's website at <http://www.deq.virginia.gov/Programs/Water/PermittingCompliance.aspx> for more information.

**17. Floodplain Management.** The project must to be permitted in compliance with the local floodplain ordinance. Coordinate with the floodplain administrator for the cities ([www.dcr.virginia.gov/dam-safety-and-floodplains/floodplain-directory](http://www.dcr.virginia.gov/dam-safety-and-floodplains/floodplain-directory)) for an official floodplain determination of the project area and to ensure compliance with the local ordinance.

**18. Regional Long-Term Resiliency Recommendation.** Coordinate with the HRPDC (Ben McFarlane, 757-420-8300) with questions regarding its recommendation to incorporate at least 4.5 feet of sea level rise into the design of the project. Coordinate

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with the cities of Hampton (Planning and Zoning, 757-727-6140) and Norfolk (City Planning, 757-664-4752) regarding their long-term resiliency planning initiatives and integration of the Hampton Roads Bridge Tunnel project with local resiliency efforts.

Thank you for the opportunity to comment on the FCC. The detailed comments of reviewers are attached. If you have questions, please do not hesitate to call me at (804) 698-4204 or Janine Howard at (804) 698-4299.

Sincerely,



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

Enclosures

ec:

Seamus McCarthy, City of Norfolk  
Michael Hayes, City of Hampton  
Ben McFarlane, HRPDC  
Dennis Morris, Crater PDC  
Amy Ewing, DGIF  
Robbie Rhur, DCR  
Arlene Fields Warren, VDH  
Roger Kirchen, DHR  
Emily Hein, VIMS  
Tony Watkinson, VMRC  
Heather Williams, VDOT  
Ed Sundra, FHWA  
Whitney Brooks Brunner, HRCP  
George Janek, Corps

DEPARTMENT OF ENVIRONMENTAL QUALITY  
DIVISION OF AIR PROGRAM COORDINATION

ENVIRONMENTAL REVIEW COMMENTS APPLICABLE TO AIR QUALITY

TO: Janine L. Howard

DEQ - OEIR PROJECT NUMBER: : DEQ #19-093F

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

CONSISTENCY CERTIFICATION

PROJECT TITLE: **Hampton Roads Bridge Tunnel Expansion Project**

PROJECT SPONSOR: **Army Corps of Engineers**

PROJECT LOCATION:  OZONE ATTAINMENT  
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

Matthew J. Strickler  
Secretary of Natural Resources

Clyde E. Cristman  
Director



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

JPA Appendix Q  
Attachment Q-2  
Official Correspondence  
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

**MEMORANDUM**

DATE: September 20, 2019  
TO: Janine Howard, DEQ  
FROM: Roberta Rhur, Environmental Impact Review Coordinator  
SUBJECT: DEQ 19-093F, HAMPTON ROADS BRIDGE TUNNEL EXPANSION PROJECT

**Division of Planning and Recreation Resources**

The Department of Conservation and Recreation (DCR), Division of Planning and Recreational Resources (PRR), develops the *Virginia Outdoors Plan* and coordinates a broad range of recreational and environmental programs throughout Virginia. These include the Virginia Scenic Rivers program; Trails, Greenways, and Blueways; Virginia State Park Master Planning and State Park Design and Construction.

According to the information currently in our files, the Norfolk Boat Ramp on Willoughby Bay is a Land & Water Conservation Fund (LWCF) protected parcel and adjacent to the project route. The Land and Water Conservation Fund Program was established in 1965 for the purpose of the acquisition and development of outdoor recreation areas to be maintained in perpetuity in accordance with Section 6 (f) (3) of the Land and Water Conservation Fund Act of 1965, as amended. Section 6 (f) (3) states that No property acquired or developed with assistance under this section shall, without the approval of the Secretary [of Interior], be converted to other than public outdoor recreation uses. The Secretary shall approve such conversion only if he finds it to be in accord with the then existing comprehensive statewide comprehensive outdoor recreation plan and only upon such conditions as he deems necessary to assure the substitution of other recreation properties of at least equal fair market value and of reasonably equivalent usefulness and location.

We recommend coordination with the City regarding this matter and confirm there is no impact to the 6(f) boundary of the Norfolk Boat Ramp. If you have any question or concerns please contact Jett Johnson [jett.johnson@dcr.virginia.gov](mailto:jett.johnson@dcr.virginia.gov).

**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 our files, this site is located within the Hampton Roads Bridge Tunnel Conservation Site. Conservation sites are tools for representing key areas of the landscape that warrant further review for possible conservation action because of the natural heritage resources and

habitat they support. Conservation sites are polygons built around one or more rare plant, animal, or natural community designed to include the element and, where possible, its associated habitat, and buffer or other adjacent land thought necessary for the element's conservation. Conservation sites are given a biodiversity significance ranking based on the rarity, quality, and number of element occurrences they contain; on a scale of 1-5, 1 being most significant. Hampton Roads Bridge Tunnel Conservation Site has been given a biodiversity significance ranking of B5, which represents a site of general significance. The natural heritage resources of concern at this site are:

<i>Gelochelidon nilotica</i>	Gull-billed tern	G5/S2B/NL/LT
<i>Thalasseus maximus</i>	Royal tern	G5/S2B/NL/NL
<i>Thalasseus sandvicensis</i>	Sandwich tern	G5/S1B/NL/NL
<i>Rynchops niger</i>	Black skimmer	G5/S2B,S1N/NL/NL

In addition, the Atlantic sturgeon (*Acipenser oxyrinchus*, G3/S2/LE/LE) has been documented within the project site.

Due to the legal status of the Gull-billed tern and the Atlantic sturgeon, DCR recommends continued coordination with the National Oceanic and Atmospheric Administration National Marine Fisheries Service (NOAA Fisheries) the Virginia Department of Game and Inland Fisheries (VDGIF), to ensure compliance with protected species legislation. DCR requests copies of any surveys, studies, and monitoring reports that are developed for this project.

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 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:

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.

Cc: Christine Vaccaro, NOAA Fisheries-Protected Species Division  
Amy Ewing, VDGIF  
Jett Johnson, DCR



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MEMORANDUM

TO: Janine Howard, DEQ/EIR Environmental Program Planner

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

DATE: September 18, 2019

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

SUBJECT: Environmental Impact Review: 19-093F Hampton Roads Bridge Tunnel Expansion Project in the cities of Norfolk and Hampton, Virginia.

