



**May 2019 Project Report**

## **I-64 HAMPTON ROADS BRIDGE-TUNNEL EXPANSION**

Proj. No. 0064-M06-032  
Report #2



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Issue date: June 26, 2019

## 1. Executive Summary

### 1.1 Reporting Period

This report, prepared by the Virginia Department of Transportation (the Department), provides an overview of accomplishments and activities for the Hampton Roads Bridge-Tunnel Expansion project (the Project) from May 1 - May 18, 2019. The Design-Builder for the Project is Hampton Roads Connector Partners (HRCP), a consortium that includes Dragados, Vinci, Flatiron, and Dodin Campenon Bernard.

The current reporting period has been aligned with HRCP's fiscal-month structure, on which the Project's design-build schedule updates and invoiced construction progress are based. In the future, these reporting periods will close on the Saturday on or preceding the 24th of each month.

### 1.2 Project Accomplishments

- HRCP completed its Phase 1 exploratory drilling operations at the South Island on May 13, 2019 and at the North Island on May 16, 2019.
- HRCP advanced its work on the Nationwide Permit (NWP6), Materials Management, and Virginia Pollutant Discharge Elimination System (VPDES) documentation. HRCP completed and submitted the NWP6 draft application to VDOT; submitted the draft Sampling and Analysis Plan (SAP) to agencies; and evaluated treatment processes and chemical constituents for potential additives.
- HRCP developed detailed timelines for its NWP6 and VPDES efforts and will insert these into the master project schedule.

### 1.3 Priorities

The Department's priorities for the Project are to achieve the following objectives:

- To provide mobility enhancements and travel-time reliability along the Project corridor
- To minimize project impacts on adjacent communities
- To improve transportation operations and safety throughout the Project corridor
- To develop public infrastructure in a financially responsible manner

## 1.4 Schedule

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- The second Limited Notice to Proceed (LNTP2), following submittal of the project's Joint Permit Application, is currently scheduled for September 29, 2019.
- Full Notice to Proceed (NTP), following receipt of the Project's Joint Permit, is scheduled for October 10, 2020.
- Final completion remains as scheduled for November 1, 2025.
- 1.9% of the contract time has progressed to date.

## 1.5 Budget and Cost

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- Project budget overview:

Total project budget:	\$3,861,997,227
Total charges for efforts to date:	\$33,564,402
Remaining project budget:	\$3,828,432,825

- Design-build contract overview (through May 2019 payment application):

Total contract amount:	\$3,299,997,227
Total charges for efforts to date:	\$33,564,402
Total work orders:	\$0

- Design-build progress to date (through May 2019 payment application):

Overall:	1.02%
Mobilization:	10.8%
General Requirements (incl. Project Management):	0.95%
Design:	1.21%
Physical Progress:	0%

## 1.6 Environmental Management

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HRCP is continuing the preparation of multiple environmental permits by developing its design in sufficient detail to illustrate its construction concepts to the permitting agencies, as well as by engaging with these agencies for pre-application coordination.

- Permits for marine geotechnical investigations will enable collection of additional sub-surface data to finalize the project design. During this period, HRCP completed its Marine Operations Plan and supporting materials for the following:
  - USACE Nationwide Permit 6 (Marine Geotechnical) including Corps Section 408 review and approval
  - VMRC Subaqueous Permit

- Permits for project construction in marine and wetland areas will be obtained via a Joint Permit Application (JPA). During this period, HRCP continued the preparation of JPA components for discussion at a monthly agency status meeting on May 29, 2019:
  - USACE Individual Permit including Corps Section 408 review and approval
  - Virginia Department of Environmental Quality (VDEQ) Water Protection Permit (Section 401)
  - VDEQ Virginia Pollutant Discharge Elimination System (VPDES) permit for wastewater discharge
  - VMRC Subaqueous Permit
  - U.S Coast Guard (USCG) Bridge Permit (processed under USCG bridge permit application, which is separate from the Joint Permit)

## 1.7 Quality

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- HRCP has completed the draft Design Quality Management Plan (DQMP).
- One internal audit has been performed as of May 18, 2019.

