



**October 2024
Monthly Project Report
I-64 HAMPTON ROADS
BRIDGE-TUNNEL
EXPANSION**

Report No. 67
Project No. 0064-M06-032



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Prepared by:

Virginia Department of Transportation

www.hrbtexpansion.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 September 22, 2024 – October 19, 2024. 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, project accomplishments included the following:

- South Island Progress:
 - Installation of south portal perimeter external walls 95% complete.
 - Installation of south portal internal walls 39% complete.
- Tunnel Progress:
 - General Purpose (GP) tunnel break-in on October 17, 2024.
 - Excavated 21ft this period for GP tunnel.
 - Completed testing and commissioning of TBM in launch configuration.
 - Began placing concrete for the egress corridor L-wall in the HT tunnel.
- North Island Progress:
 - Excavation for the rectilinear approach 90% complete.
 - Base slab waterproofing for the rectilinear approach 40% complete.
- Landside Progress:
 - Completed demolition of old bridge at Mallory St. overpass.
 - Began driving piles at Pier 1 at Willoughby Bay Bridge westbound.
 - Completed installation of deck concrete at all spans at 1st View St. Bridge eastbound.
- Marine Progress:
 - South Trestle MOT westbound piles completed.
 - South Trestle MOT westbound caps completed.

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

The last approved schedule for the project is Update 62 (data date: September 22, 2024), and the schedule information in this report reflects this update. Schedule 62 was returned Approved as Noted on October 15, 2024.

Contractual Substantial and Final Completion Dates in the contract remain unchanged.

However, in Update 62 the Projected Schedule Completion dates reflected:

- Substantial Completion on March 3, 2027
- Final Completion on September 1, 2027

Project Budget

The project budget summary below now includes all billed to date costs through October 19, 2024 and does not include forecasted cost outside of the reporting period.

- Project budget overview:

Current total project budget:	\$ 3,935,451,641
Total costs to date:	\$ 2,575,827,878
Remaining project budget:	\$ 1,359,623,763

- Design-build contract overview:

Design-build contract original amount:	\$ 3,299,997,227
Net change orders:	\$ 10,394,983
Exercised Options:	\$ 73,454,414
Material Price Adjustments to Date:	\$ 108,009,321
Assessed Liquidated Damages (LD):	\$ (957,500)
Design-build contract sum to date:	\$ 3,490,898,445
Expenditures to date:	\$ 2,447,735,235
Remaining design-build contract amount:	\$ 1,043,163,210

- Design-build progress to date:

Project Management:	87.1%
Design:	95.1%
Physical Construction Progress:	52.2%
Overall:	70.1%

Environmental

Environmental updates for this reporting period include:

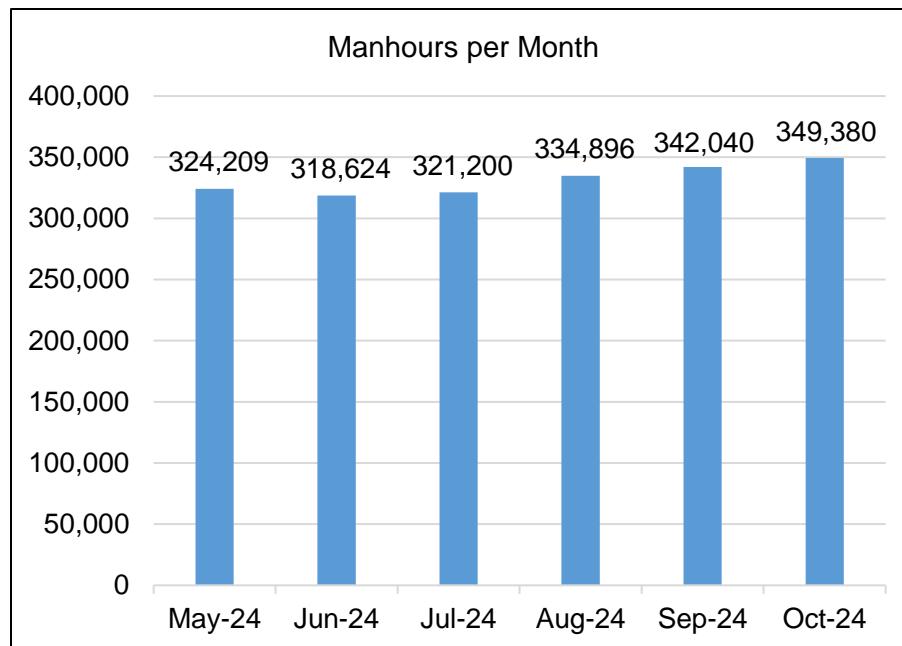
- HRCP provides weekly inspection report summaries to the U.S. Army Corps of Engineers (USACE).
- HRCP received approval from the Virginia Department of Environmental Quality (DEQ) for Joint Permit Application (JPA) modification request #11.
- HRCP held a meeting with DEQ on September 30, 2024, to discuss components of the air permit modification request for the North Island and South Island generators.
- HRCP held a meeting with the DEQ on September 25, 2024, to clarify the waste stream associated with the North Island Wastewater Treatment Plant (WTP) VPDES permit modification request.

Construction

Summary progress updates for this reporting period include:

- Landside Roadways
 - Began installation of panels at retaining wall 406 near W. Evans St.
 - Continued installation of sound wall panels for wall 3-3 along the 4th View St. eastbound on-ramp.
- Marine Works
 - Placed beams at South HOT trestle (15 installed this period).
 - Placed beams at North westbound permanent trestle (14 installed this period).
- Tunnels and Islands
 - GP tunnel break-in on October 17, 2024.
 - Excavated 21ft this period for GP tunnel.
 - Continued work on concrete tunnel egress structures and low point pump station concrete structures in the HT tunnel.
 - 27% complete for HT tunnel installation of egress footer.
 - Continued work on the Cell 1 roadway slab at the South Island portal.
- Landside Bridges
 - Completed deck reinforcement and concrete placement for Spans 1 – 3 at 4th View St. Bridge eastbound.
 - Completed deck reinforcement at existing 1st View St. Bridge eastbound.
 - Completed installation of concrete overlay at Spans 60 – 67 at Willoughby Bay Bridge eastbound.

The number of construction manhours worked each month is provided by HRCP and is current as of October 31, 2024:



Project Manhours to Date:
13,179,528

Operations

The following operations activities took place during this reporting period:

- Slow rolls on I-64 eastbound for temporary lighting installation and sign structure removal.
- Minor shift on I-64 westbound South Trestle to support MOT trestle construction.
- Temporary detour of westbound I-64 at 4th View St. for overhead sign structure installation.
- Temporary detour of I-64 eastbound at Mallory St. for bridge demolition activities.

Quality

Quality updates for this reporting period include:

- VDOT continues to monitor HRCP's QA and QC material testing. VDOT also performed Independent Testing and Verification Testing on materials in accordance with VDOT requirements and coordinated with VDOT Materials Division for shop inspections as required.
- VDOT continues to engage HRCP in discussions on HRCP's implementation of their Quality Management System Plan (QMSP) and the effectiveness of the plan.



