



November 2021
Monthly Project Report

I-64 HAMPTON ROADS BRIDGE-TUNNEL EXPANSION

Report No. 32

Project No. 0064-M06-032



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Prepared by:

Virginia Department of Transportation

www.hrbtextension.org

1. Executive Summary

1.1 Overview

This report provides an overview of accomplishments and activities for the Hampton Roads Bridge-Tunnel Expansion Project from October 24, 2021 – November 20, 2021. The Design-Builder for the project is Hampton Roads Connector Partners (HRCP), a consortium that includes lead contractors Dragados, Vinci, Flatiron, and Dodin Campenon Bernard, with lead designers HDR and Mott MacDonald.

The current reporting period is aligned with HRCP's fiscal-month structure, on which the project's design-build schedule updates and invoiced construction progress are based. Reporting periods typically close on the Saturday on or preceding the 24th of each month.

During this reporting period, the following project accomplishments were recorded:

- The design of the project continues to progress, with 92% of the project construction plans approved as Released for Construction (RFC).
- South Island Progress:
 - Excavation and demolition of slurry walls in preparation for TBM slab placement.
 - Achieved 76% of capping beam concrete placement in the TBM Launching Pit.
- North Island Progress:
 - Slurry wall operations mobilization for the TBM Receiving Pit.
 - Guide walls installation in preparation for slurry walls.
- North Island Expansion Progress:
 - Placement of fill material from elevations +5.0' to +10.0'.
- Two of the three ships carrying TBM components arrived at the Port of Virginia.
- Mobilized an additional crane in preparation for pile driving at the North Westbound Trestle and drove the first production pile.
- Began demolition of sound wall along I-64 Eastbound in Norfolk.
- Exceeded contract goals for minority and women employment on the project to date.

1.2 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.

1.3 Key Updates

Project Schedule

HRCP is currently in the process of developing a Revised Baseline schedule which is expected to be submitted and approved no later than April 1, 2022. The last approved schedule for the project is Update 26 (Data date: September 19, 2021), and the schedule information in this report reflects this update.

- HRCP is reporting Substantial Completion in accordance with the contract milestone of September 1, 2025.
- HRCP is reporting Final Completion in accordance with the contract milestone of November 1, 2025.
- Approximately 37% of the scheduled time has elapsed to date.

Project Budget

The project budget summary below updates include the preliminary November 2021 payment application. Figures are subjected to change pending the Department's review of the official submission of the final payment application by HRCP.

- Project budget overview:

Current total project budget:	\$	3,935,451,641
Total expenditures to date:	\$	1,189,953,112
Remaining project budget:	\$	2,745,498,528

- Design-build contract overview:

Design-build contract original amount:	\$	3,299,997,227
Net change orders:	\$	18,744,947
Exercised options:	\$	73,454,414
Design-build contract sum to date:	\$	3,392,196,588
Expenditures to date:	\$	1,125,925,931
Remaining design-build contract amount:	\$	2,266,270,657

- Design-build progress to date:

Overall:	33.17%
Project Management:	34.63%
Design:	82.63%
Physical Construction Progress:	17.96%

Environmental

During this reporting period, HRCP took the following steps in support of environmental management:

- To address a Warning Letter from the Department of Environment Quality (DEQ) regarding water quality permitted exceedances at the South Island treatment plant, HRCP received input from DEQ on the mixing study and has initiated the modeling effort.
- HRCP received concurrence from all agencies regarding the changes to the acoustic monitoring study.
- HRCP held a meeting with the Virginia Marine Resources Commission on November 10, 2021 to initiate discussions on the placement of demolished bridge materials at sanctioned artificial reef sites.
- HRCP provided additional information to the DEQ regarding the air permit applications for the North Island and South Island.
- HRCP uncovered a WWII helmet liner on the South Island and the Virginia Department of Historic Resources determined it not to be historically significant.

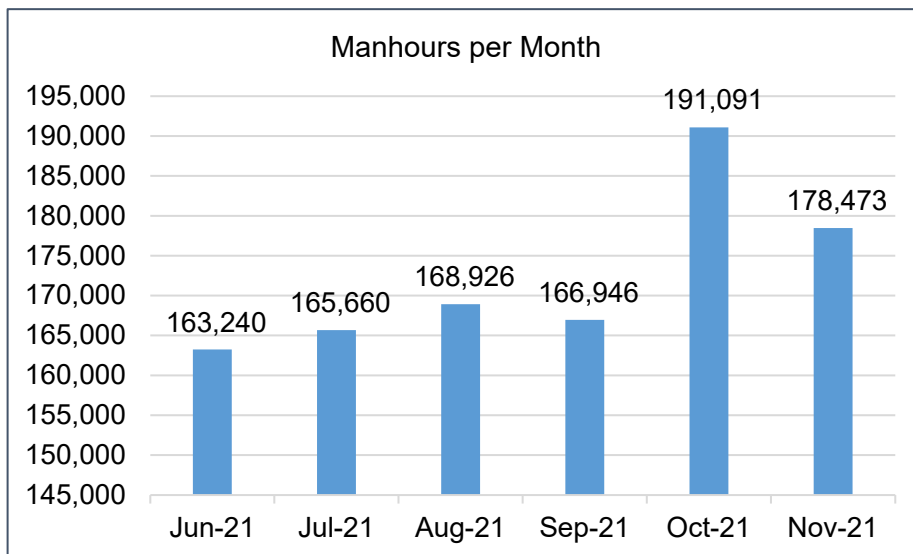
Construction

Progress updates for this reporting period include:

- Hampton Landside
 - Continued demolition of the Mallory St Bridge.
 - Began temporary drainage installation along the I-64 Eastbound in Hampton.
- Marine Works
 - Continued removing the sunken vessel obstructing work at the South Temporary Construction Trestle.
 - Continued permanent pile driving operations for the North Eastbound Trestle and South Trestle.
 - Mobilized an additional crane in preparation for pile driving at the North Westbound Trestle and drove the first production pile.
 - Completed 7 out of 8 sections of fill material placement and compaction for the North Island Expansion.
- Tunnels and Islands
 - Continued construction of the conveyor system and TBM Quay at the South Island.
 - Continued ground improvement with deep soil mixing and jet grouting operations on the South Island. Completed the field trial program for the approach jet grout plug.
 - Continued placing capping beam at the South Island Launching Pit.
 - Continued excavation and demolition of slurry walls in preparation of TBM slab placement.
 - Continued slurry wall mobilization operations at the North Island.

- Continued installing guide walls at the North Island.
- Completed construction of the temporary MSE wall at the North Island circulation road.
- Norfolk Landside
 - Continued Bay Avenue Bridge widening at abutments.
 - Began demolition of sound wall along I-64 Eastbound.
 - Continued construction of the Willoughby Bay Bridge, Oastes Creek Bridge, and Evans St Bridge for Eastbound widening.

