



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

Report No. 62
Project No. 0064-M06-032



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Prepared by:

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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 April 21, 2024 – May 18, 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 external walls 48% complete.
 - Installation of south portal internal walls 10% complete.
- Tunnel Progress:
 - Completed placement of eastern shield cradle block for the TBM U-Turn operation.
- North Island Progress:
 - Completed installation of Cell 2 base slab.
 - Installation of rectilinear approach permanent struts 26% complete.
- Landside Progress:
 - Completed installation of girders at Spans 18 – 19 at Willoughby Bay Bridge.
 - Completed deck placement at Spans 3 – 4 at Willoughby Bay Bridge.
 - Began installation of approach slab at Abutment B at Mallory Street Bridge.
 - Completed deck placement at Spans 1 – 2 at Oastes Creek Bridge.
- Marine Progress:
 - Completed driving piles at South Trestle HOT lanes.

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 57 (data date: April 21, 2024), and the schedule information in this report reflects this update. Schedule 57 was returned Approved as Noted on May 16, 2024.

- Contractual Substantial and Final Completion Dates remain unchanged.
- Substantial Completion on February 26, 2027
- Final Completion on August 27, 2027

Project Budget

The project budget summary below now includes all billed to date costs through May 18, 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: | \$ 2,434,411,387 |
| Remaining project budget: | \$ 1,501,040,254 |

- Design-build contract overview:

| | |
|--|-------------------------|
| Design-build contract original amount: | \$ 3,299,997,227 |
| Net change orders: | \$ 5,655,285 |
| Exercised Options: | \$ 73,454,414 |
| Material Price Adjustments to Date: | \$ 90,141,415 |
| Assessed Liquidated Damages (LD): | \$ (939,000) |
| Design-build contract sum to date: | \$ 3,468,309,340 |
| Expenditures to date: | \$ 2,317,797,929 |
| Remaining design-build contract amount: | \$ 1,150,511,411 |

- Design-build progress to date:

| | |
|---------------------------------|--------------|
| Project Management: | 81.0% |
| Design: | 94.3% |
| Physical Construction Progress: | 49.1% |
| Overall: | 66.8% |

Environmental

Environmental updates for this reporting period include:

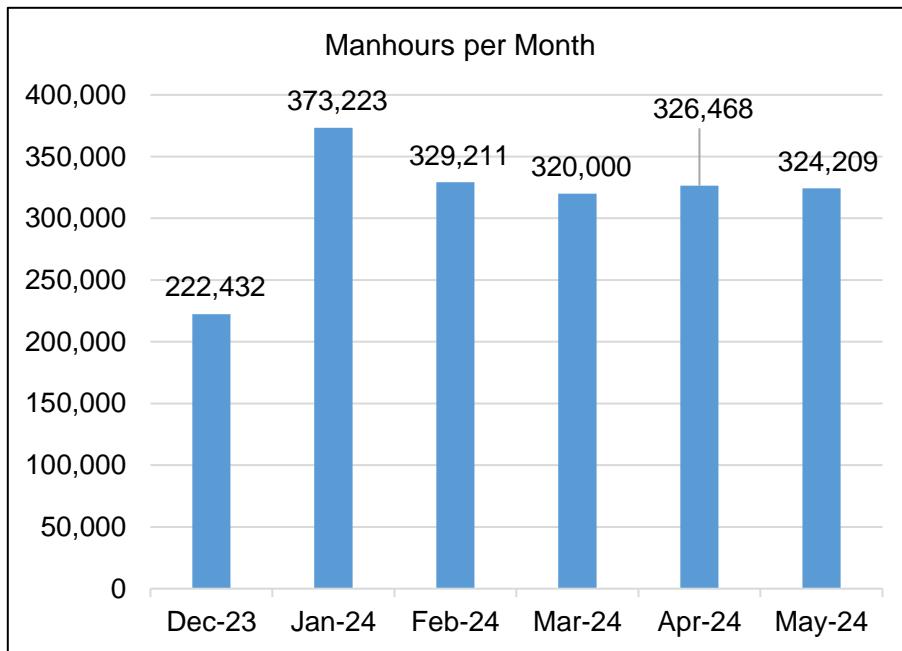
- HRCP received a Warning Letter from the Department of Environmental Quality on May 2, 2024, regarding the unauthorized discharge of wastewater from the North Island water treatment plant associated with the April 17, 2024, TBM breakthrough. HRCP initiated a permit modification request for the North Island wastewater treatment plant that would allow for future treatment and discharge of TBM process water.

Construction

Summary progress updates for this reporting period include:

- Landside Roadways
 - Completed the North Trestle eastbound traffic shift on May 2, 2024.
 - Completed installation of parapet, light blisters, and lighting at retaining wall 108.
 - Completed placement of moment slabs for retaining walls 301 and 308.
 - Began excavation for retaining wall 501 at Patrol Road eastbound on-ramp.
- Marine Works
 - Placed decks at South eastbound permanent trestle (2.3 installed this period).
 - Placed beams at North westbound permanent trestle (5 installed this period).
- Tunnels and Islands
 - 27% complete for stage 1 ballast placement for HT tunnel.
 - 50% complete for placement of center shield cradle block for TBM U-Turn operation.
 - 19% complete for Cell 1 and 2 waterproofing at North Island.
- Landside Bridges
 - Completed excavation of Pier 2 at Bayville/13th View Street Bridge for eastbound widening.
 - Completed installation of deck concrete at Spans 3 – 4 at Willoughby Bay Bridge for eastbound widening.
 - Completed lead abatement and coating at Abutment A at 4th View Street Bridge for westbound widening.
 - Completed installation of girders at Span 19 at Bay Avenue Bridge for eastbound widening.
 - Completed placement of light blisters at Oastes Creek Bridge for eastbound widening.

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



Project Manhours to Date:
11,513,388

Operations

The following operations activities took place during this reporting period:

- Major traffic shift onto the new Eastbound North Trestle.
- Short-term lane closure on I-64 at HRBT eastbound.
- Traffic shift to opposite side of Patrol Road to facilitate continued bridge rehabilitation in Norfolk.

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 (QMS) and the effectiveness of the plan.