Safety

The following safety performance indicator information is provided by HRCP and is current as of October 31, 2024:

- Total Recordable Incidence Rate: 1.58 (National Average: 2.5)
- Lost Time Incidence Rate: 0.26 (National Average 1.6)

Civil Rights & DBE/SWaM Business Opportunities

HRCP has awarded **379** subcontracts, subconsultant agreements, and purchase orders to certified DBE/SWaM firms on the project. These contract awards represent a total of **\$596.2 million** to certified DBE/SWaM firms.

Public Outreach & Media

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

- A new HRBT Tunnel Talk podcast for a discussion of the new HRBT Expansion Project Welcome Center [https://hrbtexpansion.org/videos/](https://tunneltalktoday.libsyn.com/the-new-hrbt-expansion-project>Welcome Center• Drone video footage from the HT tunnel showing progress underground. <a href=), <https://www.linkedin.com/posts/hrbt-expansion-project>, <https://www.facebook.com/groups/HRBTExpansionProject>.
- A video of North Island Cell 3 construction showing TBM reassembly prior to boring the GP tunnel. <https://hrbtexpansion.org/videos/>, <https://www.linkedin.com/posts/hrbt-expansion-project>, <https://www.facebook.com/groups/HRBTExpansionProject>.

2. Project Schedule

2.1 Schedule Status

The following table depicts key milestone dates for the project and has been updated as of the current approved schedule. The last approved schedule for the project is Update 62 (data date: September 22, 2024), and the schedule information in this report reflects this update.

Contractual Substantial and Final Completion dates remain unchanged from the Contract Amendment; February 26, 2027 and August 27, 2027 respectively. However, the Projected Schedule Update 62 Substantial and Final Completion reflect March 3, 2027 and September 1, 2027 respectively.

	Contract Requirement	September 2024 Schedule	Actual
NTP		Sep 11, 2020	Sep 11, 2020
Substantial Completion	Feb 26, 2027	Mar 3, 2027	
Final Completion	Aug 27, 2027	Sep 1, 2027	

2.2 Longest Path

The longest path/critical path in Project Schedule Update 62 is driven by the following activities:

- TBM U-Turn on North Island
- TBM Break-in General Purpose Tunnel
- General Purpose Tunneling - Mining
- TBM disassembly in south pit
- South Island Tri-Cell Permanent Structures
- South Island Ventilation Building and Commissioning
- Commissioning – High Occupancy Toll and General Purpose Operational Testing
- Commissioning – Tunnel, Buildings, Roadways, and Trestles Integration Testing
- ITT Reversal
- 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 near critical, meaning there is less than one month of float in the current schedule.

South Portal – Work Below Grade

- South Portal Cell 1 Permanent Structures – Exterior Headwall & Roadway Slab
- South Portal Cell 2 Permanent Structures – Keystone Columns, Interior Walls, Roadway Level Slabs & Walls, Plenum Level Slabs & Walls, Roof Slabs
- South Portal Cell 3 Permanent Structures – Interior Walls
- South Portal - Cell 1 GP Permanent Structure Construction after TBM Extraction
- South Island Rectilinear Construction in South Island Expansion Cell 2 – Mud Slab & Waterproofing, Base Slabs, Exterior Walls & Waterproofing, Roadway Concrete

South Island – Work Above Grade

- South Island Ventilation Building – Phase 1 Construction
- South Island Generator, Fuel & Water Tanks Building
- South Island Buildings Final MEP Work, Commissioning and Functional Testing

Tunneling

- North Island U-Turn – Gantry 3 Umbilical's installation, Assembly quick unloading system, Reassembly Permanent Umbilical's installation
- TBM Slurry treatment plant – Disassembly, Demobilization
- High Occupancy Tunnel – Interior Structures – South to North Sta. 677+85 to 598+44
- General Purpose Tunnel – Interior Structures – North to South Sta. 598+44 to 677+85
- General Purpose Tunnel – Final MEP Construction

North Portal – Work Below Grade

- North Portal Cell 2 Permanent Structures – External Walls
- North Portal Cell 1 Permanent Structures – Headwall, External Walls, Internal Walls, Plenum Slabs, Roof Slabs

North Island – Work Above Grade

- North Island Ventilation Building – Phase 2 Construction
- North Island Buildings Final MEP Work, Commissioning and Functional Testing

Roadway and Land Bridges

- Roadway Segment 1 Phase 1A, 2, 2A, 2B – I-64 North Shore Roadway Widening & Asphalt, Lighting, Permanent Barrier Wall.
- Storm Drainage, Retaining Walls
- ITS Segment 1 Phases 2 & 2A – Installation
- Mallory Bridge Phase 2 – Demolition and Reconstruction

Trestles

- North Trestle Temporary Work Trestle N3 – Construction & Demolition
- North Trestle Temporary Work Trestle N4 – Construction
- North Trestle – Eastbound Zone 4 Construction, Westbound Zones 7, 8, & 9 Construction

- North Trestle Utilities – Eastbound Zone 3A, Westbound Phase 4 & 7
- North Trestle Demolition Existing Eastbound Trestle
- South Trestle – Zone 2 Final Median Barrier
- South Island Expansion – Marine Work – Rock Placement & Substructure

Commissioning and Integration

- Operational Testing – General Purpose Tunnel – Egress Corridor Pressurization System
- Commissioning Integration – Existing Westbound Tunnel, Existing Eastbound Tunnel, General Purpose Tunnel
- ITT Reversal – Preparation Work for Eastbound Tunnel Traffic Direction Change, Roadway Median Barrier Walls after EB ITT Reversal