## 1.8 Operations

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- HRCP has completed exploratory soil borings on the South and North Islands.
- HRCP will be implementing lane closures and shoulder closures within the project corridor to support field activities including survey and geotechnical exploration.

## 1.9 Safety

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- On May 9, 2019, a water line on the North Island was damaged during drilling operations. After investigation, it was determined that the line had not been properly identified, and the utility clearance process was revised for prevention of future issues.
- Daily safety meetings are held on site with all staff working on site present.
- All personnel are urged to use caution entering/exiting the islands in live traffic.

## 1.10 DBE & SWAM Business Activities

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- VDOT's Civil Rights personnel met with HRCP to discuss compliance requirements.
- HRCP introduced its recently hired DBE/SWaM/EEO Compliance Manager, Malcolm Kates.
- A DBE/SWaM outreach event is planned in Hampton in September 2019.

## 1.11 Public Outreach

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- Members of VDOT's HRBT Expansion Team have participated in more than 50 outreach events to date.
- Of specific note in May, the following presentations were made:
  - May 2 – Cottage Line Civic League
  - May 9 – Willoughby Civic League
  - May 14 – Project Update to Norfolk City Council

## 2. Project Accomplishments

### 2.1 Overview and Look Ahead

#### Milestones

The Design-Builder's plan for South Island instrumentation was submitted, reviewed and accepted ahead of schedule. This activity was on the critical path.

#### Project Management Plans

HRCP is currently developing Project Management Plans to support a timely, quality project delivery. The draft Design Quality Management Plan was completed this period. The Instrumentation and Monitoring Plan will be submitted later in May.

#### Geotechnical Investigation

Phase 1 drilling operations to collect geotechnical data at the islands have been completed: subsurface exploration at the South Island was finished on May 13, 2019 and at the North Island on May 16, 2019. Laboratory testing for soil classification is ongoing.

#### Environmental Permitting

Environmental permit coordination continues as discussions with the agencies are occurring weekly and monthly. The next scheduled monthly status meetings are May 29, 2019 and June 28, 2019. A pre-application meeting with relevant permit agencies has been targeted for July 10, 2019 where HRCP will present the overall project and the full range of temporary and permanent environmental impacts estimated for the project. The pre-application meeting will include at a minimum the USACE, VDOT, VDEQ, VMRC, and Virginia Institute of Marine Science (VIMS).

#### Third Party Coordination

Post-award coordination with the U.S. Navy and the Federal Highway Administration (FHWA) started in April and is ongoing. Recognizing the importance of timely, appropriate coordination, HRCP is working to hire a "Navy Coordinator" in continuing to work through access and coordination matters. FHWA participates in weekly coordination meetings with VDOT and HRCP.

## 3. Project Schedule

### 3.1 Schedule Status

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#### Baseline Schedule

HRCP submitted its Preliminary Baseline Schedule to VDOT on May 10, 2019. The schedule currently reflects the longest path for the project through the South Island portal for the new tunnel. This schedule details work within the initial 180 days of the project, identifies milestones, and identifies the longest path to substantial and final completion.

#### Permitting Schedule

The JPA includes multiple administrative documents, including the Coastal Zone Management (CZM) consistency determination, the USACE Section 404/10 permit, USACE Section 408 permit, the VDEQ water protection permit, and the VMRC subaqueous land permit.

HRCP plans to submit a comprehensive permitting schedule in the next reporting period to detail the preparation, submission, and permitting processes for the above-referenced actions. A pre-application consultation with all the concerned agencies is scheduled for July 10, 2019, while the full JPA package (including the Section 408 request) is to be submitted in early September 2019.

