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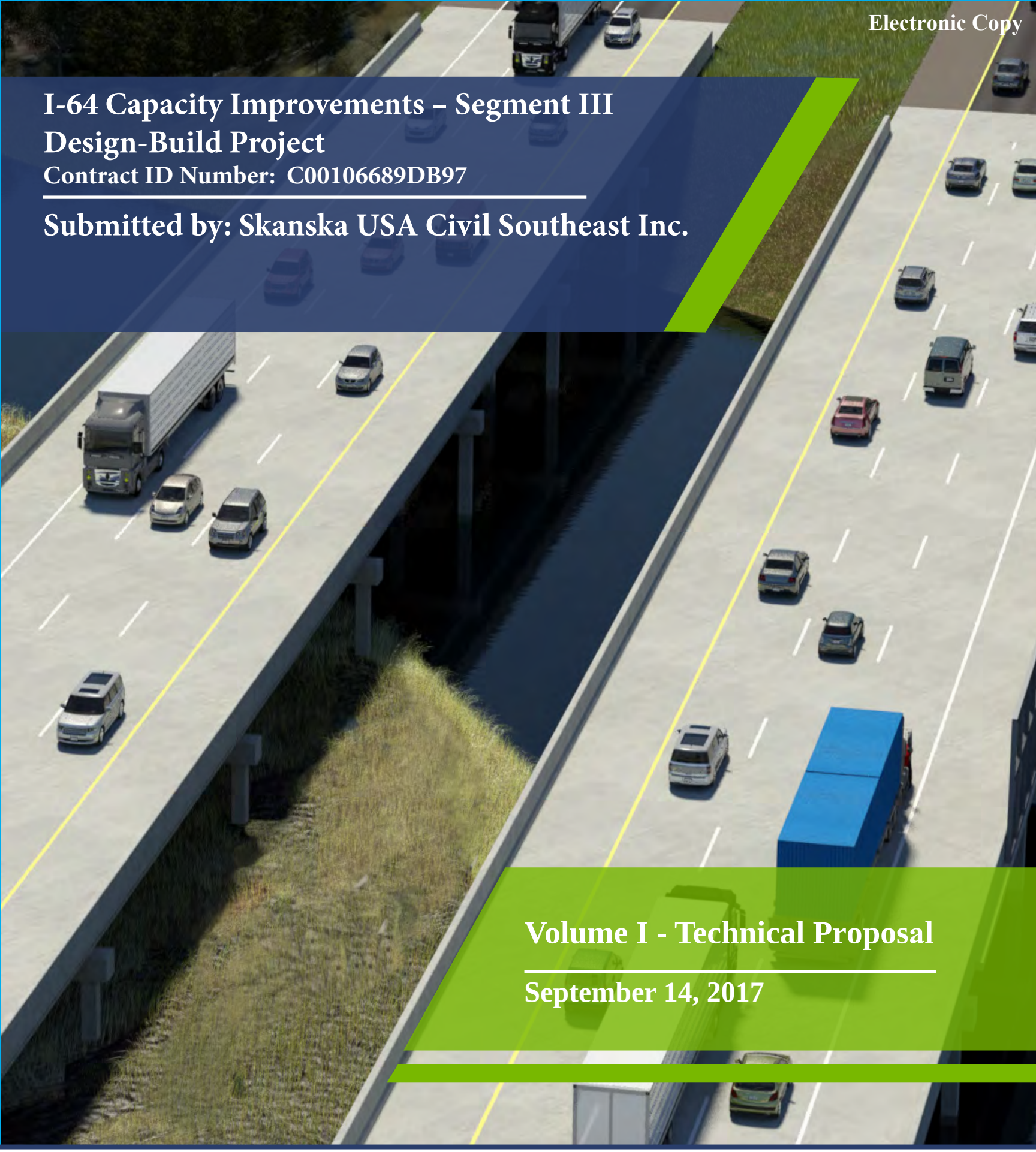
I-64 Capacity Improvements – Segment III Design-Build Project

Contract ID Number: C00106689DB97

Submitted by: Skanska USA Civil Southeast Inc.



Volume I - Technical Proposal

September 14, 2017

SKANSKA

ATTACHMENT 4.0.1.1 – ADDENDUM NO. 2

I-64 CAPACITY IMPROVEMENTS – SEGMENT III

VDOT PROJECT NO.: 0064-965-229

TECHNICAL PROPOSAL CHECKLIST AND CONTENTS

Offerors shall furnish a copy of this Technical Proposal Checklist, with the page references added, with the Technical Proposal.

Technical Proposal Component	Form (if any)	RFP Part 1 Cross Reference	Included within page limit?	Technical Proposal Page Reference
Technical Proposal Checklist and Contents	Attachment 4.0.1.1	Section 4.0.1.1	no	N/A
Acknowledgement of RFP, Revisions, and/or Addenda	Attachment 3.6 (Form C-78-RFP)	Sections 3.6, 4.0.1.1	no	N/A
Letter of Submittal	NA	Sections 4.1		
Letter of Submittal on Offeror's letterhead	NA	Section 4.1.1	yes	1
Offeror's official representative information	NA	Section 4.1.1	yes	1
Authorized representative's original signature	NA	Section 4.1.1	yes	1
Declaration of intent	NA	Section 4.1.2	yes	1
120 day declaration	NA	Section 4.1.3	yes	1
Principal Officer information	NA	Section 4.1.5	yes	1
Final Completion Date	NA	Section 4.1.6	yes	1
Provide any Unique Milestone Dates	NA	Section 4.1.7	yes	1
Proposal Payment Agreement or Waiver of Proposal Payment	Attachment 9.3.1 or 9.3.2	Section 4.1.~~7~~8	no	N/A
Certification Regarding Debarment Forms	Attachment 11.8.6(a) Attachment 11.8.6(b)	Section 4.1.~~8~~9	no	N/A
Written statement of percent DBE participation	NA	Section 4.1.10	yes	1

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Technical Proposal Component	Form (if any)	RFP Part 1 Cross Reference	Included within page limit?	Technical Proposal Page Reference
Offeror's Qualifications	NA	Section 4.2		
Confirmation that the information provided in the SOQ submittal remains true and accurate or indicates that any requested changes were previously approved by VDOT.	NA	Section 4.2.1	yes	2
Design Concept	NA	Section 4.3		
Conceptual Roadway Plans and description	NA	Section 4.3.1.1	yes	5
Conceptual Structural Plans and description	NA	Section 4.3.1.2	yes	9
Project Approach	NA	Section 4.4		
Environmental Management	NA	Section 4.4.1	yes	18
Hydraulics	NA	Section 4.4.2	yes	21
Geotechnical	NA	Section 4.4.3	yes	25
Quality Assurance/ Quality Control (QA/QC)	NA	Section 4.4.4	yes	27
Construction of Project	NA	Section 4.5		
Sequence of Construction	NA	Section 4.5.1	yes	34
Transportation Management Plan	NA	Section 4.5.2	yes	48

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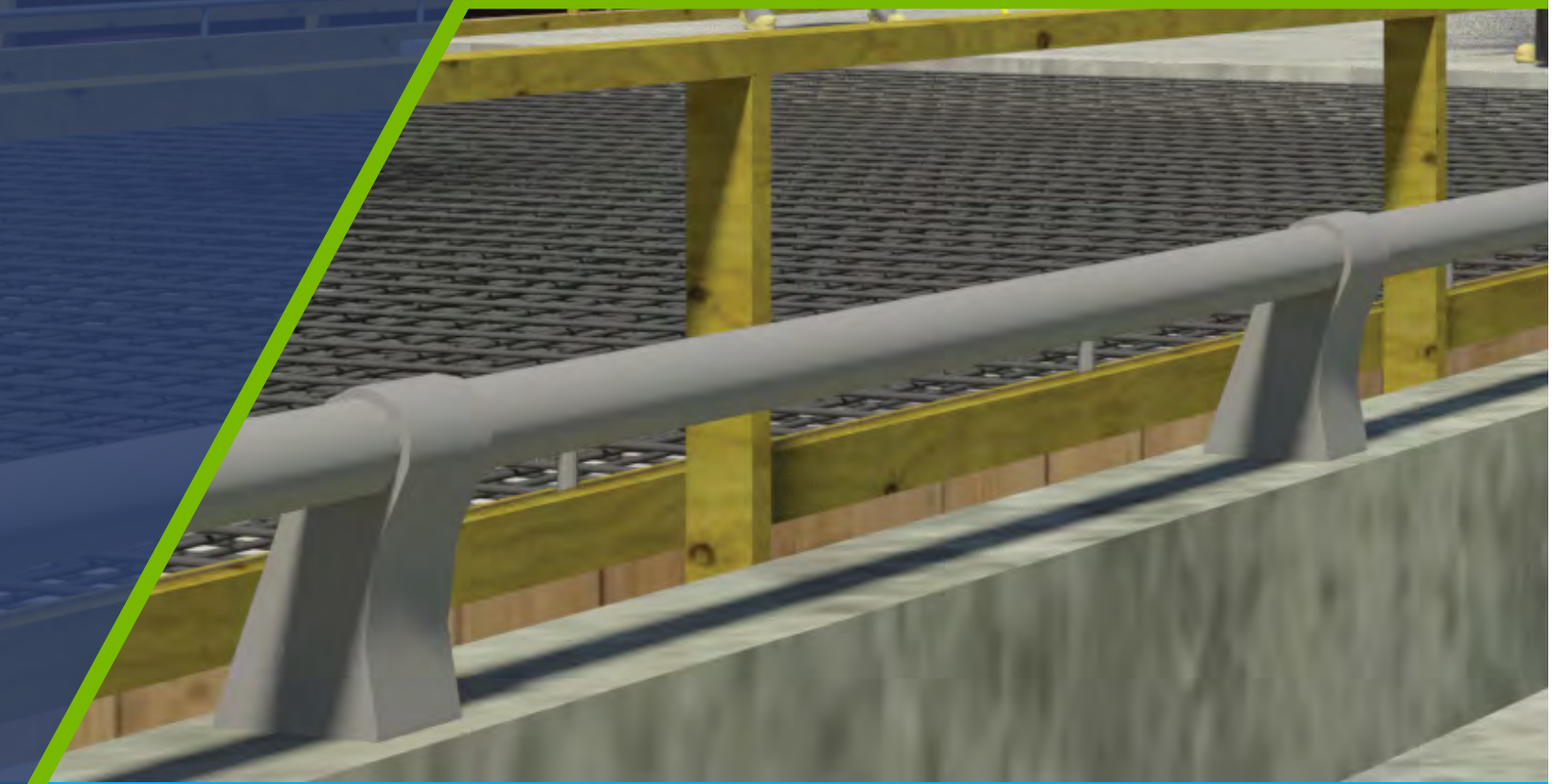
I-64 CAPACITY IMPROVEMENTS – SEGMENT III

VDOT PROJECT NO.: 0064-965-229

TECHNICAL PROPOSAL CHECKLIST AND CONTENTS

Technical Proposal Component	Form (if any)	RFP Part 1 Cross Reference	Included within page limit?	Technical Proposal Page Reference
~~**Disadvantaged Business Enterprises (DBE)**~~	~~NA~~	~~Section 4.6~~		
~~Written statement of percent DBE participation~~	~~NA~~	~~Section 4.6~~	~~yes~~	
~~DBE subcontracting narrative~~	~~NA~~	~~Section 4.6~~	~~yes~~	
Proposal Schedule	NA	Section 4.7		
Proposal Schedule	NA	Section 4.7	no	S-16
Proposal Schedule Narrative	NA	Section 4.7	no	S-1
Proposal Schedule in electronic format (CD-ROM)	NA	Section 4.7	no	N/A

4.1 Letter of Submittal



SKANSKA

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757.421.4140 phone
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September 14, 2017

Commonwealth of Virginia
Department of Transportation (VDOT)
1401 E. Broad Street
Richmond, Virginia 23219
Attention: Joseph A. Clarke, P.E. (APD Division)

Re: I-64 Capacity Improvements – Segment III; Contract ID #C00106689DB97

Dear Mr. Clarke,

The Skanska Team appreciates the opportunity to submit a technical proposal for the I-64 Capacity Improvements - Segment III (the Project). The Skanska Team, consisting of Skanska USA Civil Southeast Inc. and WSP USA Inc., understands the importance of delivering increased capacity, bringing portions of I-64 up to current design standards, providing more lanes for evacuation and improving safety by reducing congestion and improving vehicular level of service in York County. Our Team has carefully developed technical solutions to address the complex and environmentally sensitive design and construction challenges of the Project.

4.1.2: Declaration of Intent to Enter Into a Contract: If selected, we intend to enter into a contract with VDOT for the Project in accordance with the terms of this RFP.
4.1.3: Pursuant to Part 1, Section 8.2: Our offer as represented by the submitted Technical and Price Proposals will remain in full force and effect for one hundred twenty (120) days after today's date of September 14, 2017.

4.1.4: Offeror's Point of Contact:
Curtis Rowden, Pursuit Manager
295 Bendix Rd., Suite 400
Virginia Beach, VA 23452
Office: 757.578.4144 / Fax: 757.424.4089
Email: curtis.rowden@skanska.com

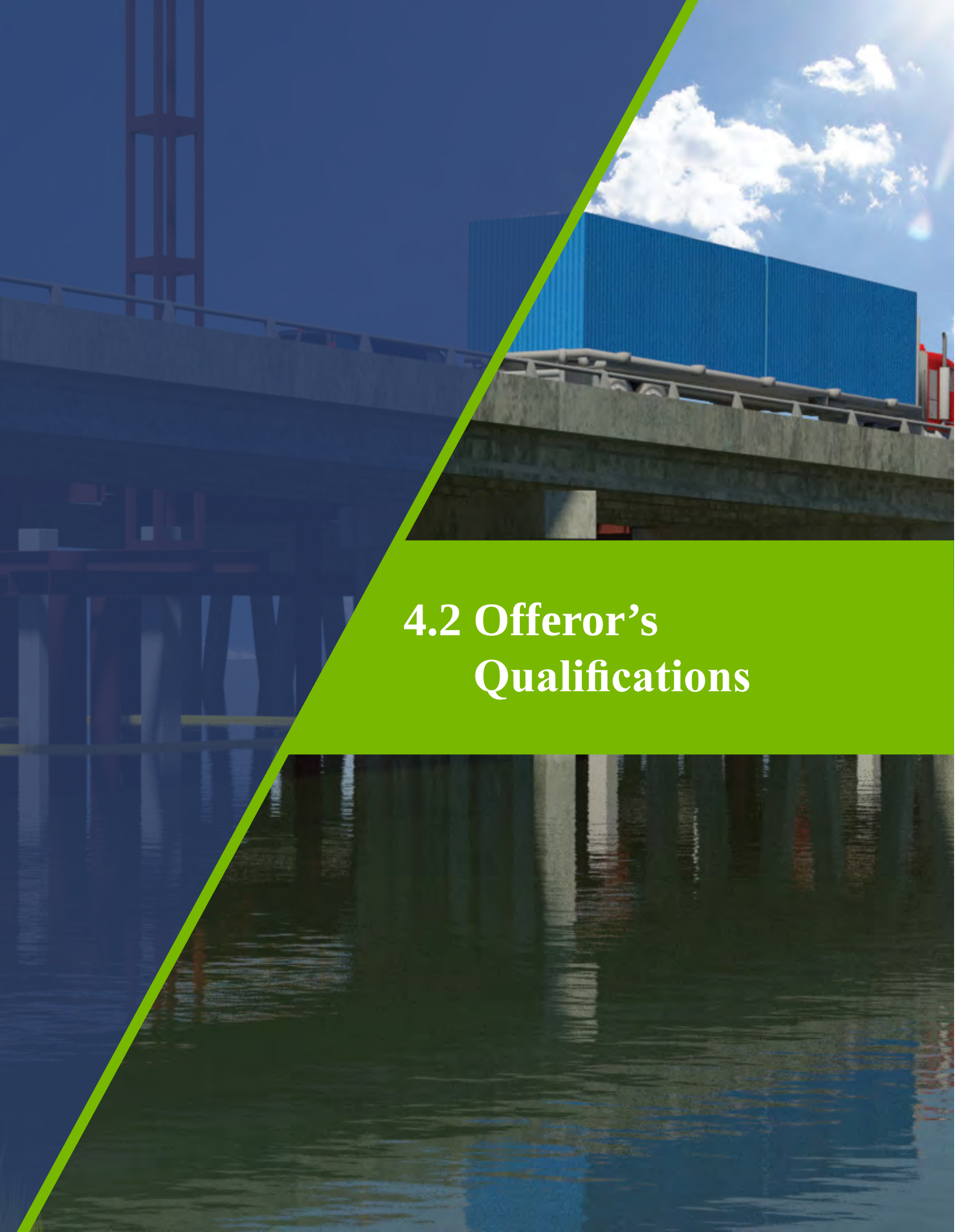
4.1.5: Principal Officer Information:
Salvatore Taddeo, Executive Vice President
295 Bendix Rd., Suite 400
Virginia Beach, VA 23452
Office: 757.578.4141 / Fax: 757.424.4089
Email: salvatore.taddeo@skanska.com

4.1.6: Final Completion Date: 09/23/2021
4.1.7: Unique Milestone Dates: None
4.1.8: Proposal Payment Agreement: Please refer to the Appendix for the executed Proposal Payment Agreement form Attachment 9.3.1.
4.1.9: Debarment Forms: Please refer to the Appendix for the Certification Regarding Debarment Forms as set forth in Section 11.8.6(a) and 11.8.6(b).
4.1.10 DBE Participation: The Skanska Team is committed to achieving the 12 percent (12%) DBE participation goal for the entire value of the contract.

Our Team has enjoyed working with VDOT in the past and throughout this procurement process, and we look forward to continuing our positive working relationship with you during the implementation phase of this important project.

Sincerely,

Salvatore Taddeo
Executive Vice President
Skanska USA Civil Southeast Inc.



4.2 Offeror's Qualifications

4.2 Offeror's Qualifications / Confirmation of SOQ

In accordance with Part 1 of the RFP, 4.2.1, the Skanska Team confirms that the information contained in our SOQ remains true and accurate, with three exceptions since its submission, as listed in Table 4.2.1.

Table 4.2.1: Approved Changes to Organizational Chart

Position	SOQ	Proposed
Noise Analysis and Mitigation	Ray Magsonac	Chris Menge
Lead QA Inspector (Roadway)	Mac McGuigan	Todd King
Lead QA Inspector (Structures)	Todd King	Kenny Scott

We have updated our organizational chart to reflect these changes, which have been approved by VDOT.

As required in the RFP Section 4.2.1, our QA manager (QAM) will be assigned full-time throughout the construction phase. Some relationships on our organizational chart have been clarified to more accurately convey our team's reporting and communication, as well as to address comments by VDOT on our SOQ:

- Design manager (DM), construction manager (CM) and design-build coordinator (DBC) report to the responsible charge engineer (RCE) with clear lines of communication between all.
- QC manager (QCM) reports to the CM.
- Deleted direct report between VDOT and third party stakeholders.
- Added detail to lists of third party stakeholders.
- QAM reports to the design-build project manager (DBPM), and has a direct line of communication to the RCE and, therefore, all others under the RCE.
- Lead utility coordination manager (UCM) reports to the RCE and therefore has lines of communication to all others under the RCE.
- Clarified QA inspection reporting lines.
- Added line of communication from safety manager and RCE and, therefore, to all others under the RCE.

4.2.1: Functional Relationships and Lines of Communication among Key Management

We will use established reporting relationships to provide a formal yet transparent communication network. However, on-time execution of this Project will require a strong and collaborative communication environment. As stakeholder coordination is a key component of success, our Project professionals understand the importance of communicating effectively with stakeholders. We strive to listen and understand the needs of all parties involved and we collaborate to bring together a variety of viewpoints to arrive at the best solution. We understand when compromise is the most appropriate solution, and we work to find a solution acceptable to all parties, especially when the cost of conflict is higher than the cost of losing ground on an early completion deadline.

The Skanska Team and our named subconsultants have collaboratively developed an approach to this project and built trust at all levels of our organizations, allowing us to overcome issues quickly and effectively. This was a cornerstone of our success on the award-winning I-264 Widening/MLK Extension Project in Portsmouth, VA. Our project communication plan will outline proactive partnering at all levels, and will include input from VDOT.

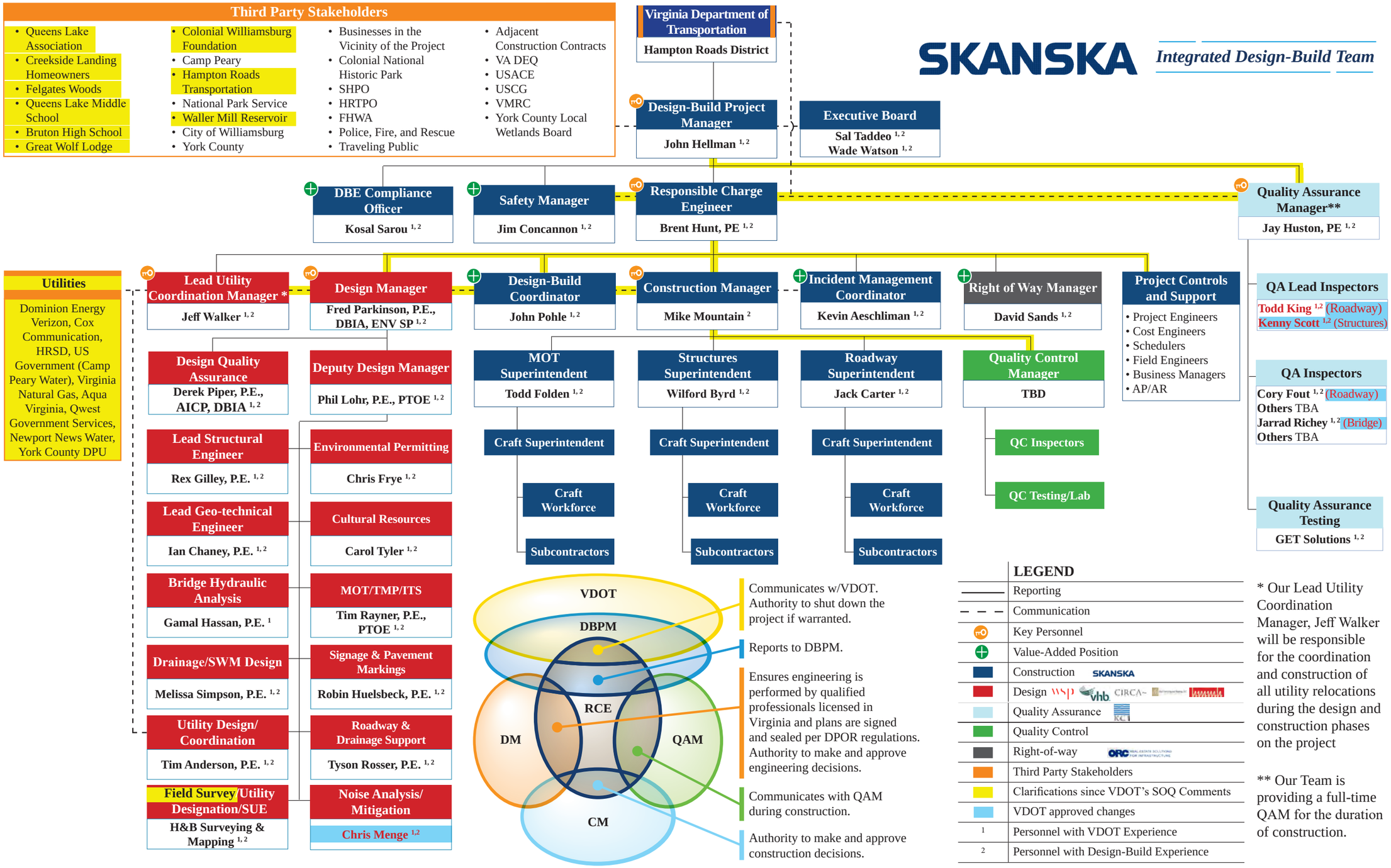
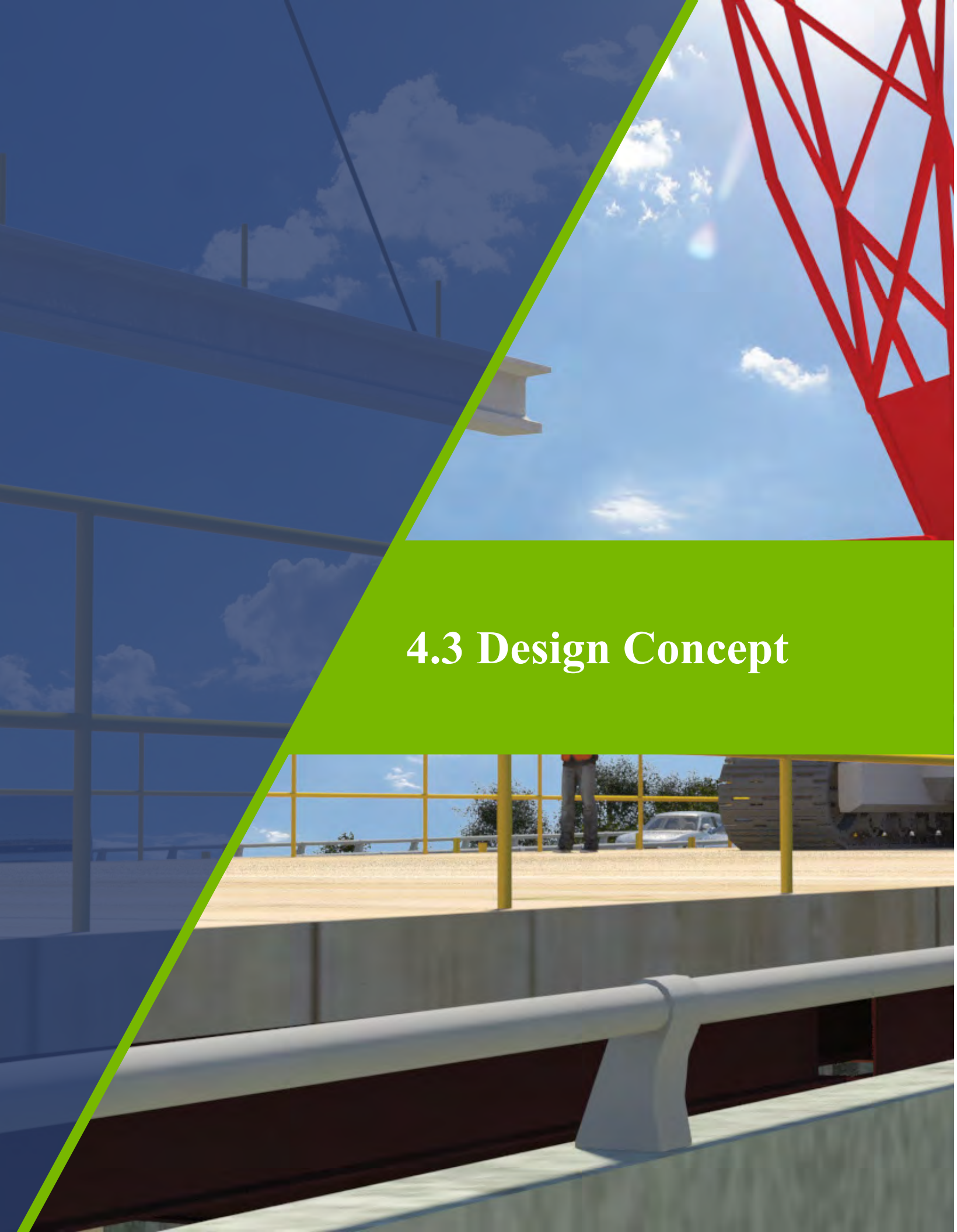


Figure 4.2.1: Organizational Chart



4.3 Design Concept

4.3 Design Concept

Table 4.3.1: Concepts and Benefits

Concept	Benefits
Conceptual Structural Plan	
▪ Shift Queens Creek eastbound bridge 25 feet south	▪ Improves public acceptance by reducing overall wetland impacts ▪ Reduces VDOT long term maintenance with wider median for better access ▪ Reduces impacts to traffic during construction
▪ Use of micropiles at the Colonial Parkway Bridges	▪ Improved maintenance of existing structure by strategic placement of micropiles in close proximity of existing piles ▪ Higher degree of public acceptance by reducing footprint, disturbance, and noise impacts ▪ Reduces impacts to National Park Service (NPS) property and patrons
Conceptual Roadway Plans	
▪ 50 percent reduction in the number of SWM facilities, and associated ROW acquisitions	▪ Improves construction schedule certainty by reducing the number of ROW takes overall by 62 percent
▪ Efficient SWM facilities, minimizing the ROW required	▪ Further reduction of ROW acquisition needed by 2.4 acres, saving VDOT an estimated additional $78,851.
▪ Balanced Median Earthwork with flatter slopes, reducing the quantity of guardrail by over 5.5 miles	▪ Improves safety over the life of the asset ▪ Reduces maintenance costs
▪ Access to SWM ponds from local roads	▪ Reduces long term maintenance costs ▪ Improved safety for VDOT maintenance crew staging
▪ Extend ramp tapers to meet RDM requirements	▪ Better traffic safety and operations
▪ Improved existing geometry (normal 2 percent cross-slopes, longer vertical curves to 75 mph std.)	▪ Better traffic safety and operations
▪ Fully comply with “level terrain” criteria with grades instead of 4 percent max	▪ Better traffic safety and operations
▪ Minimize superelevation softening curves	▪ Better traffic safety and operations
▪ Realigned Route 143 off-ramp	▪ Reduce traffic impacts during construction ▪ Improve public acceptance ▪ Improve construction schedule
▪ Shifted roadway centerlines 2 feet toward the median	▪ Minimize conflicts and disruption with utility relocations ▪ Reduces initial construction costs ▪ Improve public acceptance by reducing tree clearing ▪ Improves construction schedule certainty ▪ Reduces initial cost
▪ Minimize conflicts and disruption with utility relocations	▪ Reduces initial construction costs ▪ Improve public acceptance by reducing tree clearing ▪ Improves construction schedule certainty ▪ Reduces initial cost

4.3.1: Conceptual Roadway Plans

The Skanska Team's conceptual roadway plans are located in Volume II. The proposed improvements include reconstruction of existing I-64 and an additional 12-foot wide travel lane and median shoulder in each direction meeting the VDOT Road Design Manual (RDM) Standard GS-1 for a Rural Principal Arterial (Interstate) classification with a 75 mph design speed. Our Team's roadway design not only meets VDOT's primary objective of reducing congestion and improving capacity, it also improves many of the existing roadway conditions to achieve current design standards, including some of the features listed in Table 4.3.2. VDOT has approved one design exception and four design waivers for existing features along I-64. The Skanska Team's design implements all required mitigation measures.

Table 4.3.2: Design Concept Features

Feature	Safety	Operations	Construction Schedule	Construction Cost	Public Acceptance	Future Inspection / Maintenance	Long Term Durability
Reduced number of SWM ponds by 50%			✓	✓	✓	✓	
Optimized median grading, guardrail and clear zone	✓	✓	✓	✓		✓	
Balanced earthwork in median	✓		✓	✓			
Queens Creek by shifting eastbound bridge 25 feet to the south		✓	✓	✓	✓	✓	
Wider shoulders	✓	✓			✓		
Extension of acceleration and deceleration lanes at interchanges	✓	✓			✓		
Elimination of bridge joints	✓				✓	✓	✓
Colonial Parkway aesthetics					✓		
Use of micropiles			✓	✓	✓		
Concrete barrier to avoid culvert extension	✓		✓	✓	✓		
Bearing replacement	✓	✓				✓	✓
Aesthetics on sound barrier					✓		

While validating the RFP Concept Plans, we noted that the tapers at the start of the deceleration lanes for the I-64 off-ramps to Route 199/646 and Route 143 are shown as 250 feet long. This complies with AASHTO guidelines, but not the RDM (Table C-8-1), which calls for a 25:1 deceleration taper when the design speed is 50 mph or higher, i.e., 300 feet for a 12-foot lane. To avoid requesting a design waiver for these four locations, we have chosen to provide the full 300-foot deceleration taper at each. We will not request any additional design exceptions or waivers.

Our (SWM) design to reduces the ROW acquisition by 62 percent (approximately 10.3 acres) and VDOT's associated costs, in addition to expediting the Project schedule.

a) General Geometry

The tightest horizontal curve in our roadway plans is approximately one degree. Only two curves eastbound and two curves westbound required superelevation to provide a 75 mph design speed. These curves are much flatter than the allowable minimum radius, improving safety and functionality for drivers, especially in winter weather conditions.

Some of the existing geometric features do not meet VDOT and/or AASHTO's current design standards. This Project will update substandard geometric features to current standard, including:

- providing two percent normal crown cross slopes.
- lengthening vertical curves as needed, such as the sag vertical curve on I-64 eastbound near mile marker (MM) 238, to attain a 75 mph design speed.

We are also providing three typical sections that:

- Provide an environmentally conscious and economical solution;
- Offer durability and functionality with readily available resources; and
- Minimize traffic disruption during construction.

b) Horizontal Alignments

The Skanska Team's proposed design shifts the I-64 centerline two ft. towards the median, allowing us to provide the widened outside shoulders desired by VDOT to minimize the clearing requirements outside of the primary roadway footprint. We plan to use the horizontal curves shown on Sheets 3 through 17 in Volume II.

At Queens Creek, we are proposing to shift the north side of the I-64 westbound bridge approximately six ft. south and shift the south side of the I-64 eastbound bridge approximately 25 feet south. These changes optimize the construction schedule, minimizing the disruption to the traveling public. Furthermore, our proposed realignment provides 40 feet of separation between the bridges, reducing shading impacts on the wetlands between the bridges. We will accomplish these alignment shifts using sweeping horizontal curves that will not require superelevation (Sheet 14 in Volume II).

We selected the superelevation for each curve on I-64 in accordance with VDOT Standard TC-5.11R for a 75 mph design speed. We used shifting tapers on I-64 for minor adjustments in alignment to optimize shoulder widths under existing bridges. Optimizing shoulder widths will minimize the tendency of drivers to shy away from the pier protection barriers.

Most of the ramps require only minimal work at the gores to tie-in to the I-64 mainline travel lanes. As required, we are reconstructing the I-64 eastbound off-ramp to Route 143 per VDOT's GS-R standard with a design speed of 35 mph and a minimum radius of 316 feet Our design also accommodates a WB-67 design vehicle for the right-turn movement from the ramp onto Route 143. As shown on Sheet 12 in Volume II, we are proposing to reconstruct this ramp just to the left of the existing ramp in order to minimize construction duration and traffic disruptions.

c) Maximum Grade

Although RFP Attachment 2.2 allows for grades up to four percent east of Queens Creek, our plans will fully comply with the standard for "level" terrain and provide an enhanced design that improves on the RFP Plans by limiting the grade to three percent on westbound I-64 and 2.95 percent on eastbound I-64. This will result in smoother traffic flow by minimizing the tendency for heavy vehicles to slow down on on the steeper grades.

The eastbound I-64 off-ramp uses a grade of 2.77 percent, which complies withand in fact exceeds the requirements of VDOT's GS-R standard for a maximum grade of six percent for a 35 mph design speed.

Between successive overpasses, the I-64 proposed profiles are approximately 0.5 inches higher than the existing profiles where the existing pavement is asphalt, and approximately 2.5 inches higher where the existing pavement is concrete. To meet the requirement of 16 feet, 6 inches of vertical clearance where I-64 passes under existing bridges, such as at Route 604 (Barlow Road), we used 75 mph vertical curves as needed to lower the profile of I-64.

d) Typical Sections

We will use three basic typical sections on I-64, as described and depicted in Figures 4.3.1, 4.3.2, and 4.3.3 on Page 7. Our designs will use either asphalt or concrete to construct the mainline and shoulders. These typical sections use depressed grass medians per VDOT's GS-13 standard and proposed median width of 44 feet measured between the eastbound and westbound inside travel lane edge of pavements. The third typical section uses bridge pier protection featuring TL-5 barriers designed per VDOT's BPPS-1 and BPPS-2 standards where I-64 passes under existing bridges.

Asphalt Mainline and Shoulders with Guardrail

- New pavement buildup incorporates major components of sound existing pavement, for an environmentally friendly, sustainable practice.
- Lowest initial cost will allow VDOT/HRTAC funding to be re-allocated to other worthy projects.
- Does not disturb existing subgrade to minimize SWM requirements.
- Flat slopes and sufficiently wide median reduces the need for guardrail and associated maintenance costs.

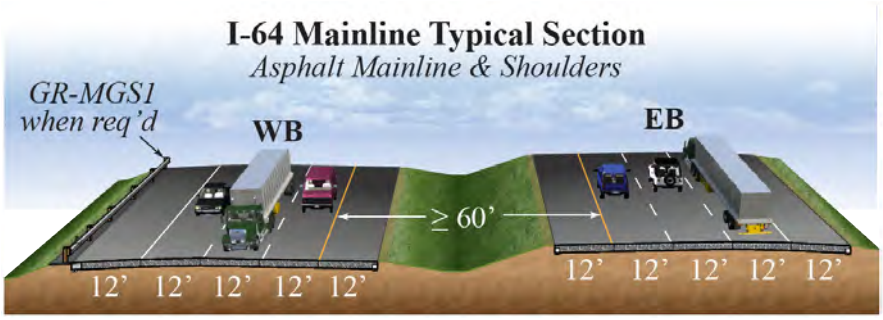


Figure 4.3.1: Asphalt Mainline and Shoulders. This typical section offers an environmentally conscious and economical solution.

Concrete Mainline and Shoulders

- Highly durable to reduce long-term maintenance costs for VDOT.
- Uses readily available source materials to enhance schedule certainty for construction.
- Does not disturb existing subgrade to minimize SWM requirements.
- Flat slopes and sufficiently wide median reduces the need for guardrail and accompanying maintenance costs.

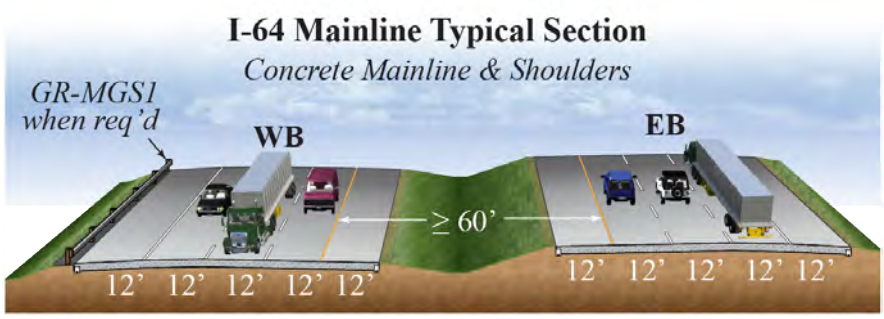


Figure 4.3.2: Concrete Mainline and Shoulders. This typical section offers durability and functionality, with readily available source materials.

Asphalt Mainline and Shoulders with TL-5 Barrier

- Keeps existing overpass structures in place to minimize disruption to the traveling public.
- Barrier cost is much lower than bridge replacement, allowing more VDOT/ HRTAC funding to be re-allocated to for other worthy projects.
- Enhances protection of valuable bridge assets to reduce the risk of structural failure.

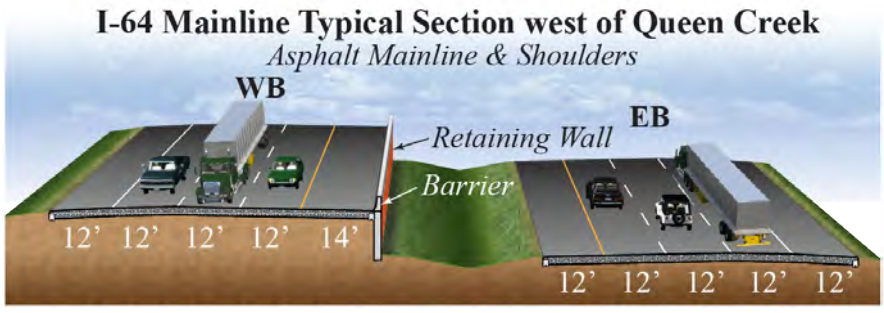


Figure 4.3.3: Asphalt Mainline and Shoulders with TL-5 Barrier. This typical section allows us to minimize traffic disruption and reduce costs over bridge replacement.

Where the median is wide enough and bifurcation between the eastbound and westbound roadways is minimal, we have optimized the use of the guardrail, which will minimize construction time. This removes a potential hazard—the guardrail itself—from the clear zone and also minimizes the need for future maintenance due to vehicular collisions with the guardrail. Since approximately 40 percent of all crashes in the Project area involve vehicles that veer off the road, this approach will benefit VDOT's traveling public by resulting in fewer crash-induced traffic backups. We have reduced the guardrail by approximately 30,000 linear feet.

By providing TL-5 pier protection for the bridges that span over I-64, we will protect the bridge piers from errant vehicles, minimizing emergency maintenance situations and extending the life of some of VDOT's most valuable and vulnerable assets.

The median retaining wall between Route 143 and Queens Creek will have an architectural brick finish (via formliner). The Skanska Team has a proven track record of applying aesthetic treatments to walls as evidenced by the recently completed I-264 Widening/MLK Extension DB Project (Figure 4.3.4).

Figure 4.3.4: Local Experience with Aesthetic Treatments. Roadway walls completed at I-264 Widening/MLK Extension Project, Portsmouth, VA.

e) Conceptual Hydraulic and SWM Design

Our conceptual hydraulic and SWM design is provided on the plans sheets in Volume II. In addition, a detailed description of our drainage design approach and benefits is presented in Section 4.4.2: Hydraulics. Where possible, the proposed SWM facilities have access from surface streets instead of from I-64, enhancing safety for VDOT's maintenance personnel. We also avoided utility conflicts and wetland impacts to the extent practicable.

f) Proposed Right of Way Limits

We have highlighted ROW reductions on the Volume II plans as required in Section 4.3.1 of the RFP Part 2. ROW impacts along the corridor are primarily for the construction and maintenance of SWM facilities. Our approach to SWM greatly reduced the Project's required ROW acquisitions and associated costs to VDOT, in addition to expediting the project schedule.

The Skanska Team's proposed ROW impact is eight parcels (a reduction of 13 parcels or 62 percent from the RFP plans.

g) Proposed Utility Impacts

The Skanska Team has prioritized utility avoidance in order to reduce cost and schedule impacts. Utility impacts, based on our evaluation, are primarily due to bridge widening (Figure 4.3.5, Page 9) and drainage. A summary of these impacts is presented in Table 4.3.3, page 9.

The greatest opportunity to eliminate impacts is through refinement of the configuration of drainage piping and SWM facilities. As such, we concentrated our efforts on the drainage design and successfully avoided a number of potential impacts.

h) Noise (Sound Barrier) Wall Locations

The Project will require a draft and final Noise Abatement Design Report (NADR). The findings of the NADR will determine the final configuration of the sound barrier(s). Our proposal accounts for the 6,080 square feet of bridge-mounted sound barrier wall and 89,220 square feet of ground-mounted wall as noted

Table 4.3.3: Summary of Utility Impacts

Utility Owner	Location	Impact Status
Cox	Barlow OH	Impacted
Cox	Lakeshead UG	Impacted
Cox	Newman UG	Avoidance
Dominion Energy	Lakeshead UG	Avoidance
HRSD	Newman UG	Avoidance
NNWW	Newman UG	Avoidance
Verizon	Barlow UG	Avoidance
Verizon	Barlow UG	Avoidance
York Co. DPU	Lakeshead UG	Avoidance

in Addendum No. 1. The RFP Plans (Sheet 9) indicate the wall beginning on the south side of I-64 on the Queens Creek bridge should be assumed to be 16 feet high, while the two walls shown further east (Sheets 10 and 11) should be assumed to be 19 feet high. We recognize the importance of aesthetics in achieving public support; therefore, all noise walls approved for construction will comply with the aesthetic requirements listed in Section 2.4.9 of the RFP.

In the Noise Technical Memorandum (NTM) dated December 2013, the sound barrier immediately east of Queens Creek was modeled at the top of the hillside, close to the existing ROW line. However, the walls shown in the RFP Concept Plans are adjacent to the I-64 eastbound shoulder. Because these wall locations are quite different acoustically, we performed preliminary modeling to validate the RFP conceptual height for the wall at Queens Creek. Sixteen feet appears to be reasonable for the RFP concept.

We also modeled our proposed design with the Queens Creek bridge shifted 25 feet south. This may require the wall to be raised two ft. to reduce impacts in the Creekside Landing neighborhood. An additional benefit of the bridge shift is that the Queens Lake neighborhood may experience about one decibel less of traffic noise.

4.3.2: Conceptual Structural Plans

The Skanska Team's Conceptual Structural Plans are included in Volume II. Descriptions of the different elements, including any enhancements, are provided in the following sections.

B642 and B643: I-64 over Queens Creek

Our concept for these bridges is to replace the existing structures in their entirety. The existing piles will be removed to a minimum of 2 feet below the existing grade. Our proposed method of replacement will result in a minor variation from the horizontal alignment depicted in the RFP Plans (Figure 4.3.6, Page 10).

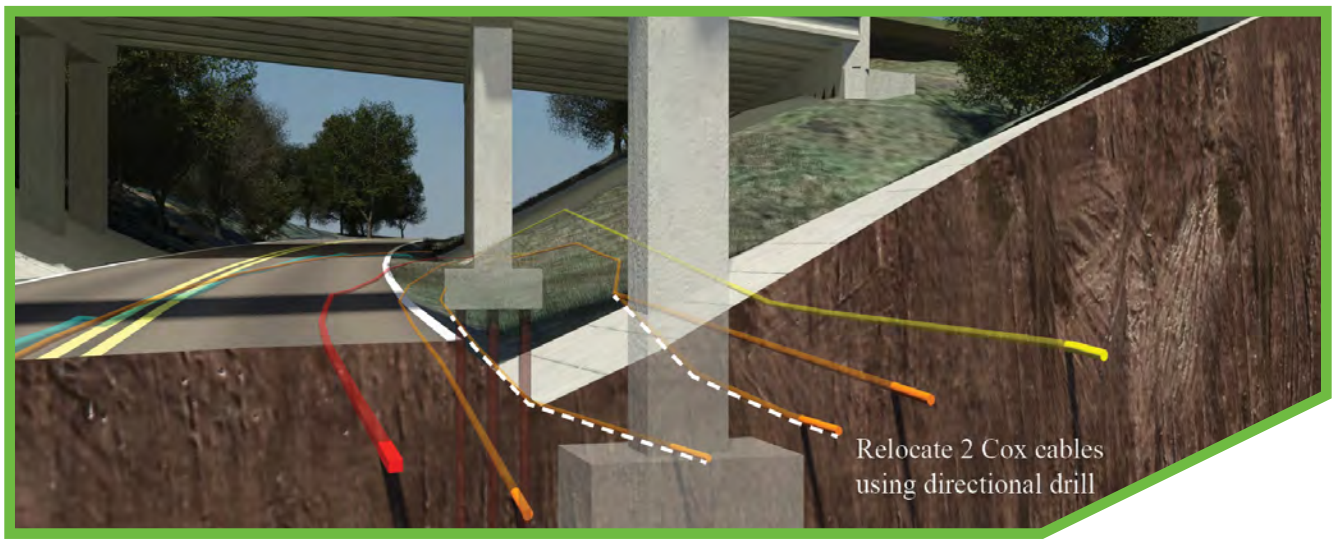


Figure 4.3.5: Utility Impacts. Our Team engaged in interdisciplinary coordination during the proposal stage to avoid or mitigate clashes between existing utilities and Lakeshead foundation locations.

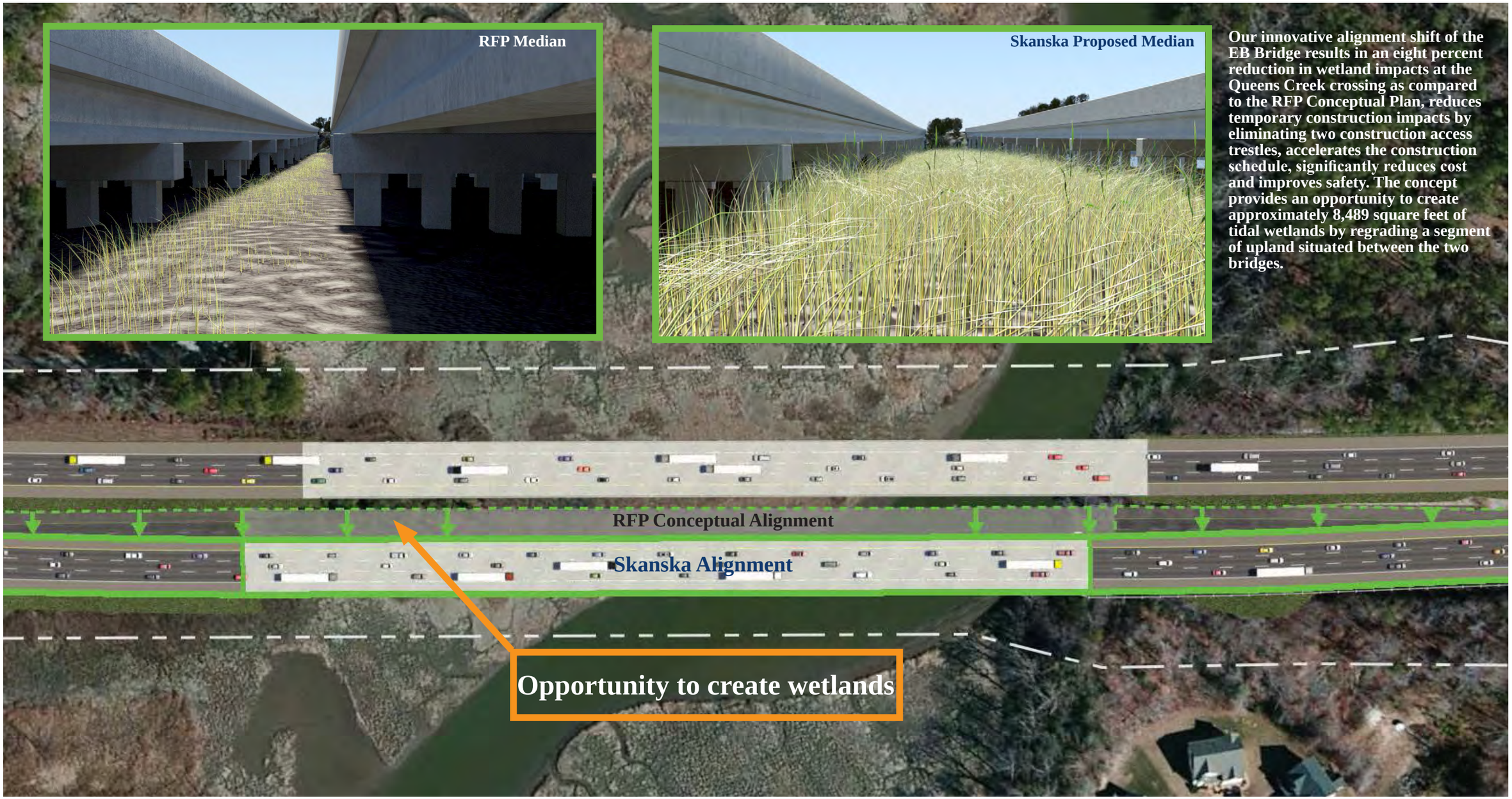


Figure 4.3.6: Bridge Replacement at I-64 over Queens Creek. Our proposed I-64 alignment is shifted 25 feet at Queens Creek and allows for more sunlight to the wetlands through a wider median.

We propose to construct the bridges from a single temporary trestle constructed in the median of I-64. The resulting configuration of the bridges will require an eastbound roadway alignment shift to the south. This alignment shift will remain within the existing VDOT ROW and eliminate approximately 1,600 feet of temporary construction trestle, thereby reducing the overall bridge construction schedule and minimizing the Project's temporary environmental impacts. Furthermore, the proposed shift yields a reduction in permanent wetland impacts. In the final configuration, the eastbound and westbound bridges will be separate structures with a clearance of approximately 40 feet between the bridges, an improved condition for wetland impacts associated with bridge shading.

Our proposed alignment shift of EB Queens Creek bridge will remain within the existing VDOT ROW and eliminate approximately 1,600 feet of temporary construction trestle, thereby reducing the overall bridge construction schedule and minimizing the Project's temporary environmental impacts.

Typical Section: The new bridges will consist of three 12-foot wide lanes and two 12-foot wide shoulders in each direction. During construction, we will provide two 12-foot wide lanes and two-ft. wide (minimum) shoulders in each direction.

Superstructure: We selected our proposed span configuration based on an optimal design for a low-level, trestle-type bridge (concrete superstructure with plumb pile bents). Since the new bridges will occupy the same footprint as the existing bridges, our design uses a span arrangement that avoids interference with existing pile foundations. Additionally, our span configuration minimizes wetland impacts and provides a hydraulically equivalent bridge opening. The resulting bridge configuration consists of multi-span bridges with a maximum span of 80 feet, as presented in our Conceptual Bridge Plans in Volume II.

The new bridges will use VDOT standard PCBT-45 prestressed concrete beams with a composite reinforced concrete deck slab, and will be supported by prestressed concrete pile bents and concrete abutments. The new bridges will be constructed using jointless bridge technologies as outlined in the VDOT Manual of the Structure and Bridge Division, Volume V, Part 2, Chapter 17. By avoiding the need for intermediate expansion joints, we have greatly reduced VDOT's long-term maintenance costs for both the superstructure and substructure. A sound barrier is required on the south edge of the eastbound bridge, and will be supported by a bridge deck extension per VDOT's Manual of the Structure and Bridge Division, Volume V, Part 2, File No. 25.03-4.

Substructure: The intermediate supports for the new bridges will consist of pile bents, similar to the details presented in the VDOT Manual of the Structure and Bridge Division, Volume V. These pile bents will be supported by 24-in. square prestressed concrete piles per the details and notes in VDOT Standard BPP-2. Pursuant to the Abutment Selection Algorithm shown in the VDOT Manual of the Structure and Bridge Division, Volume V, the proposed abutments will be "Virginia Abutments" as shown in the RFP Concept Plans. Like the details shown in the VDOT Manual of the Structure and Bridge Division, Volume V, tooth expansion joints will be provided at each abutment behind a concrete diaphragm made integral with the new superstructure. Abutments will be supported by 14-inch square prestressed concrete piles.

This configuration will help to contain the bridge drainage in a concrete trough behind the bearings. By directing the runoff water away from the bridge, this minimizes VDOT's long-term maintenance. Since the trough outlet is placed at ground level, VDOT's maintenance personnel can safely access it for cleaning and maintenance.

Material Selection, Maintenance and Construction Considerations: Using the jointless bridge technologies discussed above, the long-term maintenance requirements for these bridges are expected to be minimal since runoff water from the bridge deck surface will be

channeled away from bearings and other critical substructure elements.

All new concrete construction will use Corrosion Resistant Reinforcing (CRR) Steel per VDOT IIM-SandB-81.7. We will use low permeability concrete for all new bridge elements. The prestressed concrete piles within the tidal flow of Queens Creek will use stainless steel strands per VDOT Standard BPP-2. These materials and construction methods will help to increase the service life of the new bridges.

The new bridges will be designed per the provisions of the AASHTO LRFD Bridge Design Specifications, 7th Edition and VDOT Modifications (IIM-SandB-80.5). Strategies for MOT are provided in the Transportation Management Plan (TMP) in Section 4.5.2. Load ratings will be completed for all phases of construction and submitted for VDOT approval before implementation of any traffic configuration.

B638 and B641: I-64 over Route 1314 (Lakeshead Drive)

The Skanska Team has extensively reviewed the latest inspection report and performed a field review of the existing bridges over Lakeshead Drive. We found that making the deck joints continuous, replacing the bearings, and performing the specified spot repairs is the most cost effective method and the least disruptive to the I-64 motorists and the Queens Lake neighborhood.

Typical Section: During construction, we will widen the existing bridges, providing two additional 12-foot wide lanes and 2-foot wide shoulders in each direction. We will maintain a minimum vertical clearance of 16 feet and 6 inches during and after construction.

Superstructure: The proposed bridge superstructures will match the existing superstructures, which consist of three spans supported by multi-column concrete piers and concrete abutments. The bridges will be widened using standard VDOT PCB-2 prestressed concrete beams. Beams will be spaced to ensure that stiffness/deflection of the new composite, simple-span beam section will be compatible with that of the existing beams. The existing fascia beam will be verified for its adequacy as an interior beam in the final bridge configuration. During construction of the widened portion of the superstructure, we will avoid adding dead load to the existing structure.

We will repair and/or rehabilitate all existing superstructure elements identified in the RFP Information Package and during our field inspection that are to be incorporated into the final condition. The existing bridge deck slabs will be repaired by removing the existing thin epoxy overlay and the top ¾-inch of the deck slab, patching the deck as required and overlaying with a latex-modified concrete. Additionally, all existing pier and abutment open deck joints will be made continuous using standard VDOT details. Similarly, the deck slab expansion joints at the abutments will be eliminated by converting the existing abutments to deck slab extension type abutments with buried approach slabs per VDOT's Structure and Bridge Manual, Volume V, Part 2, Chapter 17.

Elimination of these expansion joints will greatly reduce the long-term maintenance costs for VDOT for both the superstructure and substructure (Figure 4.3.7) on page 13.

We will patch existing beams and diaphragms and repair cracks using an epoxy injection. We will replace the existing low-profile bearings with steel-reinforced elastomeric bearings. In order to complete bearing replacement and beam seat repairs, we will jack and block the existing superstructure in a manner that does not damage the existing beams or deck slab so they may remain in service. A load rating analysis will be performed for all stages of jacking and blocking per the requirements of VDOT IIM-SandB-86.1.

Substructure: We will design and construct the widened portions of the bridge substructures to match the existing bridges. The abutments will consist of cast-in-place concrete with a deck slab extension above the backwall, and will be supported by pile foundations. The piers will consist of pile supported, two-column piers. We will repair the existing concrete slope protection in front of the abutments using a strategy that avoids impacts to existing utilities. We will use VDOT's standard Pier Protection System adjacent

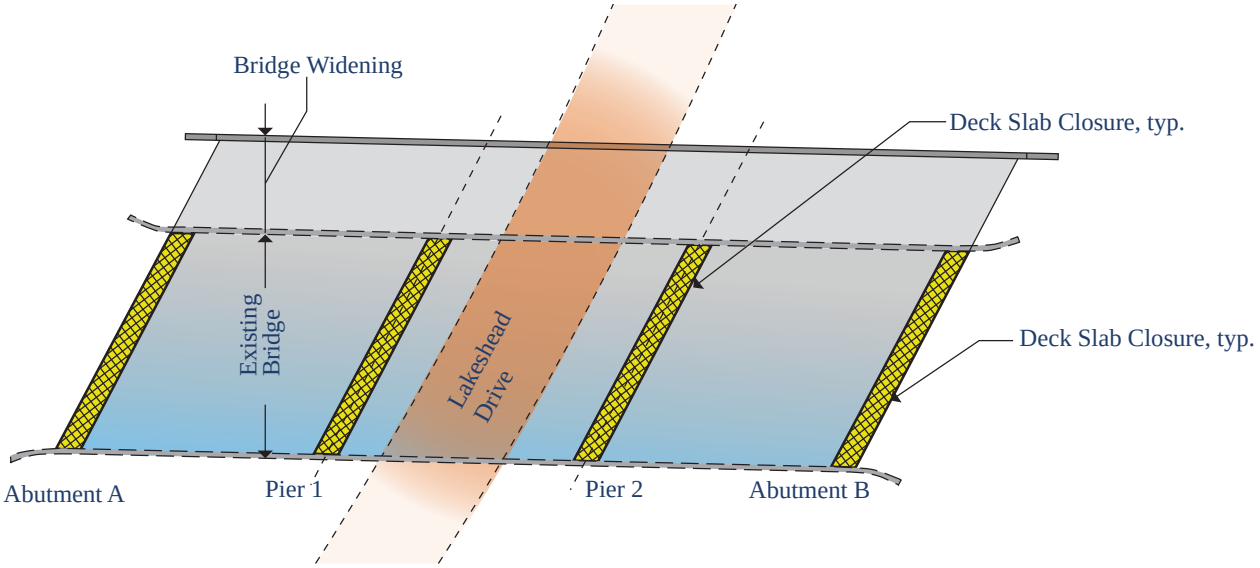


Figure 4.3.7: Elimination of Expansion Joints. The Skanska Team's design avoids VDOT's maintenance costs associated with bridge expansion joints at Lakeshead Drive.

to Lakeshead Drive, unless statistical analysis of traffic levels per AASHTO C3.6.5.1 indicate that the probability of collision is low enough to eliminate the requirement for barriers.

Material Selection, Maintenance and Construction Considerations: By eliminating the deck slab expansion joints, we have reduced the long-term maintenance requirements for these bridges, as all deck surface drainage will be redirected away from the bridge substructure and into the roadway drainage system. We anticipate little to no impact construction impacts to adjacent utility owners.

As required by VDOT IIM-S and B-81.7, we will use CRR for all new concrete construction, and low permeability concrete for all new bridge elements. We will install galvanic anodes in all repaired portions of the existing concrete substructure units. These materials and construction methods will increase the service life of the widened bridges.

B639 and B640: I-64 over Colonial Parkway

At Colonial Parkway, our approach is to design and construct the arch widening per the RFP requirements, but with the use of micropiles to reduce noise, land disturbance, and visual impacts. Because they are thinner and more easily threaded through the existing batter piles, micropiles offer a highly constructible solution. In addition, micropiles eliminate percussive driving noise and the visual impact of large pile driving rigs, thus minimizing disturbance to patrons of the Colonial Parkway. We will use nighttime lane shifts for I-64 traffic, and maintain at least one lane of traffic on Colonial Parkway during bridge construction. Our crews will maintain a clean and orderly work zone along Colonial Parkway at all times.

Typical Section: We will replace the existing pavement structure above the arches and use fill material below the pavement that meets the requirements of the RFP. During construction, we will provide two additional 12-foot wide lanes and two 1-foot wide shoulders in each direction. We will maintain a minimum vertical clearance of 14 feet and 6 inches. during construction, and a minimum vertical clearance of 14 feet and 8 inches, which will match the existing low chord elevation of the eastbound bridge, in the final bridge configuration.

Superstructure: The proposed bridge superstructures will match those of the existing bridges. The new portions of the arches will be cast-in-place, and will be structurally connected to the existing portions of the arches.

We will construct the widened portion of the superstructure in a manner that avoids adding dead load to the existing structure. All existing superstructure elements that are to be incorporated into the final condition will be repaired and rehabilitated. We will patch existing arches, use epoxy injection to repair cracks, and clean weep holes near the base of the arch legs.

The brick façade for the new portions of the widened arches will match the appearance of the existing arches. We will use solid brick for the widened arch sections, as presented in Figure 4.3.8 on page 14. No brick veneer or form liners will be used for these bridges.

Substructure: The widened portions of the arch substructures will match the existing bridges. We will construct the arch foundations using cast-in-place concrete with driven prestressed concrete piles and micropiles for support. We will take extreme care to design the widened foundation in a manner that avoids interference with the battered piles supporting the existing wingwalls. We will use micropiles to avoid intersecting these existing piles. New wingwalls that match the appearance and configuration of the existing wingwalls will be provided at both bridge approaches supported by pile foundations. We will repair erosion along the Colonial Parkway shoulders and in front of the existing arch legs, and install a new drainage system.

During construction of the bridge foundations, we will avoid impacts to the existing telecommunications utility adjacent to the eastbound bridge , as we will accurately locate this existing facility using SUE Level A test holes. Additionally, our design will ensure that there is no differential movement between the new and existing portions of the arches.

Material Selection, Maintenance and Construction Considerations: The Skanska Team proposes to provide all rehabilitation and/or repairs to the existing bridges. Due to the successful long-term performance of an earth-filled arch, the life cycle maintenance requirements for these bridges are expected to be minimal.

All new concrete construction will use CRR steel as required by VDOT IIM-SandB-81.7. We will use low permeability concrete for all new bridge elements, and install galvanic anodes in all repaired portions of the existing concrete substructures. We will provide extra concrete cover, in addition to the minimum required by VDOT standards, in areas where concrete retains soil, to protect the reinforcing steel against corrosion caused by extended exposure to moisture. These materials and construction methods will help to increase the service life of the bridges in their widened state.

We will design all widened portions of the bridges according to the provisions of the AASHTO LRFD Bridge Design Specifications, 7th Edition and VDOT Modifications (IIM-SandB-80.5). Details for MOT can be found in the TMP in Section 4.5.2. Load ratings will be prepared, submitted to VDOT, and approved, prior to implementation of any traffic configuration changes that will use the new widened sections of the bridges.

Retaining Walls

Our Team's conceptual retaining wall plans are included in Volume II. The wall located between stations 2325+50 and 2346+00 will be designed to be mechanically stabilized earth MSE walls. We will construct all MSE walls with a vertical face to remain within the existing VDOT ROW. Walls constructed in the median of I-64 will use an architectural brick finish (via formliner).

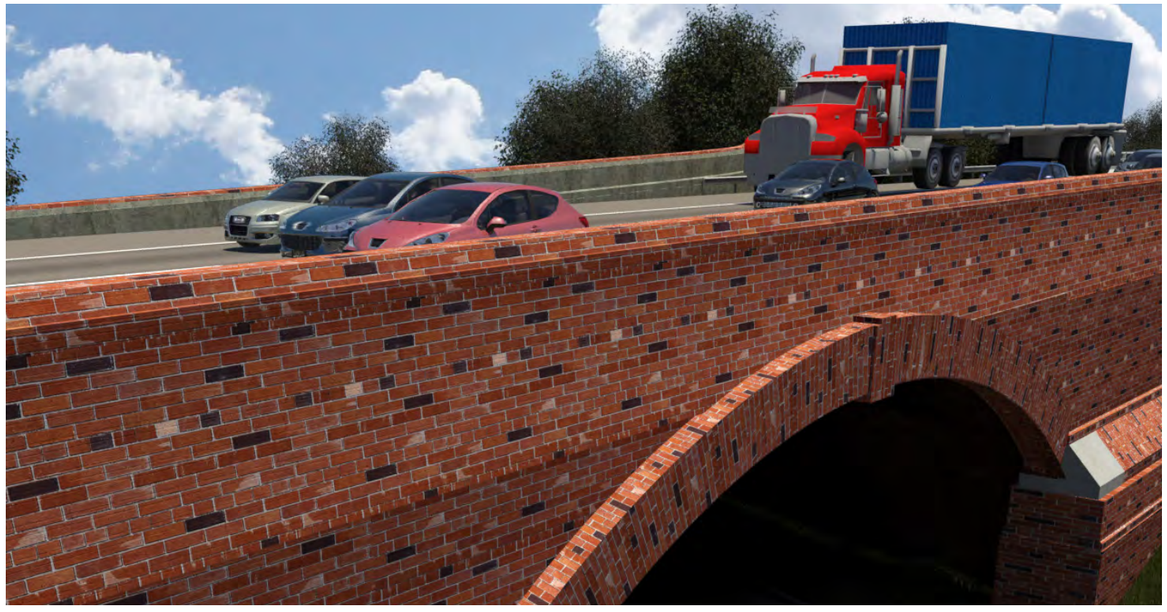


Figure 4.3.8: Colonial Parkway Aesthetics. Our design uses solid brick to blend the new portions of the widened arches with the existing arches.

4.4 Project Approach

4.4 Project Approach

The I-64 Widening, Segment III Project presents an opportunity for VDOT and the Skanska Team to deliver a successful design build project together. As the largest and most complex of the I-64 Peninsula widening projects, this segment presents unique challenges that must be addressed in order to fully achieve the Project objectives. During the procurement phase, we have focused on planning all aspects of the project's pre-construction and construction activities which, when executed, will result in a safe, high quality Project that is delivered ahead of schedule.

We thoroughly understand that issues can arise on design build projects when execution does not meet expectations, including some projects here in the Hampton Roads District. Our Project approach has been developed to specifically address those issues to ensure that design and construction of this I-64 Project are successfully delivered to VDOT's satisfaction. As requested in your RFP and as described in this section, these issues and our approach to addressing them, include:

- Environmental Management
- Hydraulics and SWM
- Geotechnical
- Quality Assurance / Quality Control

We understand that to address these issues, our Project logistics must be well thought out and our design and construction processes must be thoroughly developed through reliance on our Team's experience in delivering similar projects and our understanding of best practices. However, it is one thing to describe an approach and another to implement that approach. The Skanska Team fully embraces the role of the Responsible Charge Engineer (RCE) and the importance of this key person to effectively manage all aspects of design, construction and quality of the Project as depicted in Figure 4.4.1.

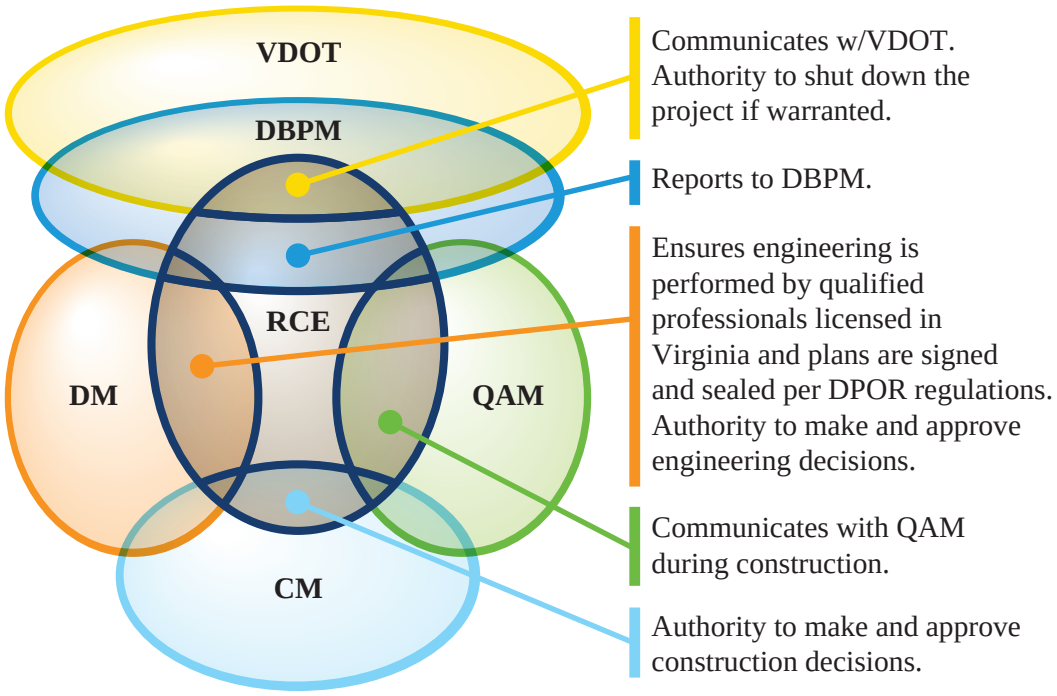


Figure 4.4.1: RCE Communication.

Our Team brings together some of the foremost design, environmental, quality and construction firms for this critical Project, ready to implement our well-established processes and procedures to ensure success. We are committed to the successful execution of the I-64 Segment III Project with VDOT.

Project Approach

MOT Areas

A 5 -1/2 Miles | **B** 1 -1/2 Miles | **C** 1 -1/2 Miles

Work Zone Cells

A-1 | A-2 | A-3 | A-4 | A-5 | A-6 | B-1 | B-2 | B-3 | C-1 | C-2

234 | 238

Route 604 Barlow Rd.

CAMP PEARY

QUEENS LAKE

Route 716 W Queens Dr.

Lakeshead Dr.

NATIONAL PARK SERVICE

GREAT WOLF LODGE

CREEKSIDE LANDING

FELGATES WOODS

Route 199 Humelsine Pkwy

Colonial Pkwy

Route 143 Merrimac Trail

WALLER MILL RESERVOIR

Investigating Potential office/yard locations

No Ponds or ROW Takes at Camp Peary or Waller Mill Reservoir

Opportunity to create approximately 8400 SF of wetlands

Balanced earthwork in median project-wide

Culvert Extension Avoided

+/- 30ea FDR, Job Mix Designs

Potential Median Construction Access (Typ.)

Shifted Off-Ramp

Fewer temporary impacts (single temporary trestle location)

15' Wide Channel Maintained through all construction phases

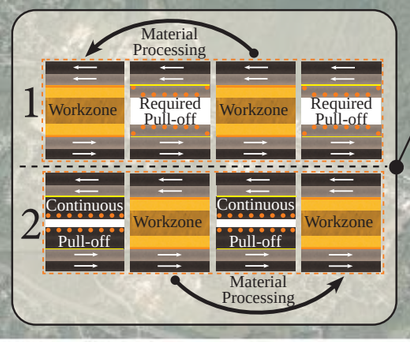
BIM to assist crews and stakeholders on understanding of the sequence and method of construction.

Coordinate with adjacent contracts.

Ponds

Benefits:

1. **Job-wide permit procurement. (All Phases)**
2. **Job-wide design packages. (All Phases)**
3. **50% fewer ponds designed.**
4. **Fewer reforestation areas.**
5. **62% reduction in ROW takes.**
6. **SWM design submittals at 80%.**
7. **Median access points with VDOT approval.**



Our Alternating Cells Production System allows our crews to retrieve existing materials from other active work cells, process and put into place those materials, maximizing this project's potential for recycle/reuse, and bolstering an aggressive completion schedule.

Our 2-phase MOT plan minimizes disruptions to the travelling public while providing safety with 12ft travel lanes.

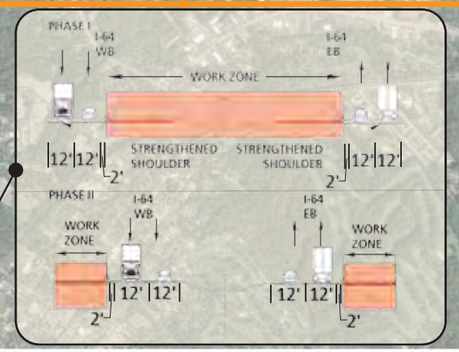


Figure 4.4.2: Concepts and benefits to our approach.

4.4.1: Environmental Management

Planned Efforts During Design and Construction

The Skanska Team will integrate our environmental staff into the design-build task groups, maximizing awareness of critical areas, natural resources, cultural resources, and predetermined environmental commitments and constraints. We will implement effective environmental risk management by holding weekly design progress meetings to exchange information, identifying potential issues, and developing resolution strategies.

WSP and VHB demonstrated this collaborative approach on past projects like the Dominion Boulevard (US 17) Improvements Project where they developed the following strategies:

- repositioning outfalls;
- steepening embankment and riprap slopes;
- reduce the Project footprint; and
- avoiding and minimizing impacts to both tidal and non-tidal systems.

On their Dominion Boulevard (US17) Improvements Project, by reducing the footprint and conducting pre-application discussions with the agencies involved, WSP and VHB accelerated the permitting process and obtained water quality permits (individual permits) in less than 120 days. The Skanska Team will replicate this strategy to obtain timely permits on the I-64 Segment III Project.

We will keep the resource agencies informed of the design progress by holding several pre-application, check-in meetings to discuss the Project alignment, potential construction methodologies and resource impacts. We will present any challenges or key issues that need to be vetted early in the process. Through our early coordination, we understand that the Virginia Institute of Marine Science has already reported to VDOT and the Virginia Marine Resources Commission that they are not recommending a Time of Year Restriction (TOYR) for pile driving within Queens Creek unless hollow piles are used.

Planning these touchstones early in the process makes it easier for the design team to incorporate items that address agency concerns and convey a level of trust and credibility back to the agencies. This will translate to a smoother permitting process and greater schedule certainty.

As with the design phase, our Team will integrate our environmental staff into the construction phase so they may communicate directly with our superintendents with the goal of making all parties aware of the permit conditions, requirements, and environmental commitments.

Environmental staff will be integrated into our process of planning construction operations, and also will provide awareness training for field personnel prior to the start of work.

Critical steps before construction begins include submitting final plans to the Department of Environmental Quality (DEQ); allowing for a 30-day review and comment period; and flagging all non-impacted wetlands, streams, and other sensitive areas within the ROW, such as the National Park Service's (NPS') Colonial Parkway and Williamsburg Battlefield. The presence of these markings will be reviewed with the field crews and incorporated into our work plans.

Our construction monitoring program (Figure 4.4.3) will provide environmental oversight throughout construction. VHB's Williamsburg office is located within minutes of the corridor,

Figure 4.4.3: Construction Monitoring Program. We will hold pre-activity meetings, inspections, and identify corrective measures as part of our program.

with senior environmental staff available to assist in training the construction crews and evaluating activities within the corridor. Skanska employs a formal tracking system for logging erosion and sediment control reports, documenting environmental issues and assuring their timely resolution, in our Skanska Integrated Quality Information Management System (QIMS) as further discussed in Section 4.4.4: Quality Assurance/Quality Control.

Approach and Potential Solutions for Recognized Concerns within the Project Footprint

VDOT has already eliminated many of the pre-existing concerns within the ROW through detailed analysis and coordination with the regulatory agencies. Our design remains within all existing or RFP-proposed ROW boundaries, and our intent is to develop final plans without having to obtain any ROW additional to that proposed in the RFP concept plans. This maximizes schedule certainty by eliminating the need for any new environmental studies in areas that are currently undocumented.

Colonial Parkway Crossing and Section 4(f) Properties

A critical stakeholder in the design and permitting process is the NPS' Colonial National Historic Park. We will closely follow the commitments outlined in the Programmatic Agreement regarding the I64 Bridges over the Colonial Parkway, and hold multiple design progress meetings with invitations extended to VDOT and NPS. We are also aware of the nearby 4(f) property (Williamsburg Battlefield) and will keep our impacts below *de minimis* levels.

Noise Analysis

Our Team will complete and furnish a final Noise Abatement Design Report (NADR) in compliance with VDOT's applicable policies and guidance documents.

Tidal Wetland Crossing

The Queens Creek bridge crossing is a critical path element to the permitting of the overall Project. This crossing represents the largest square footage impacts to wetland resources of all elements of the Project, so we have performed a detailed analysis of the potential impacts.

Our design of the Queens Creek bridges reduces the overall total wetland impacts by eight percent by shifting the alignment of the eastbound bridge by 25 feet to the south. This shift benefits the Project by requiring fewer temporary impacts to adjacent tidal wetlands, since a single construction access corridor will be used between the eastbound and westbound bridges. Our approach also reduces construction noise impacts associated with multiple construction access locations. Our innovative eastbound bridge alignment is more cost effective and requires less time to construct (Figure 4.4.4).

Our solution widens the median between the two bridges to approximately 40 feet, increasing the sunlight between the structures and eliminating the indirect shading impacts inherent to the RFP Plan. An upland area (8,400 square feet) between the shifted bridges can be regraded to the

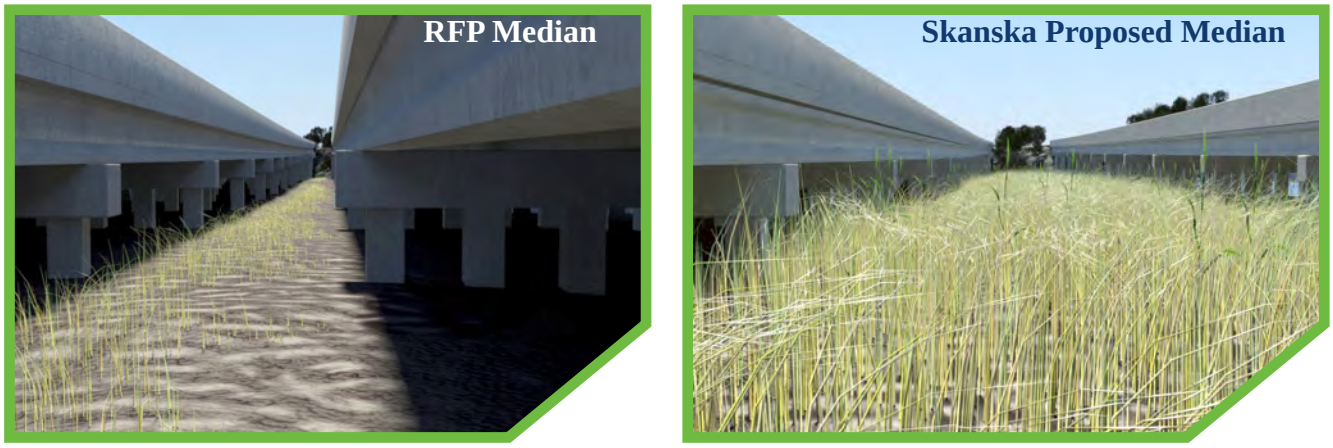


Figure 4.4.4: Queens Creek Median Alignment Shift (RFP vs Alignment Shift): An upland area (8,400 square feet) between the shifted bridges can be regraded to the appropriate marsh elevation following completion of bridge construction, resulting in 30 percent less wetland footprint for the crossing.

appropriate marsh elevation following completion of bridge construction, resulting in 30 percent less wetland footprint for the crossing.

Threatened and Endangered Species
According to the RFP, species within or adjacent to the Project are the Small Whorled Pogonia (Ilostria Medeoloides), Atlantic Sturgeon (Acipenser Oxyrichus), Northern Long-Eared Bat (Myotis Septentrionalis), and the Mabee's Salamander (Ambystoma Mabeei). VDOT's survey found several small areas identified as potential Small Whorled Pogonia habitats, but no Small Whorled Pogonia plants were found. Potential habitats carry no formal regulatory protection status, so currently this species does not impact the Project. We will coordinate these findings with the appropriate agencies during the permit process. The Atlantic Sturgeon, an anadromous fish, will require Section 7 consultation given that this species is known to migrate within the York River. Through preliminary coordination with permitting agencies, we are confident the TOYR will not impact the installation of Permanent works.