The Division of Land Protection & Revitalization (DLPR) has completed its review of the Army Corps of Engineers' August 13, 2019 EIR for the Hampton Roads Bridge Tunnel Expansion Project in the cities of Norfolk and Hampton, 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 (200 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 eleven (11) petroleum release sites within the project area which might impact the project.

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) – none in close proximity to the project area**

**Petroleum Releases – Eleven (11) found in close proximity to the project area.**

- 1. PC Number 19992249, HRBT TOLL FACILITIES, 33 Pine Chapel Rd, Hampton, Virginia 23666, Release Date: 09/18/1998, Status: Closed.**
- 2. PC Number 20025072, VDOT – Hampton Roads Bridge Tunnel – North Is, 204 National Avenue – I-64, Hampton, Virginia 23663, Release Date: 02/27/2002, Status: Closed.**
- 3. PC Number 20035178, Donald Dixon Spraying and Tree Service, 424 Naval Base Rd, Norfolk, Virginia 23505, Release Date: 06/30/2003, Status: Closed.**
- 4. PC Number 19962225, WILLOUGHBY BAY MARINA INC, 1651 Bayville St, Norfolk, Virginia 23503, Release Date: 08/21/1995, Status: Closed.**
- 5. PC Number 20045023, Willoughby Bay Marina Incorporated, 1651 Bayville St, Norfolk, Virginia 23503, Release Date: 08/07/2003, Status: Closed.**
- 6. PC Number 20075016, Willoughby Marina, 1651 Bayville St, Norfolk, Virginia 23503, Release Date: 08/19/2006, Status: Closed.**
- 7. PC Number 20015085, Norfolk Naval Station – Building WB64, Building WB64, Norfolk, Virginia 23511, Release Date: 01/16/2001, Status: Closed.**
- 8. PC Number 19910514, VDOT, I-64 & Granby Street, Norfolk, Virginia 23510, Release Date: 10/04/1990, Status: Closed.**
- 9. PC Number 20055117, Naval Station Norfolk – Building NM72, 1530 Gilbert St., Suite 2000, Norfolk, Virginia 23511, Release Date: 01/20/2005, Status: Closed.**
- 10. PC Number 19911463, NORFOLK NAVAL BASE – NM-71A, 1530 Gilbert St., Suite 2000, Norfolk, Virginia 23511, Release Date: 04/04/1991, Status: Closed.**
- 11. PC Number 19901517, EXXON S/S#2-1658, 7726 Granby St, Norfolk, Virginia 23505, Release Date: 05/03/1990, 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 Tidewater Regional Office at (757) 518-2000 (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).



# COMMONWEALTH of VIRGINIA

## DEPARTMENT OF ENVIRONMENTAL QUALITY

Street address: 629 East Main Street, Richmond, Virginia 23219

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

Fax: 804-698-4019 - TDD (804) 698-4021

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

Matthew J. Strickler  
Secretary of Natural Resources

David K. Paylor  
Director

(804) 698-4020  
1-800-592-5482

## MEMORANDUM

**TO:** Janine Howard, DEQ Office of Environmental Impact Review

**FROM:** Heather Mackey, DEQ Principal Environmental Planner

**DATE:** September 19, 2019

**SUBJECT:** DEQ #19-093F USACOE Hampton Roads Bridge Tunnel Expansion Project – cities of Norfolk and Hampton

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

In the cities of Norfolk and Hampton, the areas protected by the Chesapeake Bay Preservation Act (CBPA), as locally implemented, require conformance with performance criteria. These areas include Resource Protection Areas (RPAs) and Resource Management Areas (RMAs), as designated by the local governments. The RPA includes tidal wetlands, certain non-tidal wetlands, and tidal shores. The RPA also includes 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 require less stringent performance criteria than RPAs. In the City of Norfolk the RMA consists of the land area adjacent to and landward of the Resource Protection Area and extends landward to include the remainder of the lot or parcel designated as a Resource Protection Area. When the landward boundary of the RPA falls within an improved public right-of-way, the RMA is defined as the remainder of the improved public right-of-way. In addition, the City has designated certain areas where development was concentrated and little of the natural environment remained on or before March 3, 1992 as Intensely Developed Areas (IDAs). These areas are intended to serve as redevelopment areas provided the General Performance Criteria are met. In the City of Hampton, the RMA is contiguous to the RPA for a distance of 100-feet in the landward direction. Hampton has also designated an IDA.

The project involves a major road transportation infrastructure project along the existing Interstate (I)-64 highway and the Hampton Roads Bridge Tunnel (HRBT) in Virginia. The purpose of the

project is to relieve congestion at the HRBT in a manner that improves accessibility, transit, emergency evacuation, and military and goods movement along the primary transportation corridor in the Hampton Roads region, including the I-64, I-664, I-564, and VA 164 corridors. The project will expand the current HRBT and its approaches from four general purpose lanes to eight lanes including a new high occupancy travel (HOT) lane and a new inside shoulder, part-time HOT lane in each direction in the I-64 corridor between Settlers Landing Road and the I-564 interchange in Norfolk.

According to the City's GIS site the subject property is located within both the Norfolk and Hampton IDA and RMA; however, construction, installation, operation, and maintenance of public roads and their appurtenant structures within Chesapeake Bay Preservation Areas are exempt under 9VAC 25-830-150.B.1 of the Regulations, provided they are constructed in accordance with the following conditions:

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 the Virginia Department of Environmental Quality; or
3. local water quality protection criteria at least as stringent as the above state requirements.

The exemption of public roads is further conditioned by the requirement to optimize road alignment and design in order to prevent or otherwise minimize the encroachment into the RPA and adverse effects on water quality.

Provided the conditions noted above are met, the proposed project would be consistent with the Regulations and the *Chesapeake Bay Preservation Act*.



DEPARTMENT OF ENVIRONMENTAL QUALITY  
TIDEWATER REGIONAL OFFICE  
ENVIRONMENTAL IMPACT REVIEW COMMENTS

September 19, 2019

**PROJECT NUMBER:** 19-093F

**PROJECT TITLE:** Hampton Roads Bridge Tunnel Expansion Project

As Requested, TRO staff has reviewed the supplied information and has the following comments:

**Petroleum Storage Tank Cleanups:**

DEQ records do not indicate any reported petroleum releases within the proposed project footprint. (either bridge island) If evidence of a petroleum release is discovered during implementation of this project, it must be reported to DEQ, as authorized by CODE # 62.1-44.34.8 through 19 and 9 VAC 25-580-10 et seq. Contact Mr. Tom Madigan at (757) 518-211. Petroleum-contaminated soils and ground water generated during implementation of this project must be properly characterized and disposed of properly.

