



January 2022
Monthly Project Report

I-64 HAMPTON ROADS BRIDGE-TUNNEL EXPANSION

Report No. 34

Project No. 0064-M06-032



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Prepared by:

Virginia Department of Transportation

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1. Executive Summary

1.1 Overview

This report provides an overview of accomplishments and activities for the Hampton Roads Bridge-Tunnel Expansion Project from December 12, 2021 – January 22, 2022. 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 achieved:

- South Island Progress:
 - Mass excavation of the TBM Launching Pit to 18%.
 - Placed concrete for the first section of the TBM assembly slab.
- North Island Progress:
 - Began excavation and preparation for the first slurry wall panel at the receiving pit.
- Landside Progress:
 - Began rehabilitation work at the Willoughby Bay bridge.
 - Set first girders at Oastes Creek Bridge widened section.
- The Project was featured in American DBE Magazine (2022 winter edition), a national publication focused on highlighting diverse business programs.

1.2 Priorities

VDOT'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 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.

Project Budget

The project budget summary below includes the payment application for January 2022 activities.

- Project budget overview:

Current total project budget:	\$	3,935,451,641
Total expenditures to date:	\$	1,256,516,477
Remaining project budget:	\$	2,678,935,164

- Design-build contract overview:

Design-build contract original amount:	\$	3,299,997,227
Net change orders:	\$	2,183,729
Exercised options:	\$	73,454,414
Design-build contract sum to date:	\$	3,375,635,370
Expenditures to date:	\$	1,190,395,300
Remaining design-build contract amount:	\$	2,185,240,071

- Design-build progress to date:

Project Management:	37.75%
Design:	84.74%
Physical Construction Progress:	19.08%
Overall:	35.24%

Environmental

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

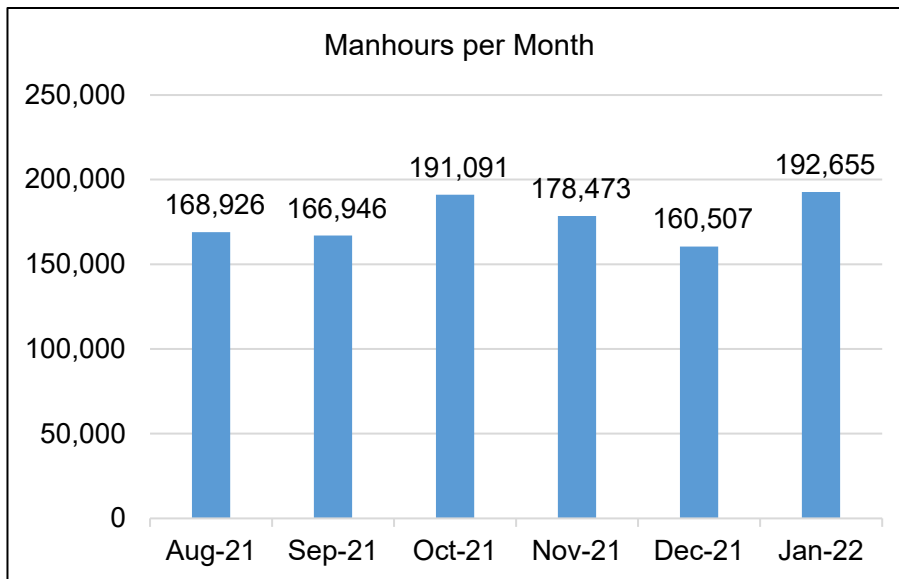
- HRCP is presenting water quality modeling results to DEQ on January 25, 2022 including proposed mitigation strategies for bringing water treatment plant discharges into compliance.
- VMRC is inspecting HRCP's first barge-load of demolition material and HRCP anticipates placing material at an approved reef site by early February 2022.
- HRCP held a quarterly agency meeting on January 11, 2022 to present construction progress to the agencies, review compliance items, and introduce upcoming permit modification request #6.

Construction

Progress updates for this reporting period include:

- Hampton Landside
 - Drainage installation along I-64 median.
- Marine Works
 - Caps installed at the Permanent North Eastbound (10 total installed) and Westbound Trestles (1 total installed).
 - Piles installed at the Permanent South Trestle (227 total installed).
 - NEXT beams placed at the South MOT Eastbound trestle (4 total installed).
 - Completed removal of the sunken vessel near the Willoughby North Shore.
- Tunnels and Islands
 - Mass excavation at the TBM Launch Pit and began demolition of interior cross walls.
 - Construction of the conveyor system and TBM Quay at the South Island.
 - Ground improvement with deep soil mixing and jet grouting operations on the South Island.
 - Work on the TBM assembly slab adjacent to the South Island Launching Pit.
 - Guide walls at the North Island and began slurry wall operations.
- Norfolk Landside
 - Bay Avenue Bridge widening at abutment and temporary lighting installation.
 - Sound wall demolition along I-64 Eastbound between Bay Ave and Evans St.
 - Drainage installation at Evans St.
 - Drainage installation along I-64 median.
 - Wick drain installation for retaining wall along I-64 near Willoughby Spit.
 - Construction of the Willoughby Bay Bridge Eastbound widening.
 - Oastes Creek Bridge for Eastbound widening, set first girder spans.