Safety

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

- Total Recordable Incidence Rate: 1.55 (National Average: 2.5)
- Lost Time Incidence Rate: 0.26 (National Average 1.6)

Civil Rights & DBE/SWaM Business Opportunities

HRCP has awarded **358** subcontracts, subconsultant agreements, and purchase orders to certified DBE/SWaM firms on the project. These contract awards represent a total of **\$556 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:

- VDOT reached another HRBT Expansion Project milestone on May 2, 2024, with the opening of the new I-64 east North Trestle.
- VDOT hosted the 2024 HRBT Expansion Project Regional Stakeholder Committee Meeting at the Hampton Roads Regional Building on May 9, 2024. A highlight of the meeting was the debut of the Spring project update video to regional stakeholders. It featured a virtual tour of the construction corridor.
- The HRBT Expansion Project hosted staff from the Pennsylvania Turnpike Commission (PTC) who traveled to Virginia on May 16, 2024 to learn about best practices and challenges associated with the project. VDOT leadership led the visitors on a tour of the newly constructed eastbound tunnel.

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 57 (data date: April 21, 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.

| | Contract Requirement | April 2024 Schedule | Actual |
|-------------------------------|----------------------|---------------------|--------------|
| NTP | | Sep 11, 2020 | Sep 11, 2020 |
| Substantial Completion | Feb 26, 2027 | Feb 26, 2027 | |
| Final Completion | Aug 27, 2027 | Aug 27, 2027 | |

2.2 Longest Path

The longest path/critical path in Project Schedule Update 57 is driven by the following activities:

- TBM U-Turn on North Island
- TBM drive in General Purpose Tunnel
- 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

- South Portal Cell 1 Permanent Structures – Interior Walls & Roadway Slab, Plenum Slab, Roof Slab
- South Portal - East External Walls – Permanent Headwall and Roadway Slab

South Island

- None

Tunneling

- High Occupancy Tunnel – TBM Cradle, Installation final rings
- Tunneling U-Turn –Cutterhead Cleaning
- High Occupancy Tunnel – Interior Structures – Ballast Stage II
- General Purpose Tunnel – Interior Structures – Stage I Ballast

North Portal

- North Portal – Temporary U-Turn Structures - High Occupancy Tunnel TBM Shield Receiving Cradle, General Purpose Tunnel TBM Launch Cradle, Post Breakout Cell1 Cleaning, Nitrogen Table Mobilization, Cell 1 Thrust Frame Installation, Gantry Cradles, Gantry 4 Lift out and Reassembly.
- North Portal – Rectilinear Approach Excavation, Permanent Struts Installation, Cross Wall demolition

North Island

- None

Roadway and Land Bridges

- Segment 1 Phase 1, 1A, 2 – I-64 North Shore Roadway Widening, Temporary Lighting, Permanent Barrier Wall, Storm Drainage, Retaining Wall 106
- Segment 3b Phase 2, 2A, 2B, 3, 3A, 4 – I-64 Willoughby Spit – Widening, Drainage, PV Drains/Ground Improvement, Retaining Wall 302, 306, 307, 312, 313, Lighting, Ramp F.
- Segment 4 Phase 2, 2A, 3, 3A, 4, 4A – Norfolk to Navy – Storm Drainage, Roadway Widening, Retaining Wall 406, 407, 408, 409, 501, Permanent Barrier Wall, Widening &
- ITS Segment 1 Phases 1 & 1A – Installation
- ITS Segment 3 Phases 2, 3 & 4 - Installation
- ITS Segment 3B Phases 2, 3A & 4 - Installation
- ITS Segment 3C Phases 2 - Installation
- ITS Segment 4 Phases 2, 3 - Installation
- 13th View Bridge – Eastbound Widening & Rehabilitation, Westbound Widening & Rehabilitation
- Willoughby Bay Bridge – Eastbound Superstructure & Rehabilitation, Westbound Rehabilitation
- 4th View Bridge – Eastbound Rehabilitation
- Mason Creek Bridge - Eastbound Rehabilitation
- 1st View Bridge - Eastbound Rehabilitation
- Bay Avenue Bridge – Eastbound Widening & Rehabilitation, Westbound Rehabilitation

- Evans Street Bridge - Eastbound Widening
- Bayview Blvd. Bridge - Eastbound Widening & Rehabilitation
- Oastes Creek Bridge – Eastbound Widening, Westbound Widening
- Patrol Road Bridge – Eastbound Widening & Rehabilitation

Trestles

- North Trestle Temporary Work Trestle N3 – Construction & Demolition
- North Trestle Temporary Work Trestle N4 & N2 – Demolition
- North Trestle – Eastbound Zone 1, 2, 3, 4, 5 Construction, Westbound Zone 8 & 10 Construction
- North Trestle Utilities – Eastbound Phase 2 & 3A, Westbound Phase 7
- North Trestle Demolition Existing Eastbound Trestle
- South Trestle Temporary Work Trestle S2 – Demolition
- South Trestle Temporary Work Trestle S3 – Construct
- South Trestle Temporary Work Trestle S4 – Construct
- South Trestle Temporary Work Trestle S5 – Construct and Demolition
- South Trestle – Zone 2 Deck Construction & Finishes
- South Trestle – Zone 5 Construction & Finishes
- South Trestle – Zone 7 Construction & Finishes
- South Trestle – Zone 8 Construction & Finishes
- South Trestle – Zone 9 Construction & Finishes
- South Island Expansion – Marine Work – Rock Placement & Substructure
- South Trestle – Existing Trestle Demolition