**Petroleum Storage Tank Compliance/Inspections:**

The installation and use of an AST (>660 gallons) for temporary fuel storage (>120 days) during the project must follow the requirements in 9 VAC 25-91-10 et. seq. Please contact Tom Madigan of the DEQ Tidewater Regional Office (757) 518-2115 for additional details.

**Virginia Water Protection Permit Program (VWPP):**

As described, the proposed project will impact tidal and non-tidal surface waters (including wetlands). The project will be consistent with our program provided a Joint Permit Application is submitted for the proposed surface water impacts, and VWP authorization is received and complied with.

**Air Permit Program :**

The following air regulations of the Virginia Administrative Code may be applicable: 9VAC5-50-60 *et seq.* which addresses the abatement of visible emissions and fugitive dust emissions, and 9VAC5-130-10 *et seq.* which addresses open burning. For additional information, contact Laura Corl at (757) 518-2178.



DEPARTMENT OF ENVIRONMENTAL QUALITY  
TIDEWATER REGIONAL OFFICE  
ENVIRONMENTAL IMPACT REVIEW COMMENTS

September 19, 2019

**PROJECT NUMBER:** 19-093F

**PROJECT TITLE:** Hampton Roads Bridge Tunnel Expansion Project

**Water Permit Program :**

Industrial or agriculturally-related activities may require a water permit. These activities include the discharge of pollutants to surface waters (regulated under the Virginia Pollutant Discharge Elimination System program), the land application of waste and wastewater (regulated under the Virginia Pollution Abatement Act), and surface or groundwater water withdrawals. Facilities with outdoor activities that come into contact with stormwater may also require a permit (e.g. scrap metal yards, car washes, and many other industrial activities).

For more information, please contact DEQ Water permits at [TRO.VPDESPermits@deq.virginia.gov](mailto:TRO.VPDESPermits@deq.virginia.gov) or visit DEQ's website at <http://www.deq.virginia.gov/Programs/Water/PermittingCompliance.aspx>.

**Waste Permit Program :**

All construction, demolition and debris waste, including excess soil and dredge spoil, must be characterized in accordance with the Virginia Hazardous Waste Management Regulations prior to management at an appropriate facility. For additional information, contact Sean Priest, DEQ-TRO at (757) 518-2141 or [jonathan.priest@deq.virginia.gov](mailto:jonathan.priest@deq.virginia.gov).

**Storm Water Program:**

ESC and SWM plans should be submitted to VDOT for review and should be conducted under VDOT's Annual Standard and Specifications. Ensure CGP coverage under new VAR10 and comply with approved plans. For additional information, contact Courtney Smith, DEQ-TRO at (757) 493-1072 or [courtney.smith@deq.virginia.gov](mailto:courtney.smith@deq.virginia.gov).



DEPARTMENT OF ENVIRONMENTAL QUALITY  
TIDEWATER REGIONAL OFFICE  
ENVIRONMENTAL IMPACT REVIEW COMMENTS

September 19, 2019

**PROJECT NUMBER:** 19-093F

**PROJECT TITLE:** Hampton Roads Bridge Tunnel Expansion Project

The staff from the Tidewater Regional Office thanks you for the opportunity to provide comments.

Sincerely,

Cindy Robinson  
Environmental Specialist II  
5636 Southern Blvd.  
VA Beach, VA 23462  
(757) 518-2167  
Cindy.Robinson@deq.virginia.gov



## COMMONWEALTH of VIRGINIA

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

Matthew J. Strickler  
Secretary of Natural Resources

Steven G. Bowman  
Commissioner

October 18, 2019

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

Re: Federal Consistency Certification  
Hampton Roads Bridge Tunnel Expansion Project  
DEQ #19-093F

Dear Ms. Howard:

This will respond to the request for comments regarding the Federal Consistency Certification for the Hampton Roads Bridge Tunnel Expansion Project (DEQ #19-093F), prepared by Mott MacDonald, on behalf of Hampton Roads Connector Partners. Specifically, the Hampton Roads Connector Partners have proposed to expand the current I-64 corridor between Settlers Landing in Hampton and I-564 in Norfolk, to include the expansion of existing roadways, construction of new bridge trestles, boring of two new two-lane tunnels, and expansion of existing portal islands. The purpose is to improve accessibility, transit, emergency evacuation, and military and goods movement in a highly urbanized section of Hampton Roads. The project is located in the Cities of Norfolk and Hampton, Virginia.

Specifically, you have asked if the project is consistent with the enforceable policies administered by the Virginia Marine Resources Commission (Commission) within the Commonwealth's Coastal Zone Management Program. The Commission, as the custodian of Virginia's submerged lands, has the proprietary authority and responsibility to issue permits for activities that take place over, under, through and on all submerged lands throughout the Commonwealth. This authority is based on the Commonwealth's ownership of submerged lands, as provided for in Chapter 12 of Title 28.2 of the Code of Virginia.

The project proposes to fill approximately 19.73 acres of submerged lands during the expansion of the portal islands. The fill of submerged lands will impact important marine resources in the area. One resource of concern to the Commission is the hard clam (*Mercenaria mercenaria*). A clam survey conducted by the Commission and the Virginia Institute of Marine Science in October 2018 found clam densities up to 0.3 clams per meter squared in the area impacted by the project. The proposed mitigation plan of purchasing chowder clams at a 1.3:1 replacement ratio to be placed on public clam grounds is appropriate.

Approximately 17,468 square feet of submerged aquatic vegetation (SAV) will be impacted either directly by pile driving, or indirectly by shading caused by new bridge trestles. Mitigation for impacts

*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

December 19, 2019

Department of Environmental Quality  
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to SAV will be necessary. The preferred mitigation method is to fund the seeding of SAV beds in the area. Such funding has been used to support the seeding activities conducted by VIMS to support SAV restoration efforts. Other out-of-kind mitigation methods may be considered during the application process.

Approximately 1,718 pilings will be installed during construction of the new bridge trestles. During the installation of any steel hollow pilings in waterways, the Commission recommends adherence to the following best management practices to reduce impacts to marine fishery resources:

1. The use of wooden pile cap cushions should impact hammers be needed for the installation of hollow steel pilings.
2. “Ramp-up” procedures prior to initiating any pile driving. Ramp-up procedures will include an initial set of three strikes from the impact hammer at 40% energy, followed by a 30 second waiting period, then two subsequent three-strike sets. During the ramp-up the contractor will monitor the project area and if sturgeon, marine mammals, or fish kills are sighted within the project area, then a shutdown will be implemented.
3. The use of a bubble curtain and isolation casing during the placement of hollow steel piles.