The number of construction manhours worked each month is provided by HRCP and is current as of January 31, 2022:



Project Manhours to Date:
3,129,678

Operations

The following operations activities took place during this reporting period:

- Short-term lane closures throughout the project corridor for bridge widening, barrier wall installation, and pot hole repairs. One non-permitted occurrence occurred near Bayville St.
- Long-term lane closures at Bay Avenue, Bayview Blvd, and Mallory St.
- Long-term detour at West Evans St.

Quality

Quality updates for this reporting period include:

- VDOT continues to monitor HRCP's Quality Program per 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.
- VDOT reviewing HRCP tunnel liner segment production quality processes.

Safety

Safety procedures and activities during this reporting period include:

- The following safety performance indicator information is provided by HRCP and is current as of January 31, 2022:
 - Total Recordable Incidence Rate: 1.98 (National Average: 2.5)
 - Lost Time Incidence Rate: 0.26 (National Average: 1.6)

Civil Rights & DBE/SWaM Business Opportunities

To date, HRCP has awarded **281** subcontracts, subconsultant agreements, and purchase orders. Contract awards represent a total of **\$393.4 million** to active DBE/SWaM firms on the project.

- HRCP continues to make progress towards its 80-participant On-the-Job Training goal, with 8 graduates and 17 currently active in the program.
- VDOT continued to conduct routine compliance reviews on civil rights activities.
- The Project was featured in American DBE Magazine (2022 winter edition), a national publication focused on highlighting diverse business programs.
- HRCP and VDOT are in the process of developing the second edition of their DBE/SWaM Success publication for distribution.

Public Outreach & Media

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

- Presentation at the Governor's Transportation Conference.
- Media coverage on traffic alerts.

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 and VDOT have collaborated and determined that a Revised Baseline schedule is appropriate, with the design of the project nearing completion and construction sequencing becoming more finalized. HRCP is currently in the process of developing a Revised Baseline schedule 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 in 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 HRCF 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

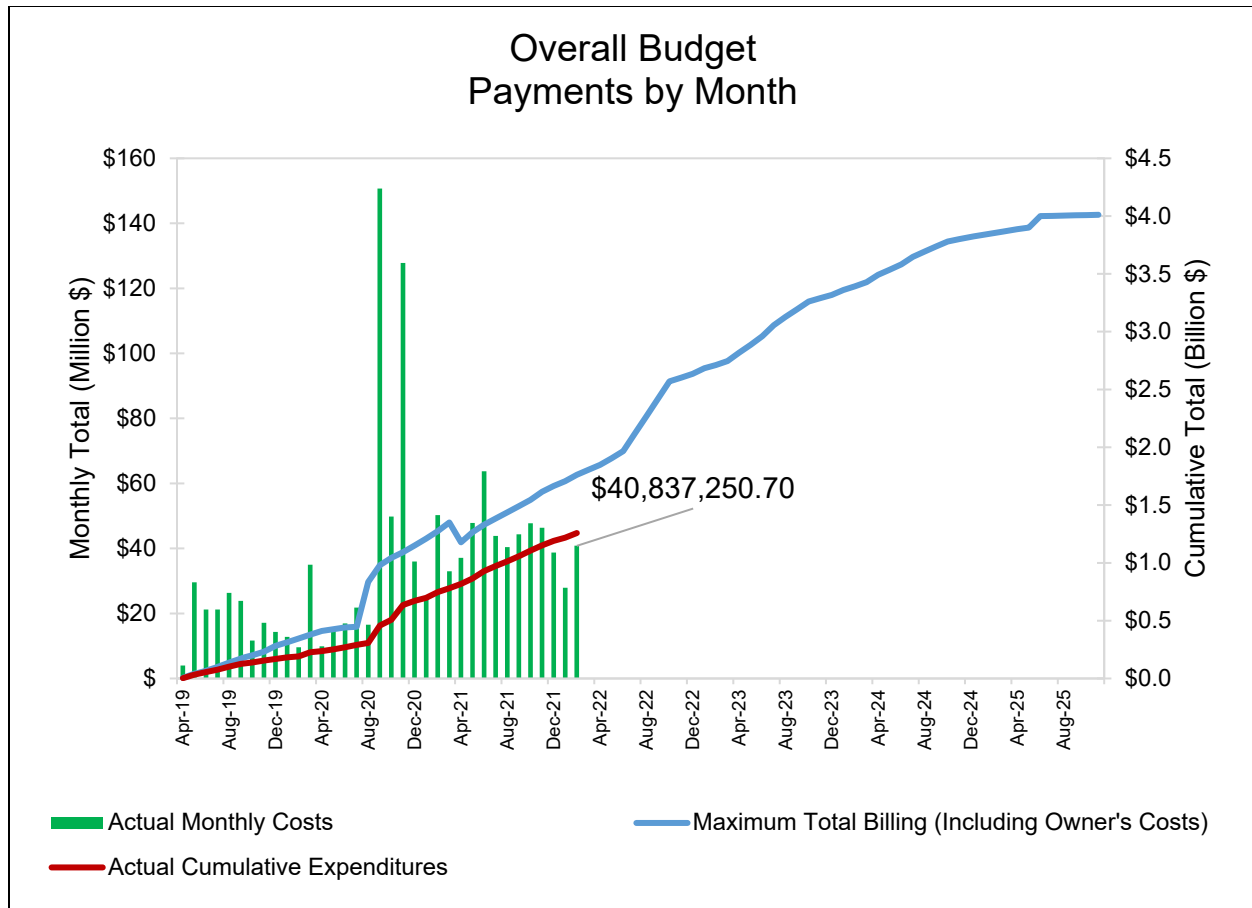
- Segment 3 Roadway from South Trestle to Mason Creek Rd