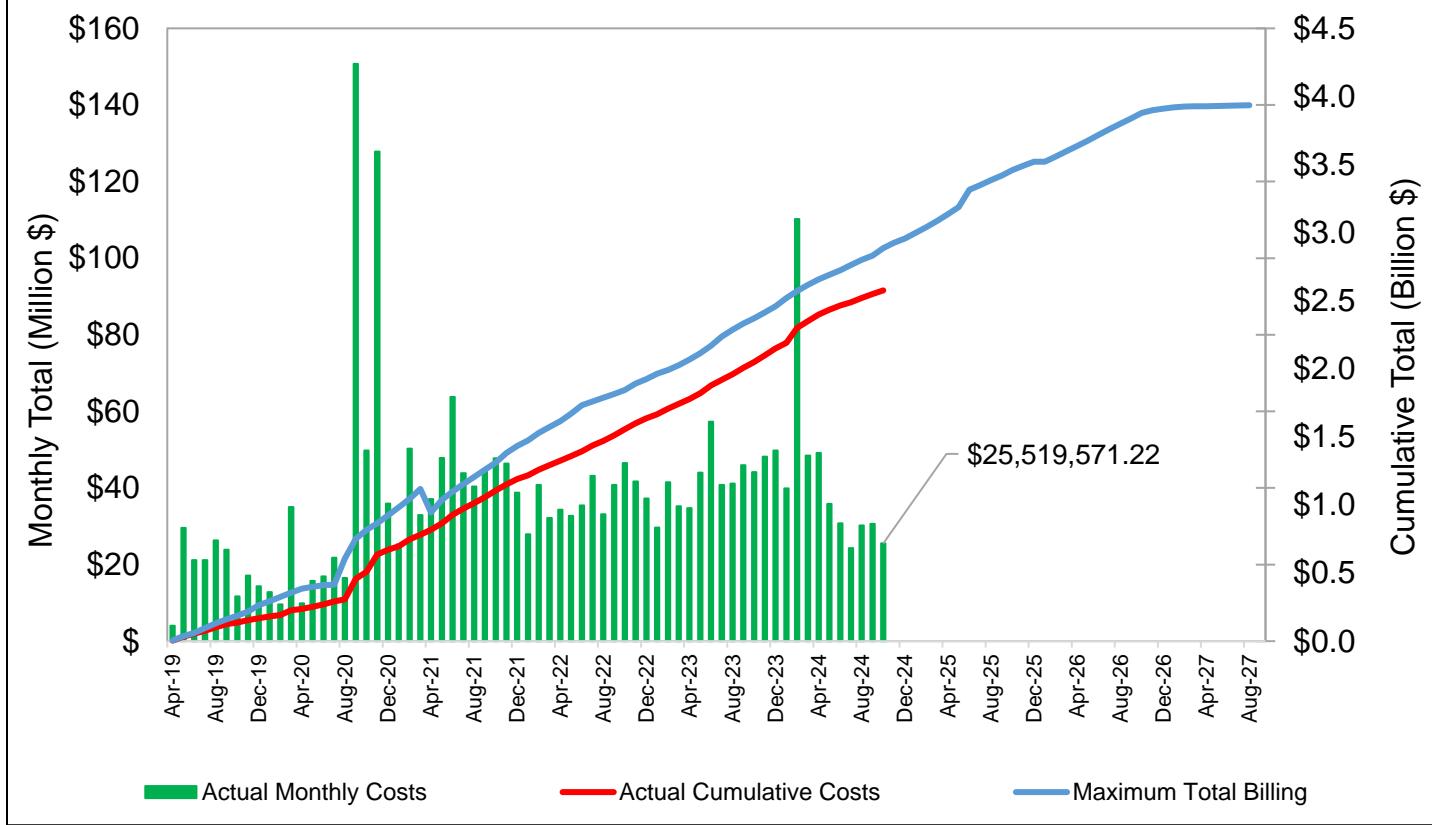
3. Project Budget

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 Spent this Period:	Total Spent to Date:	Original Total Budget:	Total Remaining Budget:	Percent Spent To-date:
Comprehensive Agreement					
<i>Construction</i>	\$19,940,495.96	\$2,286,922,763.72	\$3,299,997,227.00	\$1,013,074,463.28	69.30%
Owner Costs					
<i>Administration</i>	\$2,168,140.07	\$114,536,338.45	\$122,000,000.00	\$7,463,661.55	93.88%
<i>Right of Way</i>	\$871.95	\$9,556,304.48	\$15,000,000.00	\$5,443,695.52	63.71%
<i>No-Excuses Incentive</i>	\$0.00	\$0.00	\$90,000,000.00	\$90,000,000.00	0.00%
<i>Contingency</i>	\$3,211,960.02	\$155,166,769.17	\$335,000,000.00	\$179,833,230.83	46.32%
<i>Bridge Repair Work Option</i>	\$198,103.22	\$9,645,702.04	\$73,454,413.96	\$63,808,711.92	13.13%
Total	\$25,519,571.22	\$2,575,827,877.86	\$3,935,451,640.96	\$1,359,623,763.10	65.45%

Overall Payments by Month* **

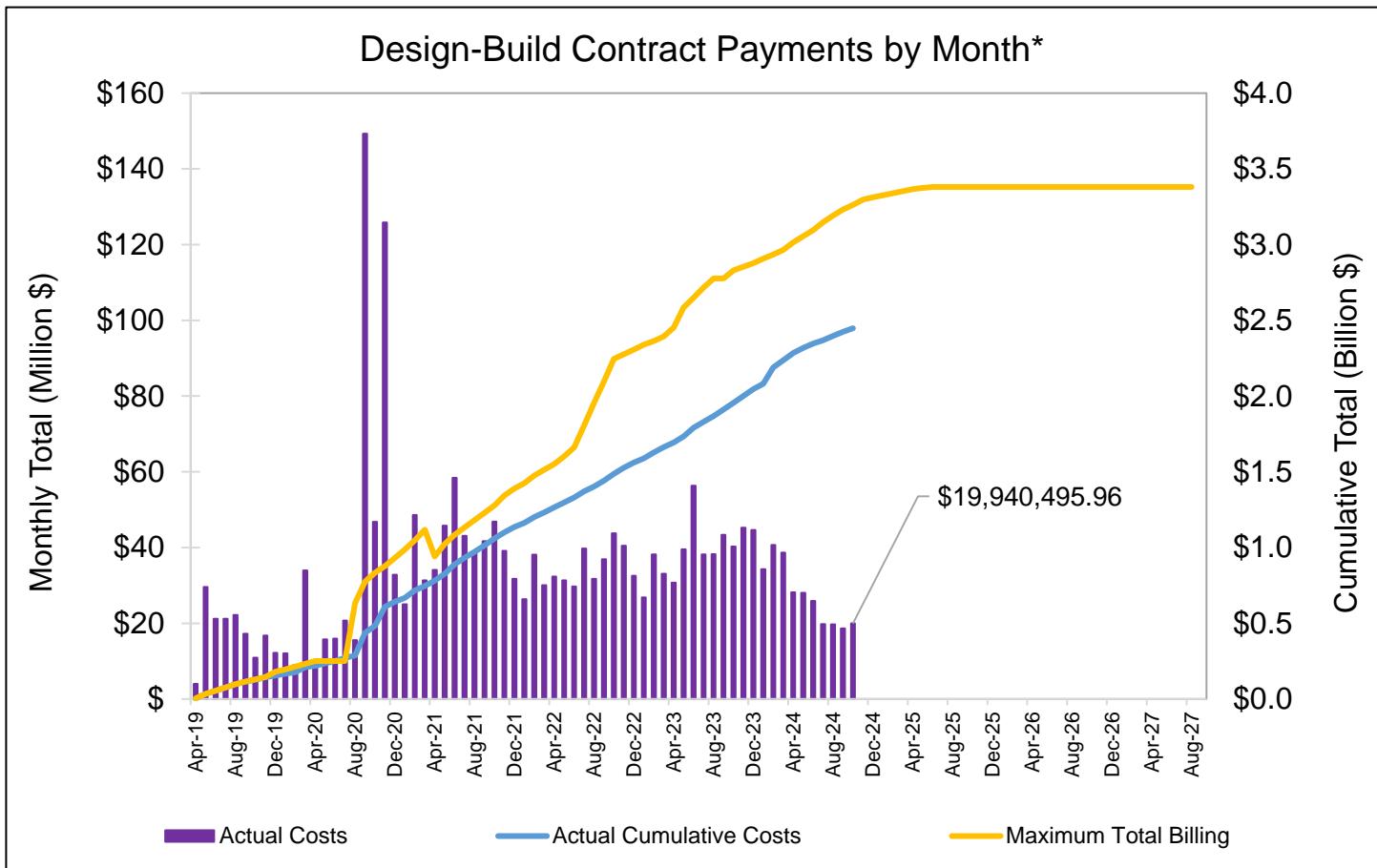


*The Maximum Total Billing showed an adjustment in May 2021 due to the executed Change Order #40 – Update Maximum Cumulative Cost Curve.

