



**June 2023
Monthly Project Report
I-64 HAMPTON ROADS
BRIDGE-TUNNEL
EXPANSION**

Report No. 51
Project No. 0064-M06-032



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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 May 21, 2023 – June 24, 2023. 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 Island concrete batch plant and pugmill at 95% complete.
- Tunnel Progress:
 - Excavated 286 ft and installed 43 permanent tunnel rings for High Occupancy Toll (HT) tunnel.
- North Island Progress:
 - Waterproofing of Cell 1 base slab at 73% complete.
 - Jet grout approach plug at 32% complete.
- Landside Progress:
 - Completed pile driving at Pier 1 at 1st View St. Bridge for westbound widening.
- Marine Progress:
 - North Trestle eastbound beams 66% complete.
 - North Trestle westbound piles 49% complete.
 - South Trestle eastbound beams 36% complete.
 - South Trestle westbound MOT piles 72% complete.

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 45 (data date: April 23, 2023), and the schedule information in this report reflects this update. Schedule 45 was returned Approved as Noted on June 8, 2023. Schedule Update 46 (data date: May 20, 2023) was returned Revise and Resubmit on June 15, 2023.

- Contractual Substantial and Final Completion Dates remain unchanged.
- HRCP's Schedule Update 45 is reporting Substantial Completion on September 18, 2026.
- HRCP's Schedule Update 45 is reporting Final Completion on November 17, 2026.

Project Budget

The project budget summary below now includes all incurred to date costs through June 24, 2023 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:	\$ 1,880,994,148
Remaining project budget:	\$ 2,054,457,493

- Design-build contract overview:

Design-build contract original amount:	\$ 3,299,997,227
Net change orders:	\$ (13,765,084)
Exercised Options:	\$ 73,454,414
Material Price Adjustments to Date:	\$ 2,692,982
Assessed Liquidated Damages (LD):	\$ (735,000)
Design-build contract sum to date:	\$ 3,361,644,539
Expenditures to date:	\$ 1,790,640,258
Remaining design-build contract amount:	\$ 1,571,004,281

- Design-build progress to date:

Project Management:	63.0%
Design:	90.9%
Physical Construction Progress:	35.3%
Overall:	53.3%

Environmental

Environmental updates for this reporting period include:

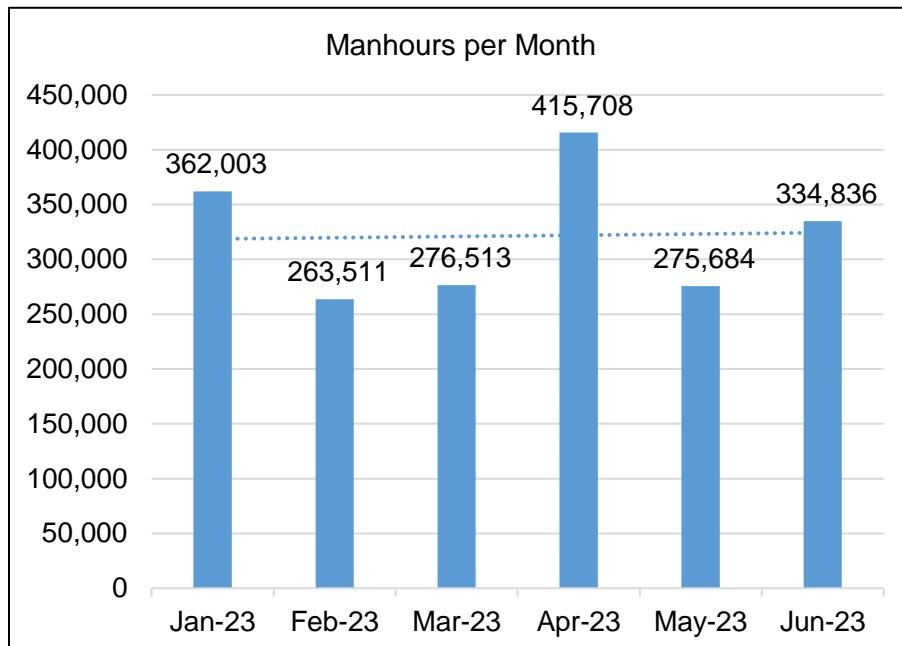
- USACE issued a Notice of Violation in response to the frequency of recent spills and sediment releases.
- HRSD conducted an inspection of the project's wastewater treatment plants.

Construction

Summary progress updates for this reporting period include:

- Landside Roadways
 - Continued roadway widening, drainage, and supporting construction throughout the project corridor.
 - Began installation of soundwall 3-3 along I-64 eastbound between 4th View St. and Mason Creek Rd.
- Marine Works
 - Placed beams at North eastbound permanent trestle (4 installed this period).
 - Drove piles at North westbound permanent trestle (18 installed this period).
 - Placed beams at South eastbound permanent trestle (55 installed this period).
 - Drove piles at South westbound MOT trestle (4 installed this period).
- Tunnels and Islands
 - 286 ft excavated this period (360 ft total excavation) for the High Occupancy Toll (HT) tunnel.
 - Completed installation of conveyor/quay mooring piles.
- Landside Bridges
 - Completed concrete placements for Pier 1 cap, Abutment A pedestal, and Abutment B pedestal for 4th View St. Bridge for eastbound widening.
 - Completed concrete placements for Pier 1 footing and Pier 2 footing and columns for 1st View St. Bridge for westbound widening.
 - Completed pile driving at Pier 1 at 1st View St. Bridge for westbound widening.
 - Completed demolition of parapet and deck overhang at 1st View St. Bridge for eastbound widening.
 - Began installation of jacking beams for repair/rehabilitation of existing Evans St. Bridge eastbound.
 - Began pile driving at Abutment B at Patrol Rd. Bridge for eastbound widening.

The number of construction manhours worked each month is provided by HRCP and is current as of June 30, 2023:



Project Manhours to Date:
7,961,308

Operations

During this reporting period, HRCP's operations resulted in three non-permitted closures which significantly impacted traffic on the I-64 corridor.

On June 15, 2023 VDOT issued a moratorium on future overnight lane closures until HRCP demonstrated satisfactory improvements to its management, planning, and execution of its operations with potential to impact the traveling public. VDOT also imposed the contractually-stipulated amounts of liquidated damages for these non-permitted closures.