HRCP's goal is to obtain the Joint Permit in Spring 2020. During this process, the JPA is scheduled to be ready for USACE Public Notice in September 2019.

#### Key Dates

The following table depicts key milestone dates outlined in the contract requirements. Currently, these dates are based on HRCP's Preliminary Baseline Schedule. A Baseline Schedule will be provided by HRCP in July 2019; this table will be updated to reflect these dates and used as a benchmark to track milestone achievements.

Key Dates	Contract Requirement	HRCP Preliminary Baseline Schedule	HRCP Baseline Schedule	Actual
<b>LNTP1</b>		April 12, 2019		April 12, 2019
<b>LNTP2</b>		September 29, 2019		
<b>LNTP3</b>		October 9, 2019		
<b>NTP</b>		October 10, 2020		
<b>Substantial Completion</b>	September 1, 2025	June 27, 2025		
<b>Final Completion</b>	November 1, 2025	November 1, 2025		

### 3.2 Longest Path

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The longest-path activities for the Project schedule include:

- Baseline monitoring of the South Island structures (12 months of readings)
- Construction of the South Island launching pit for the Tunnel Boring Machine (TBM)
- Assembly of the TBM in the launching pit
- TBM mining of the new tunnel
- Finishes in the tunnels
- Commissioning and integration tests for the tunnel

### 3.3 Impact Analysis

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Several elements of work are near-critical and could affect Project progress if they are not addressed diligently. The Department and HRCP are closely monitoring these activities. The following work elements have been identified as near critical with less than one month of float:

- JPA preparation process
- Design of South Portal
- TBM design, procurement, fabrication, and delivery
- Bored tunnel design
- Manufacturing of tunnel segments
- Tunnel mechanical, electrical, and plumbing design and installation

Submitting the JPA will allow LNTP2 and LNTP3 to be issued. LNTP2 enables procurement of the TBM, while LNTP3 allows commencement of construction work for the launching pit and ground improvement on South Island. Receipt of the Joint Permit will allow full NTP for the Project.