** The increase to monthly costs during February 2024 is primarily due to initial Material Price Adjustments associated with CA Amendment #1.

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 showed 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 HRCP refines its design, construction means-and-methods, activity sequences, and project resourcing.

3.3.1 HRTAC and Smart Scale

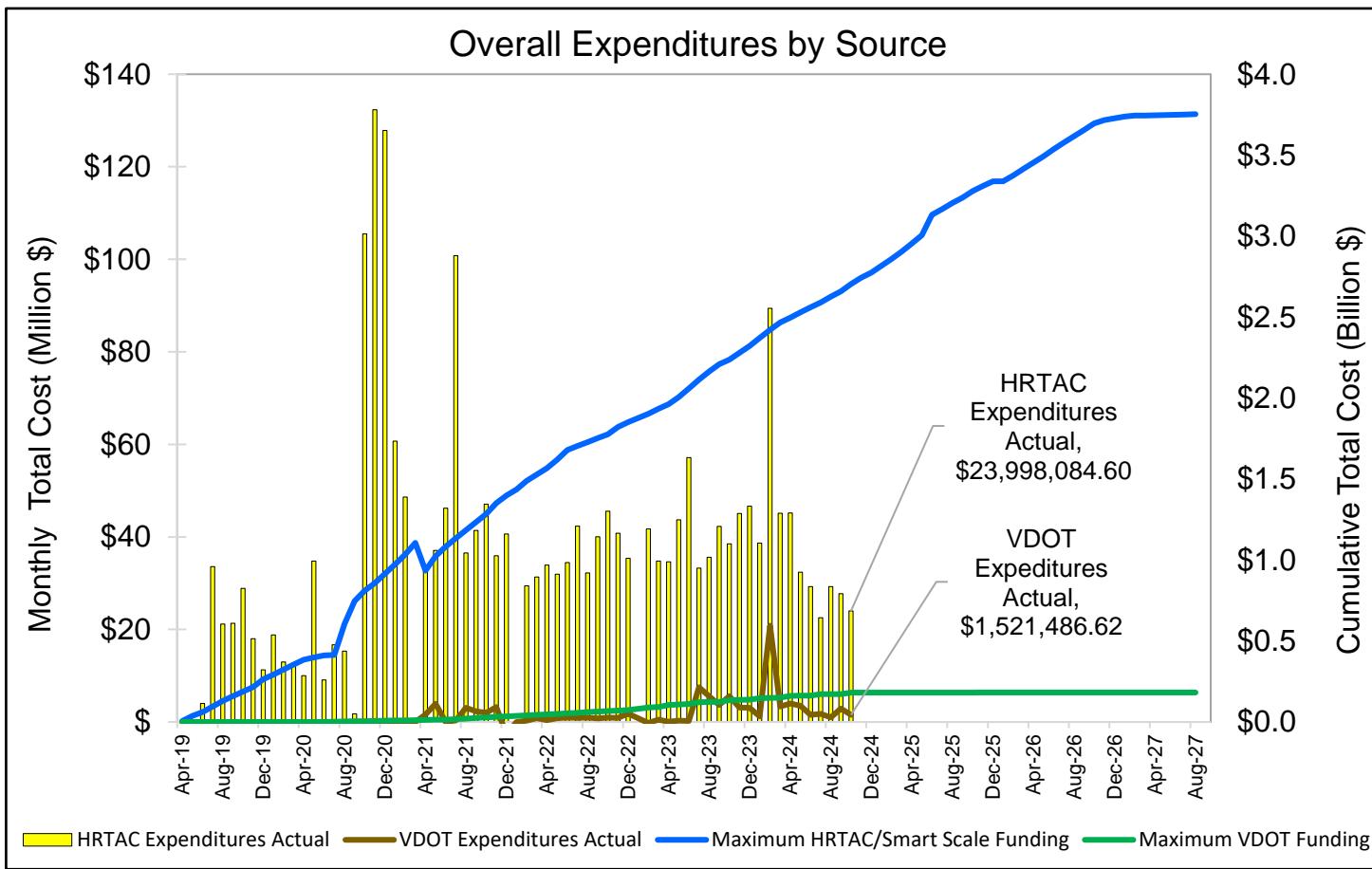
	Amount Spent this Period:	Total Spent to Date:	Original Total Budget:	Total Remaining Budget:	Percent Spent To-date:
<u>Comprehensive Agreement</u>					
Construction	\$18,757,509.98	\$2,235,627,827.78	\$3,204,569,251.00	\$968,941,423.22	69.76%
<u>Owner Costs</u>					
Administration	\$2,035,393.38	\$109,320,253.76	\$118,472,054.00	\$9,151,800.24	92.28%
Right of Way	\$871.95	\$9,556,304.48	\$15,000,000.00	\$5,443,695.52	63.71%
No-Excuses Incentive	\$0.00	\$0.00	\$90,000,000.00	\$90,000,000.00	0.00%
Contingency	\$3,204,309.29	\$127,130,171.70	\$325,428,276.00	\$198,298,104.30	39.07%
Total	\$23,998,084.60	\$2,481,634,557.72	\$3,753,469,581.00	\$1,271,835,023.28	66.12%

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>					
Construction	\$1,182,985.98	\$51,294,935.94	\$95,427,976.00	\$44,133,040.06	53.75%
<u>Owner Costs</u>					
Administration	\$132,746.69	\$5,216,084.69	\$3,527,946.00	(\$1,688,138.69)	147.85%
Right of Way	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
No-Excuses Incentive	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
Contingency	\$7,650.73	\$28,036,597.47	\$9,571,724.00	(\$18,464,873.47)	292.91%
Bridge Repair Work Option	\$198,103.22	\$9,645,702.04	\$73,454,413.96	\$63,808,711.92	13.13%
Total	\$1,521,486.62	\$94,193,320.14	\$181,982,059.96	\$87,788,739.82	51.76%

* The VDOT Administration costs are due to higher Owners Costs for South Trestle work oversight, bird management, bridge repair oversight, and Visitor Center Costs.