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 June 30, 2023:

- Total Recordable Incidence Rate: 1.58 (National Average: 2.5)
- Lost Time Incidence Rate: 0.20 (National Average 1.6)

Civil Rights & DBE/SWaM Business Opportunities

HRCP has awarded **334** subcontracts, subconsultant agreements, and purchase orders to certified DBE/SWaM firms on the project. These contract awards represent a total of **\$522.3 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:

- Project team released a new HRBT Tunnel Talk podcast: "Environmentally Speaking".
- Project team presented to the Hampton Roads Chamber Regional Board of Directors.

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 45 (data date: April 23, 2023), and the schedule information in this report reflects this update. Contractual Substantial and Final Completion dates remain unchanged.

	Contract Requirement	May 2023 Schedule	Actual
NTP		Sep 11, 2020	Sep 11, 2020
Substantial Completion	Sep 1, 2025	Sep 18, 2026	
Final Completion	Nov 1, 2025	Nov 17, 2026	

2.2 Longest Path

The longest path/critical path in Project Schedule Update 45 is driven by the following activities:

- TBM drive in High Occupancy Toll Tunnel
- TBM U-Turn on North Island
- TBM drive in General Purpose Tunnel
- TBM Disassembly in south pit
- General Purpose Tunnel Interior Fit Out – Section 8
- General Purpose Egress Corridor – Fire Life Safety System
- Commissioning - General Purpose Tunnel – Functional Testing
- 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 Schedule Update 45.

South Portal

- South Portal – Rectilinear Approach Capping Beams – Phase 3
- South Portal – Rectilinear Approach Permanent Structures
- South Portal Cell 1 & 2 Permanent Structures – Exterior Walls, Interior Walls & Slabs, Roof Slabs

South Island

- South Island – Slurry Treatment Plant – Spoil Walls
- South Island – Additional Conveyor and Quay Mooring Piles and Fenders
- South Island – Temporary Private Utilities (Verizon & VDOT/Cox)
- South Island Buildings – Ventilation Building, Inspection Booths, Generator Building, and Fuel & Water Tanks

Tunneling

- Tunneling – Final – Gantry 4 Assembly
- General Purpose Tunnel – Interior Structures Construction

North Portal

- North Portal – Cell 1 and 2 Excavation
- North Portal – Temporary Headwall Construction
- North Portal Cell 1 & 2 Permanent Structures – Exterior Walls, Interior Walls & Slabs

North Island

- North Island Buildings – Generator, Fuel & Water Tanks, Inspection Booth, Garage Building, Ventilation Building, and Flood Gate House Building
- North Island Restoration – Utilities, Paving, Civil Finishes, Signage and Pavement Markings

Roadway and Land Bridges

- Segment 1 Phase 1 – I-64 North Shore Roadway, Waterline Relocation, Drainage, and RW108
- Segment 1 – Shore Feeder Medium Voltage Cable Relocation
- Segment 1, 3, 3b, 3d, & 4 – ITS – Lane Use Signals, Overhead Sign Structure, Dynamic Messaging Sign, and Overheight Detector
- Segment 3b Phase 1, 2, 2A, 3A, 4 – I-64 Willoughby Spit PV Drains/Ground Improvement, Retaining Walls, Drainage, Roadway, and Temporary Lighting
- Segment 3b Rockfish Substation
- Segment 3b Phase 4 – 13th Avenue Ramp C & F Construction
- Segment 3d Phase 1, 2, 2A, 3 & 4 – Willoughby Bridge to Mason Creek – Median Widening, Retaining Walls, Storm Drainage and Roadway
- Segment 3d 4th View Ramp H & I – Surcharge and Ramp Construction
- Segment 4 Phase 2, 2A, 3, 4, 4A – Norfolk to Navy – Median Widening, Retaining Walls, Storm Drainage, and Roadway
- Mallory Bridge – Phase 1 & 2
- 13th Avenue Bridge – EB Abutment A

- Willoughby Bay Bridge – Eastbound/Westbound Superstructure Construction, Westbound Rehabilitation

Trestles

- North Trestle Utilities – Eastbound Temporary MV/ITS Utility and Permanent ITS/SCADA/Fire Alarm, Westbound Conduits & Hangers and Permanent Wet Utilities
- North Trestle Eastbound – Zone 1 – Abutment A, Superstructure Construction
- North Trestle Westbound – Zone 7, 8, 9, and 10 – Substructure/Superstructure Construction
- North Trestle – Eastbound and Westbound Demolition
- South Island Expansion – Marine Works, Land Works, and Island Expansion
- South Trestle Utilities – Eastbound Private Utility Relocation and Westbound Private Utilities and ITS/SCADA/Fire Alarm System
- South Trestle – Eastbound Zone 1, 2, and 5 Superstructure Construction
- South Trestle – Westbound Zone 7, 8, and 9 – Abutment D, Substructure and Superstructure Construction
- South Trestle – Existing Trestle Demolition