Dredging is proposed in the footprints of both portal island expansions to remove undesirable base material. This dredging will likely remove mud and other fine materials unsuitable for beneficial reuse. These materials should be disposed of at an appropriate upland area. Dredging is also proposed for barge access along the bridge trestles between the south island and the Norfolk side of the project. The material to be dredged at these locations is likely sand that would be suitable for beneficial use on nearby public beaches. The Commission recommends coordinating with both the City of Hampton and the City of Norfolk to determine which public beaches would benefit from nourishment using the sandy dredge materials from these locations.

There are two proposed safe harbor areas in the vicinity of the project for mooring of construction vessels when not in use. One is in the Willoughby Bay area, and the other is in the Hampton Flats area. The Hampton Flats area contains a public clam bed that was designated during a Commission meeting held on March 26, 1986. While the area is not currently popular for harvesting clams, the area could still have a population of clams that could be impacted. The Commission will consider permitting this area, but restrictions to protect the clam bed may be necessary.

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Please be advised that the Commission's eventual permit action and identification of specific permit conditions cannot be finalized until completion of the NEPA documentation and our public interest permit review process. Any permit decision reached by the Commission will clarify the permit conditions that are necessary to insure consistency with the submerged lands, tidal wetlands and marine fishery elements of Virginia's Coastal Zone Management Program.

If you have any questions please contact me at (757) 247-2254 or by email at [allison.lay@mrc.virginia.gov](mailto:allison.lay@mrc.virginia.gov). Thank you for the opportunity to comment.

Sincerely,

A handwritten signature in black ink that reads "Allison Lay". The signature is written in a cursive, flowing style.

Allison Lay  
Environmental Engineer, Habitat Management

AEL/keb  
HM



Howard, Janine &lt;janine.howard@deq.virginia.gov&gt;

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**Re: HRBT Consistency Certification Comments**

1 message

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**Lay, Allison** <allison.lay@mrc.virginia.gov>  
To: "Howard, Janine" <janine.howard@deq.virginia.gov>

Fri, Nov 1, 2019 at 7:18 AM

Janine, can we alter the wetland statement to read the following:

"a permit issued by VMRC or the local wetlands board for impacts to tidal wetlands not owned or leased by the Commonwealth or a political subdivision thereof, authorized under §28.2-1301 through §28.2-1320 of the Virginia Code. "

Thanks,

**Allison Lay**  
Environmental Engineer  
Virginia Marine Resources Commission

380 Fenwick Road, Bldg. 96

Fort Monroe, Virginia 23651

757-247-2254

On Wed, Oct 30, 2019 at 2:58 PM Howard, Janine <janine.howard@deq.virginia.gov> wrote:

Thanks Allison.

To follow up, below is the language that I intend to use in the report. If you have any concerns or suggested edits please let me know.

**Conditions of Concurrence with the FCC**

The conditions of the Commonwealth's concurrence include the following authorizations under the Virginia CZM Program:

- a permit issued by VMRC for encroachments on or over state-owned subaqueous beds authorized under § 28.2-1200 *et seq.* of the Virginia Code.
- a permit issued by VMRC for impacts to tidal wetlands authorized under §28.2-1301 through §28.2-1320 of the Virginia Code.

In accordance with the *Federal Consistency Regulations* 15 CFR Part 930, section 930.4, this conditional concurrence is based on the applicant obtaining the necessary authorizations prior to initiating project activities. If the requirements of section 930.4, sub-paragraphs (a)(1) through (a)(3) are not met, this conditional concurrence becomes an objection under 15 CFR Part 930, section 930.63.

Janine Howard  
Environmental Impact Review Coordinator  
Virginia Department of Environmental Quality  
1111 East Main Street, Suite 1400  
Richmond, VA 23219  
804-698-4299

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On Thu, Oct 24, 2019 at 3:48 PM Lay, Allison <allison.lay@mrc.virginia.gov> wrote:

December 19, 2019



Howard, Janine &lt;janine.howard@deq.virginia.gov&gt;

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**Re: 19-093 F Hampton Roads Bridge Tunnel Expansion Project Updated Response**

1 message

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**Gregory, Lance** <lance.gregory@vdh.virginia.gov>  
To: "Howard, Janine" <janine.howard@deq.virginia.gov>  
Cc: "Warren, Arlene" <arlene.warren@vdh.virginia.gov>

Thu, Oct 31, 2019 at 10:37 AM

Mrs. Howard,

Thank you for following up. The appropriate reference would be to the Sewage Handling and Disposal Regulations (12VAC5-610). The AOSS Regulations (12VAC5-613) are supplemental to the Sewage Handling and Disposal Regulations, and therefore also covered under reference to 12VAC5-610.

Sincerely,

Lance Gregory  
Director  
Division of Onsite Sewage and Water Services,  
Environmental Engineering, and Marina Programs  
Virginia Department of Health  
(804) 864-7491

On Wed, Oct 30, 2019 at 3:56 PM Howard, Janine &lt;janine.howard@deq.virginia.gov&gt; wrote:

Hello,

Just checking in on this question as I am getting ready to start this report through internal review. Please advise if I am citing the correct regulation for your program.

Thank you,

Janine Howard  
Environmental Impact Review Coordinator  
Virginia Department of Environmental Quality  
[1111 East Main Street, Suite 1400](#)  
[Richmond, VA 23219](#)  
804-698-4299

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On Fri, Oct 25, 2019 at 10:55 AM Howard, Janine &lt;janine.howard@deq.virginia.gov&gt; wrote:

Hello Arlene and Lance,

Below is the language I intend to use for the shoreline sanitation conclusion section of our report. Could you please confirm that the citation that I am using is the correct one for the proposed installation of new, larger capacity septic systems on the north and south islands to replace existing systems associated with the Hampton Roads Bridge Tunnel project?