Commissioning and Integration

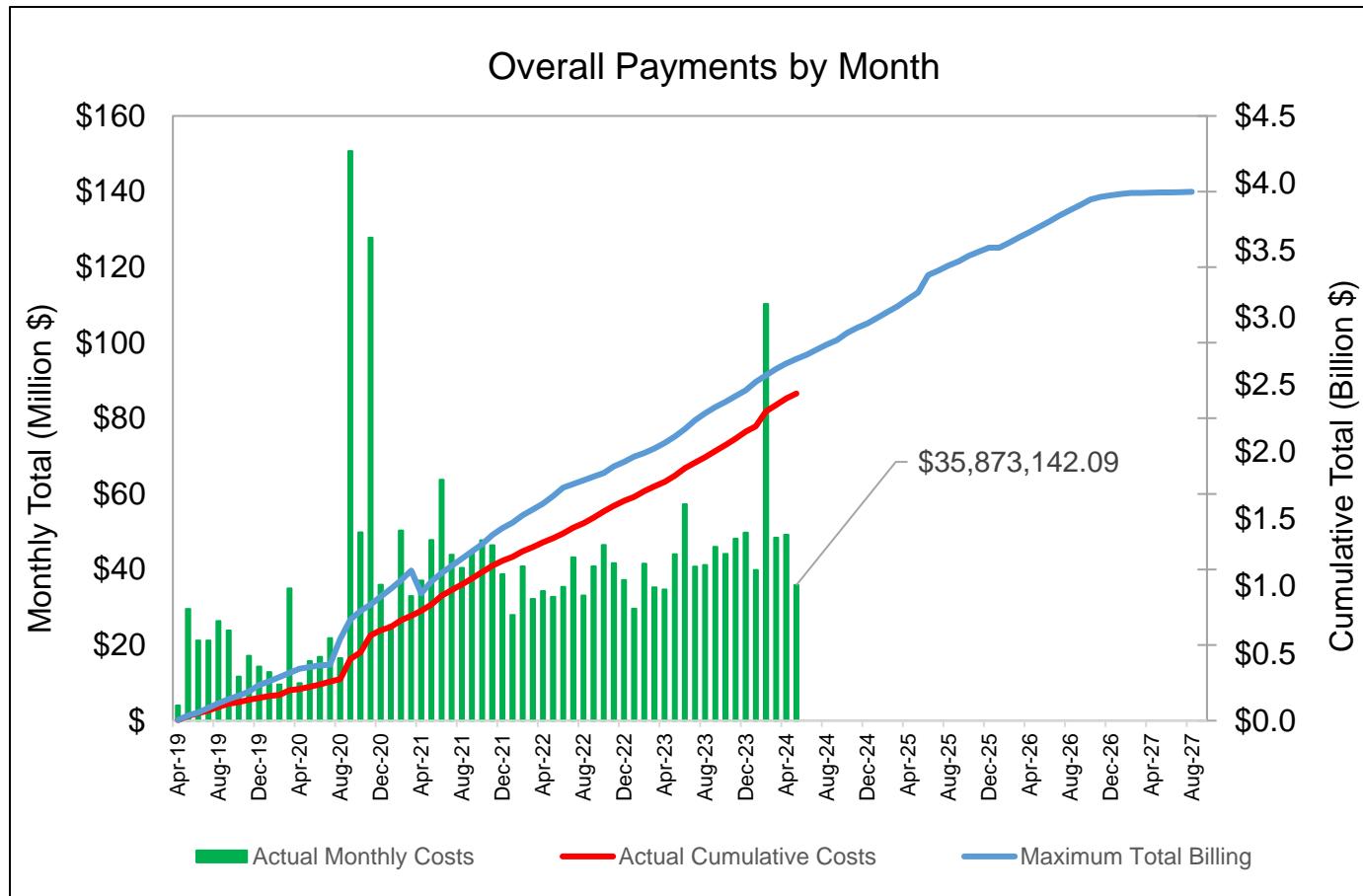
- Operational Testing – General Purpose Tunnel – Egress Corridor Pressurization System
- Commissioning Integration – Existing Westbound Tunnel, Existing Eastbound Tunnel, General Purpose Tunnel
- ITT Reversal – Preparation Work for Eastbound Tunnel Traffic Direction Change, Roadway Median Barrier Walls 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: |
|---------------------------------------|---------------------------|---------------------------|---------------------------|---------------------------|------------------------|
| <u>Comprehensive Agreement</u> | | | | | |
| <i>Construction</i> | \$28,022,975.65 | \$2,183,036,226.88 | \$3,299,997,227.00 | \$1,116,961,000.12 | 66.15% |
| <u>Owner Costs</u> | | | | | |
| <i>Administration</i> | \$1,914,502.81 | \$103,098,081.19 | \$122,000,000.00 | \$18,901,918.81 | 84.51% |
| <i>Right of Way</i> | \$10,054.65 | \$9,515,376.33 | \$15,000,000.00 | \$5,484,623.67 | 63.44% |
| <i>No-Excuses Incentive</i> | \$0.00 | \$0.00 | \$90,000,000.00 | \$90,000,000.00 | 0.00% |
| <i>Contingency</i> | \$5,526,058.18 | \$132,557,869.09 | \$335,000,000.00 | \$202,442,130.91 | 39.57% |
| <i>Bridge Repair Work Option</i> | \$399,550.80 | \$6,203,833.18 | \$73,454,413.96 | \$67,250,580.78 | 8.45% |
| <u>Total</u> | \$35,873,142.09 | \$2,434,411,386.67 | \$3,935,451,640.96 | \$1,501,040,254.29 | 61.86% |