Commissioning and Integration

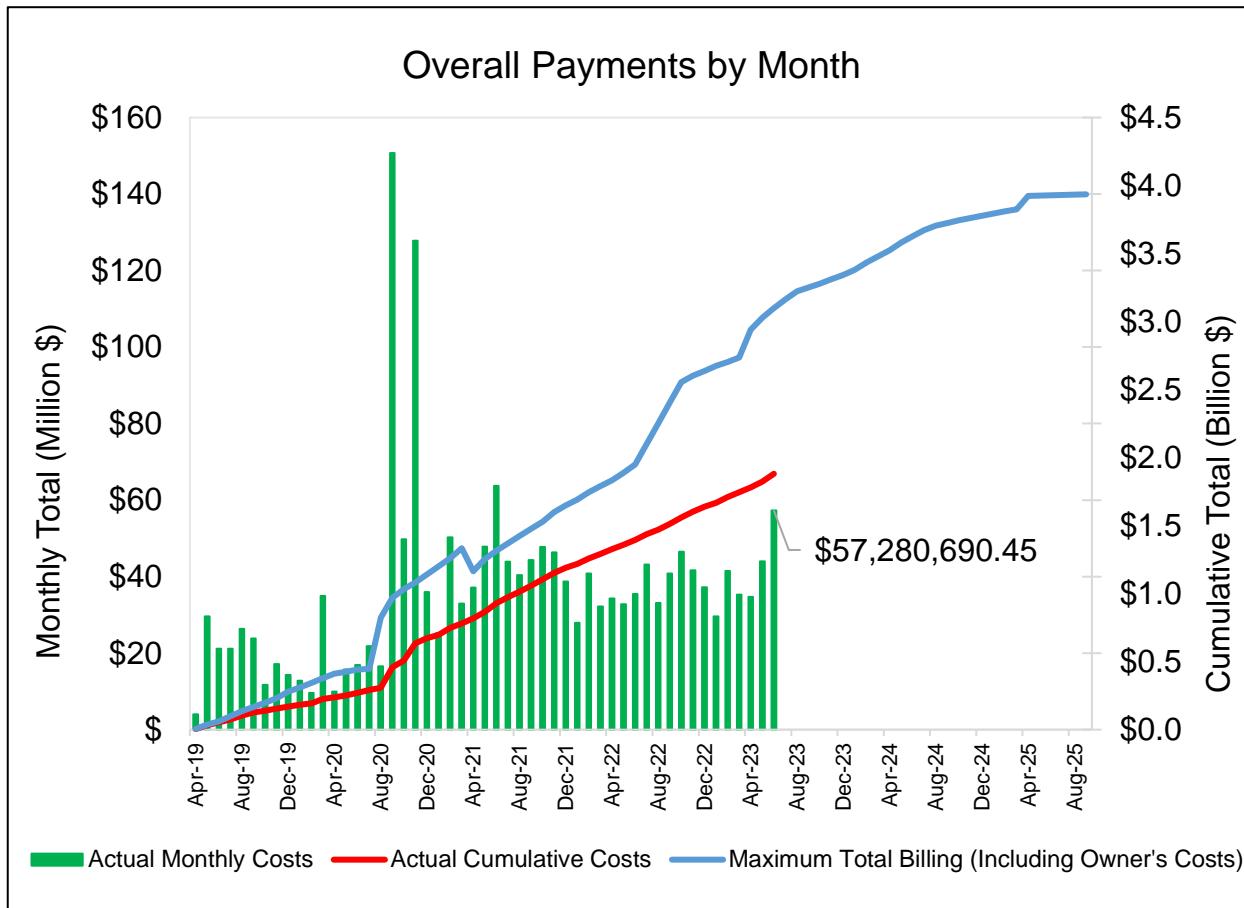
- General Purpose Tunnel – Functional Testing – Low Point Pump Station Drainage, Fire Suppression and Detection, Booster Fans, Lighting
- North Island Buildings – Functional Testing – Mechanical Pressurization
- South Island Buildings – Functional Testing – Electrical Medium Voltage/Low Voltage
- Commissioning – Operational Testing – General Purpose Fire System, General Purpose Medium Voltage/Low Voltage, General Purpose Drainage System

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).

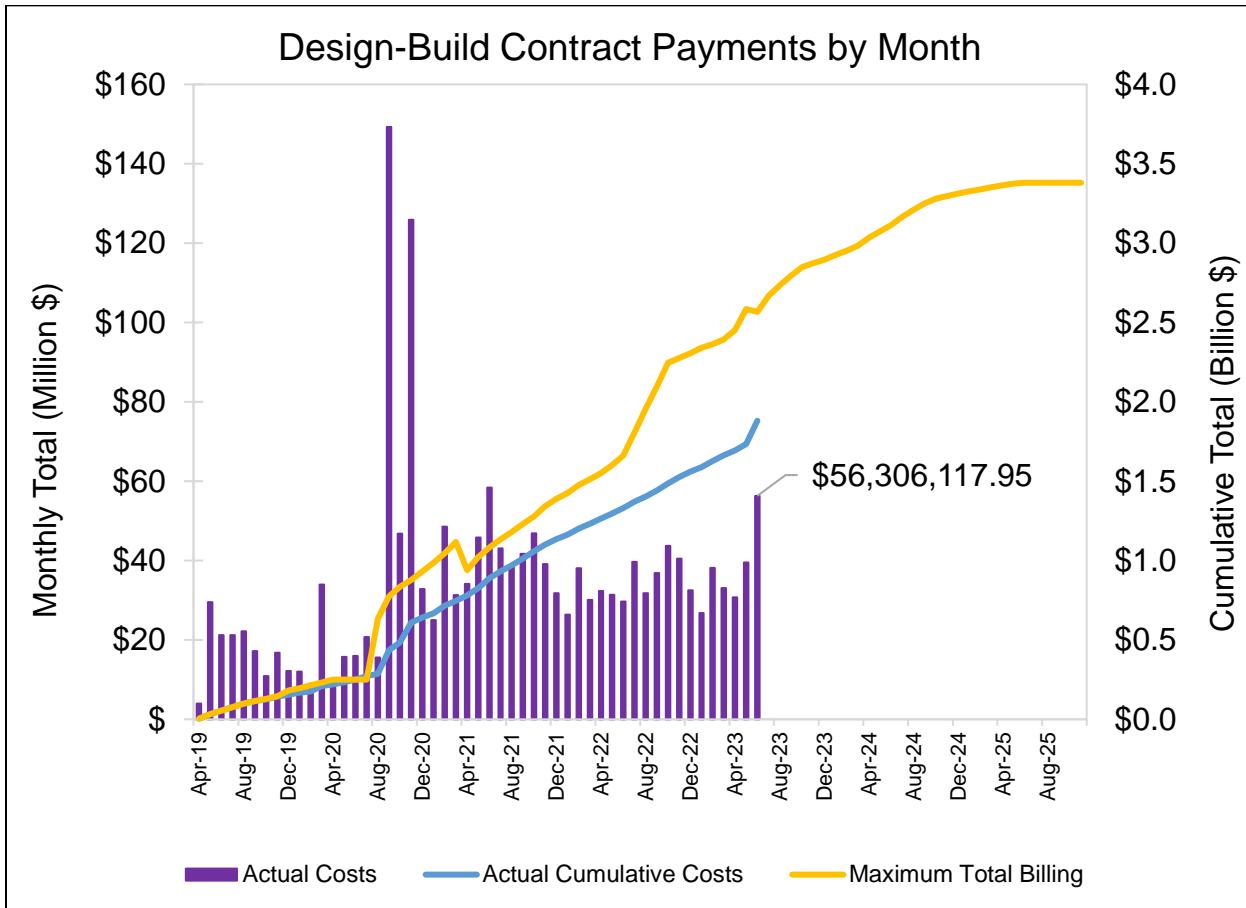
	Amount Spent this Period:	Total Spent to Date:	Original Total Budget:	Total Remaining Budget:	Percent Spent To-date:
<u>Comprehensive Agreement</u>					
<i>Construction</i>	\$56,306,117.95	\$1,763,454,894.62	\$3,299,997,227.00	\$1,536,542,332.38	53.44%
<u>Owner Costs</u>					
<i>Administration</i>	\$567,897.40	\$77,562,096.67	\$122,000,000.00	\$44,437,903.33	63.58%
<i>Right of Way</i>	\$19,436.95	\$8,791,793.21	\$15,000,000.00	\$6,208,206.79	58.61%
<i>No-Excuses Incentive</i>	\$0.00	\$0.00	\$90,000,000.00	\$90,000,000.00	0.00%
<i>Contingency</i>	\$343,208.95	\$26,624,664.04	\$335,000,000.00	\$308,375,335.96	7.95%
<i>Bridge Repair Work Option</i>	\$44,029.20	\$4,560,699.66	\$73,454,413.96	\$68,893,714.30	6.21%
<u>Total</u>	\$57,280,690.45	\$1,880,994,148.20	\$3,935,451,640.96	\$2,054,457,492.76	47.80%