On January 5, 2016, the Programmatic Biological Opinion (PBO) for the Final 4(d) Rule was issued and a Final 4(d) Rule was issued effective February 16, 2016 for the Northern Long-Eared Bat. The Skanska Team will employ voluntary conservation measures, such as a TOYR on tree clearing as well as bat inspections of the bridges per VDOT and FHWA protocols. Our Team will conduct an acoustic study, consisting of 15 to 18 acoustic detectors installed for a two-night period in the summer of 2018, to determine if protected bats are present within the corridor. If bat usage is found, we will implement the appropriate avoidance and minimization (AAM) measures outlined in the PBO.

Finally, the state-threatened Mabee's Salamander was identified as being within the vicinity of the Project. It is unlikely that suitable habitat for the Mabee's Salamander is located within the ROW, but a habitat assessment to fully document habitat presence or absence within the corridor will be completed and submitted to the Department of Game and Inland Fisheries for review and determination.

Water Quality Permits and Mitigation

Based on the March 2017 pre-application meeting that VDOT held with the U.S. Army Corps of Engineers (COE), DEQ, and the VMRC, we understand that individual permits will be required from those entities. Additional permits/ authorizations from the DEQ include: Virginia Stormwater Management Program (VSMP), Spill Prevention Control & Countermeasure (SPCC) Plan, Virginia Pollution Discharge Elimination System (VPDES), and Coastal Zone Management Area (CZMA) Consistency Determination.

The Skanska Team will prepare a Joint Permit Application (JPA) and permit support documentation that identifies the Project goals, purpose and need, avoidance and minimization measures, direct and indirect impacts, and proposed mitigative measures to offset the proposed impacts (Figure 4.4.5, Page 21). For the bridge crossing over Queens Creek, approximately 0.8 acres of tidal marsh will be impacted and require at a minimum 1:1 replacement. Currently, there are no tidal mitigation banks within the watershed so mitigation could be achieved through payment into the Aquatic Trust Fund. Mitigation for non-tidal impacts could be satisfied through bank purchases within the watershed and/or payment into the Aquatic Trust Fund. Our Team plans to submit the JPA by June 2018 with wetland permits being issued by October 2018, well in advance of the January 2019 construction start.

Integration of Environmental Management into the Schedule

Our environmental strategy for maintaining and exceeding schedule milestones includes:

- identifying schedule-critical environmental issues and mitigation measures at design kick-off;
- collaborating and communicating within our interdisciplinary team;
- coordinating early with regulatory agencies and key stakeholders; and
- developing plans that address agency/ stakeholder concerns, to the greatest extent possible, in advance of permit application submission.

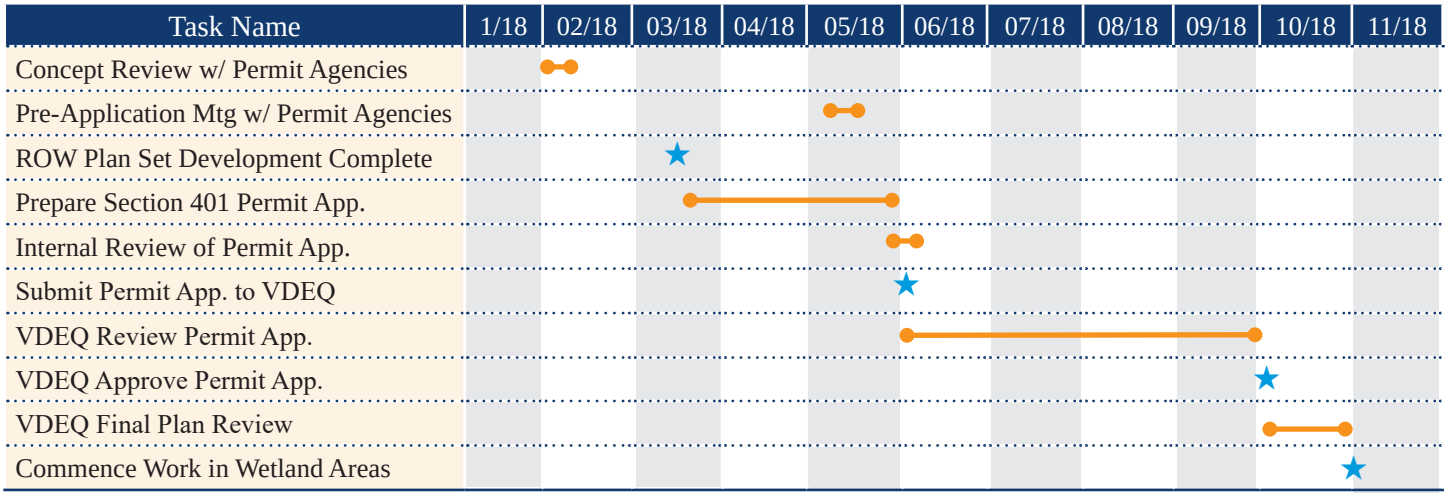


Figure 4.4.5: Permitting Schedule. Our schedule is based on experience with the permitting agencies and knowledge of the design-build permitting process.

The proposal schedule presented in Section 4.7 outlines this approach and depicts an estimate for completion of key environmental tasks (such as threatened and endangered species coordination, and JPA preparation and submission) and anticipates worst-case construction restrictions related to threatened and endangered species. VDOT's recently completed wetland delineation, Small Whorled Pogonia survey, and State Historic Preservation Office (SHPO) clearances for work within the existing and proposed ROW have reduced work efforts for our team. However, in the areas where additional ROW is required, we have allowed time for the necessary environmental studies to occur within those areas. VHB is currently performing wetland delineations and cultural resource investigations on several large tracts of land that abut the western end of the Project. If additional ROW is needed in these areas, our advance environmental work will help keep the Project on schedule.

4.4.2: Hydraulics

Approach to Managing Hydraulic Features

The Skanska Team's drainage and SWM design meets or exceeds the applicable criteria, is efficient, and minimizes both the construction duration as well as future maintenance. We achieved this by minimizing land disturbance, proposing efficient SWM facilities, and eliminating unnecessary storm sewer systems and proposed culverts as presented in the RFP Concept Plans. We followed the Part II C Design Criteria, in accordance with the RFP, which resulted in the lowest SWM burden for the Project. By rapidly advancing key components of the drainage and SWM design, while taking into account site-specific requirements such as the York County Watershed Management and Protection (WMP) area, we were able to provide necessary SWM facilities at optimal locations and avoid more sensitive areas such as Camp Peary.

The Skanska Team's approach includes the features and benefits listed below:

- Optimized SWM design and facility layout requires 12 fewer ponds and 17 fewer grassed swales.
- Reduction in phosphorus loading by 11 percent in the WMP areas, thus exceeding the local requirements.
- Higher quality treatment of runoff using enhanced Erosion and Sediment Control (E&SC) during construction, as well as a more efficient SWM plan that adds greater treatment in a smaller footprint.
- Avoidance of the Camp Peary and Section 4(f) properties as part of the proposed SWM Plan.
- Stormwater Management Design will be expedited and the Stormwater Management Plan and Erosion and Sediment Control Plan will be finalized early in order to expedite the VSMP Permit application which is required to start construction. Taking

this approach on these critical path items increases schedule certainty for the project.

- Minimized tree clearing through the optimization of SWM facilities layout and other measures.
- Reduced maintenance costs due to an optimized SWM facility design.

Preliminary Engineering

As part of this proposal, our Team performed extensive preliminary engineering to minimize impacts of delay risk due to permit approval, design approval, and construction, while still meeting Project goals and RFP criteria. To date, our preliminary engineering includes:

- analysis of the SWM to meet and exceed Project criteria;
- analysis of the storm sewer system to provide the most efficient and cost effective design;
- alternative analysis to extend box culverts, including minor alignment shifts, construction of retaining walls and provision of MB-7 barrier with a moment slab in lieu of guardrail and "sliver" fills. (At the west end of the Project, we chose the barrier with moment slab option as it eliminated wetland impacts, preserved 11,000 square feet of forest, and minimized construction duration and cost);
- evaluation of scour and undermining at the existing box and pipe culverts under I-64;
- coordination of the roadway, drainage and pavement design to minimize subgrade disturbance, thereby reducing the number of SWM facilities required; and
- enhanced SWM facilities in York County WMP areas (where requirements are more stringent - particularly the requirement for a 10 percent pollutant load reduction) to "overcompensate" for peripheral areas of the Project and eliminate the need for ROW acquisition over much of the corridor.

Mitigation Strategies

Design Constraints

The following constraints will significantly reduce the risk of construction delays:

- complete avoidance of Camp Peary;
- cut/fill limit of 20 feet clear of Camp Peary property to avoid the Camp's 45-day design review period;
- avoidance of the Queens Lake Community (we eliminated the SWM facilities in the RFP Concept Plans to comply with the community request to VDOT);
- Twelve percent reduction in phosphorus loading in the Waller Mill Reservoir and Jones Mill Reservoir watersheds, which exceeds the York County WMP area overlay district requirement of ten percent).

Design Approval Process and Permitting

We propose a fast-track permitting schedule that will use the following elements to enable construction to commence sooner:

- obtain VSMP Permit Application Project-wide, to provide for phased land disturbance construction;
- submit subsequent land disturbance area construction phases for approval;
- submit the Stormwater Permit in coordination with the District Hydraulic Engineer's monthly permit submittal schedule to ensure optimization of the approval time for the VSMP General Construction permit;
- coordinate work with the District Hydraulic Engineer to provide interim copies of the SWM Report for discussion/review, ahead of the final submittal for approval.

Stormwater Management

As part of the SWM design, we optimized the layout of SWM facilities to offer numerous benefits for the Project. To address water table variances, we analyzed the groundwater elevations provided in the RFP for each SWM facility location and used them in the preliminary determination of SWM facility type and size. Our design reduced the total number of SWM facilities in the RFP Concept Plans from 86 to 59. The overall duration of the ROW acquisition process (demonstrated in Figure 4.4.6, page 23) is largely driven by our SWM design, our schedule has built-in credibility as our SWM design eliminates ROW takes by 52%. Table 4.4.1 on page 23 presents the reductions in each type of SWM facility.

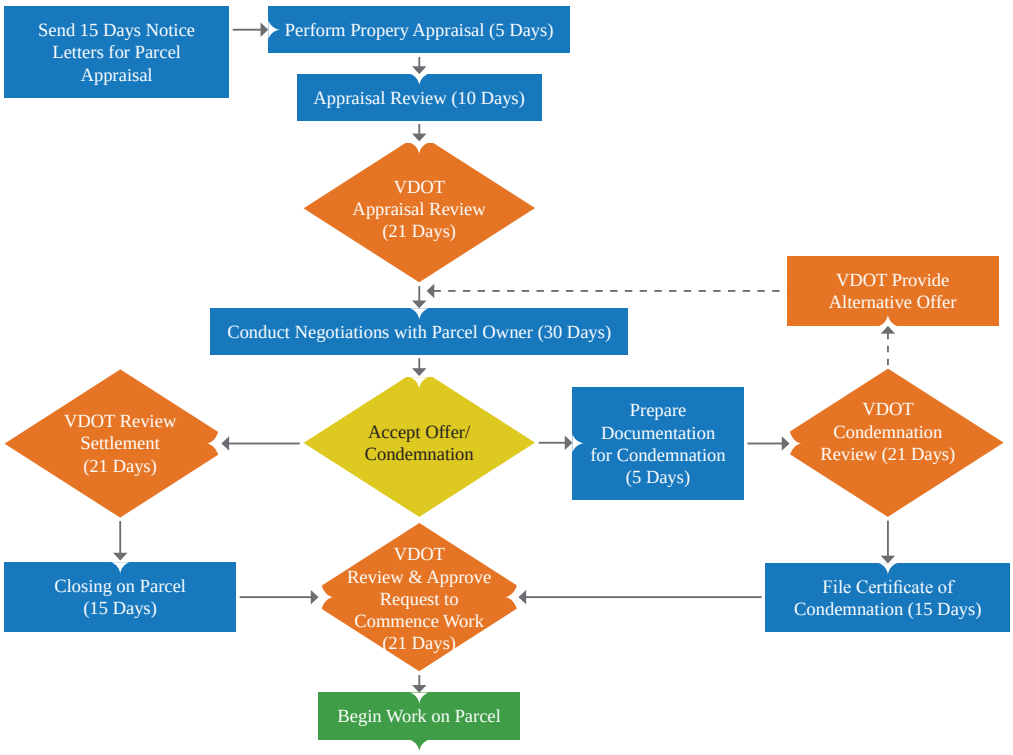


Figure 4.4.6: ROW Acquisition Process. The Skanska Team has familiarity and experience with minimizing and streamlining ROW acquisitions on fast-paced construction projects.

Table 4.4.1: Stormwater Management Optimization

No. of SWM Facilities	RFP Design	Skanska WSP Design
Bioretention	9	9
Extended Detention	15	3
Total	**24**	**12**

We eliminated 50 percent of the SWM facilities shown in the RFP Plans and reduced long-term maintenance costs for VDOT.

Optimized SWM Design

The Skanska Team used the following methodology to determine the best and most efficient locations for SWM facilities:

- Locations that maximized drainage area and resulting treatment from SWM facilities were favored.
- Locations that enabled higher yielding treatment and/or SWM facilities with low maintenance costs were favored.
- Locations where the volume of the one-year storm (Q1) is required to be detained and then released over a 24-hour period have SWM facilities included.
- Locations that were near high points and did not provide efficiency from SWM facilities were removed.
- SWM facility locations that require ROW acquisition and were not needed per RFP requirements were removed.

Reducing the number of SWM facilities and optimizing SWM facility locations achieved many Project benefits:

- Reduction of ROW impacts
- Limited tree removal/destruction by 57 percent
- Better cut/fill balance
- Reduction of impacts to wetlands and existing communities
- Maximized SWM facilities in the WMP to meet local requirements, including the requirement to reduce phosphorus loading by 10 percent from the existing condition

Outfalls
The Skanska Team conducted site visits and performed preliminary analysis on the proposed and existing outfalls to determine which ones need to be restored. We determined that 54 outfalls need to be restored.

Other highlights of the Skanska Team's outfall design for the Project are listed below:

- Stream restoration will be incorporated on outfall channels, which will meet outfall criteria as well as generating TMDL credits for VDOT's MS-4.
- Every location where ditch or pipe discharges flow from the ROW was checked for adequacy.
- Decreased discharge to NPS property.

Existing Culverts
We analyzed inspection reports for existing culverts and developed a plan for rehabilitating damaged culverts. We propose slip-lining and/or trenchless technology for longer culverts and smaller areas of damage. We will rehabilitate damaged headwalls or endwalls using various concrete repair techniques.

We will avoid culvert extensions where possible using concrete barriers and barrier systems that enable the roadway to be widened without the fill slope impacting the existing headwall or endwall (Figure 4.4.7). We will use a construction technique for these elements that has been previously approved by VDOT.

Erosion Control During Construction
Potential sedimentation of Queens Creek from I-64 has caused concerns with the surrounding neighborhoods. The Skanska Team is committed to proactively performing erosion and sediment control (E&SC) measures during construction.

We will institute a full-time dedicated erosion control and maintenance crew during construction operations, reporting to the Responsible Charge Engineer (RCE). The dedicated crew will maintain and repair any erosion control devices in order to eliminate any possible issues before they arise and to support our high quality standards and commitment to the environment.

Maintenance
The Skanska Team's proposal reduces future VDOT maintenance with the following strategies:

- Maintenance-friendly SWM facilities
- Reduction in the number and size of SWM facilities
- A drainage system that limits the length of closed conduit and maximizes open channel and natural drainage channels

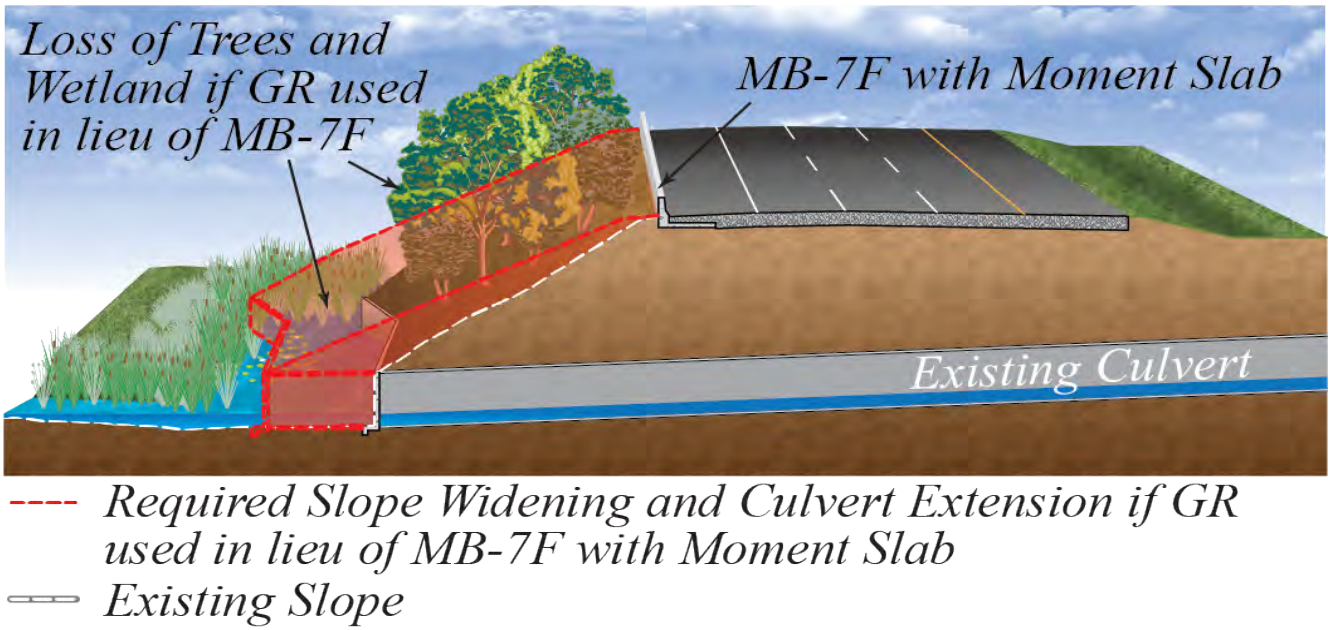


Figure 4.4.7: Utilize a Concrete Barrier at Shoulder. Our design uses a moment slab and barrier system to widen the roadway without the fill slope impacting the existing headwall or wing wall.

Drainage Coordination with Utilities

The Skanska Team identified potential utility conflicts and mitigated them in our design. For example, our design completely avoids the sanitary force main adjacent to Colonial Parkway, resulting in less risk to the schedule and less coordination with local reviewers. Section 2.7.5 of the RFP requires the York County Sanitary Sewer Force Main to be relocated around proposed stormwater facilities with the constraint that the relocation must remain on VDOT right of way in the vicinity of the Williamsburg Battlefield area. Our design has positioned stormwater ponds to avoid this force main altogether while still remaining on proposed VDOT right of way; requiring no relocations of the force main due to stormwater pond placement.

4.4.3: Geotechnical

Approach to Identifying and Mitigating Geotechnical Risks

Our approach to identifying and mitigating geotechnical risks is critical to delivering this Project on time. We conducted a thorough validation of the RFP pavement designs, and a comprehensive review of the RFP Geotechnical Data Report (GDR), as-built bridge and roadway plans, traffic analysis report, survey files, and available public records including soil surveys and geologic mapping. This effort enhanced our understanding of potential construction impacts on the surrounding environment, residential communities, and existing infrastructure.

Coordination of Geotechnical Design Concepts and Construction Activities

For the Cold Central Plant Recycling Material (CCPRM), we will develop appropriate job mix formulas (JMF) for all reclaimed asphalt pavement (RAP) materials. We will construct a trial section to verify placement procedures and confirm the JMFs through QA/QC testing. This process will provide the best outcome through close coordination of design, construction, QA/QC and IA personnel from the RFP design to final design through construction and acceptance.

Our full-depth reclamation (FDR) process of using a reclaimer to process existing pavement materials into FDR subbase will include varying quantities of existing un-milled asphalt, subbase stone, and stabilized subgrade soils. For the widening portions of the Project, we will use crushed concrete aggregate or RAP materials that are placed, treated with cement and reclaimed into an FDR subbase material. JMFs will be designed for all materials used in the FDR processes.

We will use multiple JMFs to account for the variability of existing materials. Sampling, testing, and analysis of existing materials will guide the FDR design process during construction and determine the appropriate JMFs. In order to correlate the constituent quantities of pavement materials to the cement content required to meet final compressive strengths, we will use test data from the design process to reduce the risks of manufacturing FDR material that does not meet the performance requirements of the Special Provisions. This proactively addresses the risk of costly schedule delays associated with FDR re-work and re-testing.

Due to the required overhead clearances at the Newman Road, Barlow Road, Merrimac Trail, and Queens Drive overpasses, the FDR process may be deepened below the current stabilized subgrade and into the underlying soils. While preparing the minimum design section required by the RFP, disturbance to the subgrade is allowed and will not affect SWM requirements if the disturbance stabilizes subgrades with cement or lime, thereby creating a non-erodible subgrade during construction. Additional JMFs may be required at these locations to determine the impact of native unstabilized soils on the FDR mix design.

Working in the Vicinity of Existing Foundations

We will use driven prestressed concrete piles as the foundation for Queens Creek and Lakeshead Drive bridges. When the design-level subsurface investigation is completed, we will refine the foundation design based on subsurface profiles and soil strengths obtained from in-situ standard penetration testing (SPT) and cone penetration testing (CPT) and lab testing of retained soil samples. We will perform drivability analyses and monitor driving stresses in the piles with PDA testing at select pile locations where design capacities can be verified in the as-built condition.

We will use a composite foundation system of driven prestressed concrete piles and micropiles to provide a robust, constructible foundation to support the widened arch on the structure at Colonial Parkway. As-built plans indicate that the existing wingwalls are supported on a pile foundation battered towards the proposed widening. Our use of micropiles will avoid damage to the existing piles by allowing for installation of the new piles between the existing foundation.

Maintaining Existing Structures

The Skanska Team will provide vibration surveys and monitoring in areas where construction may threaten the integrity of nearby structures. We will refine foundation designs, if needed, following in-situ SPT and CPT and lab testing. We will analyze drivability and monitor stresses in the piles with PDA testing in order to confirm design capacities and provide an as-built condition that fully verifies the design with actual field data. We will verify design lengths and sizes of the micropiles using static load tests.

The RFP Concept Plans indicate areas where sound barriers may be required. Our innovative use of micropile foundations for these walls will reduce impacts to adjacent properties and expedite the installation of the sound barrier. We will use "LPile" software to model the soil-structure interaction during final design.

Maintaining or Reconstructing Existing Slopes

The RFP Concept Plans recommend a large retaining wall in the median west of Queens Creek. By using safer median slopes and shifting the Queens Creek alignment 25 feet, our design reduces the height of the retaining wall and allows for the implementation of an MSE wall in this area. The Skanska Team anticipates that this type of wall will reduce the schedule and provide cost savings to VDOT, for both the initial construction cost and long-term maintenance costs.

We will use slope stability checks to construct critical temporary and permanent slopes (Figure 4.4.8) using conventional methods and probabilistic methods (where applicable) in order to ensure the safety of the roadway, work areas, and existing utilities.

Unlike many projects in the Coastal Plain, the available subsurface data on significant fill areas of the Project did not indicate soft, normally-consolidated clay soils and heavily organic soil deposits that generally undergo significant consolidation settlements. To confirm this conclusion, we will conduct additional soil borings and CPTs in areas of significant fill where settlement would typically be a concern.

In conjunction with pavement coring and CBR testing of the existing subgrades, we will perform a comprehensive geotechnical investigation in accordance with VDOT MOI Chapter III. This analysis will identify the extent and characteristics of unsuitable soils with high plasticity, organic, high moisture content and loose or soft properties. By identifying the location and properties of the materials early in the design phase, we can evaluate mitigation measures such as removal/replacement, chemical stabilization, or moisture/density manipulation to enhance schedule certainty.

We will supplement the soil borings with dynamic cone penetration (DCP) testing at and between

Figure 4.4.8: Reconstructing of Slope. The Skanska Team will use slope stability checks to ensure that the roadway, work zone, and utilities are safe and secured.

the boring locations to help identify soils that may require moisture or density manipulations during construction, defining problematic soils that may be detrimental to stable fill placement and proof rolling pavement subgrades during construction.

We will perform proof roll testing with loaded dump trucks to identify loose or soft fill subgrades prior to placing fill. If not detected prior to construction, these soils can lead to failing pavement subgrades during final proof roll testing. Early identification and mitigation of these soils can reduce schedule impacts associated with re-work.

The Skanska Team is also evaluating the use of Intelligent Compaction (IC) technology to supplement proof rolling and nuclear density testing of subgrade and fill soils. This technology can allow us to evaluate and correct deficiencies in soils and asphalt compaction by measuring in real-time the energy response of the material being compacted by the roller.

We propose a thorough pavement condition survey in general accordance with FHWA Distress Identification Manual to identify the presence of failing subgrades resulting from loose/soft soils and high plasticity soils. We will conduct forensic ground penetrating radar (GPR) testing to determine the existing pavement thickness and identify anomalies in the pavement structure. We will correlate the results of the GPR survey to the existing core data in the GDR and to additional cores collected during our subsurface investigation. The results will allow the construction team to better quantify the existing pavement material's availability for recycling operations.

4.4.4: Quality Assurance/Quality Control

The Skanska Team's project specific Quality Management Plan (QMP) details the steps to ensure that the quality requirements for this Project are met. Our QMP clearly defines our quality management structure, including lines of authority and communication protocols that exceed the RFP requirements and VDOT's expectations.

Our quality management processes and our web-based information management technology differentiates our overall QMP from our competition. Our QMP will provide confidence in our Team's quality performance with minimal oversight from VDOT.

Approach to Design Quality Control and Assurance

Design quality management is led by the design manager (DM), with oversight from the design-build coordinator (DBC), responsible charge engineer (RCE) and design-build project manager (DBPM), to confirm that the RFC (Released for Construction) plans are prepared in accordance with January 2012 QA/QC Guide. Our Team's design quality assurance manager (DQAM) is responsible for oversight of quality activities. Specifically, the DQAM will confirm that the design team follows the formal quality processes documented in the QMP. The DQAM will support the Quality Assurance Manager (QAM) with the information needed to confirm the design quality process follows the requirements of the Project Design Quality Control Procedures. We will implement the following formal design quality control requirements during design development:

- designer to develop project specific checklists (by discipline) and submit them to the DBC, RCE, DBPM, and the QAM for review and approval;
- milestone interdisciplinary coordination (IDC) reviews for each formal submittal;
- formal plan reviews by the discipline quality control officer prior to each formal submittal to the DBC, RCE and VDOT;

- confirmation by the DM and DQAM that discipline checklists are completed;
- complete quality assurance certifications by the DM, DQAM, and design discipline lead;
- documentation of compliance checklists, IDC reviews, and QC check-prints; and
- analysis and testing to develop mix designs that fulfill FDR and CCPRM requirements

Our QMP will include a series of coordination meetings lead by the DBC. These meetings will allow the construction team oversight and constructability input during design development and provide for "over-the-shoulder" reviews from VDOT and key stakeholders, as appropriate, prior to formal submittals.

QA/QC Procedures for One Unique Critical Design Element

Design and construction of the arches carrying I-64 eastbound and westbound over Colonial Parkway will present unique challenges, particularly tying into the existing arches.

Design of the Cast-In-Place Concrete Arch Widening

The Skanska Team's design approach involves using finite element modeling (FEM), as presented in Figure 4.4.9, to analyze the short-term and long-term structural behavior of the existing concrete arch. We will use this information to design new widened portions that match the stiffness and geometry of the existing arch, as special care must be taken to ensure that foundation stiffness is compatible and that new foundations may be threaded through the existing wingwall's battered piles.

Our design will minimize the differential movements between the existing and proposed sections that are caused by differences in dead load, thermal strains at various stages of construction, etc. We will design measures that structurally tie the two sections together while not overstressing the existing arches, which will remain loaded throughout construction. A qualified design engineer will perform a peer review to validate all appropriate design considerations and ensure that the design meets the intent of the contract requirements.

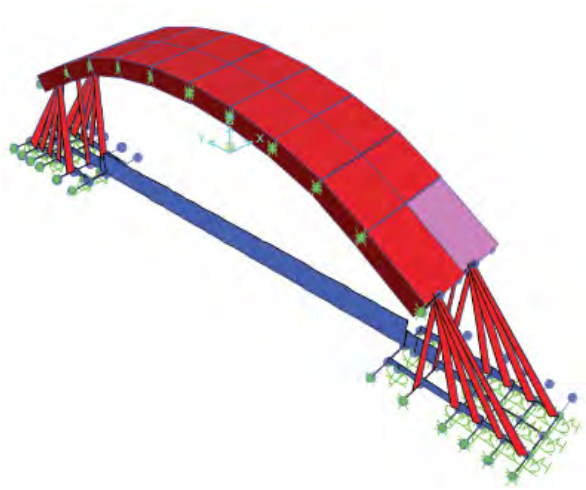


Figure 4.4.9: FEM Model of Colonial Parkway Arch. FEM modeling will help our team design and build a structure that is compatible with the existing arch.

Detailing of the Cast-In-Place Arch Widening

Our Team will work closely with industry experts to install the architectural brick façades and ensure that the contract plans clearly and adequately show all brick-to-concrete attachment details. These measures will ensure that the finished product matches the existing structure and has a uniform and aesthetically pleasing appearance.

Approach to Construction Quality Control and Assurance

Right Sized Staffing

The Skanska Team will perform quality control and assurance testing as required by Table A-3 and A-4 of the January 2012 QA/QC Guide. We have evaluated each definable feature of work and its timeline in order to determine the correct number of inspectors and technicians needed to perform the inspections in accordance with the VTMs, MOIs sections and QMP checklists. On occasion, production crew schedules overlap and QC staff may become challenged to cover all items of work. We will allocate the necessary QC resources during our weekly production meetings to coincide with our crews and locations. This approach ensures that we meet the frequency of inspections and tests required while minimizing impacts to our schedule.

Table 4.4.2 provides our preliminary estimate of the staffing needed during the peak construction period from March 2019 to mid 2020.

Table 4.4.2: Anticipated Quality Management Staff at Peak

Positions	QC	QA
QC Manager	1	
QAM		1
Office Engineer	1	
Sr. Inspectors (am and pm)	5	2
Inspectors (am and pm)	6	3
Inspectors Specialty ITS	1	
Testing Technicians (am and pm)	7	4

Elements in Skanska QMP

The Skanska Team's QMP will meet or exceed the requirements detailed in the January 2012 QC/QA Guide and will be approved by VDOT prior to the start of work. Key elements are described below.

- Preparatory Meetings: Inspection and testing frequencies and details are discussed at these meetings, in addition to C-25s, JMFs, proctor results, repetitive deficiencies, lessons learned from prior phases of work, shop drawings, RFIs and the approved plans. These meetings are held prior to every new work activity, attended by all those who will come into contact with the work. Attendance by key VDOT representatives and IA staff is welcome and encouraged.
- Intermediate Inspections: These inspections will be performed on a continual basis according to the frequencies defined in the January 2012 QC/QA Guide. Inspection checklists will be used for each definable feature of work.
- Recurring Deficiencies and Deficiency Tracking: Our QMP specifically addresses recurring deficiencies by including a section in our preparatory meetings where recurring deficiencies are addressed for each definable feature of work, assuring VDOT that we are committed to continual improvement.
- Non-Conformance Reports (NCRs): NCRs will be issued and tracked for work that does not meet the contract requirements. NCRs will be coordinated with the RCE and DBPM for resolution, and our NCR form will be modified to include this requirement. The QAM will ensure that no payments are approved for work identified on NCRs until resolution is achieved.
- C107 and MOT Inspections: Skanska's QMP requires the QCM to control the C107 inspection and correction process with oversight from the QAM. To ensure that required weekly inspections are performed and issues are resolved immediately, we will conduct joint inspections that include the Construction Manager (CM), QC and QA staff.
- FDR and CCPRM QC Plan: These processes will undergo the same scrutiny and QC/QA oversight per the Skanska QMP, with full QAM support to VDOT in the oversight of these work activities.
- Independent QA and QC Staffing: Skanska will provide independent QA and QC teams in order to offer VDOT the most effective program and experienced personnel.
- Issue Escalation Process: Skanska's QMP establishes a process for elevating testing results, staff disagreements, or other issues.

QA/QC Procedures for One Unique Construction Critical Element

Full Depth Reclamation

Initial core samples will be in order to determine the JMF. These cores will be in the existing pavement no less than 2,500 linear feet for each lane, with six cores for each location. The EOR will determine the core locations by stationing and lanes and document the sampling results with the corresponding JMFs for each location. We anticipate that more than 30 JMFs will be required due to the variations in the existing pavement. Our QC team will ensure the proper material is placed in the locations as directed by the EOR and assist QAM in tracking which JMF is being placed at each location for their QA testing.

The EOR will be present during the trial section. This process will confirm the roller size and number of passes to achieve the required density that exceeds 97 percent of the target density. The required FDR technical representative will be present during mixing and placing FDR

operations for the trial section, as well as the first day of production, and as needed during the FDR operations. In addition to field compaction testing, we will maintain a moist cure as required, and conduct final grading following the field compaction. In the event that any two consecutive densities result in less than 97 percent of the target density, the production will stop in order to allow for additional density tests to be performed. The EOR will require a number of samples be taken in order to run complementary proctors. Based on those results, the EOR may make adjustments to the JMF for a given area or require additional forensic investigation.

Cold Central Plant Recycling Material (CCPRM)

The production of CCPRM follows standard asphalt placement techniques with the exception of set-up speed. QC inspectors will perform density testing that includes a field proctor that meets 98 percent of the maximum theoretical density. Then a CCPRM roller pattern and control strip is performed. It is not uncommon to experience difficulties driving the nuclear gauge pin for the DTM, which can cause disruption to the aggregates if the CCPRM sets up prior to the technician performing the test. The aggregate disruption causes false, low readings on the nuclear DTM testing. As a contingency plan, our QC team will obtain core samples should the DTM prove too difficult to use per the EOR's approval. In order to confirm density and thickness, we will obtain cores and field samples at the frequency specified for asphalt pavement placement in the January 2012 QC/QA Guide. As defined in the Special Provisions, we will place a 1,000 linear ft. trial section prior to production. A CCPRM Technical Representative meeting the requirements in the Special Provisions will be on site for a second trial section if required.

Quality Information Management System (QIMS) and Processes

At the center of our QMP is an integrated, web based information management system that encompasses design and construction quality management requirements, as depicted in Figure 4.4.10.

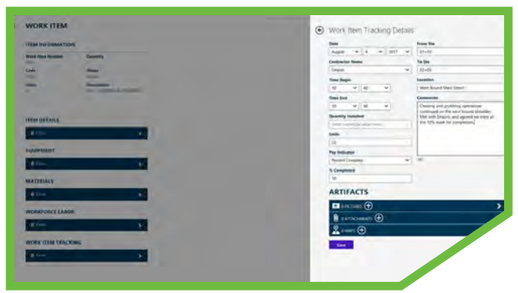
Skanska's Quality Assurance subconsultant, KCI, has developed a proprietary 'app' for QA/QC inspections and to generate and transmit IDRs, testing results, progress photos, and sketches electronically. KCI has developed a Mobile Field Services (MFS) application for tablet devices to record pertinent site information that is uploaded to a cloud-based central data repository. It includes drop down menus with specific features of work and construction activities that are coordinated with the construction schedule.

Integrated with Skanska's QMP processes, this technology will improve efficiency of our inspection staff; increase accuracy in reporting; and simplify the tracking of materials tests, proctors, JMFs, inspections, deficiencies and rework items as required by the January 2012 QA/QC Guide. Our system provides a transparent view of field operations between the QA and QC staff for VDOT, building credibility and trust in our ability to meet quality requirements.

QAM Authority and DBPM Support: The QAM reports directly to our DBPM and will be on-site for the duration of construction. The QAM will collaborate with the DBPM to resolve deficiencies, NCRs and other issues. The following unique approaches assure VDOT of our commitment to quality:

- weekly meetings with the DBPM to discuss progress made toward resolution of issues;
- joint inspections with CM, QC inspectors, QA inspectors, and IA inspectors on a weekly basis, enabling all parties to gain a common understanding of the challenges and an agreed-upon solution; and
- coordination of issues that may require re-design work by the RCE, DBC, Engineer of Record (EOR) and the QAM.

MFS System. The MFS created allows real-time photos to be uploaded from the field.



C-25 Acceptance Criteria
Materials Submittals
Delivery Documents
Buy America Certs

Materials Log

Deficiency Tracking Process and Database

NCR
Written Deficiencey
Corrective Actions

C107 Deficiencies
ESC Plan
Permits
Discharges

SWPPP

Integrated Quality Information Management System (QIMS)

Preparatory Meetings

Work Plans
Specs
Plans
Hazard Analysis
Kickoff Field Meeting
Submittals/RFIs
ES&C Plan
MOT Plan

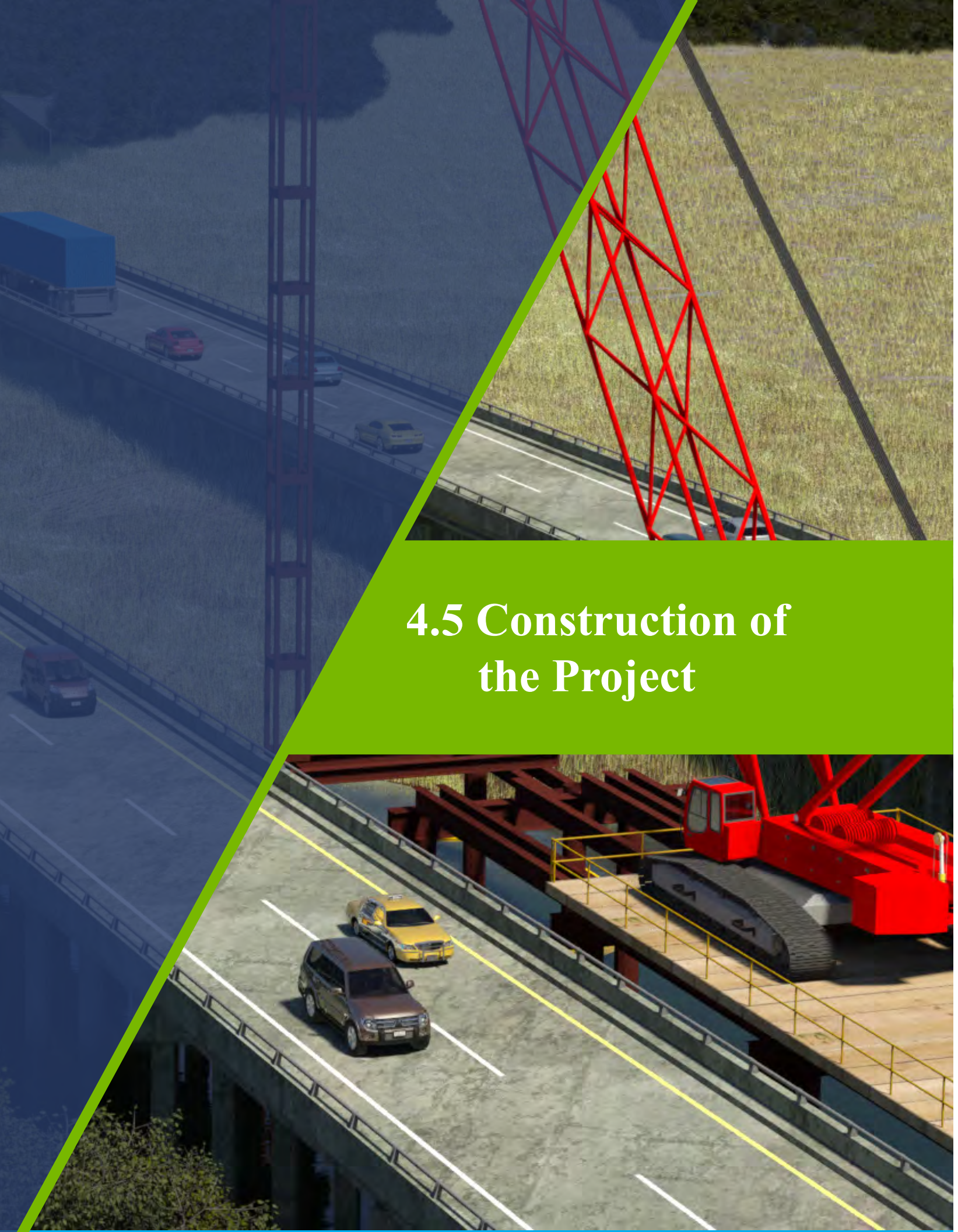
Inspector Daily Diary

Follow up Inspection & Testing

Frequency of Testing Log

Photos
Inspector Checklist
Material Test Reports
Narratives/Observations (searchable)
Tracked by Date / Work Location / Work Activity

Figure 4.4.10: Integrated Quality Information Management System (QIMS). Our QIMS will improve inspection efficiency, increase reporting accuracy, and streamline tracking.



4.5 Construction of the Project

4.5 Construction of the Project

Table 4.7.1: Summary of Utility Impacts

Concept	Benefits
Sequence of Construction	
▪ Two-phase roadway construction approach ▪ Alternating work zone cells and pull-off cells ▪ Three-phase Queens Creek bridges construction approach ▪ Access trestle featuring 40-foot span lengths strategically positioned	▪ Makes best use of existing recyclable pavement materials ▪ Reduced construction schedule ▪ Optimal level of public safety support between one-mile construction work zones ▪ Safer approach with crews performing more productive and repetitive work in close proximity to supervision ▪ Flexibility to allow some areas to advance to the next phase, maintain overall progress ▪ Allows construction of proposed Queens Creek bridges from a single trestle location ▪ 15-foot wide channel maintained for local watercraft at Quuens Creek through all construction phases ▪ Permit 'friendly' construction approach
Transportation Management Plan	
▪ Robust public outreach plan to keep travelers informed ▪ Application of SMART ZONE System technologies ▪ 12-foot lanes maintained (TMP) ▪ Nighttime construction zone using lane closures ▪ Safer to operate during construction MOT trucks and traffic control equipment	▪ Reduced disruption and careful accommodation to the high volume of truck traffic in the corridor ▪ Safety and mobility enhancements for all travelers passing through construction ▪ Improved driver visibility at night ▪ Clear and consistent messaging ▪ Better safety for the collective construction and inspection personnel working on site

The Skanska Team will successfully deliver this critical segment of I-64 for VDOT by meeting the overall objective to increase capacity and mobility while improving corridor safety and operations. I-64 carries over 74,000 vehicles per day with nine percent of the volume representing truck traffic, making the Capacity Improvements to the I-64 Segment III one of VDOT's highest priorities in the Hampton Roads District.

Our Team will use an integrated approach to work in partnership with VDOT and local stakeholders to achieve the following project priorities:

- **maintain the safety of the traveling public and minimize construction impacts;**
- **provide an efficient design that meets or exceeds the RFP's requirements;**
- **the appropriate level of VDOT oversight;**
- **implement cost-effective construction means and methods; and**
- **manage all aspects of the Project to minimize risk and successfully deliver a quality facility on time to VDOT.**

We have strategically located staging/storage areas and access points to minimize impacts to the traveling public. We will develop alternative routes around the work zones and coordinate them with local authorities and first responders before implementation. Prior to every traffic shift, we will provide media notices and opportunities for community briefings and other measures which will be further detailed in the Public Information and Communications Plan, administered by our DBPM.

Skanska specializes in providing state-of-the-art visualizations of construction sequencing in order to clearly communicate plans long before starting work. By sharing 3D and 4D schedule models with VDOT and relevant stakeholders, we can provide insight into our construction plans and progress. Stakeholders will be invited to attend our four-week look ahead scheduling meetings when construction activities .when construction activities will impact Key Stakeholders such as Camp Peary, Waller Mill Reservoir, Queens Creek, Queens Lake Association, Creekside Landing, Felgates Woods, NPS, various utility owners, and adjacent contractors.

This Project's high volume traffic conditions present inherent safety risks to the traveling public and our workers. With tight workspaces and nighttime work, safety awareness on this Project and our emphasis on an Injury Free Environment® (IFE) is critical. IFE is part of Skanska's corporate culture (Figure 4.5.1), and centers around the belief that safety is a value not to be compromised by cost or schedule.

Figure 4.5.1: Injury Free Environment. Skanska's company-wide safety culture makes safe working practices the responsibility of all Team members.

We will develop a construction work plan for each construction activity, which will include the safety hazards, environmental concerns, and quality requirements associated with the specific task. We will hold a preparatory meeting to review the work plan before starting any critical activity, such as traffic shifts, beam setting, FDR, etc. VDOT personnel are encouraged to be involved in the formation and review of these work plans. The work plans are used in daily job briefings at the start of each shift to ensure crew members understand the safety, environmental, and quality aspects of the upcoming task. We will use the improvement process depicted in Figure 4.5.2 on page 34 to strive for continuous improvement.

Figure 4.5.2: Plan, Do, Check, Act. Skanska uses a cycle of continuous improvement as the framework for successful project performance and sharing lessons learned.

The Skanska Team has developed a detailed approach and construction means and methods to gain VDOT's confidence that we can successfully deliver a high quality project ahead of schedule, with minimal impacts, and at the lowest possible cost.

4.5.1: Sequence of Construction

Our approach to construction sequencing incorporates the proposal schedule, detailed construction activities, competent personnel, and specific safety and quality requirements and goals. We will develop and execute work plans for each task to ensure the means and methods for each element of the Project meet contract requirements, including:

- Scope of work
- Safety
- Environment
- Quality
- Plans and specifications
- Task-specific procedures

Considerations for Public Safety

The Skanska Team will use new processes and tools to optimize the design and construction schedule, as well as to enable our crews to plan and visualize the upcoming tasks. The implementation of Building Information Modeling (BIM) with 3D and 4D models into our construction approach allows us to make accurate simulations that improve safety, construction planning, and the quality of the work. The use of BIM builds certainty into our design and construction schedule and helps us mitigate risks at the earliest stage possible.

Our Concept and Benefits table on Page 32 highlights innovative concepts that Skanska will implement to maintain safety and minimize traffic impacts during construction.

Measures to Limit Disruptions to Traffic Through the Work Area

Our Team offers VDOT a proven track record of pairing a constructible design with a methodically planned construction approach. Our sequence of construction is designed to limit planned disruptions and to mitigate unplanned ones. Short-term stoppages for intersection and ramp tie-ins will be included in our construction work plans, as will detour routes, advance notification to the public and affected stakeholders (including drivers, bicyclists and pedestrians).

We will use defined staff roles and consistent communication protocols with VDOT and agency officials to solidify a high level of trust and understanding with all parties.

We will address adjacent public transportation facilities to implement detours and closures. We will use various forms of media, including local newspapers, mobile device applications (apps), VMS boards, corridor signing, in our public awareness campaign. These effective public engagement methods will provide information necessary to limit disruptions to stakeholders.

General Sequence of Construction

Outlined below is a general description of our sequence of construction required to complete the project by September 23, 2021. Greater detail is provided in Section 4.7 Proposed Schedule.

Prior to Notice to Proceed (NTP), our Team will work to prepare permit applications and work plans encompassing a robust scope validation process to ensure our design includes the most accurate existing information possible. Our

designers will begin to develop ROW, roadway, and structures plans, while concurrently pursuing the Project's permits.

We will divide the Project-wide design into consistent packages for efficiency, using four key elements:

1. ROW
2. Roadway
3. Structures
4. Environmental permitting

Roadway Sequence of Construction (SOC)

Our Team has identified three construction "areas", based on similarities in the existing conditions and similar MOT, as depicted in Figure 4.5.3 on page 37.

- Area A – Start of Project to Route 143
- Area B – Rte. 143 to Queens Lake Drive
- Area C – W. Queens Drive to Project limit

Identifying these areas allows our team to effectively manage the schedule, traffic, our craft workers, the equipment resources, the material staging and our subcontractors. We have further subdivided these areas into "cells" approximately one mile in length, which will allow us to implement our innovative Alternating Cells Production System with pull-off cells between the work cells. Work in each of the 11 cells has been sequenced to achieve the most cost-effective material recycling plan and most productive construction environment for our crews.

Roadway work will be accomplished in two basic SOC Phases. During SOC Phase 1, we will strengthen the outside shoulders and use temporary pavement markings to shift traffic outward and onto the existing outside lane and strengthened shoulder. We will install temporary barrier wall only adjacent to the active work cells. Work in cell for the eastbound and westbound directions will happen concurrently in the median. As work in each cell is completed, temporary barriers are moved to the next area until the alternating cells are complete. The process is repeated until the Project is complete. This sequencing pattern always provides the approximately one mile emergency pull-off cell between the two active work zones.

We will optimize safety and mobility for the traveling public by avoiding working in two adjacent cells at the same time in order to provide the necessary motorist pull-off space every mile. Once traffic is shifted, we will demolish the existing inside shoulder and the remaining lane, install the inside underdrains, fine-grade the subgrade for the new left lane and full width shoulder, and install the new pavement section for both eastbound and westbound I-64.

Phase 2 repeats the pattern in Phase 1, except now for the outside lane construction. We will install temporary barrier along the active work areas only with pull-off cells between the active work zones as presented in Figure 4.5.3. We will recycle the existing pavement (concrete or asphalt) for use in the new pavement, and install 12 inches of FDR in-place. This introduces cement into the existing aggregates and soils where the mixture will be pulverized, stabilized and compacted in-place, providing a base for the new pavement section. The new pavement section can then be installed with the exception of final surface. Following pavement installation, we will install guardrail systems and sign structures. Once all the outside lane construction is complete, we will remove the temporary concrete barrier in preparation for the final pavement surface course, any finish work, and landscaping. Traffic will then be placed into the final configuration, requiring us to perform final surface paving and permanent pavement marking applications using nightly lane closures. Our previous experience constructing interstate highways in the Hampton Roads area includes projects like the I-264 Widening/MLK Extension Design-Build Project and HOV Projects on both I-64 and I-264. We have applied lessons learned from these projects to develop our sequencing plan.

Our SOC minimizes impacts to traffic, the existing ITS system, ROW needs, environmental impacts, and maximizes the salvage opportunities for in-place roadway material and guardrail. We will install temporary asphalt pavement at the ramps with adjustments to the acceleration and deceleration lanes to provide access to the mainline roadway.

Bridge SOC

The Skanska Team carefully planned the bridge sequencing at each location. Some key advantages to our proposed sequencing at Queens Creek include:

- single installation of temporary trestle between the I-64 eastbound and westbound bridges directly adjacent to the existing eastbound bridge;
- reduction in temporary environmental impacts as both bridges are constructed from the same trestle; and
- new I-64 eastbound bridge is shifted 25 feet south of the location presented by VDOT on the RFP Plans, providing:
  - better alignment of eastbound traffic onto the bridge
  - crossovers using new pavement constructed for the final I-64 alignment
  - better construction access and material delivery during the construction of both bridges and less interaction of construction traffic with the traveling public

Designing for Optimal Sequencing

Our SOC methodology, (presented in Figure 4.5.3, Page 37) considered a combination of constraints such as design packages, wetland impacts, permits, existing bridges, and innovative ways to recycle materials from the existing roadway. Our SOC advances certain cells within our MOT Plan to maintain our CPM schedule through the phases.

The following pages outline our roadway SOC in detail by MOT phase for Areas A,B, and C (Figures 4.5.4, 4.5.5, 4.5.6). Our early use of BIM during the proposal and design stages allows us to identify and mitigate clashes in various aspects of our design and helps reviewers visualize an integrated design, minimizing construction risks.

We will conduct a series of pre-application meetings to proactively mitigate issues prior to construction that will include, but not be limited to, the following parties, in addition to VDOT:

- Utility agencies
- Environmental permitting agencies
- Other key Project stakeholders

Our schedule provides a reasonable construction timeframe with appropriate allowance for weather and unknown delays. It allows for true collaboration and partnering to deliver a Project that meets VDOT's goals. This early coordination will give VDOT additional confidence in our overall CPM schedule.

Our SOC approach enhances public safety by minimizing egress/ingress conflicts between construction traffic and I-64 traffic, minimizing traffic shifts to ease driver confusion, eliminating unnecessary traffic weaves within the work zones for a more uniform driving experience and a focused public outreach providing updated traffic conditions.

The VDOT ITS system will remain fully operational during construction. Our SOC approach maximizes productivity while also providing emergency pull-off cells every mile during construction. As work advances, new portions of roadway can be made available for additional pull-off space to enhance safety and mobility as work progresses toward completion.

Alternating Cells Production System

Safety: The mile-long barrier openings will be used as pull-offs for incident and EMS response.

Economy: Crews work in assigned cells, promoting lineal construction strategies. Each cell is scheduled in order to optimize hauling distances and cycle times.

Environmental: Our Sequence accounts for environmental permits constraints, allowing for early starts in non-critical areas.

Recycling: The crucial re-use of existing materials is essential to mitigate market risk. We will demo existing roadway in one cell, process it and ship it to its destination cell for incorporation back into the project. We have sequenced our schedule to promote a sustainable solution for the entire corridor, a credible schedule, and a low cost solution.

Quality: Along the corridor we will encounter varying make-up of existing pavement and will be able to design the proper job mix formula for each section.

Risk Mitigation: To mitigate impacts of unexpected issues our plan provides opportunities

Sequence of Construction

MOT Areas

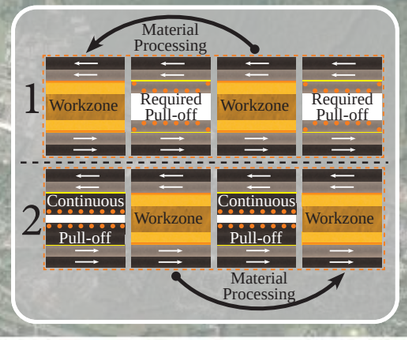
Ⓐ 5 -1/2 Miles | Ⓑ 1 -1/2 Miles | Ⓒ 1 -1/2 Miles

Work Zone Cells

A-1 | A-2 | A-3 | A-4 | A-5 | A-6 | B-1 | B-2 | B-3 | C-1 | C-2

Route 604 Barlow Rd.
234
238
Route 199 Humelsine Pkwy
Merrimac Trail
Route 143
W Queens Dr
Route 716
Lakeshead Dr.
Colonial Pkwy

Notes:
1. Cells are to be constructed sequentially, numbered above in ascending order from first to last.
2. Construction activities have been carefully sequenced in order to provide pull-off cells between the active work zone cells.

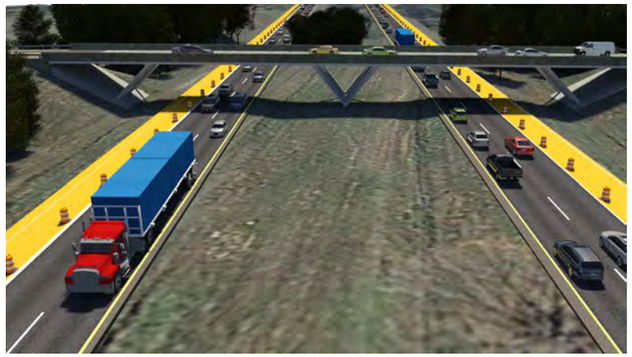


Our Alternating Cells Production System allows our crews to retrieve existing materials from other active work cells, process and put into place those materials, maximizing this project's potential for recycle/reuse, and bolstering an aggressive completion schedule.

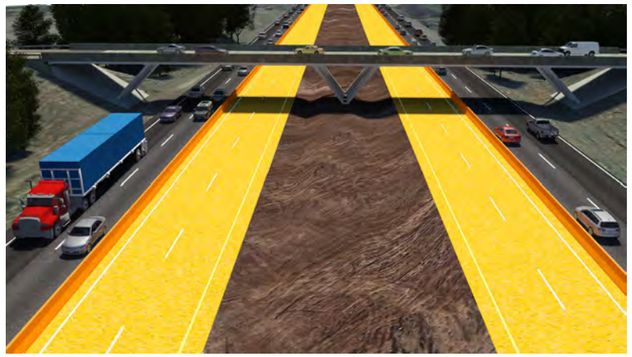
Legend*
- 1 Roadway Crew A
- 2 Roadway Crew B
- 3 Roadway Crew C
- 0 Bridge Crew A (Queens Creek)
- 0 Bridge Crew B (Lakeshead & Colonial)

*Number in the circle indicates crew's active position in the sequence

Figure 4.5.3: Project Sequencing Overview. The Skanska Team has divided the Project into three areas, each with distinct "cells" to optimize construction productivity, enhance safety for the public, and maximize the Project's potential for recycling existing materials.



Shoulder Strengthening



Phase 1

Phase 2

Figure 4.5.4: Phase 1 and 2 Roadway Sequencing.

Phase 1

The main objective of Phase 1 is to strengthen the shoulders using nightly lane closures and begin the permanent construction of the widening toward the median of I-64 applying our innovative Alternating Work Zone Production System.

A. Establish work zones and signing per MUTCD and VDOT Standards
B. Set up MOT for single lane closure
C. Establish emergency vehicle pull-off areas
D. Construct outside shoulder strengthening, mill/resurface under nightly lane closures
E. Shift traffic to outside lane and strengthened shoulder
F. Set up Alternating Work Zone Cells in Stage 1 at locations at presented on Figure 4.5.3
G. Install temporary barrier at work zone cells with Cat 325s, flatbed trucks, barrier wall clamps
H. Clear and grub the area within the work zones, 2 crews with track tree cutters, grinders
I. Install erosion control measures, 2 crews initial install, plus maintenance crew
J. Relocate existing ITS facilities, trenched using a 300-series hydraulic excavator
K. Construct work zone access and haul roads with 120 series blade
L. Remove existing pavement material for recycling with Wirtgen W200i Cold Mill or similar
M. Excavate proposed roadway, median and Ponds with D6Dozer, Cat330, 20tn Off-Road Dump Trucks. On-Road Trucks limited to disposal of materials off site
N. Install temporary drainage primarily in the I64 Median (inlets, culvert extensions)
O. Install permanent drainage utilizing series 300 Excavator, walk-behind compactors
P. Install temporary pavement to accommodate ramps
Q. Construct full depth reclamation (FDR)
R. Install cold control plant recycling material (CCPRM)
S. Lay asphalt paving, up to 3 crews
T. Install guardrail as shown in the plans, average 2 crews
U. Advance to Alternating Work Zone Cell Stage 2

Phase 2

The main objective of this phase is to switch traffic to the completed inside widened mainline and shoulder and begin the permanent reconstruction of the existing lanes and outside portion of I-64.

A. Shift traffic to newly-constructed inside lane and shoulder
B. Establish emergency vehicle pull-off areas
C. Set up Alternating Work Zone Cells in Stage 1at locations at presented on Figure 4.5.3
D. Install temporary barrier at work zone cells
E. Clear and grub the area within the work zones, 2 crews with track tree cutters, grinders
F. Install erosion control measures, 2 crews initial install, plus maintenance crew
G. Construct work zone access and haul road
H. Excavate remaining ponds with D6Dozer, Cat330, 20tn Off-Road Dump Trucks.
I. Remove existing pavement material for recycling with Wirtgen W200i Cold Mill or similar
J. Maintain temporary drainage (inlets, culvert extensions)
K. Install remaining permanent drainage with series 300 Excavator, walk-behind compactors
L. Construct full depth reclamation (FDR), 2 crews
M. Install cold control plant recycling material (CCPRM), 2 crews
N. Lay asphalt paving, up to 3 crews
O. Install pier protection if required
P. Install guardrail, average 2 crews
Q. Install ITS, trenched using a 300-series hydraulic excavator, and final signage
R. Advance to Alternating Work Zone Cell Stage 2

Final Work:

Final work will be performed under nightly lane closures and will include:

- Shift traffic into final configuration
- Install asphalt surface course, up to 3 crews
- Install permanent pavement markings
- Punch list and final clean up

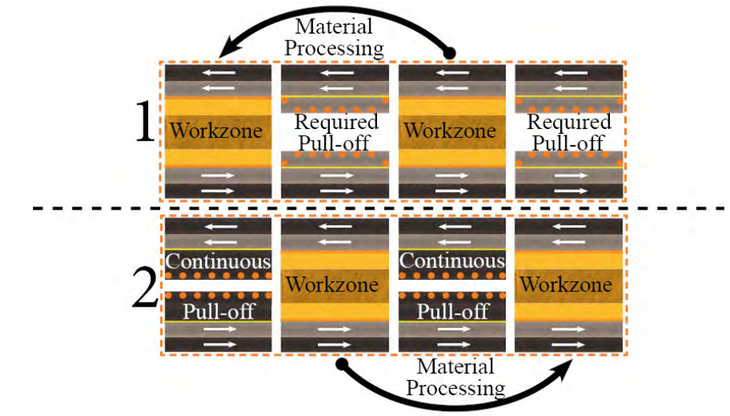


Diagram of our Alternating Work Zone Production System uses an innovative sequence of work to take full advantage of the existing materials on site, minimizing the amount of materials our Team will need to purchase at the beginning of the Project, and sell at the end of the Project, providing a more date-certain schedule and lower price.

Sequence of Construction - Full-Depth Reclamation (FDR):

- **Investigate existing pavement materials:** Take samples of the existing pavement structure and subgrade materials to the desired depth of reclamation and tested by a qualified materials laboratory to determine the required amount of cement to be added.
- **Reclaim existing pavement:** Remove existing pavement materials for recycling. Pulverize existing pavement to the desired depth using a reclaimer. The maximum particle size after pulverization to be 2 inches or less.
- **Rough grade:** Rough grade the base and make ready for addition of cement.
- **Spread cement:** Using a spreader that is calibrated to deliver the specified amount of cement, and check spread rate in the field by QC and QA technicians.
- **Mix:** Make a second pass with the reclaimer to mix the cement and pulverized base applying water to bring the final mixture to the appropriate moisture content a.
- **Compact and fine grade**: A sheepsfoot roller will be used to compact the reclaimed mixture. To achieve deep compaction while maintaining the desired elevation. Once initial compaction is achieved a motor grader and a vibratory steel drum roller will complete the fine grading operation and provide the final surface.

Phase 1

Phase 2

Phase 3

Figure 4.5.5: Phase 1, 2, and 3 Queens Creek Bridge Sequencing.

Phase 1

Construct enough of the new westbound I-64 bridge over Queens Creek to allow eastbound traffic to switch to the inside portion of the new westbound structure.

A. Establish work zones and signing per MUTCD and VDOT standards
B. Set up MOT for single lane closure
C. Establish emergency vehicle pull-off areas
D. Install temporary barrier at work zone cells
E. Install erosion control measures
F. Construct work zone access and haul road
G. Excavate and rough grade proposed roadway and median
H. Install temporary barrier at work zone cells with Cat 325s, flatbed trucks, barrier wall clamps
I. Install erosion control measures, 2 crews initial install, plus maintenance crew
J. Construct work zone access and haul roads with 120 series blade
K. Excavate and rough grade roadway and median with D6Dozer, Cat330, 20tn Off-Road Dump Trucks.
L. Install permanent drainage utilizing series 300 Excavator, walk-behind compactors.
M. Install temporary crossovers
N. Final grade proposed roadway and median with D6Dozer, Cat330, On-Road Dump Trucks.
O. Construct roadway pavement sections at bridge approaches
    a. Construct portion of westbound bridge
    b. Install sheetpile at Queens Creek abutments with 150TN crane
    c. Excavate and grade abutments A and B for westbound bridge
    d. Construct trestle for bridge construction using 300TN crawler crane
    e. Construct westbound bridge per Structures Plans
    f. Drive test piles and production piling, pier caps with 300TN and 150TN cranes
    g. Install girders, back walls, form and pour bridge deck with 300TN and 150TN cranes
    h. Install approach slabs, parapets, groove deck

Phase 2

Construct the new eastbound I-64 bridge over Queens Creek.

A. Shift eastbound traffic to newly-constructed inside portion of the westbound bridge using the two temporary crossovers
B. Establish emergency vehicle pull-off areas
C. Install temporary barrier at work zone cells with Cat 325s, flatbed trucks, barrier wall clamps
D. Install erosion control measures, 2 crews initial install, plus maintenance crew
E. Construct work zone access and haul roads with 120 series blade
F. Install remaining permanent Drainage with series 300 Excavator, walk-behind compactors.
G. Install temporary crossovers
H. Construct pavement sections at bridge approaches
I. Construct new eastbound bridge
    a. Demolish existing eastbound bridge with 300TN and 150TN cranes, and 300 excavator
    b. Install support of excavation for Queens Creek Bridge abutments using 150TN crane
    c. Excavate and grade abutments A and B for eastbound bridge
    d. Construct Phase 1 eastbound bridge per Structures Plans
    e. Drive test piles and production piling, pier caps with 300TN and 150TN cranes
    f. Install girders, back walls, form and pour bridge deck with 300TN and 150TN cranes
    g. Install approach slabs, parapets, groove deck

Phase 3

This phase will construct the remaining portion of the westbound I-64 bridge, and shift traffic into the final configuration for installation of final pavement and markings.

A. Shift eastbound and westbound traffic to the newly constructed eastbound bridge
B. Demolish remaining westbound bridge
C. Drive test piles and production piling, pier caps with 300TN and 150TN cranes
D. Install girders, back walls, form and pour bridge deck with 300TN and 150TN cranes
E. Install approach slabs, parapets, groove deck
F. Complete remaining pavement sections, up to 3 crews
G. Shift eastbound and westbound traffic to final configuration
H. Place final asphaltic concrete surface course, up to 3 crews
I. Install permanent pavement markings
A. Punch list and final cleanup

Our 25-foot alignment shift of the eastbound I-64 bridge over Queens Creek allows our Team to construct all three phases of the bridge with the access trestle in a single position. This innovative constructible design provides for fewer temporary environmental impacts, and eliminates the time it takes to relocate the trestle every phase, bolstering schedule certainty. For a more detailed explanation of our sequence of construction of the proposed Queens Creek bridges, please refer to Figure 4.7.5 in Section 4.7 Proposal Schedule.

Shoulder Strengthening

Phase 1

Phase 2

Figure 4.5.6: Lakeshead Drive and Colonial Parkway Bridge Sequencing. .

Phase 1

This phase will begin the permanent construction of the inside widening of I-64, including the Lakeshead and Colonial Parkway bridges.

A. Establish work zones and signing per MUTCD and VDOT standards
B. Set up MOT for single lane closure (eastbound and westbound)
C. Establish emergency vehicle pull-off areas
D. Construct outside shoulder strengthening
E. Shift traffic to outside lane and strengthened shoulder
F. F. Install temporary barrier at work zone cells with Cat 325s, flatbeds, barrier wall clamps
G. Clear and grub the area within the work zones, 2 crews with track tree cutters, grinders
H. Install erosion control measures, 2 crews initial install, plus maintenance crew
I. Construct work zone access and haul roads with 120 series blade
J. Excavate and rough grade roadway and median with D6Dozer, Cat330, 20tn Off-Road Dump Trucks
K. Install temporary drainage primarily in the I64 Median (inlets, culvert extensions)
L. Install permanent drainage utilizing series 300 Excavator, walk-behind compactors
M. Relocate existing ITS facilities, trenched using a 300-series excavator
N. Final grade proposed roadway and median
O. Construct roadway pavement sections at bridge approaches
P. Install guardrail as shown in the plans, average 2 crews

Lakeshead Drive Bridge:

a. Remove parapet and existing portion of deck from median side of existing bridges
b. Perform bearing replacement under existing beams using temporary lane closures
c. Remove bridge deck expansion joints and replace deck slabs using temporary lane closures
d. Construct proposed bridge widenings

Colonial Parkway Arch Bridge:

a. Remove existing portions of abutments, railing and spandrel wall
b. Construct proposed bridge widening outside of traffic (see diagram at right)
c. Install single lane operations on Colonial Parkway under the bridge construction
d. Construct proposed substructure elements across Colonial Parkway, temporarily patch
e. Cast in place proposed concrete arch
f. Re-open Colonial Parkway to existing number of lanes
g. Replace remaining portions of the existing Colonial Parkway

Phase 2

The main objective of this phase is to switch traffic to the completed inside widened mainline and shoulder and begin the permanent reconstruction of the existing lanes and outside portion of I-64.

A. Shift traffic to newly-constructed inside lane and shoulder
B. Establish emergency vehicle pull-off areas
C. Install temporary barrier at work zone cells with Cat 325s, flatbed trucks, barrier wall clamps
D. Install erosion control measures
E. Construct work zone access and haul road with 120 series blade
F. Install remaining permanent drainage
G. Construct pavement sections at bridge approaches

Lakeshead Drive Bridge:

a. Perform existing deck patching and overlay
b. Extend deck slabs over backwalls
c. Place new concrete overlay on existing deck

Final Work:

- Shift traffic onto final configuration
- Install asphalt surface course, up to 3 crews
- Install permanent pavement markings
- Punch list work and final clean up

1. Install SOE Abutment A
2. Excavate to Stage 1
3. Install SOE Abutment B
4. Excavate to Stage 2
5. Install 1st level piles
6. Install Arch tie through SOE A
7. Place 1st level footing
8. Place 1st level wall
9. Place counterfort
10. Backfill 1st level
11. Remove SOE A
12. Install 2nd level piles
13. Place 2nd level footing
14. Place 2nd level wall
15. Backfill 2nd level
16. Install 3rd level piles
17. Place 3rd level footing
18. Place 3rd level wall
19. Install formwork
20. Place arch span
21. Place wall over arch
22. Place wing wall
23. Remove SOE B and backfill
24. Place barrier

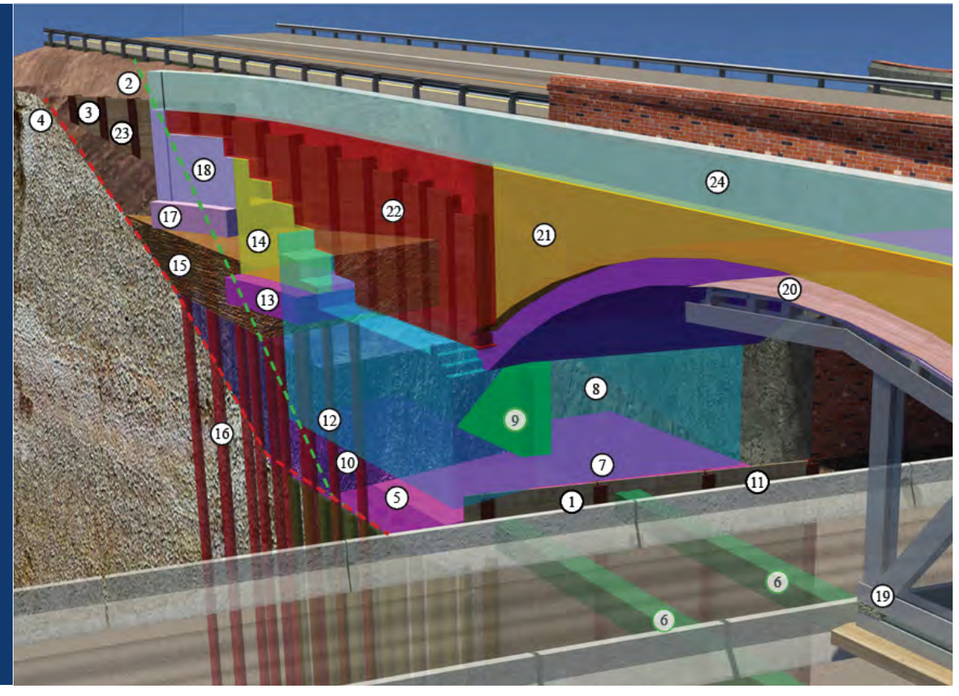


Diagram of 24 planned steps for Colonial Parkway arch bridge

Our Team understands the emphasis that VDOT places on the safety of the traveling public and the collective construction and inspection work force. As an industry leader in safety, Skanska will maintain a work culture where safety is a value that will not be compromised by cost or schedule.

Safety and Operations

Averaging 50 million man-hours per year, Skanska has refined its safety culture at every level of the company, as demonstrated by the program highlights listed below.

- An IFE mindset that ensures safety accountability for our supervisors and those around them.
- Skanska empowers all employees, regardless of role or title, to stop work at any time if they are concerned about safety.
- Due to the MOT required on this Project, our senior management team, including Mr. Salvatore Taddeo, the Executive Vice President at Skanska, will personally inspect the safety of this Project's operations regularly.
- Skanska's executives conduct more than 1,200 formal safety inspections on our projects every year as part of our commitment to visible leadership.
- Skanska conducts the world's largest workplace safety campaign with our annual Safety Week, and our IFE website (www.injuryfreeenvironment.com) educates the industry on our safety approach.

Coordination meetings include top field management from Skanska, subcontractors, QC and QA leads; VDOT and their IA inspection leads are encouraged to attend (Figure 4.5.7).

Our daily superintendent coordination meetings begin by addressing safety concerns brought forth from the previous day. We then coordinate the efforts of multiple crews working in close proximity of each other sto ensure a safe work environment.

Figure 4.5.7: Daily Coordination Meetings. As with every Skanska project, workers on our I-4 Ultimate Project in Florida conduct morning safety meetings daily prior to commencement of work.

Our crews conduct daily toolbox talks (Figure 4.5.8) to communicate our safety plans for each work activity to all who are involved in the operation. If conditions change, crews stop work, change the work plan and conduct another toolbox talk to communicate the change prior to commencing work.

Figure 4.5.8: Toolbox Talks. Skanska uses daily Toolbox Talks to communicate information to crews on a variety of topics pertinent to safety of personnel, the public, and the environment.

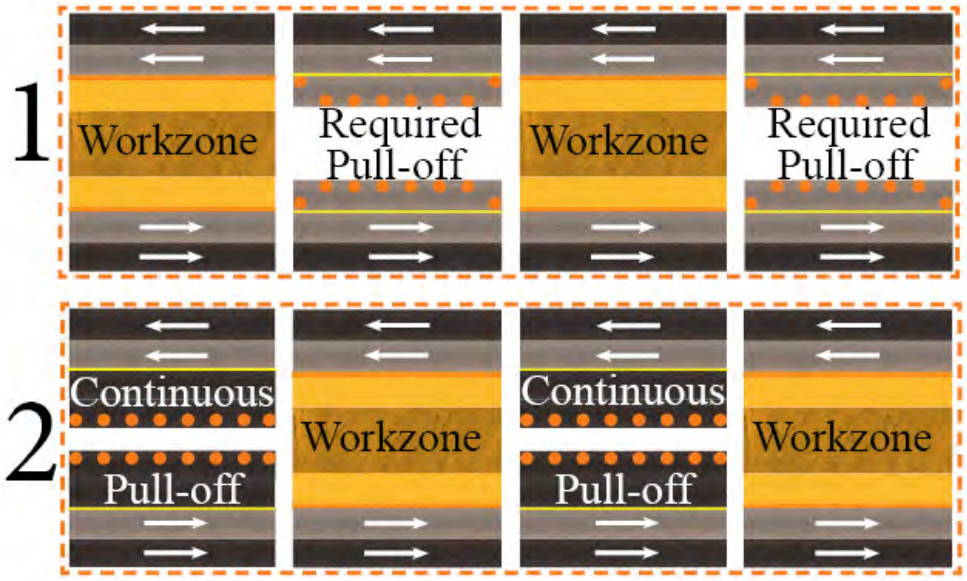


Figure 4.5.9: Work zones and Pull-Off Cells. Our SOC uses alternating mile-long work cells to advance construction, optimizing efficiency, working conditions, opportunities for recycling pavement materials, quality control, erosion control, and public safety.

During Phase 1, once the existing outside shoulders are strengthened, we will install temporary concrete barriers in accordance with the VWAPM in order to protect motorists from the median work-zones, as shown in Figure 4.5.9.

Logistics and access on this Project will be addressed each day with our crews to ensure that construction advances with minimal impacts on I-64 mobility, adjacent transportation facilities, or surrounding neighborhoods.

Figure 4.5.10: Innovative Median Access Ramp Concept. By decreasing reliance on I-64 for deliveries, we have greater control of the delivery schedule and can offer first responders alternatives to reach incidents blocked by traffic backups.

With VDOT's approval, our proposed innovative median access ramp concept, presented in Figure 4.5.10, will allow deliveries to the Project to enter and exit the job site with minimal reliance on I-64. To achieve this, we will build temporary median ramps at existing overpasses, such as Route 199/646 (Newman), Barlow Road, Merrimac (Route 143), and Queens Lake Drive.

This approach will increase schedule certainty to offer VDOT a more predictable final acceptance date, as well as options for emergency crews responding to daily vehicular incidents on this congested corridor.

Well-planned access and egress will avoid delays to our concrete, aggregate, earthwork, asphalt and other critical deliveries caused by backups on I-64.

Geotechnical Constraints

Since the existing pavement and subbase materials will be excavated in order to meet VDOT's requirement to gain additional clearance beneath the Project's four existing overpasses, our design incorporates recycled concrete in lieu of FDR on existing roadways in these areas. This is reflected in our CPM proposal schedule in Section

4.7, and this work will be performed concurrently with the FDR.

Our CPM schedule also incorporates mitigation activities for unsuitable subgrade materials by placing suitable backfill prior to construction of the subgrade and pavement section.

Section 4.4.3: Geotechnical detailed our approach to identify and confirm problematic soils during the design phase that may require moisture or density manipulations during construction. We will perform proof roll testing with loaded dump trucks during construction to identify loose or soft fill subgrades prior to placement of embankment. These soils can lead to failing pavement subgrades, so identifying them early and removing or conditioning them prior to constructing the pavement section proactively mitigates schedule impacts associated with rework.

The Skanska Team is evaluating the use of Intelligent Compaction (IC) technology to supplement proof rolling and nuclear density testing of subgrade and fill soils. This technology can allow us to evaluate and correct deficiencies in soils and asphalt compaction by measuring the energy response of the material being compacted by the roller in real-time.

Figure 4.5.11:Check Dams. This mitigation measure is effective in small channels with a contributing drainage area similar to those on the I-64 Segment III Project.

Figure 4.5.12: Temporary Sediment Traps and Inlet Protection. We will install similar measures to prevent sediment from entering stormwater conveyance systems prior to permanent stabilization of the disturbed areas.

Environmental Impacts

The Skanska Team will generate and adhere to the best practices put forth in our E&SC Plan. We will monitor and correct soil stabilization as required by the plan and applicable regulatory agencies, using methods such as the ones pictured in Figures 4.5.11 and 4.5.12.

Our Team will comply with all VDOT and/or DEQ regulations and guidelines while achieving no sediment loss from the Project into environmentally-sensitive areas.

Impacts related to noise, vibration, light, dust, erosion/runoff, and local road damage are addressed in our design and daily work plans.

During field reviews, our Team will discuss upcoming land disturbing activities, monitor field conditions, complete project documentation, and ensure that adequate erosion control features are installed and functioning properly.

Vibration monitoring will be conducted during pile driving operations and demolition operations in sensitive areas of the Project.

Our Team will conduct pre- and post-condition surveys of existing facilities as required by the technical requirements.

Our conceptual design and phased construction approach obtains all required permits and avoids potential schedule delays including the time of year restrictions associated with the Northern Long-Eared Bat. Our innovative shift of the I-64 eastbound Queens Creek bridge allows us to reconstruct both new bridges with our access trestle that is installed and removed only once, thus saving time and reducing impacts to Queens Creek. Our schedule allows for the trestle's pile foundations to be driven prior to the beginning of the February 2019 Anadromous Fish window.

All environmental protection measures, storm water management facilities, and E&SC measures will be installed and maintained in accordance with the approved Storm Water Pollution Protection Plan (SWPPP). As demonstrated by Table 4.5.2, Skanska has emerged as an industry leader in recycling/reusing materials on large scale design-build infrastructure projects and this Project is an opportunity for VDOT in this regard.

Figure 4.5.13: Envision Platinum Award. The I-4 Ultimate Widening D-B Project in central Florida earned the prestigious Envision Platinum recognition from the Institute for Sustainable Infrastructure (ISI) for its sustainability efforts of environmental, social and economic impact on the community for the 21-mile I-4 widening project.

The I-64 Segment III project fits Skanska's culture to maximize recycling of materials over the course of our projects.

Table 4.5.2: Success with Recycling and Reuse

Design-Build Project	Recycle Achieved	Award
I-275 Reconstruction Design-Build, Tampa,FL	98%	FTBA Best in Construction (Urban) Award FDEP Recycling Program Recognition – Achieving a 98.7% Recycling Rate / Diversion from Landfill Roads & Bridges Magazine – Ranked No. 3 Top Ten Roads DBIA Florida Region - Transportation Project of the Year
I-264 Widening/ MLK Extension Design-Build, Portsmouth,VA	99%	River Star Model Level Environmental Stewardship Award and River Star Sustaining Model Level Environmental Stewardship Recognition ACEC-VA Engineering Excellence Grand Award Sustained Distinguished Performance Award 2016 DBIA Hampton Roads Award for Excellence VDOT On-the-Job Training Program Award "You Mean the World to Us" Recognition for Stakeholder Involvement
I-4 Ultimate Widening D-B, Orlando,FL	99% goal	Platinum Envision™ Certification Envision Platinum FDEP Recycling Program Recognition – Achieving a 98.7% Recycling Rate / Diversion from Landfill – SGL Community Service Award ENR Southeast Top Project Starts – Ranked No. 1

Figure 4.5.14: Concrete Disposal. Our crews take appropriate measures to ensure washout water from concrete pours are not released on to the ground or into drains or waterways.

Figure 4.5.15: Segregating Recyclable Materials. We place containers and signs to segregate waste, which encourages and streamlines recycling and re-use.

As part of Phase 1 construction, E&SC elements, including silt fencing, temporary sediment basins, and check dams, will be installed prior to grubbing activities. Our Registered Land Disturber (RLD) will assign a crew to implement all the requirements of the SWPPP and environmental permits as well as:

- inspect and maintain all protection measure placed during construction;
- mark jurisdictional lines prior to any construction activities and train equipment operators on the need to stay clear of these designated areas;
- isolate areas with environmental impacts through staking, flagging, and signing to insure all types of environmental issues are communicated to the construction staff;
- eliminate wildlife impacts by driving hollow piles outside of fish windows, clearing outside of bat windows and limiting intrusions into the ditches and subaqueous vegetation;

Skanska understands that self-contained concrete truck washout systems are superior to lined dumpsters, which require heavy maintenance and upkeep during construction. Washout pits are no longer endorsed by the EPA; therefore, we will not use pits on our project site. Our crews use methods similar to that presented in Figure 4.5.14 to help our projects achieve the benefits of environmental stewardship.