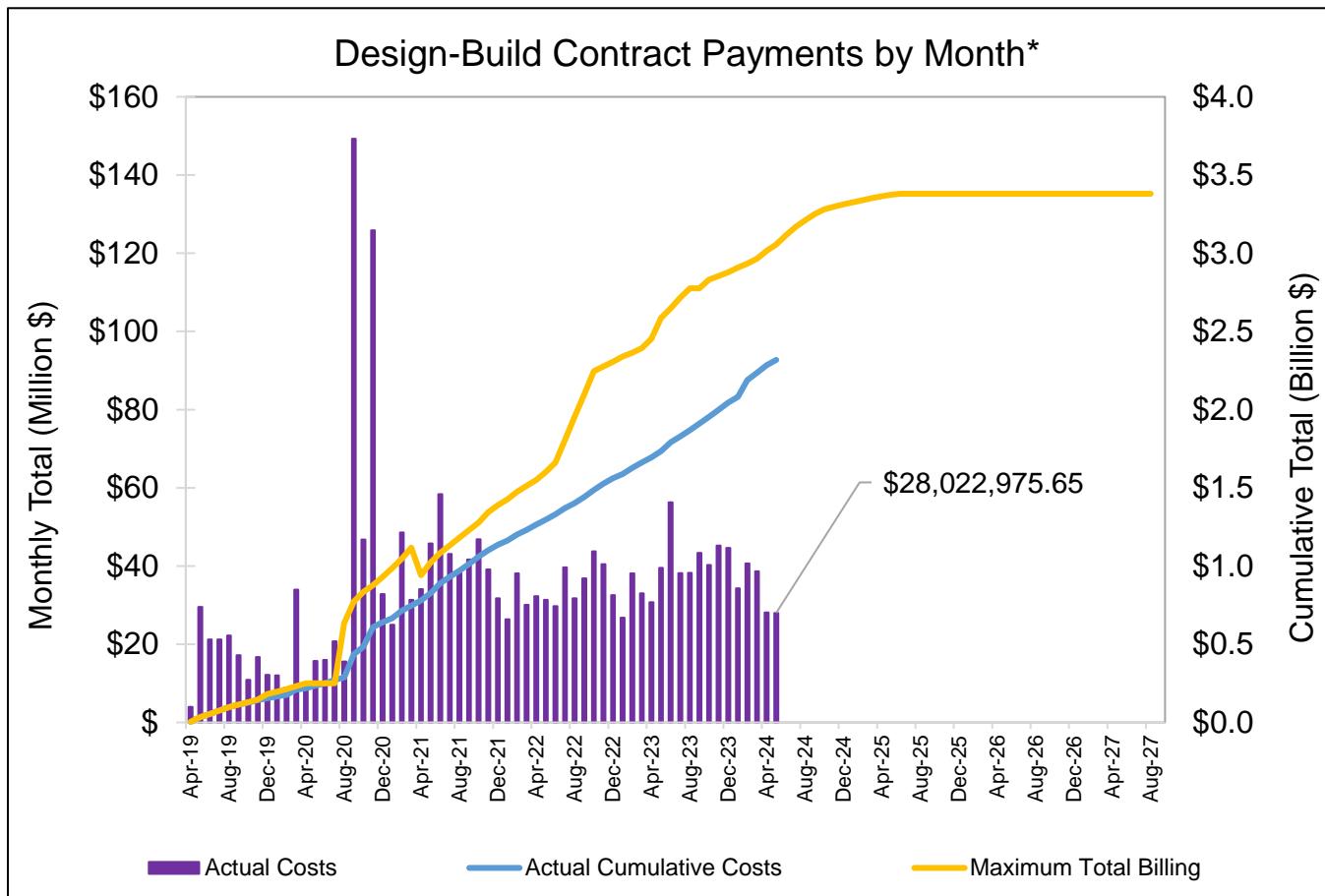


*The Maximum Total Billing showed an adjustment in May 2021 due to the executed Change Order #40 – Update Maximum Cumulative Cost Curve.

** 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.



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

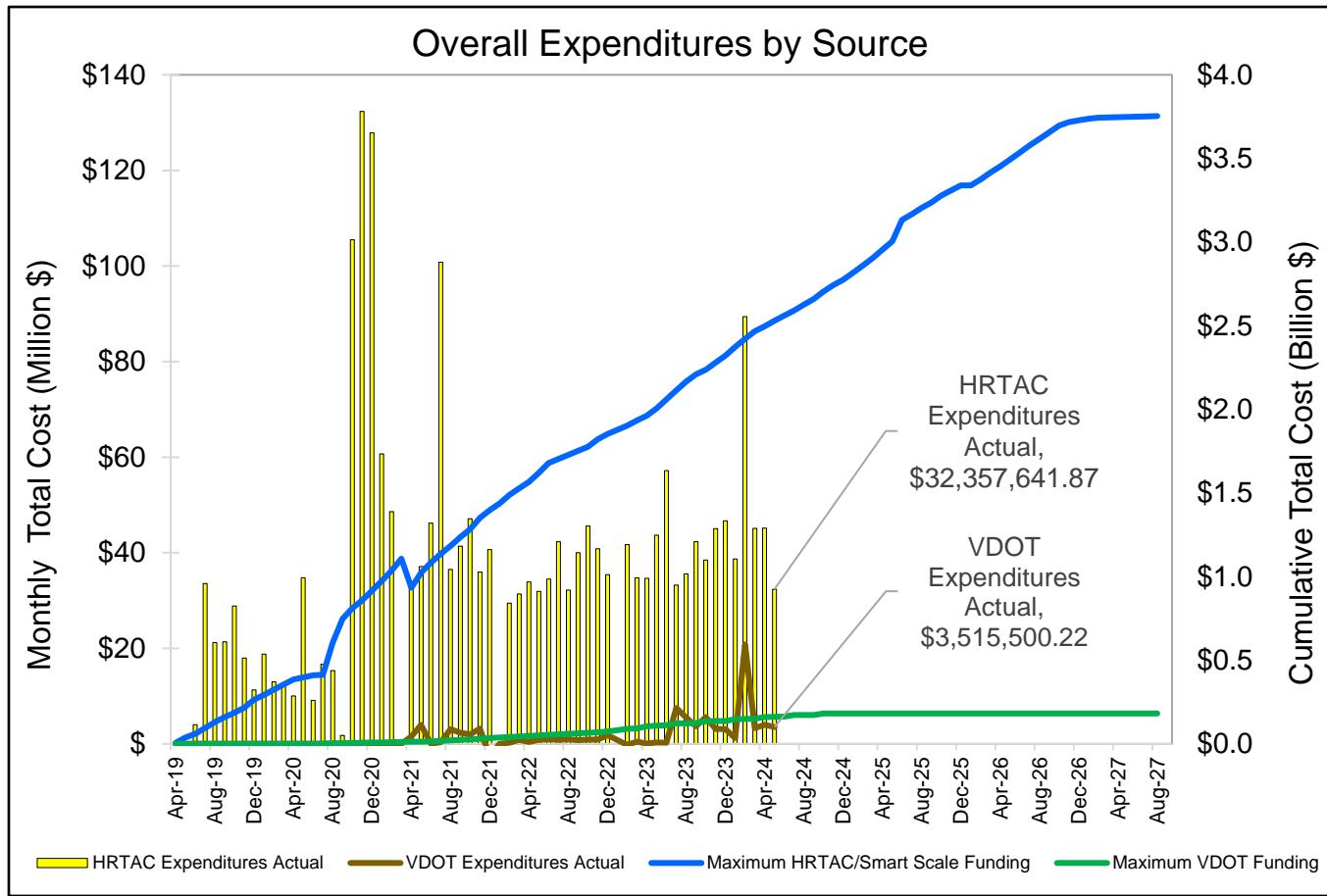
| | Amount Spent this Period: | Total Spent to Date: | Original Total Budget: | Total Remaining Budget: | Percent Spent To-date: |
|---------------------------------------|---------------------------|---------------------------|---------------------------|---------------------------|------------------------|
| <u>Comprehensive Agreement</u> | | | | | |
| Construction | \$26,401,093.94 | \$2,135,417,009.97 | \$3,204,569,251.00 | \$1,069,152,241.03 | 66.64% |
| <u>Owner Costs</u> | | | | | |
| Administration | \$1,719,212.81 | \$98,774,625.19 | \$118,472,054.00 | \$19,697,428.81 | 83.37% |
| Right of Way | \$10,054.65 | \$9,515,376.33 | \$15,000,000.00 | \$5,484,623.67 | 63.44% |
| No-Excuses Incentive | \$0.00 | \$0.00 | \$90,000,000.00 | \$90,000,000.00 | 0.00% |
| Contingency | \$4,227,280.47 | \$105,198,218.56 | \$325,428,276.00 | \$220,230,057.44 | 32.33% |
| Total | \$32,357,641.87 | \$2,348,905,230.05 | \$3,753,469,581.00 | \$1,404,564,350.95 | 62.58% |