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

3.3 Budget by Funding Source

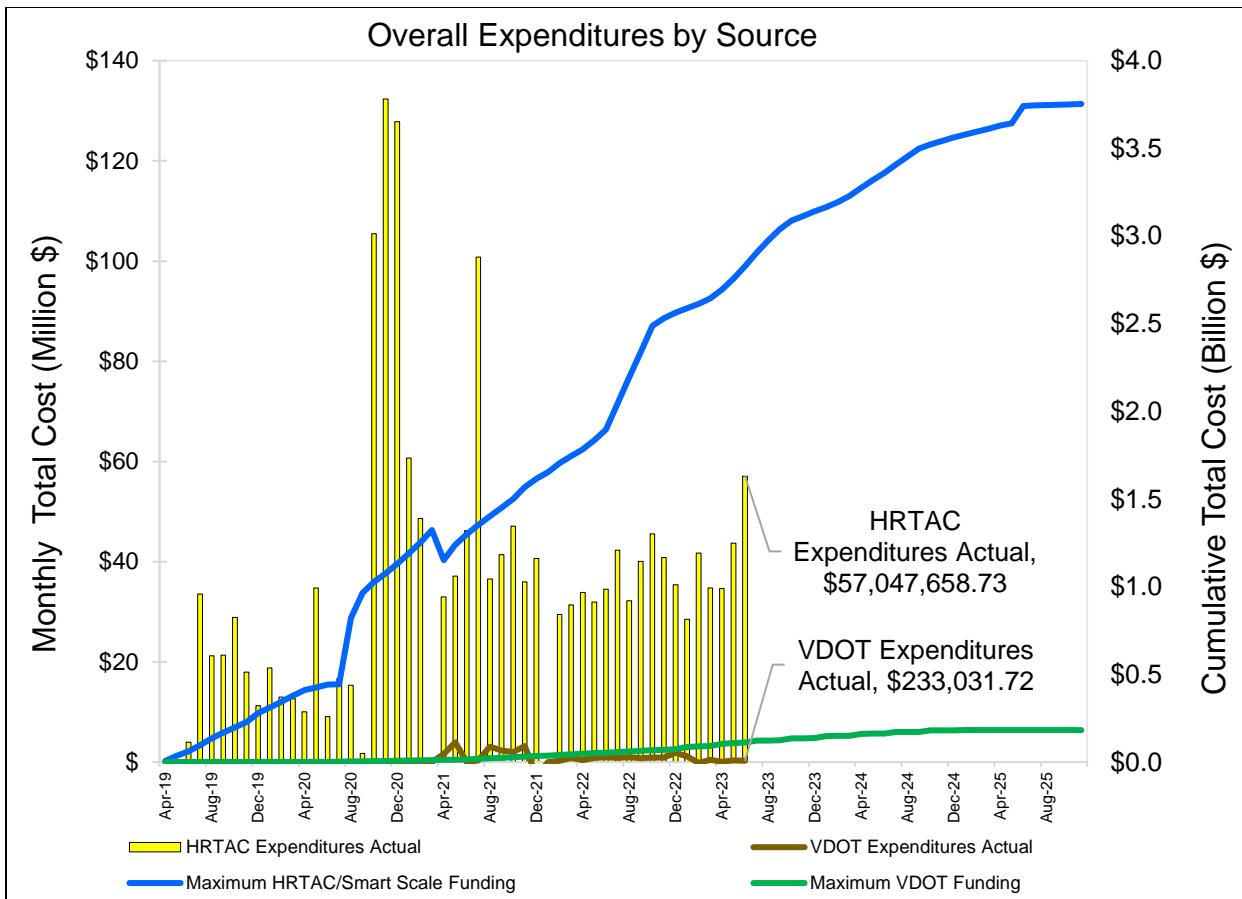
The budget for expenditures by funding source is based on the terms and conditions of Article 3 (Project Funding) and Exhibit 5 of the PAFA. This section outlines planned expenditures of both HRTAC and VDOT funds. The cost curve has been developed based on the monthly maximum cumulative compensation amount in the Comprehensive Agreement and will be updated as 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:
Comprehensive Agreement					
<i>Construction</i>	\$56,174,575.69	\$1,747,368,434.93	\$3,204,569,251.00	\$1,457,200,816.07	54.53%
Owner Costs					
<i>Administration</i>	\$540,020.40	\$75,227,695.67	\$118,472,054.00	\$43,244,358.33	63.50%
<i>Right of Way</i>	\$19,436.95	\$8,791,793.21	\$15,000,000.00	\$6,208,206.79	58.61%
<i>No-Excuses Incentive</i>	\$0.00	\$0.00	\$90,000,000.00	\$90,000,000.00	0.00%
<i>Contingency</i>	\$313,625.69	\$25,511,211.50	\$325,428,276.00	\$299,917,064.50	7.84%
Total	\$57,047,658.73	\$1,856,899,135.31	\$3,753,469,581.00	\$1,896,570,445.69	49.47%