The number of construction manhours worked each month is provided by HRCP and is current as of November 30, 2021:



Project Manhours to Date:
2,773,216

Operations

The following operations activities took place during this reporting period:

- Implemented short-term lane closures along I-64 EB and I-64 WB in Hampton as well as on the Willoughby Eastbound Bridge and North Eastbound Trestle.
- Continued long-term detour at West Evans St.
- Continued long-term lane closures at Bay Avenue, Bayview Blvd, and Mallory St.
- Held the Quarterly Concept of Operations meeting between HRCP and VDOT on November 1, 2021.

Quality

Quality updates for this reporting period include:

- VDOT reviewed the quarterly updates of the Quality Management System Plan, the Design Quality Management Plan, and the Construction Quality Management Plan.

- VDOT continues to track Owner's Independent Assurance (OIA) and Owner's Verification Sampling and Testing (OVST) requirements and conducts testing as needed.
- VDOT continues to monitor and audit HRCP's material book records for compliance.

Safety

Safety procedures and activities during this reporting period include:

- VDOT conducts routine safety site visits to promote safe work zones and oversight of HRCP's Safety Program.
- The following safety performance indicator information is provided by HRCP and is current as of November 30, 2021:
 - Total Recordable Incidence Rate: 1.59 (National Average: 2.5)
 - Lost Time Incidence Rate: 0.14 (National Average: 1.6)

Civil Rights & DBE/SWaM Business Opportunities

To date, HRCP has awarded **276** subcontracts, subconsultant agreements, and purchase orders. Contract awards represent a total of **\$379.6 million** to active DBE/SWaM firms on the project.

- HRCP continues to make progress towards its 80-participant On-the-Job Training goal.
- HRCP held the Virtual DBE/SWaM Opportunity Conference on October 27, 2021.
- VDOT continued to conduct routine compliance reviews on civil rights activities.
- The HRBT Expansion Project Team attended several workforce development and business development activities this period.

Public Outreach & Media

Public outreach and project media updates provided by VDOT and HRCP for this reporting period:

- Presentations to the Exchange Club of Poquoson, Downtown Norfolk Council, Hampton Roads Utility and Heavy Contractors Association, and Old Dominion University civil engineering class.
- Media articles published in WAVY-TV 10 and the Daily Press/Virginian-Pilot regarding the Mallory St Bridge demolition and recovered Civil War era cannonballs.

2. Project Schedule

2.1 Schedule Status

The following table depicts key milestone dates outlined in the contract requirements. This table will be used as a benchmark to track milestone achievements and has been updated as of the current approved schedule. HRCP is currently in the process of developing a Revised Baseline schedule which is expected to be submitted and approved no later than April 1, 2022. The last approved schedule for the project is Update 26 (Data date: September 19, 2021), and the schedule information in this report reflects this update.

	Contract Requirement	Schedule of Record Dates	September 2021 (Update 26)	Actual
NTP		Sep 9, 2020	Sep 11, 2020	Sep 11, 2020
Substantial Completion	Sep 1, 2025	Aug 27, 2025	Sep 1, 2025	
Final Completion	Nov 1, 2025	Nov 1, 2025	Nov 1, 2025	

2.2 Longest Path

The longest path to achieve the completion date of the Project Schedule Update 26 is driven by the following activities:

- South Portal Launching Pit Capping Beam Cell 1,2,3
- South Portal Launching Pit Excavation Part 2,3,4
- South Portal Cell 1 Place Lean Concrete
- South Portal Temporary Headwall Cell 1
- Assembly of the Tunnel Boring Machine (TBM) in the launching pit
- TBM drive in High Occupancy Toll (HOT) Tunnel
- TBM U-Turn
- TBM drive in General Purpose (GP) Tunnel
- TBM Disassembly in south pit
- South Portal Cut & Cover Structures Phase 4 Cell 1
- South Portal Mechanical, Electrical, and Plumbing (MEP)
- GP Tunnel Site Integration Acceptance
- Tunnel Systems Integration-ITS
- Commissioning and Testing of all Systems (Roadway, Bridges, Structures, Tunnels)
- Substantial Completion

2.3 Impact Analysis

Several elements of work are near-critical and could affect schedule performance if they are not addressed diligently. VDOT and HRCP are closely monitoring these activities. The following work elements have been identified as critical or near critical, meaning there is less than one month of float in the Schedule Update 26:

Design

- Design Segment 3 Roadway

Procurement

- North EB MOT Trestle procurement
- South WB MOT Trestle procurement

Construction

South Portal

- Dewatering-Testing & Commissioning
- Launch Pit Excavation Part 1
- Launch Pit Temporary Headwall-Partial Excavation
- Launch Pit Demolish abandoned Slurry Wall
- Launch Pit Stiffening Columns & Struts
- Base Slab Concrete works Phase 1
- Rectilinear section on-shore U-Wall
- Jet Grout Break-in/out Phase 2

North Portal

- Receiving Pit Slurry Walls
- North Ground Improvement-Bore Proximity slurry walls

North Trestle

- EB Zone 1 (Pier Caps, Beams Deck)
- EB Zone 2 (Pier Caps)
- EB Zone 3 (Piles, Pier Caps, Abutment)
- EB MOT Zone 5 (Piles)
- WB Zone 6 (Piles)

South Trestle

- EB MOT Zone 3 (Piles, Pier Caps, Beams, Deck, Abutment, Finishes)
- WB MOT Zone 4 (Piles, Pier Caps, Beams)