*Provided the onsite septic systems are replaced in accordance with VDH regulations for alternative onsite sewage systems (12VAC5-613), the project would be consistent with the shoreline sanitation enforceable policy of the Virginia CZM program.*

Thank you for your help,

Janine Howard  
Environmental Impact Review Coordinator

Virginia Department of Environmental Quality  
1111 East Main Street, Suite 1400  
Richmond, VA 23219  
804-698-4299

For program updates and public notices please subscribe to Constant Contact: <https://lp.constantcontact.com/su/MVcCump/EIR>

On Tue, Sep 24, 2019 at 10:02 AM Warren, Arlene <[arlene.warren@vdh.virginia.gov](mailto:arlene.warren@vdh.virginia.gov)> wrote:

**Project Name: Hampton Roads Bridge Tunnel Expansion Project**

**Project #: 19-093 F**

UPC #: N/A

**Location: Cities of Norfolk and Hampton**

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.

The following surface water intakes are located within a 5 mile radius of the project site:

PWS ID Number	System Name	Facility Name
3710100	NORFOLK_ CITY OF	IN-TOWN LAKES

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

Best Management Practices should be employed, including Erosion & Sedimentation Controls and Spill Prevention Controls & Countermeasures on the project site.

Materials should be managed while on site and during transport to prevent impacts to nearby surface water.

- No comments were received from OEHS Division of Shellfish Sanitation, Mr. Adam Wood.
- **Comments from OEHS Onsite Sewage & Water Services, Mr. Lance Gregory** were “The project notes the onsite sewage systems operated by the applicant will be replaced with new systems in accordance with our regulations, which is appropriate. Given the scale and length of the project, I would recommend the applicant locate any and all onsite sewage systems and private wells within 100 feet of the project boundary to ensure systems and wells serving adjacent properties are not impacted. If the applicant determines that adjacent onsite sewage systems or private wells will be impacted, they should be replaced in accordance with VDH regulations.”
- **Comments from Amy D. Pemberton, M-AOSE Environmental Health Supervisor for the Peninsula Health District Williamsburg Environmental Health Office** were “To our knowledge there are no private water wells or onsite sewage disposal systems in the areas that will be impacted by this project. This area of the City is served by public water and sewer utilities. I would concur with Lance Gregory, that should you discover a private water well or septic system in this area, then a replacement system would need to be installed which meets the current regulations.”

**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

--

Lance Gregory  
Director  
Division of Onsite Sewage and Water Services,  
Environmental Engineering, and Marina Programs  
(804) 864-7491



Howard, Janine &lt;janine.howard@deq.virginia.gov&gt;

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**OEIR Review**

1 message

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**Dennis Morris** <dmorris@craterpdc.org>  
To: janine.howard@deq.virginia.gov

Tue, Aug 20, 2019 at 12:23 PM

Ms. Howard,

The Crater Planning District Commission has reviewed the information regarding the proposed Hampton Roads Bridge Tunnel Expansion Project located in the cities of Norfolk and Hampton.

The Crater Commission has determined that the proposed project is in full compliance with regional environmental policies and plans.

Thank you for allowing the Crater Commission to comment on this proposed mega-project.

Denny Morris  
Executive Director  
Crater Planning District Commission  
(804) 861-1666



Howard, Janine &lt;janine.howard@deq.virginia.gov&gt;

## Re: ESSLog 40075; DEQ-OEIR#19-093F CZMA Coastal Consistency Determination for the Hampton Roads Bridge Tunnel Expansion Project

1 message

**ProjectReview (DGIF), rr** <projectreview@dgif.virginia.gov>

Wed, Sep 18, 2019 at 9:03 AM

To: Janine Howard &lt;janine.howard@deq.virginia.gov&gt;, "rr ProjectReview (DGIF)" &lt;ProjectReview@dgif.virginia.gov&gt;

This edition supersedes and should replace the original. A typographical error is corrected in this edition (after the design is finalized). Thanks.

According to the Coastal Zone Management Act (CZMA) Consistency Certification (p. 14), the project area of impact on waterways is subject to change when the project footprint is determined (after the design is finalized). Construction activities will be determined based on the engineering requirements and consultation with the National Oceanic and Atmospheric Administration National Marine Fisheries Service (NOAA -- Fisheries) (p. 16). An Avoidance, Minimization, and Mitigation Plan (AMMP) is being developed as part of the CWA Section 404 permit, which would address impacts on fish habitat (p. 14).

Assuming adherence to erosion and sediment controls, the AMMP, construction Best Management Practices (BMPs); and consultation with NOAA -- Fisheries and the Virginia Marine Resources Commission (VMRC), we find this project consistent with the Fisheries Management Section of the CZMA. Thanks.



### Ernie Aschenbach

*Environmental Services Biologist*

P 804.367.2733

Email: [Ernie.Aschenbach@dgif.virginia.gov](mailto:Ernie.Aschenbach@dgif.virginia.gov)

Virginia Department of Game &amp; Inland Fisheries

CONSERVE. CONNECT. PROTECT.

A 7870 Villa Park Drive, P.O. Box 90778, Henrico, VA 23228-0778

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

On Tue, Sep 17, 2019 at 4:49 PM Aschenbach, Ernst <[ernie.aschenbach@dgif.virginia.gov](mailto:ernie.aschenbach@dgif.virginia.gov)> wrote:

According to the Coastal Zone Management Act (CZMA) Consistency Certification (p. 14), the project area of impact on waterways is subject to change when the project footprint is determined (after the design if finalized). Construction activities will be determined based on the engineering requirements and consultation with the National Oceanic and Atmospheric Administration National Marine Fisheries Service (NOAA -- Fisheries) (p. 16). An Avoidance, Minimization, and Mitigation Plan (AMMP) is being developed as part of the CWA Section 404 permit, which would address impacts on fish habitat (p. 14).

Assuming adherence to erosion and sediment controls, the AMMP, construction Best Management Practices (BMPs); and consultation with NOAA -- Fisheries and the Virginia Marine Resources Commission (VMRC), we find this project consistent with the Fisheries Management Section of the CZMA. Thanks.



### Ernie Aschenbach

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Email: [Ernie.Aschenbach@dgif.virginia.gov](mailto:Ernie.Aschenbach@dgif.virginia.gov)

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Howard, Janine &lt;janine.howard@deq.virginia.gov&gt;

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**Hampton Roads Bridge Tunnel Expansion Project (DHR #2015-0783/DEQ #19-093F)**1 message

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**Holma, Marc** <marc.holma@dhr.virginia.gov>

Wed, Aug 14, 2019 at 11:24 AM

To: "Howard, Janine" &lt;janine.howard@deq.virginia.gov&gt;

Cc: Samantha Hodson &lt;samantha.henderson@dhr.virginia.gov&gt;

Janine,

The DHR received your request for our review and comment on the above referenced project. Your email identified the Army Corps of Engineers as the project sponsor. We have been consulting closely with FHWA/VDOT on this undertaking pursuant to Section 106 since 2015, however, to my knowledge the Corps has not contacted DHR regarding any permits it needs to issue in association with the undertaking. My experience is that the Corps usually defers to FHWA as the lead federal agency to fulfill its Section 106 responsibilities. It may have also done that in this case but I am not sure. If not, we request in its response to the Corps that DEQ remind it of the need to consult with DHR under Section 106 for this undertaking.