3.3.2 VDOT

	Amount Spent this Period:	Total Spent to Date:	Original Total Budget:	Total Remaining Budget:	Percent Spent To-date:
Comprehensive Agreement					
<i>Construction</i>	\$131,542.26	\$16,086,459.69	\$95,427,976.00	\$79,341,516.31	16.86%
Owner Costs					
<i>Administration</i>	\$27,877.00	\$2,334,401.00	\$3,527,946.00	\$1,193,545.00	66.17%
<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>	\$29,583.26	\$1,113,452.54	\$9,571,724.00	\$8,458,271.46	11.63%
<i>Bridge Repair Work Option</i>	\$44,029.20	\$4,560,699.66	\$73,454,413.96	\$68,893,714.30	6.21%
Total	\$233,031.72	\$24,095,012.89	\$181,982,059.96	\$157,887,047.07	13.24%



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-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-71	Addendum to WO-24 Water Supply Line	4/25/2023	\$ -	0 days
		TOTAL	\$ 59,689,330.44	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
Asphalt	\$ 0.00	\$ 57,044.28	April 2023
Fuel	\$ 17,839.18	\$ 301,267.62	April 2023
Steel	\$ 33,994.28	\$ 2,334,669.86	December 2022
Total	\$ 51,833.46	\$ 2,692,981.76	

4. Environmental

The following environmental management activities occurred during this reporting period:

Permits:

- HRCP met with DEQ to discuss resolution of the May 24, 2023 Notice of Violation. DEQ intends to issue a draft Consent Order for HRCP review.
- USACE issued a Notice of Violation in response to the frequency of recent spills and sediment releases.
- HRSD conducted an inspection of the project's wastewater treatment plants.
- HRCP provided a response to DEQ on comments made to a DEQ Wastewater Treatment Plant VPDES inspection report.
- VMRC requested additional information related to JPA permit modification request #10.

Marine Mammal Protection:

- No new activities.

Bird Mitigation:

- HRCP and continued patrolling with dogs on South Island, North Island, and Willoughby Spit.

Programmatic Agreement:

- No new activities.

Archeological Discoveries:

- No new activities.

Protected Species:

- HRCP submitted the revised Northern Long-Eared Bat consultation package to the U.S. Fish and Wildlife Service (USFWS). The consultation package is in review with USFWS.

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):

- Drainage work in I-64 median in Hampton.

I-64 (Segment 3):

- Began installation of soundwall 3-3 along I-64 eastbound between 4th View St. and Mason Creek Rd.
- Subgrade preparation in median between 15th View St. and 13th View St. for westbound widening.
- Drainage installation near Willoughby Bay Bridge Abutment A for eastbound widening.
- Began installation of surcharge for retaining wall 308 adjacent to Willoughby Bay Bridge Abutment B.
- Drainage installation along I-64 on and off ramps at 4th View St. for eastbound widening.
- Permanent roadway barrier installation in the median between Willoughby Bay and 4th View St. for eastbound widening.

I-64 (Segment 4):

- Completed installation of panels for retaining wall 405 adjacent to Evans St. Bridge Abutment A.



► Soundwall Work
in Norfolk
Post installation for
Soundwall 3-3

5.2 Construction Area 2: Marine Trestle Work

North Trestle:

- **Eastbound Trestle**
 - 4 beams placed this period (196 out of 296 beams placed).
 - 1 deck placed this period (23 out of 36 decks placed).
- **Westbound Trestle**
 - 18 piles driven during this period (129 out of 261 total piles driven).
 - 5 beams placed this period (32 out of 281 total beams placed).
 - Partial cap placed during this period (5.5 out of 46 total caps placed).

South Trestle:

- **Eastbound Trestle**
 - 1.5 decks placed during this period (2 out of 69 total decks placed).
 - 55 beams placed during this period (252 out of 698 total beams placed).
 - 18 piles driven during this period (315 out of 531 total piles driven).
- **Westbound Trestle MOT**
 - 4 piles driven during this period (77 out of 107 total piles driven).
 - 5 caps placed during this period (11 out of 24 total caps placed).
- **HOT Lanes Trestle**
 - 1 cap placed during this period (3 out of 16 total caps placed).



◀ **North Trestle**
Westbound
Completed Bent 26 pile group

5.3 Construction Area 3: Tunnels and Islands

South Island:

- Completed installation of conveyor/quay mooring piles.
- 95% complete for installation of concrete batch plant and pugmill.
- 35% complete for approach capping beams (285 ft of 811 total ft installed).
- Began work on structural walls inside tri-cell shaft.

North Island:

- 32% complete for jet grout plug at approach section (400 of 1249 total columns).
- 73% complete for waterproofing at Cell 1 of receiving shaft.
- Began rebar installation for headwall at Cell 1 of receiving shaft.

Tunnel:

- 74% complete for precast tunnel segment liner production.
- 3.6% complete for High Occupancy Toll (HT) tunnel excavation (286 ft out of 7940 total ft excavated).
- 38 concrete tunnel rings installed this period (43 out of 1194 total rings installed).
- Completed installation of South Island precast ballast elements inside tunnel.



◀ **HT Tunnel**
Tunnel view
looking towards
front of TBM

Total Segments Required:	Conforming Segments Cast To-Date:	Percentage Complete:
21,492	15,904	74%

5.4 Construction Area 4: Landside Bridges

Mallory St Bridge:

- Began excavation and support-of-excavation work for retaining wall 105 at Abutment B.

Willoughby Bay Bridge:

- Continued installation of deck forms and overhangs for eastbound widening.
- Continued installation of diaphragm rebar and formwork for eastbound widening.
- Continued repair/rehabilitation of existing eastbound bridge.
- Continued setting girders for eastbound widening.