** The VDOT Contingency costs are primarily due to the VDOT portion of the CA Amendment material price adjustments.



3.4 Contingency

3.4.1 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	\$ 73,454,413.96	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-42	Navy Gate 22 Drainage Design and Construction	8/19/2022	\$ 1,524,940.16	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-47	Evans Street Approach Slab Settlement Repair	6/22/2022	\$ 34,082.83	0 days
CO-48	Scope Reduction – City of Hampton	8/24/2022	\$ (6,072,941.31)	0 days
CO-49	HRCP Senior Representative Change	7/2/2021	\$ -	0 days
CO-50	Change in Precast Form Tolerance & Curing Methods	1/10/2022	\$ -	0 days
CO-53	Sound Wall Quantity Reconciliation	12/6/2021	\$ (16,561,217.63)	0 days
CO-54	4th View Interchange Design and Construction Drainage	8/17/2022	\$ 984,598.45	0 days
CO-55	HREL Overlap Scope Change in Norfolk - Proposal Costs	8/12/2022	\$ 157,237.34	0 days
CO-56	Building Code Changes - Design	10/21/2022	\$ 2,186,150.00	0 days
CO-57	Design-Builder's Senior and Representative Changes	1/11/2022	\$ -	0 days
CO-58	Scope Reduction – City of Norfolk	5/16/2023	\$ (18,739,670.82)	0 days
CO-59	Fisheries and SAV Mitigation Plan - VCU	6/16/2022	\$ (70,238.22)	0 days
CO-60	Navy Fence (remaining design costs)	8/17/2022	\$ 180,142.36	0 days
CO-61	HRELN Tie-In Zero Drainage Spread	11/29/2022	\$ 2,965,469.69	0 days
CO-62	SIP Forms for Marine Bridges	6/28/2022	\$ -	0 days
CO-63	Bridge Repair Item – Insert Plates - New Unit Prices	8/30/2023	\$ -	0 days
CO-64	Tolling Infrastructure Proposal Costs	10/21/2022	\$ 645,242.40	0 days
CO-65	Snowplowable Raised Pavement Markers (SRPMs)	3/3/2023	\$ 256,174.09	0 days

CO-66	Additional Design Costs – CSPM Code Changes and Island Security Fencing - Unilateral	8/14/2024	\$ 3,541,051.00	0 days
CO-68	Buoyancy Calculations	3/3/2023	\$ -	0 days
CO-69	Change of Department's Senior Representative	4/6/2023	\$ -	0 days
CO-70	Reuse of Existing Pipe 29-26 to 29-31	7/26/2023	\$ (117,734.20)	0 days
CO-71	Addendum to WO-24 Water Supply Line	4/25/2023	\$ -	0 days
CO-72	Bay Avenue Approach Ramp	6/29/2023	\$ 120,053.43	0 days
CO-73	Pile Jackets – Additional Chloride Sampling/Testing	1/10/2024	\$ 118,665.12	0 days
CO-74	South Island – Asbestos Pipes	7/7/2023	\$ 128,883.51	0 days
CO-76	Northern Long-Eared Bat (NLEB) Consultation Process	5/1/2024	\$ 45,463.00	0 days
CO-77	Scope Reduction – Segment 5 ITS Trunk Line	11/12/2023	\$ (153,079.38)	0 days
CO-78	Steel Escalation Price Adjustments	9/19/2023	\$ 2,835,839.00	0 days
CO-79	WB Willoughby Bay Bridge Obstructions	1/10/2024	\$ 50,682.44	0 days
CO-80	Marine Fleet Safe Harbor – Hurricane Ian	1/10/2024	\$ 452,075.00	0 days
CO-81	3-Coat Paint System for Steel on Applicable Bridges	1/10/2024	\$ 140,000.00	0 days
CO-82	CA Amendment Disputed Items Resolution	3/21/2024	\$ 9,910,582.34	0 days
CO-83	Marine Fleet Safe Harbor – Tropical Storms Idalia/Ophelia	1/11/2024	\$ 200,262.16	0 days
CO-84	Bird Management Outside of South Island 2023	2/29/2024	\$ 458,375.51	0 days
CO-85	DRBISC #08 SMOT WB Rock Removal	4/3/2024	\$ 1,135,513.87	0 days
CO-86	OHSS No. 36 Foundation – Archaeologist Assessment	2/20/2024	\$ 14,641.81	0 days
CO-87	Traffic IIM-TE-395	8/12/2024	\$ 787,510.46	0 days
CO-88	Bird Management 2024 to Project Completion	5/1/2024	\$ 2,369,359.64	0 days
CO-91	DRBISC #08 ST Zone 6 Rock Removal	5/8/2024	\$ 1,710,784.92	0 days
CO-93	Construction General Permit - 2024	10/15/2024	\$ 411,136.65	0 days
CO-94	HRCP Representative Change	6/11/2024	\$ -	0 days
		TOTAL	\$ 83,849,396.72	0 days

3.4.2 Material Price Adjustments

This progress period included the following material price adjustments:

Material	Current Amount	Total to Date	Material Price Adjustment Through*
Per Contract Adjustments (Federally Eligible Costs)			
Exhibit 9 - Asphalt	\$0.00	\$215,416.26	August 2024
Exhibit 10 - Fuel	\$10,782.45	\$549,716.38	August 2024
Exhibit 11 - Steel	\$38,290.24	\$6,802,740.87	April 2024
Total	\$49,072.69	\$7,567,873.51	
Per CA Amendment Adjustments (Non-Federally Eligible Costs)			
Exhibit 9 - Asphalt	\$0.00	\$0.00	August 2024
Exhibit 10 - Fuel	\$765.30	\$41,106.35	August 2024
Exhibit 11 - Steel	\$290,192.96	\$9,239,324.03	April 2024
Exhibit 10A – Fuel (Atypical Items)	\$10,933.90	\$1,515,963.75	August 2024
Exhibit 15A – Index-Adjusted Commodities	\$2,773,241.11	\$68,907,394.57	April 2024
Exhibit 15B – Escrow-Adjusted Commodities	\$0.00	\$20,737,658.69	August 2024
Total	\$3,075,133.27	\$100,441,447.39	

* Steel price adjustments are based on Federal index data finalized 4 months after each period.

4. Environmental

The following environmental management activities occurred during this reporting period:

Permits:

- HRCP notified the Department of Environmental Quality (DEQ) on September 25, 2024, regarding the start-up of construction on the North Island bi-component plant.
- HRCP held a meeting with DEQ to discuss the modification of the VPDES permit for the North Island Water Treatment Plant.
- HRCP held a meeting on September 30, 2024, with the DEQ to discuss the air permit modification for the North and South Island generators.
- DEQ approved Construction General Permit (CGP) Modification 8 – Revision 4 on October 3, 2024.
- HRCP received the final approval needed from the DEQ on October 4, 2024, for the Joint Permit Application (JPA) modification #11 request.
- HRCP notified the permitting agencies on October 7, 2024, on their intent to initiate maintenance dredging around the South Island quay and conveyor sometime in October 2024.
- HRCP received notification from DEQ on October 10, 2024, that a modification of the existing VPDES permit for the North Island WTP was not required as long as TBM slurry/grout will continue to be processed at the South Island.
- HRCP provided the South Island drainage improvements - maintenance plan on October 14, 2024, to the agencies for their review.