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).

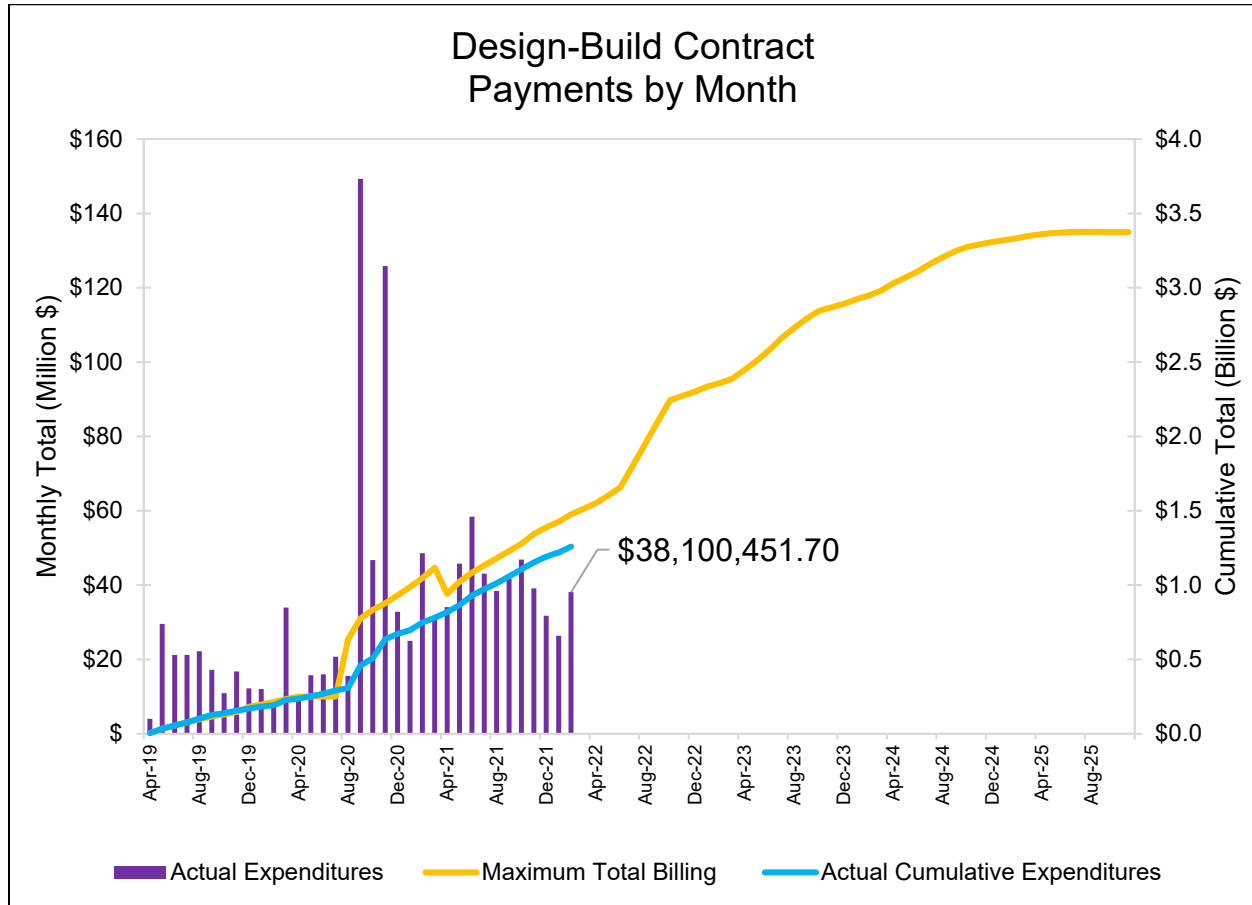
	Amount this Period:	Total to Date:	Original Total Budget:	Total Remaining Budget:	Percent To-date:
<u>Comprehensive Agreement</u>					
<i>Construction</i>	\$38,100,451.70	\$1,190,395,299.90	\$3,299,997,227.00	\$2,109,601,927.10	36.07%
<u>Owner Costs</u>					
<i>Administration</i>	\$2,192,054.90	\$42,230,544.62	\$122,000,000.00	\$79,769,455.38	34.62%
<i>Right of Way</i>	\$36,128.39	\$8,490,899.39	\$15,000,000.00	\$6,509,100.61	56.61%
<i>No-Excuses Incentive</i>	\$0.00	\$0.00	\$90,000,000.00	\$90,000,000.00	0.00%
<i>Contingency</i>	\$482,198.19	\$15,373,315.96	\$335,000,000.00	\$319,626,684.04	4.59%
<i>Bridge Repair Work Option</i>	\$26,417.52	\$26,417.52	\$73,454,413.96	\$73,427,996.44	0.04%
<u>Total</u>	\$40,837,250.70	\$1,256,516,477.39	\$3,935,451,640.96	\$2,678,935,163.57	31.93%