Mason Creek Bridge:

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

1st View Street Bridge:

- Completed pile driving at Pier 1 for westbound widening.
- Completed concrete placements for Pier 1 footing and Pier 2 footing and columns for westbound widening.
- Completed demolition of parapet and deck overhang for eastbound widening.

Bay Avenue Bridge:

- Phase 2A demolition of existing ramp/gore area for eastbound widening.

Evans St Bridge:

- Began installation of jacking beams for repair/rehabilitation of existing eastbound bridge.

Bayview Boulevard Bridge:

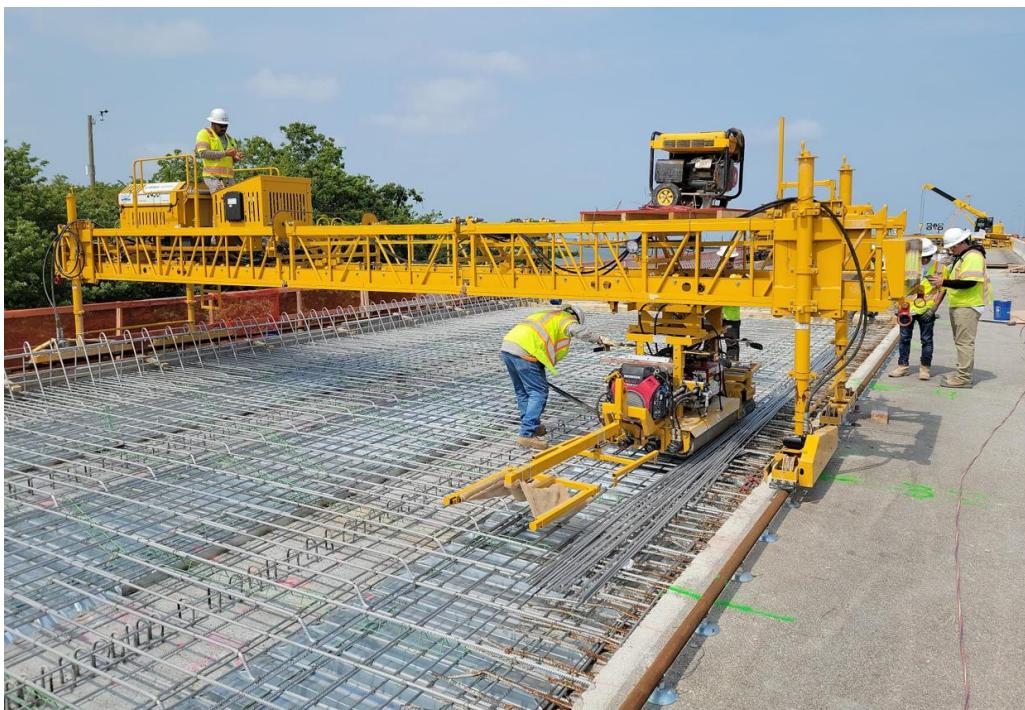
- Continued repair/rehabilitation of existing eastbound and westbound bridges.

Oastes Creek Bridge:

- Continued forming, reinforcing, and placing concrete for diaphragms and bridge decks for eastbound widening.
- Continued repair/rehabilitation of existing eastbound bridge.

Patrol Road Bridge:

- Began driving piles at Abutment B for eastbound widening.



► **Willoughby Bay Bridge Eastbound**
Performing dry run of screed machine for finishing concrete prior to placement of bridge deck



► **Oastes Creek Bridge Eastbound**
Installation of bridge deck reinforcing steel

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:

Non-Permitted Lane Closures:

HRCP's operations resulted in three non-permitted closures which significantly impacted traffic on the I-64 corridor:

- June 8, 2023 – HRCP did not timely remove its overnight lane closure, which caused a non-permitted lane closure between 5:00 a.m. and 5:50 a.m.
- June 14, 2023 – HRCP was responsible for material spillage on I-64 eastbound, which caused a non-permitted interstate closure between 3:00 a.m. and 5:00 a.m.
- June 15, 2023 – HRCP did not timely remove its overnight lane closure, which caused a non-permitted lane closure between 5:00 a.m. and 6:59 a.m.

On June 15, VDOT issued a moratorium on future overnight lane closures until HRCP demonstrated satisfactory improvements to its management, planning, and execution of its operations with potential to impact the traveling public. Following extensive reviews and discussions, HRCP provided acceptable evidence of systematic improvements to its processes, and the moratorium was lifted shortly after the close of this reporting period.

Short-Term Lane Closures:

- Willoughby Bay Bridge, North Trestle, and South Trestle eastbound to facilitate ongoing beam placement as well as concrete placement for piles, caps, and decks.
- North Trestle and South Trestle westbound for concrete pours.
- North Trestle and South Trestle for temporary conduit installation.
- Temporary stoppage for sign structure removal eastbound at Hampton north shore.
- Striping maintenance throughout project corridor.

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.

Hampton Lane Shifts:

- No new activities.

Norfolk Lane Shifts:

- No new activities.

Detours:

- Short-term detour at West Bay Ave. westbound I-64 off ramp for ITS installation.
- Long-term detour at West Evans St. to facilitate bridge widening.
- Long-term detour on West Bay Ave. on-ramp to eastbound I-64 for bridge widening.
- Long-term detour on 1st View St. to facilitate bridge widening.

Intelligent Transportation System (ITS):

- Installation of ITS and private utility conduit on the North and South Trestles.
- Relocation of ITS power and communications at South and North Shore.
- Removal of sign structure at North Shore.
- Relocation of camera, ITS power, and communications at Bay Ave.
- Relocation of Traffic Operations Center ITS fiber trunk line at Mallory St.

Routine Maintenance:

- HRCP performed routine incident management / maintenance operations within corridor.
- HRCP continued removing raised pavement markers throughout 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. There were 3 NDC updates reviewed this period. These updates included specific testing and inspection plans for the work shown in the corresponding RFC plans and a staffing matrix showing quality assurance and quality control staffing for the work.

Independent Assurance (IA) Testing Activities:

- VDOT continues to monitor HRCP’s QA and QC material testing. VDOT 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 and Technopref’s precast yard in Cape Charles producing the tunnel lining segments.

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, which is updated quarterly.