As shown in Figure 4.5.15, we divide our construction waste into hazardous, non-hazardous, and inert receptacles for disposal, helping to minimize costs and maximize the opportunities for recovery and recycling of wastes. Segregating wastes will maximize recycling and allows certain types of waste to be recycled and re-used on site.

ROW Acquisition

We minimized ROW acquisitions during the proposal phase by extensively evaluating the storm drainage systems. We evaluated the parcels to be acquired and, through the experience of our consultant, determined the likelihood of certain parcels for condemnation, which we accounted for in our schedule.

During the ROW acquisition phase, the Skanska Team will continue efforts to minimize the time needed for ROW acquisitions. We will perform appraisals of each property, communicating with impacted property owners multiple times during negotiations on behalf of VDOT. In our experience, open and transparent lines of communications will increase the chance of success for the process.

The Skanska Team reduced the total amount of ROW required for the project by approximately 62 percent, as compared with the RFP Plans.

Our schedule has accounted for necessary acquisitions, with no work activities scheduled in these areas until the particular acquisition is complete.

Staging and Storage Areas

Making use of the I-64 median areas as they become available will further provide for material stockpiles and temporary staging for bridge and crossover construction. We plan to pursue agreements with landowners adjacent to the Project to secure additional acreage, if required, for a recycling yard(s). Our Team will procure the required permits for yards needed for construction, and we will work to minimize disturbances to local roads and communities.

As with all Skanska projects, storage of materials will be planned for areas where safe delivery access does not introduce hazards, including line of sight obstructions to the traveling public

By using the future drainage pond areas as stockpile and equipment staging areas prior to excavation of the pond sites, our Team minimize have the needed space for the Project's temporary material storage and office needs.

Public Involvement/Stakeholder Coordination

We will coordinate our sequence of construction during design and construction with other known projects in the area, which are listed in Table 4.5.3.

With numerous tourist destinations increasing traffic flow during the summer months, I-64 in York County is a highly congested area. Our Team understands communication protocol requirements and will ensure stakeholder concerns are tracked and expeditiously answered. The Skanska Team will coordinate with the I-64 Segment II Project on public information and outreach activities, as it impacts many of the same stakeholders.

Our approach has proven successful on many large design-build interstate highway projects, such as the I-4 Widening D-B project in Orlando, FL. Our multimedia approach for this Project

Table 4.5.3: Public Involvement/Adjacent Project Coordination

Project	Current Status
I-64 Capacity Improvements – Segment II	Under construction for May 2019 completion
Route 143 at F-137 and I-64 (Exit 238)	Under design with construction expected by Sep 2017
Colonial Parkway Joint Sealing (NPS)	Under design, construction expected summer 2018
Smart 18 – Capital Landing Road/ Bypass Road Intersection	Under preliminary design, construction expected 2023
Ironbound Road / Longhill Road Intersection	Under design, construction expected Jan - Sep 2018
Annual resurfacing (throughout Williamsburg)	April through June yearly
Route 640 (Water Country Parkway)	Under preliminary design, construction expected July 2018 – April 2019

We will communicate lane closures and traffic shifts using multiple media outlets so that stakeholders have consistent, accurate information with enough time to make decisions on their

will give stakeholders updated information in simplified formats. In order to effectively communicate with the public on this Project, we will identify critical roles, proactively connect with stakeholders, coordinate closely with VDOT, and continually engage the surrounding community.

Our TMP develops a Public Outreach Plan (POP) within 90 days of NTP that includes

coordination with the VDOT Communications Team supporting the Project and joint information flow with Segment II. The POP uses VDOT's Policy Manual for public participation as a guide to address roles, protocols, guidelines and responsibilities. The POP includes:

- Information dissemination goals
- TMP with alternative routes and potential impacts
- Incident management protocols
- Mitigation strategies for communication
- Stakeholder identification and specific outreach plans
- Crisis communication protocols and contact information
- Communications tools
- Advertising and marketing plan and budget

The POP is flexible enough to adapt to the changing needs and conditions of the Project and its stakeholders. Since the Project spans over eight miles, we will meet with stakeholders common to certain areas of the Project in order to be sure topics are kept relative to those who attend. Skanska will use BIM modeling for high-tech visualization for public outreach and stakeholder coordination. BIM 3D and 4D schedule models can be shared with stakeholders to effectively communicate impacts and strengthen our partnership between VDOT and affected stakeholders during construction.

We will work in close coordination with VDOT's Hampton Roads District to deliver accurate and consistent messages to stakeholders.

Governmental Approvals

The Skanska Team has evaluated the permitting requirements of the Project and, using our CPM schedule, determined that the procurement of the COE Section 404 and the Virginia DEQ Section 401 Permits will be critical to the installation of construction access for the construction of the bridges over Queens Creek.

Our acquisition of the DEQ Virginia Pollutant Discharge Elimination System Permit is near critical to the Project and critical to starting the ground disturbance activities required for the construction of the roadway. See Table 4.7.2 for the full list of permits and their current float. Permits listed in Table 4.7.3 could also impact the Project. Following award, we will coordinate with the responsible permitting agencies and VDOT to assure the needs of the agencies are met, building the foundation for an effective permitting process.

Mitigating any Potential Delays to Construction

Our CPM proposal schedule, presented in Section 4.7, allows us to anticipate delays by managing and tracking the expected progress of the Project from NTP to final completion, with the following:

- Milestones
- Project management
- Scope validation period
- Design
- Public involvement
- Environmental
- ROW
- Utilities
- Procurement
- Mobilization
- Construction
- Systems testing
- Demobilization

Our CPM scheduler has worked diligently during the proposal phase to identify and address potential schedule-related project risks for the Oroject. After NTP, we will evaluate the effects of time-related changes to the activities that occur prior to construction, so that we can make timely and informed decisions on recovery.

Our scope of work is adaptable and can be re-sequenced often. Depending on the constraint, we will consider opportunities for adjustments and adding crews.

We have identified sufficient local labor resources in the Hampton Roads area, many of whom were a part of the recently-completed I-264 Widening/MLK Extension Design-Build Project.

Expediting the Interim Milestone or Final Completion of the Project by the dates included in the Offeror's Letter of Submittal.
The Skanska Team's proposal schedule provides a final completion date of September, 23, 2021. We will consider alternate methods to achieve the available incentive(s) such as:

- Heat-cure concrete pours in the winter
- Continue to optimize our sequence of construction

4.5.2: Transportation Management Plan (TMP)

The Skanska Team possesses the innovative and flexible mindset required to operate in a dynamic traffic environment. This enables us to mitigate impacts to the traveling public and major Project stakeholders during construction. Our Team will use effective traffic control to guide the traveling public safely and efficiently through the work zone.

We will implement a TMP that carefully maintains traffic safety by providing accurate and up-to-date information to drivers before and as they navigate our construction zone.

Our commitment to safety starts with the MOT design and ends with construction completion. A quality MOT plan is the basis for an overall safe Project, not just an afterthought.

We will prepare our TMP in accordance with the RFP for a Type C, Category V project. This provides consistency with the I-64 Segment II TMP, yet is tailored to the specific needs inherent to I-64 Segment III.

Our TMP will include three general sections:

Realizing that an effective MOT plan is the basis for a safe Project, the Skanska Team's TMP design will be more than simply plan notes. Our TMP will be an independent, living document that encompasses our temporary traffic control, public outreach, and construction strategies to enhance public safety

- Temporary Traffic Control (TTC) Strategies:
  - describe the project, how it will be phased, and analyze expected impacts (including phased analysis);
  - define work hour, lane closure, and time of year restrictions;
  - outline detours and impacts;
  - provide TTC numbers/plan sheet references; and
  - develop outreach strategies for Project stakeholders.
- Public Outreach (PO) Strategies:
  - define methods to communicate with impacted stakeholders; and
  - outline expected work zone impacts and changing conditions.
- Construction Operations (CO) Strategies:
  - document the processes used for incident response in the work zone;
  - solicit first responders' input into the transportation operations strategies;
  - identify the contact process for emergency responses, providing our field personnel with a single source of reference so they can respond quickly and effectively; and
  - detail the notification process for O&M by construction work forces during construction.

We will submit our initial TMP with the early submittals of the MOT design package generally outlining the work zone and including analysis to support the work zone configuration. As we refine TTC strategies, we will solicit stakeholder input. We will use this input to develop the CO strategies in our TMP, including towing operations and special work zone access to incident sites.

We will then incorporate new information and details into our MOT design packages. For each subsequent MOT Plan package submittal, we amend the TMP and highlight our revisions to simplify VDOT's next review.

Maintaining Traffic Through all Phases of Construction
Our TMP provides 12-foot travel lanes and emergency pull-off cells as noted in Figure 4.5.9 on page 42. Our MOT design provides tapers

and shifts for the posted speed limit. If a reduced speed limit for the work zone becomes necessary, we will work with VDOT to design a speed reduction and submit for their consideration in order to minimize the potential for work zone incidents.

We will coordinate as needed with the adjacent construction projects mentioned in Table 4.5.3 in order to provide safe and efficient traffic flow between the projects' boundaries by maintaining appropriate work spaces and consistent posted speeds. Skanska will use SAMRT ZONE technology similar to what we are using on the 21-mile I-4 Widening D-B Project in Orlando, Florida, to constantly monitor traffic to provide data necessary for making TMP adjustments in real-time. This approach will keep drivers aware of conditions and maintain smooth traffic flow. By relocating the existing fiber optic backbone out of the areas impacted by construction while maintaining the existing redundant loops, we can provide 24/7 uninterrupted service.

Our strategy to coordinate with first responders, including access and response times during emergencies, is explained in the Public Involvement/Stakeholder Coordination Section on Page 46.

Descriptions of how traffic will be maintained during all phases of construction are described in Figure 4.5.16.

Our TMP will provide:

- two 12-foot wide travel lanes in each direction except for areas where the RFP allows otherwise;
- work zone cells, approximately one mile in length, protected with temporary concrete barrier with leading ends tapered to reduce hits;
- safe emergency pull-off cells every mile, which increase in length and width as construction progresses through each phase (these areas are located between the active work zones and are designed to accommodate separate, safe ingress/egress of construction vehicles);
- Incident Management Plan, including emergency vehicle access and detour routing;
- on-site wrecker service;
- maintenance of haul roads for Project stakeholders and EMS access; and
- provisions to secure the work areas in the event of a VDOT-directed evacuation.

Using our experience on the I-264 Widening/MLK Extension Design-Build Project, we can provide improved methods to exchange information, including public outreach and internal project level communication which includes event work scheduling, unscheduled incidents and

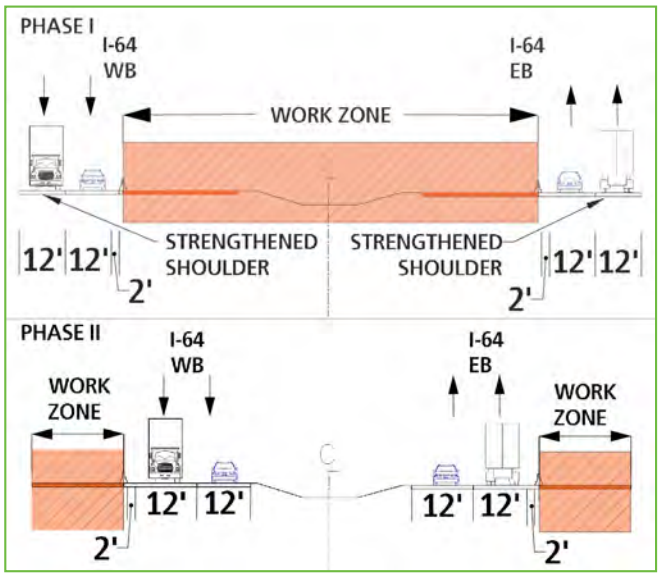


Figure 4.5.16: Maintenance of Traffic Typical Section.

We will use SMART ZONE systems to better inform motorists of upcoming congestion and opportunities to use alternate routes. This technology will enhance safety and mobility, and improve first responder response time by providing real-time traffic data, which allows responders to select more usable routes to incidents.

Our TMP concept provides construction access to the shoulder work areas from parallel local roads which have lower traffic volume, further reducing construction impacts to the traveling public.

Figure 4.5.17: Innovative Median Access Plan. By decreasing reliance on I-64 for deliveries, we have greater control of the delivery schedule and can offer first responders alternatives to reach incidents blocked by traffic backups.

Our Team's MOT Plan focuses on driver expectancy, the safety of the traveling public and our workers, and facilitates safer and more efficient construction access, while still consolidating the maximum amount of work into the fewest number of phases.

We will make every effort to remove hazards from the Project's clear zones in order to minimize the need for temporary barrier wall in our TMP whenever possible. By balancing the median earthwork, our Team has been able to design safer median slopes, which will serve as an important safety feature during temporary construction phases and throughout the life of the Project.

Incident Management

Traffic on I-64 can be subject to long periods of immobility due to incidents that occur regularly up and down the corridor.

Our Incident Management Coordinator (IMC) will lead the preparation of the Incident Management Plan to include the key elements listed below.

- Coordination with VDOT's Transportation Operations Center (TOC) to determine the possibility of using VDOT's facility to monitor cameras in the Project corridor to enhance response times for medical support and to clear vehicles quickly.
- Methods to expedite response time and clearing of accidents. We plan to define accessible pull-off spaces to allow removing vehicles from traffic lanes as soon as possible and provide towing service as required by the RFP.
- Coordination with first responders to define a workable response plan. Before a traffic switch, the IMC will brief first responders on changes to traffic flow, explain how they can access the corridor, and address any concerns regarding their ability to respond within their service area. It is our practice to execute a practice drill with first responders every six months to help ensure a rapid, efficient response if required.

With VDOT's approval, we propose to provide safer construction access directly from the existing overpass bridges at Route 199/646, Barlow Road, Route 143/Merrimac and Queens Lake Drive. This innovative temporary median access ramp concept (Figure 4.5.17) to allow local supplier and subcontractor deliveries to enter the Project without accessing I-64 mitigates the risks of materials becoming delayed in interstate traffic. This approach bolsters the certainty of our construction schedule and also lessens the overall length of time this Project will impact traffic. We will consider using temporary signals at these locations to enhance traffic control and safety to drivers and pedestrians.

Recognizing that VDOT has 20 CCTV's, 28 MVD's and four DMS's operating along the Project corridor, we will strive to learn of incidents on the Project as quickly as VDOT does. Our dispatchers can monitor on-line applications that contain real-situation feedback data compiled by motorists and, within seconds, can transmit accurate information to our IMC to initiate the fastest possible response.

During non working hours in Phase 3 of the Queens Creek Bridge construction (Figure 4.5.18, Page 51) the Skanska Team will maintain a delineated access lane that can be used by emergency response vehicles to cross Queens Creek, avoiding the longer distance that would be required by an impassable bridge condition.

Figure 4.5.18: Queens Creek Bridge Phase 3: Our crews will maintain a delineated access lane for emergency responders to use during hours that our crews are not present in Phase III of the Queens Creek Bridge construction.

Public Outreach

A proactive public outreach campaign is critical to an effective TMP and a successful project. Our Team will communicate with VDOT and other Project stakeholders in advance of all planned impacts to traffic. We will give special consideration to providing advanced warning of congestion ahead to traveling passing through the Project. We will implement additional changeable message signs to enhance driver awareness in areas deemed necessary. Through VDOT's existing program for the overall I-64 corridor, we will provide and keep the public updated with the most timely, clear, focused, accurate, and consistent information possible throughout construction.

Lane Closures

Lane shifts and lane closures will be designed to meet the VWAPM requirements for the existing posted speed with minimum RFP allowable travel lane widths. Our plan will use temporary nighttime lane closures to facilitate safe completion of:

- Temporary strengthening of existing shoulders
- Sign and signal installations
- Temporary traffic shifts
- Ramps and temporary cross-over tie-ins
- Construction of final pavement surface course and markings
- Deliveries scheduled to occur at off-peak times in order to minimize impacts to traffic

Understanding that temporary lane closures are allowed at the sole discretion of VDOT, we plan to use lane closures only when necessary to ensure the safety of the traveling public.

Short-term directional closures on Lakeshead Drive and Colonial Parkway for setting bridge beams or unloading/loading equipment or materials will be limited to 20 minutes or less, and will only occur between the hours of 8:00 pm and 5:00 am.

On Lakeshead Drive, our crews will reduce traffic lanes to one 12-ft. through-lane, which will safely maintain two-way traffic using automated temporary traffic signals for no longer than six months. This configuration will allow us to complete the bearing replacement work on the existing spans. We will maintain emergency response vehicle access into Queens Lake neighborhoods at all times.

To facilitate safe and expedient installation of the cast-in-place concrete arch portion of the bridge widening over the travel lanes of the Colonial Parkway, we will safely accommodate two-way traffic using a single 14-ft. lane, with an automated temporary traffic signal, for no longer than 12 months.

Design Speeds

Our MOT plan will be designed using a 55 mph speed. Higher design speeds provide a higher degree of safety, because they use longer tapers, shifts, clear zone distances, and acceleration and deceleration lanes. We strive to strike a balance between MOT design speed and posted speed in order to optimize safety for our workers and the traveling public. While promoting an optimal level of mobility through the corridor during construction, we will work with VDOT to identify opportunities where constraints allow us to provide higher design speeds. One opportunity may be during Phase 2 when traffic is placed onto newly constructed pavement. It is possible that construction on the Segment I and II projects will be complete at that time, and VDOT may desire to improve mobility through the Segment III Project during its final phase. Horizontal clearances, such

as clear zone distance, will need to be addressed in our TMP during design for that situation.

Ramp Closures

The only ramp closure included in our TMP will be the on-ramp from northbound Route 143 to westbound I-64. This ramp will be closed for less than four weeks in order to reconstruct the proposed pavement under the Route 143 overpass. Our TMP includes entering all approved closures into the VDOT Lane Closure Advisory Management System (LCAMS), VA Traffic, and our proposed smart phone app to keep local stakeholders informed and updated on scheduled changes to, and opening of the ramp. All other ramps will be constructed without closures.

Temporary Detours

The only temporary detour included in our TMP will be used to facilitate the movement of traffic that would otherwise use the on-ramp from northbound Route 143 to westbound I-64, while that ramp is closed for the above-mentioned period of less than four weeks. All other ramps will be constructed without detours.

Time of Day Restrictions

Our Team understands the importance of the RFP-designated time restrictions and shares VDOT's goal to promote safety and mobility throughout construction. Our TMP uses lane closures to minimize the exposure of vehicles to construction hazards, as well as to maintain an aggressive construction schedule. We will adhere to Time of Day restrictions as specified in the RFP. After selection, we will work with VDOT to evaluate the actual traffic flow to determine whether the schedule can be advanced by modifying the lane closure requirements. This may allow us to refine the allowable closure times in order to best position our crews to achieve the most production during times of low flow, while still maintaining traffic mobility during times of high flow. Such an evaluation would include:

- obtaining new traffic data; and
- performing an analysis using the Allowable Lane Closure Hours Spreadsheet Tool developed by VCTIR using the standard VDOT paramaters

If it is determined that a new allowable lane closure restriction of hours is viable for this segment, we will a request an exception and submit it to VDOT's project manager for said adjustment.

Flagging Operations

Flaggers will be employed to protect motorists, pedestrians and bicyclists from construction operations as needed, such as helping pedestrians divert to safe areas, and protecting them from situations that could put them at risk of injury from overhead objects.

Minimum Lane Widths

Our temporary lane configuration is two 12-foot lanes and a 2-foot shoulder in front of temporary concrete barrier wall, with 1-foot behind the barrier wall for function. Our use of 12-foot minimum lane widths is generally less disruptive and more comfortable to the high volume of trucks using the corridor. We considered using 11-foot lanes and a continuous 9-foot shoulder. However, with a full-width shoulder preserved every other mile for emergency pull-off cells, we offer more safe width for a disabled vehicle to change a tire than would be afforded with a 9-foot shoulder. Furthermore, our SOC allows for continuous improvement as phasing advances mile-by-mile, by completing the IM pavement layer, pulling barrier and adding precious full-width emergency pull-offs to provide more continuous space for vehicles involved in breakdowns or incidents to pull-over and allow traffic to flow.

Work Zone Speed Reductions

Our TMP is designed using design speeds that match the existing posted speed limit. Our TMP anticipates no temporary reductions in speed limits consistent with the RFP requirements.

The Skanska Team will work with VDOT to identify opportunities to raise the work zone speed

The overall success of the Project will depend on the stakeholders' perception. Our Team will work closely with VDOT to ensure that we maintain a positive outlook for this vital corridor.

during later phases, when other segments are complete, which will enhance mobility in Phase 2.

Major Stakeholders

Our Team has identified a unique set of stakeholders of this Project, who are listed in in Table 4.7.1 located in Section 4.7: Proposal Schedule Narrative.

During the proposal phase, our Team reviewed the comments obtained from VDOT's public information sessions and contacted many of the impacted stakeholders to listen to their concerns regarding the Project.

Regularly scheduled meetings with the stakeholders will provide two-way information sharing monthly, and these meetings will be a focus of the Skanska Team.

Many stakeholders near the Project will be affected by construction; therefore, close coordination will be extremely important to maintain the schedule and minimize impacts to traffic operations.

Our DBPM will provide accurate and timely information to all stakeholders. Our Team will work with VDOT to establish and maintain a Project website and mobile phone application to provide information about the I-64 corridor overview, work sequencing, overall Project schedule, potential traffic impacts, potential impacts to local stakeholders, up-to-date Project photos, and our contact information. This same information will be sent to VDOT's District Office of Public Affairs and Stakeholders on both a periodic basis and at key milestones. We will prepare for and attend public coordination meetings as necessary to communicate Project status and upcoming activities that will impact the stakeholders. We will also provide written documentation to VDOT about our planned operations, haul routes, utility relocations, lane closure schedules, and upcoming changes in traffic patterns.

The Skanska Team complies with RFP paragraph 2.3.2 Proposed Bridge Improvements – B-642 and B643 over Queens Creek, as evidenced in Figure 4.5.19, our design achieves the minimum 15-foot wide clear channel beneath the spans of both bridges for boats traveling along the creek at all times during construction.

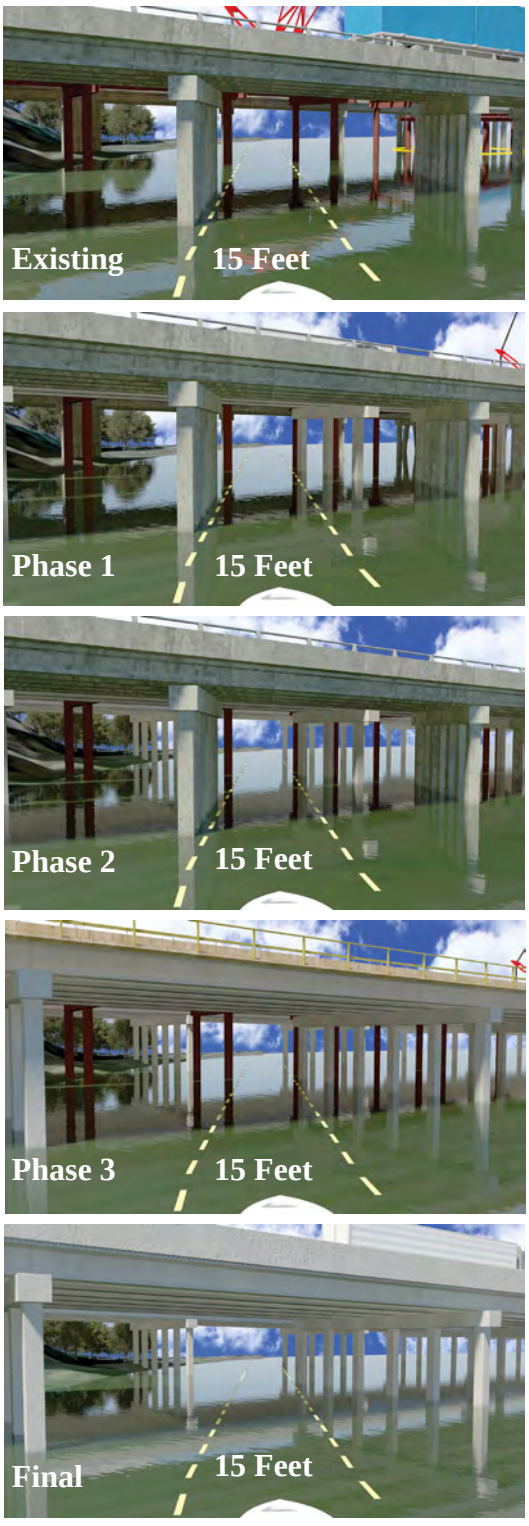


Figure 4.5.19: Queens Creek bridge: Our trestle design accommodates the minimum 15-foot wide clear channel beneath both bridges.

Means and Methods – Specific Details

Our MOT specialists will set out the lane closures, and then be responsible to monitor, maintain, and improve or adjust the devices in their lane closures for the duration of the closure. We will perform regular inspections of our lane closure equipment by testing reflectivity, replacing batteries on lights, and bulbs on arrow boards and changeable message signs.

Advanced notification will be provided prior to work area activities, and before temporary lane closures to minimize congestion. The public outreach campaign will include typical media outlets, citizen information meetings, website updates, press releases, local resident/business letter notifications, and targeted group meetings. This is reflected in our phasing approach and throughout our TMP, which adheres to the laws, standards, specifications, and references listed in the RFP.

Traffic safety in temporary traffic control areas will be an integral and high priority element of this project. The TMP will balance the safety of motorists, pedestrians, and workers. Standard highway signs will be placed using federal and state guidelines to provide advance warning to drivers and assistance in identifying and designating traffic paths. Such traffic control devices, signals, message boards, barrels and barricades will instruct drivers to follow a path away from the work zone. We will minimize traffic impacts, maintaining the current number of lanes through the Project. We expect nightly lane closures to be a common occurrence for work that includes, but is not limited to:

- Temporary barrier operations wall installations and removal
- Roadway and paving
- Pavement marking and striping
- Sign work
- Demolition of bridge and roadway

We will consider traffic operations in each stage of construction, and conduct traffic analysis to confirm the functionality of temporary traffic patterns to minimize the impact of motorists in the work zone. Our analysis will evaluate travel time, level of service, and volume/capacity ratios to identify work zone mobility deficiencies and provide mitigation strategies.

Utilizing intelligent, wireless, and sequentially operated lights in cone tapers (Figure 4.5.20) enables our crews to form a clearer directional path for merging traffic during lane closures. This provides better driver recognition of the merging taper and helps reduce approach speeds.

Figure 4.5.20: Syncro-Guide Cone Taper Lights: Synchro-guide cone lights are being used on Skanska's I-4 Widening D-B project in Florida. Our crews have experienced a drastic reduction in taper intrusions with the taper lights with near zero intrusions compared to a history of two to three intrusions per shift without the taper lights.

Advanced Lane Closure Alert System

The lane closure alert system consists of real-time updates entered by Skanska's MOT field engineers who can populate the VA 511 Traffic Information System, local media and VDOT's website. Skanska's I-4 Widening D-B project is the first to use this technology in the U.S., and more than 10,000 central Florida users have signed up to receive lane closure alerts that are customizable to their specific travel routes.

Figure 4.5.21: Custom Designed MOT Trucks: Skanska's specifically designed MOT trucks feature a basket that hydraulically adjusts up and down to make retrieving and laying cones safer and easier. The trucks are equipped with a custom interior video and intercom system to allow the driver to communicate and monitor the crew around the truck from the cab without turning around.

Figure 4.5.22: Halo Lights. The Halo Light, used on Skanska's I-4 Ultimate Project, attaches to hard hats and uses a 12-hour rechargeable battery to produce its signature ring of light visible from 400 yd. away.

Lane Closure Documentation System Project Data Portal (PDP) Website

All lane closures will be videoed and stored in project records for documentation to aid in proactive avoidance of traffic accident reactionary lawsuits.

Custom-Designed MOT Trucks

This innovation (Figure 4.5.21) mitigates risks by significantly minimizing the amount of vehicles and personnel needed to perform our operations, reducing the necessary man-hours to change attachments, and lessens physical stress on workers. Skanska crews have currently installed more than 7,000 closures with zero truck-mounted attenuator impacts. Our state-of-the-art truck's cab-over design reduces turning radius in urban environments, and the in-cab hydraulically-raised and lowered attenuator reduces the time spent out of the truck.

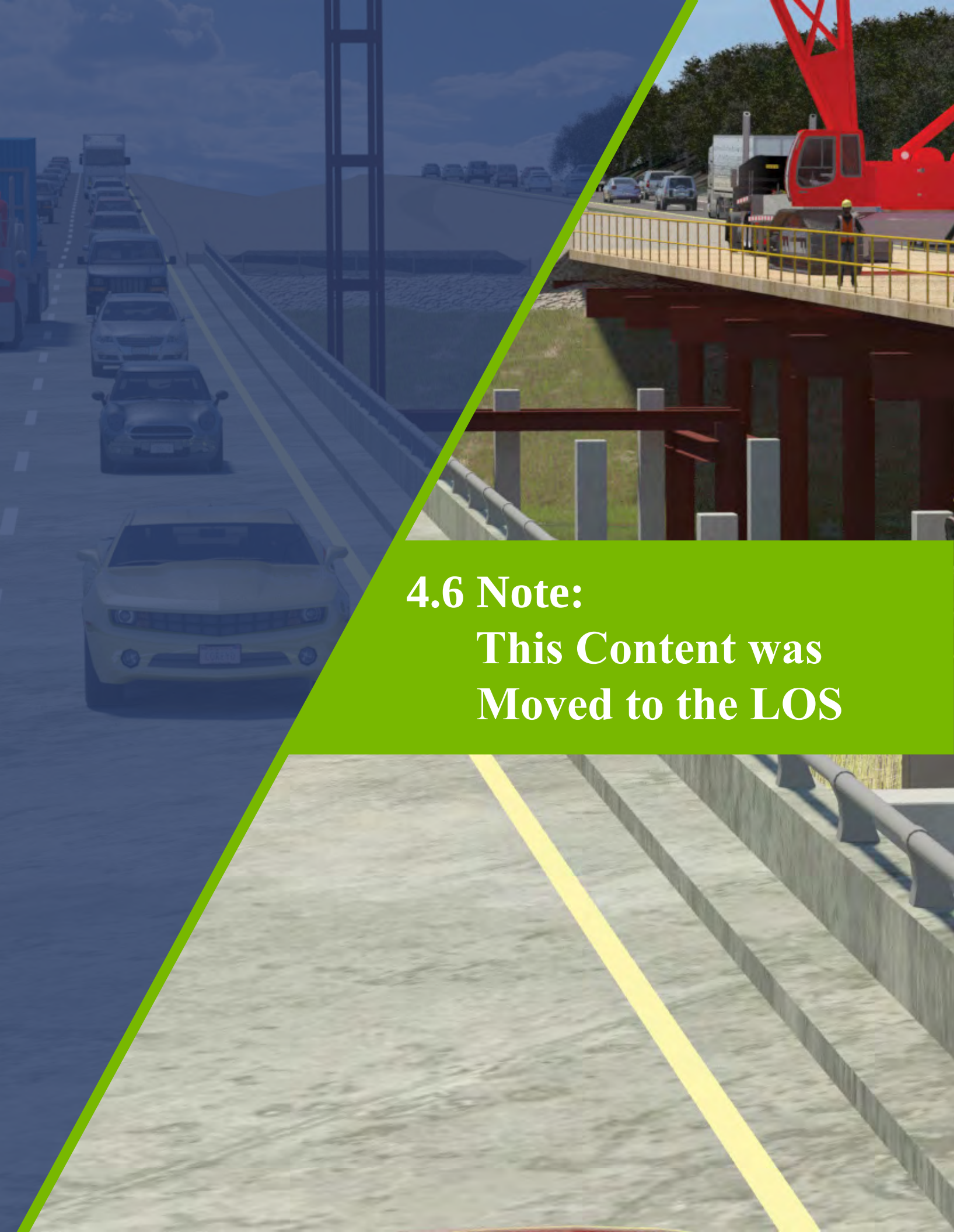
A quick disconnect attenuator can be removed in under 10 minutes and swapped for a rear man basket. Using these custom MOT trucks reduces repetitive rotator body movements and minimizes physical injury and stress to cone setters. The trucks are equipped with a six-camera system and DVR to monitor drivers and record conditions in the event of a third party accident.

Balloon Lighting

Unlike traditional portable light towers, Skanska employs the use of balloon lighting in work areas where we need to deliver softer, diffused light throughout the work site, and/or to eliminate the glare that light towers are capable of producing which can be a hazard to traffic moving through the work site.

Halo Lights

When working near traffic in low-light conditions, many Skanska crews use the Halo Light (Figure 4.5.22), a safety and task light that enables the wearer to see the task at hand and be seen in all directions.



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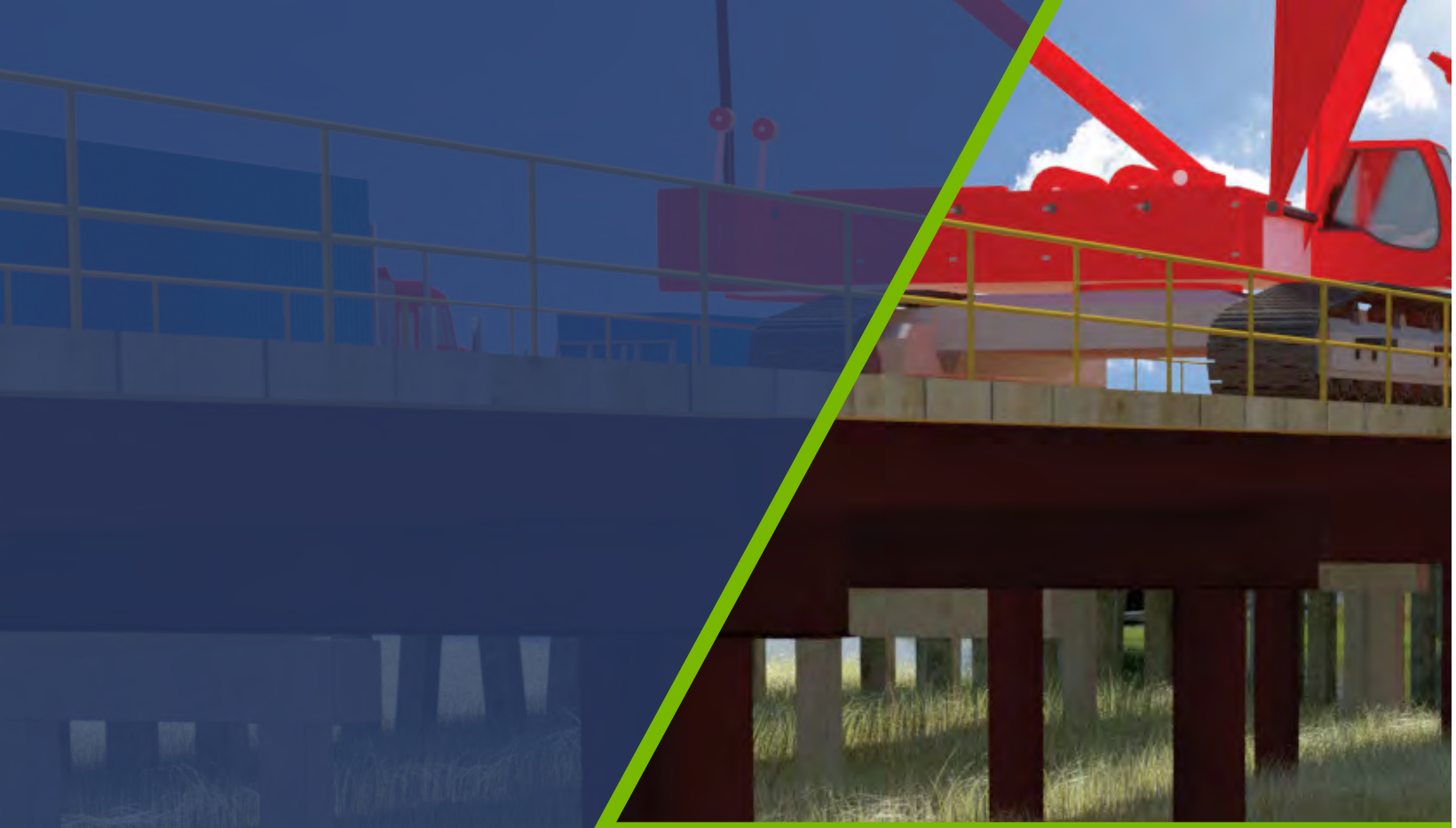


4.7 Proposal Schedule

4.7 Proposal Schedule

4.7.1: Proposal Schedule

The Skanska Team has provided two versions of the same schedule in Volume II: One version that shows only our critical path and a second, unfiltered schedule grouped by our Work Breakdown Structure and sorted by the start date.

4.7.2: Proposal Schedule Narrative

Our design-build schedule is based on a sequence of logical interpretations of the work, and optimizes the amount of construction activities completed during each construction phase to maximize efficiency of resources and activities. Our schedule is also a management tool focusing on integrating all aspects of the Project, including impacts to the stakeholders noted in Table 4.7.1, as well as our design process, and construction activities. Regularly scheduled meetings with the stakeholders will provide monthly, two-way information sharing. These meetings will ensure our continued focus on stakeholder coordination.

Our schedule divides the Project into three main construction areas (Figure 4.7.1, Page S-2) (Areas A, B and C), and manages them both separately and collectively. This approach enables our Team to make objective decisions with the resultant effect to each activity, and subsequently the overall Project, in mind. Construction activities are completed using two phases, with the exception of an additional phase for the completion of the bridges over Queens Creek and the adjacent roadway.

Our proposal schedule provides a final completion date of September, 23, 2021. Following award, our Team will consider alternate construction methods to attain the available incentive(s). These methods include:

- using Saturdays to recover time lost during the work week due to weather;
- incorporating heating systems to maintain quality while pouring bridge decks during winter months when temperatures are not conducive to conventional deck pouring;
- working with VDOT to inspect and correct any defects as construction progresses, minimizing the time needed to close-out the Project; and
- Accelerating design work as it relates to permitting.

Table 4.7.1: Stakeholders Considered in Our Schedule

Stakeholder Considered in Our Schedule
Queens Lake Association
Creekside Landing Homeowners
Felgates Woods
Queens Lake Middle School
Bruton High School
Great Wolf Lodge
Colonial Williamsburg Foundation
Camp Peary
Hampton Roads Transportation
National Park Service
Waller Mill Reservoir
City of Williamsburg
York County
Businesses in the Vicinity of the Project
Colonial National Historic Park
SHPO
HRTPO
FHWA

Summary of our Approach and Critical Path

MOT Areas

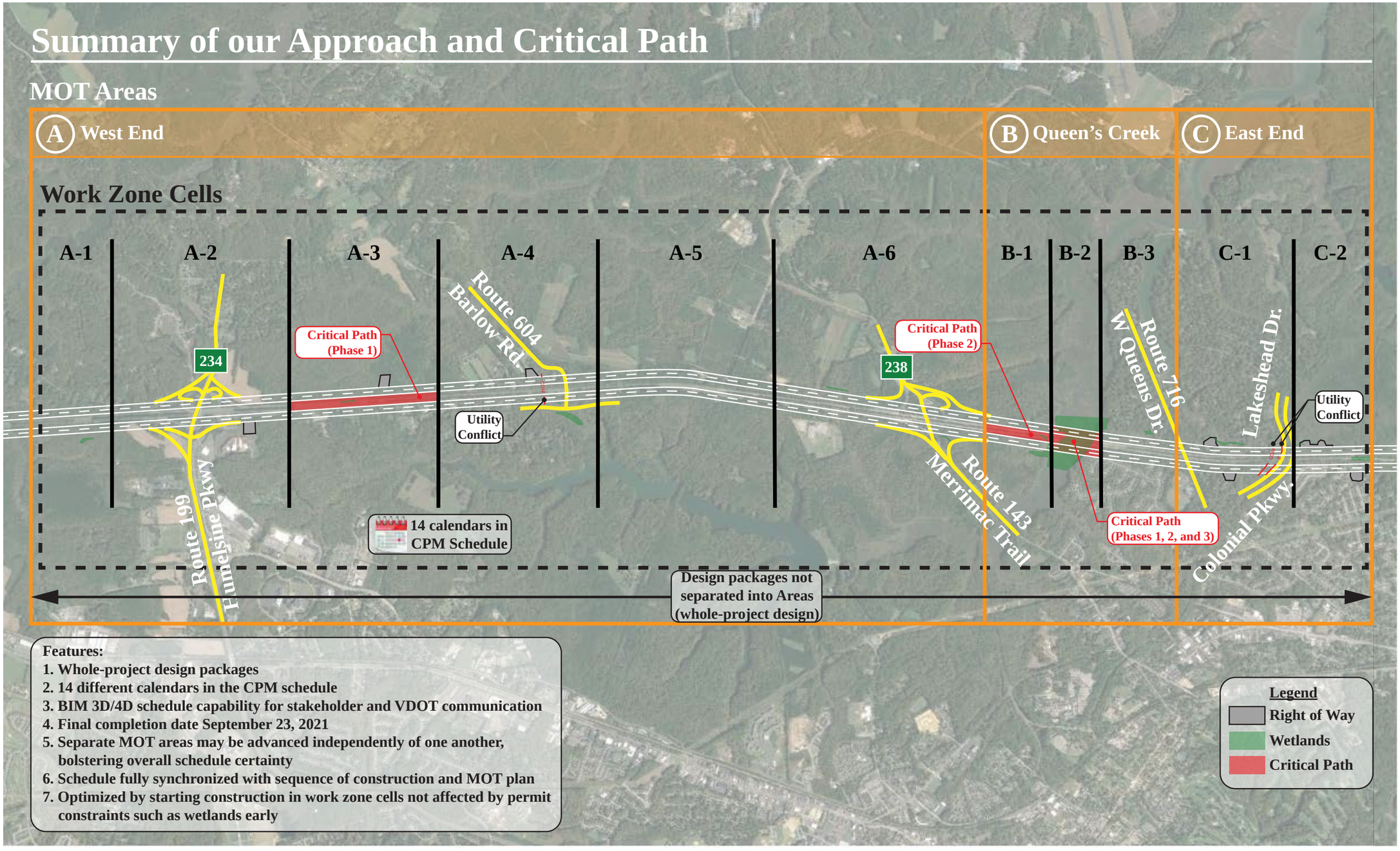


Figure 4.7.1: Project Schedule Constraints. We have divided the Project into three identifiable Areas, each with their own distinct features and associated MOT plan, allowing critical activities to advance and build a high level of certainty into our schedule.

Using one or more of these techniques will allow our Team to deliver the Project to VDOT early enough to attain the full incentive.

Work Breakdown Structure (WBS)

Our proposal schedule uses a hierarchical WBS (Level 3), helping us evaluate and understand the interdependence of work throughout the I-64 corridor. We will anticipate delays by using our schedule to manage and track the expected progress. Critical elements are detailed below.

1. Milestones: Both the contract milestones and internal milestones are included in this section. The milestone portion of the schedule will be an initial indicator of expected Project success.
2. Project Management: Includes general and administrative aspects of the Project, such as close-out.
3. Scope Validation Period: Includes all aspects of the scope validation, including contract document review, design validation, surveying, utility location, and geotechnical investigations.
4. Design: This section encompasses the roadway and structures design from the ROW plans through RFC for all anticipated packages.
5. Public Involvement: Includes interactions with the public, such as coordination with adjacent construction Projects, public information meetings, first responders meetings, final noise abatement design, and coordination with Camp Peary and other stakeholders (Table 4.7.1).
6. Environmental: This section includes the preparation and reviews of permits required for the Project.
7. ROW: Includes outreach to property owners and ROW acquisition.
8. Utilities: This section includes outreach to all utility owners in the Project vicinity as well as the design coordination and expected relocations of impacted utilities.
9. Procurement: Encompasses outreach to major subcontractors for services and vendors for materials, and includes material submittals, reviews, fabrication, and deliveries.
10. Mobilization: Refers to set-up of Project office space and Project staffing.
11. Construction: Includes all construction activities, such as MOT, clearing, demolition, grading, drainage, pavement.
12. Systems Testing: This refers to testing of newly installed ITS systems, where required.
13. Demobilization: This section refers to removal of Project office space and staff.

Activity Codes

Activity codes have been assigned to individual activities to allow for filtering, grouping, and sorting of activities.

- Feature – general elements of the Project
- Area – specific area of the Project
- Stage – general stage of the Project
- Phase – specific phase of construction
- Type of Work – details regarding the specific type of work, grouped by similarity
- Responsibility – defines the entity responsible for the work

Milestones

The milestone schedule will allow the Skanska Team and VDOT to track progress against the contract milestones in the RFP and our own internal milestones for the Project, both in its entirety as well as by individual area. The milestone schedule is provided in Table 4.7.2.

Table 4.7.2: Project Milestones and Completion Dates

Milestones	Date
Contract Milestones	
Notice of Intent to Award	10/30/2017
Notice to Award	12/6/2017
Design-build Contract Execution	1/9/2018
NTP	1/17/2018
Final Completion	9/23/2021

Project Sequencing

Preconstruction: During the preconstruction stage of the Project, the Skanska Team will progress the design, procure permits and ROW, and coordinate and relocate utilities to facilitate the construction.

Design: Prior to NTP, the Skanska Team will work collaboratively to prepare permit applications and work plans in order to perform scope validation work as efficiently as possible. Once NTP is received, our Team will begin scope validation while concurrently developing the roadway ROW plans and bridge preliminary plans. Scope validation activities includes bit is not limited to geotechnical investigations, ROW survey, and utility locates. Once we have incorporated data from the survey and geotechnical investigations into the design, we will submit the ROW plan set to VDOT for review. After receiving comments from VDOT, our design team will develop construction plan sets for temporary traffic control, clearing and grubbing, grading and drainage, and final roadway. The bridge designs will progress in a similar fashion; after the preliminary plans have been reviewed, we will develop final plans for VDOT's review and approval.

Environmental/Permitting: Environmental permitting will progress concurrently with the design. To mitigate risks associated with delays during the permitting process, the Skanska Team will conduct "pre-application" meetings with permitting agencies to assure permit packages are complete and comprehensive with the initial submittal. Once permit packages have been assembled, our Team will conduct a final review of the permit package prior to submission.

Utilities: During the scope validation period, the Skanska Team will conduct a comprehensive subsurface utility exploration (SUE) to identify all potential utility conflicts. Following the SUE, we will hold meetings with all utility owners potentially be impacted by the Project. At this meeting, we will discuss our design and construction methods with the utility owners to better understand their concerns, and identify proposed utility relocation corridors to facilitate the ROW plan development.

Once the ROW plans have been developed, the Skanska Team will hold utility design coordination meetings with the impacted utility owners, allowing the design of utility relocations to begin. After the relocation designs have been reviewed by both the utility owners and the Skanska Team, we will submit them to VDOT for review and approval. Following approval, we will begin relocating utilities in a manner that minimizes stakeholder impacts. We will relocate utilities prior to working in impacted areas of the Project.

Construction: We divided the Project into three key construction areas: Areas A, B and C based on similar MOT requirements. The majority of construction is consolidated into two major phases, with the exception of the bridges over Queens Creek that required a third phase. See Figures 4.7.3 through 4.7.18 for the sequence of Queens Creek bridge. Colonial Parkway's arch sequence of construction is presented in Figure 4.7.19.

Our sequencing approach optimizes construction efficiency while maintaining a safe corridor for motorists by subdividing the three major areas into approximately one mile cells, then working in alternating cells. This method offers more consistent flow for the traveling public by providing larger cells for emergency pull-offs and construction access to minimize impacts to the traveling public.

Phase 1: Prior to the initial traffic shift, we will use nightly lane closures to strengthen the outside shoulder to allow for safe accommodation of traffic. Once completed, traffic will be shifted away from the median to allow for construction of the median widening. During the course of the Phase 1 median widening, we will construct the inside portion of the I-64 westbound bridge over Queens Creek, and widen the median of the bridges over Lakeshead Drive and Colonial Parkway. We will install a temporary crossover on either side of the I-64 bridge over Queens Creek in the median to allow eastbound traffic to transition to the newly constructed bridge.

Phase 2: Once median construction is complete, we will shift traffic toward the median to reconstruct the existing outside travel lanes.

During these reconstruction activities, we will make repairs to the existing bridge decks over Lakeshead Drive and Colonial Parkway.

Once the reconstruction of the remaining travel lanes is complete, we will shift traffic into its final configuration and install the final roadway surface and pavement markings. Adjacent to Queens Creek, the eastbound traffic will be shifted to the temporary crossovers and the newly constructed westbound bridge over Queens Creek, and demolition will begin on the existing I-64 eastbound bridge over Queens Creek. Once demolition has progressed sufficiently, we will begin construction of the new I-64 eastbound bridge over Queens Creek.

Phase 3: Once the I-64 eastbound bridge over Queens Creek is completed, we will shift eastbound traffic from the temporary crossovers to the outside of the new bridge. The crossovers will be modified to allow the westbound traffic to transition to the newly constructed eastbound bridge over Queens Creek.

With crossover reconfiguration complete and traffic shifted off the existing I-64 westbound bridge over Queens Creek, we will begin demolition on the existing westbound bridge over Queens Creek. Once demolition has sufficiently progressed, we will complete the remaining construction of the new westbound bridge over Queens Creek.

When we have completed both the new westbound bridge and the westbound roadway, we will shift traffic into its final configuration to install the final roadway surface and striping adjacent to the bridges over Queens Creek. During this time, we will remove temporary crossovers and complete final grading of the medians adjacent to Queens Creek.

The Figure 4.7.2, Page S-6, presents the scheduling relationship between the preconstruction and construction activities. A summary of our schedule is provided below.

Critical Path

The Project's critical path runs from NTP, through scope validation, design, environmental permitting, to the construction of the bridges over Queens Creek and the adjacent roadway. Our Critical Path Schedule is included in Volume II.

Design

The initial survey of the Project, which will be conducted during the scope validation period, is critical to the development of the ROW plan set. This survey will be used to determine the limits of disturbance and prepare our design for further development. We will use the design of the ROW plans in conjunction with the preliminary bridge plans to procure permits for the Project.

Environmental

The Skanska Team has evaluated the permitting requirements and determined, through the use of the CPM schedule, that the procurement of the COE Section 404 and the Virginia DEQ Section 401 Permits will be critical to the installation of construction access for the construction of the bridges over Queens Creek.

Furthermore, the Virginia DEQ Virginia Pollutant Discharge Elimination System Permit is near critical path to the Project and critical to starting the ground disturbance activities required for the roadway construction. See Table 4.7.3 on page S-7 for the full list of permits.

Construction

The critical path during construction is comprised of the Queens Creek bridges and their approaches, which will require three phases of construction to complete.

Phase 1: We will begin construction by installing temporary retaining walls to support the existing abutments while new abutments are constructed. We will install temporary trestle for construction access and material deliveries for the bridges crossing Queens Creek. Once the trestle is installed, we will start constructing the inner portion of the new westbound bridge over Queens Creek.

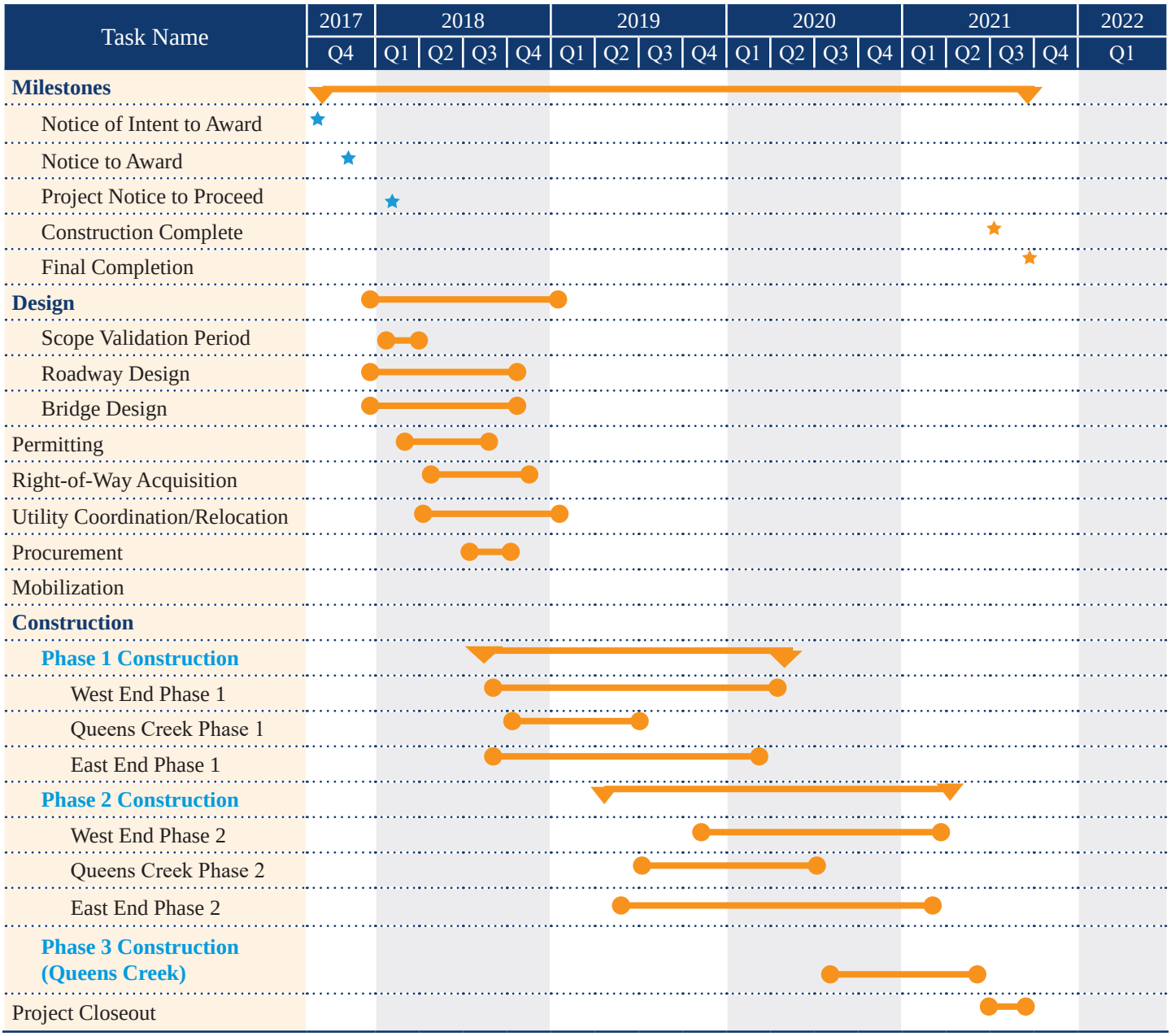


Figure 4.7.2: Summary Schedule. The Skanska Team's Project schedule avoids delays with proactive coordination during design and optimizes the amount of work completed in each phase.

Phase 2: Once construction of the new westbound bridge over Queens Creek is complete, westbound traffic will remain in its Phase 1 configuration adjacent to the bridge, while eastbound traffic will be shifted to the new westbound bridge. Using temporary crossovers, we will relieve the existing eastbound bridge over Queens Creek from all public traffic in order to begin demolition, using the trestle installed in Phase 1 for access. Once demolition has sufficiently progressed, we will begin constructing the new eastbound bridge and approaches.

Phase 3: Once the new eastbound bridge is completed, we will shift eastbound traffic from the temporary crossovers installed in Phase 1 to the outside portion of the newly constructed

Table 4.7.3: Permit Acquisition Schedule

Permitting Agency	Permit Name	Date to be Acquired
VA DEQ	Section 401 (Water Quality)	10/1/2018
VA DEQ	VA Pollution Discharge Elimination System Permit	10/9/2018
USACOE	Section 404 (Water Quality)	10/1/2018
FHWA	Final NEPA Re-Evaluation	10/9/2018
VMRC	Sub-Aqueous Permit	8/30/2018
VA DEQ	Coastal Zone Management Consistency Determination	7/31/2018
USFWS	Endangered & Threatened Species	7/31/2018
NPS	Special Use Permit - Tree Removal	9/10/2018
NPS	Special Use Permit - Land Disturbance	8/3/2018
SHPO	Section 4(f) Consistency Determination	7/31/2018

bridge. With traffic now removed, the temporary crossovers will be reconfigured to allow westbound traffic to access the inner portion of the new eastbound bridge. Once the temporary crossovers are reconfigured, we will install temporary barrier to separate the eastbound and westbound traffic. Westbound traffic will be shifted to the inside portion of the new eastbound bridge. With traffic removed from the existing westbound bridge, we will begin demolition of the existing bridge. Cranes and heavy equipment will again use the trestle installed in Phase 1 to perform the demolition and construction of the outside portion of the westbound bridge. Once demolition has sufficiently progressed, we will build the remaining portion of the new westbound bridge over Queens Creek. When construction of the new westbound bridge is completed, the westbound and eastbound traffic will be shifted into their final configuration and the trestle will be removed. We will remove temporary crossovers and apply the final pavement surface to both the eastbound and westbound lanes adjacent to the bridges over Queens Creek.

Means and Methods

The Skanska Team, along with our consultants and key field management personnel, have developed a schedule which follows our approach to the Project.

Preconstruction

The preconstruction phase is equally important to the success of this Project as the construction phase. The decisions made during the preconstruction phase will impact all future phases.

Design/Scope Validation

In order to develop the design and scope validation portion of the schedule, our design team considered how the work performed during scope validation impacts the design of the Project. Therefore, we allotted time for WSP to react to unexpected Project conditions uncovered during the scope validation work. The complete integration of the design and construction schedules allows our team to understand how each portion of the schedule impacts the others. Using this approach to schedule development, we were able to develop a more aggressive design schedule while maintaining a high level of schedule certainty.

During the design phase, Skanska and WSP will integrate staff to ensure a coordinated effort and a design that is not only constructible, but meets

the needs of the VDOT and their stakeholders. Approximately one month prior to submitting our ROW plan set, we will invite VDOT to participate in over-the-shoulder reviews. This will allow our Team to understand VDOT's concerns and reduce the amount of comments generated by the formal design submissions. At this same time, we will hold a meeting with the appropriate VDOT personnel to coordinate these final design submissions and assure an efficient design review process. Prior to each VDOT submission, we will hold an interdisciplinary coordination meeting to better understand how the impacts of one design element will impact the others.

Environmental/Permitting
Our Team used past experience to generate an extensive list of any potential permits which could impact the Project. We then consolidated the initial list to those permits which present the highest risk of impact, as listed in Table 4.7.3, Page S-8.

Following award, we will coordinate with the responsible permitting agencies and VDOT to assure the needs of the agencies are met, laying the groundwork for an efficient permitting process.

Utilities
Our Team worked to minimize the scheduling impacts of the utilities along the corridor. We adjusted pond locations and sizing, evaluated structure foundations, and reviewed other mitigation techniques. These efforts allowed us to reduce impacts to only four known utilities throughout the Project.

In an effort to further minimize impacts to the existing utilities and their patrons, we will hold regular meetings with the utility owners during the design and construction phases. During these meetings, we will inform utility owners of our approach and listen to any concerns they have. When relocations are unavoidable, we will work with utility owners to minimize their impact.

Right of Way
We evaluated and optimized storm drainage systems, and effectively reduced the ROW acquisitions by approximately half over the RFP Plans. We also worked with our consultant to evaluate the parcels to be acquired and determine the likelihood of condemnation. These efforts allowed us to account for this time in our schedule.

During the ROW acquisition phase, our Team will continue efforts to minimize acquisitions. Although we have accounted for the time required for some parcels to progress to condemnation, we will work diligently to avoid this process. Methods to accomplish this include performing an extensive appraisal of each property, noting property owner concerns, and reaching out to impacted property owners multiple times during the negotiation phase of the acquisition process.

Public Involvement
The Skanska Team reviewed the comments obtained from the public information sessions VDOT has held to date, and communicated with many of the impacted stakeholders to understand their concerns. We worked to incorporate these concerns into our design and construction solutions.

Following award, we will continue to coordinate with stakeholders and first responders to develop a design and construction approach that minimizes impacts. Prior to changes in traffic patterns, we will meet with first responders to make sure they understand the proposed traffic patterns and, when necessary, make adjustments to our approach to anticipate and minimize potentially dangerous situations inherent to construction operations.

Construction
Throughout the proposal phase of the Project our Team has brought in key field staff to provide valuable insight as to the construction approach. The construction approach shown in our schedule reflects Skanska's best practices that were put into place at our recently completed I-264 Widening/MLK Extension DB Project in Portsmouth, VA, which we completed 11 months

ahead of schedule. Our team has sought out key subcontractors, experts in their fields, to gain further insight as to the complexities which may be encountered during the construction of this Project. This has allowed us to gain a high level of schedule certainty in the Project, minimizing the risk of delays through the construction of the I-64 Segment III Project.

During the preconstruction phase of the Project our Team will mobilize construction staff and key subcontractors to develop comprehensive work plans which will then be incorporated into our baseline schedule, allowing for even more schedule certainty. Throughout the construction of the Project, our Team will continuously evaluate practices and procedures to assure and further the efficiency of construction. Skanska requires construction management staff to be informed as to their schedule and provide regular progress updates. These progress updates will be incorporated into the baseline schedule allowing our management to utilize the key indicators within the schedule to manage any potential changes to the Project schedule. This approach to schedule development and updating the Project schedules allows the Skanska management to proactively avoid delays to the Project.

Resource Management

The Proposal Schedule has been developed to emulate a baseline schedule, allowing the assigned Project management staff to review the schedule as would be conducted during the development of the baseline schedule, post award. By incorporating key staff during the pursuit of this Project, the Skanska Team has set the sequence of construction to optimize the flow of resources through the Project.

Our Team will continue to, further refine the needs of the Project and optimize the flow of resources. This will be accomplished by resource loading the schedule with permanent materials, temporary materials, work crews, and equipment. During the construction phase of the Project the resources will be regularly updated with the schedule.

QA/QC

Our Team has included a robust approach to QA/QC throughout our proposal schedule. We have incorporated design reviews by both the design and construction teams, reviews of each permit submission, and included coordination meetings with impacted parties. This approach to our schedule allows us to proactively manage the quality of the Project.

To further promote the importance of quality post award, our Team will hold additional coordination meetings, which will be more informal, with VDOT, agencies, and impacted stakeholders early in the preconstruction phase of the Project. The information obtained during these informal meetings will be incorporated into our comprehensive QA/QC plan.

Key Assumptions

There are several key assumptions for schedule development regarding the execution of the Project. The assumptions made addressed Project calendars (weather and holidays) and endangered and threatened species.

Calendars

The proposal schedule has been developed utilizing 13 Project calendars. These calendars were developed utilizing a ten year average from weather recorded from the National Oceanic and Atmospheric Administration (NOAA) weather station located in Williamsburg. Both temperature and precipitation were taken into account to provide an accurate representation of normal weather expected for the Project location. A table of the calendars utilized in the development of the proposal schedule is presented in Table 4.7.4 on page S-10.

Precipitation amounts and temperatures shown in the table are daily averages which will constitute a cut-off point for the associated type of work. Holidays observed by VDOT and not Skanska are:

- Lee Jackson Day
- Columbus Day
- Veterans Day
- Day Before Thanksgiving

Table 4.7.4: Project Calender

Calendar	Holidays	Days Per Week	Temperature (<=)	Precipitation (>=)	Special Time
Calendar Days	N/A	7	N/A	N/A	
Skanska Admin	Skanska	5	N/A	N/A	
VDOT Admin	VDOT	5	N/A	N/A	
Mass Earthwork	Skanska	5	32˚	0.25 in	"Drying Day (Rain >1"") No Work Dec 1 - Jan 15"
Roadway & Earthwork	Skanska	5	32˚	0.25 in	Drying Day (Rain >1")
Paving & Base	Skanska	5	40˚	0.10 in	
Surface Paving	Skanska	5	50˚	0.10 in	
Substructure	Skanska	5	N/A	0.50 in	
Substructure	Skanska	6	N/A	0.50 in	
Bridge Decks	Skanska	5	40˚	0.25 in	
Bridge Decks	Skanska	6	40˚	0.25 in	
In-Water Work		5	32˚	0.50 in	Fish Window
MOT		5	N/A	0.50 in	Local Events

The Skanska Team will continue to work on the Project through these holidays.

Threatened & Endangered Species

The proposal schedule makes some assumptions as to the impacts of endangered and threatened species on the schedule. We have accounted for a TOYR for work within Queens Creek from February 15 through June 30, preventing the Skanska Team from being able to install hollow steel pipe piles, used in temporary trestle. However through extensive coordination with the responsible agencies, we are confident that this TOYR will not apply to the installation of the solid square precast piles, used in the permanent structure across Queens Creek. The proposal schedule also accounts for the restriction of tree clearing and demolition of inhabited bridge structures during the rearing period for the Northern Long-Eared Bat, June 1 through July 31. Should the presence of the Bat be detected within the limits of the Project, regular surveys of the area will be performed regularly, from mid-April through mid-September, to ensure the safety of this threatened species. Tree clearing and bridge demolition will be scheduled to avoid this TOYR. However, if bridge demolition cannot be avoided during this period of time, the structure will be netted to prohibit the bats from roosting.

Figure 4.7.3: Existing Queens Creek Bridges

Figure 4.7.4: Construction of 40 foot span construction access trestles. Piles to be installed prior to the beginning of the February Anadromous fish window.

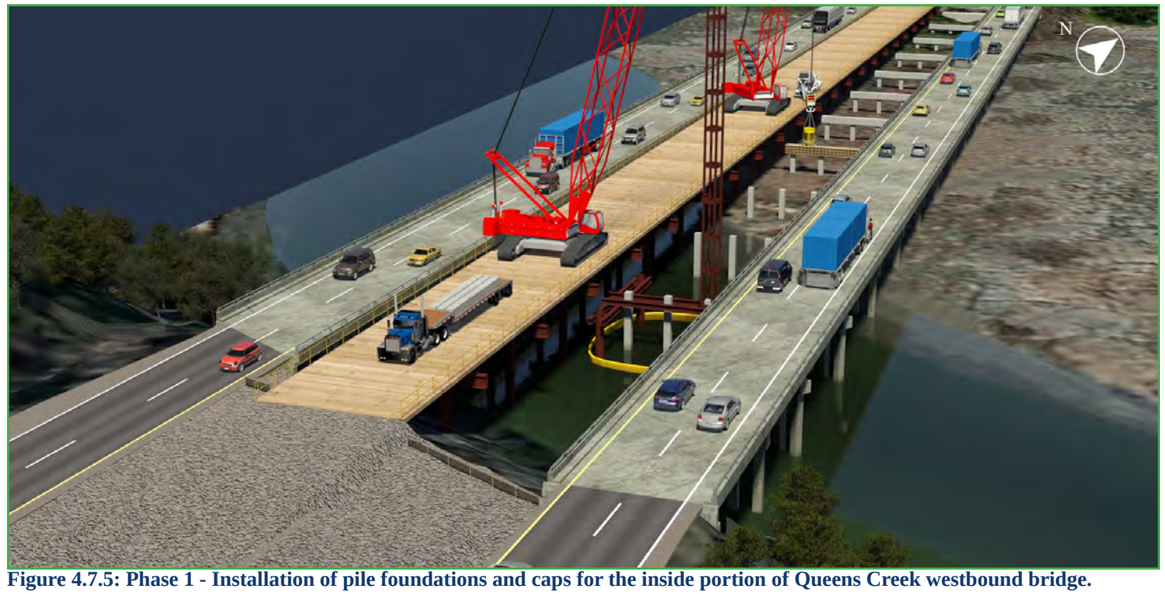


Figure 4.7.5: Phase 1 - Installation of pile foundations and caps for the inside portion of Queens Creek westbound bridge.

Figure 4.7.6: Install superstructure items with access and material lay down areas in the I-64 median at both ends of the bridge.

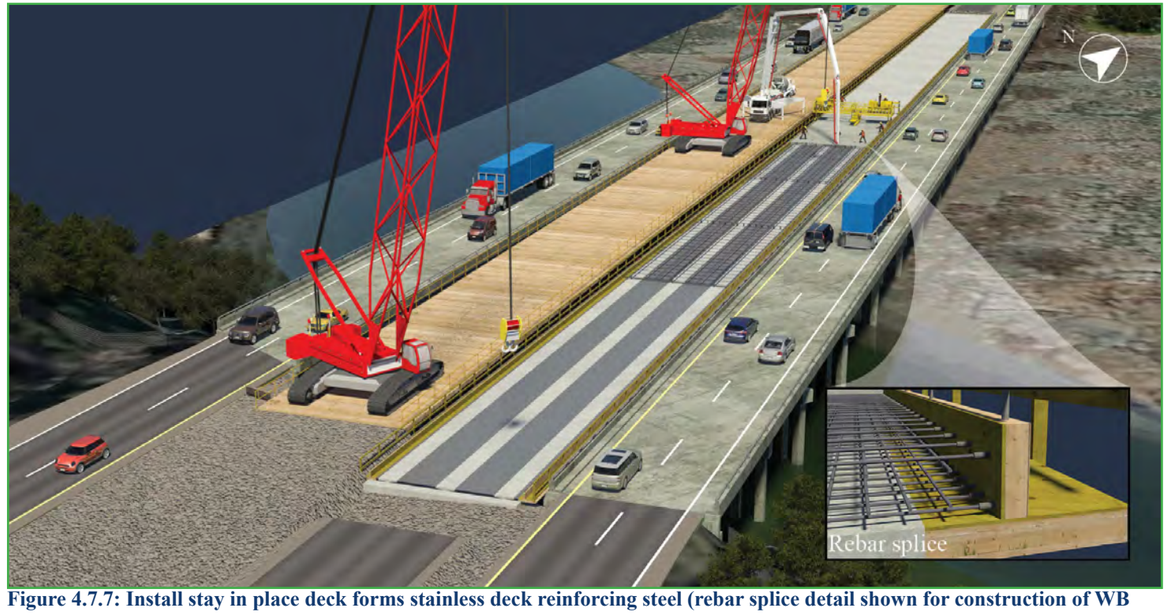


Figure 4.7.7: Install stay in place deck forms stainless deck reinforcing steel (rebar splice detail shown for construction of WB widening in Phase 3).

Figure 4.7.8: Install barrier wall on median side and temp barrier on unfinished north side. Hang temporary ITS on median side of WB to maintain camera service. Switch EB traffic onto newly constructed WB using median crossover. Enter Phase 2.

Figure 4.7.9: Phase 2 - Demolish existing EB bridge.

Figure 4.7.10: Install substructure.

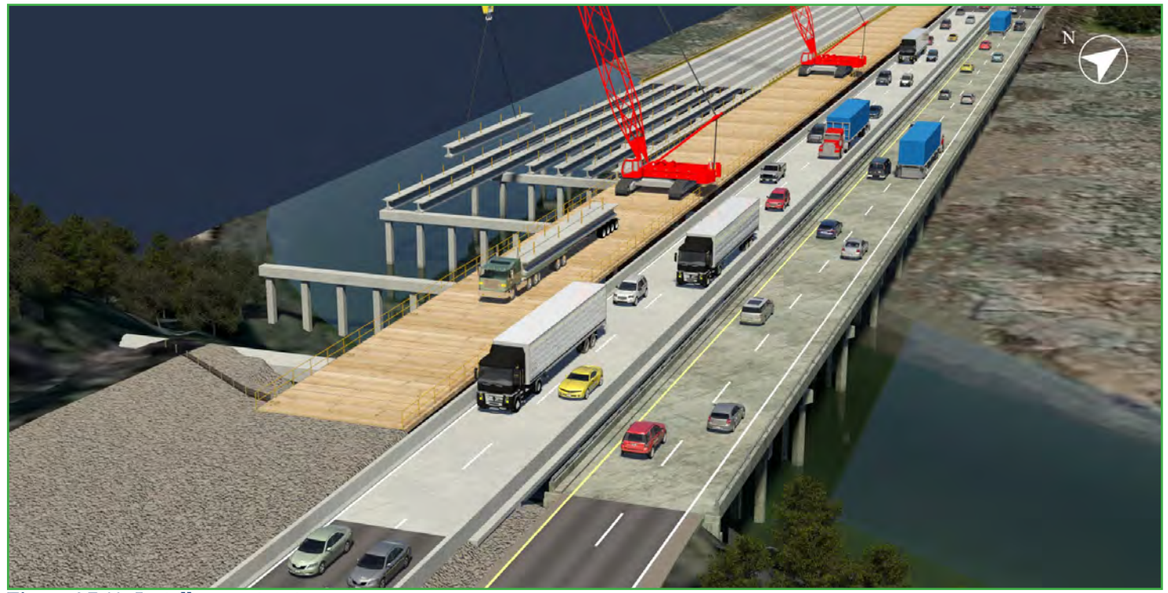


Figure 4.7.11: Install superstructure.

Figure 4.7.12: Pour decks, barrier walls, sound barrier (if required).

Figure 4.7.13: Phase 3 - Shift all traffic from WB bridges onto new EB bridge using temp median. Barrier wall and modified median crossovers. Enter Phase 3.

Figure 4.7.14: Demolish remainder of WB bridge.

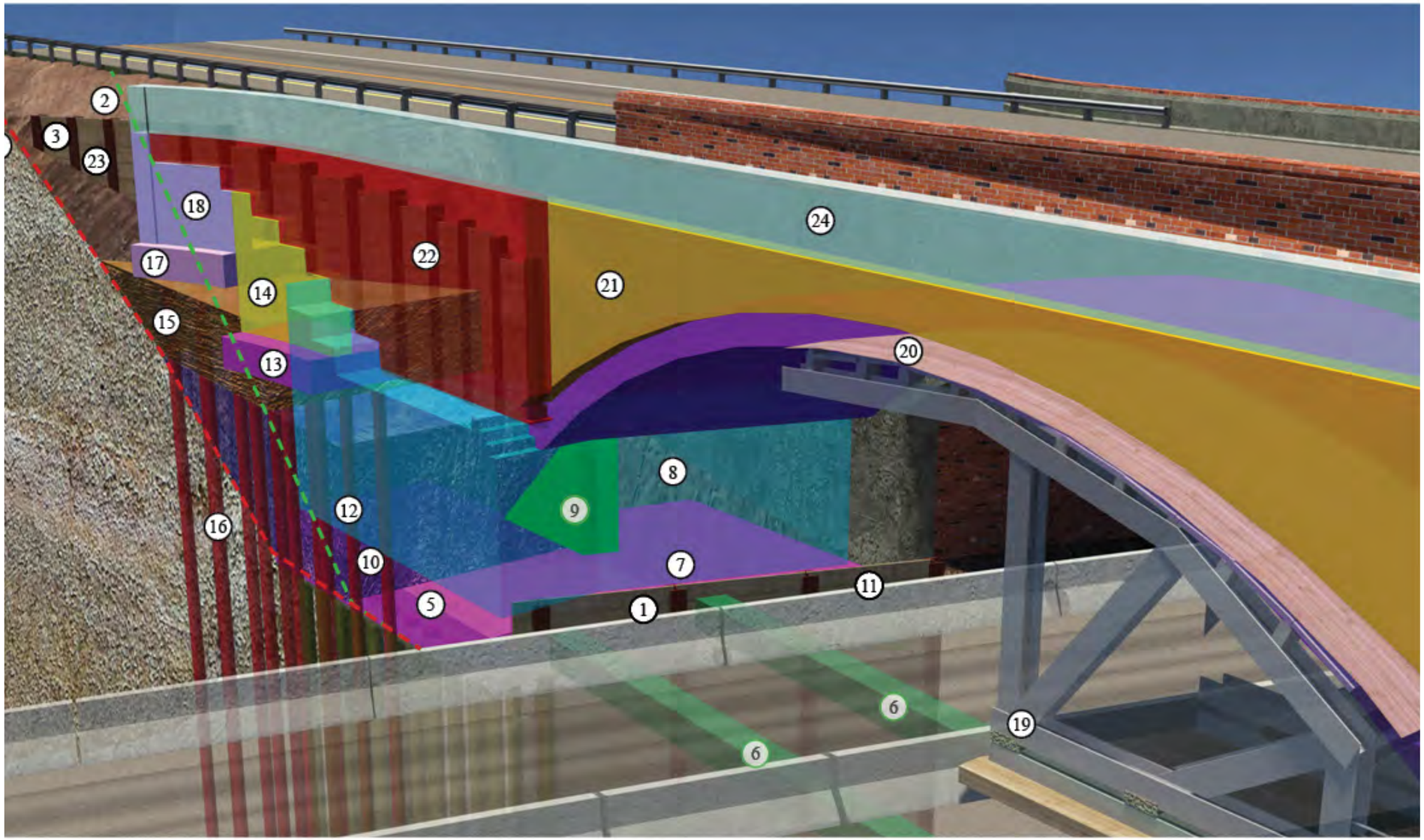
Figure 4.7.15: Install substructure.

Figure 4.7.16: Install superstructure.

Figure 4.7.17: Stay in place decking, edge forms, splicing stainless steel rebar, pour decks, install ITS, remove trestle, excavate/ final grade wider median for wetland opportunity.

Figure 4.7.18: Final configuration. Shift all traffic into final configuration.

Colonial Parkway Arch Construction Sequence
Building Information Model



1. Install SOE Abutment A
2. Excavate to Stage 1
3. Install SOE Abutment B
4. Excavate to Stage 2
5. Install 1st level piles
6. Install Arch tie through SOE A
7. Place 1st level footing
8. Place 1st level wall
9. Place counterfort
10. Backfill 1st level
11. Remove SOE A
12. Install 2nd level piles
13. Place 2nd level footing
14. Place 2nd level wall
15. Backfill 2nd level
16. Install 3rd level piles
17. Place 3rd level footing
18. Place 3rd level wall
19. Install formwork
20. Place arch span
21. Place wall over arch
22. Place wing wall
23. Remove SOE B and backfill
24. Place barrier

Figure 4.7.19: Colonial Parkway Arch Construction Sequence

Appendix

Form C-78-RFP

ATTACHMENT 3.6

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION

RFP NO. C00106689DB97

PROJECT NO.: 0064-965-229

ACKNOWLEDGEMENT OF RFP, REVISION AND/OR ADDENDA

Acknowledgement shall be made of receipt of the Request for Proposals (RFP) and/or any and all revisions and/or addenda pertaining to the above designated project which are issued by the Department prior to the Letter of Submittal submission date shown herein. Failure to include this acknowledgement in the Letter of Submittal may result in the rejection of your proposal.

By signing this Attachment 3.6, the Offeror acknowledges receipt of the RFP and/or following revisions and/or addenda to the RFP for the above designated project which were issued under cover letter(s) of the date(s) shown hereon:

1. Cover letter of June 21, 2017 – RFP
   (Date)
2. Cover letter of RFP Addendum No. 1 – July 24, 2017
   (Date)
3. Cover letter of RFP Addendum No. 2 – August 14, 2017
   (Date)
4. Cover letter of RFP Addendum No. 3 – September 1, 2017
   (Date)

Stephen Davis — SIGNATURE

September 5, 2017 — DATE

Stephen Davis — PRINTED NAME

Vice President — TITLE

ATTACHMENT 9.3.1
PROPOSAL PAYMENT AGREEMENT

THIS PROPOSAL PAYMENT AGREEMENT (this "Agreement") is made and entered into as of this ____ day of _____, 2017, by and between the Virginia Department of Transportation ("VDOT"), and Skanska USA Civil Southeast Inc. ("Offeror").

WITNESSETH:

WHEREAS, Offeror is one of the entities who submitted Statements of Qualifications ("SOQs") pursuant to VDOT's **March 29, 2017** Request for Qualifications ("RFQ") and was invited to submit proposals in response to a Request for Proposals ("RFP") for the **I-64 Capacity Improvements – Segment III, Project No. 0064-965-229** ("Project"), under a design-build contract with VDOT ("Design-Build Contract"); and

WHEREAS, as part of the procurement process for the Project, Offeror has already provided and/or furnished to VDOT, and may continue to provide and/or furnish to VDOT, certain intellectual property, materials, information and ideas, including, but not limited to, such matters that are: (a) conveyed verbally and in writing during proprietary meetings or interviews; and (b) contained in, related to or associated with Offeror's proposal, including, but not limited to, written correspondence, designs, drawings, plans, exhibits, photographs, reports, printed material, tapes, electronic disks, or other graphic and visual aids (collectively "Offeror's Intellectual Property"); and

WHEREAS, VDOT is willing to provide a payment to Offeror, subject to the express conditions stated in this Agreement, to obtain certain rights in Offeror's Intellectual Property, provided that Offeror submits a proposal that VDOT determines to be responsive to the RFP ("Offeror's Proposal"), and either (a) Offeror is not awarded the Design-Build Contract; or (b) VDOT cancels the procurement or decides not to award the Design-Build Contract to any Offeror; and

WHEREAS, Offeror wishes to receive the payment offered by VDOT, in exchange for granting VDOT the rights set forth in this Agreement.

NOW, THEREFORE, in consideration of the mutual covenants and agreements set forth in this Agreement and other good and valuable consideration, the receipt and adequacy of which are acknowledged by the parties, the parties agree as follows:

1. **VDOT's Rights in Offeror's Intellectual Property**. Offeror hereby conveys to VDOT all rights, title and interest, free and clear of all liens, claims and encumbrances, in Offeror's Intellectual Property, which includes, without restriction or limitation, the right of VDOT, and anyone contracting with VDOT, to incorporate any ideas or information from Offeror's Intellectual Property into: (a) the Design-Build Contract and the Project; (b) any other contract awarded in reference to the Project; or (c) any subsequent procurement by VDOT. In receiving all rights, title and interest in Offeror's Intellectual Property, VDOT is deemed to own all intellectual property rights, copyrights, patents, trade secrets, trademarks, and service marks in Offeror's Intellectual Property, and Offeror agrees that it shall, at the request of VDOT, execute all papers and perform all other acts that may be necessary to ensure that VDOT's rights, title and interest in Offeror's Intellectual Property are protected. The rights conferred herein to VDOT include, without limitation, VDOT's ability to use Offeror's Intellectual Property without the obligation to notify or seek permission from Offeror.