Marine Mammal Protection:

- No new activities.

Bird Mitigation:

- No new activities.

Programmatic Agreement:

- No new activities.

Archeological Discoveries:

- No new activities.

Protected Species:

- No new activities.

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 landside road 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 and island site work.
- Construction Area 4 is composed of landside road and bridge work.



5.1 Construction Area 1: Landside Roadways

I-64 (Segment 1):

- Continued installation of sidewalk and approach grade work at retaining wall 105 near Abutment B at Mallory Street Bridge.
- Continued Ramp E and Ramp H asphalt work for Mallory Street Phase 1 bridge shift.

I-64 (Segment 3):

- Continued installation of base leveling pads, moment slab, and wall panels at retaining wall 302 on Bayville Street between 13th View and eastbound off-ramp.
- Continued drainage work at retaining wall 302 near Bayville St. eastbound.
- Continued drainage work at 4th View St. eastbound off-ramp.
- Continued installation of coping at retaining wall 308 between Willoughby Bay Bridge and 4th View eastbound.
- Continued formwork for coping and moment slab at retaining wall 302 along Bayville Rd.
- Continued installation of panels at sound wall 3-3 along the 4th View St. eastbound on-ramp.
- Continued installation of panels at retaining wall 306 near Abutment A at Willoughby Bay Bridge eastbound.
- Began auger cast piles at retaining wall 310 near 4th View St.

I-64 (Segment 4):

- Continued installation of coping and moment slab at retaining wall 407 between Bayview Bridge and Oastes Creek Bridge.
- Continued installation of coping and level up pad at retaining wall 405 near Evans St. Bridge.
- Continued installation of panels and columns for sound wall 4-1A near Mason Creek Road.
- Continued drainage work at retaining wall 501 at Abutment B at Patrol Road Bridge eastbound.
- Continued installation of panels at retaining wall 409 between Oastes Creek Bridge and Patrol Road Bridge.
- Began installation of panels at retaining wall 406 near W. Evans St.



► **Retaining Wall 306**
along 13th View St.
Completed at Abutment A

5.2 Construction Area 2: Marine Trestle Work

North Trestle:

- **Westbound Trestle**
 - 14 beams placed during this period (112 out of 280 total beams placed).
 - 1 cap placed during this period (20.5 out of 46 total caps placed).
 - 3 decks placed during this period (14 out of 45 total decks placed).

South Trestle:

- **Westbound Trestle**
 - 8 piles driven during this period (25 out of 92 total piles driven).
- **Westbound MOT Trestle**
 - Completed piles driven during this period.
 - Completed caps placed during this period.
- **HOT Lanes Trestle**
 - 15 beams placed during this period (40 out of 80 total beams placed).
 - 1 deck placed during this period (3 out of 16 total decks placed).



◀ North Trestle
Westbound
Installation of
Span 20 girders

5.3 Construction Area 3: Tunnels and Islands

South Island:

- 95% complete for south portal external walls.
- 39% complete for south portal internal walls.
- 7% complete for south portal headwall external wall.
- 4% complete for rectilinear approach excavation.

North Island:

- 90% complete for rectilinear approach excavation.
- 40% complete for rectilinear approach base slab waterproofing.
- 41% complete for rectilinear approach upper and lower mud slabs.

Tunnel:

- General Purpose (GP) tunnel break-in on October 17, 2024.
- Excavated 21ft this period for GP tunnel.
- Completed testing and commissioning of TBM in launch configuration.
- Continued work on concrete tunnel egress structures in the HT Tunnel.
- 27% complete for HT tunnel installation of egress footer.
- 4% complete for HT tunnel installation of egress structure L-walls.
- 15% complete for HT tunnel low point pump station concrete structures.
- Completed advances for rings and installed temporary steel rings.



◀ GP Tunnel

Building of temporary steel rings (-5), (-6), and (-7) are visible against the thrust frame.

5.4 Construction Area 4: Landside Bridges

Mallory Street Bridge:

- Continued installation of pedestrian fence for eastbound widening.
- Completed demolition of old bridge.

Bayville/13th View Street Bridge:

- Began formwork for Abutment A for eastbound widening.

Willoughby Bay Bridge:

- Continued repair/rehabilitation of existing westbound bridge.
- Continued installation of precast caps for westbound widening.
- Continued installation of stay-in-place (SIP) deck formwork for eastbound widening.
- Completed installation of girders at Bent 38 for westbound widening.
- Continued installation of trestle at Abutment A for westbound widening.
- Completed installation of concrete overlay at Spans 60 – 67 for eastbound widening.
- Began driving piles at Pier 1 for westbound widening.

4th View St. Bridge:

- Continued installation of pads and beam seats for eastbound widening.
- Continued installation of jacking beams for eastbound widening.
- Continued installation of SIP deck formwork for eastbound widening.
- Completed deck reinforcement and concrete deck placement for Spans 1 – 3 for eastbound widening.

Mason Creek Bridge:

- Continued repair/rehabilitation of existing eastbound and westbound bridges.
- Continued parapet work and closure pours.

1st View St. Bridge:

- Continued repair/rehabilitation of existing eastbound bridge.
- Completed installation of deck reinforcement of existing eastbound bridge.
- Completed installation of deck concrete at all spans of existing eastbound bridge.

Bay Avenue Bridge:

- Continued installation of mainline SIP deck forms and overhangs for eastbound widening.

Evans St. Bridge:

- Continued repair/rehabilitation of existing substructure for eastbound bridge.

Bayview Blvd. Bridge:

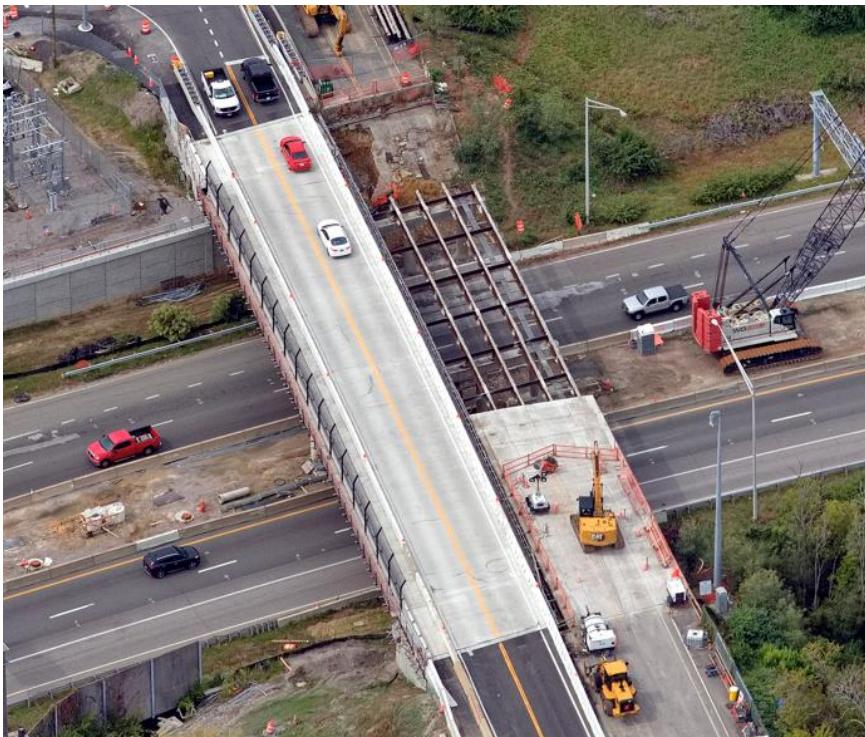
- Continued repair/rehabilitation of existing substructure for eastbound bridge.