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 | \$1,621,881.71 | \$47,619,216.91 | \$95,427,976.00 | \$47,808,759.09 | 49.90% |
| <u>Owner Costs</u> | | | | | |
| Administration | \$195,290.00 | \$4,323,456.00 | \$3,527,946.00 | (\$795,510.00)* | 122.55% |
| 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 | \$1,298,777.71 | \$27,359,650.53 | \$9,571,724.00 | (\$17,787,926.53)** | 285.84% |
| Bridge Repair Work Option | \$399,550.80 | \$6,203,833.18 | \$73,454,413.96 | \$67,250,580.78 | 8.45% |
| Total | \$3,515,500.22 | \$85,506,156.62 | \$181,982,059.96 | \$96,475,903.34 | 46.99% |

* 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-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-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 |
| | | TOTAL | \$ 79,109,698.61 | 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 | \$383.90 | \$161,202.99 | March 2024 |
| Exhibit 10 - Fuel | \$5,640.05 | \$476,516.46 | March 2024 |
| Exhibit 11 - Steel | \$290,376.47 | \$6,147,592.78 | November 2023 |
| Total | \$296,400.42 | \$6,785,312.23 | |
| Per CA Amendment Adjustments (Non-Federally Eligible Costs) | | | |
| Exhibit 9 - Asphalt | \$0.00 | \$0.00 | March 2024 |
| Exhibit 10 - Fuel | \$2,610.96 | \$33,863.72 | March 2024 |
| Exhibit 11 - Steel | \$311,437.25 | \$8,272,123.50 | November 2023 |
| Exhibit 10A – Fuel (Atypical Items) | \$8,229.69 | \$1,467,761.17 | March 2024 |
| Exhibit 15A – Index-Adjusted Commodities | \$2,756,951.05 | \$56,368,086.60 | November 2023 |
| Exhibit 15B – Escrow-Adjusted Commodities | \$0.00 | \$17,214,267.35 | March 2024 |
| Total | \$3,079,228.95 | \$83,356,102.34 | |

* 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 provided weekly inspection report summaries to the U.S. Army Corps of Engineers (USACE).
- HRCP initiated a permit modification request package that will be submitted to the Department of Environmental Quality (DEQ) for review and consideration to cover the TBM process water being managed by the North Island Water Treatment Plant.
- HRCP secured a subcontractor to begin installing wetland plantings and seed mix in areas of temporary wetland impact that require restoration.
- HRCP updated the Sediment Testing and Material Management Plan and forwarded it to the Corps and DEQ for review.
- HRCP secured the necessary nutrient credits from the Hampton Roads Sanitation District to satisfy the project's 2023 nutrient requirements.

Marine Mammal Protection:

- No new activities.

Bird Mitigation:

- HRCP continues upkeep on the bird deterrent measures and the dog patrolling of North Island, South Island, and Willoughby Spit.

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):

- Completed the North Trestle eastbound traffic shift on May 2, 2024.
- Continued construction of permanent I-64 median barrier wall between Mallory Street Bridge and North Trestle.
- Continued trench drain installation in the I-64 median south of Mallory Street Bridge.
- Continued placement of concrete slab at top of retaining wall 108 adjacent to North Trestle Abutment A.
- Completed asphalt placement at retaining wall 108 on I-64 at the North Trestle eastbound approach.
- Completed installation of parapet, light blisters, and lighting at retaining wall 108.
- Continued roadway widening at Entrance Ramp H at Mallory St. Bridge.
- Began and completed installation of asphalt along the median gate in Hampton.
- Continued Mallory St. Bridge approach work for Phase for Phase 1 bridge shift.

I-64 (Segment 3):

- Continued installation of base leveling pads and wall panels at retaining wall 302 on Bayville Street between 13th View and eastbound off ramp.
- Continued drainage work at 13th View Street.
- Continued formwork at retaining wall 308 EB between Willoughby Bay Bridge and 4th View.
- Completed placement of moment slabs for retaining walls 301 and 308.

I-64 (Segment 4):

- Continued fill for embankment at I-64 eastbound between 1st View and Bay Avenue.
- Began excavation for retaining wall 501 at Patrol Road eastbound on-ramp.



◀ **North Trestle**
Tie-In in Hampton
Asphalt work
complete at the
retaining wall 108
lanes

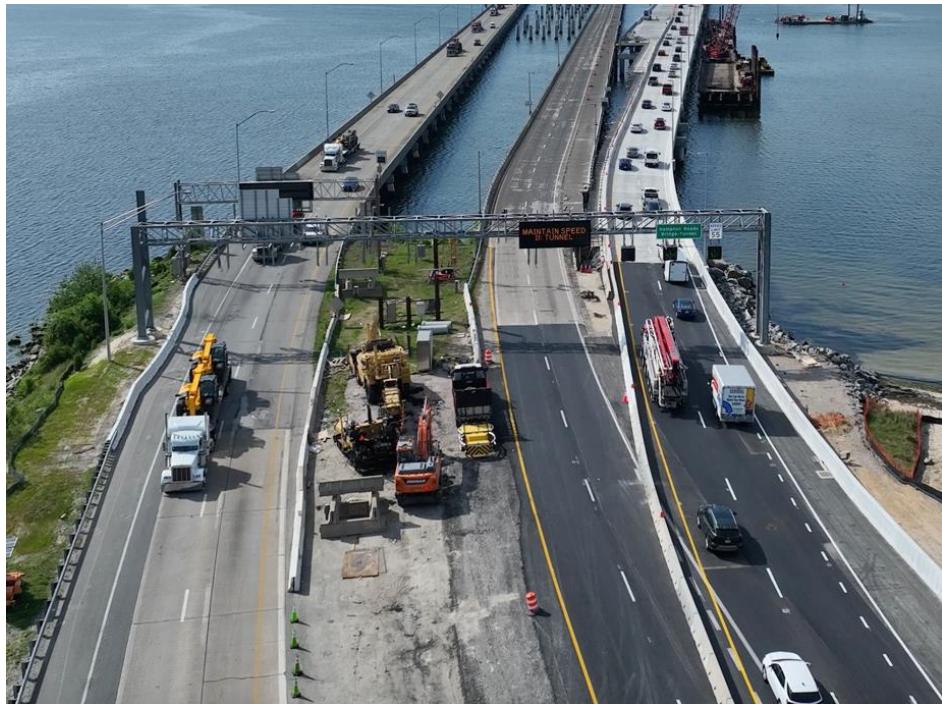
5.2 Construction Area 2: Marine Trestle Work