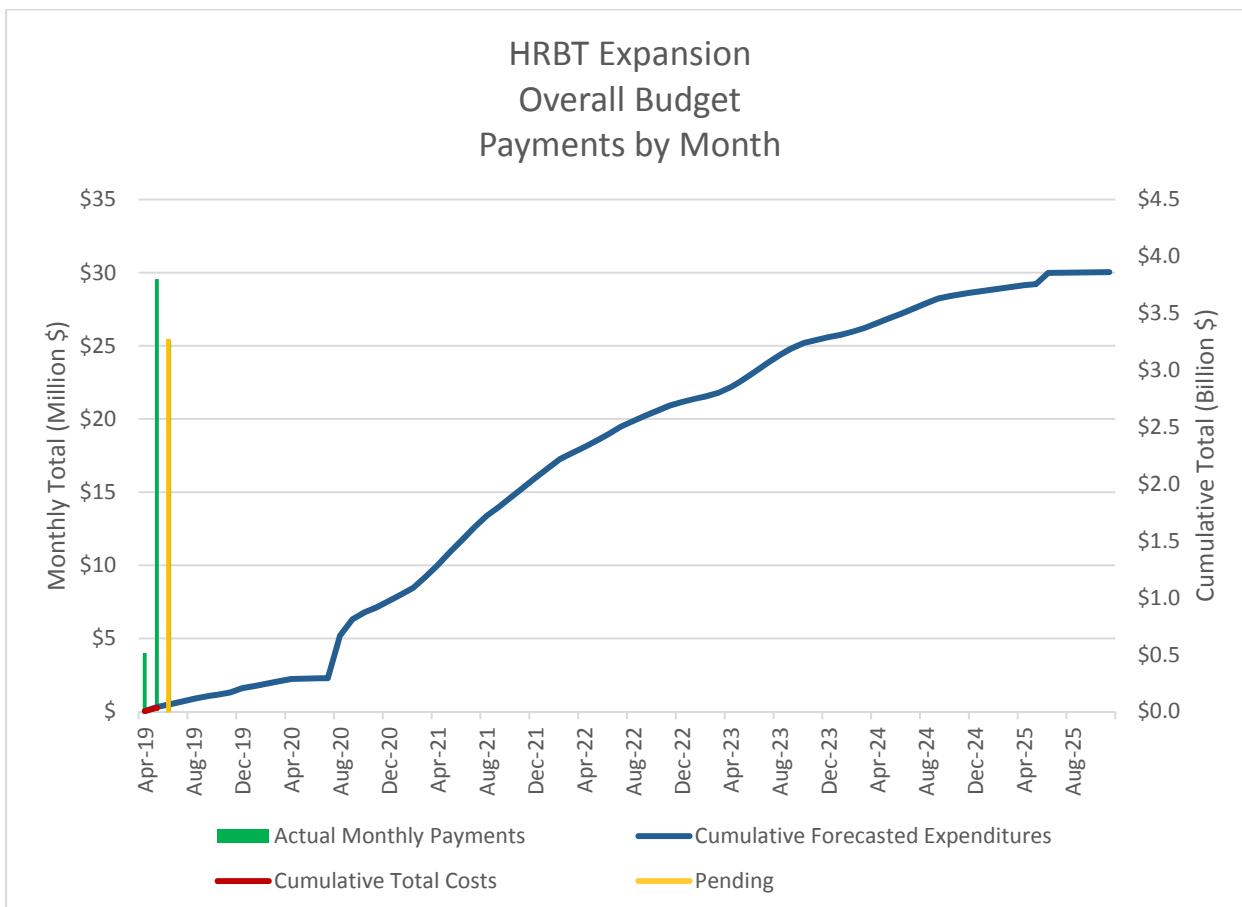


## 4. Budget and Cost

### 4.1 Overall Budget

The overall budget outlined in this report is based on the terms and conditions of Article 3 (Project Funding) in the Project Agreement for Funding and Administration (PAFA). The cost curve is based on Exhibit 6 of the CA (monthly maximum cumulative compensation amount).