Roadway

- Segment 3 Roadway from South Trestle to Mason Creek Rd

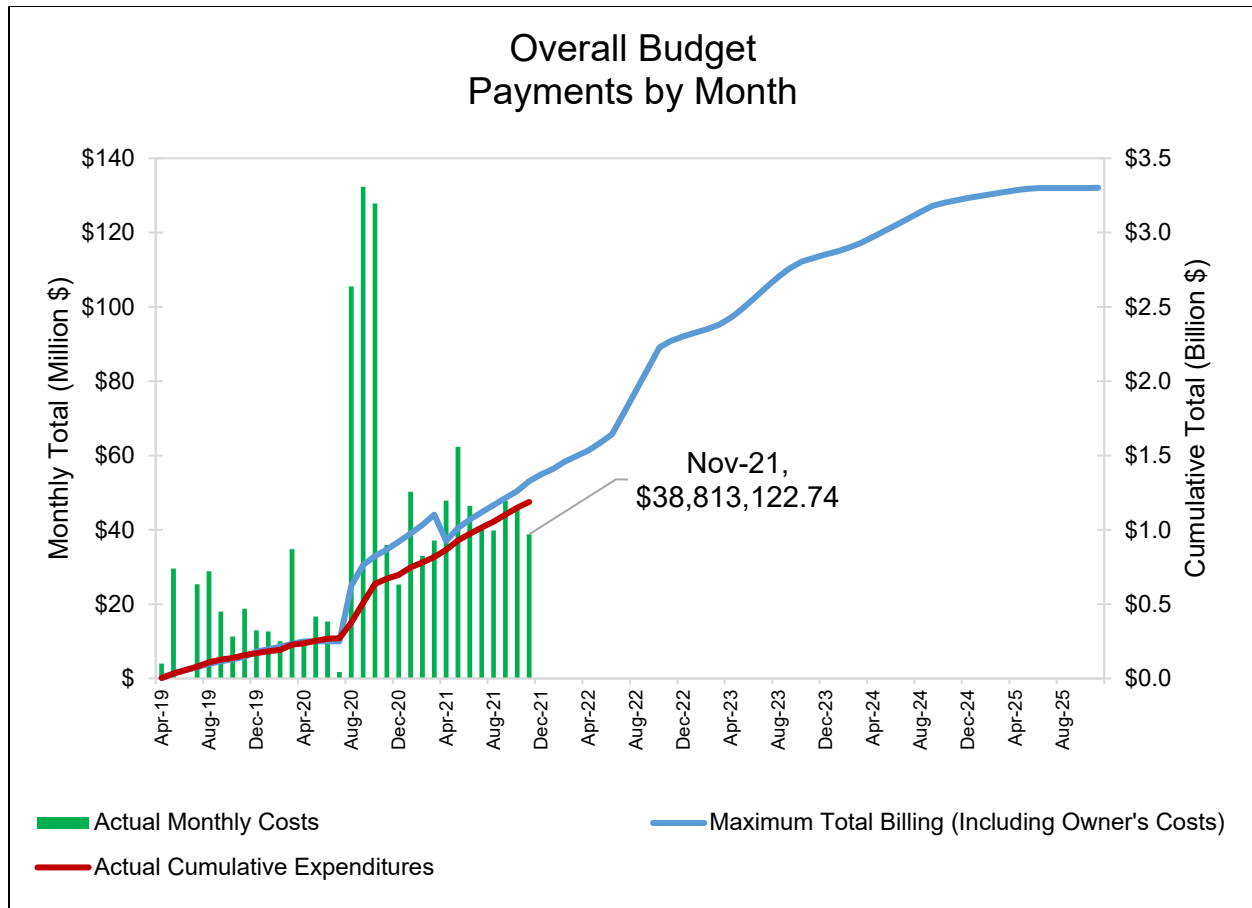
3. Project Budget

3.1 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 Comprehensive Agreement (monthly maximum cumulative compensation amount).

**Note - The project budget summary below updates include the preliminary November 2021 payment application. Figures are subjected to change pending the Department's review of the official submission of the final payment application by HRCP.*

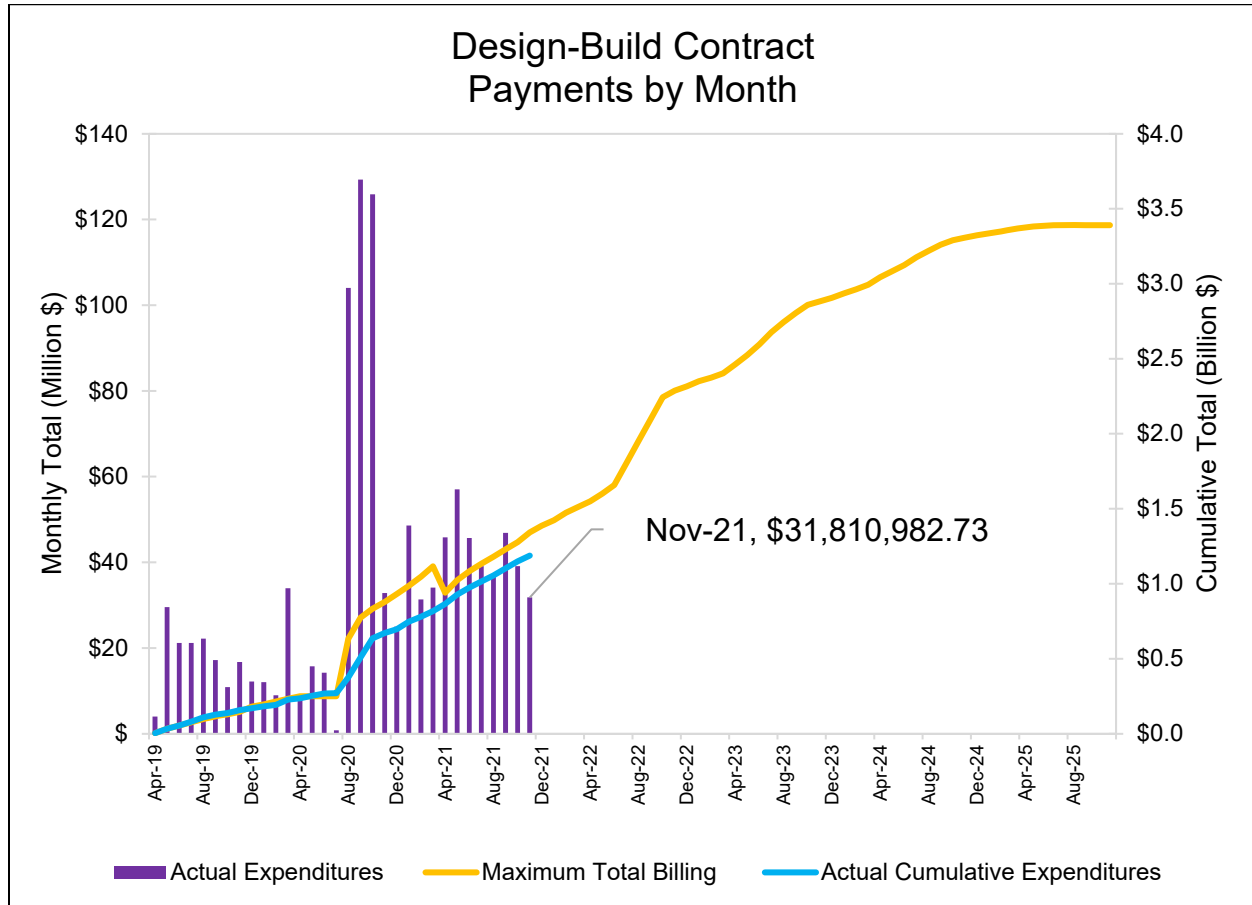
	Amount this Period:	Total to Date:	Original Total Budget:	Total Remaining Budget:	Percent To-date:
<u>Comprehensive Agreement</u>					
*Construction	\$31,810,982.73	\$1,125,925,931.07	\$3,299,997,227.00	\$2,174,071,295.93	34.12%
<u>Owner Costs</u>					
Administration	\$3,265,372.53	\$41,940,209.00	\$122,000,000.00	\$80,059,791.00	34.38%
Right of Way	\$55,354.44	\$8,362,008.36	\$15,000,000.00	\$6,637,991.64	55.75%
No-Excuses Incentive	\$0.00	\$0.00	\$90,000,000.00	\$90,000,000.00	0.00%
*Contingency	\$3,681,413.04	\$13,724,964.30	\$335,000,000.00	\$321,275,035.70	4.10%
*Bridge Repair Work Option	\$0.00	\$0.00	\$73,454,413.96	\$73,454,413.96	0.00%
<u>Total</u>	\$38,813,122.74	\$1,189,953,112.73	\$3,935,451,640.96	\$2,745,498,528.23	30.24%



**The Maximum Total Billing (Including Owner's Costs) is now showing an adjustment in May 2021 due to the executed Change Order #40 - Update Maximum Cumulative Cost Curve.*

3.2 Design-Build Contract Cost Status

The budget and planned cost have been established based on the maximum cumulative compensation amount. For this period, the invoiced expenditures cover the activities noted in this report.