Quarterly Updates of Quality Plans:

- HRCP resubmitted the quarterly updates of the Quality Management System Plan (QMSP), Construction Quality Management Plan (CQMP), and the Design Quality Management Plan (DQMP) for the first quarter of 2023. The DQMP review is complete. HRCP recalled and resubmitted the quarterly updates of the QMSP and CQMP and VDOT has begun the review of these revisions.

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 fourteen 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 51 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

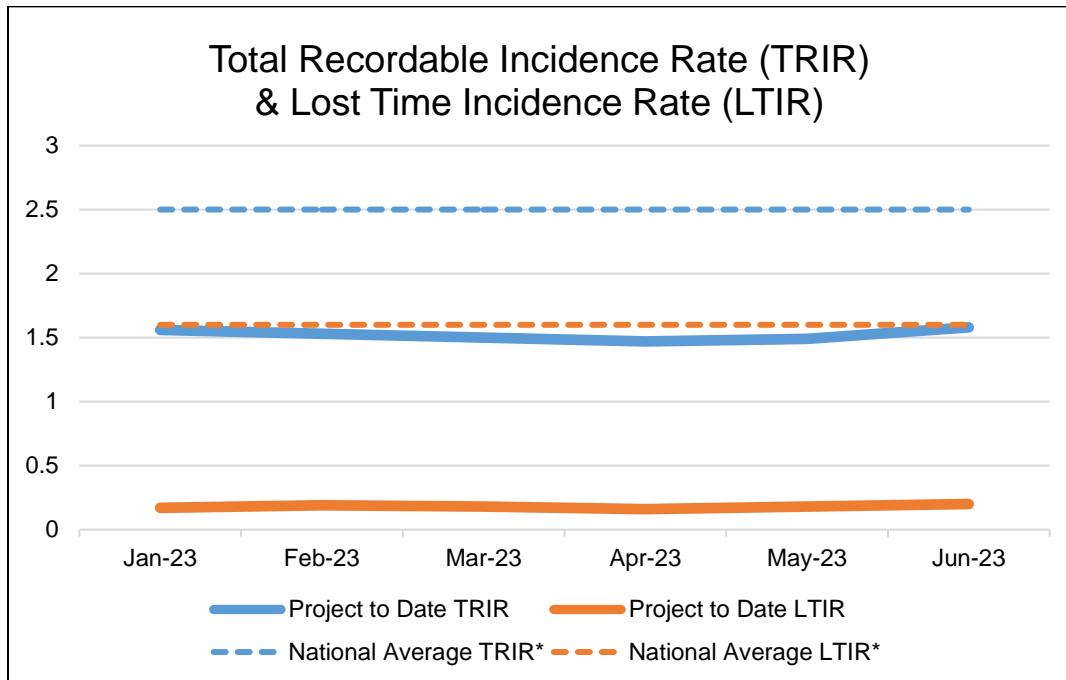
Safety procedures and activities during this reporting period include:

Safety Activities:

- VDOT continued to conduct routine visits to promote safe work practices throughout the project.
- First Responders meeting with the Hampton and Norfolk Fire Departments was conducted on June 14, 2023.

Safety Performance Indicators:

- The following safety performance indicator information is provided by HRCP and is current as of June 30, 2023:



**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 **334** subcontracts, subconsultant agreements and purchase orders to certified DBE/SWaM firms. There was a slight increase in contract awards for a total of **\$522.3 million** due to newly issued change orders issued to active DBE/SWaM firms on the project.

Compliance Activities:

- HRCP and VDOT Civil Rights Work Group met on June 20, 2023 for the monthly project and compliance update. Discussion included the submission of change orders to reflect contract scope and value modifications along with the status of outstanding invoice payments to the Design Joint Venture for subconsultants.

Workforce Development Activities:

- HRCP continued to make progress towards the 80 participant On-the-Job Training (OJT) contract goal. To date, 32 participants have completed all required training hours to graduate from the OJT program. There are currently 10 candidates active in the training program. Trades include carpenters, welders, field supervisors, excavator operators, pile drivers, mechanics, and skilled laborers.
- HRCP was encouraged to revisit its plan for increasing participation in the program during critical hiring periods of the project.

Business Development Activities:

- During this reporting period, business development and outreach activities included:
 - May 23, 2023 – Virginia Asian Chamber of Commerce (VACC), Small Business Roundtable for 757
 - June 2, 2023 – Black Brand Chamber of Commerce, Community Business Academy
 - June 14, 2023 – VACC Certifications for Contracting
 - June 23, 2023 – COMTO Bowl Fundraiser & Networking Event
- The HRBT project was featured in the American DBE Magazine, 2023 Issue 1, reporting an update on over \$500 million of DBE and SWaM contract awards. Several project DBE firms were also highlighted, including United Steel, RBA Engineering International, and Geotechnical Innovation.

The issue featured a separate article on Hugh Blackwell, owner of Blackstar Diversified Enterprises and a certified DBE electrical distribution and traffic control systems integrator, employed on the HRBT project as a subcontractor to HRCP.

- The article can be found at
https://issuu.com/americanbemediakit/docs/american_dbe_-_2023_issue_i.



HRBT EXPANSION PROJECT ACHIEVES MILESTONE

Awards More Than \$500 Million In Contracts to Small Businesses

The Hampton Roads Bridge-Tunnel (HRBT) Expansion Project recently achieved a major milestone by awarding a cumulative total of more than \$500 million in contracts to Virginia-certified Disadvantaged Business Enterprises (DBE) and Small, Women, and Minority (SWaM) vendors working on the project.

"Our project team is extremely proud of its DBE and SWaM vendor contributions, and we thank the efforts and collaboration of VDOT's Civil Rights Office, the City of Virginia Beach, and VDOT's Hampton Roads District Civil Rights Manager on reaching this historic milestone," says Juan Miguel Pérez, HRBT Expansion Project Executive for Hampton Roads Connector Partners, the design-build contractor of the HRBT Expansion Project.

■ ■ ■

22 AMERICAN DBE / 2023 - ISSUE 1



OVER \$500 MILLION AWARDED

To Virginia Disadvantaged Business Enterprise (DBE) and Small, Women and Minority (SWaM) firms since April 2019.