2. **Exclusions from Offeror's Intellectual Property**. Notwithstanding Section 1 above, it is understood and agreed that Offeror's Intellectual Property is not intended to include, and Offeror does not convey any rights to, the Escrow Proposal Documents submitted by Offeror in accordance with the RFP.

3. **Proposal Payment**. VDOT agrees to pay Offeror the lump sum amount of **One Hundred Thousand and 00/100 Dollars ($100,000.00)** ("Proposal Payment"), which payment constitutes payment in full to Offeror for the conveyance of Offeror's Intellectual Property to VDOT in accordance with this Agreement. Payment of the Proposal Payment is conditioned upon: (a) Offeror's Proposal being, in the sole discretion of VDOT, responsive to the RFP; (b) Offeror complying with all other terms and conditions of this Agreement; and (c) either (i) Offeror is not awarded the Design-Build Contract, or (ii) VDOT cancels the procurement or decides not to award the Design-Build Contract to any Offeror.

4. **Payment Due Date**. Subject to the conditions set forth in this Agreement, VDOT will make payment of the Proposal Payment to the Offeror within forty-five (45) days after the later of: (a) notice from VDOT that it has awarded the Design-Build Contract to another Offeror; or (b) notice from VDOT that the procurement for the Project has been cancelled and that there will be no Contract Award.

5. **Effective Date of this Agreement**. The rights and obligations of VDOT and Offeror under this Agreement, including VDOT's ownership rights in Offeror's Intellectual Property, vests upon the date that Offeror's Proposal is submitted to VDOT. Notwithstanding the above, if Offeror's Proposal is determined by VDOT, in its sole discretion, to be nonresponsive to the RFP, then Offeror is deemed to have waived its right to obtain the Proposal Payment, and VDOT shall have no obligations under this Agreement.

6. **Indemnity**. Subject to the limitation contained below, Offeror shall, at its own expense, indemnify, protect and hold harmless VDOT and its agents, directors, officers, employees, representatives and contractors from all claims, costs, expenses, liabilities, demands, or suits at law or equity ("Claims") of, by or in favor of or awarded to any third party arising in whole or in part from: (a) the negligence or wilful misconduct of Offeror or any of its agents, officers, employees, representatives or subcontractors; or (b) breach of any of Offeror's obligations under this Agreement, including its representation and warranty under Section 8 hereof. This indemnity shall not apply with respect to any Claims caused by or resulting from the sole negligence or wilful misconduct of VDOT, or its agents, directors, officers, employees, representatives or contractors.

7. **Assignment**. Offeror shall not assign this Agreement, without VDOT's prior written consent, which consent may be given or withheld in VDOT's sole discretion. Any assignment of this Agreement without such consent shall be null and void.

8. **Authority to Enter into this Agreement**. By executing this Agreement, Offeror specifically represents and warrants that it has the authority to convey to VDOT all rights, title, and interest in Offeror's Intellectual Property, including, but not limited to, those any rights that might have been vested in team members, subcontractors, consultants or anyone else who may have contributed to the development of Offeror's Intellectual Property, free and clear of all liens, claims and encumbrances.

9. **Miscellaneous**.

a. Offeror and VDOT agree that Offeror, its team members, and their respective employees are not agents of VDOT as a result of this Agreement.

b. Any capitalized term used herein but not otherwise defined shall have the meanings set forth in the RFP.

c. This Agreement, together with the RFP, embodies the entire agreement of the parties with respect to the subject matter hereof. There are no promises, terms, conditions, or obligations other than those contained herein or in the RFP, and this Agreement shall supersede all previous communications, representations, or agreements, either verbal or written, between the parties hereto.

d. It is understood and agreed by the parties hereto that if any part, term, or provision of this Agreement is by the courts held to be illegal or in conflict with any law of the Commonwealth of Virginia, validity of the remaining portions or provisions shall not be affected, and the rights and obligations of the parties shall be construed and enforced as if the Agreement did not contain the particular part, term, or provisions to be invalid.

e. This Agreement shall be governed by and construed in accordance with the laws of the Commonwealth of Virginia.

IN WITNESS WHEREOF, this Agreement has been executed and delivered as of the day and year first above written.

VIRGINIA DEPARTMENT OF TRANSPORTATION

By: _____

Name: _____

Title: _____

SKANSKA USA CIVIL SOUTHEAST INC.

By: Stephen Davis

Name: Stephen Davis

Title: Vice President

ATTACHMENT 11.8.6(a)
CERTIFICATION REGARDING DEBARMENT
PRIMARY COVERED TRANSACTIONS

Project No.: 0064-965-229
Contract ID: C00106689DB97

1) The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:

a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency.

b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; and have not been convicted of any violations of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification, or destruction of records, making false statements, or receiving stolen property;

c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph 1) b) of this certification; and

d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

2) Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

Stephen Davis 09/11/2017 Vice President

Signature Date Title

Skanska USA Civil Southeast Inc.

Name of Firm

ATTACHMENT 11.8.6(b)
CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-965-229
Contract ID: C00106689DB97

1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

Mary C Wheeler 8/25/2017 Vice President

Signature Date Title

KCI Technologies, Inc.

Name of Firm

ATTACHMENT 11.8.6(b)
CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-965-229
Contract ID: C00106689DB97

1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

Scott A. Lovell July 17, 2017 Vice President/Area Manager

Signature Date Title

WSP USA, Inc.

Name of Firm

ATTACHMENT 11.8.6(b)
CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-965-229
Contract ID: C00106689DB97

1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

Signature | 7/18/2017 Date | Senior Vice President/Regional Manager Title

Vanasse Hangen Brustlin, Inc. (VHB)
Name of Firm

ATTACHMENT 11.8.6(b)
CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-965-229
Contract ID: C00106689DB97

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The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

Carol D. Tyree July 14, 2017 President
Signature Date Title

Civcar Cultural Resource Management, LLC
Name of Firm

ATTACHMENT 11.8.6(b)
CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-965-229
Contract ID: C00106689DB97

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2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

Signature	July 14, 2017 Date	Vice President Title

H&B Surveying and Mapping, LLC
Name of Firm

ATTACHMENT 11.8.6(b)
CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-965-229
Contract ID: C00106689DB97

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2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

Signature	7/14/2017 Date	President Title

Hassan Water Resources, PLC
Name of Firm

ATTACHMENT 11.8.6(b)
CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-965-229
Contract ID: C00106689DB97

1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

Signature	8/25/17 Date	President Title

GET Solutions, Inc.

Name of Firm

ATTACHMENT 11.8.6(b)
CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-965-229
Contract ID: C00106689DB97

1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

Signature	07/14/17 Date	President & CEO Title

Harris Miller Miller & Hanson Inc.
Name of Firm

I-64 Capacity Improvements - Seg III
VDOT Project #: 0064-965-

Submitted by: Skanska USA Civil Southeast Inc.

September 14, 2017

SKANSKA

I-64 Capacity Improvements – Segment III Design-Build Project

Contract ID Number: C00106689DB97

Submitted by: Skanska USA Civil Southeast Inc.

Volume II - Technical Proposal

September 14, 2017

SKANSKA

4.3 Conceptual Plans

FHWA - 534 DATA 11103

STATE	FEDERAL AID PROJECT	ROUTE	STATE PROJECT	SHEET NO.
VA.	NHPP-064-3(498) (SEE TABULATION BELOW FOR SECTION NUMBERS)	64	(F0) 0064-965-229 (SEE TABULATION BELOW FOR SECTION NUMBERS)	1

THIS PROJECT WAS DEVELOPED UTILIZING THE DEPARTMENT'S ENGINEERING DESIGN PACKAGE (GEOPAK).
GEOPAK Computer Identification No. 106689/109790

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE OF PROPOSED STATE HIGHWAY

YORK COUNTY
I-64 CAPACITY IMPROVEMENTS - SEGMENT III
FROM: 1.15 MILES WEST OF ROUTE 199 - LIGHTFOOT
TO: 1.05 MILES WEST OF ROUTE 199 - HUMELSINE PKWY

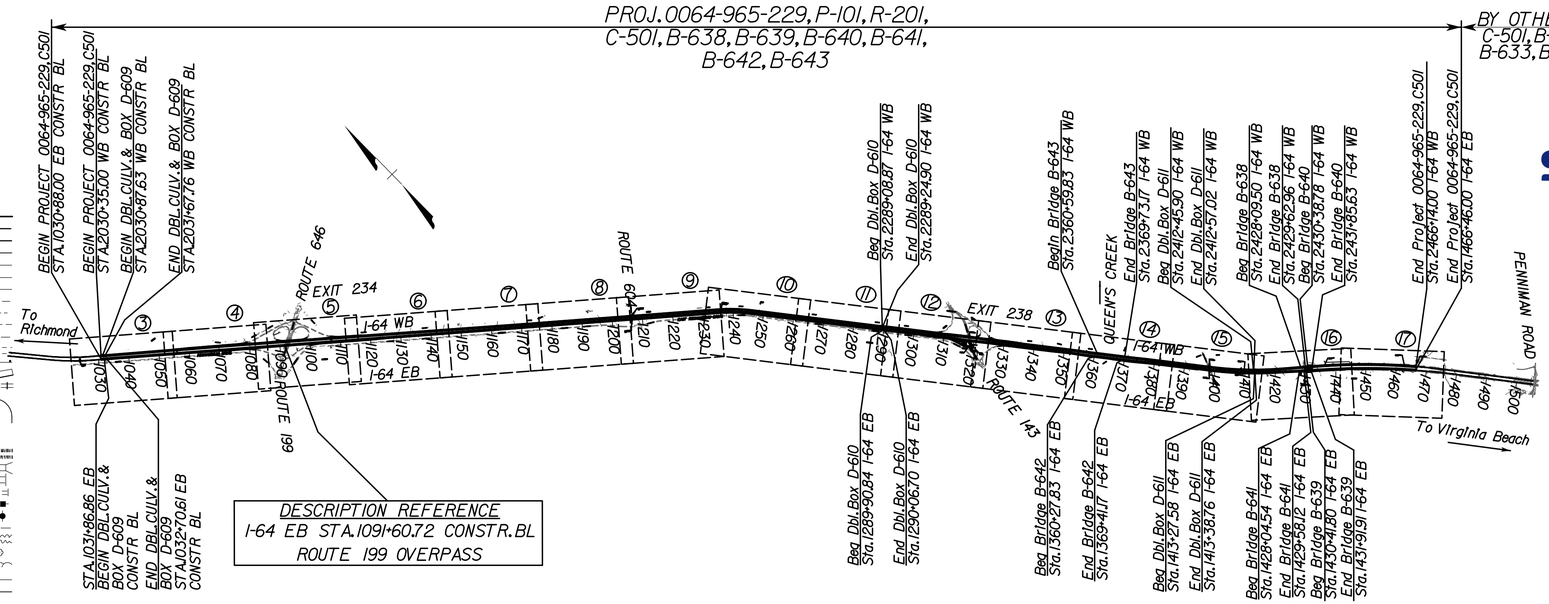
FUNCTIONAL CLASSIFICATION AND TRAFFIC DATA	
Interstate - Rural Principal Arterial - 75 MPH Min. Design Speed	
	FROM: 1.15 MILES WEST OF ROUTE 199 - LIGHTFOOT TO: 1.05 MILES WEST OF ROUTE 199 - HUMELSINE PKWY
ADT (2018)	74,500
ADT (2040)	108,000
DHV (2040)	8,000
D (%) (design hour)	55%
T (%) (design hour)	8%
V (MPH)	*

*See plan and profile sheets for horizontal and vertical curve design speeds

DESIGN EXCEPTIONS			
Location	Design Speed (mph)	Reasons for Exception	Approval Date
I-64 WB at Rte. 143 Overpass	75	Shoulder Width	02/10/17

PROJ. 0064-965-229, P-101, R-201, C-501, B-638, B-639, B-640, B-641, B-642, B-643

BY OTHERS PROJ. 0064-965-264, P-101, RW-201, C-501, B-627, B-628, B-629, B-630, B-631, B-632, B-633, B-634, B-635, D-603, D-604, D-605, D-606, D-607, D-608



DESCRIPTION REFERENCE
I-64 EB STA.1091+60.72 CONSTR. BL
ROUTE 199 OVERPASS

CONVENTIONAL SIGNS

STATE LINE
COUNTY LINE
CITY, TOWN OR VILLAGE
RIGHT OF WAY LINE
FENCE LINE
UNFENCED PROPERTY LINE
FENCED PROPERTY LINE
WATER LINE
SANITARY SEWER LINE
GAS LINE
ELECTRIC UNDERGROUND CABLE
TRAVELED WAY
GUARD RAIL
RETAINING WALL
RAILROADS
BASE OR SURVEY LINE
LEVEE OR EMBANKMENT
BRIDGES
CULVERTS
DROP INLET
POWER POLES
TELEPHONE OR TELEGRAPH POLES
TELEPHONE OR TELEGRAPH LINES
HEDGE
TREES
HEAVY WOODS
GROUND ELEVATION
GRADE ELEVATION

PROJECT MANAGER Janet M. Hedrick, P.E. (757) 494-5418 (Hampton Roads District)
SURVEYED BY, DATE Rice Associates (757) 306-4260
DESIGN BY WSP USA (757) 466-1732
SUBSURFACE UTILITY BY, DATE JMT (757) 499-1895 / PMI (757) 595-7570

THE COMPLETE ELECTRONIC PDF VERSION OF THE PLAN ASSEMBLY AS AWARDED, HAS BEEN SEALED AND SIGNED USING DIGITAL SIGNATURES AND THE OFFICIAL PLAN ASSEMBLY IN ELECTRONIC FORMAT IS STORED IN THE VDOT CENTRAL OFFICE PLAN LIBRARY, INCLUDING ALL SUBSEQUENT REVISIONS, WILL BE THE OFFICIAL CONSTRUCTION PLANS. FOR INFORMATION RELATIVE TO ELECTRONIC FILES AND LAYERED PLANS, SEE THE GENERAL NOTES.

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT.

THIS PROJECT IS TO BE CONSTRUCTED IN ACCORDANCE WITH THE DEPARTMENT'S 2016 ROAD AND BRIDGE SPECIFICATIONS, 2016 ROAD AND BRIDGE STANDARDS, 2009 MUTCD, 2011 VIRGINIA SUPPLEMENT TO THE MUTCD, 2011 VIRGINIA WORK AREA PROTECTION MANUAL REV. 1 AND AS AMENDED BY CONTRACT PROVISIONS AND THE COMPLETE ELECTRONIC PDF VERSION OF THE PLAN ASSEMBLY.

ALL CURVES ARE TO BE SUPERELEVATED, TRANSITIONED AND WIDENED IN ACCORDANCE WITH STANDARD TC-5.11R, EXCEPT WHERE OTHERWISE NOTED.

THE ORIGINAL APPROVED TITLE SHEET(S), INCLUDING ORIGINAL SIGNATURES, ARE FILED IN THE VDOT CENTRAL OFFICE PLAN LIBRARY. ANY MISUSE OF ELECTRONIC FILES, INCLUDING SCANNED SIGNATURES, IS ILLEGAL AND ENFORCED TO THE FULL EXTENT OF THE LAW.

STATE PROJECT NO.	SECTION	FEDERAL AID PROJECT NO.	TYPE CODE	UPC NO.	EQUALITIES	LENGTH INCLUDING BRIDGE(S)		LENGTH EXCLUDING BRIDGE(S)		BRIDGE PROJECT NO.	TYPE PROJECT	DESCRIPTION
						FEET	MILES	FEET	MILES			
0064-965-229	P-101	NHPP-064-3(498)	PENG	106689	NONE	43558.00	8.250	42340.97	8.019		Prelim. Engr.	FROM: 1.15 MILES WEST OF ROUTE 199 - LIGHTFOOT TO: 7.10 MILES EAST OF ROUTE 199 - LIGHTFOOT
	R-201	NHPP-064-3(498)	ROWA	106689	NONE	43558.00	8.250	42340.97	8.019		Right of Way	
	C-501	NHPP-064-3(498)		106689	NONE	43558.00	8.250	42340.97	8.019		Construction	
	B-638	NHPP-064-3(498)	X281	106689	NONE	153.46	0.029				Bridge	64 WB Bridge @ Lakeshead Drive
	B-639	NHPP-064-3(498)	X224	106689	NONE	150.11	0.028				Bridge	64 EB Bridge @ Colonial Pkwy
	B-640	NHPP-064-3(498)	X224	106689	NONE	146.85	0.028				Bridge	64 WB Bridge @ Colonial Pkwy
	B-641	NHPP-064-3(498)	X281	106689	NONE	153.58	0.029				Bridge	64 EB Bridge @ Lakeshead Drive
	B-642	NHPP-064-3(498)	X081	106689	NONE	913.34	0.173				Bridge	64 EB Bridge @ Queens Creek
	B-643	NHPP-064-3(498)	X081	106689	NONE	913.34	0.173				Bridge	64 WB Bridge @ Queens Creek
	D-609	NHPP-064-3(498)	X028	106689	NONE	83.75	0.016				Box Culvert	64 EB & WB Dbl. 84" Culv. & 6'x6' Box Culv. @ Skimino Creek
	D-610	NHPP-064-3(498)	X028	106689	NONE	15.86	0.003				Box Culvert	64 EB & WB Dbl. 6'x7' Box Culv.
	D-611	NHPP-064-3(498)	X028	106689	NONE	11.18	0.002				Box Culvert	64 EB & WB Dbl. 5'x6' Box Culv.

Project Lengths are based on I-64 EB Construction Baseline.

SCALE 0 2500' 5000'

TIER 2 PROJECT

RECOMMENDED FOR APPROVAL FOR RIGHT OF WAY ACQUISITION	
DATE	PROGRAMMING DIVISION DIRECTOR
DATE	STATE LOCATION AND DESIGN ENGINEER
DATE	CHIEF OF PROGRAMMING AND PLANNING
DATE	CHIEF ENGINEER

APPROVED FOR RIGHT OF WAY ACQUISITION	
DATE	CHIEF OF POLICY

RECOMMENDED FOR APPROVAL FOR CONSTRUCTION	
DATE	PROGRAMMING DIVISION DIRECTOR
DATE	STATE LOCATION AND DESIGN ENGINEER
DATE	STATE STRUCTURE AND BRIDGE ENGINEER
DATE	CHIEF OF PROGRAMMING AND PLANNING

APPROVED FOR CONSTRUCTION	
DATE	CHIEF ENGINEER

APPROVED	
DATE	DIVISION ADMINISTRATOR FEDERAL HIGHWAY ADMINISTRATION U.S. DEPARTMENT OF TRANSPORTATION

REVISED

York County Population 65,464 (2010 Census)

PROJECT	SHEET NO.
0064-965-229	1

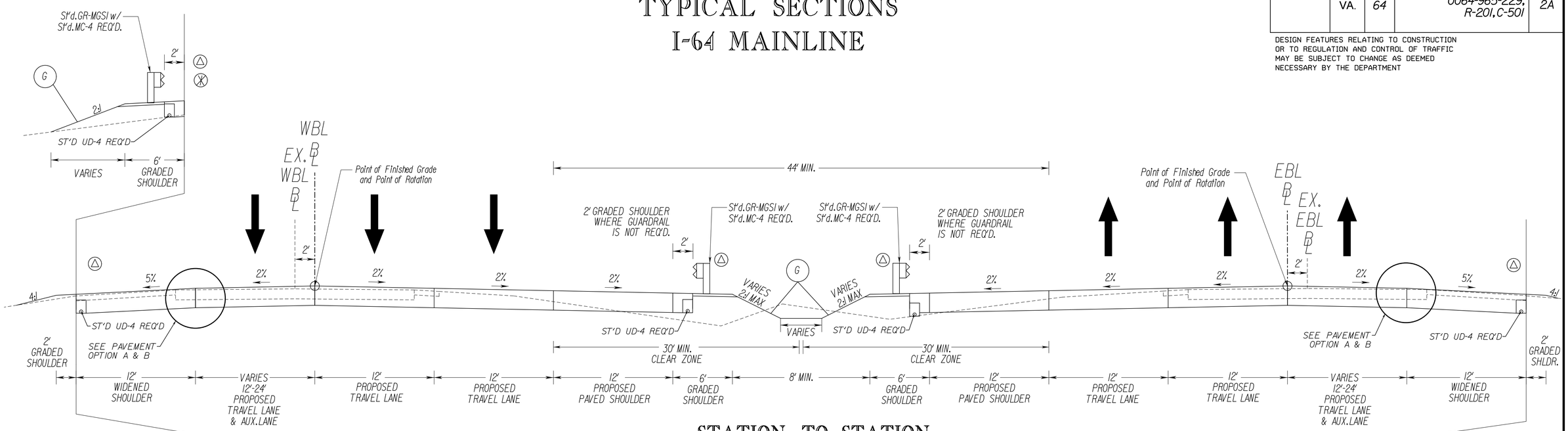
10:47

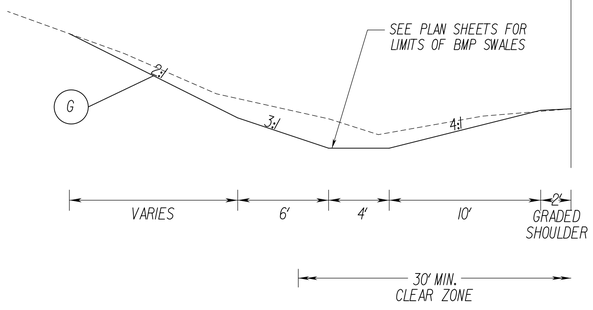
PROJECT MANAGER Janet M. Hedrick, P.E. (757) 494-5478 (Hampton Roads District)
SURVEYED BY, DATE Rice Associates (757) 306-4260
DESIGN BY WSP USA (757) 466-7132
SUBSURFACE UTILITY BY, DATE JMT Inc. (757) 499-1895 / PMI (757) 595-7570

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	64	0064-965-229, R-201, C-501	2A

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

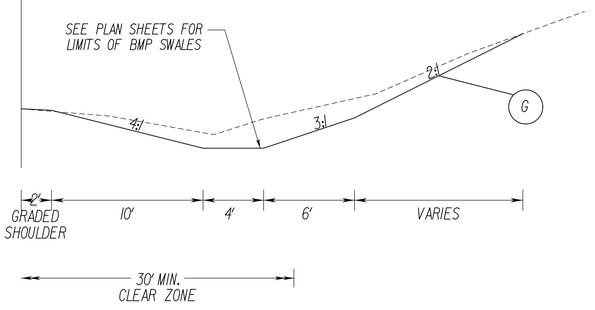
TYPICAL SECTIONS
I-64 MAINLINE





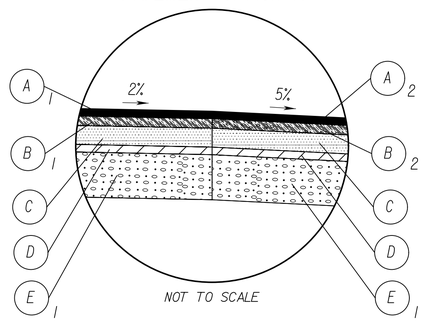
STATION TO STATION

(I-64 WB)	(I-64 EB)
2030+35 - 2205+44	1030+88 - 1205+97
2206+38 - 2317+42	1206+91 - 1317+71
2319+02 - 2325+50	1319+31 - 1325+81
2346+00 - 2360+77	1346+31 - 1360+40
2369+83 - 2397+29	1369+77 - 1397+59
2398+72 - 2428+09	1399+02 - 1428+04
2429+63 - 2430+39	1429+58 - 1430+42
2431+86 - 2466+14	1431+92 - 1466+46

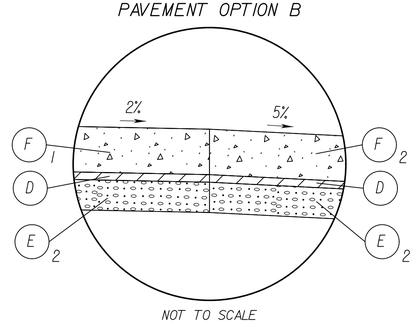


- (A)1 2" SURFACE COURSE, ASPHALT CONCRETE, SMA-12.5 PG76-22
- (A)2 2" SURFACE COURSE, ASPHALT CONCRETE, SM-12.5A
- (B)1 2.5" INTERMEDIATE COURSE, ASPHALT CONCRETE, SMA-19.0 PG76-22
- (B)2 2.5" INTERMEDIATE COURSE, ASPHALT CONCRETE, IM-19.0A
- (C) 5" BASE COURSE, COLD CENTRAL PLANT RECYCLING MATERIAL (CCPRM)
- (D) 2" OPEN GRADED DRAINAGE LAYER, ASPHALT OR CEMENT STABLIZED, OR VDOT-APPROVED EQUIVALENT
- (E)1 12" SUBBASE, FULL DEPTH RECLAMATION (FDR), OR CEMENT TREATED CRUSHED CONCRETE OR RECYCLED ASPHALT PAVEMENT (RAP) PER RFP PART 2 SECTION 2.6.1.2
- (E)2 8" SUBBASE, FULL DEPTH RECLAMATION (FDR), OR CEMENT TREATED CRUSHED CONCRETE OR RECYCLED ASPHALT PAVEMENT (RAP) PER RFP PART 2 SECTION 2.6.1.2
- (F)1 12" CONTINUOUSLY REINFORCED CONCRETE PAVEMENT (CRCP)
- (F)2 12" JOINTED PLAIN CONCRETE PAVEMENT (JPCP)
- (G) 2" TOPSOIL, CLASS A

PAVEMENT OPTION A



PAVEMENT OPTION B



NOTE:

STATION RANGES SHOWN ARE APPROXIMATE ONLY. DESIGN BUILDER TO DETERMINE FINAL TYPICAL SECTION STATION LIMITS.

(X) VDOT ST'D MC-3B ASPHALT CURB REQ'D. AND MC-4 REPLACED WITH ASPHALT BACKUP MATERIAL WHERE SHOWN ON PLANS.

(△) SEE PLAN SHEETS W/ DETAIL FOR GUARDRAIL LIMITS

SKANSKA WSP

Not To Scale	PROJECT 0064-965-229	SHEET NO. 2A

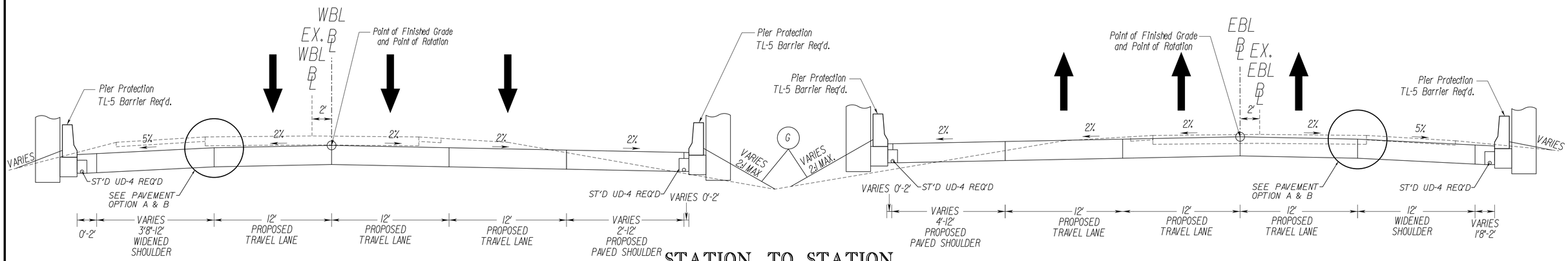
LIMITED ACCESS HIGHWAY By Resolution of Highway Commission dated October 4, 1956

PROJECT MANAGER Janet M. Hedrick, P.E. (757) 494-5478 (Hampton Roads District)
SURVEYED BY, DATE Rice Associates (757) 306-4260
DESIGN BY WSP USA (757) 466-1732
SUBSURFACE UTILITY BY, DATE JMT Inc. (757) 499-1895 / PML (757) 595-7570

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	64	0064-965-229, R-201, C-501	2B

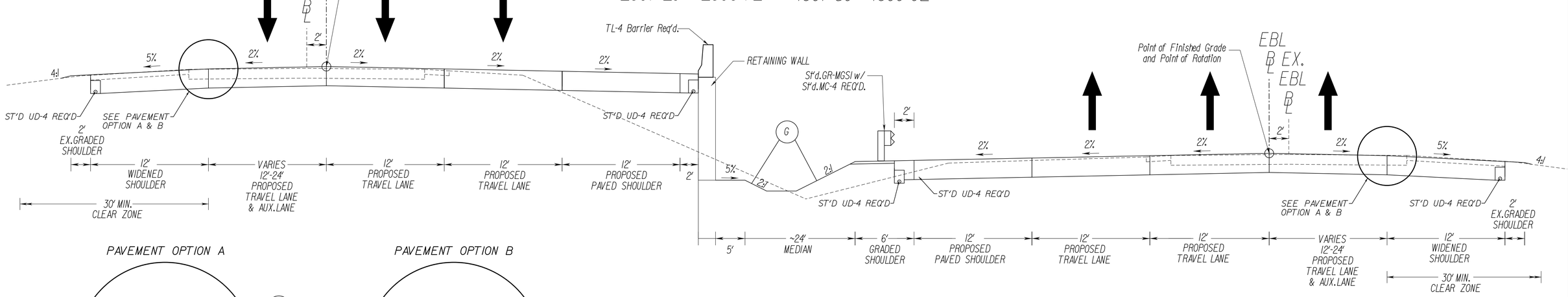
DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

TYPICAL SECTIONS
I-64 MAINLINE

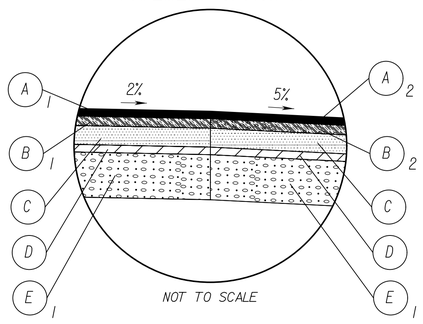


STATION TO STATION

(I-64 WB)	(I-64 EB)
2205+44 - 2206+38	1205+97 - 1206+91
2317+42 - 2319+02	1317+71 - 1319+31
2397+29 - 2398+72	1397+59 - 1399+02

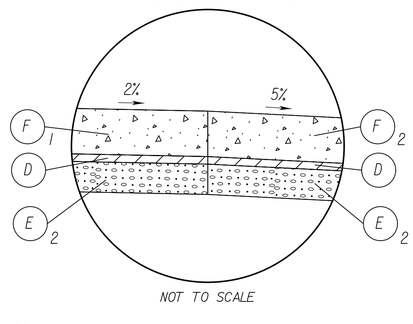


PAVEMENT OPTION A



NOT TO SCALE

PAVEMENT OPTION B



NOT TO SCALE

SEE SHEET 2A FOR LEGEND

STATION TO STATION

(I-64 WB)	(I-64 EB)
2325+50 - 2346+00	1325+81 - 1346+31

NOTE:

STATION RANGES SHOWN ARE APPROXIMATE ONLY. DESIGN BUILDER TO DETERMINE FINAL TYPICAL SECTION STATION LIMITS.

SKANSKA wsp

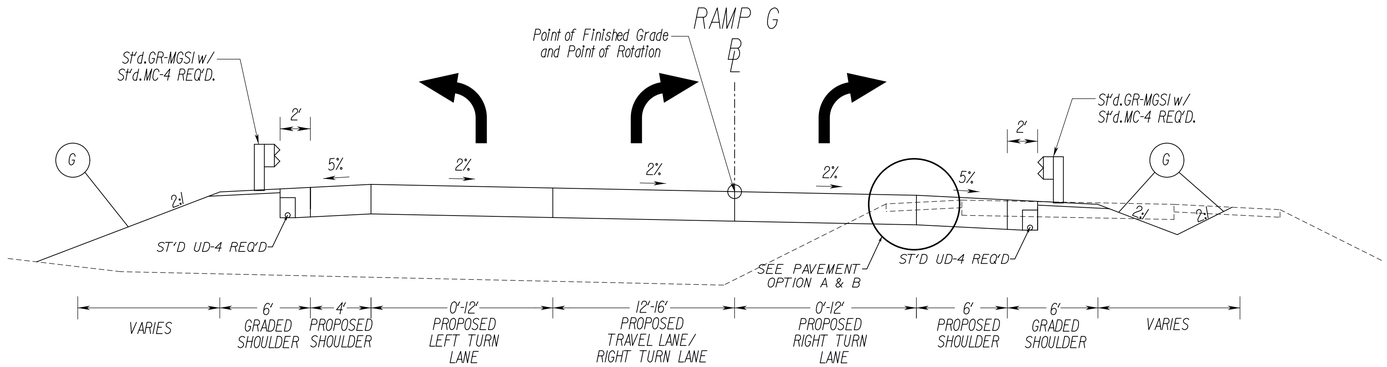
Not To Scale	PROJECT 0064-965-229	SHEET NO. 2B

PROJECT MANAGER Janet M. Hedrick, P.E. (757) 494-5478 (Hampton Roads District)
SURVEYED BY, DATE Rice Associates (757) 306-4260
DESIGN BY WSP USA (757) 466-1732
SUBSURFACE UTILITY BY, DATE JMT Inc. (757) 499-1895 / PMI (757) 595-7570

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	64	0064-965-229, R-201, C-501	2C

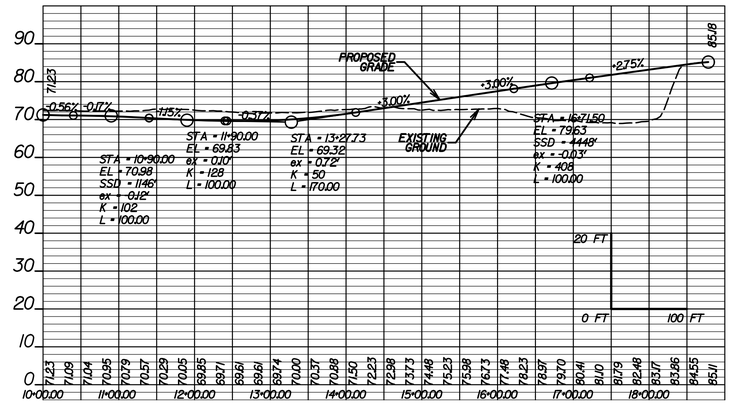
DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

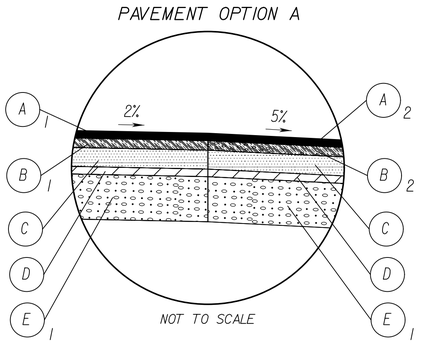
TYPICAL SECTIONS
I-64 MAINLINE & RAMP G

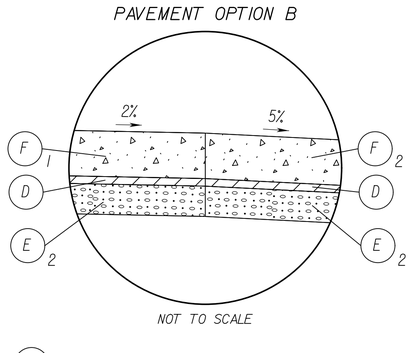


STATION TO STATION
(RAMP G)
10+00 - 18+78.19

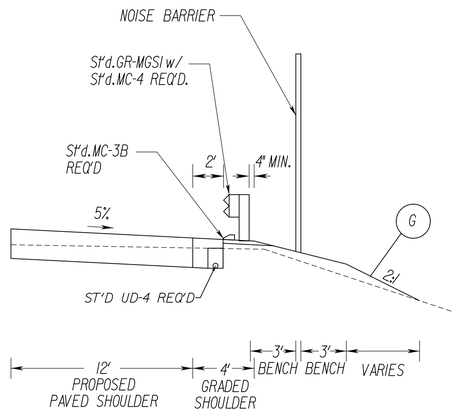
RAMP G PROFILE







SEE SHEET 2A FOR LEGEND



STATION TO STATION
(I-64 EB)
SEE PLAN SHEETS FOR LIMITS

Not To Scale	PROJECT 0064-965-229	SHEET NO. 2C

NOTE:
ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT OF WAY SHOWN ON THESE PLANS.

LEGEND
- PROPOSED TRAVEL LANES
- PROPOSED SHOULDERS
- PROPOSED RAMP CONSTRUCTION
- PROPOSED SWM FACILITY
- PROPOSED BRIDGE
- APPROXIMATE WETLAND LIMITS
- APPROXIMATE FEMA FLOODPLAIN
- DENOTES REDUCTION IN ROW IMPACTS
- EXISTING R/W
- PROPOSED R/W
- SOUND WALL UNDER CONSIDERATION
- CUT LINE
- FILL LINE
- FLAT BOTTOM DITCH
- GRASSED SWALE
- STANDARD V DITCH
- ABANDON/REMOVE DRAINAGE

MILE 2 3 3

SKANSKA wsp

I-64 CAPACITY IMPROVEMENTS - SEGMENT III
YORK COUNTY, VIRGINIA Sept. 2017
STATE PROJ. NO. 0064-965-229 Sheet No. 3

ROW Acquisition, Deforestation & BMP Eliminated, Avoided Wetland Impacts

Enhanced Safety by Eliminating GR Break for BMP Access

Grading Median to Minimize Need for Guardrail

Providing MB-7 Barrier with Moment Slab in lieu of Guardrail & Regrading Slope, Eliminating Culvert Extension, Deforestation & Wetland Impacts

BEGIN PROJECT 0064-965-229,C501
STA 2030+35.00 WB CONSTR BL

BEGIN DBL.CULV.& BOX D-609
STA 2030+87.63 WB
CONSTR BL

END DBL.CULV.& BOX D-609
STA 2031+67.76 WB
CONSTR BL

Proposed R/W & Limited Access per RFP

Proposed BMP Grassed Swale 3-7

Proposed BMP Grassed Swale 3-14

Repair Channel Erosion

Existing R/W & Limited Access

Proposed BMP Grassed Swale 3-21

Repair Channel Erosion

Repair Channel Erosion

Overhead Sign Structure to be Replaced

Curve 64EB-1
PI = 1020+89.12
DELTA = 9° 32' 48.95" (LT)
D = 0° 45' 00"
T = 637.94'
L = 1,272.92'
R = 7,639.44'
PC = 1014+51.18
PT = 1027+24.10

BEGIN PROJECT 0064-965-229,C501
STA 1030+88.00 EB
CONSTR BL

BEGIN DBL.CULV.& BOX D-609
STA 1031+86.86 EB
CONSTR BL

END DBL.CULV.& BOX D-609
STA 1032+70.61 EB
CONSTR BL

ROCHAMBEAU DRIVE

PRINCESS LANE

I-64 WB CONSTR BL

I-64 EB CONSTR BL

MATCH LINE STA 1053+50 EB

001 BILLY J SR & JOYCE D BOUTWELL INST #060017506 GPIN B26-3510-1020 11.62 AC.

ROBERT M CUMMING III INST #150018165 GPIN B26-3995-0346 3.3 AC.

BRANDON M SHARE ET AL INST #080003543 GPIN B26-4252-0145 1.83 AC.

CYNTHIA L DANIEL TRUSTEE INST #160009191 GPIN B20b-4648-4942 3.01 AC.

DONALD M STAFFORD ET UX INST #130028347 GPIN B26-4547-0125 3.14 AC.

TED M III & GEORGIA LEA HOLTZ INST #160004209 GPIN B25-3961-0385 7.33 AC.

Existing R/W

Existing Limited Access

002 TED M III & GEORGIA LEA HOLTZ INST #160004209 GPIN B20b-3595-4888 13.25 AC.

003 WILLIAMSBURG POTTERY FACTORY INC DB 99 PG 235 GPIN B20b-4407-3129 97.57 AC.

Proposed R/W per RFP

ROW Acquisition, Deforestation & BMP Eliminated, Avoided Wetland Impacts

SCALE 0 100' 200'

PROFILE - WESTBOUND LANES

BEGIN PROJECT 0064-965-229,C501
STA 2030+35.00 WB CONSTR BL

PROPOSED GRADE

EXISTING GROUND

END DBL.CULV.& BOX D-609
STA 2031+67.76 WB CONSTR BL

BEGIN DBL.CULV.& BOX D-609
STA 2030+87.63 WB CONSTR BL

20 FT 0 FT 100 FT

2031+00.00 2035+00.00 2040+00.00 2045+00.00 2050+00.00

PROFILE - EASTBOUND LANES

BEGIN PROJECT 0064-965-229,C501
STA 1030+88.00 EB CONSTR BL

PROPOSED GRADE

EXISTING GROUND

END DBL.CULV.& BOX D-609
STA 1032+70.61 EB CONSTR BL

BEGIN DBL.CULV.& BOX D-609
STA 1031+86.86 EB CONSTR BL

20 FT 0 FT 100 FT

1031+00.00 1035+00.00 1040+00.00 1045+00.00 1050+00.00

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I-64 CAPACITY IMPROVEMENTS - SEGMENT III
YORK COUNTY, VIRGINIA Sept. 2017
STATE PROJ. NO. 0064-965-229 Sheet No. 4

MILE 234

MATCH LINE STA.1053+50 EB

MATCH LINE STA.1083+50 EB

ROW Acquisition, Deforestation & BMP Eliminated

ROW Acquisition, Deforestation & BMP Eliminated, Avoided Wetland Impacts

Proposed R/W & Limited Access per RFP

Proposed R/W per RFP

Existing R/W

Existing Limited Access

Existing R/W

Existing Limited Access

Rehabilitate Existing Pipe

Rehabilitate Existing Pipe

Proposed BMP Grassed Swale 3-9

Proposed BMP Grassed Swale 3-17

Proposed BMP Grassed Swale 3-10

Proposed BMP Grassed Swale 3-11

Proposed BMP Grassed Swale 3-12

Repair Channel Erosion

Proposed BMP Grassed Swale 3-19

Proposed BMP Grassed Swale 3-22

Enhanced Safety by Eliminating GR Break for BMP Access

Grading Median to Minimize Need for Guardrail

Extending Taper to 300', Avoiding New DW

FENTON MILL ROAD

ROCHAMBEAU DRIVE

RAMP D

RAMP A

600' TAPER

1580' ACCELERATION LANE

300' TAPER

535' DECELERATION LANE

I-64 WB CONSTR BL

I-64 EB CONSTR BL

S 43° 20' 01" E

S 43° 03' 22" E

S 42° 51' 04" E

64WB-2

PC 2070+89.23

PT 2076+68.04

Curve 64WB-2
PI = 2073+78.63
DELTA = 0° 28' 56.48" (RT)
D = 0° 05' 00"
T = 289.41'
L = 578.81'
R = 68,752.94'
PC = 2070+89.23
PT = 2076+68.04
V = 75 MPH
e = N/C

NOTE:
ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT OF WAY SHOWN ON THESE PLANS.

LEGEND
- PROPOSED TRAVEL LANES
- PROPOSED SHOULDERS
- PROPOSED RAMP CONSTRUCTION
- PROPOSED SWM FACILITY
- PROPOSED BRIDGE
- APPROXIMATE WETLAND LIMITS
- APPROXIMATE FEMA FLOODPLAIN
- DENOTES REDUCTION IN ROW IMPACTS
- EXISTING R/W
- PROPOSED R/W
- SOUND WALL UNDER CONSIDERATION
- CUT LINE
- FILL LINE
- FLAT BOTTOM DITCH
- GRASSED SWALE
- STANDARD V DITCH
- ABANDON/REMOVE DRAINAGE

SCALE 0 100' 200'

PROFILE - WESTBOUND LANES

PROPOSED GRADE

EXISTING GROUND

-1.47%

-0.46%

STA = 2065+00.00
EL = 100.89
SSD = 1568'
ex = -1.26'
K = 990
L = 1,000.00
V = 80 MPH

20 FT

0 FT

100 FT

2055+00.00 2060+00.00 2065+00.00 2070+00.00 2075+00.00 2080+00.00

PROFILE - EASTBOUND LANES

PROPOSED GRADE

EXISTING GROUND

-1.47%

-0.11%

STA = 1073+50.00
EL = 111.76
SSD = 1430'
ex = -1.95'
K = 923
L = 1200.00
V = 80 MPH

20 FT

0 FT

100 FT

1055+00.00 1060+00.00 1065+00.00 1070+00.00 1075+00.00 1080+00.00

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I-64 CAPACITY IMPROVEMENTS - SEGMENT III
YORK COUNTY, VIRGINIA Sept. 2017
STATE PROJ. NO. 0064-965-229 Sheet No. 5

NOTE:
ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT OF WAY SHOWN ON THESE PLANS.

LEGEND
- PROPOSED TRAVEL LANES
- PROPOSED SHOULDERS
- PROPOSED RAMP CONSTRUCTION
- PROPOSED SWM FACILITY
- PROPOSED BRIDGE
- APPROXIMATE WETLAND LIMITS
- APPROXIMATE FEMA FLOODPLAIN
- DENOTES REDUCTION IN ROW IMPACTS
- EXISTING R/W
- PROPOSED R/W
- SOUND WALL UNDER CONSIDERATION
- CUT LINE
- FILL LINE
- FLAT BOTTOM DITCH
- GRASSED SWALE
- STANDARD V DITCH
- ABANDON/REMOVE DRAINAGE

MATCH LINE STA.1083+50 EB

MATCH LINE STA.1113+50 EB

WILLIAMSBURG POTTERY FACTORY INC
DB. 464 PG. 197
INST. #120020845
GPIN C20d-2223-3156
16.56 AC.

JNMS LLC
INST. #170000804
GPIN C20d-2345-1719
3.43 AC.

CROSS REAL ESTATE DEV LLC
INST. #130018893
GPIN C20d-4157-0590
52.37 AC.

WILLIAMSBURG MEADOWS LLC
INST. #130025064
GPIN C20c-2462-0774
1.5 AC.

WILLIAMSBURG LANDLORD PAR C LLC
INST. #120029961
GPIN C20c-2227-0920
1.499 AC.

GREAT WOLF WILLIAMSBURG SPE LLC
INST. #190000751
GPIN C20c-1957-0991
1.571 AC.

GREAT WOLF WILLIAMSBURG SPE LLC
INST. #180003036
GPIN C19e-2403-4804
78.07 AC.

FENTON MILL ROAD

ROUTE 199 - HUMELSINE PARKWAY

ROUTE 646 - NEWMAN ROAD

Existing Limited Access
Existing R/W

Existing R/W
& Limited Access

Existing R/W

Proposed BMP Facility 4-1

Proposed BMP
Grassed Swale 4-7

Proposed BMP
Grassed Swale 3-12

Proposed BMP
Grassed Swale 4-11

Grading Median to
Minimize Need for Guardrail

Proposed BMP
Grassed Swale 4-8

Proposed BMP
Grassed Swale 4-9

Existing R/W
Existing Limited Access

I-64 WB CONSTR BL

I-64 EB CONSTR BL

RAMP F

RAMP E

RAMP B

RAMP C

535' DECELERATION LANE

1580' ACCELERATION LANE

S 42° 51' 04" E

S 43° 03' 22" E

2085

2090

2095

2100

2105

2110

1080

1085

1090

1095

1100

1105

1110

Grading Median to
Minimize Need for Guardrail

Existing Limited Access

Proposed BMP Facility 4-2

Proposed BMP
Grassed Swale 4-12

Moving BMP Access from
I-64 Mainline to Ramp
to Enhance Safety

Existing Limited Access
Existing R/W

Proposed BMP Facility 4-3

Easement
Acquisition
Eliminated

Proposed Permanent
Easement per RFP

Proposed R/W per RFP

ROW Acquisition &
Deforestation Reduced

SCALE
0 100' 200'

PROFILE - WESTBOUND LANES

EXISTING GROUND
PROPOSED GRADE
RTE. 199/646 OVERPASS SB
STA 2098+69.86
RTE. 199/646 OVERPASS NB
STA 2093+73.91
-0.46%
-0.41%
STA = 2098+25.00
EL = 116.19
SSD = 1640'
ex = -0.87%
K = 919
L = 800.00
V = 80 MPH
20 FT
0 FT
100 FT
2085+00.00
2090+00.00
2095+00.00
2100+00.00
2105+00.00
2110+00.00

PROFILE - EASTBOUND LANES

EXISTING GROUND
PROPOSED GRADE
-0.17%
-0.46%
-0.46%
-0.35%
-0.35%
-0.65%
-0.65%
-0.17%
STA = 1085+00.00
EL = 113.72
SSD = 1837'
ex = -0.20%
K = 397
L = 250.00
V = 80 MPH
STA = 1089+00.00
EL = 111.88
ex = 0.20%
K = 247
L = 200.00
V = 80 MPH
STA = 1095+00.00
EL = 113.38
ex = 0.06%
K = 500
L = 150.00
V = 80 MPH
STA = 1098+00.00
EL = 115.93
SSD = 2348'
ex = -0.12%
K = 417
L = 200.00
V = 80 MPH
RTE. 199/646 OVERPASS SB
STA 1091+68.51
RTE. 199/646 OVERPASS NB
STA 1092+73.42
20 FT
0 FT
100 FT
1085+00.00
1090+00.00
1095+00.00
1100+00.00
1105+00.00
1110+00.00

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I-64 CAPACITY IMPROVEMENTS - SEGMENT III
YORK COUNTY, VIRGINIA Sept. 2017
STATE PROJ. NO. 0064-965-229 Sheet No. 6

Extending Taper to 300', Avoiding New DW

ROW Acquisition, Deforestation & BMP Eliminated, Avoided Wetland Impacts

Grading Median to Minimize Need for Guardrail

ROW Acquisition, Deforestation & BMP Eliminated, Avoided Wetland Impacts

Grading Median to Minimize Need for Guardrail

MILE 235

011
SCRUGGS VENTURES LLC
INST. #060016788
INST. #060016787
GPIN C09-4975-4224
28.8 AC.

CROSS REAL ESTATE DEV LLC
INST. #050038913
GPIN C20-457-0590
50.37 AC.

MATCH LINE STA.1113+50 EB

MATCH LINE STA.1143+50 EB

FENTON MILL ROAD

EAST ROCHAMBEAU DRIVE

Proposed BMP Grassed Swale 4-9

Proposed BMP Grassed Swale 4-10

Proposed BMP Grassed Swale 4-13

Proposed BMP Grassed Swale 5-8

Proposed BMP Grassed Swale 5-11

Proposed R/W per RFP

Existing R/W

Existing Limited Access

300' TAPER

600' TAPER

1580' ACCELERATION LANE

I-64 WB CONSTR BL

I-64 EB CONSTR BL

S 42°51'04" E

S 43°03'22" E

JEANETTE B BRADY TRUSTEE
INST. #050006378
GPIN C09-3905-4190
2.38 AC.

JEANETTE B BRADY TRUSTEE
INST. #050005154
GPIN C09-4085-3748
4.4 AC.

JEANETTE B BRADY TRUSTEE
INST. #050005155
GPIN C09-4868-3095
46 AC.

NOTE:
ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT OF WAY SHOWN ON THESE PLANS.

LEGEND
- PROPOSED TRAVEL LANES
- PROPOSED SHOULDERS
- PROPOSED RAMP CONSTRUCTION
- PROPOSED SWM FACILITY
- PROPOSED BRIDGE
- APPROXIMATE WETLAND LIMITS
- APPROXIMATE FEMA FLOODPLAIN
- DENOTES REDUCTION IN ROW IMPACTS
- EXISTING R/W
- PROPOSED R/W
- SOUND WALL UNDER CONSIDERATION
- CUT LINE
- FILL LINE
- FLAT BOTTOM DITCH
- GRASSED SWALE
- STANDARD V DITCH
- ABANDON/REMOVE DRAINAGE

SCALE 0 100' 200'

PROFILE - WESTBOUND LANES

PROPOSED GRADE

EXISTING GROUND

-0.41%

2115+00.00 2120+00.00 2125+00.00 2130+00.00 2135+00.00 2140+00.00

20 FT 0 FT 100 FT

PROFILE - EASTBOUND LANES

-0.50%

STA = 1114+00.00
EL = 118.65
SSD = 2410'
ex = -1.34'
K = 2388
L = 1,600.00
V = 80 MPH

1115+00.00 1120+00.00 1125+00.00 1130+00.00 1135+00.00 1140+00.00

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I-64 CAPACITY IMPROVEMENTS - SEGMENT III
YORK COUNTY, VIRGINIA Sept. 2017
STATE PROJ. NO. 0064-965-229 Sheet No. 7

ROW Acquisition, Deforestation & BMP Reduced in size, Avoided Wetland Impacts

Grading Median to Eliminate Need for Guardrail

ROW Acquisition, Deforestation & BMP Eliminated, Avoided Wetland Impacts

Grading Median to Minimize Need for Guardrail

Curve 64WB-3
PI = 2165+88.75
DELTA = 0°12'17.16" (LT)
D = 0°03'45"
T = 163.80'
L = 327.60'
R = 91,665.00'
PC = 2164+24.95
PT = 2167+52.55
V = 75 MPH
e = N/C

MATCH LINE STA.1143+50 EB

MATCH LINE STA.1173+50 EB

Proposed R/W per RFP

Proposed BMP Facility 5-3

Replace/Rehabilitate Existing Pipe

Proposed BMP Grassed Swale 5-9

Rehabilitate Existing Pipe

Proposed BMP Grassed Swale 5-12

Existing R/W

Existing Limited Access

Proposed BMP Grassed Swale 5-13

Proposed BMP Grassed Swale 6-2

Proposed BMP Grassed Swale 5-14

012

WILLIAMSBURG POTTERY FACTORY INC
GPIN D9a-1581-3152
3.76 AC.

013

WILLIAMSBURG POTTERY FACTORY INC
GPIN D9b-2545-2534
78.38 AC.

SCRUGGS VENTURES LLC
INST. #060016788
INST. #060016787
GPIN C9b-4975-4224
28.16 AC.

JEANETTE B BRADY TRUSTEE
INST. #150025162
GPIN D9b-4968-3095
46 AC.

LEWIS HARRIS JR ETUX
DB 828 PG 604
GPIN D9a-0488-2515
2.9 AC.

THE J C P COMPANY LLC
INST. #080025175
GPIN D9a-1003-9957
4.95 AC.

YONG H STONE
INST. #120010004
GPIN D9b-1345-1572
1.01 AC.

KONSTANTIN & MARINA FOTIADIS TRUSTEE
INST. #120009887
GPIN D9b-1633-1323
2.67 AC.

KONSTANTIN & MARINA FOTIADIS TRUSTEE
INST. #150025149
GPIN D9c-1696-0983
0.39 AC.

R S U LLC
INST. #080010158
GPIN D9c-1879-0308
12.18 AC.

FENTON MILL ROAD

EAST ROCHAMBEAU DRIVE

I-64 WB CONSTR BL

I-64 EB CONSTR BL

S 42° 51' 04" E

S 43° 03' 22" E

64WB-3

PC 2164+24.95

PT 2167+52.55

2145 2150 2155 2160 2165 2170

1145 1150 1155 1160 1165 1170

NOTE:
ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT OF WAY SHOWN ON THESE PLANS.

LEGEND

- PROPOSED TRAVEL LANES
- PROPOSED SHOULDERS
- PROPOSED RAMP CONSTRUCTION
- PROPOSED SWM FACILITY
- PROPOSED BRIDGE
- APPROXIMATE WETLAND LIMITS
- APPROXIMATE FEMA FLOODPLAIN
- DENOTES REDUCTION IN ROW IMPACTS
- EXISTING R/W
- PROPOSED R/W
- SOUND WALL UNDER CONSIDERATION
- CUT LINE
- FILL LINE
- FLAT BOTTOM DITCH
- GRASSED SWALE
- STANDARD V DITCH
- ABANDON/REMOVE DRAINAGE

SCALE
0 100' 200'

PROFILE - WESTBOUND LANES

PROPOSED GRADE

EXISTING GROUND

20 FT

0 FT 100 FT

2145+00.00 2150+00.00 2155+00.00 2160+00.00 2165+00.00 2170+00.00

PROFILE - EASTBOUND LANES

PROPOSED GRADE

EXISTING GROUND

20 FT

0 FT 100 FT

1145+00.00 1150+00.00 1155+00.00 1160+00.00 1165+00.00 1170+00.00

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I-64 CAPACITY IMPROVEMENTS - SEGMENT III
YORK COUNTY, VIRGINIA Sept. 2017
STATE PROJ. NO. 0064-965-229 Sheet No. 8

Sht. - 8

MILE 236

MATCH LINE STA.1173+50 EB

MATCH LINE STA.1203+50 EB

Existing R/W

Existing Limited Access

Grading Median to Minimize Need for Guardrail

Existing R/W & Limited Access

Moving BMP Access from I-64 Mainline to Roy Ln to Eliminate GR Break & Enhance Safety

Proposed R/W & Limited Access per RFP

Proposed BMP Facility 6-1

ROW Acquisition & Deforestation Reduced

Repair Channel Erosion

Proposed BMP Grassed Swale 6-2

Proposed BMP Grassed Swale 6-4

Proposed BMP Grassed Swale 6-3

Proposed BMP Grassed Swale 6-6

Proposed Limited Access

Proposed R/W per RFP

ROW Acquisition, Deforestation & BMP Outfall Eliminated

014 COMMONWEALTH OF VA GPIN D18b-3969-4579 0.66 AC.

015 EDWARD W SWICK INST. #000000004 GPIN D18b-4656-4432 1.36 AC.

016 DEANE T & RUTH K A GORDON INST. #2009473 GPIN D18a-2764-0583 1.03 AC.

EDWIN LESTER WILSON INST. #030006023 GPIN D18d-5024-1077 2.16 AC.

WILLIAMSBURG POTTERY FACTORY INC. GPIN D18c-2545-2534 78.38 AC.

COMMONWEALTH OF VA GPIN D18d-3018-0563 1.18 AC.

CARL F. ROY TRUST DB 1035 PG 378 GPIN D18d-5358-0257 1.8 AC.

CHRISTOS FOTIADIS INST. #060007014 GPIN D18b-5304-4440 1.033 AC.

FRANCES M. KNIGHT DB 1648 PG 127 GPIN D18b-5580-3720 18.84 AC.

CITY OF WILLIAMSBURG GPIN D18d-2815-6629 624.21 AC.

FENTON MILL ROAD

EAST ROCHAMBEAU DRIVE

I-64 WB CONSTR BL

I-64 EB CONSTR BL

S 43° 03' 22" E

Underground Fiber Optics

Cell Tower Equipment Shelters

Cell Tower

Edge of Pavement

Asphalt Pavement

1175 1180 1185 1190 1195 1200

2175 2180 2185 2190 2195 2200

NOTE:
ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT OF WAY SHOWN ON THESE PLANS.

LEGEND

- PROPOSED TRAVEL LANES
- PROPOSED SHOULDERS
- PROPOSED RAMP CONSTRUCTION
- PROPOSED SWM FACILITY
- PROPOSED BRIDGE
- APPROXIMATE WETLAND LIMITS
- APPROXIMATE FEMA FLOODPLAIN
- DENOTES REDUCTION IN ROW IMPACTS
- EXISTING R/W
- PROPOSED R/W
- SOUND WALL UNDER CONSIDERATION
- CUT LINE
- FILL LINE
- FLAT BOTTOM DITCH
- GRASSED SWALE
- STANDARD V DITCH
- ABANDON/REMOVE DRAINAGE

SCALE 0 100' 200'

PROFILE - WESTBOUND LANES

PROPOSED GRADE

EXISTING GROUND

20 FT

0 FT 100 FT

-0.41%

-0.82%

-0.82%

STA = 2199+00.00
EL = 74.88
SSD = 273'
ex = -0.10'
K = 488
L = 200.00
V = 80 MPH

STA = 2203+00.00
EL = 71.60
ex = 0.16'
K = 30.3
L = 200.00
V = 80 MPH

PROFILE - EASTBOUND LANES

PROPOSED GRADE

EXISTING GROUND

20 FT

0 FT 100 FT

-0.50%

-1.05%

-1.05%

STA = 1201+00.00
EL = 75.15
SSD = 206'
ex = -0.14'
K = 364
L = 200.00
V = 75 MPH

1175+00.00 1180+00.00 1185+00.00 1190+00.00 1195+00.00 1200+00.00

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I-64 CAPACITY IMPROVEMENTS - SEGMENT III
YORK COUNTY, VIRGINIA Sept. 2017
STATE PROJ. NO. 0064-965-229 Sheet No.9

Adding BMP within Existing ROW with Safe Access from Tom Thomas Rd

Grading Median to Minimize Need for Guardrail

Grading Median to Minimize Need for Guardrail

Existing R/W

Proposed BMP Facility 6-4

Concrete Barrier Pier Protection, TL-5

Rehabilitate Existing Pipe

Proposed BMP Grassed Swale 6-5

Existing R/W & Limited Access

Proposed BMP Grassed Swale 6-7

Rehabilitate Existing Pipe

Proposed BMP Grassed Swale 6-9

Existing Limited Access

Existing R/W

Concrete Barrier Pier Protection, TL-5

Existing R/W

Easement Acquisition Eliminated

Proposed TCE per RFP

MATCH LINE STA.1203+50 EB

MATCH LINE STA.1233+50 EB

ROUTE 604 BARLOW ROAD

SECURITY ROAD

SECURITY ROAD

I-64 WB CONSTR BL

I-64 EB CONSTR BL

I-64 WB CONSTR BL

I-64 EB CONSTR BL

S 43° 03' 22" E

S 43° 03' 22" E

EAST ROCHAMBEAU DRIVE

EAST ROCHAMBEAU DRIVE

USA CAMP PEARY
GPIN D8b2-1244-5044
8645.85 AC.

014A
CITY OF WILLIAMSBURG
GPIN D8b4-2815-1609
624.23 AC.

NOTE:
ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT OF WAY SHOWN ON THESE PLANS.

LEGEND
- PROPOSED TRAVEL LANES
- PROPOSED SHOULDERS
- PROPOSED RAMP CONSTRUCTION
- PROPOSED SWM FACILITY
- PROPOSED BRIDGE
- APPROXIMATE WETLAND LIMITS
- APPROXIMATE FEMA FLOODPLAIN
- DENOTES REDUCTION IN ROW IMPACTS
- EXISTING R/W
- PROPOSED R/W
- SOUND WALL UNDER CONSIDERATION
- CUT LINE
- FILL LINE
- FLAT BOTTOM DITCH
- GRASSED SWALE
- STANDARD V DITCH
- ABANDON/REMOVE DRAINAGE

SCALE 0 100' 200'

PROFILE - WESTBOUND LANES

EXISTING GROUND
-0.16%
-0.16%
-0.47%
ST.A = 2207+50.00
EL = 70.88
ex = 0.16'
K = 318
L = 200.00
V = 80 MPH
604 OVERPASS
2205+91.20
PROPOSED GRADE
EXISTING GROUND
20 FT
0 FT
100 FT

PROFILE - EASTBOUND LANES

-0.35%
-0.35%
+0.67%
ST.A = 1204+00.00
EL = 72.00
ex = 0.17'
K = 286
L = 200.00
V = 80 MPH
RTE 604 OVERPASS
ST.A 1206+43.74
ST.A = 1208+75.00
EL = 70.33
ex = 0.38'
K = 294
L = 300.00
V = 80 MPH
PROPOSED GRADE
EXISTING GROUND
+0.67%
-0.22%
ST.A = 1228+25.00
EL = 83.48
SSD = 1782
ex = -1.22'
K = 1236
L = 1,100.00
V = 80 MPH
20 FT
0 FT
100 FT

1205+00.00 1210+00.00 1215+00.00 1220+00.00 1225+00.00 1230+00.00

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I-64 CAPACITY IMPROVEMENTS - SEGMENT III
YORK COUNTY, VIRGINIA Sept. 2017
STATE PROJ. NO. 0064-965-229 Sheet No.10

MILE 237

Grading Median to Minimize Need for Guardrail

Minimized Grading/Site Disturbance in the Vicinity of Site 49f

Site 49f

Curve 64WB-4
PI = 2240+07.48
DELTA = 11° 21' 51.1" (RT)
D = 0° 58' 52"
T = 581.02'
L = 1,158.24'
R = 5,839.58'
PC = 2234+26.46
PT = 2245+84.69
V = 75 MPH
e = 4.00%
Lr = 127'

Traffic Cabinet and Travel Time Sign to be Relocated

Proposed BMP Grassed Swale 7-4

Existing R/W & Limited Access

Rehabilitate Existing Pipe

Proposed BMP Grassed Swale 7-5

Curve 64EB-2
PI = 1240+54.42
DELTA = 11° 21' 51.1" (RT)
D = 0° 59' 59"
T = 570.28'
L = 1,136.82'
R = 5,731.58'
PC = 1234+84.14
PT = 1246+20.95
V = 75 MPH
e = 4.1%
Lr = 130'

ROW Acquisition, Deforestation & BMP Eliminated to Avoid Impacts to City of Williamsburg Waller Mill Park 4(f) Property

Existing R/W

Existing Limited Access

MATCH LINE STA.1233+50 EB

MATCH LINE STA.1263+50 EB

SECURITY ROAD

EAST ROCHAMBEAU DRIVE

I-64 WB CONSTR BL

I-64 EB CONSTR BL

USA CAMP PEARY
GPIN 0180-244-5044
8645.85 AC.

CITY OF WILLIAMSBURG
GPIN 0084-2815-1609
624.21 AC.

COMMONWEALTH OF VIRGINIA
GPIN E1F6-2487-4691
2.0 AC.

CITY OF WILLIAMSBURG
GPIN 0172-4401-0443
1026.63 AC.

NOTE:
ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT OF WAY SHOWN ON THESE PLANS.

LEGEND
- PROPOSED TRAVEL LANES
- PROPOSED SHOULDERS
- PROPOSED RAMP CONSTRUCTION
- PROPOSED SWM FACILITY
- PROPOSED BRIDGE
- APPROXIMATE WETLAND LIMITS
- APPROXIMATE FEMA FLOODPLAIN
- DENOTES REDUCTION IN ROW IMPACTS
- EXISTING R/W
- PROPOSED R/W
- SOUND WALL UNDER CONSIDERATION
- CUT LINE
- FILL LINE
- FLAT BOTTOM DITCH
- GRASSED SWALE
- STANDARD V DITCH
- XXXXXXX ABANDON/REMOVE DRAINAGE

SCALE 0 100' 200'

PROFILE - WESTBOUND LANES

+0.47% -0.31%

PROPOSED GRADE

EXISTING GROUND

STA = 2235+75.00
EL = 84.15
SSD = 1786'
ex = +0.78'
K = 1028
L = 800.00
V = 80 MPH

20 FT 0 FT 100 FT

PROFILE - EASTBOUND LANES

-0.22% +0.23%

STA = 1244+76.00
EL = 79.77
SSD = 1071.68'
ex = -0.00'
K = 9928
L = 100.00
V = 80 MPH

LIMITED ACCESS HIGHWAY By Resolution of Highway Commission dated Oct. 4, 1956

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I-64 CAPACITY IMPROVEMENTS - SEGMENT III
YORK COUNTY, VIRGINIA Sept. 2017
STATE PROJ. NO. 0064-965-229 Sheet No.11

MATCH LINE STA.1263+50 EB

MATCH LINE STA.1293+50 EB

Grading Median to Minimize Need for Guardrail

Providing MB-7F Barrier to Eliminate Need for Retaining Wall

END DBL.BOX D-610
STA.2289+24.90 WB
CONSTR BL

BEGIN DBL.BOX D-610
STA.2289+08.87 WB
CONSTR BL

Existing R/W & Limited Access

SECURITY ROAD

I-64 WB CONSTR BL

I-64 EB CONSTR BL

600' TAPER

S 31°41'31" E

EAST ROCHAMBEAU DRIVE

USA CAMP PEARY
GPIN G8b=(244.5044
8645.85 AC.

CITY OF WILLIAMSBURG
GPIN D7a=441-0443
1026.63 AC.

YORK COUNTY SCHOOL BOARD
DB 377 PG 36
GPIN E7b-5668-2885

YORK COUNTY SCHOOL BOARD
DB 377 PG 36
GPIN E7b-5753-1574
50.44AC.

COLONIAL WILLIAMSBURG FOUNDATION
DB 77 PG 293
GPIN E7b-6481-3507
2183.0 AC.

Existing R/W & Limited Access

300' Scenic Easement

BEGIN DBL.BOX D-610
STA.1289+90.84 EB
CONSTR BL

END DBL.BOX D-610
STA.1290+06.70 EB
CONSTR BL

BRUTON HIGH SCHOOL

Grading Median to Minimize Need for Guardrail

SCALE
0 100' 200'

NOTE:
ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT OF WAY SHOWN ON THESE PLANS.

LEGEND
- PROPOSED TRAVEL LANES
- PROPOSED SHOULDERS
- PROPOSED RAMP CONSTRUCTION
- PROPOSED SWM FACILITY
- PROPOSED BRIDGE
- APPROXIMATE WETLAND LIMITS
- APPROXIMATE FEMA FLOODPLAIN
- DENOTES REDUCTION IN ROW IMPACTS
- EXISTING R/W
- PROPOSED R/W
- SOUND WALL UNDER CONSIDERATION
- CUT LINE
- FILL LINE
- FLAT BOTTOM DITCH
- GRASSED SWALE
- STANDARD V DITCH
- ABANDON/REMOVE DRAINAGE

PROFILE - WESTBOUND LANES

STA = 2275+65.00
EL = 71.85
SSD = 821'
ex = -2.79
K = 312
L = 835.18
V = 75 MPH

-0.31%
-2.99%

PROPOSED GRADE
EXISTING GROUND

STA = 2287+40.00
EL = 36.11
ex = 6.29
K = 207
L = 1,020.00
V = 75 MPH

20 FT
0 FT
100 FT
-2.99%
-1.95%

END DBL.BOX D-610
STA.2289+24.90 WB CONSTR BL

BEGIN DBL.BOX D-610
STA.2289+08.87 WB CONSTR BL

2265+00.00 2270+00.00 2275+00.00 2280+00.00 2285+00.00 2290+00.00

PROFILE - EASTBOUND LANES

STA = 1279+00.00
EL = 71.89
SSD = 823'
ex = -2.55
K = 314
L = 800.00
V = 75 MPH

-0.23%
-2.78%

PROPOSED GRADE
EXISTING GROUND

20 FT
0 FT
100 FT

Lengthening Vertical Curve to Provide 75 mph Design Speed

STA = 1291+50.00
EL = 37.14
ex = 7.83'
K = 211
L = 1,150.00
V = 75 MPH

-2.78%
-2.61%

END DBL.BOX D-610
STA.1290+06.70 EB CONSTR BL

BEGIN DBL.BOX D-610
STA.1289+90.84 EB CONSTR BL

1265+00.00 1270+00.00 1275+00.00 1280+00.00 1285+00.00 1290+00.00

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I-64 CAPACITY IMPROVEMENTS - SEGMENT III
YORK COUNTY, VIRGINIA Sept. 2017
STATE PROJ. NO. 0064-965-229 Sheet No.12

MILE 238

EXIT 238

MATCH LINE STA.1293+50 EB

MATCH LINE STA.1323+50 EB

Water Quantity Channel (typ.) (With Additional Median and Roadside Ditch Storage)

Existing R/W & Limited Access

Existing R/W & Limited Access

Grading Median to Minimize Need for Guardrail

Grading Median to Minimize Need for Guardrail

Grading Median to Minimize Need for Guardrail

Grading Median to Minimize Need for Guardrail

Extending Taper to 300', Avoiding New DW

300' Scenic Easement

Proposed BMP Grassed Swale 8-14

Proposed BMP Grassed Swale 8-7

Proposed BMP Grassed Swale 8-8

Proposed BMP Facility 8-3

Constructing New EB Off Ramp to the Left of Existing Ramp to Minimize Disruptions to Drivers & Create a Safer Work Zone

Moving BMP to Avoid Wetland Impacts

Moving BMP Access from I-64 Mainline to Rte. 143 to Enhance Safety

Lengthening Vertical Curve to Provide 75 mph Design Speed

SECURITY ROAD

I-64 WB CONSTR BL 1420' ACCELERATION LANE

I-64 EB CONSTR BL

EAST ROCHAMBEAU DRIVE

RAMP K

RAMP G

RAMP L

ROUTE 143 - MERRIMAC TRAIL

300' TAPER

535' DECELERATION LANE

780' ACCELERATION LANE

VDOT Std. GR-MGS2

Concrete Barrier Pier Protection, TL-5

Stop Bar

200' Left Turn Storage

400' Right Turn Storage

Traffic Signal Pole

Median to be Modified for New Left Turn Lane Layout

Ramp Pavement to be Removed

USA CAMP PEARY
GPIN G18d-1244-3044
8645.85 AC.

COLONIAL WILLIAMSBURG FOUNDATION
DB 157 PG 293
GPIN E16b-4481-3507
218.58 AC.

OAK GROVE BAPTIST CHURCH CEMETERY
INST #030019183
GPIN F16d-0534-4411
1.19 AC.

Curve RG_1
PI = 11+33.86
DELTA = 19° 58' 43.44" (RT)
D = 7° 32' 20"
T = 133.86'
L = 265.01'
R = 760.00'
PC = 10+00.00
PT = 12+65.01
V = 35 MPH
e = 5.90%
Lr = 133'

NOTE:
ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT OF WAY SHOWN ON THESE PLANS.

LEGEND
- PROPOSED TRAVEL LANES
- PROPOSED SHOULDERS
- PROPOSED RAMP CONSTRUCTION
- PROPOSED SWM FACILITY
- PROPOSED BRIDGE
- APPROXIMATE WETLAND LIMITS
- APPROXIMATE FEMA FLOODPLAIN
- DENOTES REDUCTION IN ROW IMPACTS
- EXISTING R/W
- PROPOSED R/W
- SOUND WALL UNDER CONSIDERATION
- CUT LINE
- FILL LINE
- FLAT BOTTOM DITCH
- GRASSED SWALE
- STANDARD V DITCH
- ABANDON/REMOVE DRAINAGE

SCALE 0 100' 200'

PROFILE - WESTBOUND LANES

+1.95% -0.53%

STA = 2306+47.96
EL = 73.97'
SSD = 500'
ex = -2.88'
K = 375
L = 930.00
V = 75 MPH

EXISTING GROUND

PROPOSED GRADE

RTE. 143 OVERPASS STA.2317+95.66

20 FT / 0 FT / 100 FT

2295+00.00 2300+00.00 2305+00.00 2310+00.00 2315+00.00 2320+00.00

PROFILE - EASTBOUND LANES

+2.67% -2.29%

STA = 1310+70.00
EL = 88.41'
SSD = 1074'
ex = -16.43'
K = 534
L = 2,250.00
V = 80 MPH

PROPOSED GRADE

EXISTING GROUND

RTE. 143 OVERPASS STA.1318+78.41

20 FT / 0 FT / 100 FT

1295+00.00 1300+00.00 1305+00.00 1310+00.00 1315+00.00 1320+00.00

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I-64 CAPACITY IMPROVEMENTS - SEGMENT III
YORK COUNTY, VIRGINIA Sept. 2017
STATE PROJ. NO. 0064-965-229 Sheet No. 13

MILE 239

Deforestation in Close Proximity to Camp Peary, BMP Requiring Retaining Wall & Access from I-64 Eliminated

Extending Taper to 300', Avoiding New DW

Proposed BMP Grassed Swale 8-9

Proposed BMP Grassed Swale 8-8

BEGIN RETAINING WALL STA.2325+50.00 WB CONSTR BL

END RETAINING WALL STA.2346+00.00 WB CONSTR BL

USA CAMP PEARY GPIN 0480-24A-3044 8645.85 AC.

Existing R/W & Limited Access

SECURITY ROAD

Curve 64WB-5
PI = 2353+97.15
DELTA = 1° 28' 07.68" (RT)
D = 0° 21' 21"
T = 206.38'
L = 412.73'
R = 16,100.00'
PC = 2351+90.78
PRC = 2356+03.51
V = 75 MPH
e = N/C

Proposed BMP Grassed Swale 9-4

MATCH LINE STA.1323+50 EB

RAMP J

535' DECELERATION LANE

300' TAPER

2050' RETAINING WALL

I-64 WB CONSTR BL

S 31° 00' 45" E

32° 22' 37" E

RAMP H

1420' ACCELERATION LANE

I-64 EB CONSTR BL

S 31° 41' 31" E

600' TAPER

MATCH LINE STA.1353+50 EB

Repair Ditch Failure

Repair Ditch Failure and Scour

Repair Channel Erosion

Minimizing Height of Retaining Wall, thus Improving Schedule Certainty

Transitioning South to New Queens Creek Bridge, Minimizing Shading Impacts in the Median

Existing R/W & Limited Access

COLONIAL WILLIAMSBURG FOUNDATION DB 137 PG 293 GPIN 1-60-609-645 (23.1) AC.

300' Scenic Easement

Proposed BMP Grassed Swale 8-15

Curve 64EB-3
PI = 1351+55.97
DELTA = 1° 57' 50.51" (RT)
D = 0° 21' 21"
T = 275.97'
L = 551.89'
R = 16,100.00'
PC = 1348+80.00
PRC = 1354+31.89
V = 75 MPH
e = N/C

Crossovers for Bridge Construction

NOTE:
ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT OF WAY SHOWN ON THESE PLANS.

LEGEND
- PROPOSED TRAVEL LANES
- PROPOSED SHOULDERS
- PROPOSED RAMP CONSTRUCTION
- PROPOSED SWM FACILITY
- PROPOSED BRIDGE
- APPROXIMATE WETLAND LIMITS
- APPROXIMATE FEMA FLOODPLAIN
- DENOTES REDUCTION IN ROW IMPACTS
- EXISTING R/W
- PROPOSED R/W
- SOUND WALL UNDER CONSIDERATION
- CUT LINE
- FILL LINE
- FLAT BOTTOM DITCH
- GRASSED SWALE
- STANDARD V DITCH
- ABANDON/REMOVE DRAINAGE

SCALE 0 100' 200'

PROFILE - WESTBOUND LANES

PROPOSED GRADE

EXISTING GROUND

-0.53%

-1.82%

STA = 2329+20.00
EL = 61.93
SSD = 1143'
ex = 0.98'
K = 472
L = 610.00
V = 80 MPH

20 FT
0 FT 100 FT

2325+00.00 2330+00.00 2335+00.00 2340+00.00 2345+00.00 2350+00.00

PROFILE - EASTBOUND LANES

PROPOSED GRADE

EXISTING GROUND

STA = 1336+45.00
EL = 29.44
ex = 1.82'
K = 669
L = 1,000.00
V = 80 MPH

-2.23%

-0.79%

1325+00.00 1330+00.00 1335+00.00 1340+00.00 1345+00.00 1350+00.00

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LIMITED ACCESS HIGHWAY
By Resolution of Highway Commission dated Oct. 4, 1956
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I-64 CAPACITY IMPROVEMENTS - SEGMENT III
YORK COUNTY, VIRGINIA
Sept. 2017
STATE PROJ. NO. 0064-965-229
Sheet No.14
Crossovers for Bridge Construction
END BRIDGE B-643
STA.2369+73.17 WB
CONSTR BL
BEGIN BRIDGE B-643
STA.2360+59.83 WB
CONSTR BL
Providing 15' Min. Horizontal Channel Clearance, All Phases of Construction
Opportunity to Create ~8489 SF of Tidal Wetlands by Regrading a Segment of Upland between the Two Bridges
Existing R/W & Limited Access
Crossovers for Bridge Construction
ROW Acquisition, Deforestation & BMP Eliminated
Proposed R/W & Limited Access per RFP
Enhanced Safety by Eliminating GR Break for BMP Access
Proposed BMP Grassed Swale 9-5
SECURITY ROAD
QUEENS CREEK
I-64 WB CONSTR BL
I-64 EB CONSTR BL
MATCH LINE STA.1353+50 EB
MATCH LINE STA.1383+50 EB
Transitioning South to New Queens Creek Bridge, Minimizing Shading Impacts in the Median
300' Scenic Easement
BEGIN BRIDGE B-642
STA.1360+27.83 EB
CONSTR BL
END BRIDGE B-642
STA.1369+41.17 EB
CONSTR BL
BEGIN SOUNDWALL (H=16')
STA.1365+97.65 EB
CONSTR BL
Transitioning North from New Queens Creek Bridge, Minimizing Shading Impacts in the Median
Providing ~2' Higher Sound Barrier Wall (if Required by FDNA to Accommodate Bridge Shift), Reducing Noise Impacts to Queens Lake Neighborhood
Using Micropile Foundations for Any Sound Barrier Walls
SCHOONER BLVD
40'-Wide Median Provides Better Construction Access, Requiring Just 1 Temp. Trestle instead of 3, thus Improving Schedule Certainty & Reducing Impacts on the Traveling Public
NOTE: ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT OF WAY SHOWN ON THESE PLANS.
LEGEND
PROPOSED TRAVEL LANES
PROPOSED SHOULDERS
PROPOSED RAMP CONSTRUCTION
PROPOSED SWM FACILITY
PROPOSED BRIDGE
APPROXIMATE WETLAND LIMITS
APPROXIMATE FEMA FLOODPLAIN
DENOTES REDUCTION IN ROW IMPACTS
EXISTING R/W
PROPOSED R/W
SOUND WALL UNDER CONSIDERATION
CUT LINE
FILL LINE
FLAT BOTTOM DITCH
GRASSED SWALE
STANDARD V DITCH
ABANDON/REMOVE DRAINAGE
PROFILE - WESTBOUND LANES
WB X-over (Phase 3)
WB X-over (Phase 3)
PROFILE - EASTBOUND LANES
EB X-over (Phase 2)
EB X-over (Phase 2)
Raising Profiles to Accommodate Longer Spans & thus Fewer Piers in Queens Creek & Surrounding Wetlands
Limits of Higher Sound Barrier Wall
PROPOSED GRADE
EXISTING GROUND
SCALE 0 100' 200'
08-SEP-2017

LIMITED ACCESS HIGHWAY By Resolution of Highway Commission dated Oct. 4, 1956

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I-64 CAPACITY IMPROVEMENTS - SEGMENT III
YORK COUNTY, VIRGINIA Sept. 2017
STATE PROJ. NO. 0064-965-229 Sheet No.15

MILE 240

Enhanced Safety by Eliminating GR Break for BMP Access

Proposed R/W & Limited Access per RFP

ROW Acquisition, Deforestation & BMP Eliminated

Existing R/W & Limited Access

Proposed BMP Grassed Swale 9-6

Concrete Barrier Pier Protection,TL-5

Existing R/W

Curve 64WB-9
PI = 2410+13.64
DELTA = 11° 27' 23.60" (LT)
D = 0° 30' 05"
T = 1,146.37'
L = 2,285.11'
R = 11,428.12'
PC = 2398+67.26
PT = 2421+52.37
V = 75 MPH
e = 2.20%
Lr = 70'

Grading BMP to Avoid Wetland Impacts

END DBL.BOX D-611
STA.2412+57.02 WB
CONSTR BL

BEGIN DBL.BOX D-611
STA.2412+45.90 WB
CONSTR BL

Begin Proposed MC-3B
Sta.2409+41

Proposed R/W & Limited Access per RFP

Proposed BMP Facility 10-2

ROW Acquisition & Deforestation Reduced

MATCH LINE STA.1383+50 EB

MATCH LINE STA.1413+50 EB

I-64 WB CONSTR BL

I-64 EB CONSTR BL

64WB-9

64EB-7

Begin Proposed MC-3B
Sta.1409+65

Repair Channel Erosion

BEGIN DBL.BOX D-611
STA.1413+27.58 EB
CONSTR BL

END DBL.BOX D-611
STA.1413+38.76 EB
CONSTR BL

Existing R/W & Limited Access

Crossovers for Bridge Construction

Existing R/W & Limited Access

END SOUNDWALL (H=16')
STA.1394+50.00 EB
CONSTR BL

Repair Channel Erosion

Installing Sound Barrier Walls (if Required by FDNA)

Using Micropile Foundations for Any Sound Barrier Walls

Concrete Barrier Pier Protection,TL-5

Curve 64EB-7
PI = 1409+11.66
DELTA = 10° 06' 11.50" (LT)
D = 0° 30' 09"
T = 1,007.72'
L = 2,010.21'
R = 11,400.00'
PC = 1399+03.94
PT = 1419+14.15
V = 75 MPH
e = 2.20%
Lr = 70'

Existing R/W

Existing R/W & Limited Access

NOTE:
ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT OF WAY SHOWN ON THESE PLANS.