**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

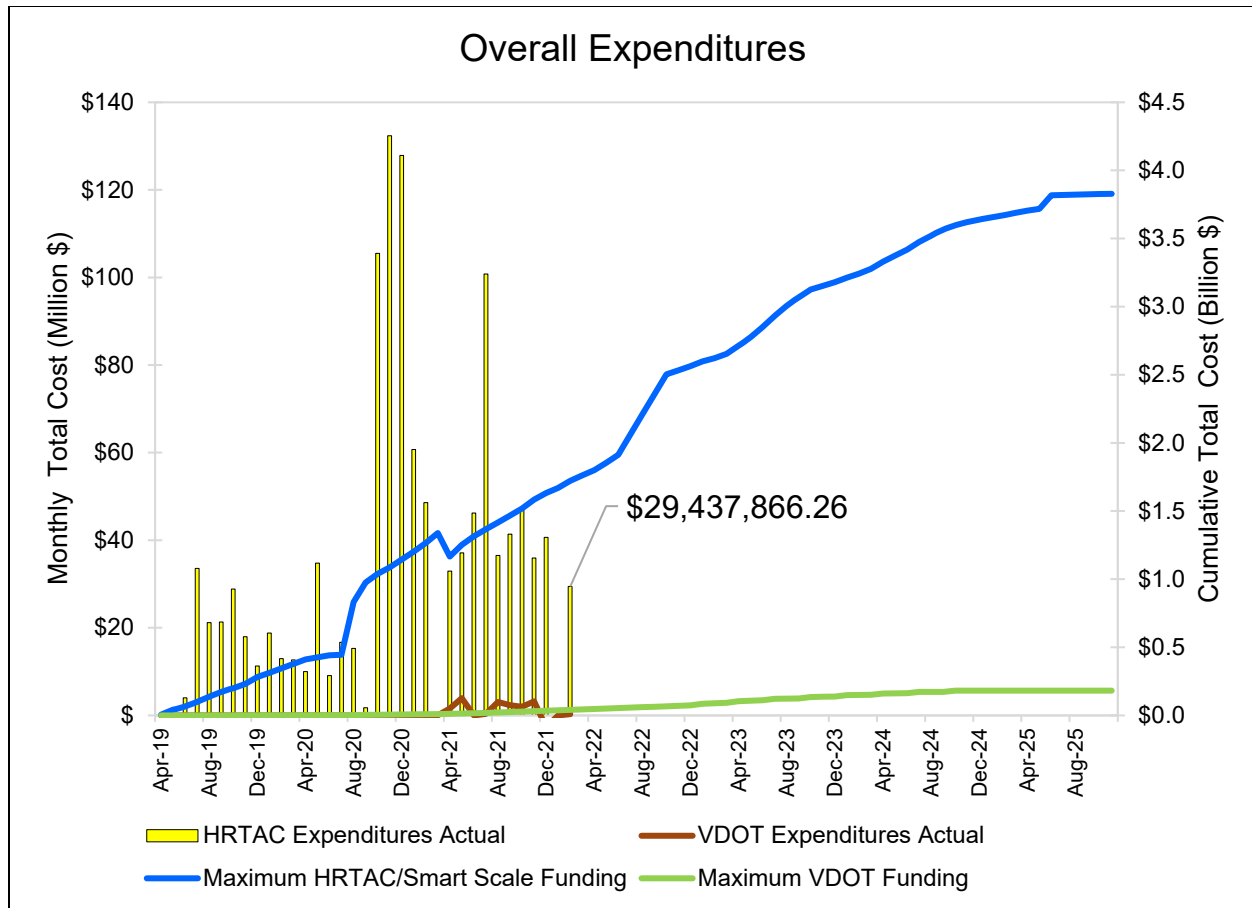
The budget for expenditures by funding source is based on the terms and conditions of Article 3 (Project Funding) and Exhibit 5 of the PAFA. This section outlines planned expenditures of both HRTAC and VDOT funds. The cost curve has been developed based on the monthly maximum cumulative compensation 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 December 12, 2021 – January 22, 2022.