Sincerely,  
Marc

--

Marc Holma  
Architectural Historian  
Division of Review and Compliance  
(804) 482-6090  
[marc.holma@dhr.virginia.gov](mailto:marc.holma@dhr.virginia.gov)



Howard, Janine &lt;janine.howard@deq.virginia.gov&gt;

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**RE: NEW PROJECT ACOE Hampton Roads Bridge Tunnel Expansion Project, DEQ #19-093F**

1 message

**Ben McFarlane** <bmcfarlane@hrpdcva.gov>

Wed, Oct 23, 2019 at 3:21 PM

To: "Howard, Janine (DEQ)" &lt;janine.howard@deq.virginia.gov&gt;

Cc: Cynthia Mulkey &lt;cmulkey@hrpdcva.gov&gt;, "Robert A. Crum, Jr." &lt;rcrum@hrpdcva.gov&gt;

Ms. Howard,

Thank you for the opportunity to provide input on the federal consistency determination for this project. The proposed project appears to be consistent with local and regional plans and policies. The Hampton Roads Transportation Planning Organization (HRTPO) is the regional transportation planning organization for Hampton Roads. One of the responsibilities of the HRTPO is to develop a Long-Range Transportation Plan. The proposed project is included in the adopted Hampton Roads 2040 Long-Range Transportation Plan and is considered one of the Hampton Roads region's priority projects.

This project passes over or through several parts of Norfolk and Hampton that are likely to be affected by sea level rise in the form of more frequent flooding and storm surge (please see the attached map). The HRPDC has adopted a regional sea level rise policy recommending that sea level rise should be accounted for in the planning and design of new projects. For long-range projects such as this, the HRPDC recommends incorporating at least 4.5' of sea level rise into the design of the project. However, given the cost and expected lifespan of the project, we recommend that VDOT consider conducting a full cost-benefit analysis of various strategies that could be used to adapt the project to different climatic conditions in the future. In addition, we recommend that VDOT explicitly assess what the planned lifespan or replacement cycle would be for this project to determine the appropriate course of action. We also suggest that VDOT coordinate with the cities of Hampton and Norfolk, both of which are currently engaged in long-term resiliency planning initiatives, to determine if and how construction of the HRBT expansion should integrate with local efforts.

We appreciate the opportunity to comment on this project. If you have any questions, please let me know.

Ben

**Benjamin J. McFarlane, AICP, CFM****Senior Regional Planner**

Hampton Roads Planning District Commission

[723 Woodlake Drive](#)[Chesapeake, VA 23320](#)

Phone: 757-420-8300 | Fax: 757-420-9300



10/23/2019

Commonwealth of Virginia Mail - RE: NEW PROJECT ACOE Hampton Roads Bridge Tunnel Expansion Project, DEQ #19-093F

All email correspondence to and from this address is subject to the Virginia Freedom of Information Act and to the Virginia Public Records Act, which may result in monitoring and disclosure to third parties, including law enforcement.