LEGEND
- PROPOSED TRAVEL LANES
- PROPOSED SHOULDERS
- PROPOSED RAMP CONSTRUCTION
- PROPOSED SWM FACILITY
- PROPOSED BRIDGE
- APPROXIMATE WETLAND LIMITS
- APPROXIMATE FEMA FLOODPLAIN
- DENOTES REDUCTION IN ROW IMPACTS
- EXISTING R/W
- PROPOSED R/W
- SOUND WALL UNDER CONSIDERATION
- CUT LINE
- FILL LINE
- FLAT BOTTOM DITCH
- GRASSED SWALE
- STANDARD V DITCH
- ABANDON/REMOVE DRAINAGE

SCALE 0 100' 200'

PROFILE - WESTBOUND LANES

STA = 2391+31.66
EL = 69.46
SSD = 1015'
ex = 6.70'
K = 477
L = 1,600.00
V = 80 MPH

+2.00% -1.35%

PROPOSED GRADE

EXISTING GROUND

RTE 76 OVERPASS STA.2397+68.22

20 FT / 0 FT / 100 FT

END DBL.BOX D-611
STA.2412+57.02 WB CONSTR BL

BEGIN DBL.BOX D-611
STA.2412+45.90 WB CONSTR BL

STA = 2412+45.00
EL = 40.93
ex = 14.89'
K = 207
L = 900.00
V = 75 MPH

2385+00.00 2390+00.00 2395+00.00 2400+00.00 2405+00.00 2410+00.00

PROFILE - EASTBOUND LANES

STA = 1392+17.44
EL = 67.98
SSD = 979'
ex = 4.75'
K = 444
L = 1,300.00
V = 80 MPH

+1.85% -1.08%

PROPOSED GRADE

EXISTING GROUND

RTE 76 OVERPASS STA.1398+64.27

20 FT / 0 FT / 100 FT

END DBL.BOX D-611
STA.1413+38.76 EB CONSTR BL

BEGIN DBL.BOX D-611
STA.1413+27.58 EB CONSTR BL

STA = 1412+22.44
EL = 46.33
ex = 4.28'
K = 21
L = 850.00
V = 75 MPH

1385+00.00 1390+00.00 1395+00.00 1400+00.00 1405+00.00 1410+00.00

Reducing Grade to 3%, thus Fully Meeting Criterion for Level Terrain

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LIMITED ACCESS HIGHWAY By Resolution of Highway Commission dated Oct. 4, 1956

SKANSKA | wsp

I-64 CAPACITY IMPROVEMENTS - SEGMENT III
YORK COUNTY, VIRGINIA Sept. 2017
STATE PROJ. NO. 0064-965-229 Sheet No.16

NOTE:
ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT OF WAY SHOWN ON THESE PLANS.

LEGEND
- PROPOSED TRAVEL LANES
- PROPOSED SHOULDERS
- PROPOSED RAMP CONSTRUCTION
- PROPOSED SWM FACILITY
- PROPOSED BRIDGE
- APPROXIMATE WETLAND LIMITS
- APPROXIMATE FEMA FLOODPLAIN
- DENOTES REDUCTION IN ROW IMPACTS
- EXISTING R/W
- PROPOSED R/W
- SOUND WALL UNDER CONSIDERATION
- CUT LINE
- FILL LINE
- FLAT BOTTOM DITCH
- GRASSED SWALE
- STANDARD V DITCH
- ABANDON/REMOVE DRAINAGE

Curve 64WB-9
PI = 2410+13.64
DELTA = 11° 27' 23.60" (LT)
D = 0° 30' 05"
T = 1,146.37'
L = 2,285.11'
R = 11,428.12'
PC = 2398+67.26
PT = 2421+52.37
V = 75 MPH
e = 2.20%
Lr = 70'

Curve 64EB-7
PI = 1409+11.66
DELTA = 10° 06' 11.50" (LT)
D = 0° 30' 09"
T = 1,007.72'
L = 2,010.21'
R = 11,400.00'
PC = 1399+03.94
PT = 1419+14.15
V = 75 MPH
e = 2.20%
Lr = 70'

Curve 64WB-10
PI = 2434+98.96
DELTA = 1° 17' 41.88" (RT)
D = 0° 12' 21"
T = 314.50'
L = 628.97'
R = 27,828.81'
PC = 2431+84.46
PCC = 2438+13.43
V = 75 MPH
e = N/C

Curve 64WB-11
PI = 2456+41.06
DELTA = 10° 26' 36.89" (RT)
D = 0° 17' 11"
T = 1,827.63'
L = 3,645.13'
R = 19,998.00'
PCC = 2438+13.43
PT = 2474+58.56
V = 75 MPH
e = N/C

Curve 64EB-8
PI = 1458+92.88
DELTA = 10° 23' 03.69" (RT)
D = 0° 15' 00"
T = 1,982.76'
L = 4,054.11'
R = 22,920.32'
PC = 1438+10.12
PT = 1479+64.23
V = 75 MP,
e = N/C

BEGIN BRIDGE B-640
STA.2430+38.78 WB
CONSTR BL

END BRIDGE B-640
STA.2431+85.63 WB
CONSTR BL

END BRIDGE B-638
STA.2429+62.96 WB
CONSTR BL

BEGIN BRIDGE B-638
STA.2428+09.50 WB
CONSTR BL

BEGIN BRIDGE B-641
STA.1428+04.54 EB
CONSTR BL

END BRIDGE B-641
STA.1429+58.12 EB
CONSTR BL

BEGIN SOUNDWALL (H=19')
STA.1431+99.51 EB
CONSTR BL

END BRIDGE B-639
STA.1431+91.91 EB
CONSTR BL

BEGIN BRIDGE B-639
STA.1430+41.80 EB
CONSTR BL

END SOUNDWALL (H=19')
STA.1443+21.24 EB
CONSTR BL

MATCH LINE STA.1413+50 EB

MATCH LINE STA.1443+50 EB

I-64 WB CONSTR BL

I-64 EB CONSTR BL

64WB-9 | 64WB-10 | 64WB-11 | 64EB-7 | 64EB-8

PT 2421+52.37 | PI 2425+35.37 | PI 2427+85.37 | PC 2431+84.46 | PI 1427+75.34 | PI 1431+99.64 | PI 1433+29.64 | PC 1438+10.17 | PT 1419+14.15

2415 | 2420 | 2425 | 2430 | 2435 | 2440 | 1415 | 1420 | 1425 | 1430 | 1435 | 1440

S 73° 08' 54" E | S 73° 43' 35" E | S 41° 20' 42" E | S 41° 42' 42" E | S 42° 15' 12" E | S 41° 47' 42" E

Repair Erosion

Existing R/W & Limited Access

Repair Ditch Failure and Surrounding Erosion

Repair ditch failure and surrounding erosion

Existing R/W & Limited Access

Existing R/W & Limited Access

Proposed R/W & Limited Access per RFP

Proposed BMP Facility 10-3

ROW Acquisition & Deforestation Reduced

Utilizing Micropiles for Colonial Pkwy. Bridge Widenings to Minimize Impacts to Existing Bridges

End Proposed MC-3B Sta.1430+34

Existing R/W

Rehabilitate existing pipe

Proposed BMP Grassed Swale 10-11

Proposed BMP Grassed Swale 10-12

Proposed BMP Grassed Swale 10-14

Proposed BMP Facility 10-7

End Proposed MC-3B Sta.2436+08

Proposed BMP Facility 10-8

Grading BMP to Avoid York County SFM Impacts

ROW Acquisition & Deforestation Reduced

ROW Acquisition & Deforestation Reduced

Grading Median to Minimize Need for Guardrail

Using Micropile Foundations for Any Sound Barrier Walls

Installing Sound Barrier Walls (if Required by FDNA)

Reducing Grade to 3%, thus Fully Meeting Criterion for Level Terrain

LAKESHEAD DRIVE

COLONIAL PARKWAY

WILLIAM L GROSE TRUSTEE INST #080004093 GPIN 0154-1582-1333 1.32 AC.

JASON A & EUSE M FRENCH INST #120006995 GPIN 0151-1737-1196 1.73 AC.

BRUCE A CLAYTON INST #120002254 GPIN 0151-2199-0646 7.84 AC.

UNITED STATES OF AMERICA GPIN 0152-1140-8229 538.39 AC.

UNITED STATES OF AMERICA GPIN 1158-4908-0112 558 AC.

FRANCES G & HUGH M HOLT TRUSTEE INST #120004896 GPIN 0154-1337-0540 13.53 AC.

AIMEE JONES TR & EGGER INST #120002961 GPIN 1144-0339-4585 241.86 AC.

020

019

PROFILE - WESTBOUND LANES

PROFILE - EASTBOUND LANES

PROPOSED GRADE

EXISTING GROUND

-3.00%

-0.85%

-0.55%

-0.80%

+3.00%

-2.95%

-0.74%

+2.95%

+0.74%

STA = 2435+80.00
EL = 96.13
SSD = 912'
ex = 1.01'
K = 314
L = 517.98
V = 75 MPH

STA = 2428+90.00
EL = 90.28
SSD = 841'
ex = -1.83'
K = 316
L = 680.00
V = 75 MPH

STA = 1433+85.00
EL = 96.59
SSD = 963'
ex = -0.87'
K = 317
L = 470.00
V = 75 MPH

STA = 1427+75.00
EL = 92.06
SSD = 835'
ex = 1.90'
K = 313
L = 690.00
V = 75 MPH

20 FT
0 FT
100 FT

SCALE
0 100' 200'

Sht. - 16

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08-SEP-2017

LIMITED ACCESS HIGHWAY By Resolution of Highway Commission dated Oct. 4, 1956

SKANSKA | WSP

I-64 CAPACITY IMPROVEMENTS - SEGMENT III
YORK COUNTY, VIRGINIA Sept. 2017
STATE PROJ. NO. 0064-965-229 Sheet No.17

MILE 241

MATCH LINE STA.1443+50 EB

ROW Acquisition & Deforestation Reduced

Proposed R/W & Limited Access per RFP

Proposed BMP Grassed Swale 10-16

Proposed BMP Grassed Swale 11-2

Grading Median to Minimize Need for Guardrail

Curve 64WB-11
PI = 2456+41.06
DELTA = 10° 26' 36.89" (RT)
D = 0° 17' 11"
T = 1,827.63'
L = 3,645.13'
R = 19,998.00'
PCC = 2438+13.43
PT = 2474+58.56
V = 75 MPH
e = N/C

Begin Proposed MC-3B
Sta.2462+28

Existing R/W & Limited Access

Proposed BMP Grassed Swale 11-2

End Proposed MC-3B
Sta.2466+14

END PROJECT 0064-965-229,C501
STA.2466+14.00 WB CONSTR BL

I-64 WB CONSTR BL

I-64 EB CONSTR BL

64WB-11

64EB-8

Proposed BMP Grassed Swale 11-3

Existing R/W & Limited Access

Proposed BMP Facility 11-1

Proposed R/W & Limited Access per RFP

ROW Acquisition & Deforestation Reduced

Existing R/W

BEGIN SOUNDWALL (H=19')
STA.1446+25.28 EB
CONSTR BL

END SOUNDWALL (H=19')
STA.1457+48.05 EB
CONSTR BL

END PROJECT 0064-965-229,C501
STA.1466+46.00 EB CONSTR BL

QUEENSBURY LANE

Installing Sound Barrier Walls (if Required by FDNA)

Using Micropile Foundations for Any Sound Barrier Walls

Curve 64EB-8
PI = 1458+92.88
DELTA = 10° 23' 03.69" (RT)
D = 0° 15' 00"
T = 2,082.76'
L = 4,154.11'
R = 22,920.32'
PC = 1438+10.12
PT = 1479+64.23
V = 75 MPH
e = N/C

NOTE:
ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT OF WAY SHOWN ON THESE PLANS.

LEGEND
- PROPOSED TRAVEL LANES
- PROPOSED SHOULDERS
- PROPOSED RAMP CONSTRUCTION
- PROPOSED SWM FACILITY
- PROPOSED BRIDGE
- APPROXIMATE WETLAND LIMITS
- APPROXIMATE FEMA FLOODPLAIN
- DENOTES REDUCTION IN ROW IMPACTS
- EXISTING R/W
- PROPOSED R/W
- SOUND WALL UNDER CONSIDERATION
- CUT LINE
- FILL LINE
- FLAT BOTTOM DITCH
- GRASSED SWALE
- STANDARD V DITCH
- ABANDON/REMOVE DRAINAGE

SCALE 0 100' 200'

PROFILE - WESTBOUND LANES

EXISTING GROUND

PROPOSED GRADE

-0.80%

-2.39%

ST.A = 2460+30.00
EL = 76.44
SSD = 1084'
ex = 1.59'
K = 508
L = 803.27
V = 80 MPH

END PROJECT 0064-965-229,C501
STA.2466+14.00 WB CONSTR BL

62.51'

20 FT

0 FT 100 FT

2445+00.00 2450+00.00 2455+00.00 2460+00.00 2465+00.00

PROFILE - EASTBOUND LANES

PROPOSED GRADE

EXISTING GROUND

-0.74%

-1.73%

ST.A = 1459+50.00
EL = 77.60
SSD = 1357'
ex = -0.65'
K = 537
L = 530.00
V = 80 MPH

END PROJECT 0064-965-229,C501
STA.1466+46.00 EB CONSTR BL

65.58'

1445+00.00 1450+00.00 1455+00.00 1460+00.00 1465+00.00

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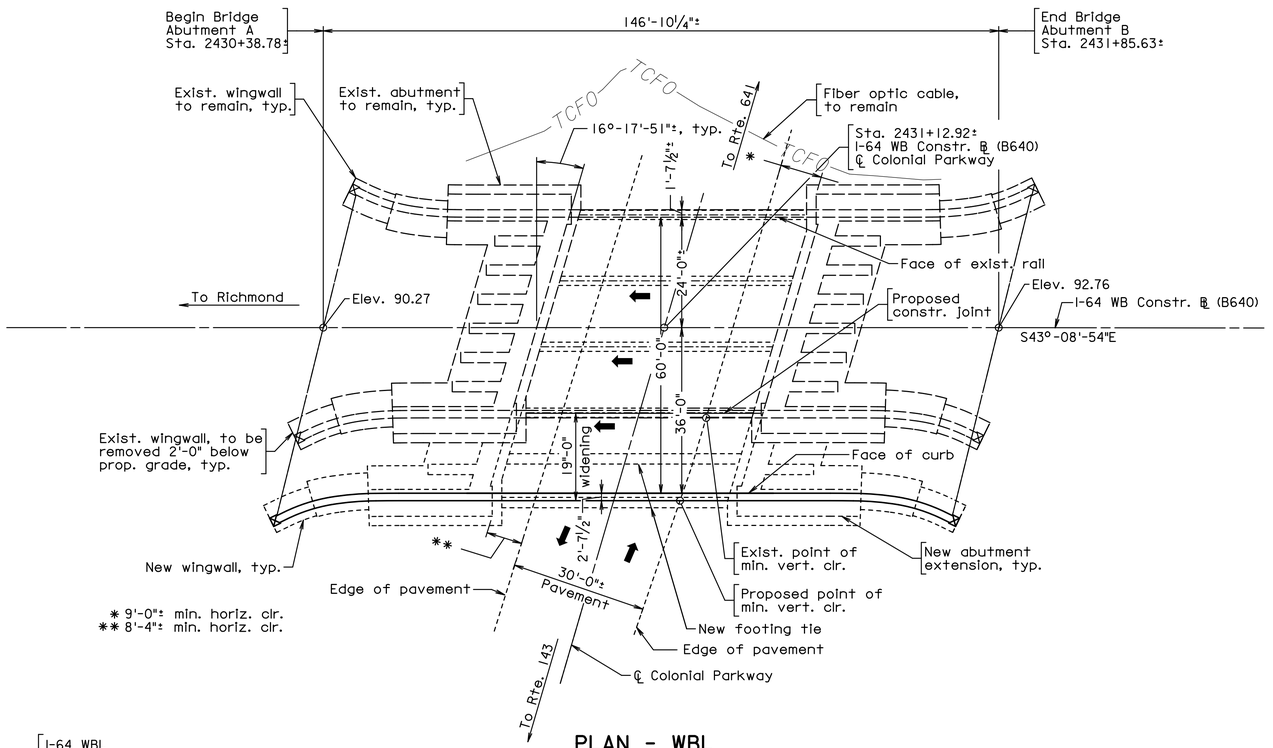
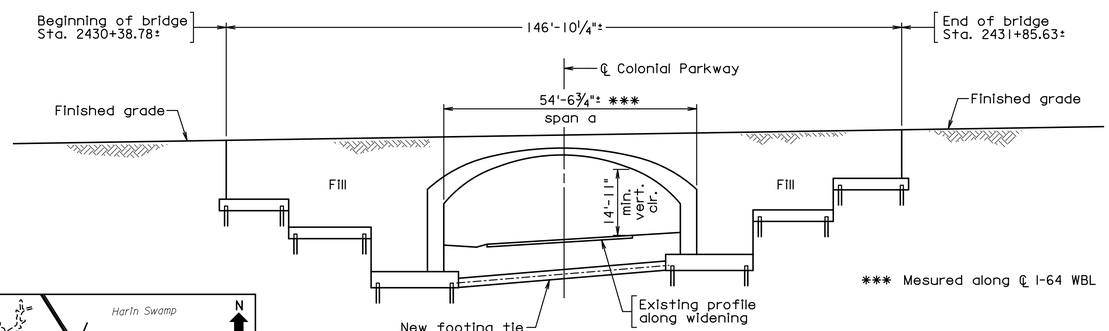


PLAN - WBL

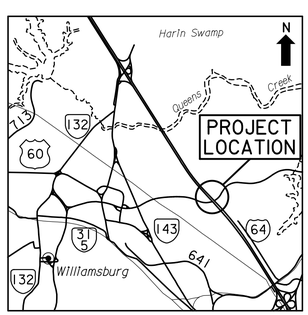
I-64 WBL
C.G. Sta. 2428+90.00
C.G. Elev. 90.28
V.C. Length = 680

+3.00% +0.85%



ABUTMENT A ABUTMENT B

DEVELOPED SECTION ALONG WIDENING



LOCATION MAP
Not to scale

STATE	FEDERAL AID		STATE		SHEET NO.
	ROUTE	PROJECT	ROUTE	PROJECT	
VA.	—	---	64	0064-965-229, B639, B640	1
NBIS Number: 000000000019840 000000000019838			UPC No. 106689		
Federal Oversight Code: N/A			FHWA Construction and Scour Code: X224-SN		

DESIGN EXCEPTION(S):

None

GENERAL NOTES:

Width: 60'-0" face of rail to face of curb, includes widening of 19'-0" on median side.

Span layout: 54'-6¾"± WBL, 57'-9½"± EBL

Capacity: HL-93 loading. (Widened portion only)

Specifications:

Construction: Virginia Department of Transportation Road and Bridge Specifications, 2016.

Design: AASHTO LRFD Bridge Design Specifications, 7th Edition, 2014; and VDOT Modifications.

Standards: Virginia Department of Transportation Road and Bridge Standards, 2016.

These plans are incomplete unless accompanied by the Supplemental Specifications and Special Provisions included in the contract documents.

Design loading includes 10 psf allowance for construction tolerances and construction methods. (Widened portion only)

Design loading includes 15 psf allowance for future wearing surface. (Widened portion only)

Bridge No. of existing bridge are 2006 (WBL) and 2005 (EBL). Plan No. is 163-19.

b16319A001.dgn

RECOMMENDED FOR APPROVAL FOR CONSTRUCTION
VDOT PROJECT MANAGER
DISTRICT CONSTRUCTION MANAGER
WSP USA VIRGINIA BEACH, VA STRUCTURAL ENGINEER

PLANS BY:	WSP USA
COORDINATED:	
SUPERVISED:	WSP USA
DESIGNED:	WSP USA
DRAWN:	WSP USA
CHECKED:	WSP USA

PRELIMINARY PLANS

THESE PLANS NOT TO BE USED FOR CONSTRUCTION

Scale 1/16" = 1'-0"

No.	Description	Date
REVISIONS		
For Table of Revisions, see Sheet 2.		

SKANSKA WSP

VDOT

COMMONWEALTH OF VIRGINIA

DEPARTMENT OF TRANSPORTATION

PROPOSED BRIDGE WIDENING ON I-64 OVER COLONIAL PARKWAY YORK COUNTY - 3.7 MI. W. YORK CO./ CITY OF NEWPORT NEWS LINE PROJ. NO. 0064-965-229, B639, B640

Recommended for Approval: _____ Designee/Developer Date

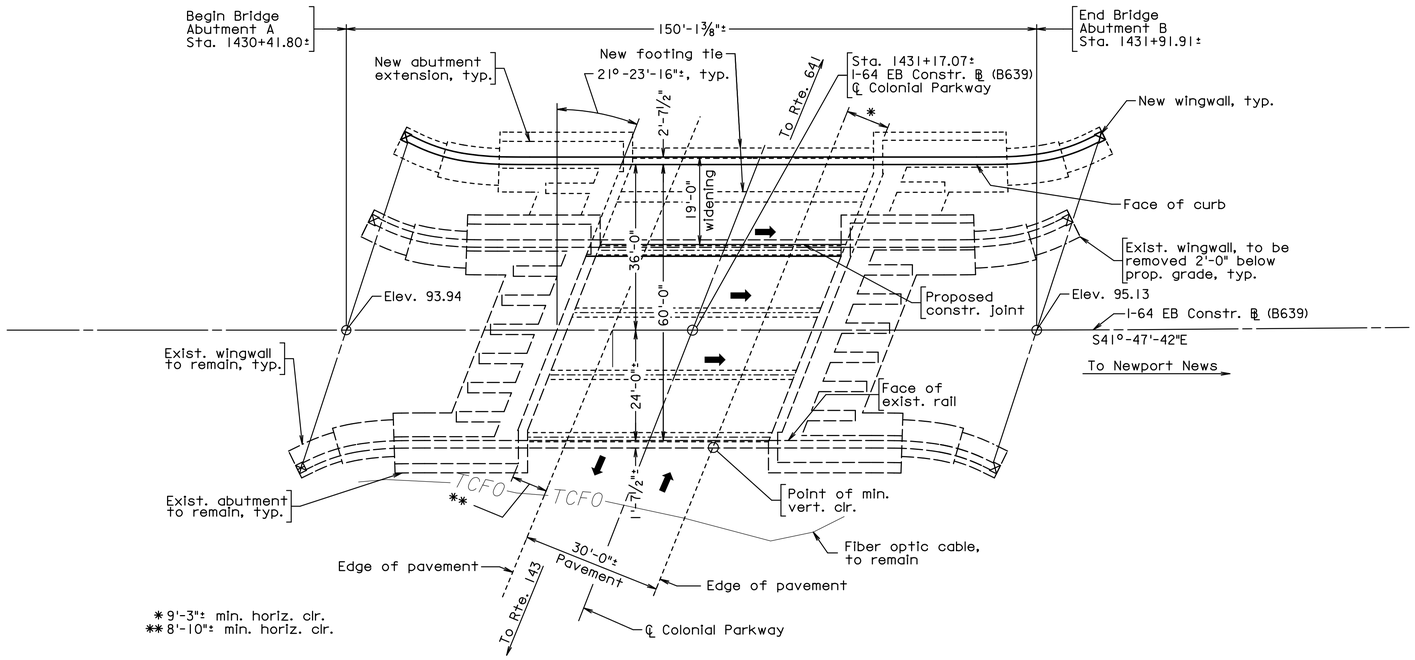
Approved: _____ Chief Engineer Date

Date: Aug., 2017

163-19A

Sheet 1 of 3

STATE	FEDERAL AID		STATE		SHEET
	ROUTE	PROJECT	ROUTE	PROJECT	NO.
VA.	—		64	0064-965-229, B639, B640	2



PLAN - EBL

Note:

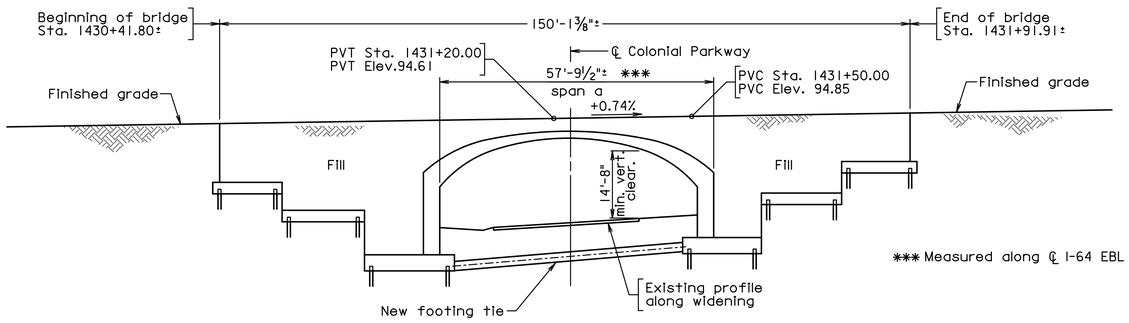
1. For General Notes, see sheet 1.

I-64 EBL
C.G. Sta. 1427+75.00
C.G. Elev. 92.06
V.C. Length = 690

+2.95% +0.74%

I-64 EBL
C.G. Sta. 1433+85.00
C.G. Elev. 96.59
V.C. Length = 470

+0.74% -0.74%



ABUTMENT A ABUTMENT B

DEVELOPED SECTION ALONG WIDENING

b16319A002.dgn

WSP USA
VIRGINIA BEACH, VA
STRUCTURAL ENGINEER

Scale 1/16" = 1'-0"

SKANSKA wsp

PRELIMINARY PLANS
THESE PLANS NOT TO BE USED FOR CONSTRUCTION

No.	Description	Date
	Revisions	

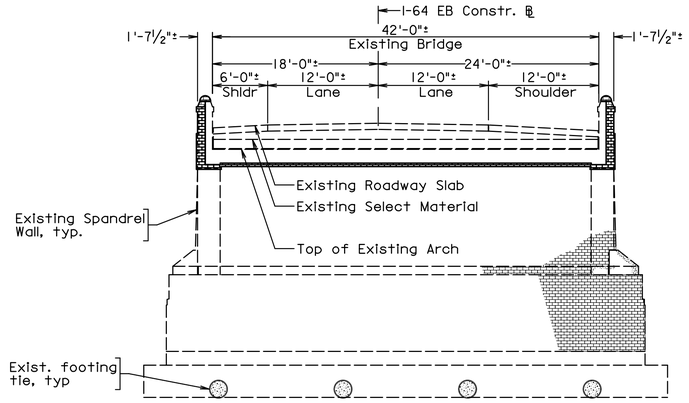
COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION

STRUCTURE AND BRIDGE DIVISION

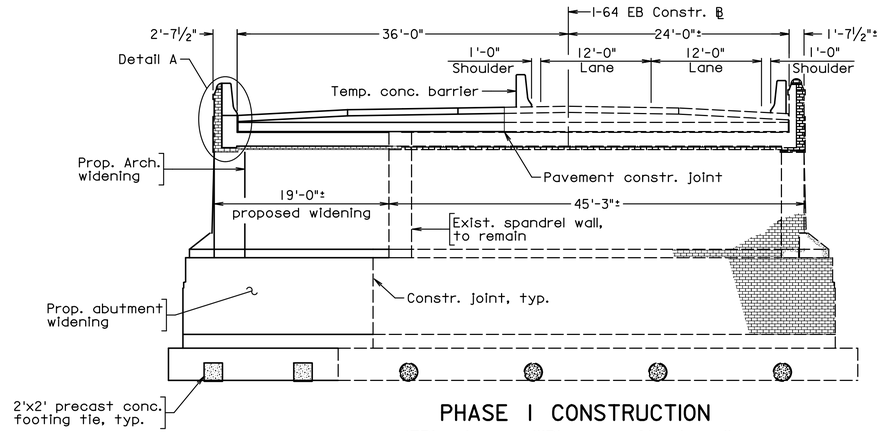
GENERAL PLAN AND ELEVATION (2 OF 2)

Designed: WSP	Date	Plan No.	Sheet No.
Drawn: WSP			
Checked: WSP	Aug. 2017	163-19A	2

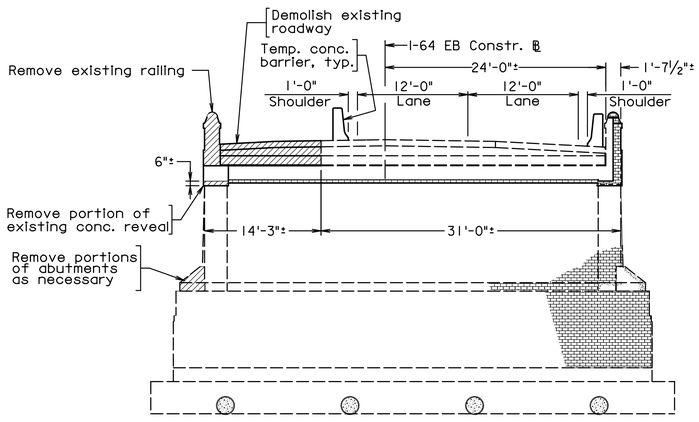
STATE	FEDERAL AID		STATE		SHEET NO.
	ROUTE	PROJECT	ROUTE	PROJECT	
VA.	——		64	0064-965-229, B639, B640	3



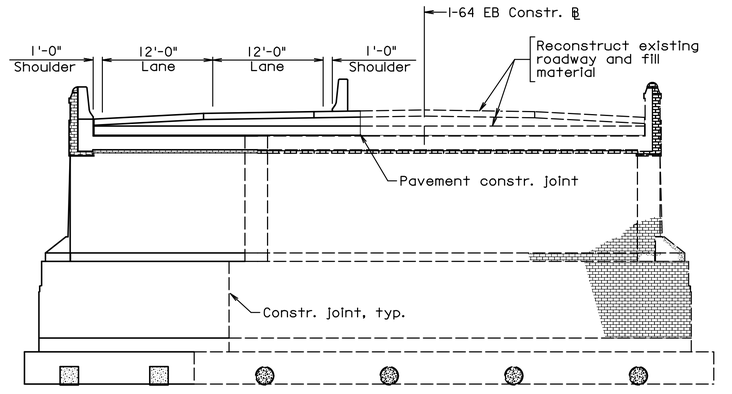
EXISTING BRIDGE - TRANSVERSE SECTION
(EBL shown, WBL opposite hand)



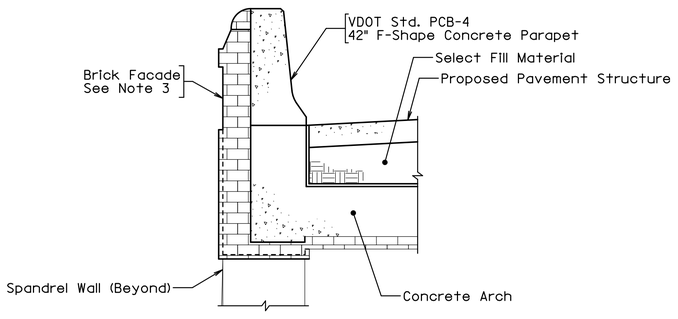
PHASE I CONSTRUCTION
(EBL shown, WBL opposite hand)



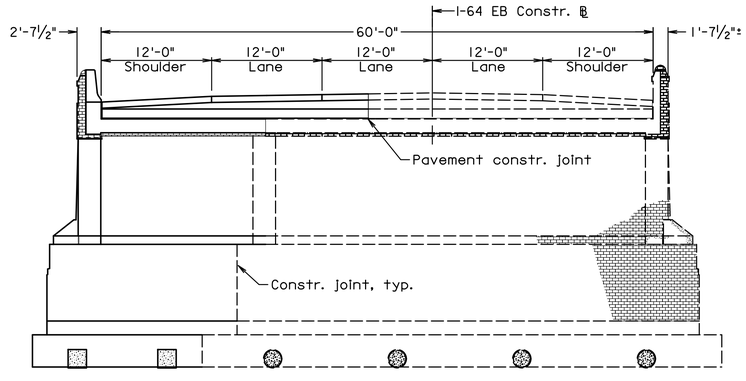
PHASE I DEMOLITION
(EBL shown, WBL opposite hand)



PHASE 2
(EBL shown, WBL opposite hand)



DETAIL A
(Not to Scale)



FINAL CONFIGURATION
(EBL shown, WBL opposite hand)

Notes:

1. All sections shown looking station ahead (to the east).
2. Maintenance of Traffic notes:

   Phase 1, Stage 1: Install temporary traffic controls and shift traffic towards the outside of the existing bridge, maintaining two 12'-0" lanes. Remove existing portions of abutments, railing and spandrel wall as necessary and portion of the existing roadway from median side of existing bridge.

   Phase 1, Stage 2: Construct proposed bridge widening by matching geometry of the existing arch. Proposed arch shall be cast-in-place concrete.

   Phase 2: Shift traffic to the previously constructed widening, providing two 12'-0" lanes. Replace the remaining portion of the existing roadway and fill material.

   Final: Remove temporary barrier and shift traffic to final alignment.
3. Masonry and aesthetics of proposed widening shall match the existing bridge.

Legend:

Denotes portion of existing structure to be removed

b16319A003.dgn

WSP USA
VIRGINIA BEACH, VA
STRUCTURAL ENGINEER

Scale 1/8" = 1'-0"

SKANSKA wsp

PRELIMINARY PLANS
THESE PLANS NOT TO BE USED FOR CONSTRUCTION

No.	Description	Date
	Revisions	

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION
STRUCTURE AND BRIDGE DIVISION

SEQUENCE OF CONSTRUCTION

Designed: WSP	Date	Plan No.	Sheet No.
Drawn: WSP	Aug. 2017	163-19A	3
Checked: WSP			

STATE	FEDERAL AID		STATE		SHEET NO.
	ROUTE	PROJECT	ROUTE	PROJECT	
VA.	—	---	64	0064-965-229, B638, B641	1
NBIS Number: 000000000019836 000000000019834			UPC No. 106689		
Federal Oversight Code: N/A			FHWA Construction and Scour Code: X281-SN		

DESIGN EXCEPTION(S):

None

GENERAL NOTES:

Width: 60'-0" face of rail to face of curb; includes widening of 21'-2" on median side.

Span layout: 51'-6¾"± - 50'-4"± - 51'-6¾"± WBL
51'-7½"± - 50'-4"± - 51'-7½"± EBL

Capacity: HL-93 loading. (Widened portion only)

Specifications:

Construction: Virginia Department of Transportation Road and Bridge Specifications, 2016.

Design: AASHTO LRFD Bridge Design Specifications, 7th Edition, 2014; and VDOT Modifications.

Standards: Virginia Department of Transportation Road and Bridge Standards, 2016.

These plans are incomplete unless accompanied by the Supplemental Specifications and Special Provisions included in the contract documents.

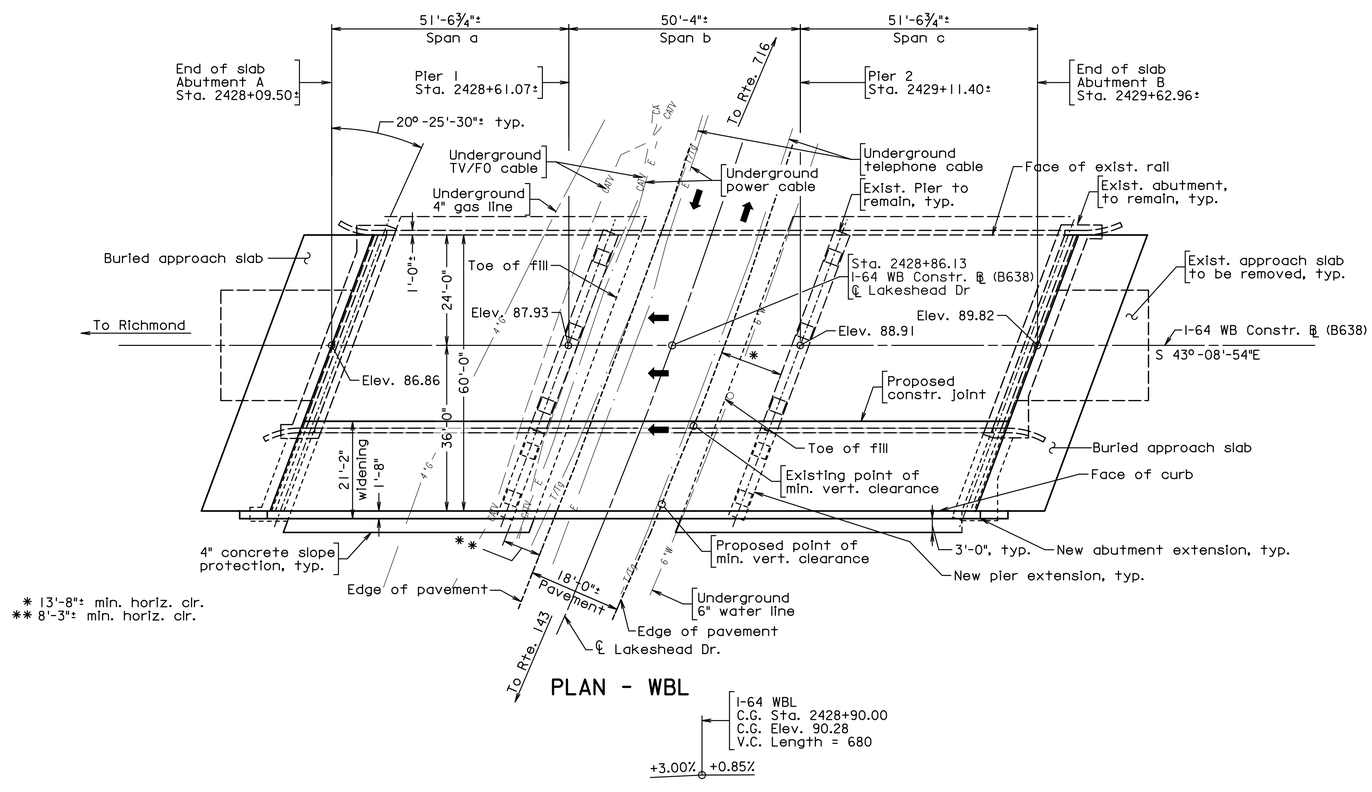
Design loading includes 20 psf allowance for construction tolerances and construction methods. (Widened portion only)

Design loading includes 15 psf allowance for future wearing surface. (Widened portion only)

Bridge No. of existing bridges are 2004 (WB) and 2003 (EB). Plan No. is 163-18.

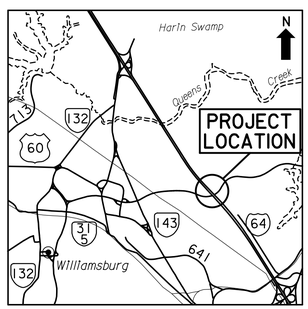
Utilities shown in Plan view which conflict with new foundations will be relocated. All other utilities are to remain in place.

The need for pier protection barrier adjacent to Lakeshead Drive to be determined.



PLAN - WBL

DEVELOPED SECTION ALONG WIDENING



LOCATION MAP
Not to scale

RECOMMENDED FOR APPROVAL FOR CONSTRUCTION
VDOT PROJECT MANAGER
DISTRICT CONSTRUCTION MANAGER
WSP USA VIRGINIA BEACH, VA STRUCTURAL ENGINEER

PLANS BY:	WSP USA
COORDINATED:	
SUPERVISED:	WSP USA
DESIGNED:	WSP USA
DRAWN:	WSP USA
CHECKED:	WSP USA

PRELIMINARY PLANS

THESE PLANS NOT TO BE USED FOR CONSTRUCTION

Scale 1/16" = 1'-0"

No.	Description	Date

REVISIONS

For Table of Revisions, see Sheet 2.

SKANSKA WSP

VDOT

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION

PROPOSED BRIDGE WIDENING ON I-64 OVER RTE. 1314 (LAKESHEAD DRIVE) YORK COUNTY - 3.7 MI. W. YORK CO./ CITY OF NEWPORT NEWS LINE PROJ. NO. 0064-965-229, B638, B641

Recommended for Approval: _____ Designee/Developer Date

Approved: _____ Chief Engineer Date

Date: Aug., 2017

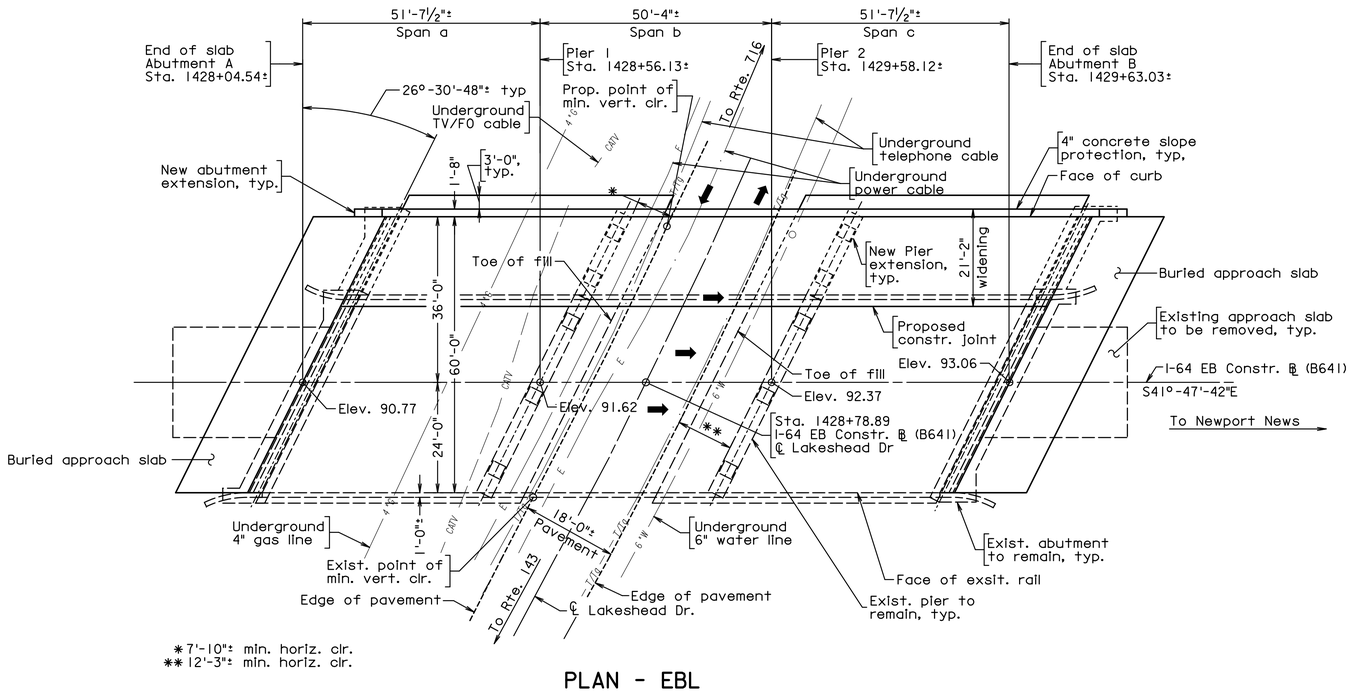
163-18A

Sheet 1 of 3

b16318A001.dgn

STATE	FEDERAL AID		STATE		SHEET NO.
	ROUTE	PROJECT	ROUTE	PROJECT	
VA.	—		64	0064-965-229, B638, B641	2

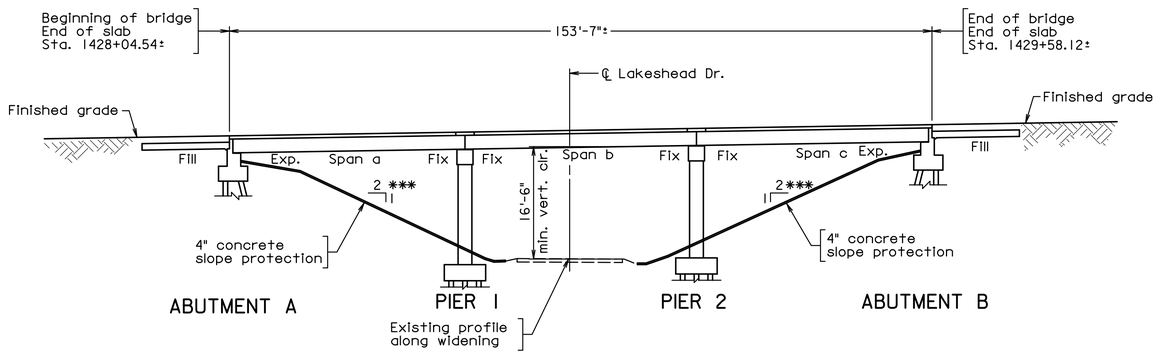
Note:
1. For General Notes, see sheet 1.



∗ 7'-10"± min. horiz. clr.
∗∗ 12'-3"± min. horiz. clr.

PLAN - EBL

I-64 EBL
C.G. Sta. 1427+75.00
C.G. Elev. 92.06
V.C. Length = 690
+2.95% +0.74%



*** Normal to abutment

DEVELOPED SECTION ALONG WIDENING

b163 18A002.dgn

WSP USA
VIRGINIA BEACH, VA
STRUCTURAL ENGINEER

Scale 1/16" = 1'-0"

SKANSKA wsp

PRELIMINARY PLANS
THESE PLANS NOT TO BE USED FOR CONSTRUCTION

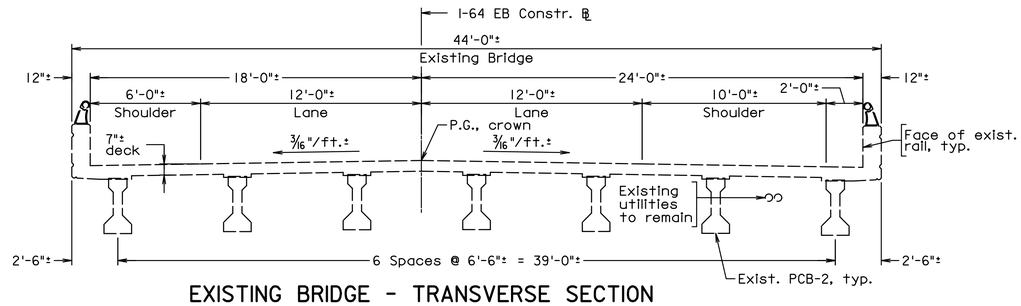
No.	Description	Date
	Revisions	

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION
STRUCTURE AND BRIDGE DIVISION

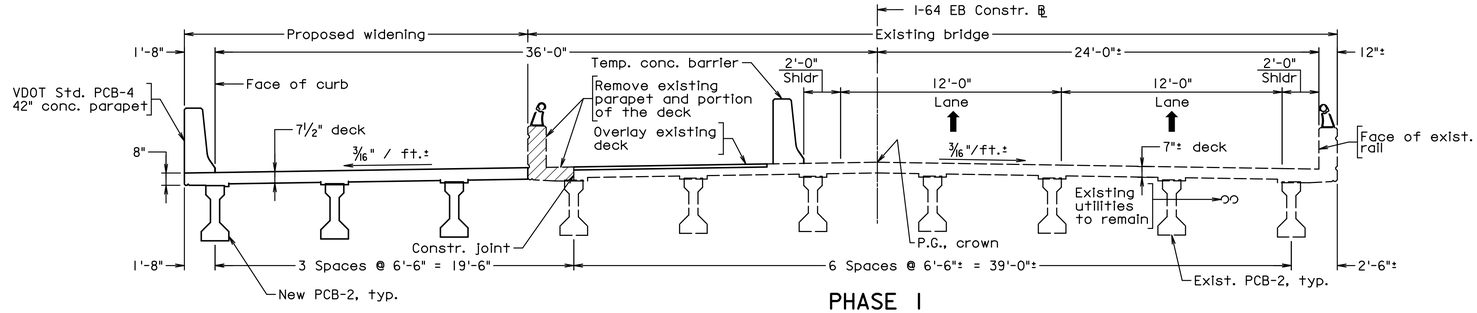
GENERAL PLAN AND ELEVATION (2 OF 2)

Designed: WSP	Date	Plan No.	Sheet No.
Drawn: WSP	Aug. 2017	163-18A	2
Checked: WSP			

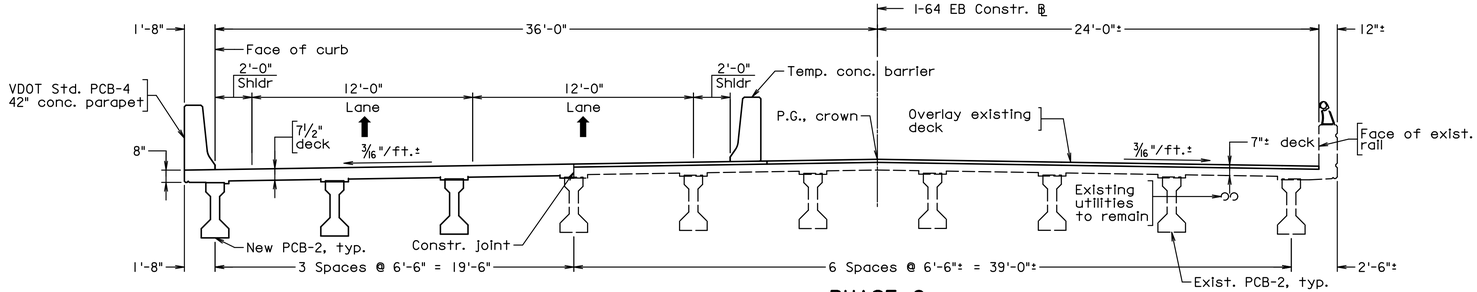
STATE	FEDERAL AID		STATE		SHEET NO.
	ROUTE	PROJECT	ROUTE	PROJECT	
VA.	—		64	0064-965-229, B638, B641	3



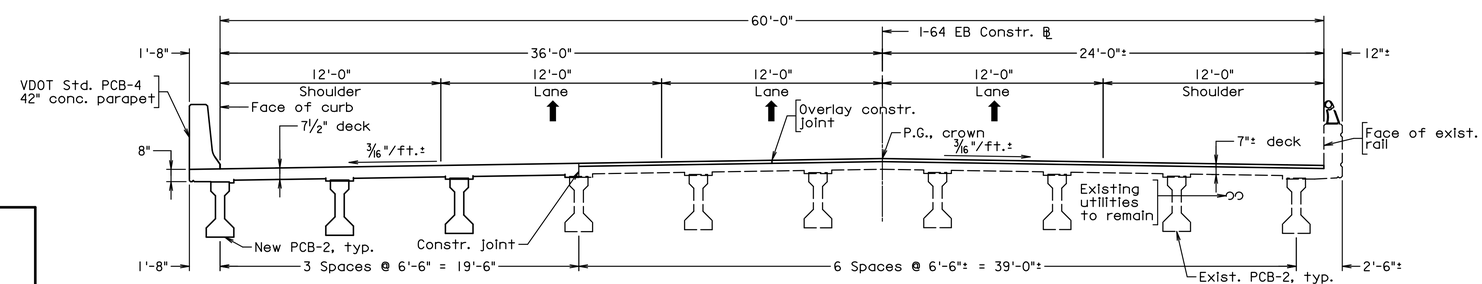
EXISTING BRIDGE - TRANSVERSE SECTION
(EBL shown, WBL opposite hand)



PHASE 1
(EBL shown, WBL opposite hand)



PHASE 2
(EBL shown, WBL opposite hand)



FINAL CONFIGURATION
(EBL shown, WBL opposite hand)

Notes:

1. All section shown looking station ahead (to the east).
2. Maintenance of Traffic Notes:

   Phase 1, Stage 1: Install temporary traffic controls and shift traffic towards the outside of the existing bridge, maintaining two 12'-0" lanes. Remove parapet and existing portion of deck from median side of existing bridge. Perform bearing replacement under existing beams. Jacking and blocking operations to be done during temporary nighttime closures.

   Phase 1, Stage 2: Construct proposed bridge widening. Longitudinal construction joint shall be located over the existing beam/girder line. Perform deck patching as required and place portion of new concrete overlay on existing deck. Close portion of existing joints over the piers, and extend deck slabs over the backwalls

   Phase 2: Shift traffic to the previously constructed widening, providing two 12'-0" lanes. Perform deck patching as required and place new concrete overlay on existing deck. Close the existing joints over the piers, and extend deck slabs over the backwalls.

   Final: Remove temporary barrier and shift traffic to final alignment.

Legend:

Denotes portion of existing structure to be removed

b163_18A003.dgn

WSP USA
VIRGINIA BEACH, VA
STRUCTURAL ENGINEER

Scale 1/4" = 1'-0"

SKANSKA WSP

PRELIMINARY PLANS
THESE PLANS NOT TO BE USED FOR CONSTRUCTION

No.	Description	Date
	Revisions	

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION
STRUCTURE AND BRIDGE DIVISION

SEQUENCE OF CONSTRUCTION

Designed: WSP	Date	Plan No.	Sheet No.
Drawn: WSP	Aug. 2017	163-18A	3
Checked: WSP			

STATE	FEDERAL AID		STATE		SHEET NO.
	ROUTE	PROJECT	ROUTE	PROJECT	
VA.	——	---	64	0064-965-229, B642, B643	1
NBIS Number: 000000000019842 000000000019843			UPC No. 106689		
Federal Oversight Code: N/A			FHWA Construction and Scour Code: X081-S5		

DESIGN EXCEPTION(S):

None

GENERAL NOTES:

Width: 60'-0" face-to-face of curbs.

Span layout: 10 spans @ 75'-0", 2 spans @ 80'-0" (WBL); 10 spans @ 75'-0", 2 spans @ 80'-0" (EBL) prestressed concrete 45" deep bulb-T beam spans continuous for live load.

Capacity: HL-93 loading.

Drainage area: Tidal

Specifications:

Construction: Virginia Department of Transportation Road and Bridge Specifications, 2016.

Design: AASHTO LRFD Bridge Design Specifications, 7th Edition, 2014; and VDOT Modifications.

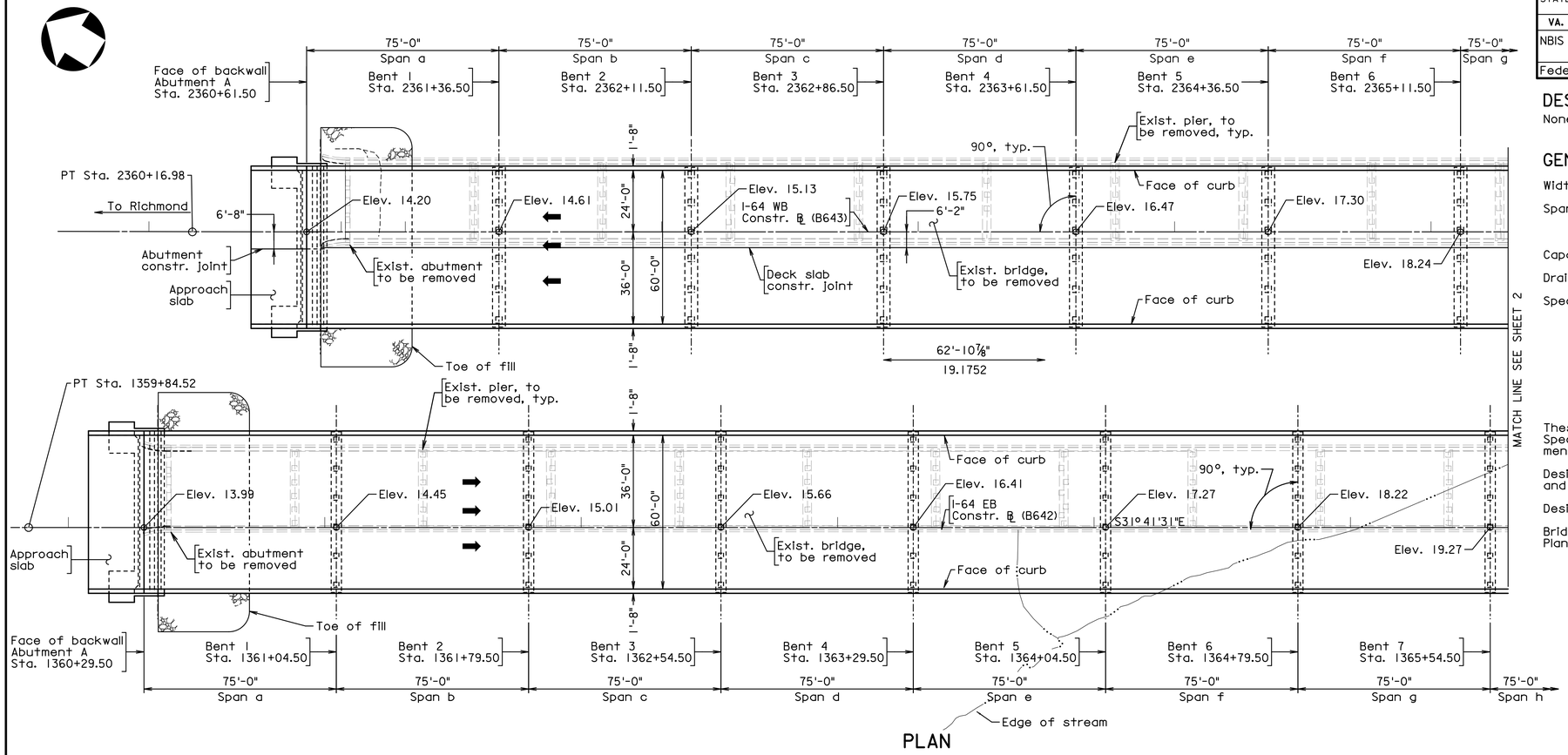
Standards: Virginia Department of Transportation Road and Bridge Standards, 2016.

These plans are incomplete unless accompanied by the Supplemental Specifications and Special Provisions included in the contract documents.

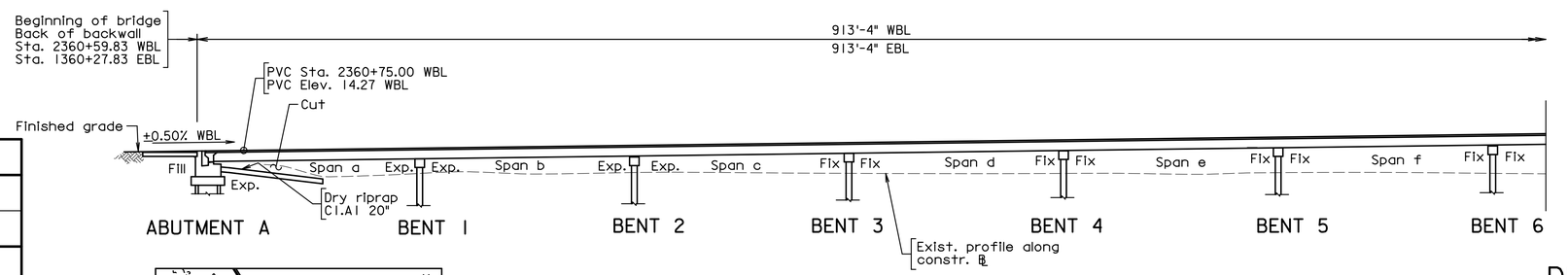
Design loading includes 20 psf allowance for construction tolerances and construction methods.

Design loading includes 15 psf allowance for future wearing surface.

Bridge No. of existing bridge are 2007 (EB) and 2008 (WB). Existing Plan No. is 163-16.

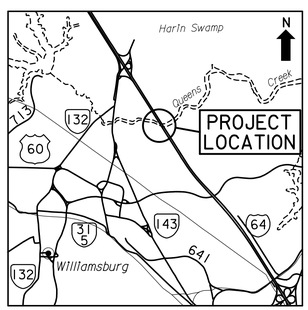


PLAN



DEVELOPED SECTION ALONG CONSTR. ℄

WBL SHOWN, EBL SIMILAR



LOCATION MAP

Not to scale

PRELIMINARY PLANS

THESE PLANS NOT TO BE USED FOR CONSTRUCTION

Scale 1" = 300'

No.	Description	Date

REVISIONS

For Table of Revisions, see Sheet 2.

RECOMMENDED FOR APPROVAL FOR CONSTRUCTION
VDOT PROJECT MANAGER
DISTRICT CONSTRUCTION MANAGER
WSP USA VIRGINIA BEACH, VA STRUCTURAL ENGINEER

PLANS BY:	WSP USA
COORDINATED:	
SUPERVISED:	WSP USA
DESIGNED:	WSP USA
DRAWN:	WSP USA
CHECKED:	WSP USA

b163 16A001.dgn

VDOT

COMMONWEALTH OF VIRGINIA

DEPARTMENT OF TRANSPORTATION

PROPOSED BRIDGE REPLACEMENT ON I-64 OVER QUEEN CREEK YORK COUNTY - 4.9 MI. W. YORK CO./ CITY OF NEWPORT NEWS LINE PROJ. NO. 0064-965-229, B642, B643

Recommended for Approval: _____ Designee/Developer Date

Approved: _____ Chief Engineer Date

Date: Aug., 2017

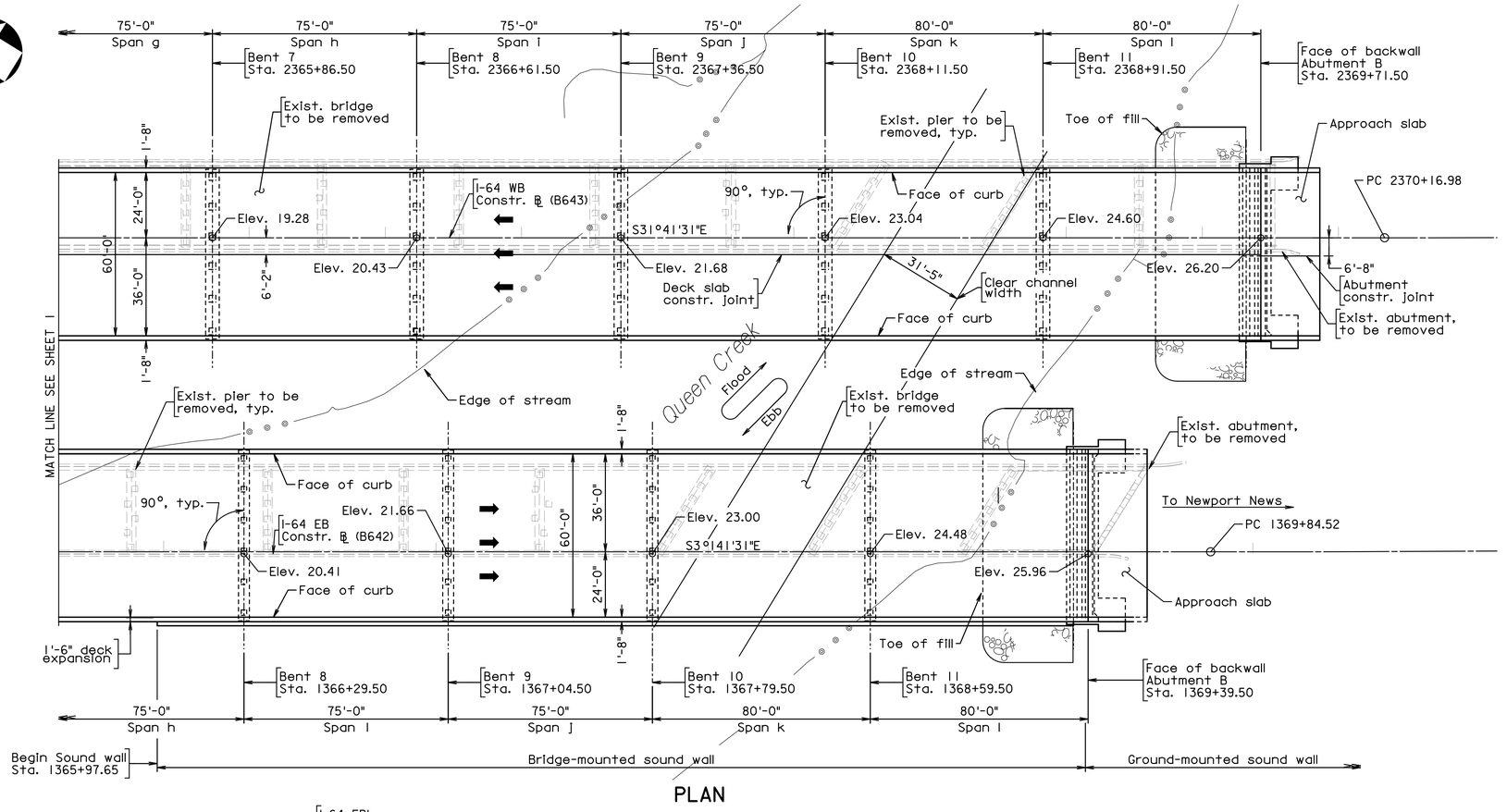
163-16A

Sheet 1 of 4

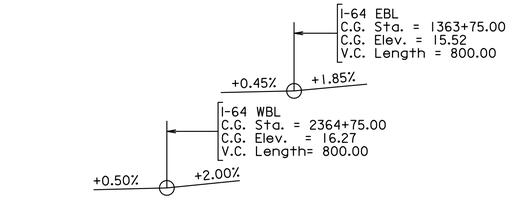
STATE	FEDERAL AID		STATE		SHEET NO.
	ROUTE	PROJECT	ROUTE	PROJECT	
VA.	—		64	0064-968-229, B642, B643	2

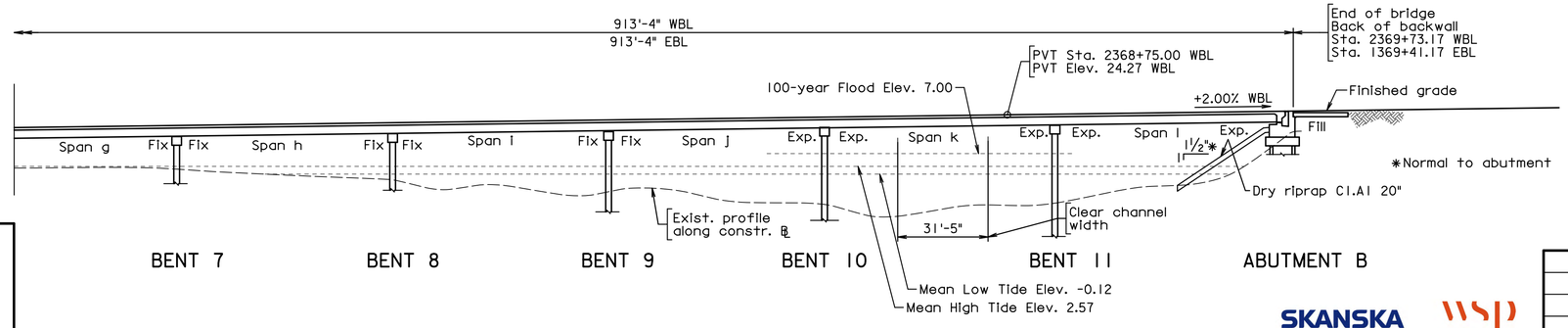
Note:

1. For General Notes, see sheet 1.



PLAN





DEVELOPED SECTION ALONG CONSTR. ℄

WBL SHOWN, EBL SIMILAR

Scale 1" = 300'

PRELIMINARY PLANS

THESE PLANS NOT TO BE USED FOR CONSTRUCTION

No.	Description	Date
	Revisions	

WSP USA
VIRGINIA BEACH, VA
STRUCTURAL ENGINEER

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION

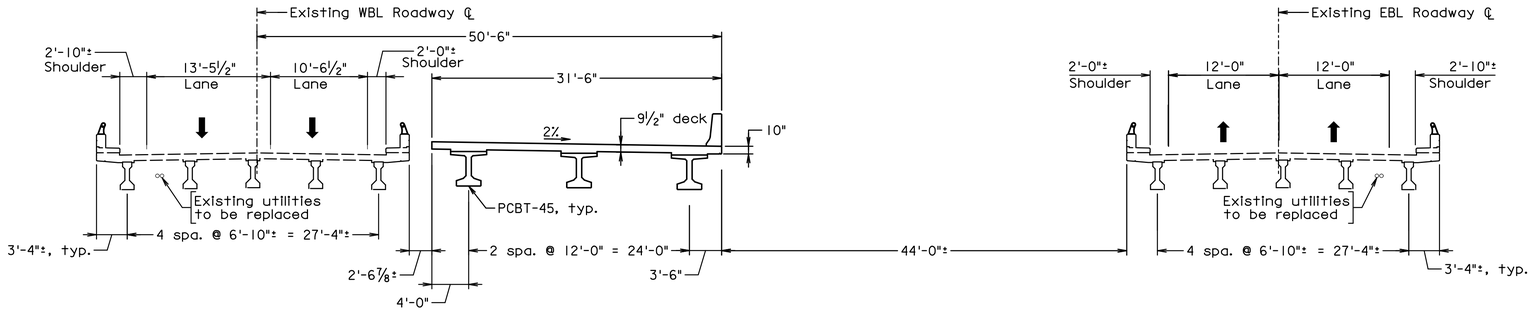
STRUCTURE AND BRIDGE DIVISION

GENERAL PLAN AND ELEVATION (2 OF 2)

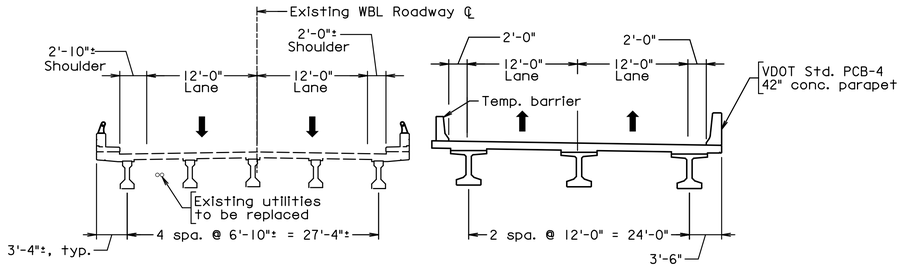
Designed: WSP	Date	Plan No.	Sheet No.
Drawn: WSP	Aug. 2017	163-16A	2
Checked: WSP			

b163116A002.dgn

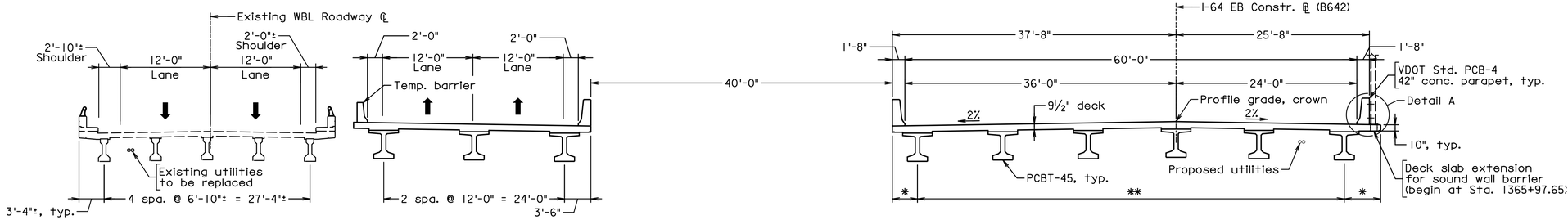
STATE	FEDERAL AID		STATE		SHEET NO.
	ROUTE	PROJECT	ROUTE	PROJECT	
VA.	——		64	0064-968-229, B642, B643	3



PHASE 1 CONSTRUCTION AND MOT



PHASE 2, STAGE 1 DEMOLITION AND MOT



PHASE 2, STAGE 2 CONSTRUCTION AND MOT

* 3'-4", spans a thru g
Varies 3'-4" to 3'-5½", span h
3'-5½", spans i thru l

** 5 spa. @ 11'-4" = 56'-8", spans a thru g
Spa. varies 11'-4" to 11'-7", span h
5 spa. @ 11'-7" = 57'-11", spans i thru l

Notes:

1. All sections shown looking station ahead (to the east).
2. Maintenance of Traffic Notes:

   Phase 1: Construct portion of the proposed WBL bridge on the median side of the existing WBL bridge that can accomodate two 12'-0 lanes.

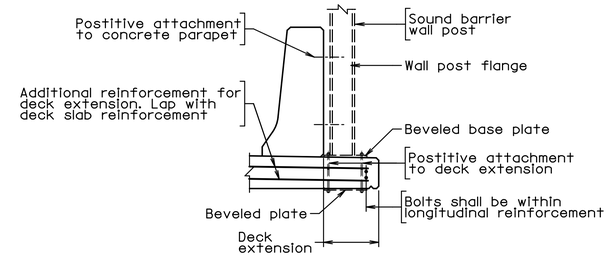
   Phase 2: Use approach crossover to shift two existing EB travel lanes to proposed structure adjacent to existing WB bridge. Once crossover is complete demolish existing EB structure and construct entire proposed EBL bridge.

   Phase 3: Shift EB traffic to the newly constructed EB bridge, then use crossover to shift WB traffic to the newly constructed EB bridge. Maintain two 12'-0" lanes in each direction. Demolish existing WB structure and construct proposed WBL bridge.

   Final: Shift WB traffic back to proposed WB structure, remove temporary barrier and shift traffic to final alignment.

Legend:

Denotes existing sturcture to be removed



DETAIL A
Not to scale

b16316A003.dgn

WSP USA
VIRGINIA BEACH, VA
STRUCTURAL ENGINEER

Scale ⅛" = 1'-0" unless noted otherwise

SKANSKA wsp

PRELIMINARY PLANS
THESE PLANS NOT TO BE USED FOR CONSTRUCTION

No.	Description	Date
	Revisions	

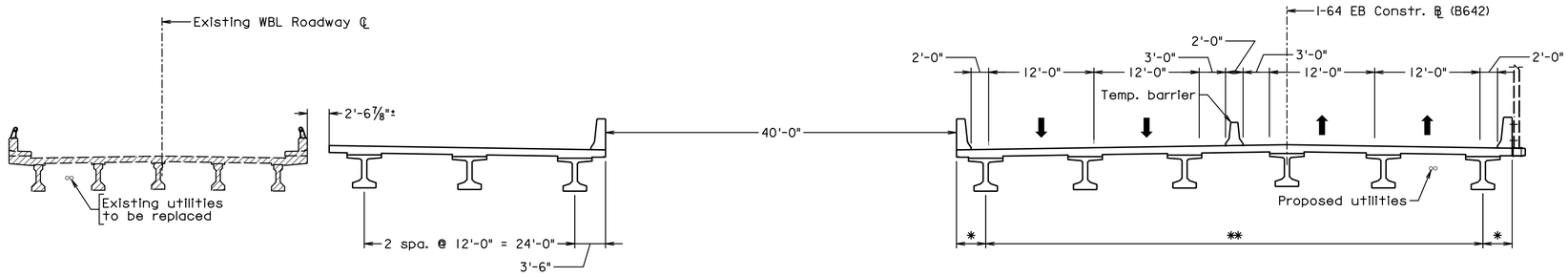
COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION

STRUCTURE AND BRIDGE DIVISION

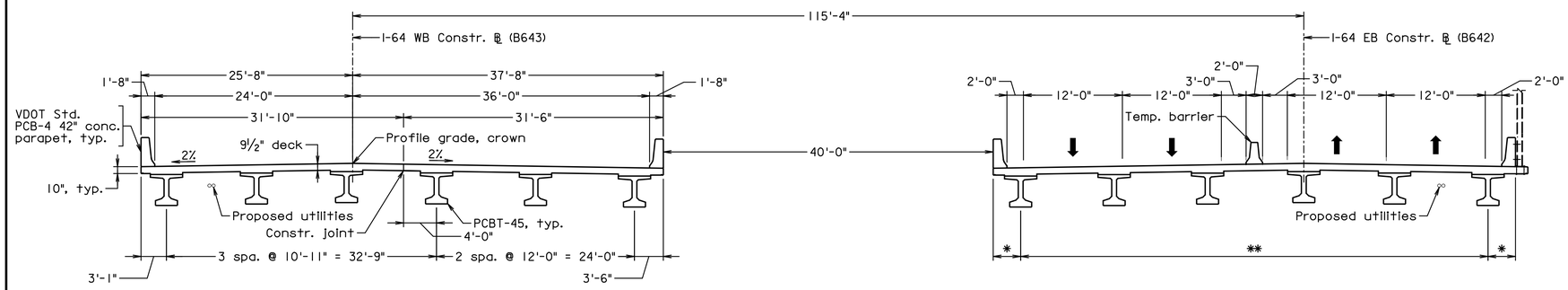
SEQUENCE OF CONSTRUCTION (1 OF 2)

Designed: WSP	Date	Plan No.	Sheet No.
Drawn: WSP	Aug. 2017	163-16A	3
Checked: WSP			

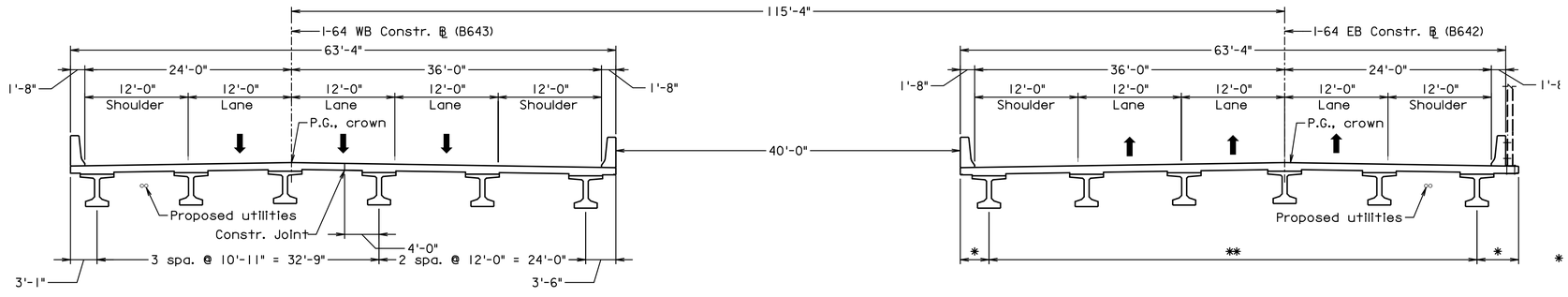
STATE	FEDERAL AID		STATE		SHEET NO.
	ROUTE	PROJECT	ROUTE	PROJECT	
VA.	—		64	0064-968-229, B642, B643	4



PHASE 3, STAGE 1 DEMOLITION AND MOT



PHASE 3, STAGE 2 CONSTRUCTION AND MOT



FINAL CONFIGURATION

Notes:

1. All sections shown looking station ahead (to the east).
2. Maintenance of Traffic notes:

   Phase 1: Construct portion of the proposed WBL bridge on the median side of the existing WBL bridge that can accomodate two 12'-0 lanes.

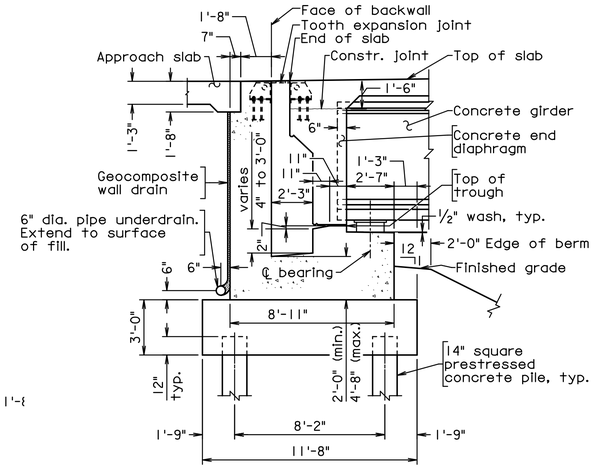
   Phase 2: Use approach crossover to shift two existing EB travel lanes to proposed structure adjacent to existing WB bridge. Once crossover is complete demolish existing EB structure and construct entire proposed EBL bridge.