**The Maximum Total Billing (Including Owner's Costs) is now showing an adjustment in May 2021 due to the executed Change Order #40 - Update Maximum Cumulative Cost Curve.*

3.3 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 of both HRTAC and VDOT funds. The cost curve has been developed based on the monthly maximum cumulative compensation amount in the Comprehensive Agreement and will be updated as HRCF refines its design, construction means-and-methods, activity sequences, and project resourcing. Amounts this period reflect amounts paid for Construction, Engineering, Administration, Right of Way, and Contingency between October 24, 2021 – November 20, 2021.

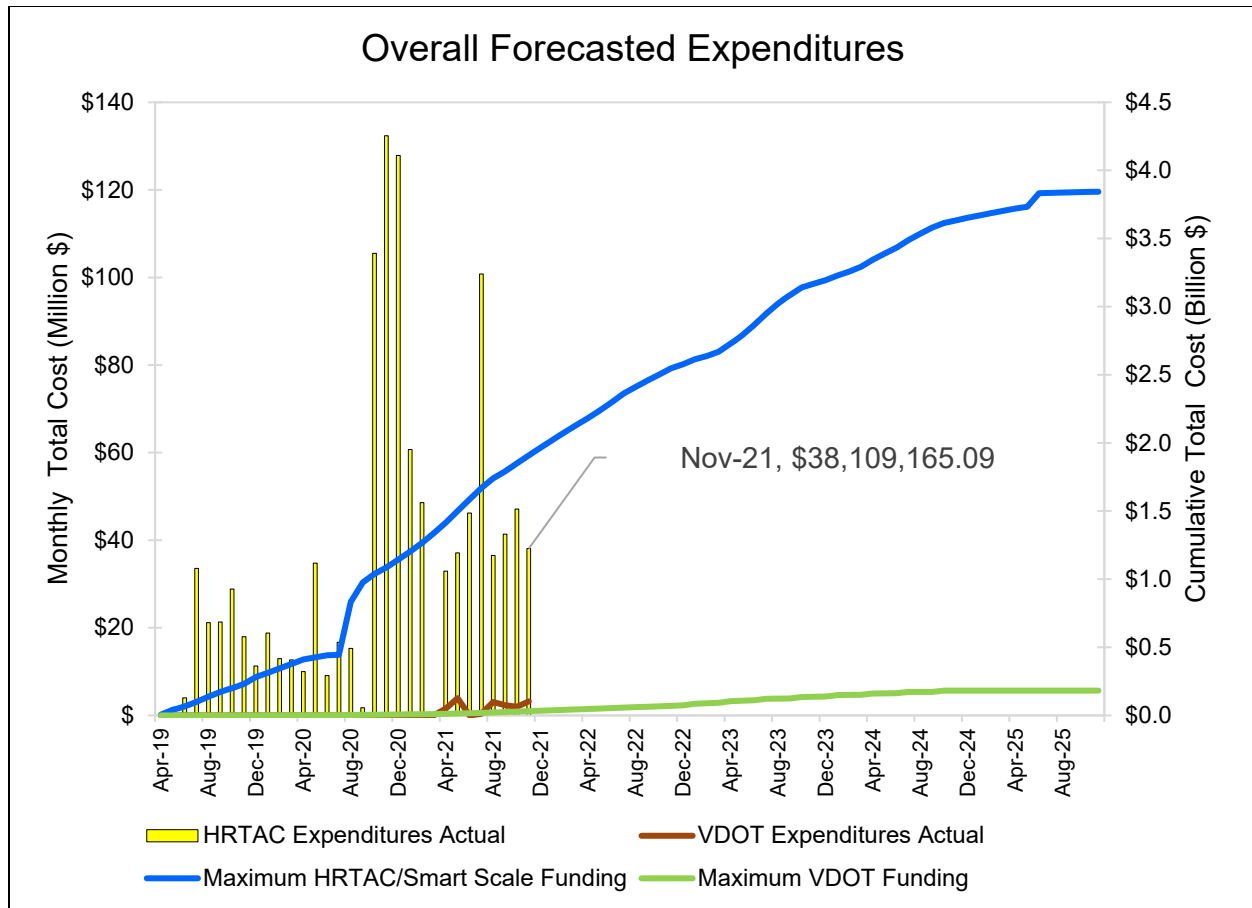
**Payment received on November 24, 2021.*

3.3.1 HRTAC and Smart Scale

	Amount Spent this Period:	Total Spent to Date:	Original Total Budget Including Smart Scale:	Total Remaining Budget:	Percent Spent To-date:
<u>Comprehensive Agreement</u>					
<i>*Construction</i>	\$35,923,150.66	\$1,080,330,133.71	\$3,204,569,251.00	\$2,124,239,117.29	33.71%
<u>Owner Costs</u>					
<i>Administration</i>	\$2,163,788.25	\$33,953,939.09	\$118,472,054.00	\$84,518,114.91	28.66%
<i>Right of Way</i>	\$22,226.18	\$6,526,482.15	\$15,000,000.00	\$8,473,517.85	43.51%
<i>No-Excuses Incentive</i>	\$0.00	\$0.00	\$90,000,000.00	\$90,000,000.00	0.00%
<i>Contingency</i>	\$0.00	\$4,143,414.76	\$325,428,277.00	\$321,284,862.24	1.27%
<u>Total</u>	\$38,109,165.09	\$1,124,953,969.71	\$3,753,469,582.00	\$2,628,515,612.29	29.97%

3.3.2 VDOT

	Amount Spent this Period:	Total Spent to Date:	Original Total Budget:	Total Remaining Budget:	Percent Spent To-date:
<u>Comprehensive Agreement</u>					
<i>Construction</i>	\$3,174,360.00	\$13,844,056.26	\$95,427,976.00	\$81,583,919.74	14.51%
<u>Owner Costs</u>					
<i>Administration</i>	\$532.47	\$805,740.00	\$3,527,946.00	\$2,722,206.00	22.84%
<i>Right of Way</i>	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
<i>No-Excuses Incentive</i>	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
<i>Contingency</i>	\$43,350.00	\$530,365.64	\$9,571,724.00	\$9,041,358.36	5.54%
<i>Bridge Repair Work Option</i>	\$0.00	\$0.00	\$73,454,413.96	\$73,454,413.96	0.00%
<u>Total</u>	\$3,218,242.47	\$15,180,161.90	\$181,982,059.96	\$166,801,898.06	8.34%