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>	\$26,153,187.13	\$1,141,403,421.94	\$3,204,569,251.00	\$2,063,165,829.06	35.62%
<u>Owner Costs</u>					
<i>Administration</i>	\$3,229,324.69	\$41,135,001.47	\$118,472,054.00	\$77,337,052.53	34.72%
<i>Right of Way</i>	\$55,354.44	\$8,362,008.36	\$15,000,000.00	\$6,637,991.64	55.75%
<i>No-Excuses Incentive</i>	\$0.00	\$0.00	\$90,000,000.00	\$90,000,000.00	0.00%
<i>Contingency</i>	\$0.00	\$8,056,535.62	\$325,428,277.00	\$317,371,741.38	2.48%
<u>Total</u>	\$29,437,866.26	\$1,198,956,967.39	\$3,753,469,582.00	\$2,554,512,614.61	31.94%

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>	\$221,730.00	\$10,891,426.26	\$95,427,976.00	\$84,536,549.74	11.41%
<u>Owner Costs</u>					
<i>Administration</i>	\$44,875.00	\$918,049.00	\$3,527,946.00	\$2,609,897.00	26.02%
<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>	\$0.00	\$984,966.13	\$9,571,724.00	\$8,586,757.87	10.29%
<i>Bridge Repair Work Option</i>	\$0.00	\$0.00	\$73,454,413.96	\$73,454,413.96	0.00%
<u>Total</u>	\$266,605.00	\$12,794,441.39	\$181,982,059.96	\$169,187,618.57	7.03%



3.4 Contingency

Contract Changes

	Description	Date	Value	Time
CO-1	VDOT'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
CO-50	Change in Precast Form Tolerance & Change in Curing Methods	1/10/2022	\$ -	0 days
CO-53	Sound Wall Quantity Reconciliation	12/6/2021	\$(16,561,217.63)	0 days
CO-57	Design-Builder's Senior and Representative Changes	1/11/2022	\$ -	0 days
TOTAL			\$ 75,638,143.47	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 presenting water quality modeling results to DEQ on January 25, 2022 in response to water quality exceedances observed at the South Island treatment plant. HRCP has several mitigative strategies that will be presented to DEQ for bringing the WTP discharges into compliance.
- VMRC is scheduled to inspect the first barge-load of demolition material during the week of January 24, 2022. Once approved by VMRC, the pile cutoff material will be placed at one of VMRC's artificial fishing reefs within the bay.
- HRCP continues to coordinate with DEQ regarding air permits for the North and South Islands.

Marine Mammal Protection:

- Dolphin pod sightings on December 15, 2021 near the North Trestle area. No impacts to construction progress.

Bird Mitigation:

- HRCP suspended dog patrols until the 2022 season begins.

Archeological Discoveries:

- There were two cannonball discoveries at the South Island during this time period. Cannonballs were found in the deep soil mixing area and the tricell excavation on January 6 and 8, 2022.
- 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 the Virginia Department of Historic Resources comments. A draft report is expected.

Other:

- HRCP held a quarterly agency progress meeting on January 11, 2022 to share construction progress updates, discuss compliance items, and present upcoming permit modification #6.

5. Construction

The figure below illustrates a map of the project corridor. The project is further categorized into four construction areas. Construction Area 1 is composed of Hampton landside road and bridge work. Construction Area 2 is composed of marine work, including the North Trestle, South Trestle, and island expansions. Construction Area 3 is composed of tunnel work. Construction Area 4 is composed of Norfolk landside road and bridge work.



5.1 Construction Area 1: Hampton Landside

During the reporting period, HRCP performed the following work:

- I-64 Westbound - median drainage installation.

5.2 Construction Area 2: Marine Work

During the reporting period, HRCP performed the following work:

- Permanent North Eastbound Trestle - 10 out of 43 precast caps to-date installed.
- Permanent North Westbound Trestle - installed first precast cap out of 43.
- Permanent South Trestle - 227 out of 465 piles driven to-date.
- North MOT Trestle - 16 out of 21 piles in driven to date.
- South MOT Trestles - 50 out of 231 piles driven and 7 out of 53 caps installed; set 4 of 114 NEXT beams.
- Other - completed removal of the sunken vessel near the Willoughby North Shore.

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 - constructed the superstructure of the conveyor for the removal of excavated materials and TBM spoils; installed the structural steel beams and precast concrete deck slabs for the future quay dock, continued driving gantry piles at the quay.
- Ground Improvement Operations - deep soil mixing and jet grouting operations along the proposed tunnel path; retrieved cores for the field trial program for the approach section jet grout plug.
- Struts - installed the cast-in-place concrete strut between Cell 1 and Cell 2 of the TBM Launch Pit. Also poured the concrete foundation for the gantry crane rail on top of the strut.
- Dewatering Wells - dewatering in all cells of the TBM Launch Pit ongoing.
- TBM Assembly Slab - placed concrete for the first section of the TBM slab; excavated and installed rebar in preparation for placing concrete at the second section of the slab.
- Mass Excavation - mass excavation within all cells of the TBM Launch Pit.