North Trestle:

- **Westbound Trestle**
 - 5 beams placed during this period (57 out of 280 total beams placed).
 - 1 cap placed during this period (12.5 out of 46 total caps placed).

South Trestle:

- **Eastbound Trestle**
 - 2.3 decks placed during this period (28.5 out of 53 total decks placed).
 - 5 piles driven during this period (326 out of 465 total piles driven).
- **HOT Lanes Trestle**
 - 7 piles driven during this period (66 out of 66 total piles driven).
 - 1 cap placed during this period (7 out of 16 total caps placed).



► North Trestle
Eastbound
Traffic Switch

5.3 Construction Area 3: Tunnels and Islands

South Island:

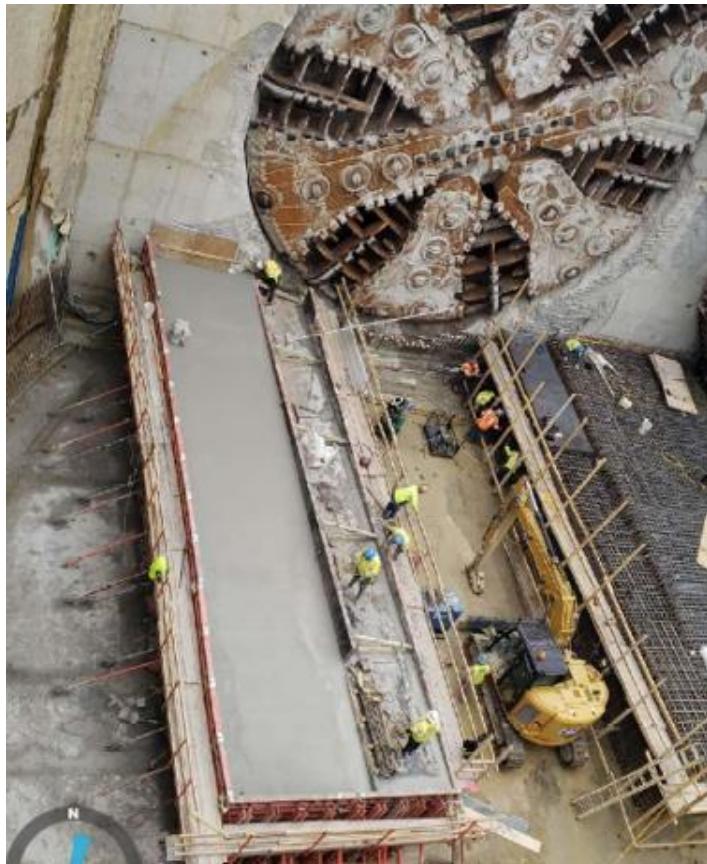
- 48% complete for south portal external walls.
- 10% complete for south portal internal walls.
- 43% complete for rectilinear approach permanent struts.

North Island:

- Completed installation of Cell 2 base slab with 4,090 CY of concrete placed.
- 26% complete for rectilinear approach permanent struts.
- 25% complete for rectilinear approach temporary struts.
- 19% complete for Cell 1 and 2 waterproofing.

Tunnel:

- 1 concrete tunnel ring installed this period (1,185 out of 1,191 total rings installed).
- 27% complete for stage 1 installation of cement-treated base (CTB) ballast for tunnel roadway.
- Completed placement of eastern shield cradle block for U-Turn operation.
- 50% complete for placement of center shield cradle block for U-Turn operation.



◀ North Island
Concrete pour for TBM
Cradle (east-side)

5.4 Construction Area 4: Landside Bridges

Mallory Street Bridge:

- Continued backfilling soil into area behind bridge abutments.
- Began installation of sleeper slab at Abutment B for eastbound widening.

Bayville/13th View St. Bridge:

- Completed excavation of Pier 2 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 deck concrete at Spans 3 – 4 for eastbound widening.
- Completed installation of girders at Spans 18 – 19 for westbound widening.

4th View Street Bridge:

- Completed lead abatement at Abutment A for eastbound and westbound widening.
- Continued Abutment B backfill for eastbound widening.

Mason Creek Bridge:

- Continued repair/rehabilitation of existing eastbound and westbound bridges.

1st View Street Bridge:

- Continued repair/rehabilitation of existing eastbound bridge.

Bay Avenue Bridge:

- Continued installation of mainline SIP deck forms and overhangs for eastbound widening.
- Continued driving piles at Pier 18 and 19 for eastbound widening.
- Completed installation of girders at Span 19 for eastbound widening.
- Completed placement of cap at Pier 18 for eastbound widening.

Oastes Creek Bridge:

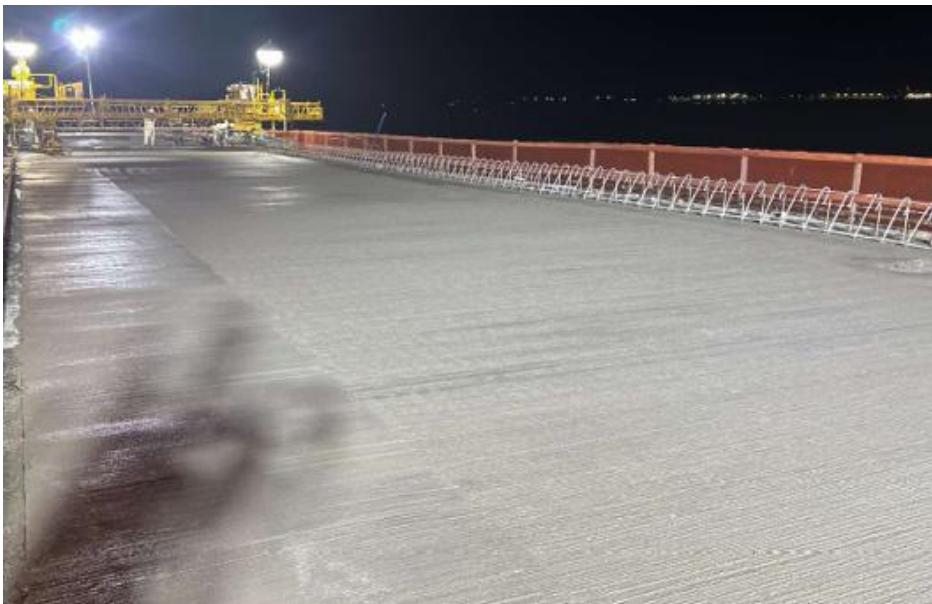
- Completed installation of concrete at Spans 1 – 2 for eastbound widening.
- Completed placement of light blisters for eastbound widening.
- Began and completed installation of Stay-in-Place deck formwork at Spans 17 – 18 for eastbound widening.

Patrol Road Bridge:

- Completed demolition of parapet at Abutment B for eastbound widening.



► **Mallory Street
Bridge Eastbound**
Approach slab work at
Abutment B



► **Willoughby Bay
Bridge Eastbound**
Spans 3 – 4 deck
concrete placed

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.
- Temporary lighting installation at Willoughby Bay Bridge.
- Striping maintenance throughout project corridor.
- All stops on I-64 at HRBT eastbound for ITS device installation.

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.

Hampton Lane Shifts:

- Major traffic shift onto the new Eastbound North Trestle occurred on May 2, 2024.

Norfolk Lane Shifts:

- Traffic shifted to opposite side of 4th View St. to facilitate continued bridge rehabilitation.
- Traffic shifted to opposite side of Patrol Road to facilitate continued bridge rehabilitation.

Detours:

- Long-term detour on Mason Creek Road to facilitate bridge widening.
- Overnight detour of westbound off ramp to W Bay Ave. for equipment demobilization.

Intelligent Transportation System (ITS):

- Relocation of ITS devices onto new overhead sign structure #12.
- Relocation of RCU-10 to support North Trestle traffic shift.
- Installation of ITS, Medium Voltage power, and private utility conduit on North Trestle.
- Permanent ITS duct bank installation in Segment 3D WB.
- Medium Voltage and TBM power relocation preparation at Southwest MOT trestle.

Overhead Sign Structures:

- Installation of overhead sign structure foundations at OHSS 51 and 52.
- Preparation for placement of uprights on OHSS 10 and 11.

Roadway Lighting:

- Continued temporary lighting installation on Willoughby Bay Bridge.

- Installation of lighting conduit and junction boxes at Willoughby Bridge and North Trestle.
- Permanent lighting installation on new North Trestle.
- Addressing maintenance of temporary lighting throughout the corridor.

Routine Maintenance:

- HRCP performed routine incident management / maintenance operations within corridor.

7. Quality

Quality updates for this reporting period include:

Construction Quality Management Plan (CQMP) Updates:

- HRCP submitted quarterly update V17 of the CQMP last period, this plan was returned to HRCP as Approved as Noted.
- VDOT reviews CQMP updates as part of final “Released for Construction” (RFC) design packages and “Notice of Design Change” (NDC) packages. One package was received this period and was returned to HRCP as Approved.

Design Quality Management Plan (DQMP) Updates:

- HRCP submitted quarterly update V20 of the DQMP, this plan was returned to HRCP as Approved.

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):

- HRCP submitted quarterly update V24 of the QMSP last period, the plan was returned to HRCP as Approved as Noted
- VDOT continues to engage HRCP in discussions on HRCP’s implementation of their QMSP and the effectiveness of the plan.

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 twenty-eight volumes of Material Book records and is currently auditing two 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 38 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

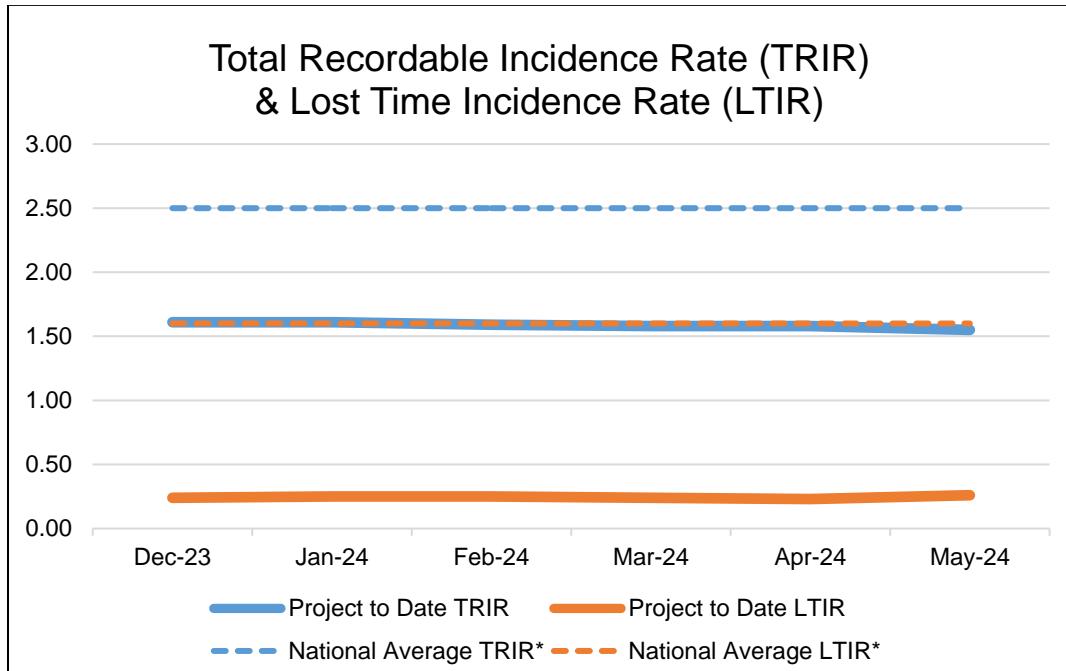
Safety procedures and activities during this reporting period include:

Safety Activities:

- HRCP held weekly Safety Walks at the North Island.
- HRCP held Fall Protection for Supervisors training.
- HRCP conducted a Man Overboard Drill in coordination with the Hampton Fire Department.
- HRCP implemented a Quality and Safety Inspection Program for Stay-in-Place Forms used for bridge deck construction.