JPA Appendix Q  
Attachment Q-2  
Official Correspondence

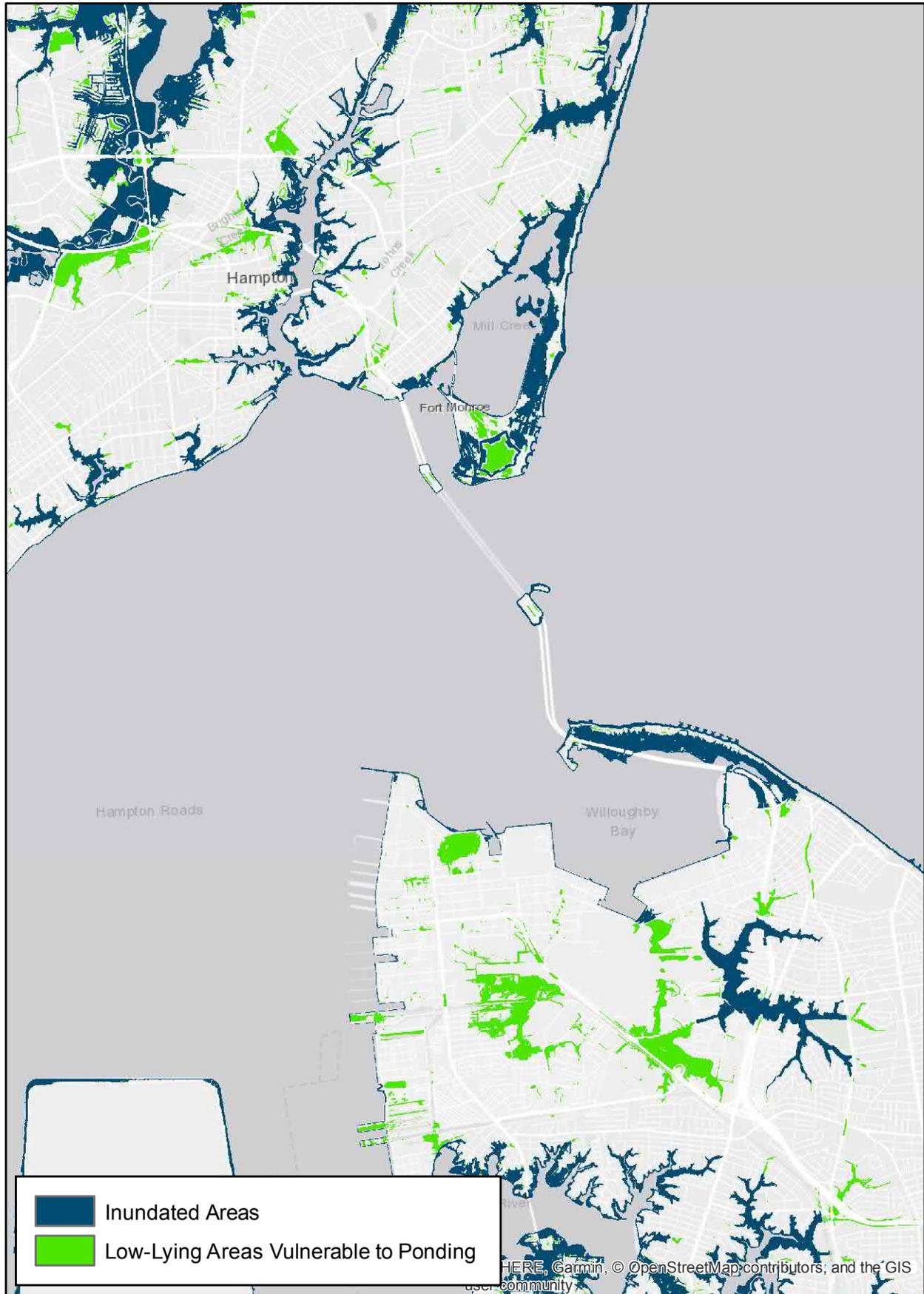


**EIRNOHA 19-093F HRBT SLR.pdf**

735K

# Proposed HRBT Expansion Project Area and Vicinity

## Areas Vulnerable to Inundation with 4.5' of Sea Level Rise



Prepared by the staff of the Hampton Roads Planning District Commission 10/23/2019



Howard, Janine &lt;janine.howard@deq.virginia.gov&gt;

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**Re: NEW PROJECT ACOE Hampton Roads Bridge Tunnel Expansion Project, DEQ #19-093F**

1 message

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**Gavan, Lawrence** <larry.gavan@deq.virginia.gov>  
To: Janine Howard <janine.howard@deq.virginia.gov>

Tue, Aug 13, 2019 at 4:03 PM

***(i) Erosion and Sediment Control Plan***

VDOT projects that involve land-disturbing activities of equal to or greater than 10,000 square feet (2,500 square feet in Chesapeake Bay Preservation Area) must comply with the most current version of the VDOT erosion and sediment control (ESC) Annual Standards and Specifications approved by DEQ. All regulated land-disturbing activities must have a project-specific ESC plan developed in accordance with the DEQ approved VDOT ESC Annual Standards and Specifications. However, the project-specific ESC plan need not be submitted to DEQ for approval since VDOT has DEQ approved Annual Standards and Specifications. All regulated land-disturbing activities associated with the project, including on and off site access roads, staging areas, borrow areas, stockpiles, and soil intentionally transported from the project must be covered by a project-specific ESC plan. Annual Standards and Specifications must be prepared in accordance with VESCL&R and the most current version of the *Virginia Erosion & Sediment Control Handbook*. [VESCL §62.1-44.15 et seq.; VESCR 9VAC25-840-30]

***(ii) Stormwater Management Plan***

VDOT projects that result in land-disturbing activities equal to or greater than 1 acre (2,500 square feet in Chesapeake Bay Preservation Area) must comply with the most current version of the VDOT stormwater management (SWM) Annual Standards and Specifications approved by DEQ. All regulated land-disturbing activities must have a project specific SWM plan developed in accordance with the DEQ approved VDOT SWM Annual Standards and Specifications. However, the project specific SWM plan need not be submitted to DEQ for approval since VDOT has DEQ approved Annual Standards and Specifications. Annual Standards and Specifications must be prepared in accordance with the Virginia Stormwater Management Act (VSMA) and the Virginia Stormwater Management Program (VSMP) Permit Regulations. In accordance with 9VAC25-870-170 individual plans, to the maximum 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. . [Reference: VSMA §62.1-44.15 et seq.; VSMP Permit Regulations 9VAC25-870 et seq.]

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

The operator or owner of a construction project involving land-disturbing activities equal to or greater than 1 acre is required to register for 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 and 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 on DEQ's website at: <http://www.deq.virginia.gov/Programs/Water/StormwaterManagement/VSMPPermits/ConstructionGeneralPermit.aspx> [VSWML §62.1-44.15 et seq.; *VSMP Permit Regulations* 9VAC25-880 et seq.]

18 October 2019

Janine Howard  
Environmental Impact Review Coordinator  
Virginia Department of Environmental Quality  
1111 East Main Street, Suite 1400  
Richmond, VA 23219

Dear Ms. Howard:

Scientists from the Virginia Institute of Marine Science have been involved with both pre-application and now application review for the Hampton Roads Bridge Tunnel Expansion Project (DEQ #19-093F). This project includes construction of two new bored tunnels under the James River and associated trestle, portal island, and road construction. While boring the tunnels will necessitate fewer impacts to the marine environment than the open cut, immersed tube method, there will be various impacts that will accumulate due to the large scale of the project. Our full review of the project, as presented in the Joint Permit Application, is ongoing and, provided there are no substantial revisions or additional materials, we expect to submit our comprehensive comments on the project in mid-January 2020 to all permitting agencies (including the Virginia Marine Resources Commission, Virginia Department of Environmental Quality, and the US Army Corps of Engineers). This review includes impacts to fishes (including Atlantic sturgeon), clams, oysters, benthic organisms, submerged aquatic vegetation, sediments, shorelines, and toxicity of additives and wastewater.

Please let me know if you have any questions or require additional information. I will submit a copy of our final comments upon their completion.

Sincerely,



Emily Hein

Assistant Director for Advisory Services



U.S. Department of  
Homeland Security

United States  
Coast Guard



Commander  
United States Coast Guard  
Fifth Coast Guard District

431 Crawford Street  
Portsmouth, VA 23704-5004  
Staff Symbol: dpb  
Phone: (757) 398-6557  
Fax: (757) 398-6334  
Email:  
[Michael.R.Thorogood@uscg.mil](mailto:Michael.R.Thorogood@uscg.mil)

16591  
5 NOV 2019

Mr. Edward Sundra  
Federal Highway Administration  
400 8<sup>th</sup> Street, Suite 750  
Richmond, VA 23219-4825

Subject: Hampton Roads Bridge Tunnel Expansion Project

Dear Mr. Sundra:

Coast Guard review of your Coast Guard bridge permit exemption determination as provided in your letter dated October 30, 2019, as authorized in 23 CFR 650.805, is complete.

Based on the documentation provided and our research, it is determined that a Coast Guard bridge permit will not be required for the proposed bridges:

1. Highway fixed bridge – I-64/US 60 (Hampton Roads Beltway) Bridge, across Oastes Creek, at location [36.941888, -76.266182], at Norfolk, VA.
2. Highway fixed bridge – I-64/US 60 (Hampton Roads Beltway) Bridge, across Mason Creek, at location [36.931612, -76.266954], at Norfolk, VA.