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

- Hydromill Concrete Slab - Installed formwork and rebar in preparation to pour remainder of cell 1 hydromill slab.
- Slurry Walls - installed guide walls at the North Island in preparation for slurry wall construction at the TBM Receiving Pit; began excavation and fabrication of rebar cage for the first slurry wall panel.

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

- Tunnel Segment Liners - production of segment liners at facility in Cape Charles, VA.

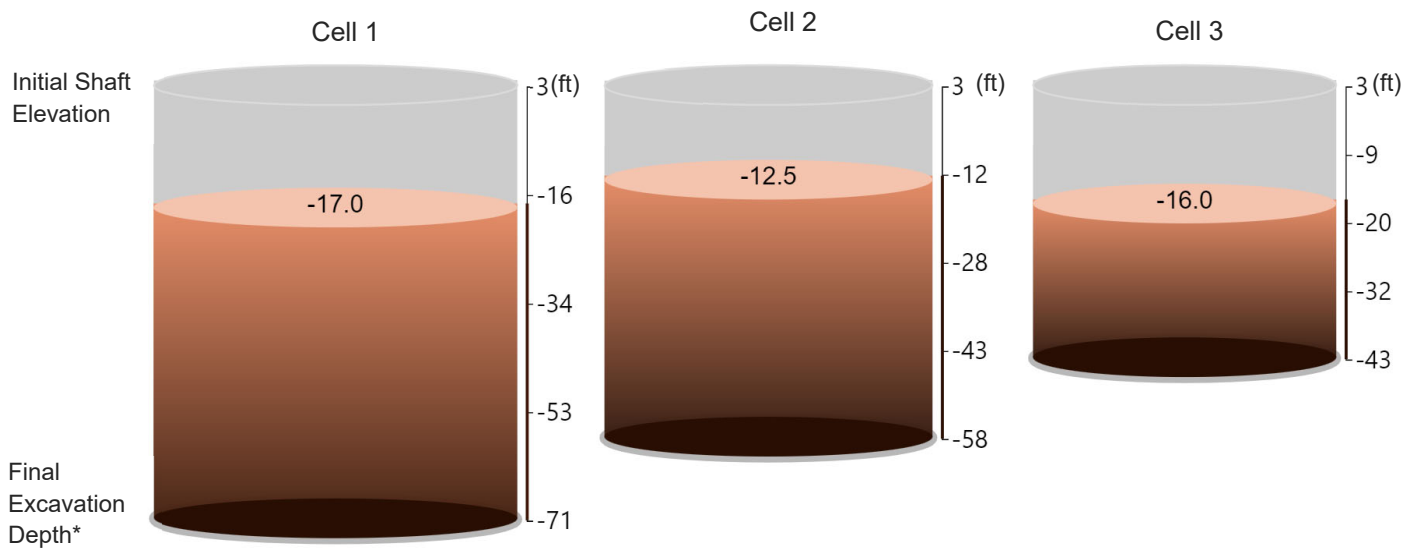


Total Segments to Cast: 21,492

Segments Cast To-Date: 115

Percentage Complete: 0.5%

South Island Launching Pit – Mass Excavation Progress Progress of Shaft Excavation by Average Elevation



**Final excavation depth in each cell increases with proximity to tunnel opening.*



◀ **North Island**
First slurry wall panel excavation.

5.4 Construction Area 4: Norfolk Landside

During the reporting period, HRCP performed the following work:

- Bay Avenue Bridge - drove piles for eastbound abutment work; installed temporary lighting at on-ramp.
- I-64 Eastbound - installed wick drains for retaining wall near Willoughby Spit; demolished sound wall along I-64 Eastbound between Bay Avenue and Evans St in preparation for eastbound widening; installed drainage pipe near Evans St for eastbound widening; installed median drainage near Willoughby Spit for eastbound widening.
- Oastes Creek Bridge - drove piles for eastbound abutment work, set bearings and girders for the eastbound widened section.
- Willoughby Bay Bridge - drove piles for eastbound abutment work, began bridge work repair and rehabilitation at the east end.



◀ **I-64 EB Widening**
Wick drain installation for consolidation of soft soils.



◀ **Willoughby Bay Bridge**
Bridge jacking to support rehabilitation and bearing replacement.

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 Closures:

- Willoughby Eastbound Bridge and the North Eastbound Trestle to facilitate concrete pile placement.
- I-64 near Bay Ave in Norfolk to pull aerial power cables across the interstate for temporary lighting installation.
- I-64 EB near Willoughby North Shore for temporary lighting installation.
- Mallory St Westbound and the South Island Westbound entrance for barrier wall installation.
- Corridor wide for pot hole repairs due to anticipated cold weather.

Long-Term Lane Closures:

- Bay Avenue in Norfolk to facilitate access to a staging area for the widening of the Oastes Creek Bridge.
- Bayview Blvd in Norfolk and Mallory St in Hampton to facilitate bridge widening.