   Phase 3: Shift EB traffic to the newly constructed EB bridge, then use crossover to shift WB traffic to the newly constructed EB bridge. Maintain two 12'-0" lanes in each direction. Demolish existing WB structure and construct proposed WBL bridge.

   Final: Shift WB traffic back to proposed WB structure, remove temporary barrier and shift traffic to final alignment.

Legend:

Denotes existing structure to be removed.



TYPICAL ABUTMENT SECTION

Scale ¼" = 1'-0"

* 3'-4", spans a thru g
  Varies 3'-4" to 3'-5½", span h
  3'-5½", spans i thru l

** 5 spa. @ 11'-4" = 56'-8", spans a thru g
   Spa. varies 11'-4" to 11'-7", span h
   5 spa. @ 11'-7" = 57'-11", spans i thru l

Scale ⅛" = 1'-0"

b16316A004.dgn

WSP USA
VIRGINIA BEACH, VA
STRUCTURAL ENGINEER

SKANSKA wsp

PRELIMINARY PLANS
THESE PLANS NOT TO BE USED FOR CONSTRUCTION

No.	Description	Date
	Revisions	

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION

STRUCTURE AND BRIDGE DIVISION

SEQUENCE OF CONSTRUCTION (2 OF 2)

Designed: WSP	Date	Plan No.	Sheet No.
Drawn: WSP	Aug. 2017	163-16A	4
Checked: WSP			

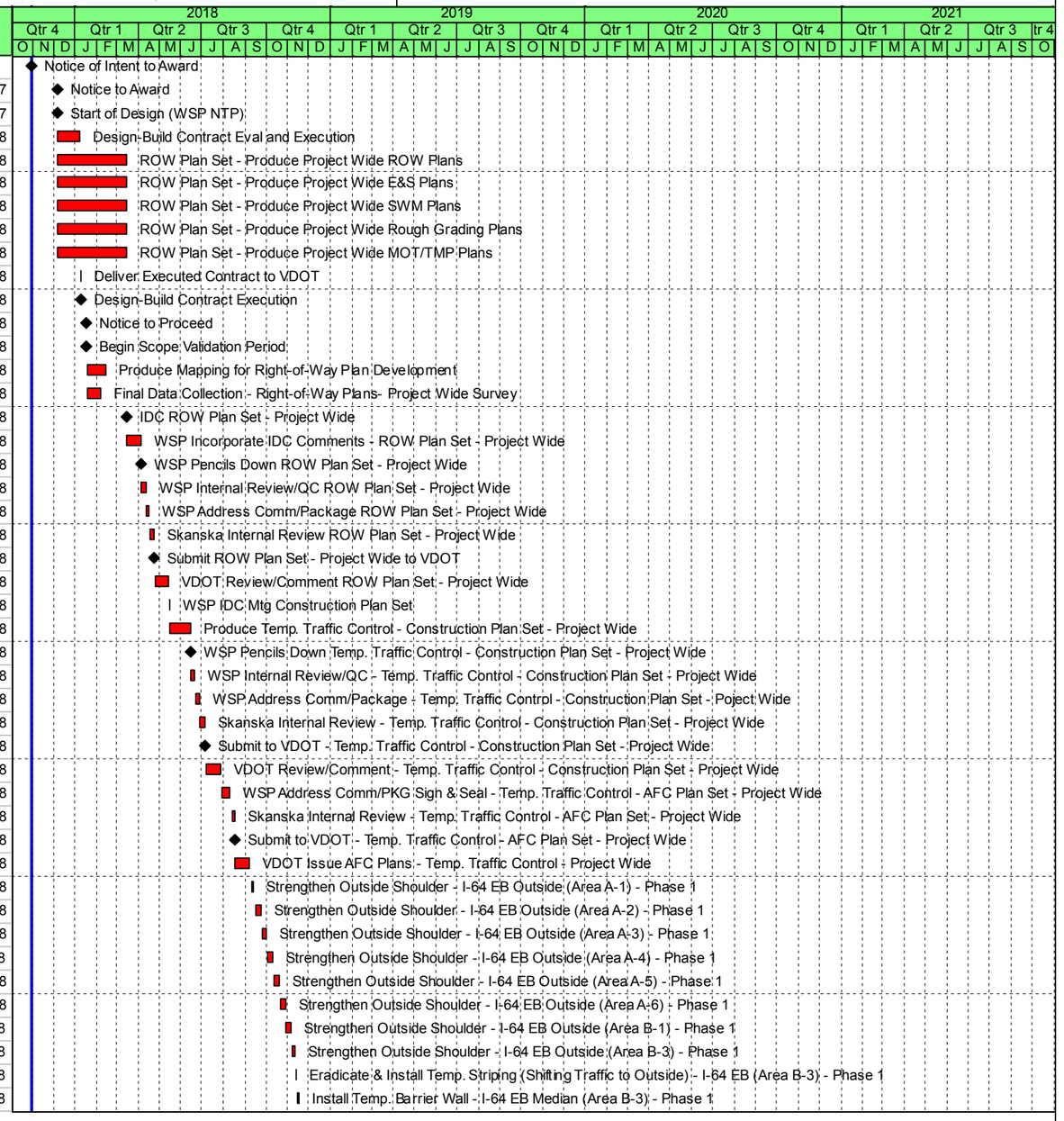
4.7 Proposal Schedule

SKANSKA

I-64 Capacity Improvements - Segment III

Proposal Date: September 14, 2017

Activity ID	Activity Name	Original Duration	Start	Finish
MILE.NOI	Notice of Intent to Award	0	10-30-17	
MILE.NOA	Notice to Award	0		12-06-17
MILE.DGN.START	Start of Design (WSP NTP)	0		12-06-17
CONT.EXEC	Design-Build Contract Eval and Execution	20	12-07-17	01-08-18
DGN.PW.ROW.005	ROW Plan Set - Produce Project Wide ROW Plans	66	12-07-17	03-15-18
DGN.PW.ROW.010	ROW Plan Set - Produce Project Wide E&S Plans	66	12-07-17	03-15-18
DGN.PW.ROW.015	ROW Plan Set - Produce Project Wide SWM Plans	66	12-07-17	03-15-18
DGN.PW.ROW.020	ROW Plan Set - Produce Project Wide Rough Grading Plans	66	12-07-17	03-15-18
DGN.PW.ROW.025	ROW Plan Set - Produce Project Wide MOT/TMP Plans	66	12-07-17	03-15-18
CONT.DELV	Deliver Executed Contract to VDOT	1	01-09-18	01-09-18
MILE.DBCE	Design-Build Contract Execution	0		01-09-18
MILE.NTP	Notice to Proceed	0		01-17-18
MILE.DGN.START10	Begin Scope Validation Period	0		01-17-18
SV.DGN.SVY.035	Produce Mapping for Right-of-Way Plan Development	20	01-18-18	02-14-18
SV.DGN.SVY.010	Final Data Collection - Right-of-Way Plans- Project Wide Survey	15	01-18-18	02-07-18
DGN.PW.ROW.030	IDC ROW Plan Set - Project Wide	0		03-15-18
DGN.PW.ROW.035	WSP Incorporate IDC Comments - ROW Plan Set - Project Wide	15	03-16-18	04-05-18
DGN.PW.ROW.040	WSP Pencils Down ROW Plan Set - Project Wide	0		04-05-18
DGN.PW.ROW.045	WSP Internal Review/QC ROW Plan Set - Project Wide	5	04-06-18	04-12-18
DGN.PW.ROW.050	WSP Address Comm/Package ROW Plan Set - Project Wide	3	04-13-18	04-17-18
DGN.PW.ROW.055	Skanska Internal Review ROW Plan Set - Project Wide	5	04-18-18	04-24-18
DGN.PW.ROW.060	Submit ROW Plan Set - Project Wide to VDOT	0		04-24-18
DGN.PW.ROW.065	VDOT Review/Comment ROW Plan Set - Project Wide	21	04-25-18	05-15-18
DGN.PW.ROW.070	WSP IDC Mtg Construction Plan Set	1	05-16-18	05-16-18
DGN.PW.CPS.TC.005	Produce Temp. Traffic Control - Construction Plan Set - Project Wide	20	05-17-18	06-14-18
DGN.PW.CPS.TC.015	WSP Pencils Down Temp. Traffic Control - Construction Plan Set - Projec	0		06-14-18
DGN.PW.CPS.TC.020	WSP Internal Review/QC - Temp. Traffic Control - Construction Plan Set	5	06-15-18	06-21-18
DGN.PW.CPS.TC.025	WSP Address Comm/Package - Temp. Traffic Control - Construction Plai	5	06-22-18	06-28-18
DGN.PW.CPS.TC.030	Skanska Internal Review - Temp. Traffic Control - Construction Plan Set ·	5	06-29-18	07-06-18
DGN.PW.CPS.TC.035	Submit to VDOT - Temp. Traffic Control - Construction Plan Set - Project	0		07-06-18
DGN.PW.CPS.TC.040	VDOT Review/Comment - Temp. Traffic Control - Construction Plan Set -	21	07-07-18	07-27-18
DGN.PW.CPS.TC.045	WSP Address Comm/PKG Sign & Seal - Temp. Traffic Control - AFC Plan	10	07-30-18	08-10-18
DGN.PW.CPS.TC.050	Skanska Internal Review - Temp. Traffic Control - AFC Plan Set - Project	5	08-13-18	08-17-18
DGN.PW.CPS.TC.055	Submit to VDOT - Temp. Traffic Control - AFC Plan Set - Project Wide	0		08-17-18
DGN.PW.CPS.TC.060	VDOT Issue AFC Plans - Temp. Traffic Control - Project Wide	21	08-18-18	09-07-18
64E.A1.TPAV.105	Strengthen Outside Shoulder - I-64 EB Outside (Area A-1) - Phase 1	3	09-10-18	09-13-18
64E.A2.TPAV.105	Strengthen Outside Shoulder - I-64 EB Outside (Area A-2) - Phase 1	5	09-17-18	09-24-18
64E.A3.TPAV.105	Strengthen Outside Shoulder - I-64 EB Outside (Area A-3) - Phase 1	5	09-25-18	10-02-18
64E.A4.TPAV.105	Strengthen Outside Shoulder - I-64 EB Outside (Area A-4) - Phase 1	5	10-04-18	10-11-18
64E.A5.TPAV.105	Strengthen Outside Shoulder - I-64 EB Outside (Area A-5) - Phase 1	5	10-12-18	10-19-18
64E.A6.TPAV.105	Strengthen Outside Shoulder - I-64 EB Outside (Area A-6) - Phase 1	5	10-22-18	10-29-18
64E.B1.TPAV.105	Strengthen Outside Shoulder - I-64 EB Outside (Area B-1) - Phase 1	4	10-30-18	11-06-18
64E.B3.TPAV.105	Strengthen Outside Shoulder - I-64 EB Outside (Area B-3) - Phase 1	3	11-08-18	11-12-18
64E.B3.TSTR.105	Eradicate & Install Temp. Striping (Shifting Traffic to Outside) - I-64 EB (A	1	11-13-18	11-13-18
64E.B3.TBAR.105	Install Temp. Barrier Wall - I-64 EB Median (Area B-3) - Phase 1	2	11-15-18	11-16-18



Remaining Level of Effort
Actual Work
Remaining Work
Critical Remaining Work
Milestone
Summary

State Project No.: 0064-965-229, P-101, R-201, C-501, B-638, B-639, B-640, B-641, B-642, B-643, D-609, D-610, D-611
Federal Project No.: NHPP-064-3 (498)
Contract ID Number: C00106689DB97

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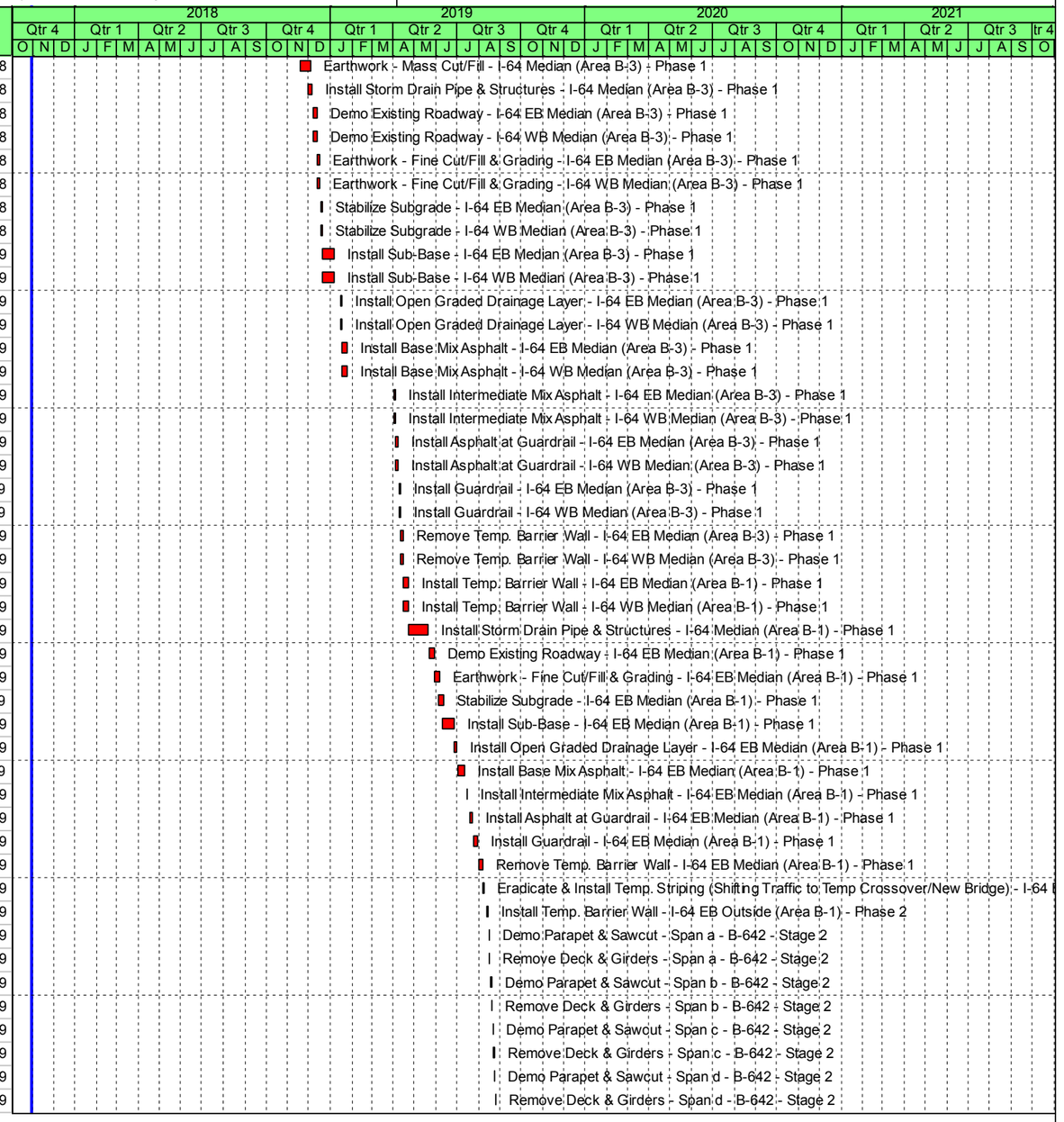
I-64 Capacity Improvements - Segment III

Proposal Date: September 14, 2017

Activity ID	Activity Name	Original Duration	Start	Finish
64M.B3.ECUT.105	Earthwork - Mass Cut/Fill - I-64 Median (Area B-3) - Phase 1	6	11-19-18	12-03-18
64M.B3.STORM.105	Install Storm Drain Pipe & Structures - I-64 Median (Area B-3) - Phase 1	4	11-30-18	12-06-18
64E.B3.DRDW.105	Demo Existing Roadway - I-64 EB Median (Area B-3) - Phase 1	4	12-07-18	12-13-18
64W.B3.DRDW.105	Demo Existing Roadway - I-64 WB Median (Area B-3) - Phase 1	4	12-07-18	12-13-18
64E.B3.RGRD.105	Earthwork - Fine Cut/Fill & Grading - I-64 EB Median (Area B-3) - Phase 1	2	12-14-18	12-17-18
64W.B3.RGRD.105	Earthwork - Fine Cut/Fill & Grading - I-64 WB Median (Area B-3) - Phase	2	12-14-18	12-17-18
64E.B3.STAB.105	Stabilize Subgrade - I-64 EB Median (Area B-3) - Phase 1	2	12-18-18	12-20-18
64W.B3.STAB.105	Stabilize Subgrade - I-64 WB Median (Area B-3) - Phase 1	2	12-18-18	12-20-18
64E.B3.BASE.105	Install Sub-Base - I-64 EB Median (Area B-3) - Phase 1	7	12-21-18	01-07-19
64W.B3.BASE.105	Install Sub-Base - I-64 WB Median (Area B-3) - Phase 1	7	12-21-18	01-07-19
64E.B3.OGDL.105	Install Open Graded Drainage Layer - I-64 EB Median (Area B-3) - Phase	2	01-15-19	01-17-19
64W.B3.OGDL.105	Install Open Graded Drainage Layer - I-64 WB Median (Area B-3) - Phas	2	01-15-19	01-17-19
64E.B3.ASBM.105	Install Base Mix Asphalt - I-64 EB Median (Area B-3) - Phase 1	3	01-18-19	01-24-19
64W.B3.ASBM.105	Install Base Mix Asphalt - I-64 WB Median (Area B-3) - Phase 1	3	01-18-19	01-24-19
64E.B3.ASIM.105	Install Intermediate Mix Asphalt - I-64 EB Median (Area B-3) - Phase 1	2	04-02-19	04-04-19
64W.B3.ASIM.105	Install Intermediate Mix Asphalt - I-64 WB Median (Area B-3) - Phase 1	2	04-02-19	04-04-19
64E.B3.ASGR.105	Install Asphalt at Guardrail - I-64 EB Median (Area B-3) - Phase 1	2	04-05-19	04-08-19
64W.B3.ASGR.105	Install Asphalt at Guardrail - I-64 WB Median (Area B-3) - Phase 1	2	04-05-19	04-08-19
64E.B3.GRAIL.105	Install Guardrail - I-64 EB Median (Area B-3) - Phase 1	2	04-09-19	04-11-19
64W.B3.GRAIL.105	Install Guardrail - I-64 WB Median (Area B-3) - Phase 1	2	04-09-19	04-11-19
64E.B3.RBAR.105	Remove Temp. Barrier Wall - I-64 EB Median (Area B-3) - Phase 1	2	04-12-19	04-15-19
64W.B3.RBAR.105	Remove Temp. Barrier Wall - I-64 WB Median (Area B-3) - Phase 1	2	04-12-19	04-15-19
64E.B1.TBAR.105	Install Temp. Barrier Wall - I-64 EB Median (Area B-1) - Phase 1	4	04-16-19	04-22-19
64W.B1.TBAR.105	Install Temp. Barrier Wall - I-64 WB Median (Area B-1) - Phase 1	4	04-16-19	04-22-19
64M.B1.STORM.105	Install Storm Drain Pipe & Structures - I-64 Median (Area B-1) - Phase 1	16	04-23-19	05-21-19
64E.B1.DRDW.105	Demo Existing Roadway - I-64 EB Median (Area B-1) - Phase 1	5	05-23-19	05-30-19
64E.B1.RGRD.105	Earthwork - Fine Cut/Fill & Grading - I-64 EB Median (Area B-1) - Phase 1	4	05-31-19	06-06-19
64E.B1.STAB.105	Stabilize Subgrade - I-64 EB Median (Area B-1) - Phase 1	4	06-04-19	06-11-19
64E.B1.BASE.105	Install Sub-Base - I-64 EB Median (Area B-1) - Phase 1	10	06-10-19	06-27-19
64E.B1.OGDL.105	Install Open Graded Drainage Layer - I-64 EB Median (Area B-1) - Phase	2	06-28-19	07-01-19
64E.B1.ASBM.105	Install Base Mix Asphalt - I-64 EB Median (Area B-1) - Phase 1	5	07-02-19	07-11-19
64E.B1.ASIM.105	Install Intermediate Mix Asphalt - I-64 EB Median (Area B-1) - Phase 1	2	07-15-19	07-16-19
64E.B1.ASGR.105	Install Asphalt at Guardrail - I-64 EB Median (Area B-1) - Phase 1	3	07-19-19	07-23-19
64E.B1.GRAIL.105	Install Guardrail - I-64 EB Median (Area B-1) - Phase 1	3	07-26-19	07-30-19
64E.B1.RBAR.105	Remove Temp. Barrier Wall - I-64 EB Median (Area B-1) - Phase 1	4	08-01-19	08-06-19
64E.B1.TSTR.205	Eradicate & Install Temp. Striping (Shifting Traffic to Temp Crossover/Nev	2	08-08-19	08-09-19
64E.B1.TBAR.205	Install Temp. Barrier Wall - I-64 EB Outside (Area B-1) - Phase 2	4	08-12-19	08-15-19
A3.B642.SA.DDEK.205	Demo Parapet & Sawcut - Span a - B-642 - Stage 2	1	08-16-19	08-16-19
A3.B642.SA.DGRD.205	Remove Deck & Girders - Span a - B-642 - Stage 2	1	08-17-19	08-17-19
A3.B642.SB.DDEK.205	Demo Parapet & Sawcut - Span b - B-642 - Stage 2	1	08-19-19	08-19-19
A3.B642.SB.DGRD.205	Remove Deck & Girders - Span b - B-642 - Stage 2	1	08-20-19	08-20-19
A3.B642.SC.DDEK.205	Demo Parapet & Sawcut - Span c - B-642 - Stage 2	1	08-22-19	08-22-19
A3.B642.SC.DGRD.205	Remove Deck & Girders - Span c - B-642 - Stage 2	1	08-23-19	08-23-19
A3.B642.SD.DDEK.205	Demo Parapet & Sawcut - Span d - B-642 - Stage 2	1	08-24-19	08-24-19
A3.B642.SD.DGRD.205	Remove Deck & Girders - Span d - B-642 - Stage 2	1	08-26-19	08-26-19



Remaining Level of Effort
Actual Work
Remaining Work
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Milestone
Summary

State Project No.: 0064-965-229, P-101, R-201, C-501, B-638, B-639, B-640, B-641, B-642, B-643, D-609, D-610, D-611
Federal Project No.: NHPP-064-3 (498)
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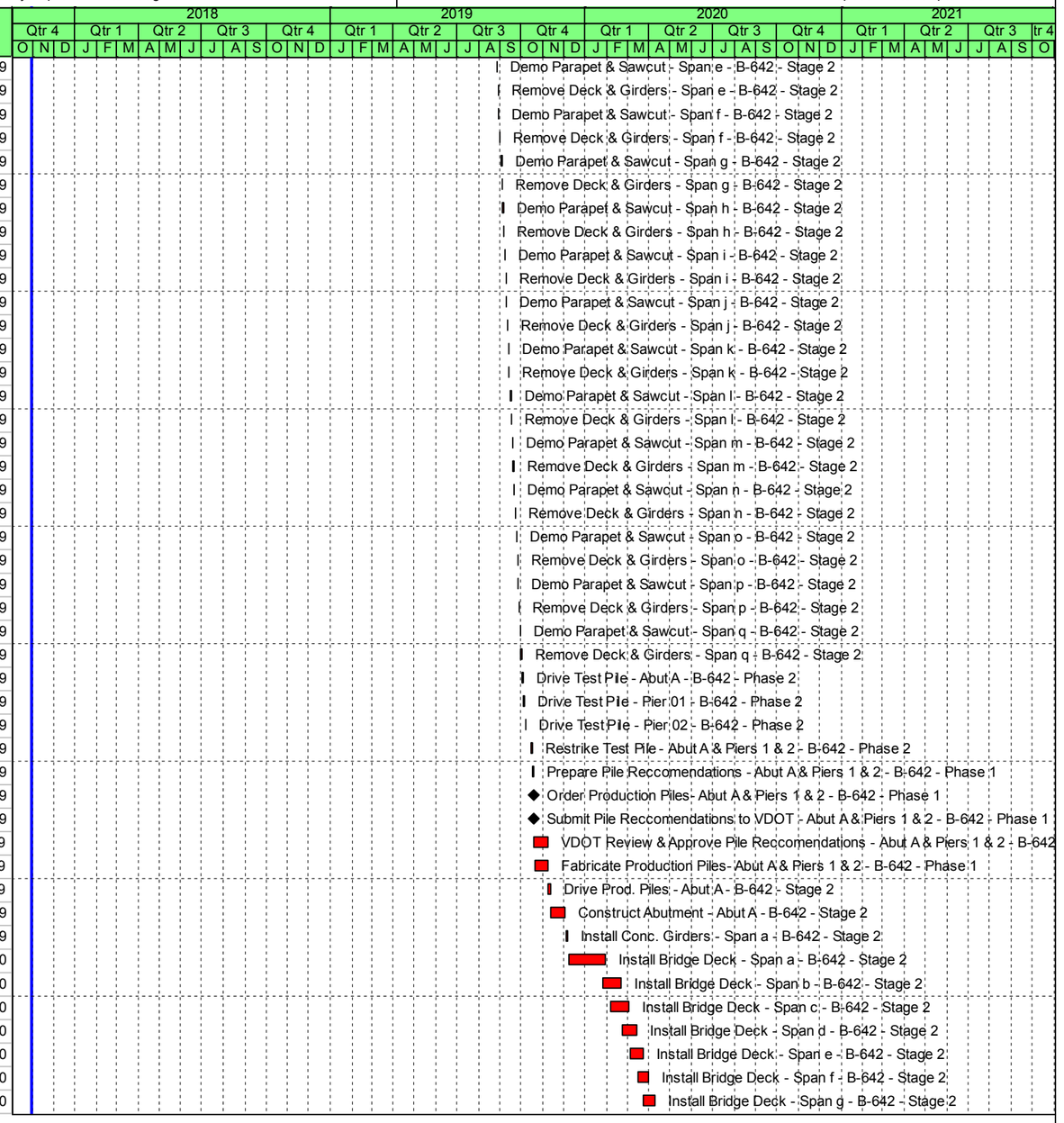
I-64 Capacity Improvements - Segment III

Proposal Date: September 14, 2017

Activity ID	Activity Name	Original Duration	Start	Finish
A3.B642.SE.DDEK.205	Demo Parapet & Sawcut - Span e - B-642 - Stage 2	1	08-27-19	08-27-19
A3.B642.SE.DGRD.205	Remove Deck & Girders - Span e - B-642 - Stage 2	1	08-29-19	08-29-19
A3.B642.SF.DDEK.205	Demo Parapet & Sawcut - Span f - B-642 - Stage 2	1	08-30-19	08-30-19
A3.B642.SF.DGRD.205	Remove Deck & Girders - Span f - B-642 - Stage 2	1	08-31-19	08-31-19
A3.B642.SG.DDEK.205	Demo Parapet & Sawcut - Span g - B-642 - Stage 2	1	09-03-19	09-03-19
A3.B642.SG.DGRD.205	Remove Deck & Girders - Span g - B-642 - Stage 2	1	09-04-19	09-04-19
A3.B642.SH.DDEK.205	Demo Parapet & Sawcut - Span h - B-642 - Stage 2	1	09-05-19	09-05-19
A3.B642.SH.DGRD.205	Remove Deck & Girders - Span h - B-642 - Stage 2	1	09-06-19	09-06-19
A3.B642.SI.DDEK.205	Demo Parapet & Sawcut - Span i - B-642 - Stage 2	1	09-07-19	09-07-19
A3.B642.SI.DGRD.205	Remove Deck & Girders - Span i - B-642 - Stage 2	1	09-09-19	09-09-19
A3.B642.SJ.DDEK.205	Demo Parapet & Sawcut - Span j - B-642 - Stage 2	1	09-10-19	09-10-19
A3.B642.SJ.DGRD.205	Remove Deck & Girders - Span j - B-642 - Stage 2	1	09-12-19	09-12-19
A3.B642.SK.DDEK.205	Demo Parapet & Sawcut - Span k - B-642 - Stage 2	1	09-13-19	09-13-19
A3.B642.SK.DGRD.205	Remove Deck & Girders - Span k - B-642 - Stage 2	1	09-14-19	09-14-19
A3.B642.SL.DDEK.205	Demo Parapet & Sawcut - Span l - B-642 - Stage 2	1	09-16-19	09-16-19
A3.B642.SL.DGRD.205	Remove Deck & Girders - Span l - B-642 - Stage 2	1	09-17-19	09-17-19
A3.B642.SM.DDEK.205	Demo Parapet & Sawcut - Span m - B-642 - Stage 2	1	09-19-19	09-19-19
A3.B642.SM.DGRD.205	Remove Deck & Girders - Span m - B-642 - Stage 2	1	09-20-19	09-20-19
A3.B642.SN.DDEK.205	Demo Parapet & Sawcut - Span n - B-642 - Stage 2	1	09-21-19	09-21-19
A3.B642.SN.DGRD.205	Remove Deck & Girders - Span n - B-642 - Stage 2	1	09-23-19	09-23-19
A3.B642.SO.DDEK.205	Demo Parapet & Sawcut - Span o - B-642 - Stage 2	1	09-24-19	09-24-19
A3.B642.SO.DGRD.205	Remove Deck & Girders - Span o - B-642 - Stage 2	1	09-26-19	09-26-19
A3.B642.SP.DDEK.205	Demo Parapet & Sawcut - Span p - B-642 - Stage 2	1	09-27-19	09-27-19
A3.B642.SP.DGRD.205	Remove Deck & Girders - Span p - B-642 - Stage 2	1	09-28-19	09-28-19
A3.B642.SQ.DDEK.205	Demo Parapet & Sawcut - Span q - B-642 - Stage 2	1	09-30-19	09-30-19
A3.B642.SQ.DGRD.205	Remove Deck & Girders - Span q - B-642 - Stage 2	1	10-01-19	10-01-19
B2.B642.TST.PLE.AA	Drive Test Pile - Abut A - B-642 - Phase 2	2	10-02-19	10-03-19
B2.B642.TST.PLE.P01	Drive Test Pile - Pier 01 - B-642 - Phase 2	2	10-04-19	10-05-19
B2.B642.TST.PLE.P02	Drive Test Pile - Pier 02 - B-642 - Phase 2	2	10-07-19	10-08-19
B2.B642.RSTRK.005	Restrike Test Pile - Abut A & Piers 1 & 2 - B-642 - Phase 2	1	10-16-19	10-16-19
PREP.B642.PILE.005	Prepare Pile Reccomendations - Abut A & Piers 1 & 2 - B-642 - Phase 1	2	10-17-19	10-18-19
ORD.B642.PILE.005	Order Production Piles- Abut A & Piers 1 & 2 - B-642 - Phase 1	0		10-18-19
SUBM.B642.PILE.005	Submit Pile Reccomendations to VDOT - Abut A & Piers 1 & 2 - B-642 - P	0		10-18-19
VDOT.B642.PILE.005	VDOT Review & Approve Pile Reccomendations - Abut A & Piers 1 & 2 - I	21	10-19-19	11-08-19
FAB.PRD.PILE.EQC.005	Fabricate Production Piles- Abut A & Piers 1 & 2 - B-642 - Phase 1	15	10-21-19	11-08-19
A3.B642.ABA.PLE.205	Drive Prod. Piles - Abut A - B-642 - Stage 2	3	11-09-19	11-12-19
A3.B642.ABA.ABUT.205	Construct Abutment - Abut A - B-642 - Stage 2	15	11-13-19	12-03-19
A3.B642.SA.GRD.205	Install Conc. Girders - Span a - B-642 - Stage 2	3	12-05-19	12-07-19
A3.B642.SA.DEK.205	Install Bridge Deck - Span a - B-642 - Stage 2	15	12-09-19	01-30-20
A3.B642.SB.DEK.205	Install Bridge Deck - Span b - B-642 - Stage 2	12	01-25-20	02-20-20
A3.B642.SC.DEK.205	Install Bridge Deck - Span c - B-642 - Stage 2	12	02-06-20	03-03-20
A3.B642.SD.DEK.205	Install Bridge Deck - Span d - B-642 - Stage 2	12	02-22-20	03-14-20
A3.B642.SE.DEK.205	Install Bridge Deck - Span e - B-642 - Stage 2	12	03-05-20	03-23-20
A3.B642.SF.DEK.205	Install Bridge Deck - Span f - B-642 - Stage 2	12	03-16-20	03-31-20
A3.B642.SG.DEK.205	Install Bridge Deck - Span g - B-642 - Stage 2	12	03-24-20	04-10-20



Remaining Level of Effort
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Summary

State Project No.: 0064-965-229, P-101, R-201, C-501, B-638, B-639, B-640, B-641, B-642, B-643, D-609, D-610, D-611
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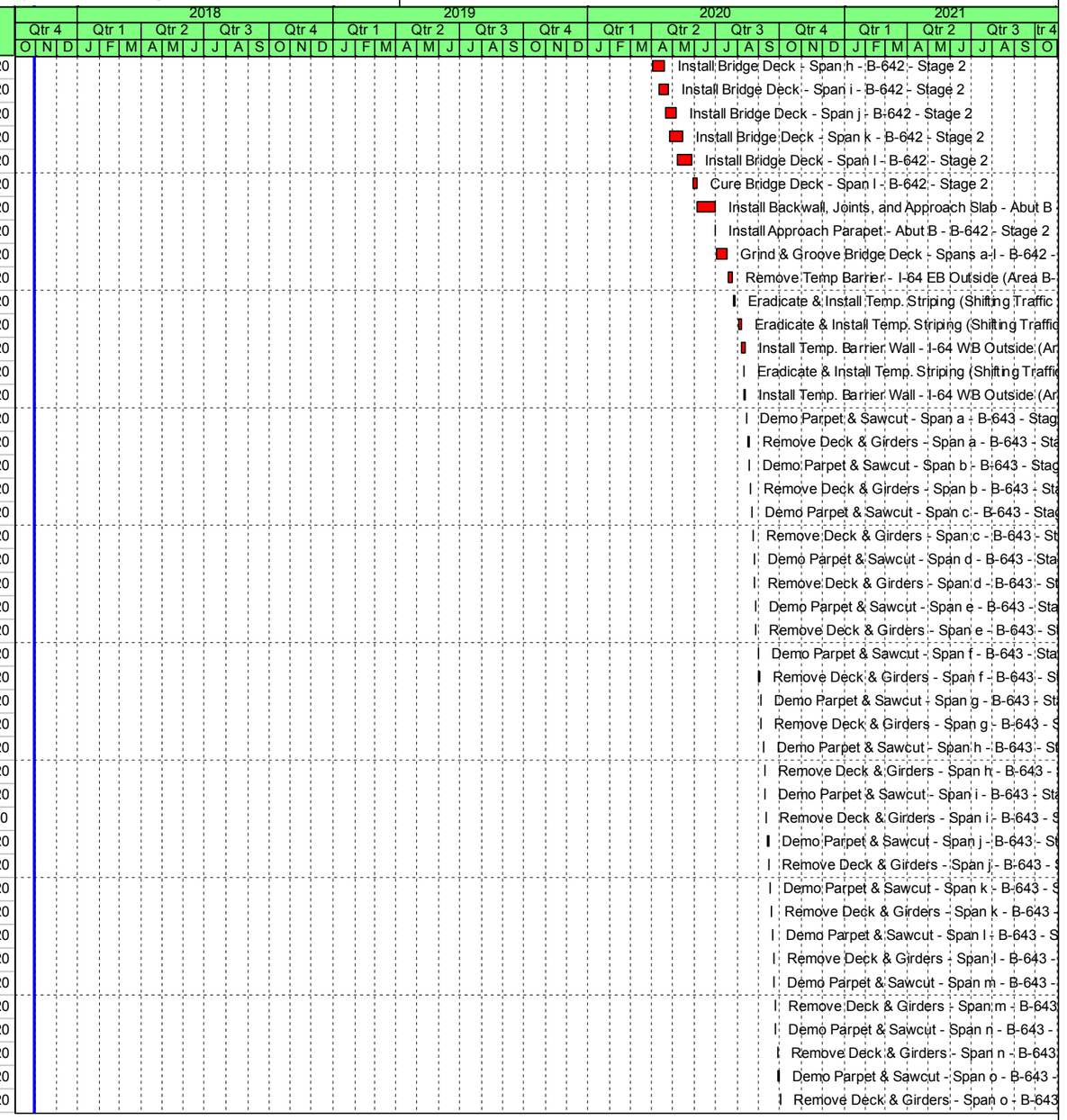
I-64 Capacity Improvements - Segment III

Proposal Date: September 14, 2017

Activity ID	Activity Name	Original Duration	Start	Finish
A3.B642.SH.DEK.205	Install Bridge Deck - Span h - B-642 - Stage 2	12	04-02-20	04-18-20
A3.B642.SI.DEK.205	Install Bridge Deck - Span i - B-642 - Stage 2	12	04-11-20	04-25-20
A3.B642.SJ.DEK.205	Install Bridge Deck - Span j - B-642 - Stage 2	12	04-20-20	05-05-20
A3.B642.SK.DEK.205	Install Bridge Deck - Span k - B-642 - Stage 2	12	04-27-20	05-14-20
A3.B642.SL.DEK.205	Install Bridge Deck - Span l - B-642 - Stage 2	15	05-07-20	05-28-20
A3.B642.SL.CUR.205	Cure Bridge Deck - Span l - B-642 - Stage 2	7	05-29-20	06-04-20
A3.B642.ABB.APR.205	Install Backwall, Joints, and Approach Slab - Abut B - B-642 - Stage 2	20	06-05-20	06-30-20
A3.B642.ABB.BAR.205	Install Approach Parapet - Abut B - B-642 - Stage 2	1	07-01-20	07-01-20
A3.B642.SAQ.GRV.205	Grind & Groove Bridge Deck - Spans a-l - B-642 - Stage 2	12	07-02-20	07-18-20
64E.B1.RBAR.205	Remove Temp Barrier - I-64 EB Outside (Area B-1) - Phase 2	4	07-20-20	07-24-20
64E.B1.TSTR.305	Eradicate & Install Temp. Striping (Shifting Traffic to Outside) - I-64 EB Ou	2	07-27-20	07-28-20
64W.B1.TSTR.305	Eradicate & Install Temp. Striping (Shifting Traffic to Temp Crossover/Nev	2	08-04-20	08-06-20
64W.B1.TBAR.305	Install Temp. Barrier Wall - I-64 WB Outside (Area B-1) - Phase 3	4	08-07-20	08-13-20
64W.B3.TSTR.305	Eradicate & Install Temp. Striping (Shifting Traffic to Temp Crossover/Nev	1	08-10-20	08-10-20
64W.B3.TBAR.305	Install Temp. Barrier Wall - I-64 WB Outside (Area B-3) - Phase 3	2	08-11-20	08-13-20
A3.B643.SA.DDEK.305	Demo Parpet & Sawcut - Span a - B-643 - Stage 3	1	08-14-20	08-14-20
A3.B643.SA.DGRD.305	Remove Deck & Girders - Span a - B-643 - Stage 3	1	08-17-20	08-17-20
A3.B643.SB.DDEK.305	Demo Parpet & Sawcut - Span b - B-643 - Stage 3	1	08-18-20	08-18-20
A3.B643.SB.DGRD.305	Remove Deck & Girders - Span b - B-643 - Stage 3	1	08-20-20	08-20-20
A3.B643.SC.DDEK.305	Demo Parpet & Sawcut - Span c - B-643 - Stage 3	1	08-21-20	08-21-20
A3.B643.SC.DGRD.305	Remove Deck & Girders - Span c - B-643 - Stage 3	1	08-24-20	08-24-20
A3.B643.SD.DDEK.305	Demo Parpet & Sawcut - Span d - B-643 - Stage 3	1	08-25-20	08-25-20
A3.B643.SD.DGRD.305	Remove Deck & Girders - Span d - B-643 - Stage 3	1	08-26-20	08-26-20
A3.B643.SE.DDEK.305	Demo Parpet & Sawcut - Span e - B-643 - Stage 3	1	08-27-20	08-27-20
A3.B643.SE.DGRD.305	Remove Deck & Girders - Span e - B-643 - Stage 3	1	08-28-20	08-28-20
A3.B643.SF.DDEK.305	Demo Parpet & Sawcut - Span f - B-643 - Stage 3	1	08-31-20	08-31-20
A3.B643.SF.DGRD.305	Remove Deck & Girders - Span f - B-643 - Stage 3	1	09-01-20	09-01-20
A3.B643.SG.DDEK.305	Demo Parpet & Sawcut - Span g - B-643 - Stage 3	1	09-03-20	09-03-20
A3.B643.SG.DGRD.305	Remove Deck & Girders - Span g - B-643 - Stage 3	1	09-04-20	09-04-20
A3.B643.SH.DDEK.305	Demo Parpet & Sawcut - Span h - B-643 - Stage 3	1	09-08-20	09-08-20
A3.B643.SH.DGRD.305	Remove Deck & Girders - Span h - B-643 - Stage 3	1	09-09-20	09-09-20
A3.B643.SI.DDEK.305	Demo Parpet & Sawcut - Span i - B-643 - Stage 3	1	09-10-20	09-10-20
A3.B643.SI.DGRD.305	Remove Deck & Girders - Span i - B-643 - Stage 3	1	09-11-20	09-11-20
A3.B643.SJ.DDEK.305	Demo Parpet & Sawcut - Span j - B-643 - Stage 3	1	09-14-20	09-14-20
A3.B643.SJ.DGRD.305	Remove Deck & Girders - Span j - B-643 - Stage 3	1	09-15-20	09-15-20
A3.B643.SK.DDEK.305	Demo Parpet & Sawcut - Span k - B-643 - Stage 3	1	09-17-20	09-17-20
A3.B643.SK.DGRD.305	Remove Deck & Girders - Span k - B-643 - Stage 3	1	09-18-20	09-18-20
A3.B643.SL.DDEK.305	Demo Parpet & Sawcut - Span l - B-643 - Stage 3	1	09-21-20	09-21-20
A3.B643.SL.DGRD.305	Remove Deck & Girders - Span l - B-643 - Stage 3	1	09-22-20	09-22-20
A3.B643.SM.DDEK.305	Demo Parpet & Sawcut - Span m - B-643 - Stage 3	1	09-23-20	09-23-20
A3.B643.SM.DGRD.305	Remove Deck & Girders - Span m - B-643 - Stage 3	1	09-24-20	09-24-20
A3.B643.SN.DDEK.305	Demo Parpet & Sawcut - Span n - B-643 - Stage 3	1	09-25-20	09-25-20
A3.B643.SN.DGRD.305	Remove Deck & Girders - Span n - B-643 - Stage 3	1	09-28-20	09-28-20
A3.B643.SO.DDEK.305	Demo Parpet & Sawcut - Span o - B-643 - Stage 3	1	09-29-20	09-29-20
A3.B643.SO.DGRD.305	Remove Deck & Girders - Span o - B-643 - Stage 3	1	10-01-20	10-01-20



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State Project No.: 0064-965-229, P-101, R-201, C-501, B-638, B-639, B-640, B-641, B-642, B-643, D-609, D-610, D-611
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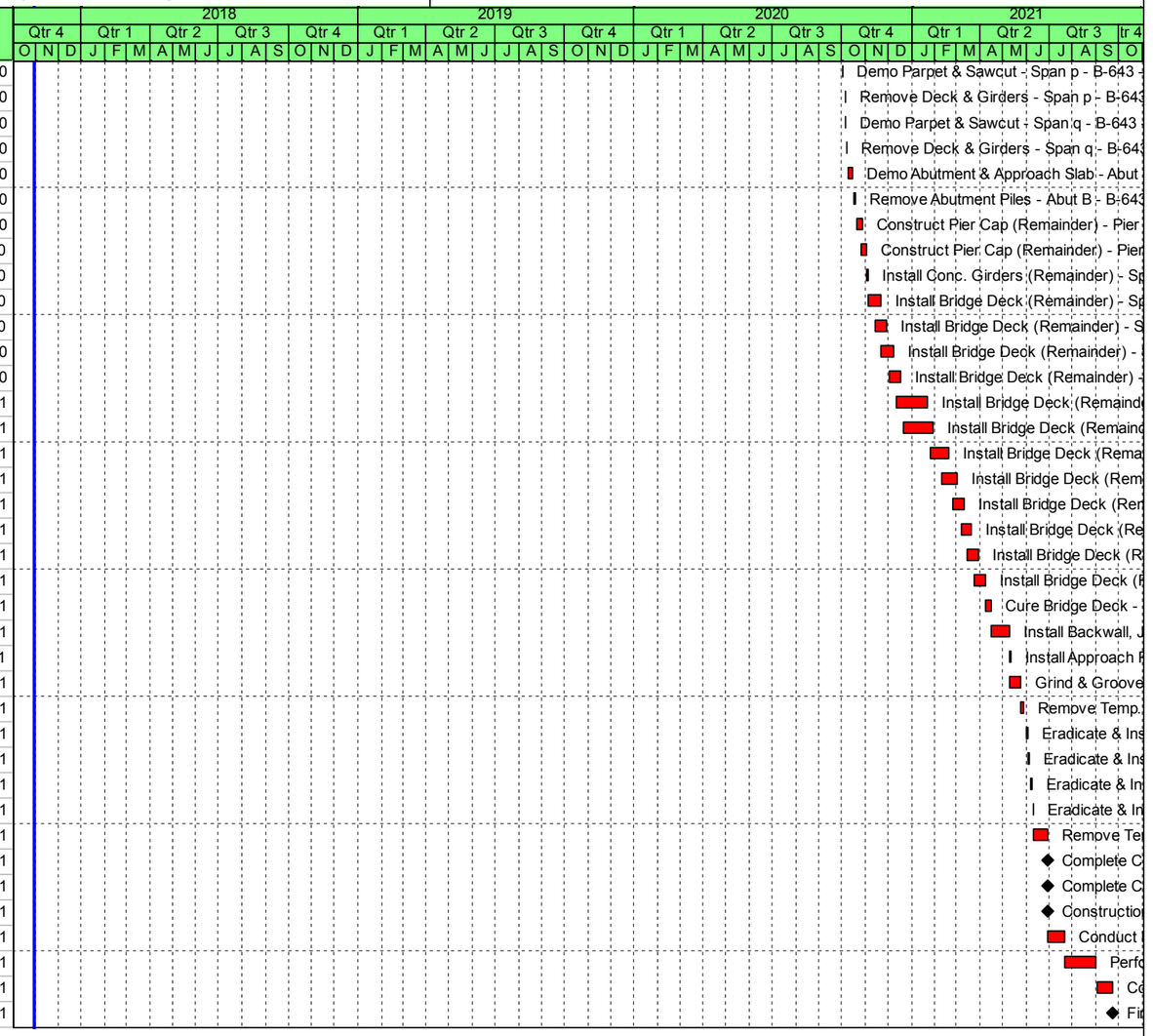
I-64 Capacity Improvements - Segment III

Proposal Date: September 14, 2017

Activity ID	Activity Name	Original Duration	Start	Finish
A3.B643.SP.DDEK.305	Demo Parpet & Sawcut - Span p - B-643 - Stage 3	1	10-02-20	10-02-20
A3.B643.SP.DGRD.305	Remove Deck & Girders - Span p - B-643 - Stage 3	1	10-05-20	10-05-20
A3.B643.SQ.DDEK.305	Demo Parpet & Sawcut - Span q - B-643 - Stage 3	1	10-06-20	10-06-20
A3.B643.SQ.DGRD.305	Remove Deck & Girders - Span q - B-643 - Stage 3	1	10-08-20	10-08-20
A3.B643.ABB.DABT.305	Demo Abutment & Approach Slab - Abut B - B-643 - Stage 3	5	10-09-20	10-15-20
A3.B643.ABB.DPLE.305	Remove Abutment Piles - Abut B - B-643 - Stage 3	2	10-16-20	10-19-20
A3.B643.P01.CAP.305	Construct Pier Cap (Remainder) - Pier 01 - B-643 - Stage 3	5	10-20-20	10-27-20
A3.B643.P02.CAP.305	Construct Pier Cap (Remainder) - Pier 02 - B-643 - Stage 3	5	10-27-20	11-02-20
A3.B643.SB.GRD.305	Install Conc. Girders (Remainder) - Span b - B-643 - Stage 3	2	11-03-20	11-05-20
A3.B643.SA.DEK.305	Install Bridge Deck (Remainder) - Span a - B-643 - Stage 3	13	11-05-20	11-21-20
A3.B643.SB.DEK.305	Install Bridge Deck (Remainder) - Span b - B-643 - Stage 3	10	11-13-20	11-28-20
A3.B643.SC.DEK.305	Install Bridge Deck (Remainder) - Span c - B-643 - Stage 3	10	11-21-20	12-08-20
A3.B643.SD.DEK.305	Install Bridge Deck (Remainder) - Span d - B-643 - Stage 3	10	12-03-20	12-17-20
A3.B643.SE.DEK.305	Install Bridge Deck (Remainder) - Span e - B-643 - Stage 3	10	12-12-20	01-21-21
A3.B643.SF.DEK.305	Install Bridge Deck (Remainder) - Span f - B-643 - Stage 3	10	12-21-20	01-29-21
A3.B643.SG.DEK.305	Install Bridge Deck (Remainder) - Span g - B-643 - Stage 3	10	01-25-21	02-18-21
A3.B643.SH.DEK.305	Install Bridge Deck (Remainder) - Span h - B-643 - Stage 3	10	02-09-21	03-02-21
A3.B643.SI.DEK.305	Install Bridge Deck (Remainder) - Span i - B-643 - Stage 3	10	02-25-21	03-12-21
A3.B643.SJ.DEK.305	Install Bridge Deck (Remainder) - Span j - B-643 - Stage 3	10	03-08-21	03-20-21
A3.B643.SK.DEK.305	Install Bridge Deck (Remainder) - Span k - B-643 - Stage 3	10	03-16-21	03-29-21
A3.B643.SL.DEK.305	Install Bridge Deck (Remainder) - Span l - B-643 - Stage 3	10	03-25-21	04-08-21
A3.B643.SL.CUR.305	Cure Bridge Deck - Span l - B-643 - Stage 3	7	04-09-21	04-15-21
A3.B643.ABB.APR.305	Install Backwall, Joints, and Approach Slab (Remainder) - Abut B - B-643	15	04-16-21	05-10-21
A3.B643.ABB.BAR.305	Install Approach Parapet - Abut B - B-643 - Stage 3	1	05-11-21	05-11-21
A3.B643.SAQ.GRV.305	Grind & Groove Remainder of Bridge Deck - Spans a-l - B-643 - Stage 3	8	05-11-21	05-24-21
64W.B1.RBAR.305	Remove Temp. Barrier Wall - I-64 WB Outside (Area B-1) - Phase 3	4	05-25-21	05-28-21
64W.B1.TSTR.310	Eradicate & Install Temp. Striping (Shifting Traffic to Final Configuration) -	2	06-01-21	06-03-21
64W.B3.TSTR.310	Eradicate & Install Temp. Striping (Shifting Traffic to Final Configuration) -	1	06-04-21	06-04-21
64E.B1.TSTR.310	Eradicate & Install Temp. Striping (Shifting Traffic to Final Configuration) -	2	06-07-21	06-08-21
64E.B3.TSTR.310	Eradicate & Install Temp. Striping (Shifting Traffic to Final Configuration) -	1	06-10-21	06-10-21
64.B3.GRAD.305	Remove Temp.Crossover and Finish Grade Median - I-64 Median (Area	10	06-11-21	06-29-21
MILE.CONST.A2.COMP	Complete Construction Area B	0		06-29-21
MILE.CONST.PW.COMP	Complete Construction Project Wide	0		06-29-21
MILE.CONST.A2.S3.FIN	Construction Complete - Stage 3 - Area B	0		06-29-21
CLOSE.PL.INSP	Conduct Punch-List Inspection	15	06-30-21	07-21-21
CLOSE.PL.WORK	Perform Punch-List Work	30	07-22-21	09-01-21
CLOSE.PL.FIN.INSP	Conduct Final Punch-List Inspection	15	09-02-21	09-23-21
MILE.FC	Final Completion	0		09-23-21



Remaining Level of Effort
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State Project No.: 0064-965-229, P-101, R-201, C-501, B-638, B-639, B-640, B-641, B-642, B-643, D-609, D-610, D-611
Federal Project No.: NHPP-064-3 (498)
Contract ID Number: C00106689DB97

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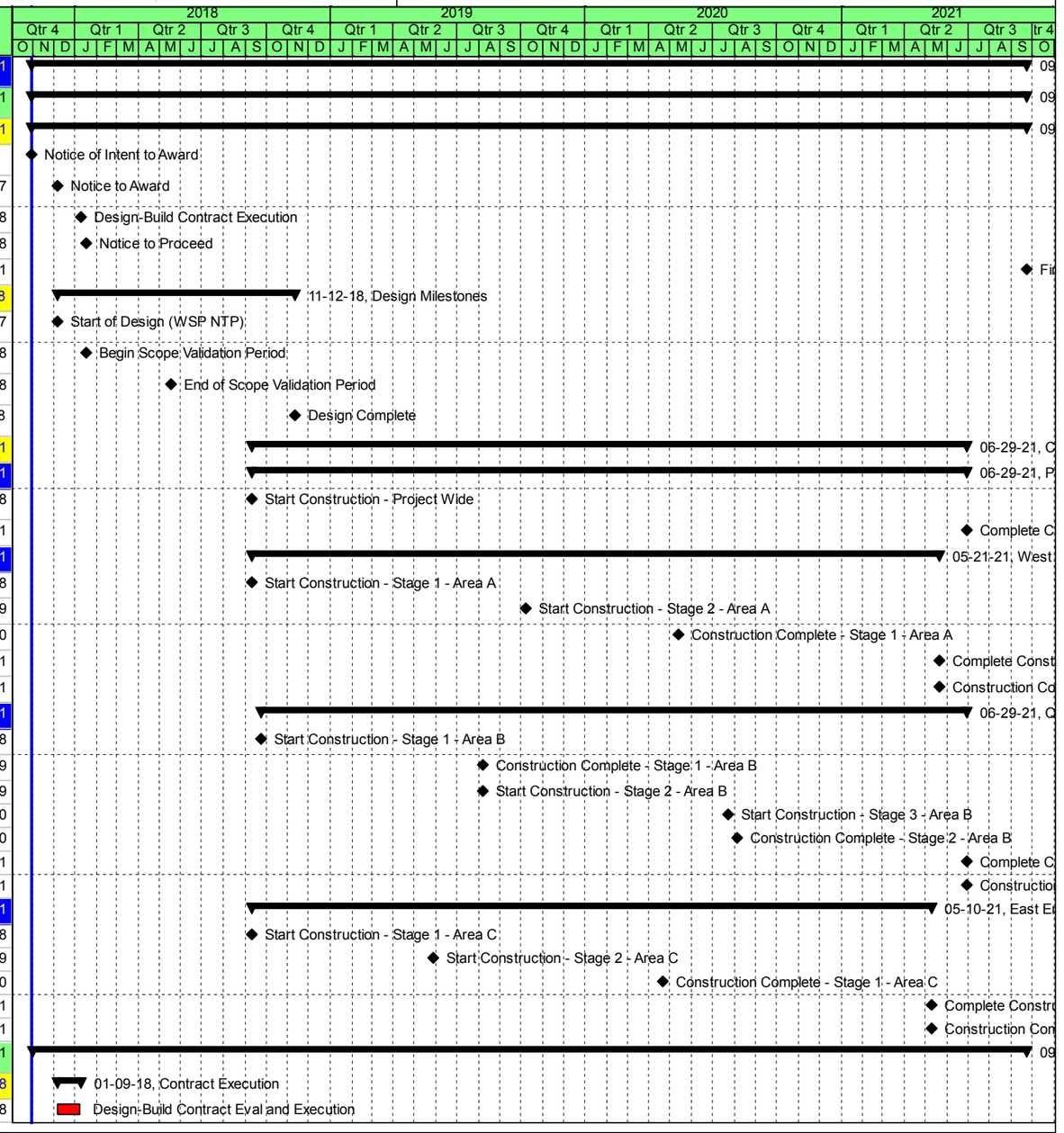
SKANSKA

I-64 Capacity Improvements - Segment III

Proposal Date: September 14, 2017

Activity ID	Activity Name	Original Duration	Start	Finish
I-64 Capacity Improvements - Segment III - Tech Proposal Schedule F		1425	10-30-17	09-23-21
Milestone		1425	10-30-17	09-23-21
Contract Milestones		964	10-30-17	09-23-21
MILE.NOI	Notice of Intent to Award	0	10-30-17	
MILE.NOA	Notice to Award	0		12-06-17
MILE.DBCE	Design-Build Contract Execution	0		01-09-18
MILE.NTP	Notice to Proceed	0		01-17-18
MILE.FC	Final Completion	0		09-23-21
Design Milestones		235	12-06-17	11-12-18
MILE.DGN.START	Start of Design (WSP NTP)	0		12-06-17
MILE.DGN.START10	Begin Scope Validation Period	0		01-17-18
MILE.DGN.START20	End of Scope Validation Period	0		05-17-18
MILE.DGN.COMP	Design Complete	0		11-12-18
Construction Milestones		704	09-10-18	06-29-21
Project Wide		704	09-10-18	06-29-21
MILE.CONST.PW.START	Start Construction - Project Wide	0		09-10-18
MILE.CONST.PW.COMP	Complete Construction Project Wide	0		06-29-21
West End (Area A)		678	09-10-18	05-21-21
MILE.CONST.A1.S1.ST	Start Construction - Stage 1 - Area A	0		09-10-18
MILE.CONST.A1.S2.ST	Start Construction - Stage 2 - Area A	0		10-07-19
MILE.CONST.A1.S1.FIN	Construction Complete - Stage 1 - Area A	0		05-12-20
MILE.CONST.A1.COMP	Complete Construction - Area A	0		05-21-21
MILE.CONST.A1.S2.FIN	Construction Complete - Stage 2 - Area A	0		05-21-21
Queens Creek (Area B)		694	09-24-18	06-29-21
MILE.CONST.A2.S1.ST	Start Construction - Stage 1 - Area B	0		09-24-18
MILE.CONST.A2.S1.FIN	Construction Complete - Stage 1 - Area B	0		08-06-19
MILE.CONST.A2.S2.ST	Start Construction - Stage 2 - Area B	0		08-08-19
MILE.CONST.A2.S3.ST	Start Construction - Stage 3 - Area B	0		07-23-20
MILE.CONST.A2.S2.FIN	Construction Complete - Stage 2 - Area B	0		08-04-20
MILE.CONST.A2.COMP	Complete Construction Area B	0		06-29-21
MILE.CONST.A2.S3.FIN	Construction Complete - Stage 3 - Area B	0		06-29-21
East End (Area C)		669	09-10-18	05-10-21
MILE.CONST.A3.S1.ST	Start Construction - Stage 1 - Area C	0		09-10-18
MILE.CONST.A3.S2.ST	Start Construction - Stage 2 - Area C	0		05-28-19
MILE.CONST.A3.S1.FIN	Construction Complete - Stage 1 - Area C	0		04-20-20
MILE.CONST.A3.COMP	Complete Construction - Area C	0		05-10-21
MILE.CONST.A3.S2.FIN	Construction Complete - Stage 2 - Area C	0		05-10-21
Project Management		1422	11-02-17	09-23-21
Contract Execution		21	12-07-17	01-09-18
CONT.EXEC	Design-Build Contract Eval and Execution	20	12-07-17	01-08-18



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State Project No.: 0064-965-229, P-101, R-201, C-501, B-638, B-639, B-640, B-641, B-642, B-643, D-609, D-610, D-611
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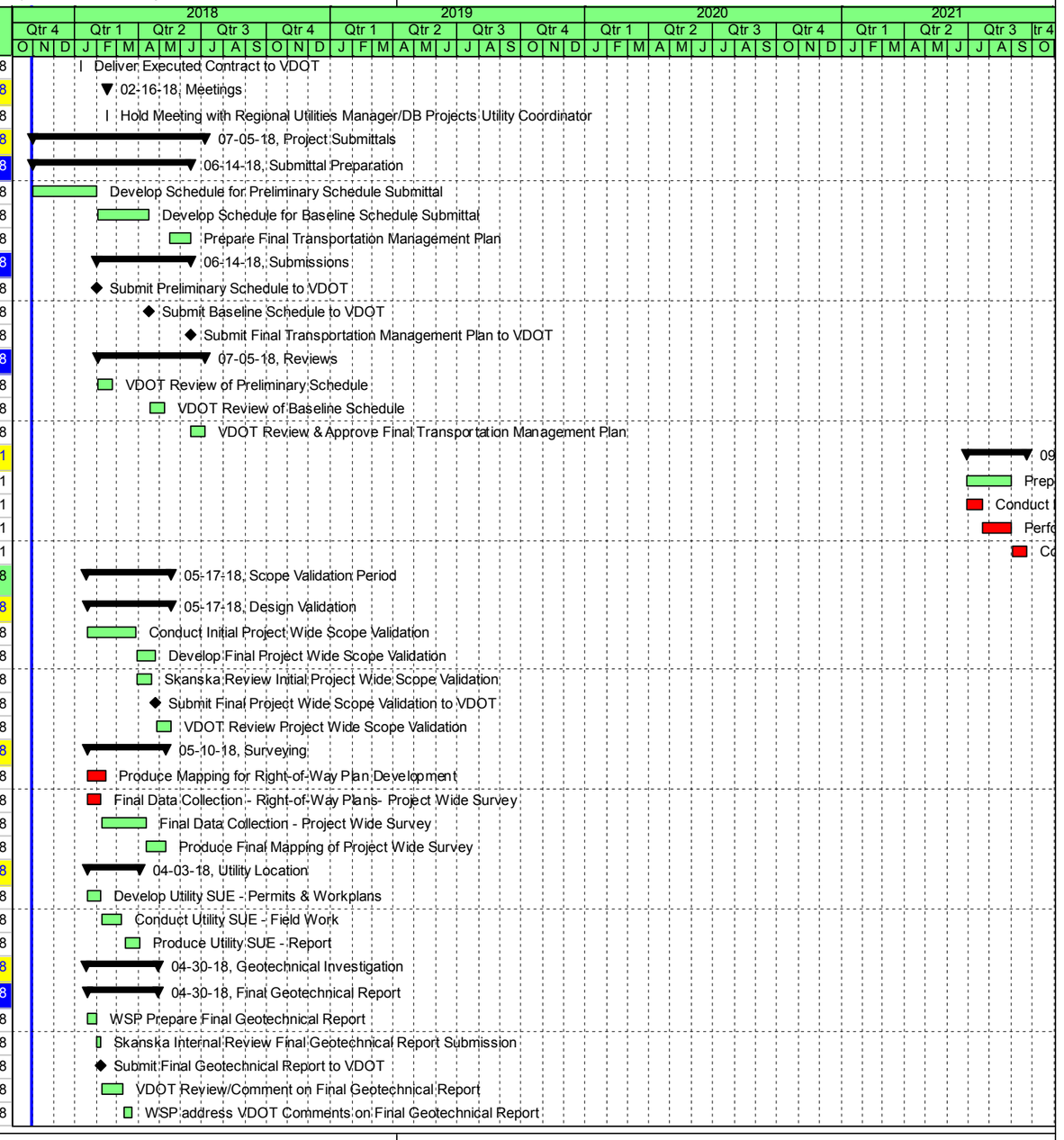
Activity ID	Activity Name	Original Duration	Start	Finish
CONT.DELV	Deliver Executed Contract to VDOT	1	01-09-18	01-09-18
Meetings		2	02-15-18	02-16-18
MTG.UTIL.MGR	Hold Meeting with Regional Utilities Manager/DB Projects Utility Coordinat	2	02-15-18	02-16-18
Project Submittals		246	11-02-17	07-05-18
Submittal Preparation		153	11-02-17	06-14-18
PREP.PRE.SCHED	Develop Schedule for Preliminary Schedule Submittal	60	11-02-17	02-01-18
PREP.BL.SCHED	Develop Schedule for Baseline Schedule Submittal	52	02-02-18	04-17-18
PREP.FIN.TMP	Prepare Final Transportation Management Plan	20	05-17-18	06-14-18
Submissions		93	02-01-18	06-14-18
SUBM.PRE.SCHED	Submit Preliminary Schedule to VDOT	0		02-01-18
SUBM.BL.SCHED	Submit Baseline Schedule to VDOT	0		04-17-18
SUBM.FIN.TMP	Submit Final Transportation Management Plan to VDOT	0		06-14-18
Reviews		154	02-02-18	07-05-18
REV.PRE.SCHED	VDOT Review of Preliminary Schedule	21	02-02-18	02-22-18
REV.BL.SCHED	VDOT Review of Baseline Schedule	21	04-18-18	05-08-18
REV.FIN.TMP	VDOT Review & Approve Final Transportation Management Plan	21	06-15-18	07-05-18
Project Close Out		60	06-30-21	09-23-21
CLOSE.AS-BUILT	Prepare & Submit Final As-Built Drawings to VDOT	45	06-30-21	09-01-21
CLOSE.PL.INSP	Conduct Punch-List Inspection	15	06-30-21	07-21-21
CLOSE.PL.WORK	Perform Punch-List Work	30	07-22-21	09-01-21
CLOSE.PL.FIN.INSP	Conduct Final Punch-List Inspection	15	09-02-21	09-23-21
Scope Validation Period		120	01-17-18	05-17-18
Design Validation		120	01-18-18	05-17-18
SV.DGN.DSV.005	Conduct Initial Project Wide Scope Validation	50	01-18-18	03-29-18
SV.DGN.DSV.010	Develop Final Project Wide Scope Validation	20	03-30-18	04-26-18
SV.DGN.DSV.015	Skanska Review Initial Project Wide Scope Validation	15	03-30-18	04-19-18
SV.DGN.DSV.020	Submit Final Project Wide Scope Validation to VDOT	0		04-26-18
SV.DGN.DSV.025	VDOT Review Project Wide Scope Validation	21	04-27-18	05-17-18
Surveying		80	01-18-18	05-10-18
SV.DGN.SVY.035	Produce Mapping for Right-of-Way Plan Development	20	01-18-18	02-14-18
SV.DGN.SVY.010	Final Data Collection - Right-of-Way Plans- Project Wide Survey	15	01-18-18	02-07-18
SV.DGN.SVY.020	Final Data Collection - Project Wide Survey	45	02-08-18	04-12-18
SV.DGN.SVY.015	Produce Final Mapping of Project Wide Survey	20	04-13-18	05-10-18
Utility Location		53	01-18-18	04-03-18
SV.DGN.UTIL.005	Develop Utility SUE - Permits & Workplans	15	01-18-18	02-07-18
SV.DGN.UTIL.010	Conduct Utility SUE - Field Work	20	02-08-18	03-08-18
SV.DGN.UTIL.015	Produce Utility SUE - Report	15	03-14-18	04-03-18
Geotechnical Investigation		103	01-17-18	04-30-18
Final Geotechnical Report		72	01-18-18	04-30-18
SV.DGN.FGR.005	WSP Prepare Final Geotechnical Report	10	01-18-18	01-31-18
SV.DGN.FGR.010	Skanska Internal Review Final Geotechnical Report Submission	5	02-01-18	02-07-18
SV.DGN.FGR.015	Submit Final Geotechnical Report to VDOT	0		02-07-18
SV.DGN.FGR.020	VDOT Review/Comment on Final Geotechnical Report	21	02-08-18	03-09-18
SV.DGN.FGR.025	WSP address VDOT Comments on Final Geotechnical Report	10	03-12-18	03-23-18



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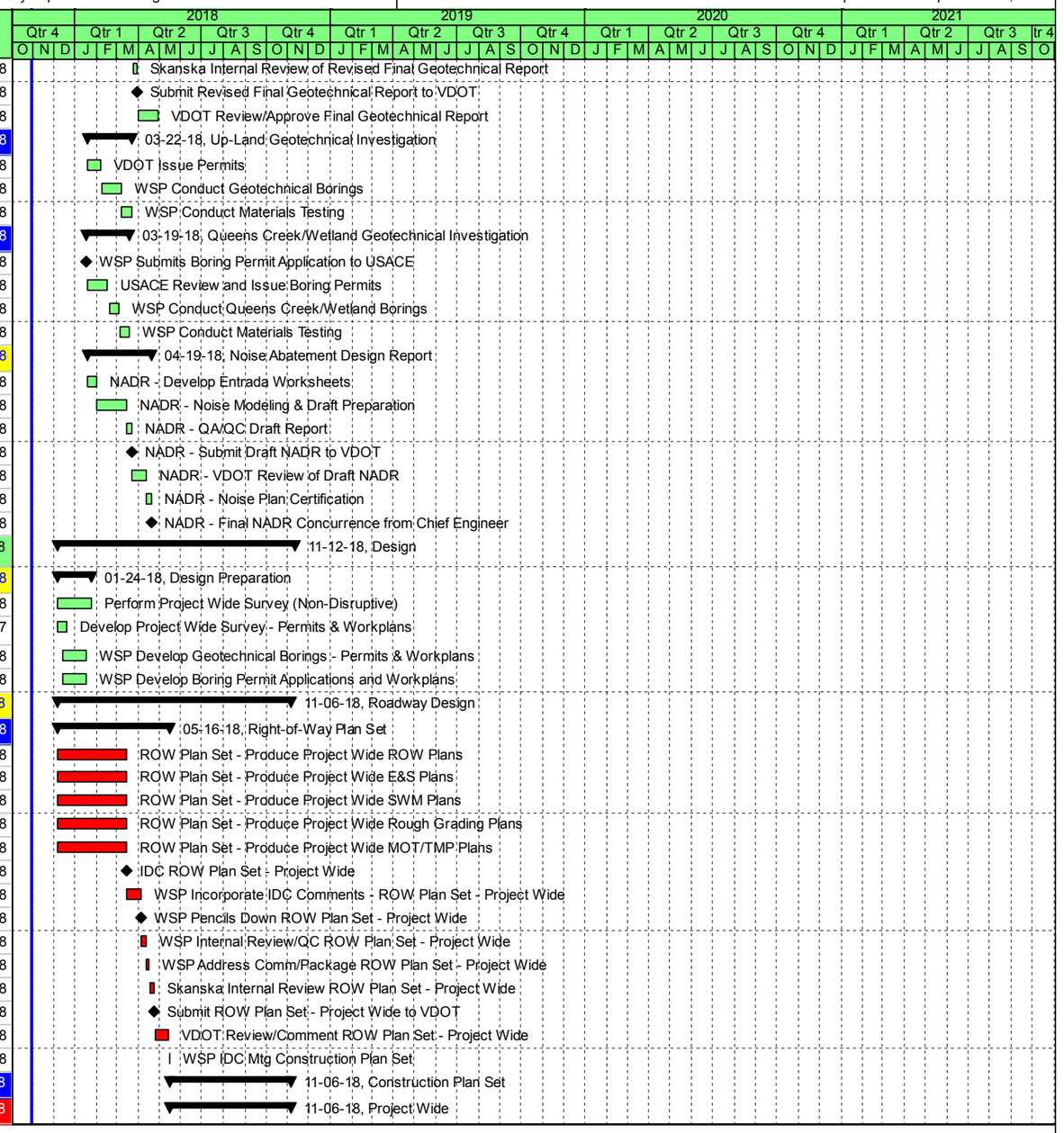
Activity ID	Activity Name	Original Duration	Start	Finish
SV.DGN.FGR.030	Skanska Internal Review of Revised Final Geotechnical Report	5	03-26-18	03-30-18
SV.DGN.FGR.035	Submit Revised Final Geotechnical Report to VDOT	0		03-30-18
SV.DGN.FGR.040	VDOT Review/Approve Final Geotechnical Report	21	04-02-18	04-30-18
Up-Land Geotechnical Investigation		64	01-18-18	03-22-18
SV.DGN.LGI.010	VDOT Issue Permits	21	01-18-18	02-07-18
SV.DGN.LGI.015	WSP Conduct Geotechnical Borings	20	02-08-18	03-08-18
SV.DGN.LGI.020	WSP Conduct Materials Testing	10	03-09-18	03-22-18
Queens Creek/Wetland Geotechnical Investigation		61	01-17-18	03-19-18
SV.DGN.WGI.010	WSP Submits Boring Permit Application to USACE	0		01-17-18
SV.DGN.WGI.015	USACE Review and Issue Boring Permits	30	01-18-18	02-16-18
SV.DGN.WGI.020	WSP Conduct Queens Creek/Wetland Borings	10	02-20-18	03-05-18
SV.DGN.WGI.025	WSP Conduct Materials Testing	10	03-06-18	03-19-18
Noise Abatement Design Report		92	01-18-18	04-19-18
SV.DGN.NADR.005	NADR - Develop Entrada Worksheets	10	01-18-18	01-31-18
SV.DGN.NADR.010	NADR - Noise Modeling & Draft Preparation	30	02-01-18	03-15-18
SV.DGN.NADR.015	NADR - QA/QC Draft Report	5	03-16-18	03-22-18
SV.DGN.NADR.020	NADR - Submit Draft NADR to VDOT	0		03-22-18
SV.DGN.NADR.025	NADR - VDOT Review of Draft NADR	21	03-23-18	04-12-18
SV.DGN.NADR.030	NADR - Noise Plan Certification	5	04-13-18	04-19-18
SV.DGN.NADR.035	NADR - Final NADR Concurrence from Chief Engineer	0		04-19-18
Design		341	12-07-17	11-12-18
Design Preparation		31	12-07-17	01-24-18
SV.DGN.SVY.025	Perform Project Wide Survey (Non-Disruptive)	31	12-07-17	01-24-18
SV.DGN.SVY.005	Develop Project Wide Survey - Permits & Workplans	10	12-07-17	12-20-17
SV.DGN.LGI.005	WSP Develop Geotechnical Borings - Permits & Workplans	20	12-15-17	01-17-18
SV.DGN.WGI.005	WSP Develop Boring Permit Applications and Workplans	20	12-15-17	01-17-18
Roadway Design		335	12-07-17	11-06-18
Right-of-Way Plan Set		161	12-07-17	05-16-18
DGN.PW.ROW.005	ROW Plan Set - Produce Project Wide ROW Plans	66	12-07-17	03-15-18
DGN.PW.ROW.010	ROW Plan Set - Produce Project Wide E&S Plans	66	12-07-17	03-15-18
DGN.PW.ROW.015	ROW Plan Set - Produce Project Wide SWM Plans	66	12-07-17	03-15-18
DGN.PW.ROW.020	ROW Plan Set - Produce Project Wide Rough Grading Plans	66	12-07-17	03-15-18
DGN.PW.ROW.025	ROW Plan Set - Produce Project Wide MOT/TMP Plans	66	12-07-17	03-15-18
DGN.PW.ROW.030	IDC ROW Plan Set - Project Wide	0		03-15-18
DGN.PW.ROW.035	WSP Incorporate IDC Comments - ROW Plan Set - Project Wide	15	03-16-18	04-05-18
DGN.PW.ROW.040	WSP Pencils Down ROW Plan Set - Project Wide	0		04-05-18
DGN.PW.ROW.045	WSP Internal Review/QC ROW Plan Set - Project Wide	5	04-06-18	04-12-18
DGN.PW.ROW.050	WSP Address Comm/Package ROW Plan Set - Project Wide	3	04-13-18	04-17-18
DGN.PW.ROW.055	Skanska Internal Review ROW Plan Set - Project Wide	5	04-18-18	04-24-18
DGN.PW.ROW.060	Submit ROW Plan Set - Project Wide to VDOT	0		04-24-18
DGN.PW.ROW.065	VDOT Review/Comment ROW Plan Set - Project Wide	21	04-25-18	05-15-18
DGN.PW.ROW.070	WSP IDC Mtg Construction Plan Set	1	05-16-18	05-16-18
Construction Plan Set		174	05-17-18	11-06-18
Project Wide		174	05-17-18	11-06-18



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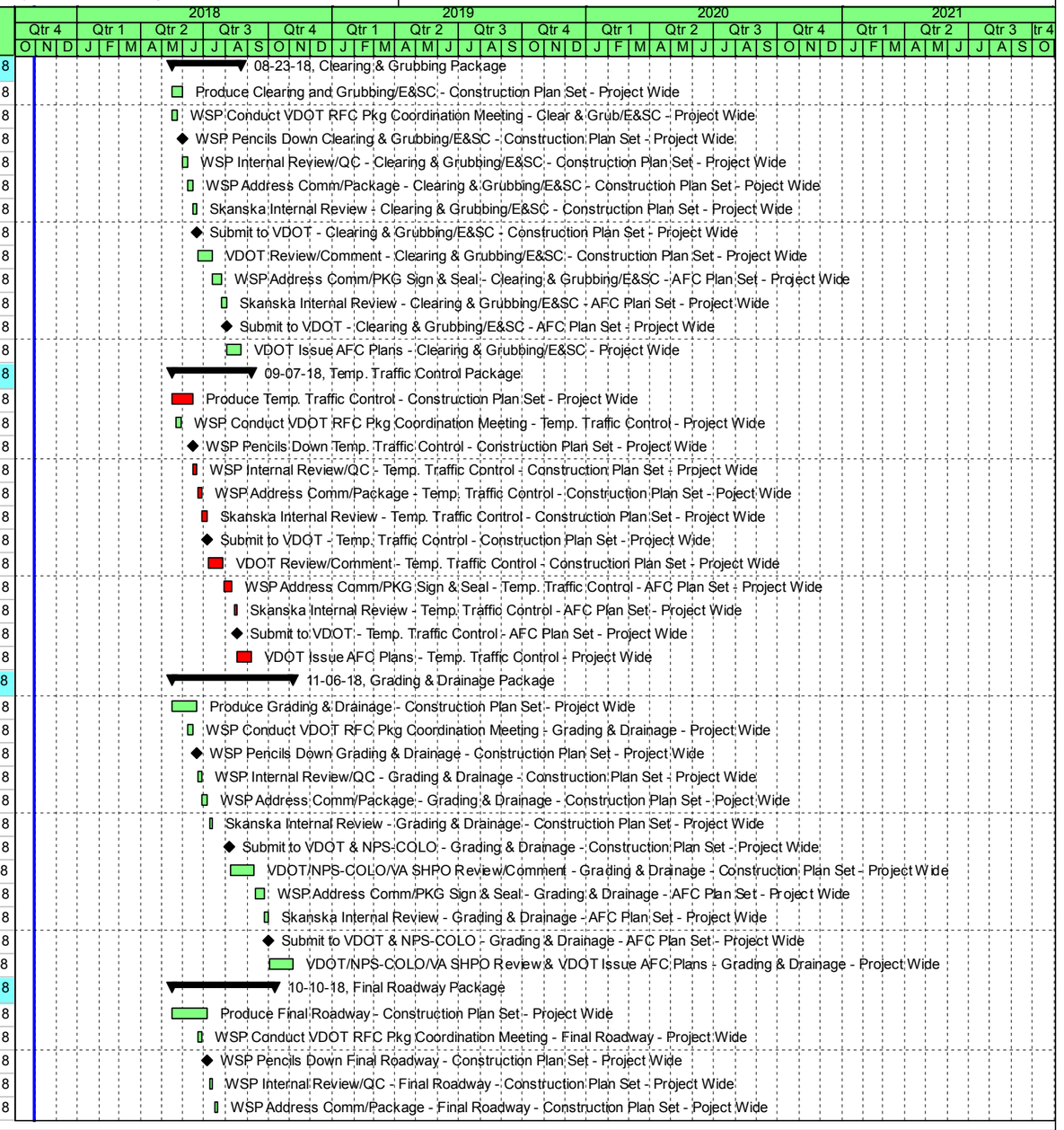
Activity ID	Activity Name	Original Duration	Start	Finish
Clearing & Grubbing Package		99	05-17-18	08-23-18
DGN.PW.CPS.CG.005	Produce Clearing and Grubbing/E&SC - Construction Plan Set - Project W	10	05-17-18	05-31-18
DGN.PW.CPS.CG.010	WSP Conduct VDOT RFC Pkg Coordination Meeting - Clear & Grub/E&S	5	05-17-18	05-23-18
DGN.PW.CPS.CG.015	WSP Pencils Down Clearing & Grubbing/E&SC - Construction Plan Set -	0		05-31-18
DGN.PW.CPS.CG.020	WSP Internal Review/QC - Clearing & Grubbing/E&SC - Construction Pla	5	06-01-18	06-07-18
DGN.PW.CPS.CG.025	WSP Address Comm/Package - Clearing & Grubbing/E&SC - Constructi	5	06-08-18	06-14-18
DGN.PW.CPS.CG.030	Skanska Internal Review - Clearing & Grubbing/E&SC - Construction Pla	5	06-15-18	06-21-18
DGN.PW.CPS.CG.035	Submit to VDOT - Clearing & Grubbing/E&SC - Construction Plan Set - P	0		06-21-18
DGN.PW.CPS.CG.040	VDOT Review/Comment - Clearing & Grubbing/E&SC - Construction Plan	21	06-22-18	07-12-18
DGN.PW.CPS.CG.045	WSP Address Comm/PKG Sign & Seal - Clearing & Grubbing/E&SC - AF	10	07-13-18	07-26-18
DGN.PW.CPS.CG.050	Skanska Internal Review - Clearing & Grubbing/E&SC - AFC Plan Set - P	5	07-27-18	08-02-18
DGN.PW.CPS.CG.055	Submit to VDOT - Clearing & Grubbing/E&SC - AFC Plan Set - Project W	0		08-02-18
DGN.PW.CPS.CG.060	VDOT Issue AFC Plans - Clearing & Grubbing/E&SC - Project Wide	21	08-03-18	08-23-18
Temp. Traffic Control Package		114	05-17-18	09-07-18
DGN.PW.CPS.TC.005	Produce Temp. Traffic Control - Construction Plan Set - Project Wide	20	05-17-18	06-14-18
DGN.PW.CPS.TC.010	WSP Conduct VDOT RFC Pkg Coordination Meeting - Temp. Traffic Con	5	05-22-18	05-29-18
DGN.PW.CPS.TC.015	WSP Pencils Down Temp. Traffic Control - Construction Plan Set - Projec	0		06-14-18
DGN.PW.CPS.TC.020	WSP Internal Review/QC - Temp. Traffic Control - Construction Plan Set	5	06-15-18	06-21-18
DGN.PW.CPS.TC.025	WSP Address Comm/Package - Temp. Traffic Control - Construction Plan	5	06-22-18	06-28-18
DGN.PW.CPS.TC.030	Skanska Internal Review - Temp. Traffic Control - Construction Plan Set -	5	06-29-18	07-06-18
DGN.PW.CPS.TC.035	Submit to VDOT - Temp. Traffic Control - Construction Plan Set - Project	0		07-06-18
DGN.PW.CPS.TC.040	VDOT Review/Comment - Temp. Traffic Control - Construction Plan Set -	21	07-07-18	07-27-18
DGN.PW.CPS.TC.045	WSP Address Comm/PKG Sign & Seal - Temp. Traffic Control - AFC Plan	10	07-30-18	08-10-18
DGN.PW.CPS.TC.050	Skanska Internal Review - Temp. Traffic Control - AFC Plan Set - Project	5	08-13-18	08-17-18
DGN.PW.CPS.TC.055	Submit to VDOT - Temp. Traffic Control - AFC Plan Set - Project Wide	0		08-17-18
DGN.PW.CPS.TC.060	VDOT Issue AFC Plans - Temp. Traffic Control - Project Wide	21	08-18-18	09-07-18
Grading & Drainage Package		174	05-17-18	11-06-18
DGN.PW.CPS.GD.005	Produce Grading & Drainage - Construction Plan Set - Project Wide	25	05-17-18	06-21-18
DGN.PW.CPS.GD.010	WSP Conduct VDOT RFC Pkg Coordination Meeting - Grading & Drainag	5	06-08-18	06-14-18
DGN.PW.CPS.GD.015	WSP Pencils Down Grading & Drainage - Construction Plan Set - Project	0		06-21-18
DGN.PW.CPS.GD.020	WSP Internal Review/QC - Grading & Drainage - Construction Plan Set -	5	06-22-18	06-28-18
DGN.PW.CPS.GD.025	WSP Address Comm/Package - Grading & Drainage - Construction Plan	5	06-29-18	07-06-18
DGN.PW.CPS.GD.030	Skanska Internal Review - Grading & Drainage - Construction Plan Set -	5	07-09-18	07-13-18
DGN.PW.CPS.GD.035	Submit to VDOT & NPS-COLO - Grading & Drainage - Construction Plan	0		08-07-18
DGN.PW.CPS.GD.040	VDOT/NPS-COLO/VA SHPO Review/Comment - Grading & Drainage - C	35	08-08-18	09-11-18
DGN.PW.CPS.GD.045	WSP Address Comm/PKG Sign & Seal - Grading & Drainage - AFC Plan	10	09-12-18	09-25-18
DGN.PW.CPS.GD.050	Skanska Internal Review - Grading & Drainage - AFC Plan Set - Project V	5	09-26-18	10-02-18
DGN.PW.CPS.GD.055	Submit to VDOT & NPS-COLO - Grading & Drainage - AFC Plan Set - Pr	0		10-02-18
DGN.PW.CPS.GD.060	VDOT/NPS-COLO/VA SHPO Review & VDOT Issue AFC Plans - Gradin	35	10-03-18	11-06-18
Final Roadway Package		147	05-17-18	10-10-18
DGN.PW.CPS.FR.005	Produce Final Roadway - Construction Plan Set - Project Wide	35	05-17-18	07-06-18
DGN.PW.CPS.FR.010	WSP Conduct VDOT RFC Pkg Coordination Meeting - Final Roadway - F	5	06-22-18	06-28-18
DGN.PW.CPS.FR.015	WSP Pencils Down Final Roadway - Construction Plan Set - Project Wide	0		07-06-18
DGN.PW.CPS.FR.020	WSP Internal Review/QC - Final Roadway - Construction Plan Set - Proje	5	07-09-18	07-13-18
DGN.PW.CPS.FR.025	WSP Address Comm/Package - Final Roadway - Construction Plan Set -	5	07-16-18	07-20-18