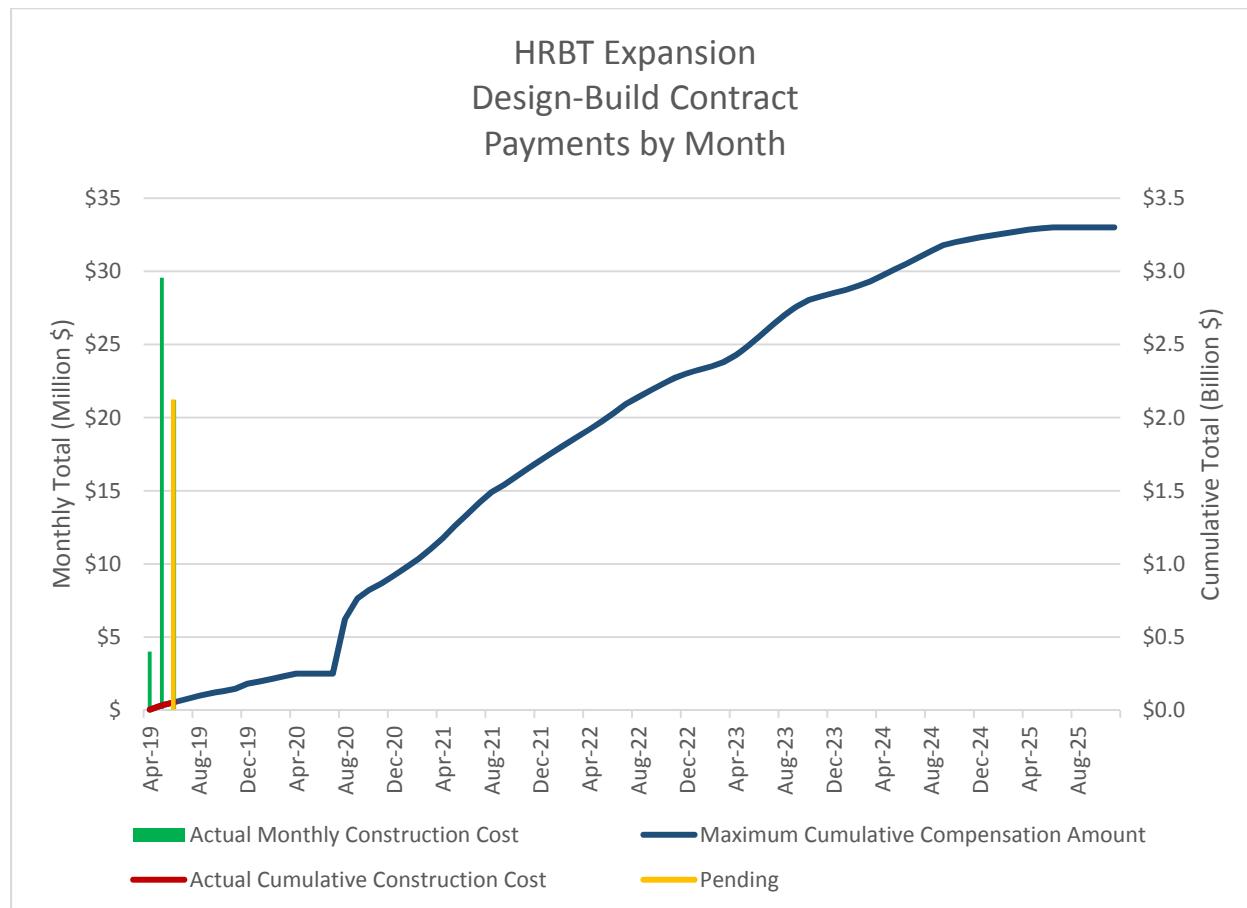
	Amount this period:	Total to Date:	Total Budget:	Total Remaining Budget:	Percent Spent To-date:
<b>Comprehensive Agreement</b>					
<b>Construction</b>	\$29,564,402	\$33,564,402	\$3,299,997,227	\$3,266,432,825	1.02%
<b>Owner Costs</b>					
<b>Administration</b>	\$0	\$0	\$122,000,000	\$122,000,000	0.00%
<b>Right of Way</b>	\$0	\$0	\$15,000,000	\$15,000,000	0.00%
<b>No-Excuses Incentive</b>	\$0	\$0	\$90,000,000	\$90,000,000	0.00%
<b>Contingency</b>	\$0	\$0	\$335,000,000	\$335,000,000	0.00%
<b>Total</b>	<b>\$29,564,402</b>	<b>\$33,564,402</b>	<b>\$3,861,997,227</b>	<b>\$3,828,432,825</b>	<b>0.87%</b>



## 4.2 Design-Build Cost Status

The construction budget and planned cost have been established based on the maximum cumulative compensation amount. For this period, the following tasks are associated with the invoiced expenditures (actual construction cost):

- Mobilization at LNTP1
- Bonds and insurance
- Project management
- Design surveys
- Environmental permitting
- Geotechnical investigation
- Design work for permitting