Hampton Lane Shifts:

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

Norfolk Lane Shifts:

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

Detours:

- 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.
- Overnight detour at 4th View Eastbound off-ramp for pavement repair.

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 seven (7) 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 HRCF’s QA and QC material testing. VDOT has also performed Independent Testing and Verification Testing on materials in accordance with VDOT requirements and coordinates with VDOT Materials Department for shop inspections as required. This testing includes oversight of the HRCF Precast Yard in Chesapeake and Technopref’s Precast Yard in Cape Charles for the production of the tunnel lining segments.

Quality Management System Plan (QMSP):

- VDOT continues to engage HRCF in discussions on HRCF’s implementation of their QMSP and the effectiveness of the plan. VDOT completed the review of version 13 of the QMSP HRCF submitted in response to VDOT’s comments on the Quarterly Update of this plan.

Quarterly Updates of Quality Plans:

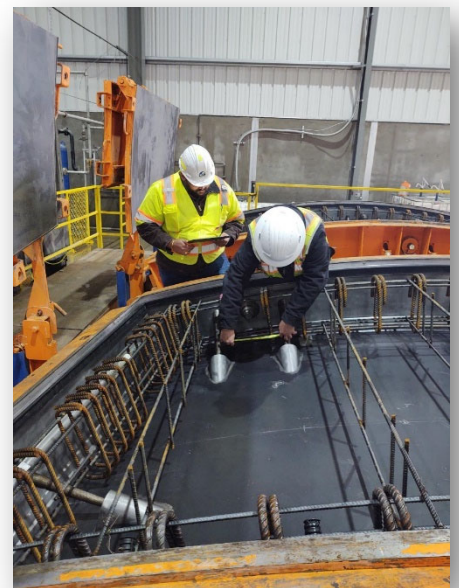
- HRCF submitted the quarterly updates of the Quality Management System Plan, Construction Management Quality Plan, and the Design Quality Management Plan for the 1st quarter of 2022. VDOT is currently reviewing these submissions.

Tunnel Quality Plan (TQP):

- HRCF continues to update their Tunnel Quality Plan and address VDOT’s comments. *See photo to right for tunnel segment liner inspection.*

Material Book Records:

- VDOT to date completed and closed audits of six material book record volumes. HRCF 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, and HRCF is responding to audit comments provided by VDOT.



Routine Quality Activities:

VDOT's quality team conducted reviews of work deficiency notices (WDNs) and nonconformance reports (NCRs) and coordinated with VDOT's 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. VDOT has initiated a formal audit of HRCP's QA and QC Daily Reports.

8. Safety

Safety procedures and activities during this reporting period include:

COVID-19 Policies:

- VDOT and HRCP continue to monitor and enforce COVID-19 policies.

Health, Safety, & Wellness Plan:

- VDOT reviewed HRCP compliance with their current plan.

First Responders Meeting:

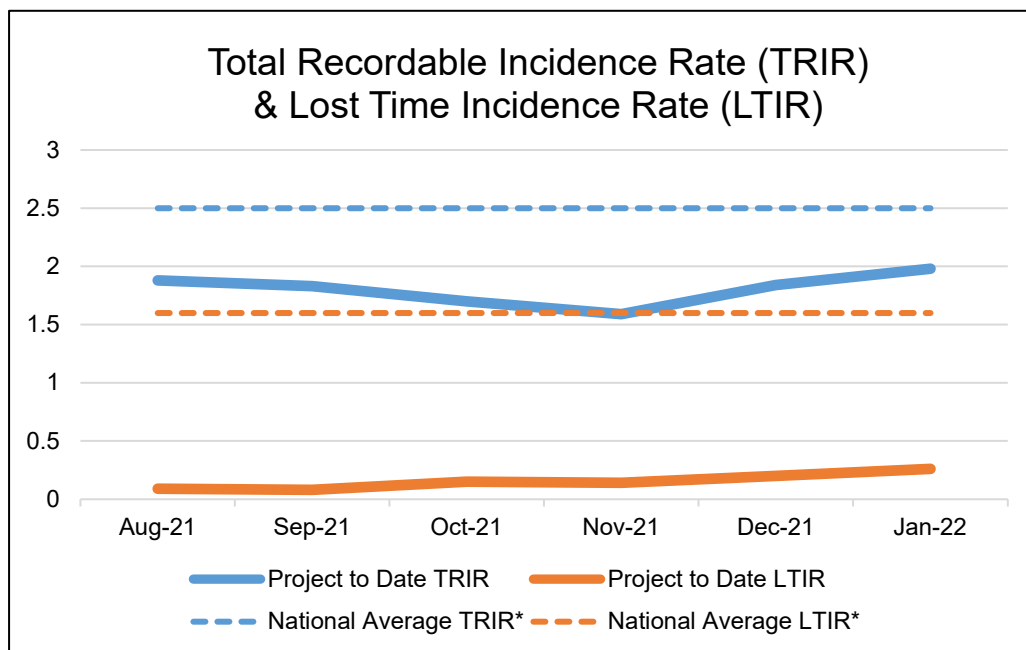
- VDOT attended a First Responders Meeting at the Willoughby Spit location on January 20, 2022. Discussions included landing points and how Seaward's Tug Service can access barges and trestles by water.