3.4 Contingency

Contract Changes

	Description	Date	Value	Time
CO-1	Department's Acquisition of Willoughby Staging Area	2/11/2020	\$ (3,000,000.00)	0 days
CO-2	Minor Revisions to Technical Requirements	3/18/2020	\$ -	0 days
CO-3	Tunnel Approach Structure Support of Excavation Requirements Refinement	4/28/2020	\$ -	0 days
CO-4	Dispute Resolution Board (DRB) Allowance	5/12/2020	\$ 200,000.00	0 days
CO-5	North Island Armor Stone Value Engineering Change Proposal (VECP)	4/28/2020	\$ (2,011,117.50)	0 days
CO-6	Exit Ramp at Bayville Avenue	5/29/2020	\$ 46,906.29	0 days
CO-7	Minor revisions to the Technical Requirements	7/16/2020	\$ -	0 days
CO-8	Zero Spread Drainage	9/16/2020	\$ 3,239,212.24	0 days
CO-9	Roadway and Bridge Scope Validation Issues	9/4/2020	\$ 15,516,248.00	0 days
CO-10	Slurry Walls as Permanent Structures	8/28/2020	\$ -	0 days
CO-12	Road and Bridge Lighting Requirements	8/27/2020	\$ 2,495,000.00	0 days

CO-13	Bridge Repair Work-Exercise Option*	10/9/2020	\$ 73,454,313.00	0 days
CO-14	Trestle Barrier Form Liner elimination	7/29/2020	\$ (99,571.80)	0 days
CO-15	South Island Ground Improvement Value Engineering Change Proposal (VECP)	9/17/2020	\$ (5,338,000.00)	0 days
CO-16	Navy Security Fencing Design	7/15/2021	\$ 150,000.00	0 days
CO-17	Westbound ITT Reduced Instrumentation	10/30/2020	\$ (184,277.50)	0 days
CO-18	Willoughby Bay Bridge Barriers	9/10/2020	\$ -	0 days
CO-19	GeoPak Version Software Updates	8/3/2020	\$ -	0 days
CO-21	Material Price Adjustment for Asphalt Materials	2/26/2021	\$ -	0 days
CO-22	South Island Asbestos Conduits	9/16/2020	\$ 81,973.93	0 days
CO-23	Island & Tunnel Baseline Monitoring Requirements	7/22/2020	\$ -	0 days
CO-24	Construction Water Supply	9/10/2020	\$ (609,157.27)	0 days
CO-25	Solids Handling Pumps Requirements	11/12/2020	\$ -	0 days
CO-26	Mass Notification Independent System Requirements	11/12/2020	\$ -	0 days
CO-27	Fixed Fire Fighting System Requirements	11/16/2020	\$ -	0 days
CO-28	Hot Lane Shoulder Width	3/29/2021	\$ 2,950,000.00	0 days
CO-30	Willoughby Bay Bridges Fender & Lighting Replacement	2/12/2021	\$ 1,495,000.00	0 days
CO-31	Builder's Risk Insurance	10/21/2021	\$ 1,500,000.00	0 days
CO-32	VCU Fisheries and SAV Mitigation Plan	4/16/2021	\$ (1,042,144.00)	0 days
CO-33	Tunnel Finishes Height	12/18/2020	\$ -	0 days
CO-38	H-Piles in Aggressive Soils	12/18/2020	\$ (47,541.00)	0 days
CO-39	Re-use of existing drainage pipes	4/20/2021	\$ (100,984.25)	0 days
CO-40	Update Maximum Cumulative Cost Curve	7/15/2021	\$ -	0 days
CO-41	Wetland Mitigation Costs	4/26/2021	\$ 3,503,400.00	0 days
CO-43	Hybrid Trestle Beam Design	7/2/2021	\$ -	0 days
CO-44	SCADA Control of Deluge Valves	7/27/2021	\$ -	0 days
CO-45	HRCP Project Executive/Representative Change	5/24/2021	\$ -	0 days
CO-46	Tunnel Sprinkler Heads Material Change	7/28/2021	\$ -	0 days
CO-49	HRCP Senior Representative Change	7/2/2021	\$ -	0 days
TOTAL			\$ 92,199,260.10	0 days

*The total change order dollar amount figure has been updated to include the Bridge Repair Work-Exercise Option amount.

Material Price Adjustments

- No new activities.

4. Environmental

HRCP has completed or is performing several compliance tasks included in permit conditions:

Permits - HRCP received a Warning Letter from DEQ on September 20, 2021 due to water quality levels that exceed the allowable levels in the DEQ permit at the South Island treatment plant. HRCP continued efforts to bring the permit into compliance by developing a mixing model that is being coordinated with DEQ.

Modifications to the acoustic monitoring plan associated with the driving of hollow steel piles were approved by all of the agencies.

HRCP met with representatives from the Virginia Marine Resources Commission (VMRC) to review the proposed plan to deposit bridge demolition material at approved artificial reefs sites maintained by VMRC.

HRCP continues to coordinate with DEQ with regards to air permits for the temporary generators located on the North and South Islands. Additional information was provided by HRCP to DEQ on the generators in use.

Marine Mammal Protection - All remaining pile driving activities are being covered by the Letter of Authorization (LOA), which is valid through April 1, 2026.

Bird Mitigation - Bird nesting season officially ended on September 1, 2021. HRCP suspended using the dogs and will not resume until the 2022 season begins.