The project will be placed in our Federal Highway Administration Surface Transportation Assistance Act (STAA) exemption category for the location and structures described above. The Coast Guard concurrence of the Federal Highway Administration determination is **valid for five years from the date of this letter**. If the construction project does not commence within this time period, the Coast Guard requests that the Federal Highways Administration contact this office for reaffirmation of this concurrence. The Surface Transportation Assistance Act (STAA) exempts bridge projects from Coast Guard bridge permits when the bridge project crosses non-tidal waters which are not used, susceptible to use in their natural condition, or susceptible to use by reasonable improvement as a means to transport interstate or foreign commerce, and tidal waters used only by recreational boating, fishing, and other small vessels less than 21 feet in length.

The fact that a Coast Guard bridge permit is not required does not relieve the bridge owner of the responsibility for compliance with the requirements of any other Federal, State, or local agency who may have jurisdiction over any aspect of the project. Although the project will not require a bridge permit, other areas of Coast Guard jurisdiction apply. The following must be met:

- a. The bridge owner or their contractor must notify this office at least 30 days in advance of the start of construction and any other work which may be an obstruction to navigation, so we may issue and update the information in our Local Notice to Mariners and monitor the project. The notice should include details of the project; dates and hours of operation; and vessels, barges and equipment to be used during the project.

16591  
5 NOV 2019

- b. At no time during the project will the waterway be closed to navigation without the prior notification and approval of the Coast Guard. The bridge owner or contractor is required to maintain close and regular contact with Coast Guard Sector Hampton Roads at (757) 668-5581 or [HamptonRoadsWaterways@uscg.mil](mailto:HamptonRoadsWaterways@uscg.mil) to keep them informed of activities on the waterway.
- c. The lowest portion of the superstructure of the bridge across the waterway should clear the 100-year flood height elevation, if feasible.
- d. In addition, the requirement to display navigational lighting at the aforementioned bridge is hereby waived, as per Title 33 Code of Federal Regulations, Part 118.40(b). This waiver may be rescinded at any time in the future should nighttime navigation through the proposed bridge be increased to a level determined by the District Commander to warrant lighting.

The National Ocean Service (NOS) of the National Oceanic and Atmosphere Administration (NOAA) is responsible for maintaining the charts of U.S. waters; therefore, they must be notified of this proposed work. The bridge owner must notify our office and the NOS at the address below upon completion of the activity approved in this letter. The notification of project completion must include as-built drawings or certification of the following:

- a. Bridge name
- b. Action type (new construction, modification, relocation, conversion (fixed/draw), etc.)
- c. Dates (commenced and completed)
- d. Location (latitude and longitude at bridge center and centerline of channel, statute miles above mouth of waterway, and bridge or causeway orientation or geographic positions of approaches)
- e. Type of bridge (fixed, vertical lift, bascule, suspension, swing, trestle, pontoon, etc.)
- f. Navigation clearances (vertical at mean high water and horizontal)  
(Moveable – vertical at mean high water in open and closed positions)
- g. Whether or not the bridge is fitted with clearance gauges
- h. Whether or not the bridge has pier protection and/or fender system.
- i. Type of land traffic (highway, railroad, pedestrian, pipeline, etc.)

16591  
5 NOV 2019

Ms. Sladjana Maksimovic  
National Ocean Service  
N/CS26, Room 7317  
1315 East-West Highway  
Silver Spring, MD 20910-3282

If you have any further questions, please contact Mr. Michael Thorogood at the above listed address or telephone number.

Sincerely,



HAL R. PITTS  
Bridge Program Manager  
By direction

Copy: Mr. James Utterback, Virginia Department of Transportation  
Ms. Sladjana Maksimovic, NOS  
CG Sector Hampton Roads, Waterways Management  
U. S. Army Corps of Engineers, Norfolk District



Benson, Craig

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From: Sprenkle, Taylor <tsprenkle@wrallp.com>  
Sent: Tuesday, December 10, 2019 3:47 PM  
To: Benson, Craig  
Subject: FW: RFI from Corps; HRBT expansion  
Attachments: Corps JPA comments 19NOV2019.xlsx

-----Original Message-----

From: Janek, George A CIV USARMY CENAO (USA) <George.A.Janek@usace.army.mil>  
Sent: Tuesday, November 19, 2019 1:43 PM  
To: Gaffney, Douglas <Douglas.Gaffney@mottmac.com>; Sprenkle, Taylor <tsprenkle@wrallp.com>  
Cc: Smizik, Scott <scott.smizik@vdot.virginia.gov>; Emily A. Hein <eahein@vims.edu>; Lay, Allison <allison.lay@mrc.virginia.gov>; Jeffrey Hannah <jeffrey.hannah@deq.virginia.gov>; Larissa Ambrose <larissa.ambrose@vdot.virginia.gov>; David OBrien - NOAA Federal <david.l.obrien@noaa.gov>; ed.sundra@dot.gov; Prisco-Baggett, Kimberly A CIV USARMY USACE (US) <Kimberly.A.Baggett@usace.army.mil>; Mickel, Blair <Blair.Mickel@stantec.com>; Hawley, Brian <brian.hawley@stantec.com>; Keeler, Carolyn <Carolyn.Keeler@stantec.com>  
Subject: RFI from Corps; HRBT expansion

Doug and Taylor,

Please find attached a spreadsheet with additional comments by the Corps. Some of these issues may have been discussed at recent meetings and need to be summarized or addressed on this spreadsheet.

Please keep in mind that there are other issues that need to be resolved based on past meetings. Among these are coordination with NOAA PRD for pile-driving effects; a final compensation plan with justification; dredging quantities, dredge depths, and revised sketches (if necessary) for the island expansion area and other dredging areas as needed; providing a concise project description that can be used the permit; an alternatives analysis that focuses on this project instead of the entire Third Crossing study; responses to comments made during the public notice period; and documentation and summary of the avoidance and minimization measures that have been incorporated into the design, or considered and ruled out with reasons why.

After you've had a chance to review the spreadsheet, we would to have an idea on when we can expect a response to the issues, and what that response will look like. Will it be a completely revised JPA or an addendum to the original? Whichever it is, it will expedite our review if you clearly indicate what changes have been made in a cover letter or separate summary sheet. Please use the spreadsheet to track and date your responses to each of the questions or statements.

Please call or email if you have any questions.

George Janek  
Norfolk District Regulatory Branch  
757-201-7135