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 January 31, 2022.



**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 **281** 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 **\$393.4 million** due to change orders issued to active DBE/SWaM firms on the project. Eighty percent (80%) of the DBE/SWaM firms under contract are Virginia-based firms.

Compliance Activities:

- VDOT-HRCP Civil Rights Compliance Team met on December 16, 2021 and January 18, 2022 to discuss civil rights compliance matters. Discussions included pending subcontractor payments for compliance with prompt payment provisions, enhancing subcontractor onboarding procedures, procurement opportunities, scheduled outreach events, and internal compliance training.
- VDOT has conducted a total of twenty-one (21) comprehensive Commercially Useful Function (CUF) reviews on active DBE firms in compliance with federal DBE regulations. The required reviews are initiated to determine if a DBE firm is performing, managing, and supervising the contracted work where DBE participation is being sought by the Design-Builder.
- During the reporting period, HRCP submitted the 4th Quarter Good Faith Effort Activities Report. The report reflects HRCP's demonstrated commitments towards meeting or exceeding the 12% DBE and 20% SWaM participation goals for the period of October 1 through December 31, 2021. The quarter also included HRCP's submission of a DBE/SWaM Utilization Plan and Workforce Participation Plan in accordance with the Comprehensive Agreement, which are assessed by VDOT for compliance. The Design-Builder continues to demonstrate positive efforts towards meeting the established contract goals.

Workforce Development Activities:

- Workforce Participation Goals represent:
 - Minorities 27.1% - 51% achievement
 - Women 6.9% - 10% achievement
- HRCP continued to make progress towards the 80-participant On-the-Job Training (OJT) contract goal. To date, eight (8) trainees graduated with seventeen (17) currently active in the program.
- During this period, the HRCP continued implementing its recruitment campaign in partnership with ABC 13 News. Candidates hired prior to December 31, 2021 were offered sign-on bonuses as an added benefit in the region's highly competitive labor market.

- During the reporting period, the HRCP team participated in the following local workforce development events:
 - December 14, 2021 - Virginia Employment Commission (VEC), Super Tuesday Virtual Hiring Event.
 - December 16, 2021 – Hampton Roads Workforce Council, One City Celebration Job Fair

Business Development Activities:

- HRCP continues to take steps to develop a website to share upcoming procurement and employment opportunities with the public. A launch date for the site is being determined.
- HRCP and VDOT are in the process of developing the second edition of their DBE/SWaM Success publication for distribution during the first quarter of 2022. The publication will highlight firms that have achieved tremendous success on the project.
- VDOT, HRCP, and the USDOT Small Business Transportation Resource Center (SBTRC) are making plans for the 2022 Bonding Education Program (BEP) for businesses interested in transportation construction opportunities and learning about resources available for accessing and expanding bonding capacities. Plans are being made for a regional event during the second quarter of 2022.
- During the reporting period, other business development and outreach activities included:
 - December 13, 2021 - COMTO Hampton Roads General Membership Meeting
 - December 14, 2021 - American Consulting Engineers Council (ACEC), Small Business & Diversity Spotlight
- The HRBT Project was featured in the *American DBE Magazine*, 2022 winter edition, which highlighted construction progress and DBE/SWaM participation success (*see photo at right*). A local certified DBE firm, Geotechnical Innovations, was also featured for its success on the project. The full article can be found at the [American DBE Magazine](#) online site.



Above cover photo (left to right): James Utterback (VDOT Project Director), Veldon Sallee (Geotechnical Innovations President), and Juan Miguel Perez (HRCP Executive Director)

10. Public Outreach & Media

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

Public Outreach:

- December 14, 2021 – HRBT Expansion Project Team holds Tunnel Boring Machine Arrival Ceremony. The photo below features the TBM naming contest winners from Saint Gregory the Great Catholic School.



- January 5, 2022 – HRBT Expansion Communications Team presents to the Town Center Kiwanis

Media:

- December 14, 2021, 13NEWS Now - [Tunnel boring machine 'Mary' officially unveiled for HRBT Expansion Project](#)
- December 14, 2021, News Channel 3 - ['Mary the Tunnel Boring Machine' makes its debut at tunnel expansion ceremony](#)
- December 14, 2021, Virginian-Pilot - [Proud 'Mary' has arrived: Officials welcome the machine that will be boring new tunnels for the HRBT](#)
- December 31, 2021, Virginia Business Magazine - [HRBT expansion boring? Yes and no](#)
- January 3, 2022, WAVY-TV 10 - [VDOT: Single-lane closure on I-64 east near Willoughby Spit in Norfolk](#)
- January 11, 2022, American DBE Magazine - [HRBT Expansion delivering results for DBEs](#)

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