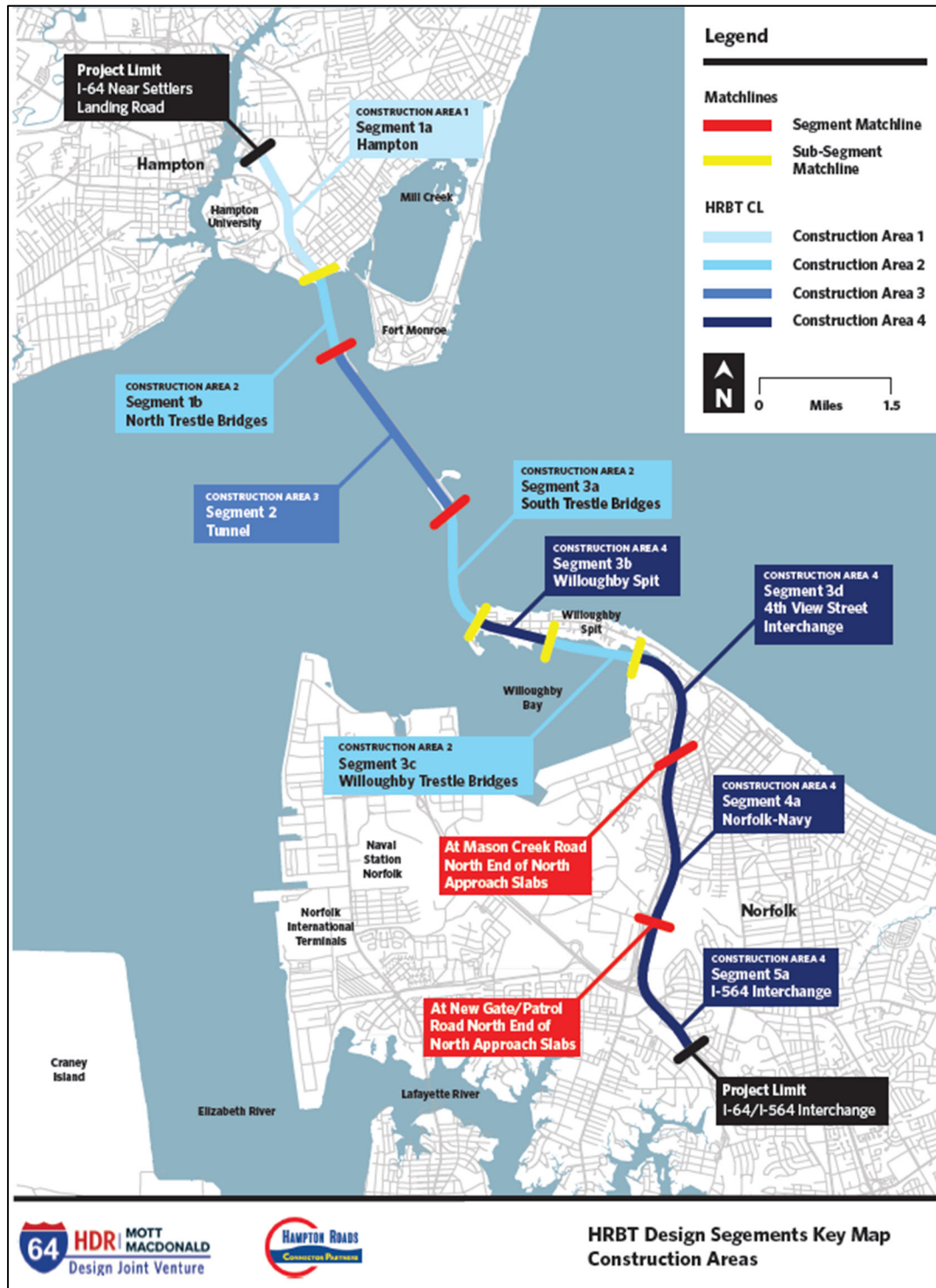
Programmatic Agreement - No updates this period.

Threatened & Endangered Species - HRCP's marine mammal observers have reported numerous sightings of dolphins within the project area with only a few sightings close enough to require short work stoppages.

Archeological Discoveries - HRCP discovered a WWII helmet liner on the South Island on November 4, 2021 and it was determined not to be historically significant. VDOT and the William and Mary Center for Archaeological Resources continue to assess the timbers and stones found near the North Island Expansion to address Virginia Department of Historic Resources comments. A portion of the timbers have been taken to a laboratory in North Carolina for more detailed analysis.

5. Construction

The figure below illustrates the project limits and the four construction areas throughout the project identified by HRCP.



5.1 Construction Area 1: Hampton Landside

During the reporting period, HRCP performed the following work:

- Mallory St - Continued drainage and temporary signal work.
- Mallory St Bridge - Continued demolition of the Mallory St Bridge.
- I-64 Eastbound - Began temporary drainage installation along the North Shore.
- I-64 Westbound - Continued median drainage installation.



◀ **Mallory St Bridge**
Demolition of existing bridge for future widening.

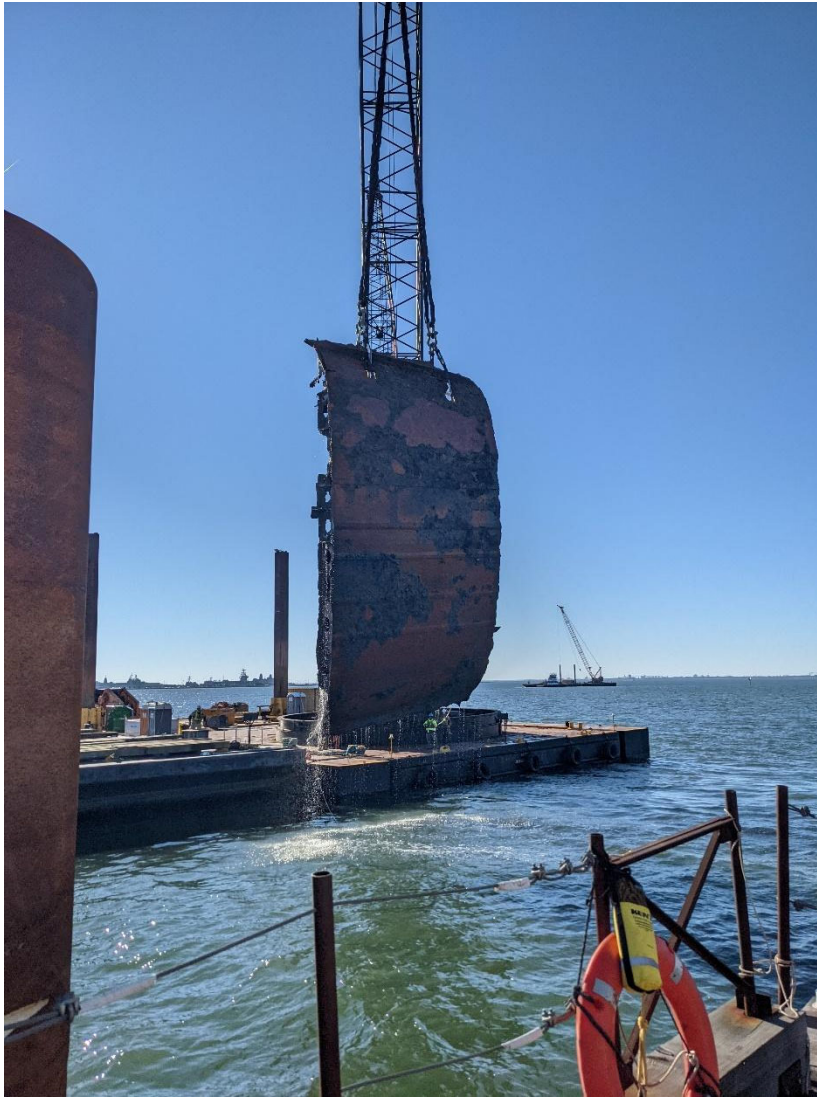
5.2 Construction Area 2: Marine Work

During the reporting period, HRCP performed the following work:

- Permanent North Eastbound Trestle - Continued driving piles and installing precast caps.
- Permanent North Westbound Trestle - Mobilized a crane onto barges, set the pile template and began driving production piles.
- South 1 Temporary Construction Trestle - Continued removing the sunken vessel obstructing work at this location.
- South MOT Trestles - Completed Bent 3, installed Span 3 jump grillage, and drove pile for Bent 4.
- Permanent South Trestle - Continued driving piles and installing precast caps.
- North Island Expansion Work - Achieved 7 out of 8 sections of fill material placement and compaction to final elevation.