## 4.3 Budget by Funding Source

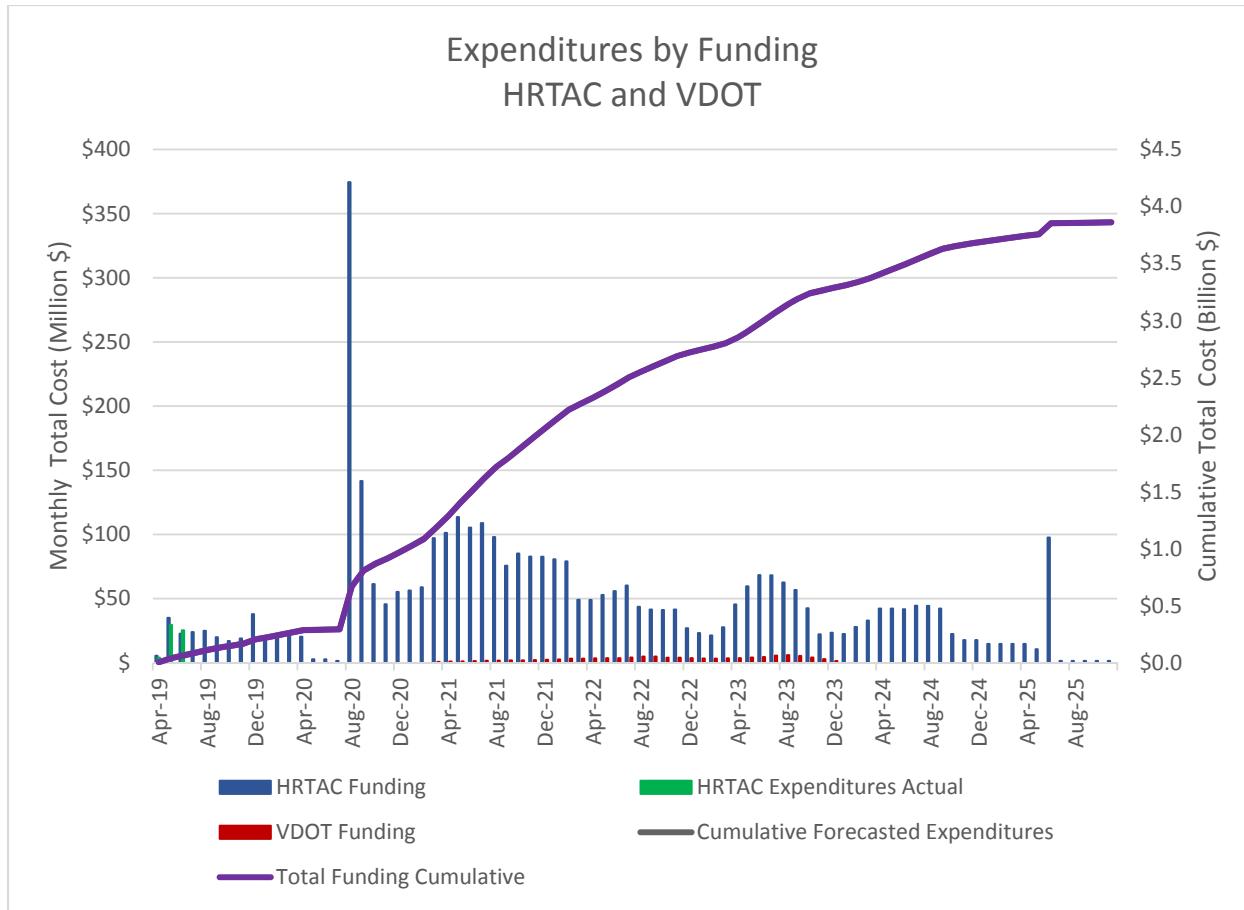
The budget for expenditures by funding source is based on the terms and conditions of Article 3 (Project Funding) and Exhibit 5 of the PAFA. This section outlines planned expenditures by both HRTAC and VDOT. The cost curve has been developed based on the monthly maximum cumulative compensation amount in the CA and will be updated as HRCP refines its design, construction means-and-methods, activity sequences, and project resourcing.