Remaining Level of Effort
Actual Work
Remaining Work
Critical Remaining Work
Milestone
Summary

State Project No.: 0064-965-229, P-101, R-201, C-501, B-638, B-639, B-640, B-641, B-642, B-643, D-609, D-610, D-611
Federal Project No.: NHPP-064-3 (498)
Contract ID Number: C00106689DB97

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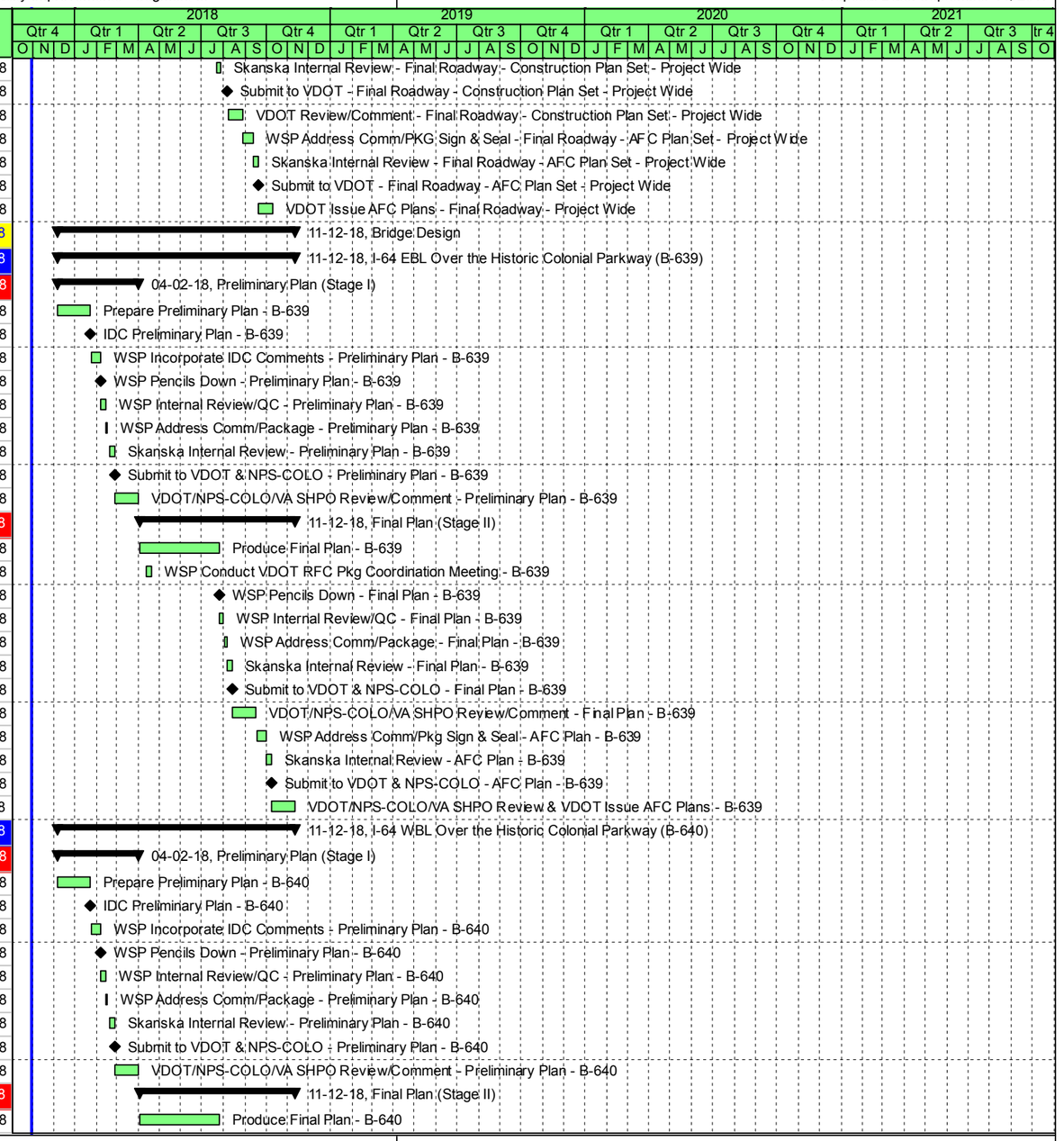
SKANSKA

I-64 Capacity Improvements - Segment III

Proposal Date: September 14, 2017

Activity ID	Activity Name	Original Duration	Start	Finish
DGN.PW.CPS.FR.030	Skanska Internal Review - Final Roadway - Construction Plan Set - Proje	5	07-23-18	07-27-18
DGN.PW.CPS.FR.035	Submit to VDOT - Final Roadway - Construction Plan Set - Project Wide	0		08-07-18
DGN.PW.CPS.FR.040	VDOT Review/Comment - Final Roadway - Construction Plan Set - Proje	21	08-08-18	08-28-18
DGN.PW.CPS.FR.045	WSP Address Comm/PKG Sign & Seal - Final Roadway - AFC Plan Set -	10	08-29-18	09-12-18
DGN.PW.CPS.FR.050	Skanska Internal Review - Final Roadway - AFC Plan Set - Project Wide	5	09-13-18	09-19-18
DGN.PW.CPS.FR.055	Submit to VDOT - Final Roadway - AFC Plan Set - Project Wide	0		09-19-18
DGN.PW.CPS.FR.060	VDOT Issue AFC Plans - Final Roadway - Project Wide	21	09-20-18	10-10-18
Bridge Design		341	12-07-17	11-12-18
I-64 EBL Over the Historic Colonial Parkway (B-639)		341	12-07-17	11-12-18
Preliminary Plan (Stage I)		117	12-07-17	04-02-18
DGN.PRE.B639.005	Prepare Preliminary Plan - B-639	30	12-07-17	01-23-18
DGN.PRE.B639.010	IDC Preliminary Plan - B-639	0		01-23-18
DGN.PRE.B639.015	WSP Incorporate IDC Comments - Preliminary Plan - B-639	10	01-24-18	02-06-18
DGN.PRE.B639.020	WSP Pencils Down - Preliminary Plan - B-639	0		02-06-18
DGN.PRE.B639.025	WSP Internal Review/QC - Preliminary Plan - B-639	5	02-07-18	02-13-18
DGN.PRE.B639.030	WSP Address Comm/Package - Preliminary Plan - B-639	3	02-14-18	02-16-18
DGN.PRE.B639.035	Skanska Internal Review - Preliminary Plan - B-639	5	02-20-18	02-26-18
DGN.PRE.B639.040	Submit to VDOT & NPS-COLO - Preliminary Plan - B-639	0		02-26-18
DGN.PRE.B639.045	VDOT/NPS-COLO/VA SHPO Review/Comment - Preliminary Plan - B-63	35	02-27-18	04-02-18
Final Plan (Stage II)		224	04-03-18	11-12-18
DGN.FIN.B639.005	Produce Final Plan - B-639	80	04-03-18	07-25-18
DGN.FIN.B639.010	WSP Conduct VDOT RFC Pkg Coordination Meeting - B-639	5	04-13-18	04-19-18
DGN.FIN.B639.015	WSP Pencils Down - Final Plan - B-639	0		07-25-18
DGN.FIN.B639.020	WSP Internal Review/QC - Final Plan - B-639	5	07-26-18	08-01-18
DGN.FIN.B639.025	WSP Address Comm/Package - Final Plan - B-639	3	08-02-18	08-06-18
DGN.FIN.B639.030	Skanska Internal Review - Final Plan - B-639	5	08-07-18	08-13-18
DGN.FIN.B639.035	Submit to VDOT & NPS-COLO - Final Plan - B-639	0		08-13-18
DGN.FIN.B639.040	VDOT/NPS-COLO/VA SHPO Review/Comment - Final Plan - B-639	35	08-14-18	09-17-18
DGN.FIN.B639.045	WSP Address Comm/Pkg Sign & Seal - AFC Plan - B-639	10	09-18-18	10-01-18
DGN.FIN.B639.050	Skanska Internal Review - AFC Plan - B-639	5	10-02-18	10-08-18
DGN.FIN.B639.055	Submit to VDOT & NPS-COLO - AFC Plan - B-639	0		10-09-18
DGN.FIN.B639.060	VDOT/NPS-COLO/VA SHPO Review & VDOT Issue AFC Plans - B-639	35	10-09-18	11-12-18
I-64 WBL Over the Historic Colonial Parkway (B-640)		341	12-07-17	11-12-18
Preliminary Plan (Stage I)		117	12-07-17	04-02-18
DGN.PRE.B640.005	Prepare Preliminary Plan - B-640	30	12-07-17	01-23-18
DGN.PRE.B640.010	IDC Preliminary Plan - B-640	0		01-23-18
DGN.PRE.B640.015	WSP Incorporate IDC Comments - Preliminary Plan - B-640	10	01-24-18	02-06-18
DGN.PRE.B640.020	WSP Pencils Down - Preliminary Plan - B-640	0		02-06-18
DGN.PRE.B640.025	WSP Internal Review/QC - Preliminary Plan - B-640	5	02-07-18	02-13-18
DGN.PRE.B640.030	WSP Address Comm/Package - Preliminary Plan - B-640	3	02-14-18	02-16-18
DGN.PRE.B640.035	Skanska Internal Review - Preliminary Plan - B-640	5	02-20-18	02-26-18
DGN.PRE.B640.040	Submit to VDOT & NPS-COLO - Preliminary Plan - B-640	0		02-26-18
DGN.PRE.B640.045	VDOT/NPS-COLO/VA SHPO Review/Comment - Preliminary Plan - B-64	35	02-27-18	04-02-18
Final Plan (Stage II)		224	04-03-18	11-12-18
DGN.FIN.B640.005	Produce Final Plan - B-640	80	04-03-18	07-25-18



Remaining Level of Effort
Actual Work
Remaining Work
Critical Remaining Work
Milestone
Summary

State Project No.: 0064-965-229, P-101, R-201, C-501, B-638, B-639, B-640, B-641, B-642, B-643, D-609, D-610, D-611
Federal Project No.: NHPP-064-3 (498)
Contract ID Number: C00106689DB97

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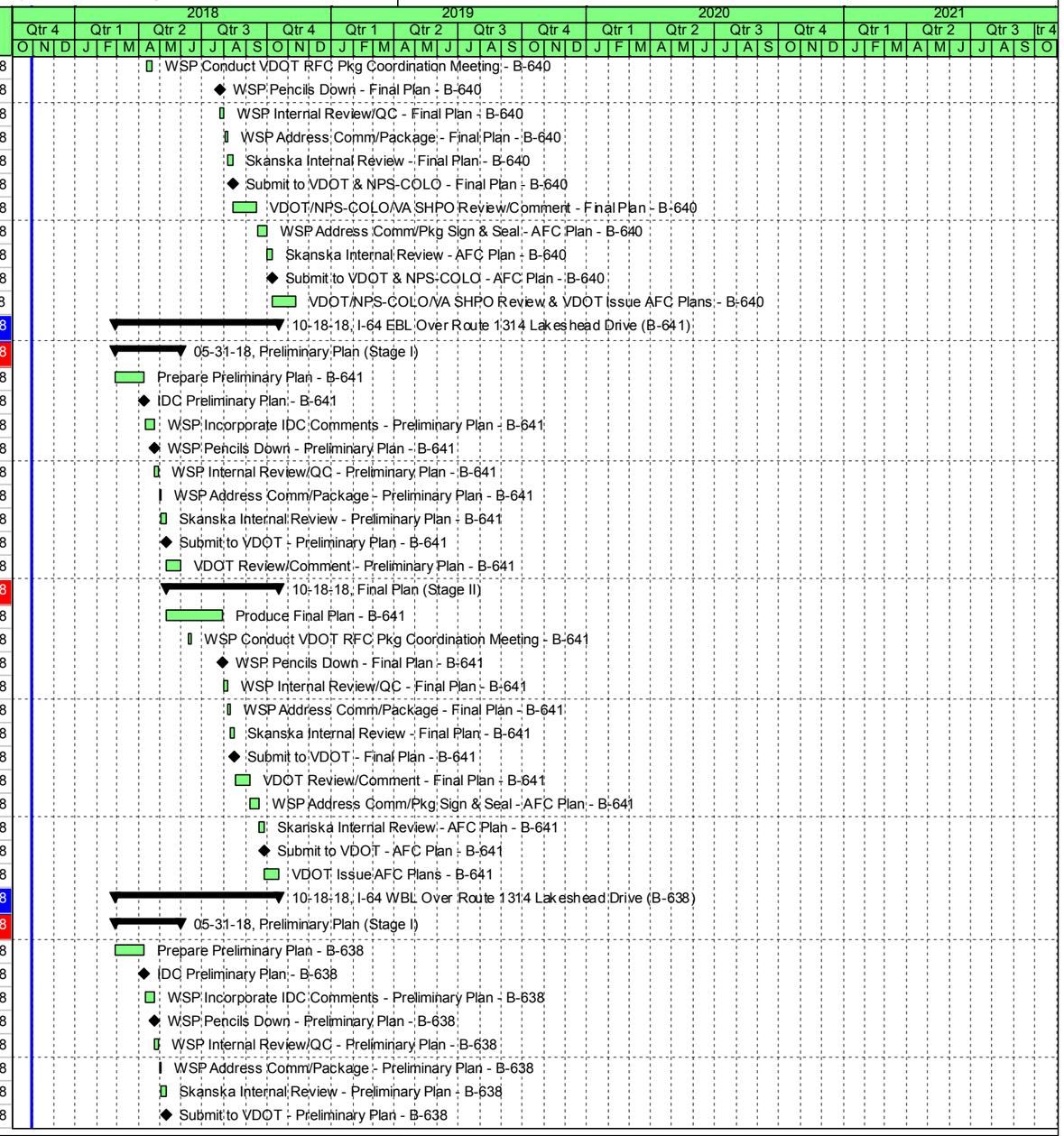
Activity ID	Activity Name	Original Duration	Start	Finish
DGN.FIN.B640.010	WSP Conduct VDOT RFC Pkg Coordination Meeting - B-640	5	04-13-18	04-19-18
DGN.FIN.B640.015	WSP Pencils Down - Final Plan - B-640	0		07-25-18
DGN.FIN.B640.020	WSP Internal Review/QC - Final Plan - B-640	5	07-26-18	08-01-18
DGN.FIN.B640.025	WSP Address Comm/Package - Final Plan - B-640	3	08-02-18	08-06-18
DGN.FIN.B640.030	Skanska Internal Review - Final Plan - B-640	5	08-07-18	08-13-18
DGN.FIN.B640.035	Submit to VDOT & NPS-COLO - Final Plan - B-640	0		08-13-18
DGN.FIN.B640.040	VDOT/NPS-COLO/VA SHPO Review/Comment - Final Plan - B-640	35	08-14-18	09-17-18
DGN.FIN.B640.045	WSP Address Comm/Pkg Sign & Seal - AFC Plan - B-640	10	09-18-18	10-01-18
DGN.FIN.B640.050	Skanska Internal Review - AFC Plan - B-640	5	10-02-18	10-08-18
DGN.FIN.B640.055	Submit to VDOT & NPS-COLO - AFC Plan - B-640	0		10-09-18
DGN.FIN.B640.060	VDOT/NPS-COLO/VA SHPO Review & VDOT Issue AFC Plans - B-640	35	10-09-18	11-12-18
I-64 EBL Over Route 1314 Lakeshead Drive (B-641)		234	02-27-18	10-18-18
Preliminary Plan (Stage I)		94	02-27-18	05-31-18
DGN.PRE.B641.005	Prepare Preliminary Plan - B-641	30	02-27-18	04-09-18
DGN.PRE.B641.010	IDC Preliminary Plan - B-641	0		04-09-18
DGN.PRE.B641.015	WSP Incorporate IDC Comments - Preliminary Plan - B-641	10	04-10-18	04-23-18
DGN.PRE.B641.020	WSP Pencils Down - Preliminary Plan - B-641	0		04-23-18
DGN.PRE.B641.025	WSP Internal Review/QC - Preliminary Plan - B-641	5	04-24-18	04-30-18
DGN.PRE.B641.030	WSP Address Comm/Package - Preliminary Plan - B-641	3	05-01-18	05-03-18
DGN.PRE.B641.035	Skanska Internal Review - Preliminary Plan - B-641	5	05-04-18	05-10-18
DGN.PRE.B641.040	Submit to VDOT - Preliminary Plan - B-641	0		05-10-18
DGN.PRE.B641.045	VDOT Review/Comment - Preliminary Plan - B-641	21	05-11-18	05-31-18
Final Plan (Stage II)		161	05-11-18	10-18-18
DGN.FIN.B641.005	Produce Final Plan - B-641	55	05-11-18	07-30-18
DGN.FIN.B641.010	WSP Conduct VDOT RFC Pkg Coordination Meeting - B-641	5	06-11-18	06-15-18
DGN.FIN.B641.015	WSP Pencils Down - Final Plan - B-641	0		07-30-18
DGN.FIN.B641.020	WSP Internal Review/QC - Final Plan - B-641	5	07-31-18	08-06-18
DGN.FIN.B641.025	WSP Address Comm/Package - Final Plan - B-641	3	08-07-18	08-09-18
DGN.FIN.B641.030	Skanska Internal Review - Final Plan - B-641	5	08-10-18	08-16-18
DGN.FIN.B641.035	Submit to VDOT - Final Plan - B-641	0		08-16-18
DGN.FIN.B641.040	VDOT Review/Comment - Final Plan - B-641	21	08-17-18	09-06-18
DGN.FIN.B641.045	WSP Address Comm/Pkg Sign & Seal - AFC Plan - B-641	10	09-07-18	09-20-18
DGN.FIN.B641.050	Skanska Internal Review - AFC Plan - B-641	5	09-21-18	09-27-18
DGN.FIN.B641.055	Submit to VDOT - AFC Plan - B-641	0		09-27-18
DGN.FIN.B641.060	VDOT Issue AFC Plans - B-641	21	09-28-18	10-18-18
I-64 WBL Over Route 1314 Lakeshead Drive (B-638)		234	02-27-18	10-18-18
Preliminary Plan (Stage I)		94	02-27-18	05-31-18
DGN.PRE.B638.005	Prepare Preliminary Plan - B-638	30	02-27-18	04-09-18
DGN.PRE.B638.010	IDC Preliminary Plan - B-638	0		04-09-18
DGN.PRE.B638.015	WSP Incorporate IDC Comments - Preliminary Plan - B-638	10	04-10-18	04-23-18
DGN.PRE.B638.020	WSP Pencils Down - Preliminary Plan - B-638	0		04-23-18
DGN.PRE.B638.025	WSP Internal Review/QC - Preliminary Plan - B-638	5	04-24-18	04-30-18
DGN.PRE.B638.030	WSP Address Comm/Package - Preliminary Plan - B-638	3	05-01-18	05-03-18
DGN.PRE.B638.035	Skanska Internal Review - Preliminary Plan - B-638	5	05-04-18	05-10-18
DGN.PRE.B638.040	Submit to VDOT - Preliminary Plan - B-638	0		05-10-18



Remaining Level of Effort | Critical Remaining Work
Actual Work | Milestone
Remaining Work | Summary

State Project No.: 0064-965-229, P-101, R-201, C-501, B-638, B-639, B-640, B-641, B-642, B-643, D-609, D-610, D-611
Federal Project No.: NHPP-064-3 (498)
Contract ID Number: C00106689DB97

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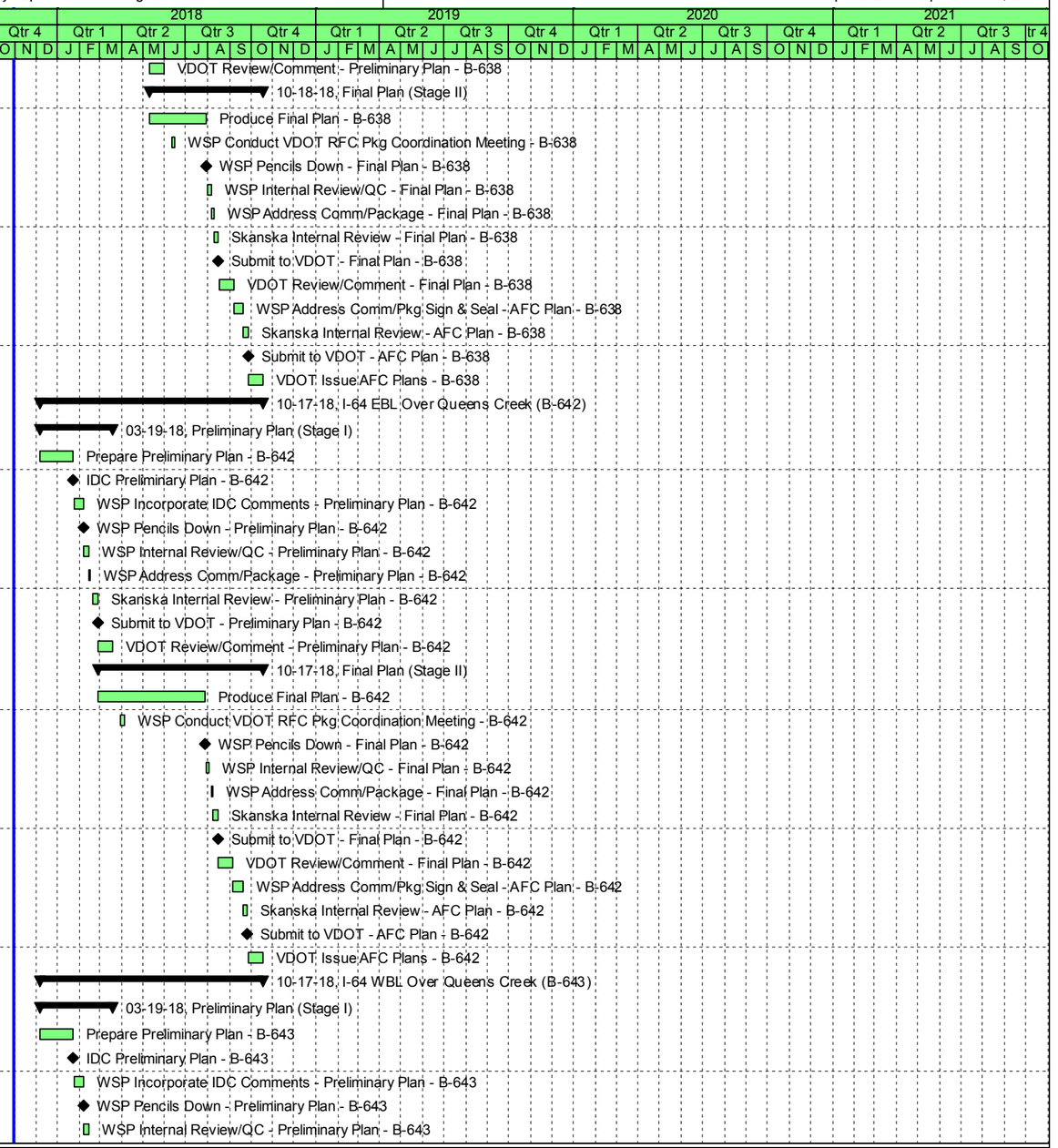
Activity ID	Activity Name	Original Duration	Start	Finish
DGN.PRE.B638.045	VDOT Review/Comment - Preliminary Plan - B-638	21	05-11-18	05-31-18
Final Plan (Stage II)		161	05-11-18	10-18-18
DGN.FIN.B638.005	Produce Final Plan - B-638	55	05-11-18	07-30-18
DGN.FIN.B638.010	WSP Conduct VDOT RFC Pkg Coordination Meeting - B-638	5	06-11-18	06-15-18
DGN.FIN.B638.015	WSP Pencils Down - Final Plan - B-638	0		07-30-18
DGN.FIN.B638.020	WSP Internal Review/QC - Final Plan - B-638	5	07-31-18	08-06-18
DGN.FIN.B638.025	WSP Address Comm/Package - Final Plan - B-638	3	08-07-18	08-09-18
DGN.FIN.B638.030	Skanska Internal Review - Final Plan - B-638	5	08-10-18	08-16-18
DGN.FIN.B638.035	Submit to VDOT - Final Plan - B-638	0		08-16-18
DGN.FIN.B638.040	VDOT Review/Comment - Final Plan - B-638	21	08-17-18	09-06-18
DGN.FIN.B638.045	WSP Address Comm/Pkg Sign & Seal - AFC Plan - B-638	10	09-07-18	09-20-18
DGN.FIN.B638.050	Skanska Internal Review - AFC Plan - B-638	5	09-21-18	09-27-18
DGN.FIN.B638.055	Submit to VDOT - AFC Plan - B-638	0		09-27-18
DGN.FIN.B638.060	VDOT Issue AFC Plans - B-638	21	09-28-18	10-18-18
I-64 EBL Over Queens Creek (B-642)		315	12-07-17	10-17-18
Preliminary Plan (Stage I)		103	12-07-17	03-19-18
DGN.PRE.B642.005	Prepare Preliminary Plan - B-642	30	12-07-17	01-23-18
DGN.PRE.B642.010	IDC Preliminary Plan - B-642	0		01-23-18
DGN.PRE.B642.015	WSP Incorporate IDC Comments - Preliminary Plan - B-642	10	01-24-18	02-06-18
DGN.PRE.B642.020	WSP Pencils Down - Preliminary Plan - B-642	0		02-06-18
DGN.PRE.B642.025	WSP Internal Review/QC - Preliminary Plan - B-642	5	02-07-18	02-13-18
DGN.PRE.B642.030	WSP Address Comm/Package - Preliminary Plan - B-642	3	02-14-18	02-16-18
DGN.PRE.B642.035	Skanska Internal Review - Preliminary Plan - B-642	5	02-20-18	02-26-18
DGN.PRE.B642.040	Submit to VDOT - Preliminary Plan - B-642	0		02-26-18
DGN.PRE.B642.045	VDOT Review/Comment - Preliminary Plan - B-642	21	02-27-18	03-19-18
Final Plan (Stage II)		233	02-27-18	10-17-18
DGN.FIN.B642.005	Produce Final Plan - B-642	107	02-27-18	07-27-18
DGN.FIN.B642.010	WSP Conduct VDOT RFC Pkg Coordination Meeting - B-642	5	03-30-18	04-05-18
DGN.FIN.B642.015	WSP Pencils Down - Final Plan - B-642	0		07-27-18
DGN.FIN.B642.020	WSP Internal Review/QC - Final Plan - B-642	5	07-30-18	08-03-18
DGN.FIN.B642.025	WSP Address Comm/Package - Final Plan - B-642	3	08-06-18	08-08-18
DGN.FIN.B642.030	Skanska Internal Review - Final Plan - B-642	5	08-09-18	08-15-18
DGN.FIN.B642.035	Submit to VDOT - Final Plan - B-642	0		08-15-18
DGN.FIN.B642.040	VDOT Review/Comment - Final Plan - B-642	21	08-16-18	09-05-18
DGN.FIN.B642.045	WSP Address Comm/Pkg Sign & Seal - AFC Plan - B-642	10	09-06-18	09-19-18
DGN.FIN.B642.050	Skanska Internal Review - AFC Plan - B-642	5	09-20-18	09-26-18
DGN.FIN.B642.055	Submit to VDOT - AFC Plan - B-642	0		09-26-18
DGN.FIN.B642.060	VDOT Issue AFC Plans - B-642	21	09-27-18	10-17-18
I-64 WBL Over Queens Creek (B-643)		315	12-07-17	10-17-18
Preliminary Plan (Stage I)		103	12-07-17	03-19-18
DGN.PRE.B643.005	Prepare Preliminary Plan - B-643	30	12-07-17	01-23-18
DGN.PRE.B643.010	IDC Preliminary Plan - B-643	0		01-23-18
DGN.PRE.B643.015	WSP Incorporate IDC Comments - Preliminary Plan - B-643	10	01-24-18	02-06-18
DGN.PRE.B643.020	WSP Pencils Down - Preliminary Plan - B-643	0		02-06-18
DGN.PRE.B643.025	WSP Internal Review/QC - Preliminary Plan - B-643	5	02-07-18	02-13-18



Remaining Level of Effort
Actual Work
Remaining Work
Critical Remaining Work
Milestone
Summary

State Project No.: 0064-965-229, P-101, R-201, C-501, B-638, B-639, B-640, B-641, B-642, B-643, D-609, D-610, D-611
Federal Project No.: NHPP-064-3 (498)
Contract ID Number: C00106689DB97

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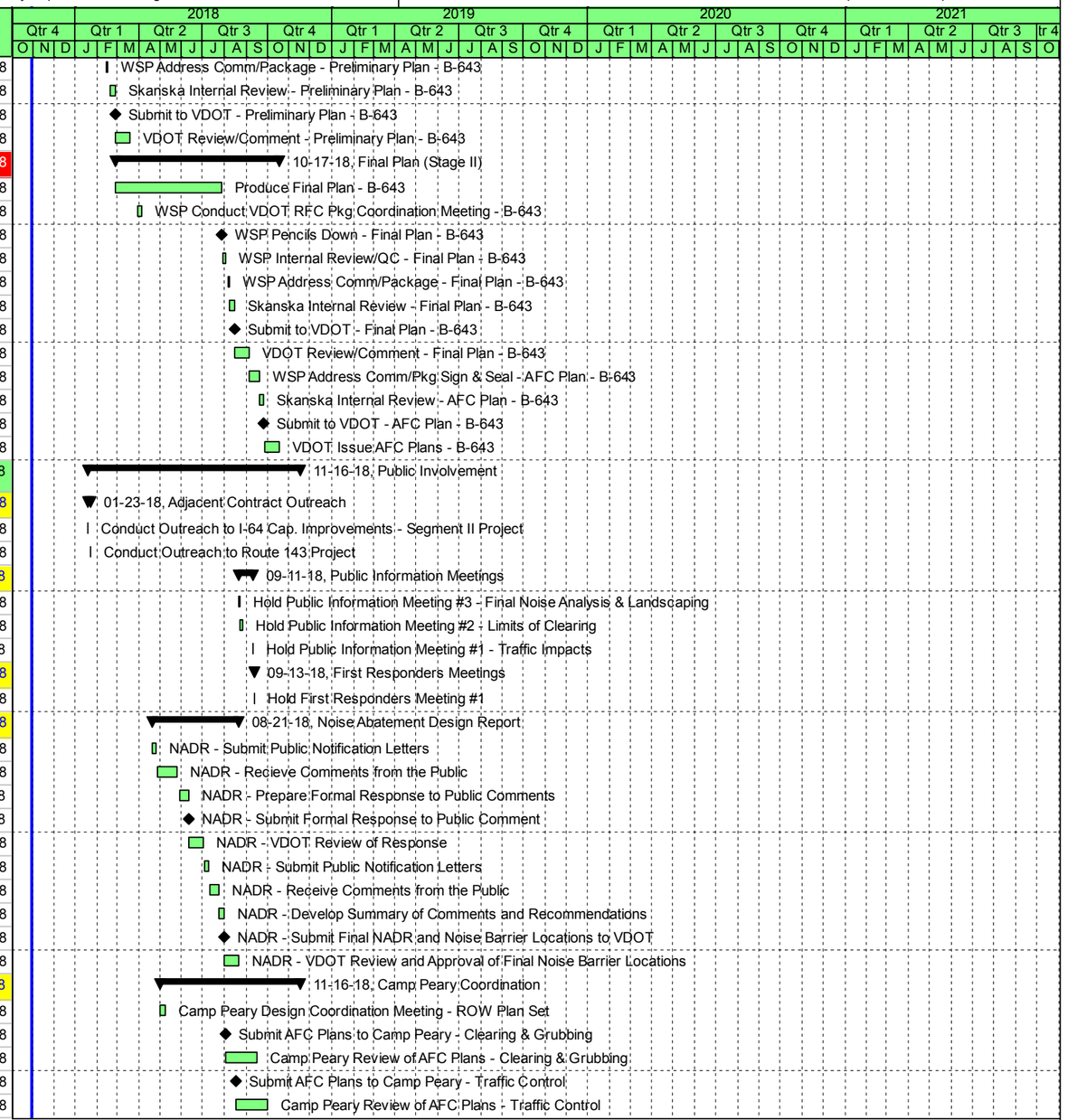
Activity ID	Activity Name	Original Duration	Start	Finish
DGN.PRE.B643.030	WSP Address Comm/Package - Preliminary Plan - B-643	3	02-14-18	02-16-18
DGN.PRE.B643.035	Skanska Internal Review - Preliminary Plan - B-643	5	02-20-18	02-26-18
DGN.PRE.B643.040	Submit to VDOT - Preliminary Plan - B-643	0		02-26-18
DGN.PRE.B643.045	VDOT Review/Comment - Preliminary Plan - B-643	21	02-27-18	03-19-18
Final Plan (Stage II)		233	02-27-18	10-17-18
DGN.FIN.B643.005	Produce Final Plan - B-643	107	02-27-18	07-27-18
DGN.FIN.B643.010	WSP Conduct VDOT RFC Pkg Coordination Meeting - B-643	5	03-30-18	04-05-18
DGN.FIN.B643.015	WSP Pencils Down - Final Plan - B-643	0		07-27-18
DGN.FIN.B643.020	WSP Internal Review/QC - Final Plan - B-643	5	07-30-18	08-03-18
DGN.FIN.B643.025	WSP Address Comm/Package - Final Plan - B-643	3	08-06-18	08-08-18
DGN.FIN.B643.030	Skanska Internal Review - Final Plan - B-643	5	08-09-18	08-15-18
DGN.FIN.B643.035	Submit to VDOT - Final Plan - B-643	0		08-15-18
DGN.FIN.B643.040	VDOT Review/Comment - Final Plan - B-643	21	08-16-18	09-05-18
DGN.FIN.B643.045	WSP Address Comm/Pkg Sign & Seal - AFC Plan - B-643	10	09-06-18	09-19-18
DGN.FIN.B643.050	Skanska Internal Review - AFC Plan - B-643	5	09-20-18	09-26-18
DGN.FIN.B643.055	Submit to VDOT - AFC Plan - B-643	0		09-26-18
DGN.FIN.B643.060	VDOT Issue AFC Plans - B-643	21	09-27-18	10-17-18
Public Involvement		303	01-18-18	11-16-18
Adjacent Contract Outreach		4	01-18-18	01-23-18
ACO.64.SEGII	Conduct Outreach to I-64 Cap. Improvements - Segment II Project	2	01-18-18	01-19-18
ACO.RTE143	Conduct Outreach to Route 143 Project	2	01-22-18	01-23-18
Public Information Meetings		14	08-22-18	09-11-18
PIM.NOISE	Hold Public Information Meeting #3 - Final Noise Analysis & Landscaping	2	08-22-18	08-23-18
PIM.CLEARING	Hold Public Information Meeting #2 - Limits of Clearing	2	08-24-18	08-27-18
PIM.TRAFFIC	Hold Public Information Meeting #1 - Traffic Impacts	2	09-10-18	09-11-18
First Responders Meetings		2	09-12-18	09-13-18
FRM.001	Hold First Responders Meeting #1	2	09-12-18	09-13-18
Noise Abatement Design Report		124	04-20-18	08-21-18
SV.DGN.NADR.040	NADR - Submit Public Notification Letters	5	04-20-18	04-26-18
SV.DGN.NADR.045	NADR - Recieve Comments from the Public	30	04-27-18	05-26-18
SV.DGN.NADR.050	NADR - Prepare Formal Response to Public Comments	10	05-29-18	06-11-18
SV.DGN.NADR.055	NADR - Submit Formal Response to Public Comment	0		06-11-18
SV.DGN.NADR.060	NADR - VDOT Review of Response	21	06-12-18	07-02-18
SV.DGN.NADR.065	NADR - Submit Public Notification Letters	5	07-03-18	07-10-18
SV.DGN.NADR.070	NADR - Receive Comments from the Public	10	07-11-18	07-24-18
SV.DGN.NADR.075	NADR - Develop Summary of Comments and Recommendations	5	07-25-18	07-31-18
SV.DGN.NADR.080	NADR - Submit Final NADR and Noise Barrier Locations to VDOT	0		07-31-18
SV.DGN.NADR.085	NADR - VDOT Review and Approval of Final Noise Barrier Locations	21	08-01-18	08-21-18
Camp Peary Coordination		199	05-02-18	11-16-18
CP.DGN.COORD.ROW	Camp Peary Design Coordination Meeting - ROW Plan Set	5	05-02-18	05-08-18
CP.DGN.COORD.CG.005	Submit AFC Plans to Camp Peary - Clearing & Grubbing	0		08-02-18
CP.DGN.COORD.CG.010	Camp Peary Review of AFC Plans - Clearing & Grubbing	45	08-03-18	09-16-18
CP.DGN.COORD.TC.005	Submit AFC Plans to Camp Peary - Traffic Control	0		08-17-18
CP.DGN.COORD.TC.010	Camp Peary Review of AFC Plans - Traffic Control	45	08-18-18	10-01-18



Remaining Level of Effort
Actual Work
Remaining Work
Critical Remaining Work
Milestone
Summary

State Project No.: 0064-965-229, P-101, R-201, C-501, B-638, B-639, B-640, B-641, B-642, B-643, D-609, D-610, D-611
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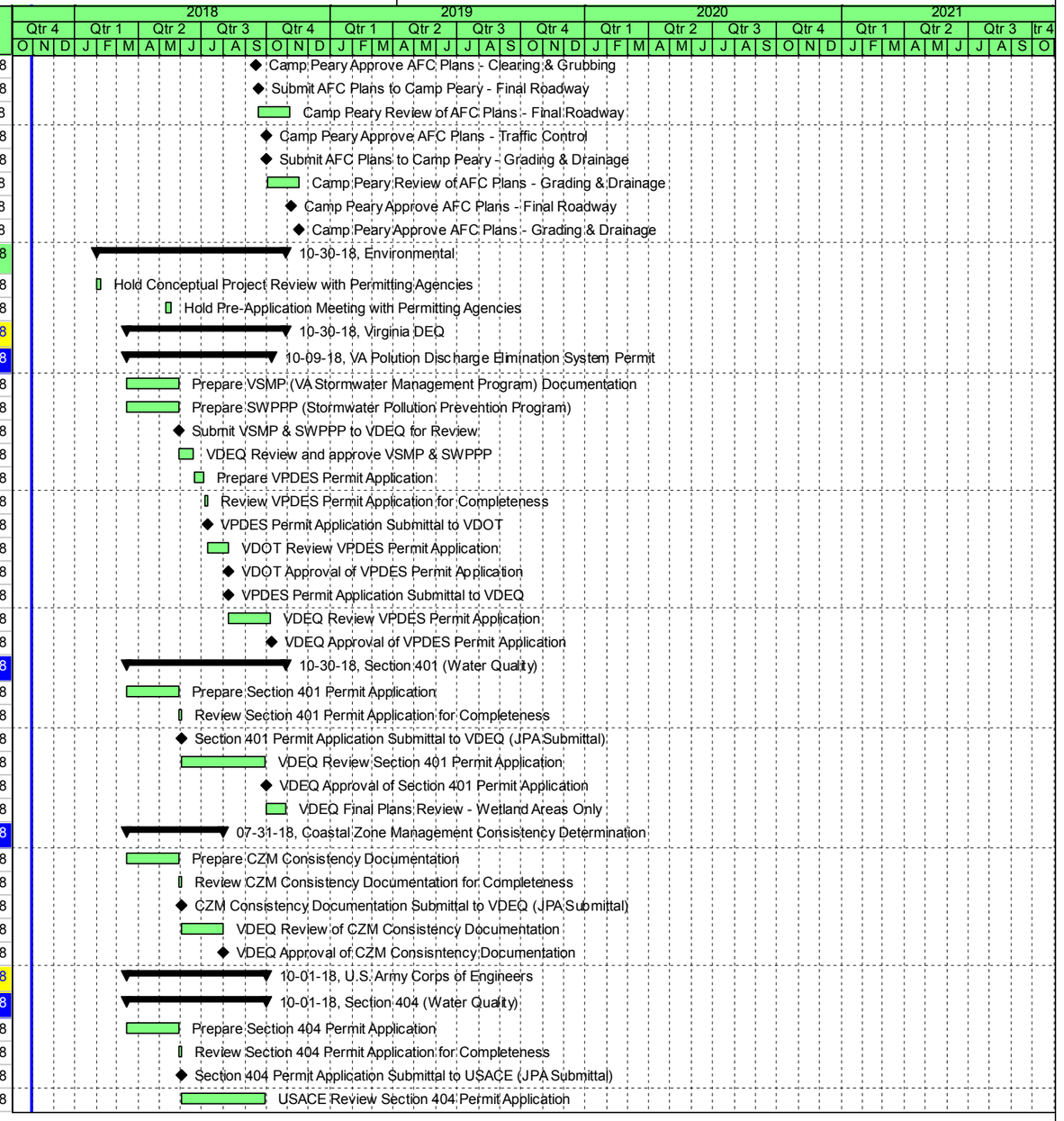
Activity ID	Activity Name	Original Duration	Start	Finish
CP.DGN.COORD.CG.015	Camp Peary Approve AFC Plans - Clearing & Grubbing	0		09-17-18
CP.DGN.COORD.FR.005	Submit AFC Plans to Camp Peary - Final Roadway	0		09-19-18
CP.DGN.COORD.FR.010	Camp Peary Review of AFC Plans - Final Roadway	45	09-20-18	11-03-18
CP.DGN.COORD.TC.015	Camp Peary Approve AFC Plans - Traffic Control	0		10-01-18
CP.DGN.COORD.GD.005	Submit AFC Plans to Camp Peary - Grading & Drainage	0		10-02-18
CP.DGN.COORD.GD.010	Camp Peary Review of AFC Plans - Grading & Drainage	45	10-03-18	11-16-18
CP.DGN.COORD.FR.015	Camp Peary Approve AFC Plans - Final Roadway	0		11-05-18
CP.DGN.COORD.GD.015	Camp Peary Approve AFC Plans - Grading & Drainage	0		11-16-18
Environmental		272	02-01-18	10-30-18
ENV.PRE.APP.MTG.005	Hold Conceptual Project Review with Permitting Agencies	5	02-01-18	02-07-18
ENV.PRE.APP.MTG.010	Hold Pre-Application Meeting with Permitting Agencies	5	05-11-18	05-17-18
Virginia DEQ		229	03-16-18	10-30-18
VA Polution Discharge Elimination System Permit		207	03-16-18	10-09-18
PERM.VSMP.PREP	Prepare VSMP (VA Stormwater Management Program) Documentation	52	03-16-18	05-29-18
PERM.SWPPP.PREP	Prepare SWPPP (Stormwater Pollution Prevention Program)	52	03-16-18	05-29-18
PERM.SWPPP.SUBM	Submit VSMP & SWPPP to VDEQ for Review	0		05-29-18
PERM.SWPPP.VDEQ.REV	VDEQ Review and approve VSMP & SWPPP	21	05-30-18	06-19-18
PERM.VPDES.PREP	Prepare VPDES Permit Application	10	06-20-18	07-03-18
PERM.VPDES.DB.REV	Review VPDES Permit Application for Completeness	3	07-05-18	07-09-18
PERM.VPDES.SUBM.VDOT	VPDES Permit Application Submittal to VDOT	0		07-09-18
PERM.VPDES.VDOT.REV	VDOT Review VPDES Permit Application	30	07-10-18	08-08-18
PERM.VPDES.VDOT.APPR	VDOT Approval of VPDES Permit Application	0		08-08-18
PERM.VPDES.SUBM.VDEQ	VPDES Permit Application Submittal to VDEQ	0		08-08-18
PERM.VPDES.VDEQ.REV	VDEQ Review VPDES Permit Application	60	08-09-18	10-07-18
PERM.VPDES.VDEQ.APPR	VDEQ Approval of VPDES Permit Application	0		10-09-18
Section 401 (Water Quality)		229	03-16-18	10-30-18
PERM.401.PREP	Prepare Section 401 Permit Application	52	03-16-18	05-29-18
PERM.401.DB.REV	Review Section 401 Permit Application for Completeness	3	05-30-18	06-01-18
PERM.401.SUBM.VDEQ	Section 401 Permit Application Submittal to VDEQ (JPA Submittal)	0		06-01-18
PERM.401.VDEQ.REV	VDEQ Review Section 401 Permit Application	120	06-02-18	09-29-18
PERM.401.VDEQ.APPR	VDEQ Approval of Section 401 Permit Application	0		10-01-18
PERM.401.VDEQ.QC.PR	VDEQ Final Plans Review - Wetland Areas Only	30	10-01-18	10-30-18
Coastal Zone Management Consistency Determination		138	03-16-18	07-31-18
PERM.CZM.PREP	Prepare CZM Consistency Documentation	52	03-16-18	05-29-18
PERM.CZM.DB.REV	Review CZM Consistency Documentation for Completeness	3	05-30-18	06-01-18
PERM.CZM.SUBM.VDEQ	CZM Consistency Documentation Submittal to VDEQ (JPA Submittal)	0		06-01-18
PERM.CZM.VDEQ.REV	VDEQ Review of CZM Consistency Documentation	60	06-02-18	07-31-18
PERM.CZM.VDEQ.APPR	VDEQ Approval of CZM Consisntency Documentation	0		07-31-18
U.S. Army Corps of Engineers		199	03-16-18	10-01-18
Section 404 (Water Quality)		199	03-16-18	10-01-18
PERM.404.PREP	Prepare Section 404 Permit Application	52	03-16-18	05-29-18
PERM.404.DB.REV	Review Section 404 Permit Application for Completeness	3	05-30-18	06-01-18
PERM.404.SUBM.ACE	Section 404 Permit Application Submittal to USACE (JPA Submittal)	0		06-01-18
PERM.404.ACE.REV	USACE Review Section 404 Permit Application	120	06-02-18	09-29-18



Remaining Level of Effort | Critical Remaining Work
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State Project No.: 0064-965-229, P-101, R-201, C-501, B-638, B-639, B-640, B-641, B-642, B-643, D-609, D-610, D-611
Federal Project No.: NHPP-064-3 (498)
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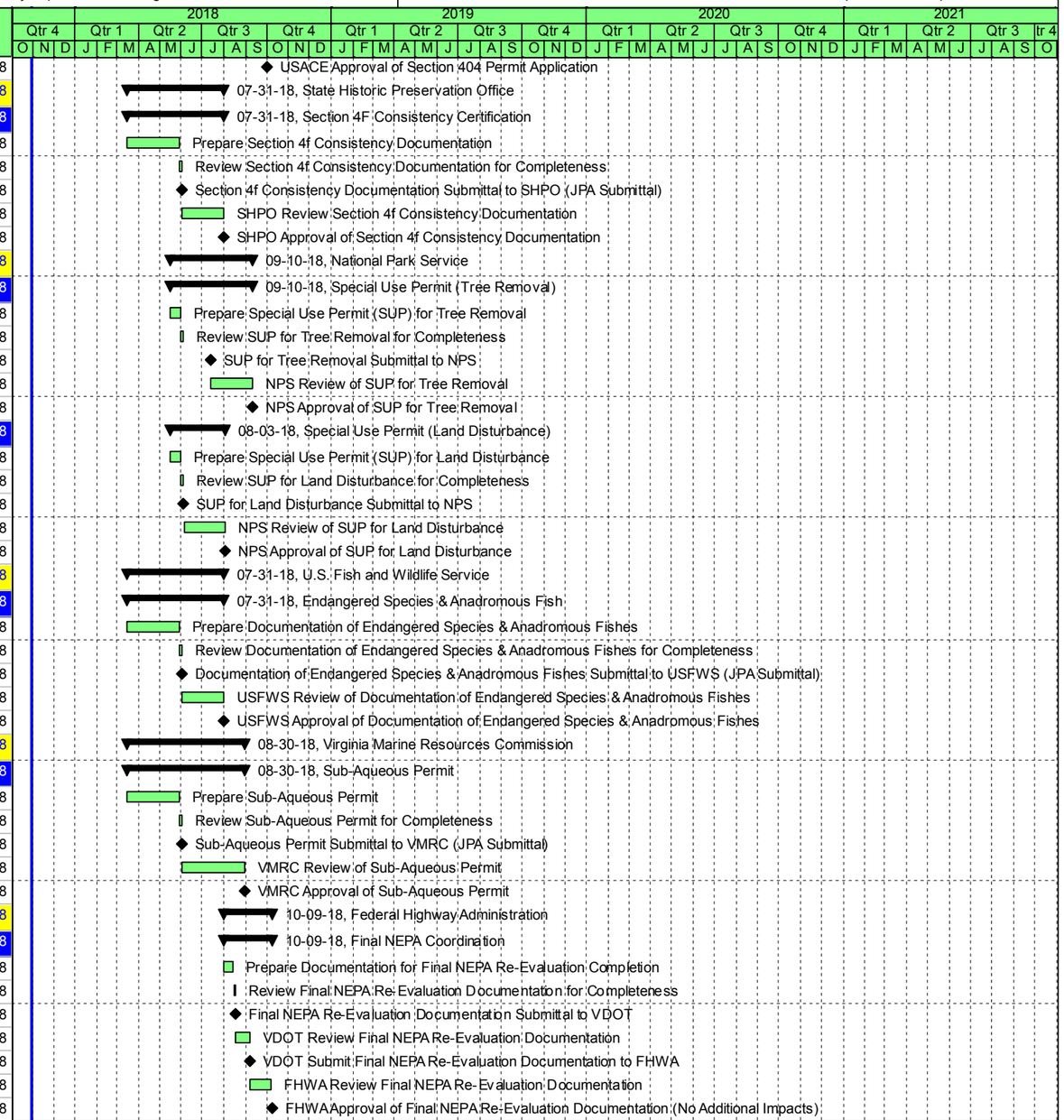
Activity ID	Activity Name	Original Duration	Start	Finish
PERM.404.ACE.APPR	USACE Approval of Section 404 Permit Application	0		10-01-18
State Historic Preservation Office		138	03-16-18	07-31-18
Section 4F Consistency Certification		138	03-16-18	07-31-18
PERM.4F.PREP	Prepare Section 4f Consistency Documentation	52	03-16-18	05-29-18
PERM.4F.DB.REV	Review Section 4f Consistency Documentation for Completeness	3	05-30-18	06-01-18
PERM.4F.SUBM.SHPO	Section 4f Consistency Documentation Submittal to SHPO (JPA Submitta	0		06-01-18
PERM.4F.SHPO.REV	SHPO Review Section 4f Consistency Documentation	60	06-02-18	07-31-18
PERM.4F.SHPO.APPR	SHPO Approval of Section 4f Consistency Documentation	0		07-31-18
National Park Service		118	05-16-18	09-10-18
Special Use Permit (Tree Removal)		118	05-16-18	09-10-18
PERM.SUPT.PREP	Prepare Special Use Permit (SUP) for Tree Removal	10	05-16-18	05-30-18
PERM.SUPT.DB.REV	Review SUP for Tree Removal for Completeness	3	05-31-18	06-04-18
PERM.SUPT.NPS.REV	SUP for Tree Removal Submittal to NPS	0		07-12-18
PERM.SUPT.SUBM.NPS	NPS Review of SUP for Tree Removal	60	07-13-18	09-10-18
PERM.SUPT.NPS.APPR	NPS Approval of SUP for Tree Removal	0		09-10-18
Special Use Permit (Land Disturbance)		80	05-16-18	08-03-18
PERM.SUPL.PREP	Prepare Special Use Permit (SUP) for Land Disturbance	10	05-16-18	05-30-18
PERM.SUPL.DB.REV	Review SUP for Land Disturbance for Completeness	3	05-31-18	06-04-18
PERM.SUPL.SUBM.NPS	SUP for Land Disturbance Submittal to NPS	0		06-04-18
PERM.SUPL.NPS.REV	NPS Review of SUP for Land Disturbance	60	06-05-18	08-03-18
PERM.SUPL.NPS.APPR	NPS Approval of SUP for Land Disturbance	0		08-03-18
U.S. Fish and Wildlife Service		138	03-16-18	07-31-18
Endangered Species & Anadromous Fish		138	03-16-18	07-31-18
PERM.ESAF.PREP	Prepare Documentation of Endangered Species & Anadromous Fishes	52	03-16-18	05-29-18
PERM.ESAF.DB.REV	Review Documentation of Endangered Species & Anadromous Fishes for	3	05-30-18	06-01-18
PERM.ESAF.SUBM.USFWS	Documentation of Endangered Species & Anadromous Fishes Submittal t	0		06-01-18
PERM.ESAF.USFWS.REV	USFWS Review of Documentation of Endangered Species & Anadromou	60	06-02-18	07-31-18
PERM.ESAF.USFWS.APPR	USFWS Approval of Documentation of Endangered Species & Anadromo	0		07-31-18
Virginia Marine Resources Commission		168	03-16-18	08-30-18
Sub-Aqueous Permit		168	03-16-18	08-30-18
PERM.SAP.PREP	Prepare Sub-Aqueous Permit	52	03-16-18	05-29-18
PERM.SAP.DB.REV	Review Sub-Aqueous Permit for Completeness	3	05-30-18	06-01-18
PERM.SAP.SUBM.VMRC	Sub-Aqueous Permit Submittal to VMRC (JPA Submittal)	0		06-01-18
PERM.SAP.VMRC.REV	VMRC Review of Sub-Aqueous Permit	90	06-02-18	08-30-18
PERM.SAP.VMRC.APPR	VMRC Approval of Sub-Aqueous Permit	0		08-30-18
Federal Highway Administration		69	08-01-18	10-09-18
Final NEPA Coordination		69	08-01-18	10-09-18
PERM.NEPA.PREP	Prepare Documentation for Final NEPA Re-Evaluation Completion	10	08-01-18	08-14-18
PERM.NEPA.PREP10	Review Final NEPA Re-Evaluation Documentation for Completeness	3	08-15-18	08-17-18
PERM.NEPA.PREP20	Final NEPA Re-Evaluation Documentation Submittal to VDOT	0		08-17-18
PERM.NEPA.PREP30	VDOT Review Final NEPA Re-Evaluation Documentation	21	08-18-18	09-07-18
PERM.NEPA.PREP40	VDOT Submit Final NEPA Re-Evaluation Documentation to FHWA	0		09-07-18
PERM.NEPA.PREP50	FHWA Review Final NEPA Re-Evaluation Documentation	30	09-08-18	10-07-18
PERM.NEPA.PREP60	FHWA Approval of Final NEPA Re-Evaluation Documentation (No Additior	0		10-09-18



Remaining Level of Effort
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State Project No.: 0064-965-229, P-101, R-201, C-501, B-638, B-639, B-640, B-641, B-642, B-643, D-609, D-610, D-611
Federal Project No.: NHPP-064-3 (498)
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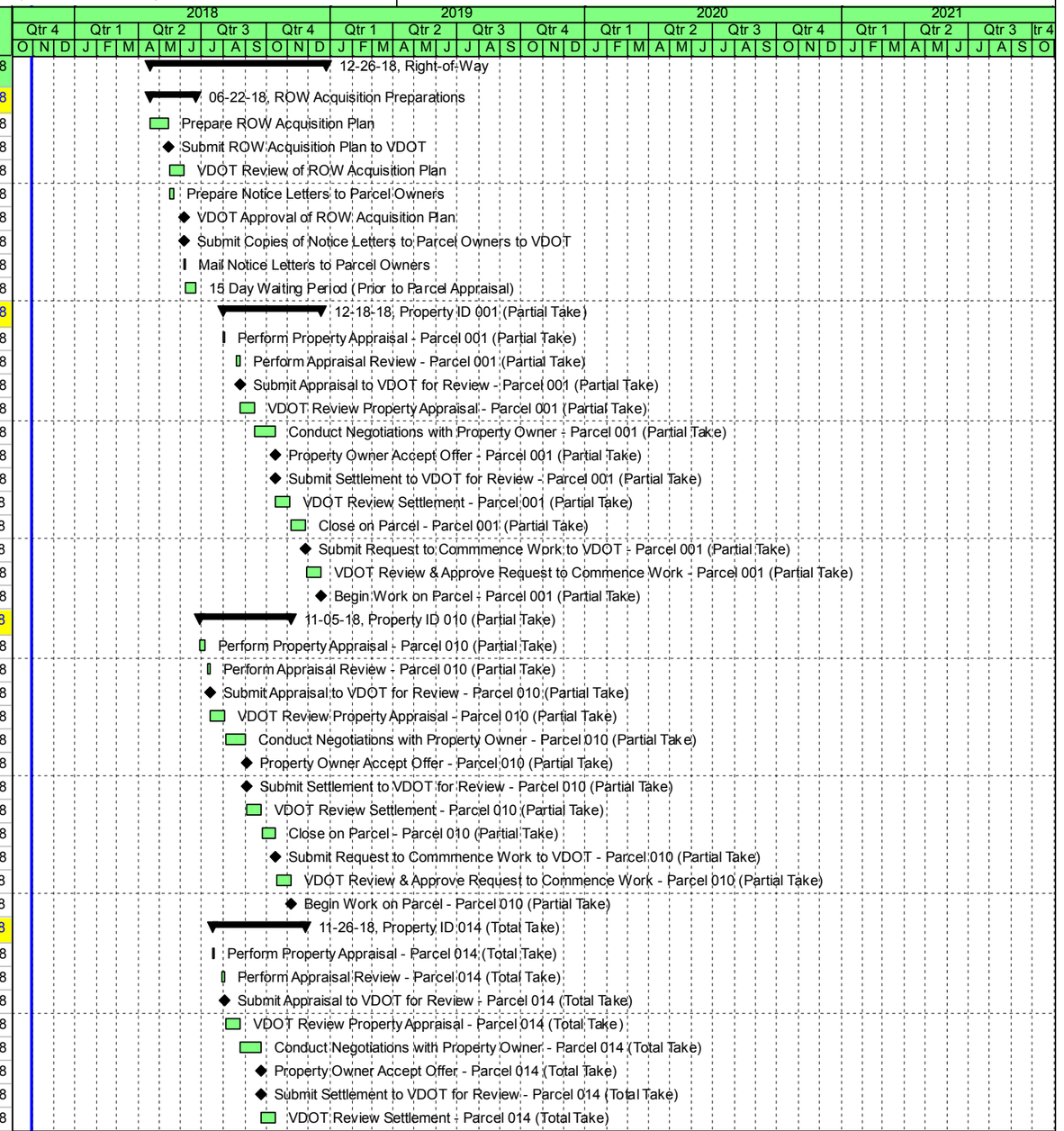
Activity ID	Activity Name	Original Duration	Start	Finish
Right-of-Way		252	04-18-18	12-26-18
ROW Acquisition Preparations		66	04-18-18	06-22-18
ROW.ACQ.PLAN.PREP	Prepare ROW Acquisition Plan	20	04-18-18	05-15-18
ROW.ACQ.PLAN.SUBM	Submit ROW Acquisition Plan to VDOT	0		05-15-18
ROW.ACQ.PLAN.REV	VDOT Review of ROW Acquisition Plan	21	05-16-18	06-05-18
ROW.NOT.LET.PREP	Prepare Notice Letters to Parcel Owners	5	05-16-18	05-22-18
ROW.ACQ.PLAN.APPR	VDOT Approval of ROW Acquisition Plan	0		06-05-18
ROW.NOT.LET.SUBM	Submit Copies of Notice Letters to Parcel Owners to VDOT	0		06-05-18
ROW.NOT.LET.MAIL	Mail Notice Letters to Parcel Owners	2	06-06-18	06-07-18
ROW.NOT.LET.WAIT	15 Day Waiting Period (Prior to Parcel Appraisal)	15	06-08-18	06-22-18
Property ID 001 (Partial Take)		140	08-01-18	12-18-18
ROW.001.PART.005	Perform Property Appraisal - Parcel 001 (Partial Take)	3	08-01-18	08-03-18
ROW.001.PART.010	Perform Appraisal Review - Parcel 001 (Partial Take)	5	08-20-18	08-24-18
ROW.001.PART.015	Submit Appraisal to VDOT for Review - Parcel 001 (Partial Take)	0		08-24-18
ROW.001.PART.020	VDOT Review Property Appraisal - Parcel 001 (Partial Take)	21	08-25-18	09-14-18
ROW.001.PART.025	Conduct Negotiations with Property Owner - Parcel 001 (Partial Take)	30	09-15-18	10-14-18
ROW.001.PART.030	Property Owner Accept Offer - Parcel 001 (Partial Take)	0		10-15-18
ROW.001.PART.035	Submit Settlement to VDOT for Review - Parcel 001 (Partial Take)	0		10-15-18
ROW.001.PART.040	VDOT Review Settlement - Parcel 001 (Partial Take)	21	10-15-18	11-04-18
ROW.001.PART.045	Close on Parcel - Parcel 001 (Partial Take)	15	11-05-18	11-27-18
ROW.001.PART.050	Submit Request to Commmence Work to VDOT - Parcel 001 (Partial Tak	0		11-27-18
ROW.001.PART.055	VDOT Review & Approve Request to Commence Work - Parcel 001 (Par	21	11-28-18	12-18-18
ROW.001.PART.060	Begin Work on Parcel - Parcel 001 (Partial Take)	0		12-18-18
Property ID 010 (Partial Take)		130	06-29-18	11-05-18
ROW.010.PART.005	Perform Property Appraisal - Parcel 010 (Partial Take)	4	06-29-18	07-05-18
ROW.010.PART.010	Perform Appraisal Review - Parcel 010 (Partial Take)	5	07-09-18	07-13-18
ROW.010.PART.015	Submit Appraisal to VDOT for Review - Parcel 010 (Partial Take)	0		07-13-18
ROW.010.PART.020	VDOT Review Property Appraisal - Parcel 010 (Partial Take)	21	07-14-18	08-03-18
ROW.010.PART.025	Conduct Negotiations with Property Owner - Parcel 010 (Partial Take)	30	08-04-18	09-02-18
ROW.010.PART.030	Property Owner Accept Offer - Parcel 010 (Partial Take)	0		09-04-18
ROW.010.PART.035	Submit Settlement to VDOT for Review - Parcel 010 (Partial Take)	0		09-04-18
ROW.010.PART.040	VDOT Review Settlement - Parcel 010 (Partial Take)	21	09-04-18	09-24-18
ROW.010.PART.045	Close on Parcel - Parcel 010 (Partial Take)	15	09-25-18	10-15-18
ROW.010.PART.050	Submit Request to Commmence Work to VDOT - Parcel 010 (Partial Tak	0		10-15-18
ROW.010.PART.055	VDOT Review & Approve Request to Commence Work - Parcel 010 (Par	21	10-16-18	11-05-18
ROW.010.PART.060	Begin Work on Parcel - Parcel 010 (Partial Take)	0		11-05-18
Property ID 014 (Total Take)		132	07-17-18	11-26-18
ROW.014.TOTAL.005	Perform Property Appraisal - Parcel 014 (Total Take)	3	07-17-18	07-19-18
ROW.014.TOTAL.010	Perform Appraisal Review - Parcel 014 (Total Take)	5	07-30-18	08-03-18
ROW.014.TOTAL.015	Submit Appraisal to VDOT for Review - Parcel 014 (Total Take)	0		08-03-18
ROW.014.TOTAL.020	VDOT Review Property Appraisal - Parcel 014 (Total Take)	21	08-04-18	08-24-18
ROW.014.TOTAL.025	Conduct Negotiations with Property Owner - Parcel 014 (Total Take)	30	08-25-18	09-23-18
ROW.014.TOTAL.030	Property Owner Accept Offer - Parcel 014 (Total Take)	0		09-24-18
ROW.014.TOTAL.035	Submit Settlement to VDOT for Review - Parcel 014 (Total Take)	0		09-24-18
ROW.014.TOTAL.040	VDOT Review Settlement - Parcel 014 (Total Take)	21	09-24-18	10-14-18



Remaining Level of Effort | Critical Remaining Work
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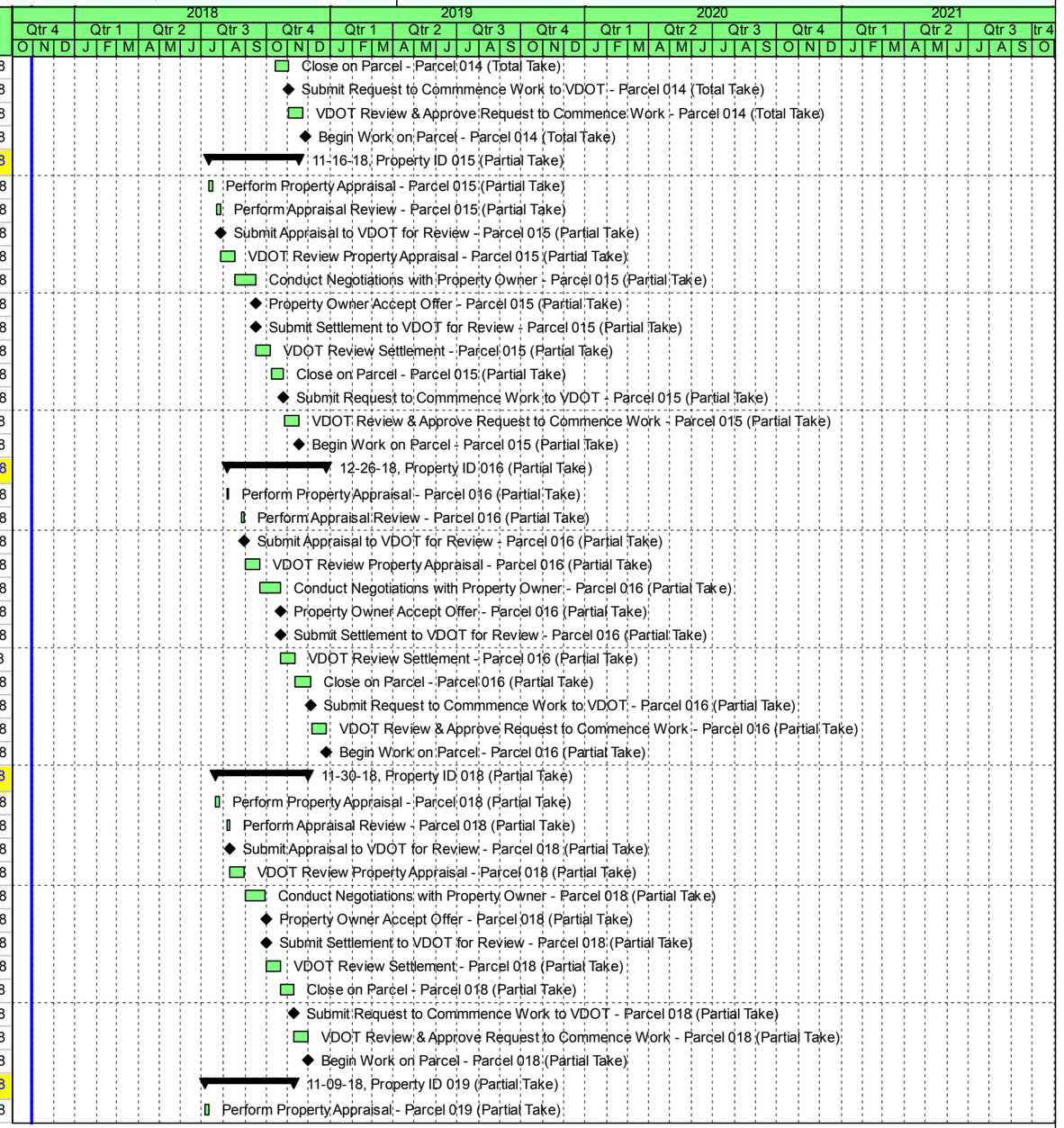
Activity ID	Activity Name	Original Duration	Start	Finish
ROW.014.TOTAL.045	Close on Parcel - Parcel 014 (Total Take)	15	10-15-18	11-02-18
ROW.014.TOTAL.050	Submit Request to Commmence Work to VDOT - Parcel 014 (Total Take)	0		11-02-18
ROW.014.TOTAL.055	VDOT Review & Approve Request to Commence Work - Parcel 014 (Tot	21	11-03-18	11-23-18
ROW.014.TOTAL.060	Begin Work on Parcel - Parcel 014 (Total Take)	0		11-26-18
Property ID 015 (Partial Take)		128	07-12-18	11-16-18
ROW.015.PART.005	Perform Property Appraisal - Parcel 015 (Partial Take)	3	07-12-18	07-16-18
ROW.015.PART.010	Perform Appraisal Review - Parcel 015 (Partial Take)	5	07-23-18	07-27-18
ROW.015.PART.015	Submit Appraisal to VDOT for Review - Parcel 015 (Partial Take)	0		07-27-18
ROW.015.PART.020	VDOT Review Property Appraisal - Parcel 015 (Partial Take)	21	07-28-18	08-17-18
ROW.015.PART.025	Conduct Negotiations with Property Owner - Parcel 015 (Partial Take)	30	08-18-18	09-16-18
ROW.015.PART.030	Property Owner Accept Offer - Parcel 015 (Partial Take)	0		09-17-18
ROW.015.PART.035	Submit Settlement to VDOT for Review - Parcel 015 (Partial Take)	0		09-17-18
ROW.015.PART.040	VDOT Review Settlement - Parcel 015 (Partial Take)	21	09-17-18	10-07-18
ROW.015.PART.045	Close on Parcel - Parcel 015 (Partial Take)	15	10-08-18	10-26-18
ROW.015.PART.050	Submit Request to Commmence Work to VDOT - Parcel 015 (Partial Tak	0		10-26-18
ROW.015.PART.055	VDOT Review & Approve Request to Commence Work - Parcel 015 (Par	21	10-27-18	11-16-18
ROW.015.PART.060	Begin Work on Parcel - Parcel 015 (Partial Take)	0		11-16-18
Property ID 016 (Partial Take)		142	08-06-18	12-26-18
ROW.016.PART.005	Perform Property Appraisal - Parcel 016 (Partial Take)	3	08-06-18	08-08-18
ROW.016.PART.010	Perform Appraisal Review - Parcel 016 (Partial Take)	5	08-27-18	08-31-18
ROW.016.PART.015	Submit Appraisal to VDOT for Review - Parcel 016 (Partial Take)	0		08-31-18
ROW.016.PART.020	VDOT Review Property Appraisal - Parcel 016 (Partial Take)	21	09-01-18	09-21-18
ROW.016.PART.025	Conduct Negotiations with Property Owner - Parcel 016 (Partial Take)	30	09-22-18	10-21-18
ROW.016.PART.030	Property Owner Accept Offer - Parcel 016 (Partial Take)	0		10-22-18
ROW.016.PART.035	Submit Settlement to VDOT for Review - Parcel 016 (Partial Take)	0		10-22-18
ROW.016.PART.040	VDOT Review Settlement - Parcel 016 (Partial Take)	21	10-22-18	11-11-18
ROW.016.PART.045	Close on Parcel - Parcel 016 (Partial Take)	15	11-12-18	12-04-18
ROW.016.PART.050	Submit Request to Commmence Work to VDOT - Parcel 016 (Partial Tak	0		12-04-18
ROW.016.PART.055	VDOT Review & Approve Request to Commence Work - Parcel 016 (Par	21	12-05-18	12-25-18
ROW.016.PART.060	Begin Work on Parcel - Parcel 016 (Partial Take)	0		12-26-18
Property ID 018 (Partial Take)		134	07-20-18	11-30-18
ROW.018.PART.005	Perform Property Appraisal - Parcel 018 (Partial Take)	4	07-20-18	07-25-18
ROW.018.PART.010	Perform Appraisal Review - Parcel 018 (Partial Take)	5	08-06-18	08-10-18
ROW.018.PART.015	Submit Appraisal to VDOT for Review - Parcel 018 (Partial Take)	0		08-10-18
ROW.018.PART.020	VDOT Review Property Appraisal - Parcel 018 (Partial Take)	21	08-11-18	08-31-18
ROW.018.PART.025	Conduct Negotiations with Property Owner - Parcel 018 (Partial Take)	30	09-01-18	09-30-18
ROW.018.PART.030	Property Owner Accept Offer - Parcel 018 (Partial Take)	0		10-01-18
ROW.018.PART.035	Submit Settlement to VDOT for Review - Parcel 018 (Partial Take)	0		10-01-18
ROW.018.PART.040	VDOT Review Settlement - Parcel 018 (Partial Take)	21	10-01-18	10-21-18
ROW.018.PART.045	Close on Parcel - Parcel 018 (Partial Take)	15	10-22-18	11-09-18
ROW.018.PART.050	Submit Request to Commmence Work to VDOT - Parcel 018 (Partial Tak	0		11-09-18
ROW.018.PART.055	VDOT Review & Approve Request to Commence Work - Parcel 018 (Par	21	11-10-18	11-30-18
ROW.018.PART.060	Begin Work on Parcel - Parcel 018 (Partial Take)	0		11-30-18
Property ID 019 (Partial Take)		127	07-06-18	11-09-18
ROW.019.PART.005	Perform Property Appraisal - Parcel 019 (Partial Take)	4	07-06-18	07-11-18



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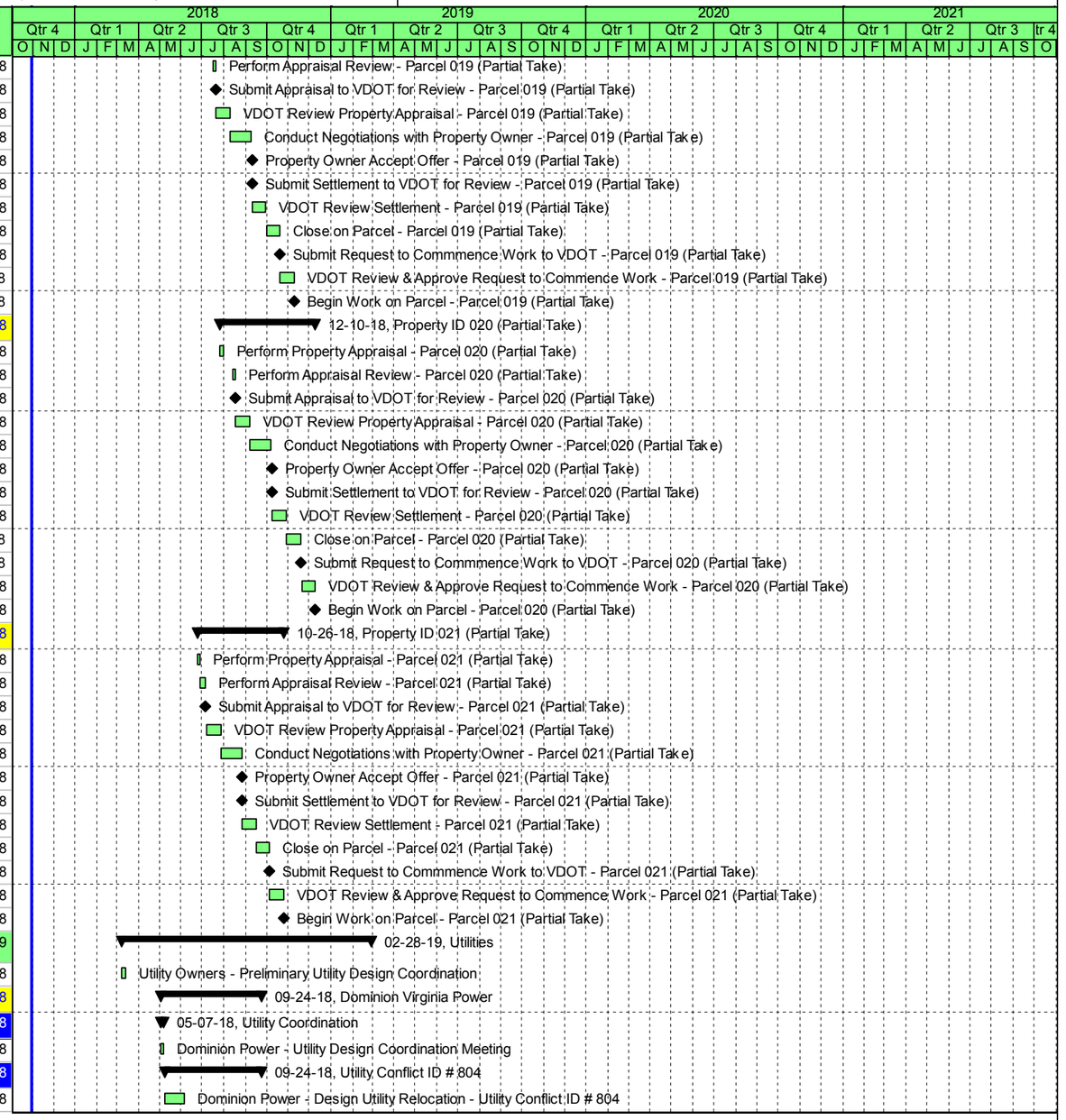
Activity ID	Activity Name	Original Duration	Start	Finish
ROW.019.PART.010	Perform Appraisal Review - Parcel 019 (Partial Take)	5	07-16-18	07-20-18
ROW.019.PART.015	Submit Appraisal to VDOT for Review - Parcel 019 (Partial Take)	0		07-20-18
ROW.019.PART.020	VDOT Review Property Appraisal - Parcel 019 (Partial Take)	21	07-21-18	08-10-18
ROW.019.PART.025	Conduct Negotiations with Property Owner - Parcel 019 (Partial Take)	30	08-11-18	09-09-18
ROW.019.PART.030	Property Owner Accept Offer - Parcel 019 (Partial Take)	0		09-10-18
ROW.019.PART.035	Submit Settlement to VDOT for Review - Parcel 019 (Partial Take)	0		09-10-18
ROW.019.PART.040	VDOT Review Settlement - Parcel 019 (Partial Take)	21	09-10-18	09-30-18
ROW.019.PART.045	Close on Parcel - Parcel 019 (Partial Take)	15	10-01-18	10-19-18
ROW.019.PART.050	Submit Request to Commmence Work to VDOT - Parcel 019 (Partial Tak	0		10-19-18
ROW.019.PART.055	VDOT Review & Approve Request to Commence Work - Parcel 019 (Pai	21	10-20-18	11-09-18
ROW.019.PART.060	Begin Work on Parcel - Parcel 019 (Partial Take)	0		11-09-18
Property ID 020 (Partial Take)		138	07-26-18	12-10-18
ROW.020.PART.005	Perform Property Appraisal - Parcel 020 (Partial Take)	4	07-26-18	07-31-18
ROW.020.PART.010	Perform Appraisal Review - Parcel 020 (Partial Take)	5	08-13-18	08-17-18
ROW.020.PART.015	Submit Appraisal to VDOT for Review - Parcel 020 (Partial Take)	0		08-17-18
ROW.020.PART.020	VDOT Review Property Appraisal - Parcel 020 (Partial Take)	21	08-18-18	09-07-18
ROW.020.PART.025	Conduct Negotiations with Property Owner - Parcel 020 (Partial Take)	30	09-08-18	10-07-18
ROW.020.PART.030	Property Owner Accept Offer - Parcel 020 (Partial Take)	0		10-08-18
ROW.020.PART.035	Submit Settlement to VDOT for Review - Parcel 020 (Partial Take)	0		10-09-18
ROW.020.PART.040	VDOT Review Settlement - Parcel 020 (Partial Take)	21	10-09-18	10-29-18
ROW.020.PART.045	Close on Parcel - Parcel 020 (Partial Take)	15	10-30-18	11-19-18
ROW.020.PART.050	Submit Request to Commmence Work to VDOT - Parcel 020 (Partial Tak	0		11-19-18
ROW.020.PART.055	VDOT Review & Approve Request to Commence Work - Parcel 020 (Pai	21	11-20-18	12-10-18
ROW.020.PART.060	Begin Work on Parcel - Parcel 020 (Partial Take)	0		12-10-18
Property ID 021 (Partial Take)		124	06-25-18	10-26-18
ROW.021.PART.005	Perform Property Appraisal - Parcel 021 (Partial Take)	4	06-25-18	06-28-18
ROW.021.PART.010	Perform Appraisal Review - Parcel 021 (Partial Take)	5	06-29-18	07-06-18
ROW.021.PART.015	Submit Appraisal to VDOT for Review - Parcel 021 (Partial Take)	0		07-06-18
ROW.021.PART.020	VDOT Review Property Appraisal - Parcel 021 (Partial Take)	21	07-07-18	07-27-18
ROW.021.PART.025	Conduct Negotiations with Property Owner - Parcel 021 (Partial Take)	30	07-28-18	08-26-18
ROW.021.PART.030	Property Owner Accept Offer - Parcel 021 (Partial Take)	0		08-27-18
ROW.021.PART.035	Submit Settlement to VDOT for Review - Parcel 021 (Partial Take)	0		08-27-18
ROW.021.PART.040	VDOT Review Settlement - Parcel 021 (Partial Take)	21	08-27-18	09-16-18
ROW.021.PART.045	Close on Parcel - Parcel 021 (Partial Take)	15	09-17-18	10-05-18
ROW.021.PART.050	Submit Request to Commmence Work to VDOT - Parcel 021 (Partial Tak	0		10-05-18
ROW.021.PART.055	VDOT Review & Approve Request to Commence Work - Parcel 021 (Pai	21	10-06-18	10-26-18
ROW.021.PART.060	Begin Work on Parcel - Parcel 021 (Partial Take)	0		10-26-18
Utilities		357	03-09-18	02-28-19
SEGIII.UO.PUDC	Utility Owners - Preliminary Utility Design Coordination	3	03-09-18	03-13-18
Dominion Virginia Power		144	05-04-18	09-24-18
Utility Coordination		2	05-04-18	05-07-18
SEGIII.DOMP.UDC	Dominion Power - Utility Design Coordination Meeting	2	05-04-18	05-07-18
Utility Conflict ID # 804		140	05-08-18	09-24-18
DGN.DOM.804.005	Dominion Power - Design Utility Relocation - Utility Conflict ID # 804	20	05-08-18	06-05-18