DRAGADOS USA

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FLATIRON

MEET SOME OF OUR DBE/SWAM SUCCESS STORIES



United Steel Joint Venture
Rod Busters, Inc. and Majk Steel, Inc., two DBE-certified rebar furnish and installate companies, have formed a joint venture, United Steel, to handle most of the rebar work for the HRBT Expansion Project.



Project United
The joint venture seek input and recommendations and input from United with making critical design and construction decisions giving the first-of-its-kind JV a unique value-add compared to a traditional rebar installer.



RBA Engineering International, PLLC
Established in 2013 by Pedro Astudillo, RBA Engineering strives to be one of the most successful and well-respected performing and customer focused engineering and construction companies in the mid-Atlantic region. That commitment has been consistent in the case with the firm's Gravity Wall construction on the HRBT Expansion Project.



Geotechnical Innovation, PLLC
Geotechnical Innovation (GTI) provides professional evaluations and civil engineering consulting services. GTI is working with HRCP on the Gravity Wall design and construction to provide soil index testing and coring services for deep soil mixing for the HRCP Expansion Project. The work involves taking core samples of ceme and soil mixtures used to strengthen the ground where the tunnelling machine will excavate the new tunnel.

WHO WILL BE THE HRBT'S NEXT SUCCESS STORY?

Please visit www.hrcopportunities.com to learn more or call 757-439-7166.

DBE POWER PLAYER

Blockstar Diversified Enterprises Powers Ahead



Hugh Blackwell uses the writing on the wall. The writing said maximizing his potential and controlling his destiny would require creating his own company. By this time he had built a solid career in the electrical distribution industry working for major corporations and come to realize his vision required him to invest in his own future. He was faced with the uncertainty of a large corporation, and his next step required the autonomy of striking out on his own.

Blackwell launched Blockstar Diversified Enterprises, LLC (BDE) in 2016 committed to creating his own entrepreneurial story and following in the footsteps of his father and grandfather, who were entrepreneurs as well. The company name is derived from Marcus Garvey, a historical figure famous for incorporating the Black Star Line in 1919 with the commitment to building economic empowerment and self-determination for people of African descent.

BDE is a minority-owned, small business-certified electrical distribution and traffic control systems integrator that conducts business in Washington, D.C. (and the surrounding metro area), Virginia, Louisiana, Texas and Mississippi. The company provides sales and services for the electrical distribution and traffic safety and control systems. BDE has expanded from the company in the New Orleans, Louisiana area but moved its headquarters to the New Orleans, Louisiana area in 2018. BDE operates a manufacturing facility in New Orleans where the company fabricates, assembles and prepares the equipment for its clients.

Powering Up

Blackwell launched BDE after transitioning from another small company. His former employer was in the process of moving out of the highly competitive electrical distribution supply industry sector. This move allowed Blackwell to maintain some of his existing clients without the concern of a non-compete agreement. Although these relationships

control systems integrator that conducts business in Washington, D.C. (and the surrounding metro area), Virginia, Louisiana, Texas and Mississippi. The company provides sales and services for the electrical distribution and traffic safety and control systems. BDE has expanded from the company in the New Orleans, Louisiana area but moved its headquarters to the New Orleans, Louisiana area in 2018. BDE operates a manufacturing facility in New Orleans where the company fabricates, assembles and prepares the equipment for its clients.

Blockstar Diversified Enterprises vice president of sales, **Cheif Blackwell** and Principal Officer, **Hugh Blackwell** take a selfie on a job site. (Photo courtesy of Blockstar Diversified Enterprises)

gave BDE the start it needed. Blackwell also knew this business segment was not the most profitable in the industry. "It was the low-hanging fruit, and it is low-hanging for a reason. It's difficult, entails working with difficult customers and requires a significant amount of engineering, project management and customer service," he said.

However, the initial clients allowed BDE to survive the early years in business and begin to expand its customer base to build a stable operation, positioned to grow in the future. Blackwell knew that growing the business would depend on finding innovative ways to meet customer needs to distinguish the company from other competitors. In

Above: The article in the 2023 American DBE featured the HRBT Expansion Project and the following DBEs on the project: United Steel, RBA Engineering, and Geotechnical Innovations.

Left: This article featured Hugh Blackwell, CEO of Blackwell Enterprises, DBE active on the project in the same publication.

[American DBE Magazine - Read the current issue of the publication](#)

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BDE is a minority-owned, small business-certified electrical distribution and traffic

10. Public Outreach & Media

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

Public Outreach

- May 24, 2023 – Project team presented to Peninsula Chamber.
- June 8, 2023 – Site visit by small group from the Virginia Society of Professional Engineers.
- June 8, 2023 – Project team presented to Lead 757.
- June 15, 2023 – Project team presented to members of Smithfield Kiwanis.
- June 16, 2023 – Project team presented to Black Brand, the Black Chamber of Commerce.
- June 19, 2023 – Project team presented to members of the Ocean View Lions Club.
- June 21, 2023 – Project team presented to the Hampton Roads Chamber Regional Board of Directors.
- June 22, 2023 – Project team presented to the Richmond Chapter of the American Society of Civil Engineers (ASCE)

Public Materials

- June 23, 2023 – Project team released the newest podcast: Environmentally Speaking
 - [HRBT Tunnel Talk: Environmentally Speaking on Apple Podcasts](#)

Media

- June 15, 2023 – (WTKR-3) VDOT Pauses HRBT Expansion Lane Closures (<https://www.wtkr.com/traffic/closures-for-hrbt-expansion-project-not-wrapping-up-on-time-leading-to-miles-long-back-ups>).
- June 16, 2023 – (WAVY-10) VDOT Suspends HRBT Expansion Lane Closures (<https://www.wavy.com/traffic/vdot-suspends-hrbt-expansion-project-lane-closure-after-heavy-traffic-delays>).
- June 16, 2023 – (WVEC-13) VDOT Suspends All HRBT Lane Closures after Major Delays (<https://www.13newsnow.com/article/traffic/hrbt-expansion-lane-closures-paused-after-major-morning-traffic-issues/291-523a7a2e-5b43-4b17-8a84-d9e14498ae59>).
- June 16, 2023 – (WTVR-6) Why VDOT's Pausing All Lane Closures (<https://www.wtvr.com/news/local-news/vdot-pauses-hrbt-expansion-project-lane-closures-june-15-2023>).

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