### 4.3.1 HRTAC and Smart Scale

	Amount this period:	Total to Date:	Total Budget Including Smart Scale:	Total Remaining Budget:	Percent Spent To-date:
<b><u>Comprehensive Agreement</u></b>					
Construction	\$29,564,402	\$33,564,402	\$3,204,569,251	\$3,171,004,849	1.05%
<b><u>Owner Costs</u></b>					
Administration	\$0	\$0	\$118,472,054	\$118,472,054	0.00%
Right of Way	\$0	\$0	\$15,000,000	\$15,000,000	0.00%
No-Excuses Incentive	\$0	\$0	\$90,000,000	\$90,000,000	0.00%
Contingency	\$0	\$0	\$325,428,276	\$325,428,277	0.00%
<b>Total</b>	<b>\$29,564,402</b>	<b>\$33,564,402</b>	<b>\$3,753,469,581</b>	<b>\$3,719,905,180</b>	<b>0.89%</b>

### 4.3.2 VDOT

	Amount this period:	Total to Date:	Total Budget:	Total Remaining Budget:	Percent Spent To-date:
<b><u>Comprehensive Agreement</u></b>					
Construction	\$0	\$0	\$95,427,976	\$95,427,976	0.00%
<b><u>Owner Costs</u></b>					
Administration	\$0	\$0	\$3,527,946	\$3,527,946	0.00%
Right of Way	\$0	\$0	\$0	\$0	0.00%
No-Excuses Incentive	\$0	\$0	\$0	\$0	0.00%
Contingency	\$0	\$0	\$9,571,724	\$9,571,724	0.00%
<b>Total</b>	<b>\$0</b>	<b>\$0</b>	<b>\$108,527,646</b>	<b>\$108,527,646</b>	<b>0.00%</b>



#### 4.4 Contingency

- 0 work orders to date
- \$0 material price adjustments (asphalt, steel, & fuel) to date

## 5. Environmental Management

Following its geotechnical investigations on the North and South Islands, HRCP is continuing to employ passive measures to protect nesting birds on the South Island. Explorations were completed on the South Island on May 13, 2019 and drilling enclosures will be removed from the work locations, leaving a temporary barrier along the island's ring road to help protect birds from walking into traffic.



## 6. Operations

Currently there are minimal impacts to traffic operation for the field activities that are underway. In the upcoming months there will be lane and shoulder closures within the project corridor to support field survey and geotechnical operations. These closures will be closely coordinated through VDOT's Lane Closure Advisory Management System (LCAMS), which provides a method to collaborate traffic operations across the region.



## 7. DBE & SWaM Business Activities

During this reporting period, VDOT's Civil Rights personnel met with HRCP to discuss compliance requirements pertaining to programs for DBE/SWaM, Equal Opportunity Contractor, Labor and On-the-Job Training (OJT). The project has 12% DBE and 20% SWaM goals, along with an OJT goal of 80 trainees.

HRCP introduced its recently hired DBE/SWaM/EEO Compliance Manager, Malcolm Kates, who brings substantial knowledge and experience with Civil Rights programs in other states. As a result, VDOT and HRCP plan to host their first Civil Rights Workgroup Meeting on May 20, 2019, as an update on firms being utilized for participation credit on the project and submitting required documents for review. Upcoming meetings will also include HRCP's design joint-venture partners, HDR Engineering and Mott MacDonald, to address reporting requirements for consulting and design work.

During this period, discussions continued with HRCP about hosting another outreach event for the industry to learn more about contracting opportunities on the project for small and disadvantaged businesses within the community.

## 8. Public Outreach

Public Outreach on the Project in early May included requests for presentations to Norfolk's Cottage Line Civic League on May 2 and the Willoughby Civic League on May 9. This was VDOT's fourth visit to the Willoughby Civic League, which has requested regular project updates since May 2017. Communications Manager Paula Miller addressed both civic groups and answered questions about project milestones.

On May 14, HRBT Expansion Project Director Jim Utterback provided Norfolk City Council with a project update.