Oastes Creek Bridge:

- Continued installation of sound wall for eastbound widening.

Patrol Road Bridge:

- Continued repair/rehabilitation of existing substructure for eastbound bridge.
- Continued installation of jacking beams for eastbound widening.



◀ **Mallory Street Bridge**
Demolition of old bridge.



◀ **Willoughby Bay Bridge Eastbound**
Rehabilitation and widening of bridge

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 Bay Bridge, North Trestle, and South Trestle eastbound and westbound to facilitate beam placement as well as concrete placement for piles, caps, and decks.
- Striping maintenance throughout project corridor.
- Lane closures eastbound and westbound for sign structure foundation installation.
- Slow rolls eastbound and westbound for Mallory Bridge demolition activities.
- Slow rolls eastbound for temporary lighting installation and sign structure removal.

Long-Term Lane Closures:

- Bay Ave. in Norfolk to facilitate staging-area access for widening Oastes Creek Bridge.
- Bayview Blvd. in Norfolk and Mallory St. in Hampton to facilitate bridge widening.
- West Ocean Ave. in Norfolk traffic shift to facilitate bridge widening.
- 4th View St. in Norfolk traffic shift to facilitate bridge widening.
- Patrol Rd. in Norfolk traffic shift to facilitate bridge rehabilitation and widening.
- 13th View St. underpass beneath I-64 reduced to one lane to facilitate utility work. Traffic is controlled by temporary automatic one-lane, two-way traffic control signal.

Norfolk Traffic Shifts:

- Minor shift on I-64 westbound South Trestle to support MOT trestle construction.

Detours:

- Temporary detour of westbound I-64 at 4th View St. for overhead sign structure installation.
- Temporary detour of I-64 eastbound at Mallory St. for bridge demolition activities.
- Temporary detour of W. Bay Ave. eastbound onramp for bridge widening activities.
- Long-term detour on Mason Creek Road to facilitate bridge widening.

Intelligent Transportation System (ITS):

- Installation of ITS, Medium Voltage power, and private utility conduit on South Trestle and landside.
- Preparations for relocation of RCU-44 at westbound South MOT Trestle.
- Installation of temporary DMS and land control signals on South Trestle westbound.

Overhead Sign Structures:

- Installation of Overhead Sign Structure 37.
- Removal of existing sign structure spanning I-64 westbound near 4th View St.

Roadway Lighting:

- Continued permanent lighting installation on Willoughby Bay Bridge and Oastes Creek Bridge.
- Continued temporary lighting installation at South MOT bridge.

- Addressing maintenance of temporary lighting throughout the corridor.

7. Quality

Quality updates for this reporting period include:

Construction Quality Management Plan (CQMP) Updates:

- VDOT reviews CQMP updates as part of final “Released for Construction” (RFC) design packages and “Notice of Design Change” (NDC) packages. Two packages were received this period and currently under review.
- HRCP submitted quarterly update V19 of the CQMP this period and it is currently under review.

Independent Assurance (IA) Testing Activities:

- VDOT continues to monitor HRCP’s QA and QC material testing. VDOT also performed Independent Testing and Verification Testing on materials in accordance with VDOT requirements and coordinated with VDOT Materials Department for shop inspections as required. This testing included 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 quarterly update V26 of the QMSP this period, and it is currently under review.

Material Book Records:

- VDOT conducted a monthly review of the current records, and HRCP is responding to audit comments provided by VDOT. Review of the Material Book records includes confirming that HRCP is completing the proper documentation for Buy America compliance. VDOT has completed the full audit of thirty-five volumes of Material Book records and is currently auditing three additional volumes of Material Book records.

Routine Quality Activities:

- VDOT’s quality team conducted reviews of written deficiency notices (WDNs), non-conformance reports (NCRs), root cause analyses and dispositions of deficiencies, with 26 NCRs reviewed for concurrence during this period. VDOT conducted reviews of QA and QC records for accuracy and quality issues and coordinated documentation reviews through VDOT’s Material Department. VDOT also continues a review of current construction quality by performing inspections based on VDOT’s Construction Quality Improvement Program (CQIP).

8. Safety

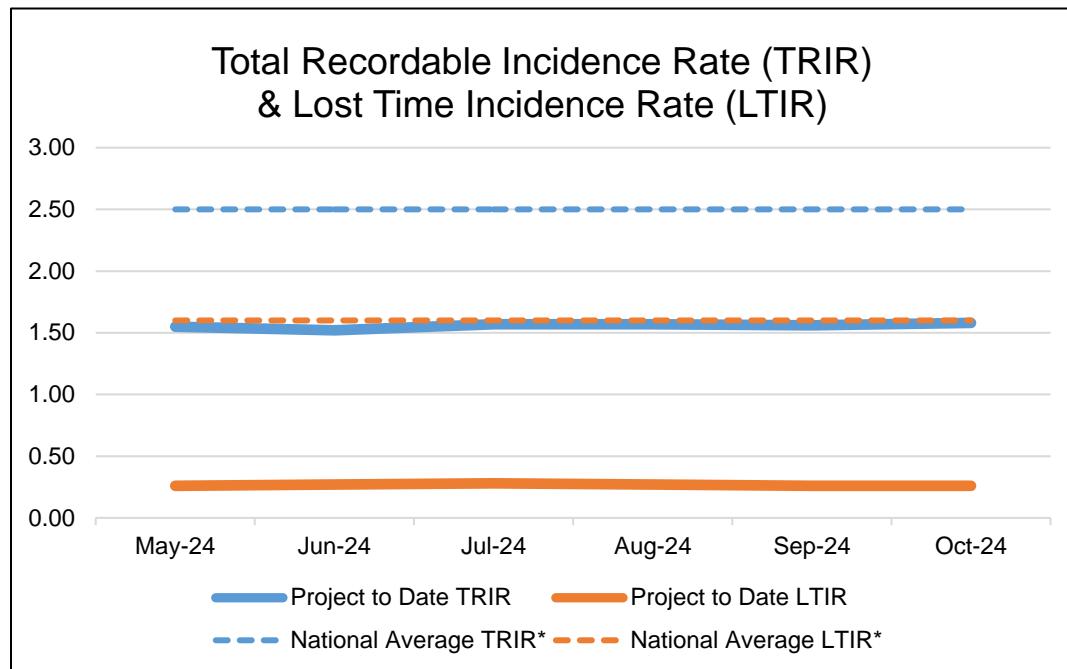
Safety procedures and activities during this reporting period include:

Safety Activities:

- HRCP continued driver training for crew members.
- HRCP continued OSHA/Safety Refresher Training for supervisors and foremen.
- HRCP updated the Tunnel Safety Plan for current operations in the HT tunnel.
- HRCP conducted Overhead Hazard Training for all crew members and subcontractors.
- HRCP conducted Crisis Management Training for all supervisors and foremen.