◀ **South Trestle**
Precast pile setting.



◀ **South 1 Temporary
Construction Trestle**
Removal of sunken vessel.

5.3 Construction Area 3: Tunnels and Islands

During the reporting period, HRCP performed the following work at the South Island:

- Conveyor & TBM Quay Installation - Continued constructing the superstructure for the conveyor for the removal of excavated materials and TBM spoils. Continued driving the remaining piles for the TBM quay at the interface between the onshore and offshore piles and continued installing the pile caps for the future quay dock. Began work on abutment for structure.
- Ground Improvement Operations - Continued deep soil mixing and jet grouting for the TBM break in/break out block. Completed the field trial program for the approach jet grout plug.
- Capping Beams - Continued removal of slurry wall panel tops and rebar installation for capping beams at the TBM Launch Pit. Capping beam concrete placement for the tri-cell shaft continued and is 76% complete.
- Dewatering Wells - Continued installation of pumps, connections, and piping for dewatering wells in the South Portal in advance of mass excavation. Began testing dewatering system prior to tricell excavation.
- TBM Assembly Slab - Continued excavation and demolition of slurry walls in preparation for TBM slab placement. Placed foundation stone and mud mat.
- Tower Crane - Completed the assembly of a tower crane to service the launching pit.

During the reporting period, HRCP performed the following work at the North Island:

- Hydromill Concrete Slab - Began temporary concrete slab construction for the slurry wall operation near the Receiving Pit.
- Slurry Walls - Continued installing guide walls at the North Island in preparation for slurry wall construction at the TBM Receiving Pit.
- Temporary Mechanically Stabilized Earth (MSE) Wall - Completed construction of the temporary MSE wall at the North Island circulation road.

During the reporting period, HRCP performed the following work for the tunnel:

- Tunnel Boring Machine (TBM) - Three ships carrying TBM components departed from Europe in route to the Port of Virginia. The *Freedom* arrived at Norfolk International Terminals on November 14, the *Atlantic Sail* arrived on November 19, and the *Atlantic Star* remained in transit at the end of this reporting period.



◀ **South Island**

Rebar cages for quay abutment and cell 1 capping beam.



◀ **North Island**

Guide wall and hydromill slab.

5.4 Construction Area 4: Norfolk Landside

During the reporting period, HRCP performed the following work:

- Bay Avenue Bridge - Continued widening at abutments.
- I-64 Eastbound - Began demolition of sound wall along I-64 Eastbound exterior between Bay Avenue and Evans St.
- Evans St Bridge - Continued pile driving for Westbound interior bridge widening.
- Oastes Creek Bridge - Began abutment work and continued the installation of precast caps.
- Willoughby Bay Bridge - Continued pile driving for Eastbound trestle widening and installation of precast caps.



◀ **Willoughby Bay Bridge**
Precast cap placement and survey.

6. Operations

Operations activities include shoulder and lane closures, creation and maintenance of Intelligent Transportation System (ITS) architecture, other maintenance within the corridor, coordination with existing VDOT Operations, and communication with the Hampton Roads Harbor Tunnels (HRHT) facility staff. The following operations activities occurred during this reporting period:

Short-Term Lane Closure - Implemented nightly short-term lane closures along I-64 EB and WB under the Mallory St Bridge to allow for demolition and widening work. HRCP also implemented short-term lane closures on the Willoughby EB Bridge and the North EB Trestle to facilitate concrete pile placement. Installation of temporary lighting along mainline I-64 near Bay Avenue in Norfolk continued, with intermittent short-term lane closures.

Long-Term Lane Closures - HRCP continued a lane closure at Bay Avenue in Norfolk to facilitate access to a staging area for the widening of the Oastes Creek Bridge. Lane closures also continued at Bayview Blvd and Mallory St to facilitate bridge widening.

Hampton Lane Shifts - No new activities this period for I-64 EB/WB.

Norfolk Lane Shifts - Completed lane shifts on I-64 EB and WB in Segment 5 (see diagram on page 15 for identification of segment locations).

Detours - HRCP continued a long-term detour at West Evans St. to facilitate bridge widening. Also continued nightly temporary detours on the West Bay Ave on-ramps for bridge widening work. HRCP completed nightly temporary detours on the West Bay Ave off-ramp for bridge widening work.

Meetings - Quarterly Concept of Operations meeting was held between HRCP and VDOT on November 1, 2021. Main discussion points included the tunnel ventilation, lighting control, fire management, operational modes, and flood gate control systems.

Routine Maintenance - HRCP performed routine incident management and maintenance operations within the corridor. VDOT continues to monitor HRCP's performance with respect to the approved maintenance management plan.

7. Quality

Quality updates for this reporting period include:

Construction Quality Management Plan (CQMP) Updates - VDOT reviews these updates as part of final “Released for Construction” (RFC) design packages and “Notice of Design Change” (NDC) packages. There were ten (10) updates reviewed this period, including the CQMP Updates for NDC packages received. These updates included specific testing and inspection plans for the work shown in the corresponding RFC plans and a staffing matrix showing quality assurance and quality control staffing for the work.

Independent Assurance (IA) Testing Activities - VDOT continues to monitor HRCP’s QA and QC material testing. VDOT has also performed Independent Testing and Verification Testing on materials in accordance with Department requirements and coordinates with VDOT Materials Department for shop inspections as required. This testing includes oversight of the HRCP Precast Yard in Chesapeake.

Quality Management System Plan (QMSP) - VDOT continues to engage HRCP in discussions on HRCP’s implementation of their QMSP and the effectiveness of the plan. HRCP submitted version 12 of the QMSP to VDOT for review.

Quarterly Updates of Quality Plans - HRCP submitted the quarterly updates of the Quality Management System Plan, Construction Management Quality Plan, and the Design Quality Management Plan for the third quarter of 2021. VDOT completed the reviews of these documents and returned them to HRCP.

Tunnel Quality Plan (TQP) - HRCP continues to update their Tunnel Quality Plan and address VDOT’s comments. The current focus of the plan is the quality procedures needed to begin precast production of the tunnel lining segments. This production is scheduled to begin in November 2021. The TQP Rev 2 was reviewed last period and all comments have been addressed allowing the tunnel lining segment production to begin.

Material Book Records - VDOT completed and closed audits of four material book record volumes. HRCP continues to submit records for subsequent volumes of material books according to the established audit schedule. VDOT also conducted a monthly review of the current records. HRCP is responding to audit comments provided by VDOT.

Routine Quality Activities - VDOT conducted reviews of deficiencies and nonconformance reports (NCRs) and coordinated with the resident engineers for acceptance of root cause analyses and dispositions of deficiencies. VDOT also conducted reviews of QA and QC records for accuracy and quality issues and coordinated documentation reviews through VDOT’s Material Department.