Safety Performance Indicators:

- The following safety performance indicator information is provided by HRCP and is current as of May 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 **358** subcontracts, subconsultant agreements and purchase orders to certified DBE/SWaM firms. The contract awards remains at **\$556 million** due to no new contracts awarded for this period. A total of **\$421.5 million** has been paid for work completed by DBE/SWaM firms.

Compliance Activities:

- During this reporting period, HRCP and VDOT met on various occasions or exchanged information resulting from concerns reported about delayed payments to subcontractors and subconsultants. VDOT has hosted meetings with firms directly to understand their concerns. As a result, some resolutions have been reported by HRCP, but continued dialogue is needed to ensure full compliance with payment provisions established in the Comprehensive Agreement.

Workforce Development Activities:

- HRCP continued to make progress towards the OJT contract goal of 80 graduates. To date, 35 employees have graduated with 14 currently active in the program.
- May 1, 2024 – Hampton Roads Workforce Council's 3rd Annual Spring Regional Job Fair, Hampton
- May 7, 2024 – Women's Transportation Seminar (WTS) Hampton Roads Chapter's Diversity, Equity & Inclusion Luncheon, Chesapeake
- May 15, 2024 – City of Virginia Beach Human Services' Hiring Event

Business Development Activities:

- May 2, 2024 – City of Newport News, Connections to Contracts Procurement Forum
- May 7, 2024 – Virginia Department Small Business and Supplier Diversity's Small Business Symposium, Virginia Beach

10. Public Outreach & Media

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

Public Outreach

- April 24, 2024 – Project leadership presented project updates to the Virginia Peninsula Chamber of Commerce Board of Directors.
- May 9, 2024 – VDOT Hampton Roads District Administrator and HRBT Expansion Project Director presented progress updates to the project's regional stakeholders group (HRTAC, HRTPO, Port of Virginia, US Navy, US Coast Guard, Hampton University, City of Norfolk, City of Hampton, Federal Highway Administration, Hampton Roads Chamber of Commerce, Virginia Maritime Association, and Hampton VA Medical Center). HRCP leadership was in attendance.
- May 13, 2024 – Resident Engineer Todd Grifka attended the annual Geotechnical Community of Practice meeting at the Virginia Transportation Research Council in Charlottesville, VA and presented Project Information of interest.
- May 16, 2024 – Project leadership hosted a site visit for Pennsylvania Turnpike Commission Executive staff.
- May 18, 2024 - Hampton Roads District Engineer Chris Hall and HRBT Expansion Project Director Ryan Banas presented project updates to the Old Point Comfort Yacht Club at Fort Monroe, VA.

Media

- April 26, 2024 – (Daily Press) Drivers on I-64 East will soon divert to HRBT's newly opened bridge portion" <https://www.dailypress.com/2024/04/26/hrbt-update-eastbound-traffic-pattern-to-permanently-shift-on-i-64/>
- April 26, 2024 – (Yahoo) Major Hampton Roads Bridge-Tunnel traffic shift to start as early as May 1 https://www.yahoo.com/news/major-hampton-roads-bridge-tunnel-191542428.html?guce_referrer=aHR0cHM6Ly93d3cuYmluZy5jb20v&guce_referrer_sig=AQAAAQ79lr4P7rptBZOGF1hAK_U5nvtzcVO4Q2hc7890wNSm6ISMZCHbMXbUFiHTDjJNjIEO5VyF_vXkw5qJUBRn29IDtJ1pzXLiPtwDhoFrDB7LSh9rMcq0ObO7gy1dykV_sWn-V7ytmBjvtTN1zfyxHX4PdjifN7dqVPUNKLya85
- May 1, 2024 – (MSN) HRBT eastbound traffic shifts to new trestle, VDOT says <https://www.msn.com/en-us/autos/news/major-hrbt-eastbound-traffic-shift-postponed-when-is-it-taking-place/ar-AA1nZ8vO>
- May 2, 2024 – (Daily Press) Changes to I-64 East at the HRBT begin Thursday night <https://www.dailypress.com/2024/05/02/changes-to-i-64-east-of-the-hrbt-happen-tonight/>
- May 2, 2024 – (WTKR) New traffic pattern begins for HRBT drivers between Hampton and Norfolk <https://www.wtkr.com/transportation/new-traffic-pattern-begins-for-hrbt-drivers-between-hampton-and-norfolk>

- May 2, 2024 – (Williamsburg Yorktown Daily) UPDATE: New Traffic Pattern on I-64 East at HRBT Begins Tonight" <https://wydaily.com/news/regional-national/2024/05/02/vdot-expect-new-traffic-pattern-on-i-64-east-at-hrbt/>
- May 3, 2024 – (WAVY) Major HRBT traffic shift to start as early as Wednesday <https://www.wavy.com/video/major-hrbt-traffic-shift-to-start-as-early-as-wednesday/9653637/>
- May 3, 2024 – (MSN) HRBT's new bridge opened early Friday morning <https://www.msn.com/en-us/autos/news/hrbt-s-new-bridge-opened-early-friday-morning/ar-AA1o5mzm>
- May 3, 2024 – (Virginian Pilot) Changes to I-64 East at the HRBT begin Thursday night <https://www.msn.com/en-us/autos/news/changes-to-i-64-east-at-the-hrbt-begin-thursday-night/ar-AA1o3kF7>
- May 8, 2024 – (WTKR) Crews remind boaters to be aware of marine construction in Hampton Roads Harbor and Willoughby Bay <https://www.wtkr.com/news/in-the-community/hampton/crews-remind-boaters-to-be-aware-of-marine-construction-in-hampton-roads-harbor-and-willoughby-bay>

Lane Closures/Advisories

- April 23, 2024 – Traffic Shift on I-64 East at HRBT to begin as early as May 1
- April 26, 2024 – Weekly Lane Closure Report
- May 2, 2024 – Traffic Shift to New North Trestle on May 2, 2024
- May 3, 2024 – Weekly Lane Closure Report
- May 10, 2024 – Weekly Lane Closure Report
- May 17, 2024 – Weekly Lane Closure Report

Visit our website to view more information:

www.hrbtexpansion.org