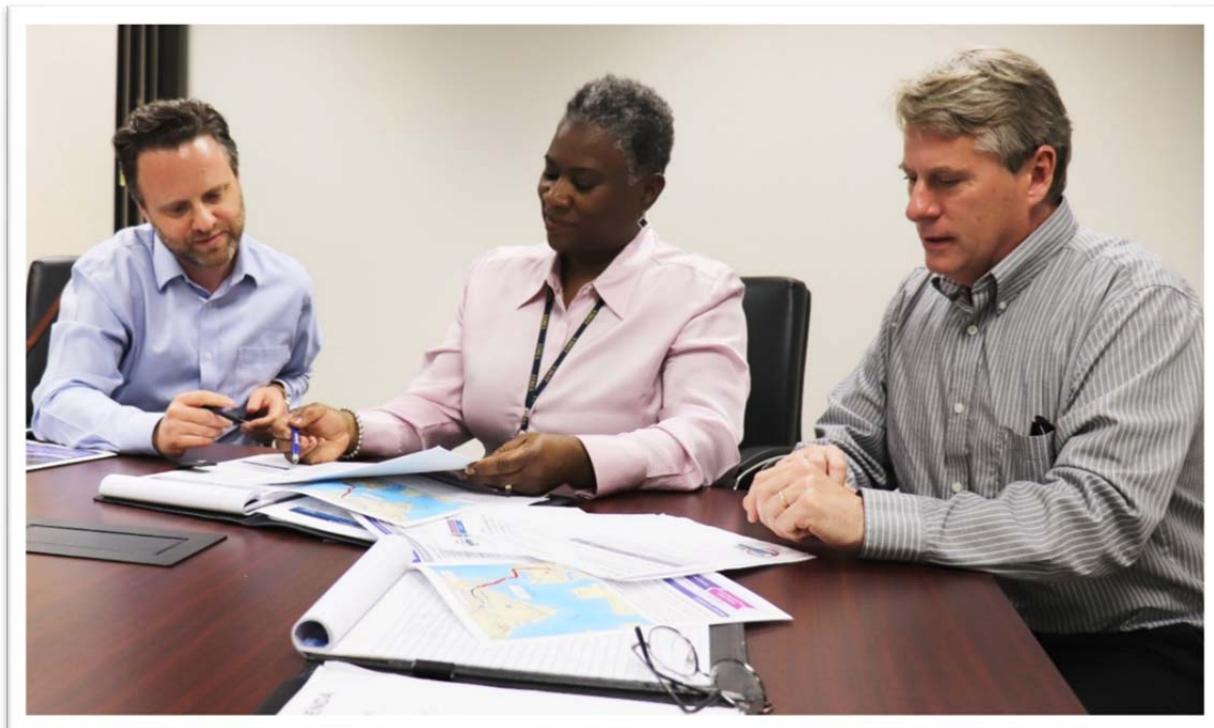
Meetings are scheduled with Hampton University leadership on May 29 and Norfolk's City Manager and other city and regional transportation officials on May 30.

An informational meeting with Hampton's City Manager and Deputy City Manager is scheduled for June.

## 9. Project Media

The project's Communications Team is in the process of developing an update to the Project website at [www.HRBTextension.org](http://www.HRBTextension.org) to reflect HRCP's selection and to connect community members with additional information now available following Project award.

Among the outreach initiatives to be highlighted, VDOT's Civil Rights Manager Queen Crittendon and Civil Rights Specialist Damon Pauly recently met with Malcolm Kates, HRCP's DBE/SWaM/EEO Compliance Manager to plan a DBE/SWaM event for September 11, 2019 at the Hampton Roads Convention Center in Hampton. The half-day session will feature a keynote speech from Secretary of Transportation Shannon Valentine and other VDOT and HRCP representatives. Individuals and companies interested in working on the HRBT Expansion Project will be encouraged to attend and learn more from the Design-Build team about the myriad opportunities available on the project.



Pictured left to right: Malcolm Kates, HRCP; Queen Crittendon and Damon Pauly, VDOT