8. Safety

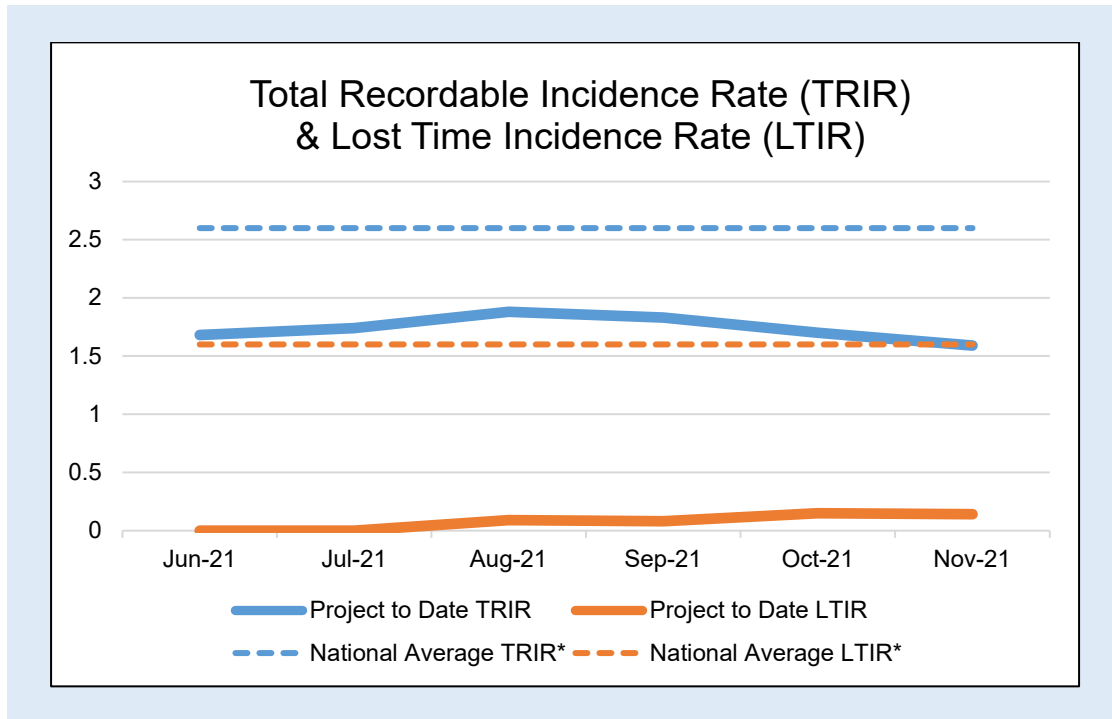
Safety procedures and activities during this reporting period include:

COVID-19 Policies - VDOT and HRCP are continuing to monitor and implement COVID-19 recommendations for project personnel.

VDOT Team Safety Plan - A comprehensive update to the Owner's Team Safety Oversight Plan has been finalized. Core components consist of policies and guidance documents for the Owner's Team safety and procedures for monitoring HRCP conformance with their Health, Safety, and Welfare (HSW) Plan.

Safety Site Visits - VDOT continued to conduct routine site visits to promote safe work zones.

Safety Performance Indicators - The following safety performance indicator information is provided by HRCP and is current as of November 30, 2021.



**National averages are from the Bureau of Labor Statistics, US Department of Labor – 2020 Data for Construction Industry, Published November 3, 2021.*

9. Civil Rights & DBE/SWaM Business Opportunities

To date, HRCP has awarded **276** subcontracts, subconsultant agreements and purchase orders. No additional agreements were awarded during this period for certified DBE/SWaM certified firms. There was a slight increase in contract awards for a total of **\$379.6 million** due to change orders issued to active DBE/SWaM firms on the project.

Compliance Activities:

- VDOT and HRBT Civil Rights Compliance Team met on November 16th to discuss civil rights compliance matters on the project. Discussions included compliance document tracking, certified payroll fringe verification, Title VI Evaluation approval process, vendor payments, and DBE/SWaM website development.
- Civil Rights Team members participated in Department of Labor Office of Federal Contract Compliance Program (OFCCP) training on November 10th as a refresher for construction compliance on federal projects subject to regulations specific to construction work.

Workforce Development Activities:

- HRCP continued to make progress towards the 80-participant On-the-Job Training (OJT) contract goal. To date, five (5) enrollees graduated with ten (10) currently active in the program. Since the last report, three (3) participants are no longer in the program.
- Project employment statistics: 49% minority and 11% women representation to date, exceeding contract goals of 27.1% minority and 6.9% female participation.
- HRCP is promoting hundreds of job openings for more than 50 different types of trades to include but not limited to crane and heavy equipment operators, electricians, laborers, and mechanics. On-the-job training opportunities for persons with limited construction work experience are also available. HRCP is also offering sign-on and retention bonuses through the end of December. Job openings can be found at www.hrcpjobs.com.
- During this period, the HRBT Expansion Team participated in the following employment outreach events:
 - November 7, 2021 - Virginia Employment Commission, Virtual Hiring Event
 - November 17, 2021 - Virginia Employment Commission, Workforce Wednesday Virtual Job Event
 - November 18, 2021 - The STOP Organization LIVE Show
 - ABC 13 News Fall Recruitment Campaign – ongoing

Business Development Activities:

- November 4, 2021 - City of Virginia Beach Minority Business Council, Fall Conference & Expo
- November 8, 2021 - Conference of Minority Transportation Officials (COMTO) Hampton Roads Membership Meeting
- November 9, 2021 - Virginia Minority Business Development Agency Center Launch
- November 12-14, 2021 - Black Brand Diamond Weekend

- HRCP and VDOT hosted the Virtual DBE/SWaM Opportunity Conference on October 27, 2021. This year's featured speakers included: Governor Ralph Northam, Secretary of Transportation Shannon Valentine, FHWA Virginia Division Administrator Thomas Nelson, VDOT Commissioner Stephen Brich, Civil Rights Division Administrator Sandra Norman, and HRCP Executive Juan Miguel Perez. Over 392 persons viewed the virtual event.



Above: A special panel of business resource experts from the Cities of Norfolk and Hampton, USDOT Small Business Resource Center, VDOT's BOWD Center, and the Department of Small Business Supplier Diversity was moderated by VDOT's District Civil Rights Manager during the event.



Above: Cover of the Program Book for the HRBT Expansion Project DBE/SWaM Opportunity Conference held on October 27, 2021.

10. Public Outreach & Media

The following public outreach and project media activities occurred in this period:

Public Outreach

- October 27, 2021 - HRBT Expansion Project Team presented to the Exchange Club of Poquoson
- November 3, 2021 - HRBT Expansion Project Team presented to Downtown Norfolk Council
- November 16, 2021 - HRBT Expansion Project Director presented to the Hampton Roads Utility and Heavy Contractors Association (HRUHCA)
- November 19, 2021 - HRBT Expansion Project Team presented to an Old Dominion University engineering senior seminar



Above: Project Director, James Utterback, presenting to HRUHCA

Media

- October 27, 2021 - WAVY-TV 10 - story titled "[VDOT will demolish Mallory Street Bridge with single-lane closures on I-64](#)"

Visit our website to view more information:
www.hrbtexpansion.org