Safety Performance Indicators:

- The following safety performance indicator information is provided by HRCP and is current as of October 31, 2024:



**National averages are from the Bureau of Labor Statistics, US Department of Labor – 2021 Data for Construction Industry, Published November 9, 2022.*

9. Civil Rights & DBE/SWaM Business Opportunities

To date, HRCP has awarded **379** subcontracts, subconsultant agreements and purchase orders to certified DBE/SWaM firms. The total contract award is at **\$596.2 million** to date. A total of **\$468.7 million** has been paid for work completed by DBE/SWaM firms. HRCP has exceeded both commitment and attainment goals.

Compliance Activities:

- HRCP's 3rd Quarter DBE/SWaM Good Faith Efforts Report/C-111, DBE/SWaM Utilization Plan, and Workforce Participation Plan were submitted on October 15, 2024, as required by the Comprehensive Agreement for VDOT's formal review.

Workforce Development Activities:

- HRCP's On-the-Job Training Program remained at 39 graduates for the reporting period with 15 active enrollments. HRCP continued to make plans for hosting a recognition luncheon to celebrate candidates completing their individual training programs and their training mentors. The event is scheduled for October 25, 2024.

Business Development Activities:

- Discussion continues between HRCP and VDOT regarding the solicitation of the support buildings, representing potential procurement opportunities available for DBE/SWaM businesses.

10. Public Outreach & Media

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

Public Outreach

- September 23, 2024 – HRBT Expansion Project Director Ryan Banas presented project updates and hosted a site visit for the San Diego Association of Governments (a California Transportation Agency).
- September 25, 2024 – HRBT Expansion Communications team published the September 2024 edition of the project newsletter.
- October 2, 2024 – HRBT Expansion team hosted a table at Sheriff Joe Baron's annual senior services seminar in Norfolk.
- October 3, 2024 – HRBT Expansion Communications Director Paula Miller presented project updates to the Virginia Beach Anglers Club in Virginia Beach.
- October 4, 2024 – HRBT Expansion Project Director Ryan Banas presented project updates and hosted a site visit for staff from the Office of Congresswoman Jen Kiggans.
- October 10, 2024 – HRBT Expansion team presented project updates to the Willoughby Civic League.
- October 10, 2024 – HRBT Expansion team presented project updates to the Peninsula Ski Club in Hampton.
- October 15, 2024 – HRBT Expansion Project team provided project updates to residents of Nansemond on the Bay High Rise.
- October 17, 2024 – The TBM began excavation of the General Purpose (GP) tunnel, and the milestone was announced to the public via social media.
- October 17-18, 2024 – The HRBT Expansion Team hosted a booth at the annual Naval Station Norfolk Fleet Fest STEM Day.
- October 17, 2024 - Project Director Ryan Banas was the keynote speaker at the Virginia Society of Civil Engineers (VSCE) Virginia Section Annual Soiree in Charlottesville.
- October 22, 2024 – HRBT Expansion staff provided project updates to the Southside Old Point Bank Board of Directors.

Media

- September 24, 2024 – (HRBT Expansion Project) HRBT Expansion Team released a video of the Fall 2024 Project Tour. <https://www.linkedin.com/company/hrbt-expansion-project/> <https://www.facebook.com/groups/HRBTExpansionProject/>
- September 26, 2024 – (Tunnel Talk Today Podcast) Hampton Roads Express Lanes Network, featuring HRTAC Executive Director Kevin Page and VDOT Hampton Roads District Engineer Chris Hall <https://tunneletalktoday.libsyn.com/hampton-roads-express-lanes-network-updates>
- October 1, 2024 – (Construction Magazine) Virginia's Largest Infrastructure Project Set to Begin Boring Second Chesapeake Bay Tunnel This Fall

<https://constructionmagazine.news/CON/article/7ADD690C-virginia-s-largest-infrastructure-project-set-to-begin-boring-second-chesapeake-bay-tunnel-this-fall>

- October 3, 2024 – (WAVY) 65 feet below, Mary's ready to bore again – to make a new tunnel for HRBT <https://www.msn.com/en-us/news/us/65-feet-below-mary-s-ready-to-bore-again-to-make-a-new-tunnel-for-hrbt>
- October 4, 2024 – (WTKR) VDOT showcases HRBT Expansion Project 65 feet below the surface <https://www.wtkr.com/news/in-the-community/norfolk/vdot-showcases-hrbt-expansion-project-65-feet-below-the-surface>
- October 7, 2024 – (Tunnel Talk Today Podcast) The new HRBT Expansion Project Welcome Center [Welcome Center](https://tunneltalktoday.libsyn.com/the-new-hrbt-expansion-project>Welcome Center <a href=)
- October 8, 2024 – (HRBT Expansion Project) HRBT Expansion Team released a video of North Island Cell 3 construction showing TBM reassembly prior to boring the GP tunnel. <https://hrbtexpansion.org/videos/>. <https://www.linkedin.com/posts/hrbt-expansion-project>. <https://www.facebook.com/groups/HRBTExpansionProject>.
- October 9, 2024 – (HRBT Expansion Project) HRBT Expansion Team released drone video footage from the HT tunnel showing progress underground. <https://hrbtexpansion.org/videos/>. <https://www.linkedin.com/posts/hrbt-expansion-project>. <https://www.facebook.com/groups/HRBTExpansionProject>.
- October 14, 2024 – (WVEC) Traffic Alert: Eastbound HRBT reopens after being temporarily shut down for unplanned road work <https://www.13newsnow.com/article/traffic/eastbound-hrbt-temporarily-shut-down-unplanned-road-work-willoughby-bay-bridge-traffic>
- October 18, 2024 – (WAVY) Mary's on the move again — making progress on HRBT Expansion Project <https://www.wavy.com/video/marys-on-the-move-again-making-progress-on-hrbt-expansion-project>
- October 18, 2024 – (WTKR) Mary, the tunnel-boring machine, starts work again on the HRBT Expansion Project <https://www.wtkr.com/transportation/mary-the-tunnel-boring-machine-starts-work-again-on-the-hrbt-expansion-project>

Lane Closures/Advisories

- September 27, 2024 – Weekly Lane Closure Report
- October 4, 2024 – Weekly Lane Closure Report
- October 11, 2024 – Weekly Lane Closure Report
- October 14, 2024 – Temporary closure of I-64 E at HRBT
- October 18, 2024 – Weekly Lane Closure Report

Visit our website to view more information:

www.hrbtexpansion.org