Remaining Level of Effort
Actual Work
Remaining Work
Critical Remaining Work
Milestone
Summary

State Project No.: 0064-965-229, P-101, R-201, C-501, B-638, B-639, B-640, B-641, B-642, B-643, D-609, D-610, D-611
Federal Project No.: NHPP-064-3 (498)
Contract ID Number: C00106689DB97

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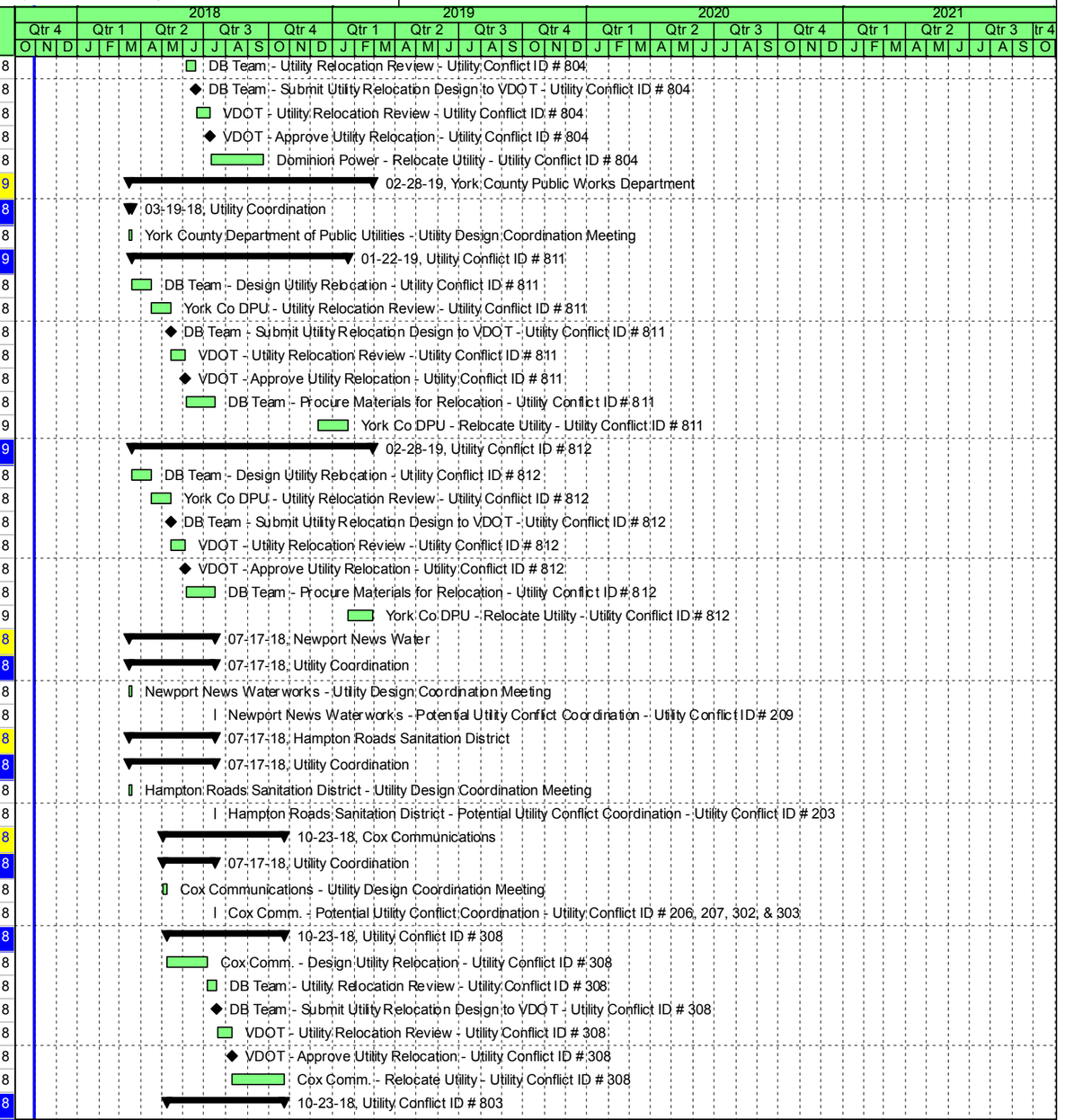
Activity ID	Activity Name	Original Duration	Start	Finish
DGN.DOM.804.010	DB Team - Utility Relocation Review - Utility Conflict ID # 804	10	06-06-18	06-19-18
DGN.DOM.804.015	DB Team - Submit Utility Relocation Design to VDOT - Utility Conflict ID #	0		06-19-18
DGN.DOM.804.020	VDOT - Utility Relocation Review - Utility Conflict ID # 804	21	06-20-18	07-10-18
DGN.DOM.804.025	VDOT - Approve Utility Relocation - Utility Conflict ID # 804	0		07-10-18
C2.LHD.RELO.DOM.804	Dominion Power - Relocate Utility - Utility Conflict ID # 804	40	07-12-18	09-24-18
York County Public Works Department		350	03-16-18	02-28-19
Utility Coordination		2	03-16-18	03-19-18
SEGIII.YCPU.UDC	York County Department of Public Utilities - Utility Design Coordination Me	2	03-16-18	03-19-18
Utility Conflict ID # 811		309	03-20-18	01-22-19
DGN.YCPU.811.005	DB Team - Design Utility Relocation - Utility Conflict ID # 811	20	03-20-18	04-16-18
DGN.YCPU.811.010	York Co DPU - Utility Relocation Review - Utility Conflict ID # 811	20	04-17-18	05-14-18
DGN.YCPU.811.015	DB Team - Submit Utility Relocation Design to VDOT - Utility Conflict ID #	0		05-14-18
DGN.YCPU.811.020	VDOT - Utility Relocation Review - Utility Conflict ID # 811	21	05-15-18	06-04-18
DGN.YCPU.811.025	VDOT - Approve Utility Relocation - Utility Conflict ID # 811	0		06-04-18
PROC.YCPU.811.005	DB Team - Procure Materials for Relocation - Utility Conflict ID # 811	30	06-05-18	07-17-18
64.C3.RELO.YCPU.811	York Co DPU - Relocate Utility - Utility Conflict ID # 811	20	12-11-18	01-22-19
Utility Conflict ID # 812		346	03-20-18	02-28-19
DGN.YCPU.812.005	DB Team - Design Utility Relocation - Utility Conflict ID # 812	20	03-20-18	04-16-18
DGN.YCPU.812.010	York Co DPU - Utility Relocation Review - Utility Conflict ID # 812	20	04-17-18	05-14-18
DGN.YCPU.812.015	DB Team - Submit Utility Relocation Design to VDOT - Utility Conflict ID #	0		05-14-18
DGN.YCPU.812.020	VDOT - Utility Relocation Review - Utility Conflict ID # 812	21	05-15-18	06-04-18
DGN.YCPU.812.025	VDOT - Approve Utility Relocation - Utility Conflict ID # 812	0		06-04-18
PROC.YCPU.812.005	DB Team - Procure Materials for Relocation - Utility Conflict ID # 812	30	06-05-18	07-17-18
64.C3.RELO.YCPU.812	York Co DPU - Relocate Utility - Utility Conflict ID # 812	20	01-24-19	02-28-19
Newport News Water		86	03-16-18	07-17-18
Utility Coordination		86	03-16-18	07-17-18
SEGIII.NNWW.UDC	Newport News Waterworks - Utility Design Coordination Meeting	2	03-16-18	03-19-18
SEGIII.NNWW.PUCC	Newport News Waterworks - Potential Utility Conflict Coordination - Utility	2	07-16-18	07-17-18
Hampton Roads Sanitation District		86	03-16-18	07-17-18
Utility Coordination		86	03-16-18	07-17-18
SEGIII.HRSD.UDC	Hampton Roads Sanitation District - Utility Design Coordination Meeting	2	03-16-18	03-19-18
SEGIII.HRSD.PUCC	Hampton Roads Sanitation District - Potential Utility Conflict Coordination	2	07-16-18	07-17-18
Cox Communications		173	05-04-18	10-23-18
Utility Coordination		51	05-04-18	07-17-18
SEGIII.COX.UDC	Cox Communications - Utility Design Coordination Meeting	3	05-04-18	05-08-18
SEGIII.COX.PUCC	Cox Comm. - Potential Utility Conflict Coordination - Utility Conflict ID # 20	2	07-16-18	07-17-18
Utility Conflict ID # 308		168	05-09-18	10-23-18
DGN.COX.308.005	Cox Comm. - Design Utility Relocation - Utility Conflict ID # 308	40	05-09-18	07-05-18
DGN.COX.308.010	DB Team - Utility Relocation Review - Utility Conflict ID # 308	10	07-06-18	07-19-18
DGN.COX.308.015	DB Team - Submit Utility Relocation Design to VDOT - Utility Conflict ID #	0		07-19-18
DGN.COX.308.020	VDOT - Utility Relocation Review - Utility Conflict ID # 308	21	07-20-18	08-09-18
DGN.COX.308.025	VDOT - Approve Utility Relocation - Utility Conflict ID # 308	0		08-09-18
64.A4.RELO.COX.308	Cox Comm. - Relocate Utility - Utility Conflict ID # 308	40	08-10-18	10-23-18
Utility Conflict ID # 803		168	05-09-18	10-23-18



Remaining Level of Effort
Actual Work
Remaining Work
Critical Remaining Work
Milestone
Summary

State Project No.: 0064-965-229, P-101, R-201, C-501, B-638, B-639, B-640, B-641, B-642, B-643, D-609, D-610, D-611
Federal Project No.: NHPP-064-3 (498)
Contract ID Number: C00106689DB97

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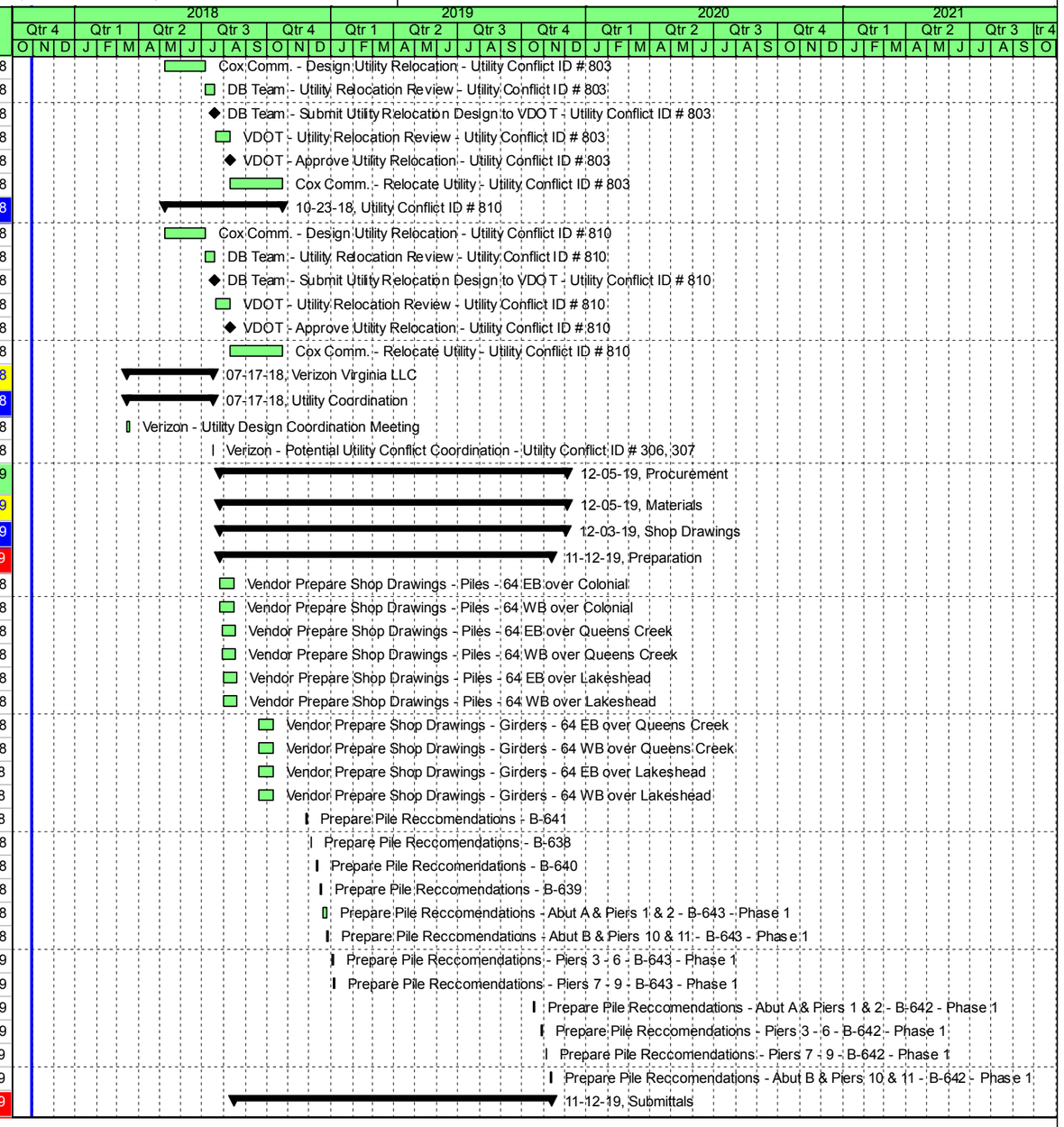
Activity ID	Activity Name	Original Duration	Start	Finish
DGN.COX.803.005	Cox Comm. - Design Utility Relocation - Utility Conflict ID # 803	40	05-09-18	07-05-18
DGN.COX.803.010	DB Team - Utility Relocation Review - Utility Conflict ID # 803	10	07-06-18	07-19-18
DGN.COX.803.015	DB Team - Submit Utility Relocation Design to VDOT - Utility Conflict ID #	0		07-19-18
DGN.COX.803.020	VDOT - Utility Relocation Review - Utility Conflict ID # 803	21	07-20-18	08-09-18
DGN.COX.803.025	VDOT - Approve Utility Relocation - Utility Conflict ID # 803	0		08-09-18
C2.LHD.RELO.COX.803	Cox Comm. - Relocate Utility - Utility Conflict ID # 803	40	08-10-18	10-23-18
Utility Conflict ID # 810		168	05-09-18	10-23-18
DGN.COX.810.005	Cox Comm. - Design Utility Relocation - Utility Conflict ID # 810	40	05-09-18	07-05-18
DGN.COX.810.010	DB Team - Utility Relocation Review - Utility Conflict ID # 810	10	07-06-18	07-19-18
DGN.COX.810.015	DB Team - Submit Utility Relocation Design to VDOT - Utility Conflict ID #	0		07-19-18
DGN.COX.810.020	VDOT - Utility Relocation Review - Utility Conflict ID # 810	21	07-20-18	08-09-18
DGN.COX.810.025	VDOT - Approve Utility Relocation - Utility Conflict ID # 810	0		08-09-18
C2.LHD.RELO.COX.810	Cox Comm. - Relocate Utility - Utility Conflict ID # 810	40	08-10-18	10-23-18
Verizon Virginia LLC		86	03-16-18	07-17-18
Utility Coordination		86	03-16-18	07-17-18
SEGIII.VZN.UDC	Verizon - Utility Design Coordination Meeting	2	03-16-18	03-19-18
SEGIII.VZN.PUCC	Verizon - Potential Utility Conflict Coordination - Utility Conflict ID # 306, 30	2	07-16-18	07-17-18
Procurement		498	07-26-18	12-05-19
Materials		498	07-26-18	12-05-19
Shop Drawings		496	07-26-18	12-03-19
Preparation		328	07-26-18	11-12-19
PROC.SD.PILE.ECP.005	Vendor Prepare Shop Drawings - Piles - 64 EB over Colonial	15	07-26-18	08-15-18
PROC.SD.PILE.WCP.005	Vendor Prepare Shop Drawings - Piles - 64 WB over Colonial	15	07-26-18	08-15-18
PROC.SD.PILE.EQC.005	Vendor Prepare Shop Drawings - Piles - 64 EB over Queens Creek	15	07-30-18	08-17-18
PROC.SD.PILE.WQC.005	Vendor Prepare Shop Drawings - Piles - 64 WB over Queens Creek	15	07-30-18	08-17-18
PROC.SD.PILE.ELH.005	Vendor Prepare Shop Drawings - Piles - 64 EB over Lakeshead	15	07-31-18	08-20-18
PROC.SD.PILE.WLH.005	Vendor Prepare Shop Drawings - Piles - 64 WB over Lakeshead	15	07-31-18	08-20-18
PROC.SD.GIRD.EQC.005	Vendor Prepare Shop Drawings - Girders - 64 EB over Queens Creek	15	09-20-18	10-10-18
PROC.SD.GIRD.WQC.005	Vendor Prepare Shop Drawings - Girders - 64 WB over Queens Creek	15	09-20-18	10-10-18
PROC.SD.GIRD.ELH.005	Vendor Prepare Shop Drawings - Girders - 64 EB over Lakeshead	15	09-21-18	10-11-18
PROC.SD.GIRD.WLH.005	Vendor Prepare Shop Drawings - Girders - 64 WB over Lakeshead	15	09-21-18	10-11-18
PREP.B641.PILE.005	Prepare Pile Reccomendations - B-641	2	11-27-18	11-28-18
PREP.B638.PILE.005	Prepare Pile Reccomendations - B-638	2	12-03-18	12-04-18
PREP.B640.PILE.005	Prepare Pile Reccomendations - B-640	2	12-11-18	12-12-18
PREP.B639.PILE.005	Prepare Pile Reccomendations - B-639	2	12-17-18	12-18-18
PREP.B643.PILE.005	Prepare Pile Reccomendations - Abut A & Piers 1 & 2 - B-643 - Phase 1	2	12-21-18	12-26-18
PREP.B643.PILE.015	Prepare Pile Reccomendations - Abut B & Piers 10 & 11 - B-643 - Phase	2	12-27-18	12-28-18
PREP.B643.PILE.010	Prepare Pile Reccomendations - Piers 3 - 6 - B-643 - Phase 1	2	01-03-19	01-04-19
PREP.B643.PILE.020	Prepare Pile Reccomendations - Piers 7 - 9 - B-643 - Phase 1	2	01-04-19	01-07-19
PREP.B642.PILE.005	Prepare Pile Reccomendations - Abut A & Piers 1 & 2 - B-642 - Phase 1	2	10-17-19	10-18-19
PREP.B642.PILE.010	Prepare Pile Reccomendations - Piers 3 - 6 - B-642 - Phase 1	2	10-28-19	10-29-19
PREP.B642.PILE.020	Prepare Pile Reccomendations - Piers 7 - 9 - B-642 - Phase 1	2	11-04-19	11-05-19
PREP.B642.PILE.015	Prepare Pile Reccomendations - Abut B & Piers 10 & 11 - B-642 - Phase	2	11-11-19	11-12-19
Submittals		454	08-15-18	11-12-19



Remaining Level of Effort | Critical Remaining Work
Actual Work | Milestone
Remaining Work | Summary

State Project No.: 0064-965-229, P-101, R-201, C-501, B-638, B-639, B-640, B-641, B-642, B-643, D-609, D-610, D-611
Federal Project No.: NHPP-064-3 (498)
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Activity ID	Activity Name	Original Duration	Start	Finish
PROC.SD.PILE.ECP.010	Vendor Submit Shop Drawings to DB Team - Piles - 64 EB over Colonial	0		08-15-18
PROC.SD.PILE.WCP.010	Vendor Submit Shop Drawings to DB Team - Piles - 64 WB over Colonial	0		08-15-18
PROC.SD.PILE.EQC.010	Vendor Submit Shop Drawings to DB Team - Piles - 64 EB over Queens (	0		08-17-18
PROC.SD.PILE.WQC.010	Vendor Submit Shop Drawings to DB Team - Piles - 64 WB over Queens	0		08-17-18
PROC.SD.PILE.ELH.010	Vendor Submit Shop Drawings to DB Team - Piles - 64 EB over Lakeshea	0		08-20-18
PROC.SD.PILE.WLH.010	Vendor Submit Shop Drawings to DB Team - Piles - 64 WB over Lakeshe	0		08-20-18
PROC.SD.PILE.ECP.020	DB Team Submit Shop Drawings to VDOT - Piles - 64 EB over Colonial	0		08-29-18
PROC.SD.PILE.WCP.020	DB Team Submit Shop Drawings to VDOT - Piles - 64 WB over Colonial	0		08-29-18
PROC.SD.PILE.EQC.020	DB Team Submit Shop Drawings to VDOT - Piles - 64 EB over Queens C	0		08-31-18
PROC.SD.PILE.WQC.020	DB Team Submit Shop Drawings to VDOT - Piles - 64 WB over Queens (	0		08-31-18
PROC.SD.PILE.ELH.020	DB Team Submit Shop Drawings to VDOT - Piles - 64 EB over Lakeshea	0		09-04-18
PROC.SD.PILE.WLH.020	DB Team Submit Shop Drawings to VDOT - Piles - 64 WB over Lakeshea	0		09-04-18
PROC.SD.GIRD.EQC.010	Vendor Submit Shop Drawings to DB Team - Girders - 64 EB over Queer	0		10-10-18
PROC.SD.GIRD.WQC.010	Vendor Submit Shop Drawings to DB Team - Girders - 64 WB over Quee	0		10-10-18
PROC.SD.GIRD.ELH.010	Vendor Submit Shop Drawings to DB Team - Girders - 64 EB over Lakes	0		10-11-18
PROC.SD.GIRD.WLH.010	Vendor Submit Shop Drawings to DB Team - Girders - 64 WB over Lakes	0		10-11-18
PROC.SD.GIRD.EQC.020	DB Team Submit Shop Drawings to VDOT - Girders - 64 EB over Queens	0		10-24-18
PROC.SD.GIRD.WQC.020	DB Team Submit Shop Drawings to VDOT - Girders - 64 WB over Queer	0		10-24-18
PROC.SD.GIRD.ELH.020	DB Team Submit Shop Drawings to VDOT - Girders - 64 EB over Lakesh	0		10-25-18
PROC.SD.GIRD.WLH.020	DB Team Submit Shop Drawings to VDOT - Girders - 64 WB over Lakes	0		10-25-18
SUBM.B641.PILE.005	Submit Pile Reccomendations to VDOT - B-641	0		11-28-18
SUBM.B638.PILE.005	Submit Pile Reccomendations to VDOT - B-638	0		12-04-18
SUBM.B640.PILE.005	Submit Pile Reccomendations to VDOT - B-640	0		12-12-18
SUBM.B639.PILE.005	Submit Pile Reccomendations to VDOT - B-639	0		12-18-18
SUBM.B643.PILE.005	Submit Pile Reccomendations to VDOT - Abut A & Piers 1 & 2 - B-643 - P	0		12-26-18
SUBM.B643.PILE.015	Submit Pile Reccomendations to VDOT - Abut B & Piers 10 & 11 - B-643 -	0		12-28-18
SUBM.B643.PILE.010	Submit Pile Reccomendations to VDOT - Piers 3 - 6 - B-643 - Phase 1	0		01-04-19
SUBM.B643.PILE.020	Submit Pile Reccomendations to VDOT - Piers 7 - 9 - B-643 - Phase 1	0		01-07-19
SUBM.B642.PILE.005	Submit Pile Reccomendations to VDOT - Abut A & Piers 1 & 2 - B-642 - P	0		10-18-19
SUBM.B642.PILE.010	Submit Pile Reccomendations to VDOT - Piers 3 - 6 - B-642 - Phase 1	0		10-29-19
SUBM.B642.PILE.020	Submit Pile Reccomendations to VDOT - Piers 7 - 9 - B-642 - Phase 1	0		11-05-19
SUBM.B642.PILE.015	Submit Pile Reccomendations to VDOT - Abut B & Piers 10 & 11 - B-642 -	0		11-12-19
Reviews		475	08-16-18	12-03-19
Design-Builder Reviews		313	08-16-18	11-12-19
PROC.SD.PILE.ECP.015	DB Team Review Shop Drawings - Piles - 64 EB over Colonial	10	08-16-18	08-29-18
PROC.SD.PILE.WCP.015	DB Team Review Shop Drawings - Piles - 64 WB over Colonial	10	08-16-18	08-29-18
PROC.SD.PILE.EQC.015	DB Team Review Shop Drawings - Piles - 64 EB over Queens Creek	10	08-20-18	08-31-18
PROC.SD.PILE.WQC.015	DB Team Review Shop Drawings - Piles - 64 WB over Queens Creek	10	08-20-18	08-31-18
PROC.SD.PILE.ELH.015	DB Team Review Shop Drawings - Piles - 64 EB over Lakeshead	10	08-21-18	09-04-18
PROC.SD.PILE.WLH.015	DB Team Review Shop Drawings - Piles - 64 WB over Lakeshead	10	08-21-18	09-04-18
PROC.SD.GIRD.EQC.015	DB Team Review Shop Drawings - Girders - 64 EB over Queens Creek	10	10-11-18	10-24-18
PROC.SD.GIRD.WQC.015	DB Team Review Shop Drawings - Girders - 64 WB over Queens Creek	10	10-11-18	10-24-18
PROC.SD.GIRD.ELH.015	DB Team Review Shop Drawings - Girders - 64 EB over Lakeshead	10	10-12-18	10-25-18
PROC.SD.GIRD.WLH.015	DB Team Review Shop Drawings - Girders - 64 WB over Lakeshead	10	10-12-18	10-25-18
ORD.B641.PILE.045	Order Production Piles - B-641	0		11-28-18

Remaining Level of Effort
Actual Work
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Summary

State Project No.: 0064-965-229, P-101, R-201, C-501, B-638, B-639, B-640, B-641, B-642, B-643, D-609, D-610, D-611
Federal Project No.: NHPP-064-3 (498)
Contract ID Number: C00106689DB97

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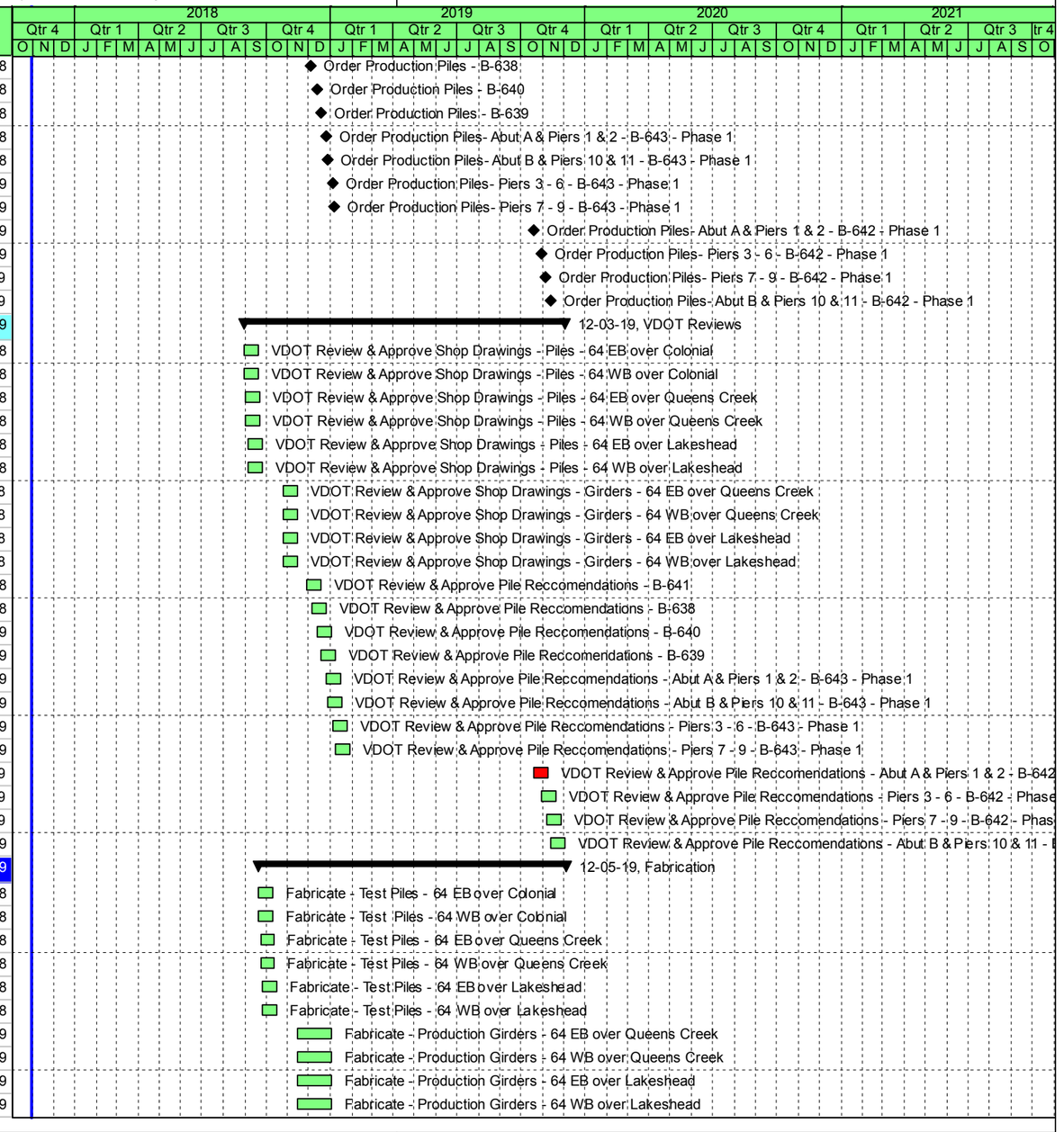
Activity ID	Activity Name	Original Duration	Start	Finish
ORD.B638.PILE.055	Order Production Piles - B-638	0		12-04-18
ORD.B640.PILE.035	Order Production Piles - B-640	0		12-12-18
ORD.B639.PILE.025	Order Production Piles - B-639	0		12-18-18
ORD.B643.PILE.005	Order Production Piles- Abut A & Piers 1 & 2 - B-643 - Phase 1	0		12-26-18
ORD.B643.PILE.015	Order Production Piles- Abut B & Piers 10 & 11 - B-643 - Phase 1	0		12-28-18
ORD.B643.PILE.010	Order Production Piles- Piers 3 - 6 - B-643 - Phase 1	0		01-04-19
ORD.B643.PILE.020	Order Production Piles- Piers 7 - 9 - B-643 - Phase 1	0		01-07-19
ORD.B642.PILE.005	Order Production Piles- Abut A & Piers 1 & 2 - B-642 - Phase 1	0		10-18-19
ORD.B642.PILE.010	Order Production Piles- Piers 3 - 6 - B-642 - Phase 1	0		10-29-19
ORD.B642.PILE.020	Order Production Piles- Piers 7 - 9 - B-642 - Phase 1	0		11-05-19
ORD.B642.PILE.015	Order Production Piles- Abut B & Piers 10 & 11 - B-642 - Phase 1	0		11-12-19
VDOT Reviews		461	08-30-18	12-03-19
PROC.SD.PILE.ECP.025	VDOT Review & Approve Shop Drawings - Piles - 64 EB over Colonial	21	08-30-18	09-19-18
PROC.SD.PILE.WCP.025	VDOT Review & Approve Shop Drawings - Piles - 64 WB over Colonial	21	08-30-18	09-19-18
PROC.SD.PILE.EQC.025	VDOT Review & Approve Shop Drawings - Piles - 64 EB over Queens Cı	21	09-01-18	09-21-18
PROC.SD.PILE.WQC.025	VDOT Review & Approve Shop Drawings - Piles - 64 WB over Queens C	21	09-01-18	09-21-18
PROC.SD.PILE.ELH.025	VDOT Review & Approve Shop Drawings - Piles - 64 EB over Lakeshead	21	09-05-18	09-25-18
PROC.SD.PILE.WLH.025	VDOT Review & Approve Shop Drawings - Piles - 64 WB over Lakeshea	21	09-05-18	09-25-18
PROC.SD.GIRD.EQC.025	VDOT Review & Approve Shop Drawings - Girders - 64 EB over Queens	21	10-25-18	11-14-18
PROC.SD.GIRD.WQC.025	VDOT Review & Approve Shop Drawings - Girders - 64 WB over Queen	21	10-25-18	11-14-18
PROC.SD.GIRD.ELH.025	VDOT Review & Approve Shop Drawings - Girders - 64 EB over Lakesh	21	10-26-18	11-15-18
PROC.SD.GIRD.WLH.025	VDOT Review & Approve Shop Drawings - Girders - 64 WB over Lakesh	21	10-26-18	11-15-18
VDOT.B641.PILE.005	VDOT Review & Approve Pile Reccomendations - B-641	21	11-29-18	12-19-18
VDOT.B638.PILE.005	VDOT Review & Approve Pile Reccomendations - B-638	21	12-05-18	12-25-18
VDOT.B640.PILE.005	VDOT Review & Approve Pile Reccomendations - B-640	21	12-13-18	01-02-19
VDOT.B639.PILE.005	VDOT Review & Approve Pile Reccomendations - B-639	21	12-19-18	01-08-19
VDOT.B643.PILE.005	VDOT Review & Approve Pile Reccomendations - Abut A & Piers 1 & 2 - I	21	12-27-18	01-16-19
VDOT.B643.PILE.015	VDOT Review & Approve Pile Reccomendations - Abut B & Piers 10 & 11	21	12-29-18	01-18-19
VDOT.B643.PILE.010	VDOT Review & Approve Pile Reccomendations - Piers 3 - 6 - B-643 - Pl	21	01-05-19	01-25-19
VDOT.B643.PILE.020	VDOT Review & Approve Pile Reccomendations - Piers 7 - 9 - B-643 - Pl	21	01-08-19	01-28-19
VDOT.B642.PILE.005	VDOT Review & Approve Pile Reccomendations - Abut A & Piers 1 & 2 - I	21	10-19-19	11-08-19
VDOT.B642.PILE.010	VDOT Review & Approve Pile Reccomendations - Piers 3 - 6 - B-642 - Pl	21	10-30-19	11-19-19
VDOT.B642.PILE.020	VDOT Review & Approve Pile Reccomendations - Piers 7 - 9 - B-642 - Pl	21	11-06-19	11-26-19
VDOT.B642.PILE.015	VDOT Review & Approve Pile Reccomendations - Abut B & Piers 10 & 11	21	11-13-19	12-03-19
Fabrication		304	09-20-18	12-05-19
FAB.TST.PILE.ECP	Fabricate - Test Piles - 64 EB over Colonial	15	09-20-18	10-10-18
FAB.TST.PILE.WCP	Fabricate - Test Piles - 64 WB over Colonial	15	09-20-18	10-10-18
FAB.TST.PILE.EQC	Fabricate - Test Piles - 64 EB over Queens Creek	15	09-24-18	10-12-18
FAB.TST.PILE.WQC	Fabricate - Test Piles - 64 WB over Queens Creek	15	09-24-18	10-12-18
FAB.TST.PILE.ELH	Fabricate - Test Piles - 64 EB over Lakeshead	15	09-26-18	10-16-18
FAB.TST.PILE.WLH	Fabricate - Test Piles - 64 WB over Lakeshead	15	09-26-18	10-16-18
FAB.PRD.GIRD.EQC	Fabricate - Production Girders - 64 EB over Queens Creek	30	11-15-18	01-02-19
FAB.PRD.GIRD.WQC	Fabricate - Production Girders - 64 WB over Queens Creek	30	11-15-18	01-02-19
FAB.PRD.GIRD.ELH	Fabricate - Production Girders - 64 EB over Lakeshead	30	11-16-18	01-03-19
FAB.PRD.GIRD.WLH	Fabricate - Production Girders - 64 WB over Lakeshead	30	11-16-18	01-03-19



Remaining Level of Effort
Actual Work
Remaining Work
Critical Remaining Work
Milestone
Summary

State Project No.: 0064-965-229, P-101, R-201, C-501, B-638, B-639, B-640, B-641, B-642, B-643, D-609, D-610, D-611
Federal Project No.: NHPP-064-3 (498)
Contract ID Number: C00106689DB97

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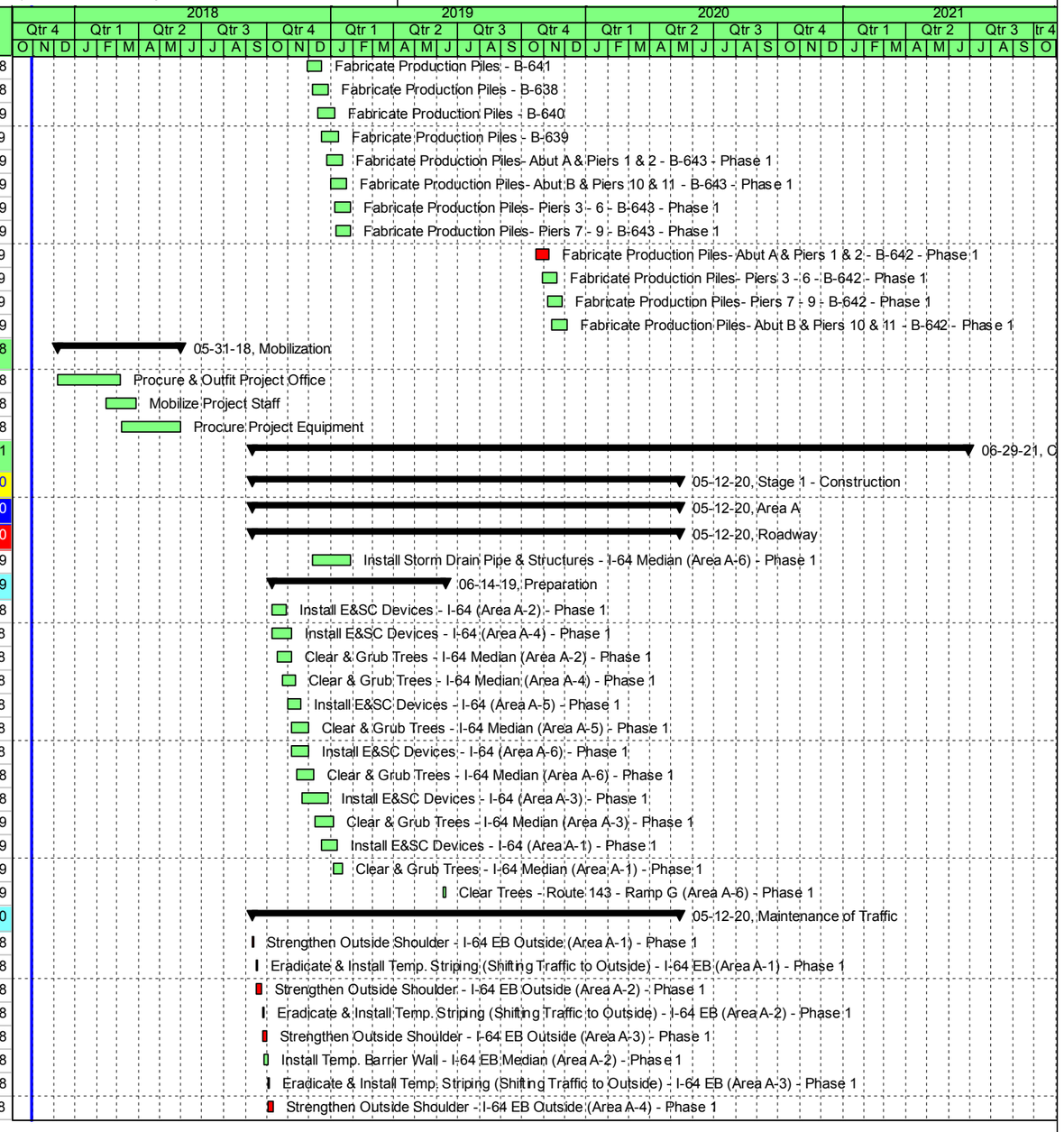
Activity ID	Activity Name	Original Duration	Start	Finish
FAB.PRD.PILE.B641	Fabricate Production Piles - B-641	15	11-29-18	12-19-18
FAB.PRD.PILE.B638	Fabricate Production Piles - B-638	15	12-05-18	12-27-18
FAB.PRD.PILE.B640	Fabricate Production Piles - B-640	15	12-13-18	01-07-19
FAB.PRD.PILE.B639	Fabricate Production Piles - B-639	15	12-19-18	01-11-19
FAB.PRD.PILE.WQC.005	Fabricate Production Piles- Abut A & Piers 1 & 2 - B-643 - Phase 1	15	12-27-18	01-17-19
FAB.PRD.PILE.WQC.015	Fabricate Production Piles- Abut B & Piers 10 & 11 - B-643 - Phase 1	15	12-31-18	01-22-19
FAB.PRD.PILE.WQC.010	Fabricate Production Piles- Piers 3 - 6 - B-643 - Phase 1	15	01-07-19	01-28-19
FAB.PRD.PILE.WQC.020	Fabricate Production Piles- Piers 7 - 9 - B-643 - Phase 1	15	01-08-19	01-29-19
FAB.PRD.PILE.EQC.005	Fabricate Production Piles- Abut A & Piers 1 & 2 - B-642 - Phase 1	15	10-21-19	11-08-19
FAB.PRD.PILE.EQC.010	Fabricate Production Piles- Piers 3 - 6 - B-642 - Phase 1	15	10-30-19	11-19-19
FAB.PRD.PILE.EQC.020	Fabricate Production Piles- Piers 7 - 9 - B-642 - Phase 1	15	11-06-19	11-26-19
FAB.PRD.PILE.EQC.015	Fabricate Production Piles- Abut B & Piers 10 & 11 - B-642 - Phase 1	15	11-13-19	12-05-19
Mobilization		120	12-07-17	05-31-18
MOB.OFFICE	Procure & Outfit Project Office	60	12-07-17	03-07-18
MOB.STAFF	Mobilize Project Staff	30	02-14-18	03-28-18
MOB.EQUIP	Procure Project Equipment	60	03-08-18	05-31-18
Construction		1024	09-10-18	06-29-21
Stage 1 - Construction		611	09-10-18	05-12-20
Area A		611	09-10-18	05-12-20
Roadway		611	09-10-18	05-12-20
64M.A6.STORM.105	Install Storm Drain Pipe & Structures - I-64 Median (Area A-6) - Phase 1	26	12-06-18	01-28-19
Preparation		129	10-09-18	06-14-19
64.A2.ESC.105	Install E&SC Devices - I-64 (Area A-2) - Phase 1	12	10-09-18	10-30-18
64.A4.ESC.105	Install E&SC Devices - I-64 (Area A-4) - Phase 1	16	10-09-18	11-05-18
64M.A2.CLR.105	Clear & Grub Trees - I-64 Median (Area A-2) - Phase 1	12	10-16-18	11-05-18
64M.A4.CLR.105	Clear & Grub Trees - I-64 Median (Area A-4) - Phase 1	12	10-23-18	11-12-18
64.A5.ESC.105	Install E&SC Devices - I-64 (Area A-5) - Phase 1	12	10-31-18	11-19-18
64M.A5.CLR.105	Clear & Grub Trees - I-64 Median (Area A-5) - Phase 1	12	11-06-18	11-30-18
64.A6.ESC.105	Install E&SC Devices - I-64 (Area A-6) - Phase 1	12	11-06-18	11-30-18
64M.A6.CLR.105	Clear & Grub Trees - I-64 Median (Area A-6) - Phase 1	12	11-13-18	12-07-18
64.A3.ESC.105	Install E&SC Devices - I-64 (Area A-3) - Phase 1	16	11-20-18	12-27-18
64M.A3.CLR.105	Clear & Grub Trees - I-64 Median (Area A-3) - Phase 1	12	12-10-18	01-04-19
64.A1.ESC.105	Install E&SC Devices - I-64 (Area A-1) - Phase 1	11	12-18-18	01-10-19
64M.A1.CLR.105	Clear & Grub Trees - I-64 Median (Area A-1) - Phase 1	8	01-04-19	01-17-19
A6.RPG.CLR.105	Clear Trees - Route 143 - Ramp G (Area A-6) - Phase 1	3	06-10-19	06-14-19
Maintenance of Traffic		611	09-10-18	05-12-20
64E.A1.TPAV.105	Strengthen Outside Shoulder - I-64 EB Outside (Area A-1) - Phase 1	3	09-10-18	09-13-18
64E.A1.TSTR.105	Eradicate & Install Temp. Striping (Shifting Traffic to Outside) - I-64 EB (A	2	09-17-18	09-18-18
64E.A2.TPAV.105	Strengthen Outside Shoulder - I-64 EB Outside (Area A-2) - Phase 1	5	09-17-18	09-24-18
64E.A2.TSTR.105	Eradicate & Install Temp. Striping (Shifting Traffic to Outside) - I-64 EB (A	2	09-25-18	09-27-18
64E.A3.TPAV.105	Strengthen Outside Shoulder - I-64 EB Outside (Area A-3) - Phase 1	5	09-25-18	10-02-18
64E.A2.TBAR.105	Install Temp. Barrier Wall - I-64 EB Median (Area A-2) - Phase 1	4	09-28-18	10-03-18
64E.A3.TSTR.105	Eradicate & Install Temp. Striping (Shifting Traffic to Outside) - I-64 EB (A	2	10-04-18	10-05-18
64E.A4.TPAV.105	Strengthen Outside Shoulder - I-64 EB Outside (Area A-4) - Phase 1	5	10-04-18	10-11-18



Remaining Level of Effort
Actual Work
Remaining Work
Critical Remaining Work
Milestone
Summary

State Project No.: 0064-965-229, P-101, R-201, C-501, B-638, B-639, B-640, B-641, B-642, B-643, D-609, D-610, D-611
Federal Project No.: NHPP-064-3 (498)
Contract ID Number: C00106689DB97

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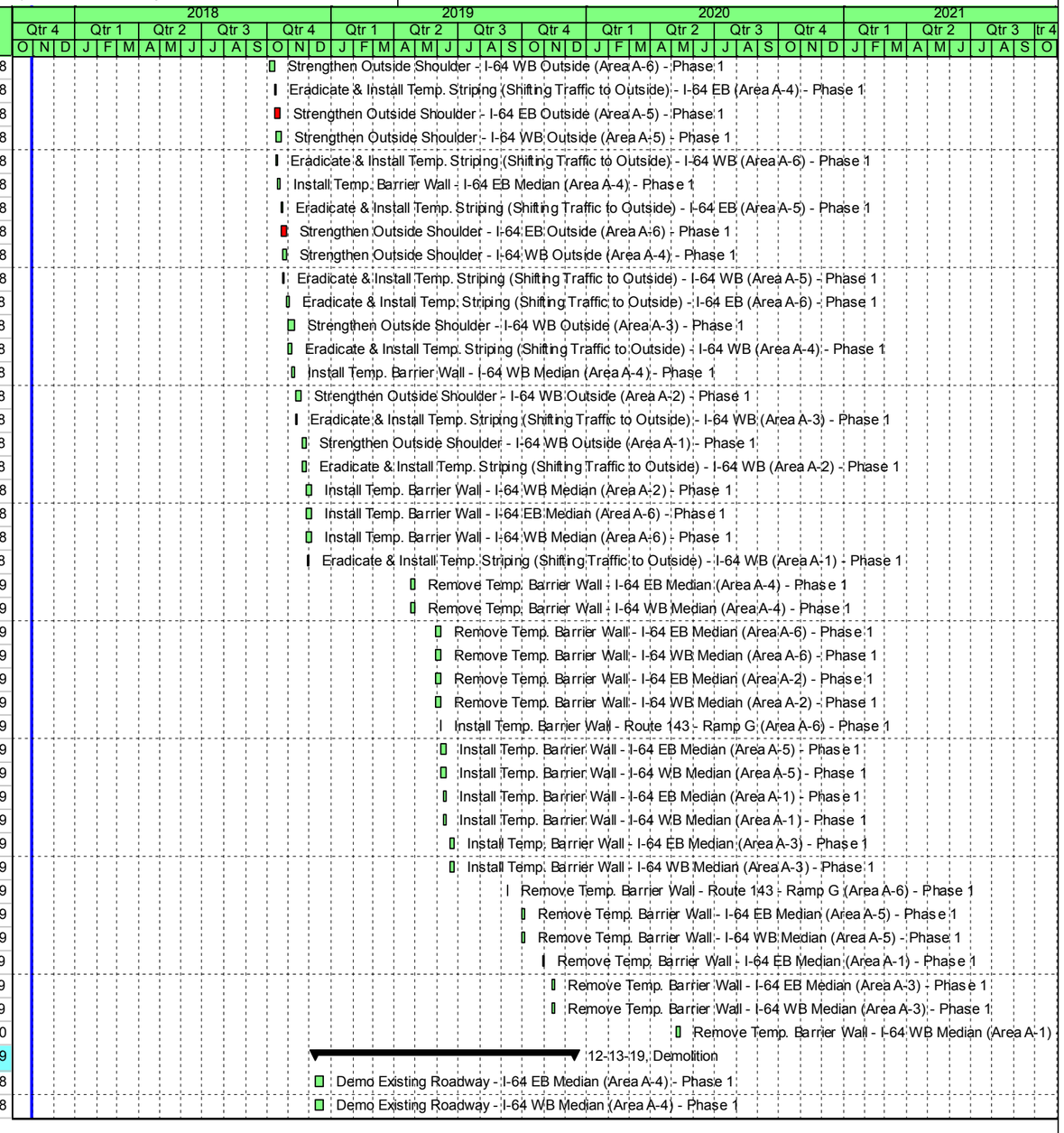
Activity ID	Activity Name	Original Duration	Start	Finish
64W.A6.TPAV.105	Strengthen Outside Shoulder - I-64 WB Outside (Area A-6) - Phase 1	5	10-05-18	10-12-18
64E.A4.TSTR.105	Eradicate & Install Temp. Striping (Shifting Traffic to Outside) - I-64 EB (A	2	10-12-18	10-15-18
64E.A5.TPAV.105	Strengthen Outside Shoulder - I-64 EB Outside (Area A-5) - Phase 1	5	10-12-18	10-19-18
64W.A5.TPAV.105	Strengthen Outside Shoulder - I-64 WB Outside (Area A-5) - Phase 1	5	10-15-18	10-22-18
64W.A6.TSTR.105	Eradicate & Install Temp. Striping (Shifting Traffic to Outside) - I-64 WB (A	2	10-15-18	10-16-18
64E.A4.TBAR.105	Install Temp. Barrier Wall - I-64 EB Median (Area A-4) - Phase 1	4	10-16-18	10-19-18
64E.A5.TSTR.105	Eradicate & Install Temp. Striping (Shifting Traffic to Outside) - I-64 EB (A	2	10-22-18	10-23-18
64E.A6.TPAV.105	Strengthen Outside Shoulder - I-64 EB Outside (Area A-6) - Phase 1	5	10-22-18	10-29-18
64W.A4.TPAV.105	Strengthen Outside Shoulder - I-64 WB Outside (Area A-4) - Phase 1	5	10-23-18	10-30-18
64W.A5.TSTR.105	Eradicate & Install Temp. Striping (Shifting Traffic to Outside) - I-64 WB (A	2	10-23-18	10-25-18
64E.A6.TSTR.105	Eradicate & Install Temp. Striping (Shifting Traffic to Outside) - I-64 EB (A	2	10-30-18	11-01-18
64W.A3.TPAV.105	Strengthen Outside Shoulder - I-64 WB Outside (Area A-3) - Phase 1	5	11-01-18	11-09-18
64W.A4.TSTR.105	Eradicate & Install Temp. Striping (Shifting Traffic to Outside) - I-64 WB (A	2	11-01-18	11-05-18
64W.A4.TBAR.105	Install Temp. Barrier Wall - I-64 WB Median (Area A-4) - Phase 1	4	11-06-18	11-09-18
64W.A2.TPAV.105	Strengthen Outside Shoulder - I-64 WB Outside (Area A-2) - Phase 1	5	11-12-18	11-19-18
64W.A3.TSTR.105	Eradicate & Install Temp. Striping (Shifting Traffic to Outside) - I-64 WB (A	2	11-12-18	11-13-18
64W.A1.TPAV.105	Strengthen Outside Shoulder - I-64 WB Outside (Area A-1) - Phase 1	3	11-20-18	11-27-18
64W.A2.TSTR.105	Eradicate & Install Temp. Striping (Shifting Traffic to Outside) - I-64 WB (A	2	11-20-18	11-26-18
64W.A2.TBAR.105	Install Temp. Barrier Wall - I-64 WB Median (Area A-2) - Phase 1	4	11-27-18	12-03-18
64E.A6.TBAR.105	Install Temp. Barrier Wall - I-64 EB Median (Area A-6) - Phase 1	5	11-27-18	12-04-18
64W.A6.TBAR.105	Install Temp. Barrier Wall - I-64 WB Median (Area A-6) - Phase 1	5	11-27-18	12-04-18
64W.A1.TSTR.105	Eradicate & Install Temp. Striping (Shifting Traffic to Outside) - I-64 WB (A	2	11-29-18	11-30-18
64E.A4.RBAR.105	Remove Temp. Barrier Wall - I-64 EB Median (Area A-4) - Phase 1	4	04-25-19	04-30-19
64W.A4.RBAR.105	Remove Temp. Barrier Wall - I-64 WB Median (Area A-4) - Phase 1	4	04-25-19	04-30-19
64E.A6.RBAR.105	Remove Temp. Barrier Wall - I-64 EB Median (Area A-6) - Phase 1	5	05-30-19	06-06-19
64W.A4.RBAR.105	Remove Temp. Barrier Wall - I-64 WB Median (Area A-4) - Phase 1	4	04-25-19	04-30-19
64E.A6.RBAR.105	Remove Temp. Barrier Wall - I-64 EB Median (Area A-6) - Phase 1	5	05-30-19	06-06-19
64W.A6.RBAR.105	Remove Temp. Barrier Wall - I-64 WB Median (Area A-6) - Phase 1	5	05-30-19	06-06-19
64E.A2.RBAR.105	Remove Temp. Barrier Wall - I-64 EB Median (Area A-2) - Phase 1	4	05-31-19	06-06-19
64W.A2.RBAR.105	Remove Temp. Barrier Wall - I-64 WB Median (Area A-2) - Phase 1	4	05-31-19	06-06-19
A6.RPG.TBAR.105	Install Temp. Barrier Wall - Route 143 - Ramp G (Area A-6) - Phase 1	1	06-07-19	06-07-19
64E.A5.TBAR.105	Install Temp. Barrier Wall - I-64 EB Median (Area A-5) - Phase 1	5	06-07-19	06-14-19
64W.A5.TBAR.105	Install Temp. Barrier Wall - I-64 WB Median (Area A-5) - Phase 1	5	06-07-19	06-14-19
64E.A1.TBAR.105	Install Temp. Barrier Wall - I-64 EB Median (Area A-1) - Phase 1	3	06-11-19	06-14-19
64W.A1.TBAR.105	Install Temp. Barrier Wall - I-64 WB Median (Area A-1) - Phase 1	3	06-11-19	06-14-19
64E.A3.TBAR.105	Install Temp. Barrier Wall - I-64 EB Median (Area A-3) - Phase 1	4	06-20-19	06-25-19
64W.A3.TBAR.105	Install Temp. Barrier Wall - I-64 WB Median (Area A-3) - Phase 1	4	06-20-19	06-25-19
A6.RPG.RBAR.105	Remove Temp. Barrier Wall - Route 143 - Ramp G (Area A-6) - Phase 1	1	09-09-19	09-09-19
64E.A5.RBAR.105	Remove Temp. Barrier Wall - I-64 EB Median (Area A-5) - Phase 1	5	09-30-19	10-04-19
64W.A5.RBAR.105	Remove Temp. Barrier Wall - I-64 WB Median (Area A-5) - Phase 1	5	09-30-19	10-04-19
64E.A1.RBAR.105	Remove Temp. Barrier Wall - I-64 EB Median (Area A-1) - Phase 1	3	10-30-19	11-01-19
64E.A3.RBAR.105	Remove Temp. Barrier Wall - I-64 EB Median (Area A-3) - Phase 1	4	11-12-19	11-15-19
64W.A3.RBAR.105	Remove Temp. Barrier Wall - I-64 WB Median (Area A-3) - Phase 1	4	11-12-19	11-15-19
64W.A1.RBAR.105	Remove Temp. Barrier Wall - I-64 WB Median (Area A-1) - Phase 1	3	05-08-20	05-12-20
Demolition		221	12-10-18	12-13-19
64E.A4.DRDW.105	Demo Existing Roadway - I-64 EB Median (Area A-4) - Phase 1	7	12-10-18	12-20-18
64W.A4.DRDW.105	Demo Existing Roadway - I-64 WB Median (Area A-4) - Phase 1	7	12-10-18	12-20-18



Remaining Level of Effort
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Summary

State Project No.: 0064-965-229, P-101, R-201, C-501, B-638, B-639, B-640, B-641, B-642, B-643, D-609, D-610, D-611
Federal Project No.: NHPP-064-3 (498)
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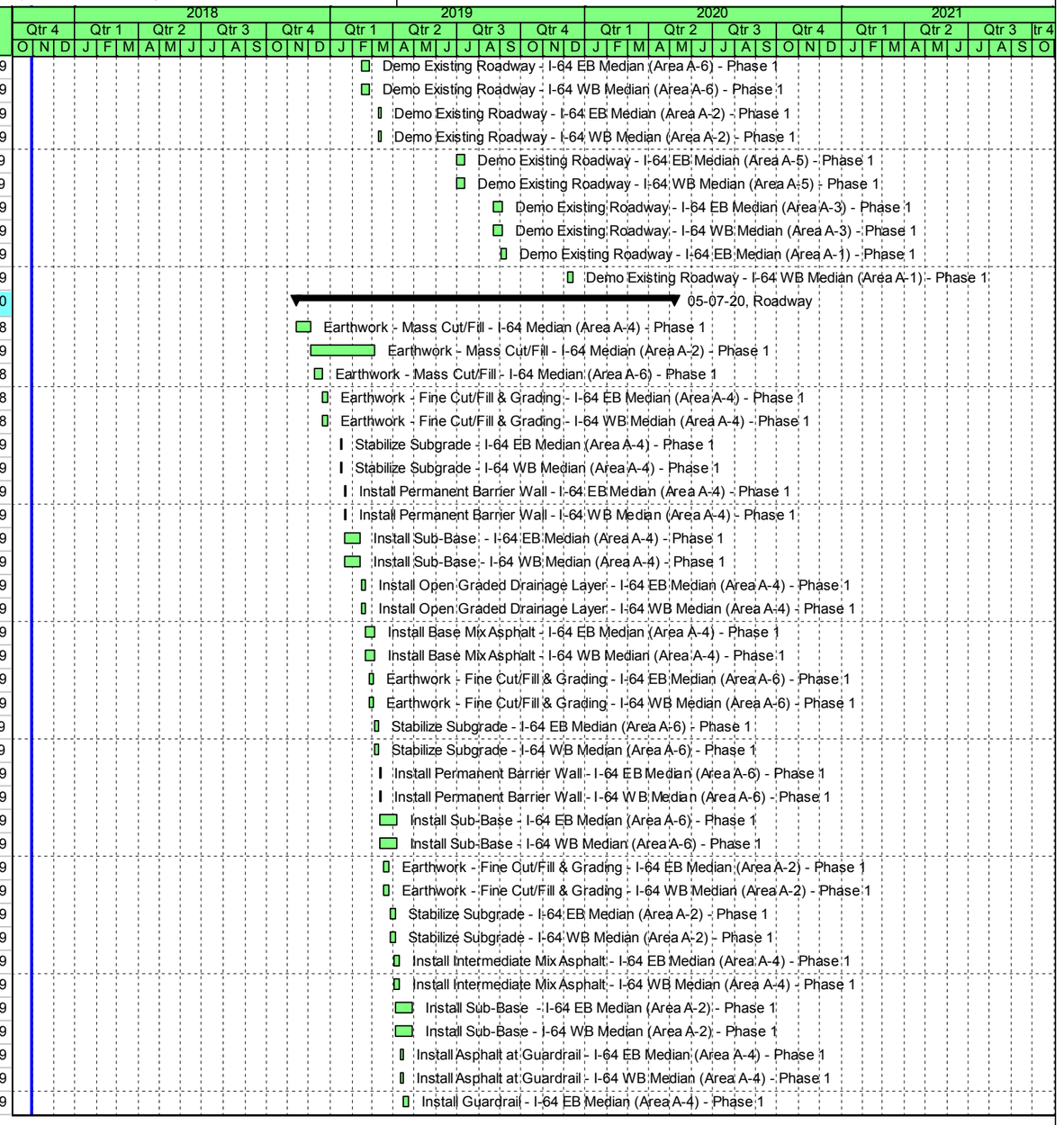
Activity ID	Activity Name	Original Duration	Start	Finish
64E.A6.DRDW.105	Demo Existing Roadway - I-64 EB Median (Area A-6) - Phase 1	7	02-14-19	02-25-19
64W.A6.DRDW.105	Demo Existing Roadway - I-64 WB Median (Area A-6) - Phase 1	7	02-14-19	02-25-19
64E.A2.DRDW.105	Demo Existing Roadway - I-64 EB Median (Area A-2) - Phase 1	5	03-11-19	03-15-19
64W.A2.DRDW.105	Demo Existing Roadway - I-64 WB Median (Area A-2) - Phase 1	5	03-11-19	03-15-19
64E.A5.DRDW.105	Demo Existing Roadway - I-64 EB Median (Area A-5) - Phase 1	7	07-01-19	07-11-19
64W.A5.DRDW.105	Demo Existing Roadway - I-64 WB Median (Area A-5) - Phase 1	7	07-01-19	07-11-19
64E.A3.DRDW.105	Demo Existing Roadway - I-64 EB Median (Area A-3) - Phase 1	7	08-22-19	09-03-19
64W.A3.DRDW.105	Demo Existing Roadway - I-64 WB Median (Area A-3) - Phase 1	7	08-22-19	09-03-19
64E.A1.DRDW.105	Demo Existing Roadway - I-64 EB Median (Area A-1) - Phase 1	5	09-03-19	09-09-19
64W.A1.DRDW.105	Demo Existing Roadway - I-64 WB Median (Area A-1) - Phase 1	5	12-06-19	12-13-19
Roadway		542	11-13-18	05-07-20
64M.A4.EMCF.105	Earthwork - Mass Cut/Fill - I-64 Median (Area A-4) - Phase 1	10	11-13-18	12-04-18
64M.A2.EMCF.105	Earthwork - Mass Cut/Fill - I-64 Median (Area A-2) - Phase 1	22	12-04-18	03-05-19
64M.A6.EMCF.105	Earthwork - Mass Cut/Fill - I-64 Median (Area A-6) - Phase 1	7	12-10-18	12-21-18
64E.A4.RGRD.105	Earthwork - Fine Cut/Fill & Grading - I-64 EB Median (Area A-4) - Phase 1	3	12-21-18	12-28-18
64W.A4.RGRD.105	Earthwork - Fine Cut/Fill & Grading - I-64 WB Median (Area A-4) - Phase	3	12-21-18	12-28-18
64E.A4.STAB.105	Stabilize Subgrade - I-64 EB Median (Area A-4) - Phase 1	3	01-15-19	01-18-19
64W.A4.STAB.105	Stabilize Subgrade - I-64 WB Median (Area A-4) - Phase 1	3	01-15-19	01-18-19
64E.A4.BARR.105	Install Permanent Barrier Wall - I-64 EB Median (Area A-4) - Phase 1	2	01-22-19	01-23-19
64W.A4.BARR.105	Install Permanent Barrier Wall - I-64 WB Median (Area A-4) - Phase 1	2	01-22-19	01-23-19
64E.A4.BASE.105	Install Sub-Base - I-64 EB Median (Area A-4) - Phase 1	13	01-22-19	02-12-19
64W.A4.BASE.105	Install Sub-Base - I-64 WB Median (Area A-4) - Phase 1	13	01-22-19	02-12-19
64E.A4.OGDL.105	Install Open Graded Drainage Layer - I-64 EB Median (Area A-4) - Phase	2	02-14-19	02-19-19
64W.A4.OGDL.105	Install Open Graded Drainage Layer - I-64 WB Median (Area A-4) - Phas	2	02-14-19	02-19-19
64E.A4.ASBM.105	Install Base Mix Asphalt - I-64 EB Median (Area A-4) - Phase 1	6	02-21-19	03-05-19
64W.A4.ASBM.105	Install Base Mix Asphalt - I-64 WB Median (Area A-4) - Phase 1	6	02-21-19	03-05-19
64E.A6.RGRD.105	Earthwork - Fine Cut/Fill & Grading - I-64 EB Median (Area A-6) - Phase 1	4	02-26-19	03-04-19
64W.A6.RGRD.105	Earthwork - Fine Cut/Fill & Grading - I-64 WB Median (Area A-6) - Phase	4	02-26-19	03-04-19
64E.A6.STAB.105	Stabilize Subgrade - I-64 EB Median (Area A-6) - Phase 1	4	03-05-19	03-11-19
64W.A6.STAB.105	Stabilize Subgrade - I-64 WB Median (Area A-6) - Phase 1	4	03-05-19	03-11-19
64E.A6.BARR.105	Install Permanent Barrier Wall - I-64 EB Median (Area A-6) - Phase 1	4	03-12-19	03-15-19
64W.A6.BARR.105	Install Permanent Barrier Wall - I-64 WB Median (Area A-6) - Phase 1	4	03-12-19	03-15-19
64E.A6.BASE.105	Install Sub-Base - I-64 EB Median (Area A-6) - Phase 1	14	03-12-19	04-05-19
64W.A6.BASE.105	Install Sub-Base - I-64 WB Median (Area A-6) - Phase 1	14	03-12-19	04-05-19
64E.A2.RGRD.105	Earthwork - Fine Cut/Fill & Grading - I-64 EB Median (Area A-2) - Phase 1	5	03-18-19	03-26-19
64W.A2.RGRD.105	Earthwork - Fine Cut/Fill & Grading - I-64 WB Median (Area A-2) - Phase	5	03-18-19	03-26-19
64E.A2.STAB.105	Stabilize Subgrade - I-64 EB Median (Area A-2) - Phase 1	5	03-28-19	04-04-19
64W.A2.STAB.105	Stabilize Subgrade - I-64 WB Median (Area A-2) - Phase 1	5	03-28-19	04-04-19
64E.A4.ASIM.105	Install Intermediate Mix Asphalt - I-64 EB Median (Area A-4) - Phase 1	3	04-02-19	04-09-19
64W.A4.ASIM.105	Install Intermediate Mix Asphalt - I-64 WB Median (Area A-4) - Phase 1	3	04-02-19	04-09-19
64E.A2.BASE.105	Install Sub-Base - I-64 EB Median (Area A-2) - Phase 1	13	04-05-19	04-29-19
64W.A2.BASE.105	Install Sub-Base - I-64 WB Median (Area A-2) - Phase 1	13	04-05-19	04-29-19
64E.A4.ASGR.105	Install Asphalt at Guardrail - I-64 EB Median (Area A-4) - Phase 1	3	04-11-19	04-15-19
64W.A4.ASGR.105	Install Asphalt at Guardrail - I-64 WB Median (Area A-4) - Phase 1	3	04-11-19	04-15-19
64E.A4.GRAIL.105	Install Guardrail - I-64 EB Median (Area A-4) - Phase 1	4	04-16-19	04-23-19



Remaining Level of Effort
Actual Work
Remaining Work
Critical Remaining Work
Milestone
Summary

State Project No.: 0064-965-229, P-101, R-201, C-501, B-638, B-639, B-640, B-641, B-642, B-643, D-609, D-610, D-611
Federal Project No.: NHPP-064-3 (498)
Contract ID Number: C00106689DB97

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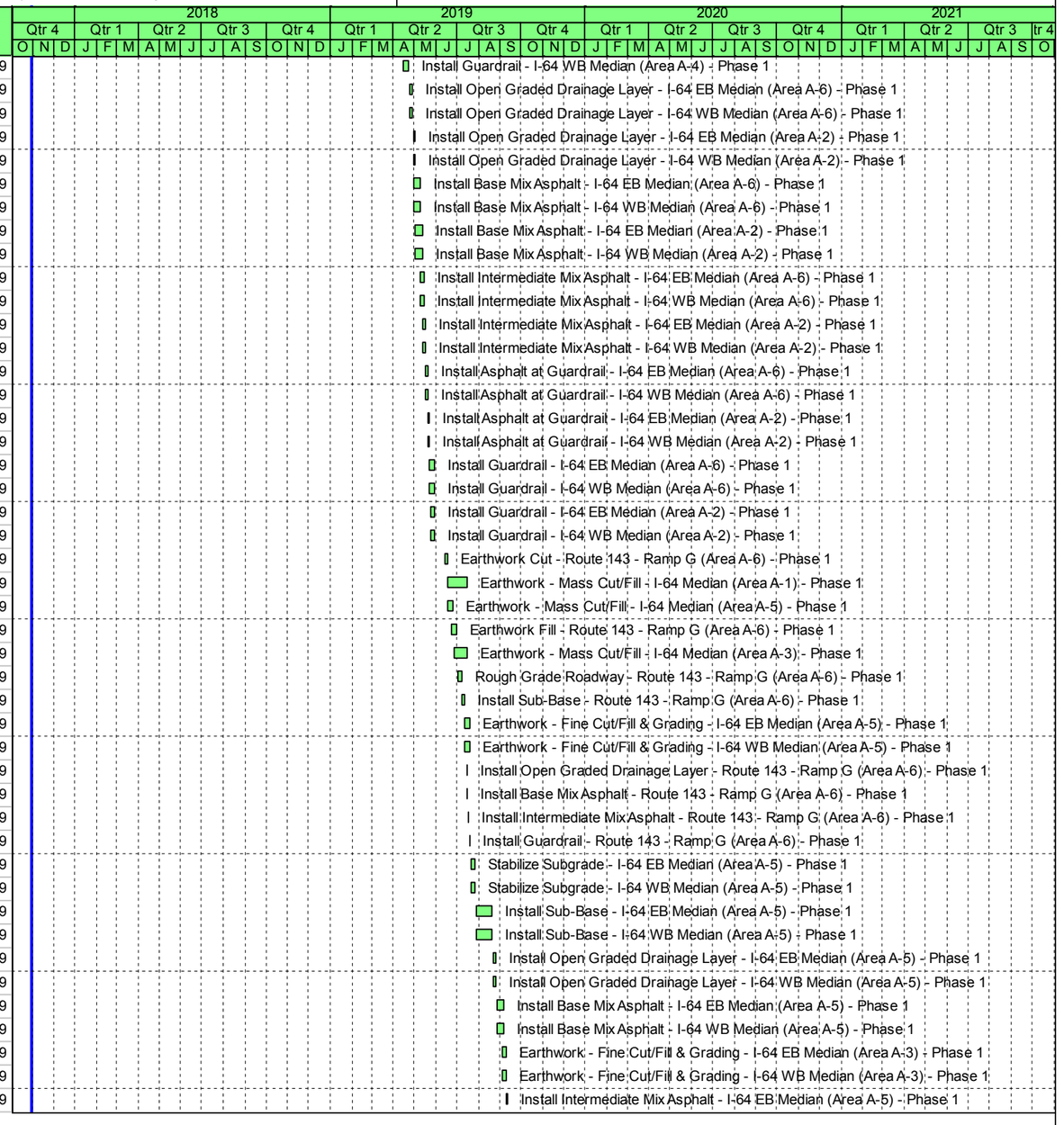
Activity ID	Activity Name	Original Duration	Start	Finish
64W.A4.GRAIL.105	Install Guardrail - I-64 WB Median (Area A-4) - Phase 1	4	04-16-19	04-23-19
64E.A6.OGDL.105	Install Open Graded Drainage Layer - I-64 EB Median (Area A-6) - Phase	3	04-25-19	04-29-19
64W.A6.OGDL.105	Install Open Graded Drainage Layer - I-64 WB Median (Area A-6) - Phas	3	04-25-19	04-29-19
64E.A2.OGDL.105	Install Open Graded Drainage Layer - I-64 EB Median (Area A-2) - Phase	2	04-30-19	05-02-19
64W.A2.OGDL.105	Install Open Graded Drainage Layer - I-64 WB Median (Area A-2) - Phas	2	04-30-19	05-02-19
64E.A6.ASBM.105	Install Base Mix Asphalt - I-64 EB Median (Area A-6) - Phase 1	6	04-30-19	05-09-19
64W.A6.ASBM.105	Install Base Mix Asphalt - I-64 WB Median (Area A-6) - Phase 1	6	04-30-19	05-09-19
64E.A2.ASBM.105	Install Base Mix Asphalt - I-64 EB Median (Area A-2) - Phase 1	6	05-03-19	05-13-19
64W.A2.ASBM.105	Install Base Mix Asphalt - I-64 WB Median (Area A-2) - Phase 1	6	05-03-19	05-13-19
64E.A6.ASIM.105	Install Intermediate Mix Asphalt - I-64 EB Median (Area A-6) - Phase 1	3	05-10-19	05-14-19
64W.A6.ASIM.105	Install Intermediate Mix Asphalt - I-64 WB Median (Area A-6) - Phase 1	3	05-10-19	05-14-19
64E.A2.ASIM.105	Install Intermediate Mix Asphalt - I-64 EB Median (Area A-2) - Phase 1	3	05-14-19	05-17-19
64W.A2.ASIM.105	Install Intermediate Mix Asphalt - I-64 WB Median (Area A-2) - Phase 1	3	05-14-19	05-17-19
64E.A6.ASGR.105	Install Asphalt at Guardrail - I-64 EB Median (Area A-6) - Phase 1	3	05-17-19	05-21-19
64W.A6.ASGR.105	Install Asphalt at Guardrail - I-64 WB Median (Area A-6) - Phase 1	3	05-17-19	05-21-19
64E.A2.ASGR.105	Install Asphalt at Guardrail - I-64 EB Median (Area A-2) - Phase 1	3	05-20-19	05-23-19
64W.A2.ASGR.105	Install Asphalt at Guardrail - I-64 WB Median (Area A-2) - Phase 1	3	05-20-19	05-23-19
64E.A6.GRAIL.105	Install Guardrail - I-64 EB Median (Area A-6) - Phase 1	4	05-23-19	05-29-19
64W.A6.GRAIL.105	Install Guardrail - I-64 WB Median (Area A-6) - Phase 1	4	05-23-19	05-29-19
64E.A2.GRAIL.105	Install Guardrail - I-64 EB Median (Area A-2) - Phase 1	4	05-24-19	05-30-19
64W.A2.GRAIL.105	Install Guardrail - I-64 WB Median (Area A-2) - Phase 1	4	05-24-19	05-30-19
A6.RPG.ECUT.105	Earthwork Cut - Route 143 - Ramp G (Area A-6) - Phase 1	3	06-14-19	06-18-19
64M.A1.EMCF.105	Earthwork - Mass Cut/Fill - I-64 Median (Area A-1) - Phase 1	16	06-17-19	07-15-19
64M.A5.EMCF.105	Earthwork - Mass Cut/Fill - I-64 Median (Area A-5) - Phase 1	6	06-17-19	06-25-19
A6.RPG.EFIL.105	Earthwork Fill - Route 143 - Ramp G (Area A-6) - Phase 1	5	06-24-19	07-01-19
64M.A3.EMCF.105	Earthwork - Mass Cut/Fill - I-64 Median (Area A-3) - Phase 1	11	06-27-19	07-16-19
A6.RPG.RGRD.105	Rough Grade Roadway - Route 143 - Ramp G (Area A-6) - Phase 1	3	07-02-19	07-08-19
A6.RPG.BASE.105	Install Sub-Base - Route 143 - Ramp G (Area A-6) - Phase 1	3	07-09-19	07-12-19
64E.A5.RGRD.105	Earthwork - Fine Cut/Fill & Grading - I-64 EB Median (Area A-5) - Phase 1	4	07-12-19	07-19-19
64W.A5.RGRD.105	Earthwork - Fine Cut/Fill & Grading - I-64 WB Median (Area A-5) - Phase	4	07-12-19	07-19-19
A6.RPG.OGDL.105	Install Open Graded Drainage Layer - Route 143 - Ramp G (Area A-6) - I	1	07-15-19	07-15-19
A6.RPG.ASBM.105	Install Base Mix Asphalt - Route 143 - Ramp G (Area A-6) - Phase 1	1	07-16-19	07-16-19
A6.RPG.ASIM.105	Install Intermediate Mix Asphalt - Route 143 - Ramp G (Area A-6) - Phase	1	07-18-19	07-18-19
A6.RPG.GRAIL.105	Install Guardrail - Route 143 - Ramp G (Area A-6) - Phase 1	1	07-19-19	07-19-19
64E.A5.STAB.105	Stabilize Subgrade - I-64 EB Median (Area A-5) - Phase 1	4	07-22-19	07-26-19
64W.A5.STAB.105	Stabilize Subgrade - I-64 WB Median (Area A-5) - Phase 1	4	07-22-19	07-26-19
64E.A5.BASE.105	Install Sub-Base - I-64 EB Median (Area A-5) - Phase 1	14	07-29-19	08-20-19
64W.A5.BASE.105	Install Sub-Base - I-64 WB Median (Area A-5) - Phase 1	14	07-29-19	08-20-19
64E.A5.OGDL.105	Install Open Graded Drainage Layer - I-64 EB Median (Area A-5) - Phase	3	08-22-19	08-26-19
64W.A5.OGDL.105	Install Open Graded Drainage Layer - I-64 WB Median (Area A-5) - Phas	3	08-22-19	08-26-19
64E.A5.ASBM.105	Install Base Mix Asphalt - I-64 EB Median (Area A-5) - Phase 1	6	08-27-19	09-06-19
64W.A5.ASBM.105	Install Base Mix Asphalt - I-64 WB Median (Area A-5) - Phase 1	6	08-27-19	09-06-19
64E.A3.RGRD.105	Earthwork - Fine Cut/Fill & Grading - I-64 EB Median (Area A-3) - Phase 1	3	09-05-19	09-09-19
64W.A3.RGRD.105	Earthwork - Fine Cut/Fill & Grading - I-64 WB Median (Area A-3) - Phase	3	09-05-19	09-09-19
64E.A5.ASIM.105	Install Intermediate Mix Asphalt - I-64 EB Median (Area A-5) - Phase 1	3	09-09-19	09-12-19



Remaining Level of Effort
Actual Work
Remaining Work
Critical Remaining Work
Milestone
Summary

State Project No.: 0064-965-229, P-101, R-201, C-501, B-638, B-639, B-640, B-641, B-642, B-643, D-609, D-610, D-611
Federal Project No.: NHPP-064-3 (498)
Contract ID Number: C00106689DB97

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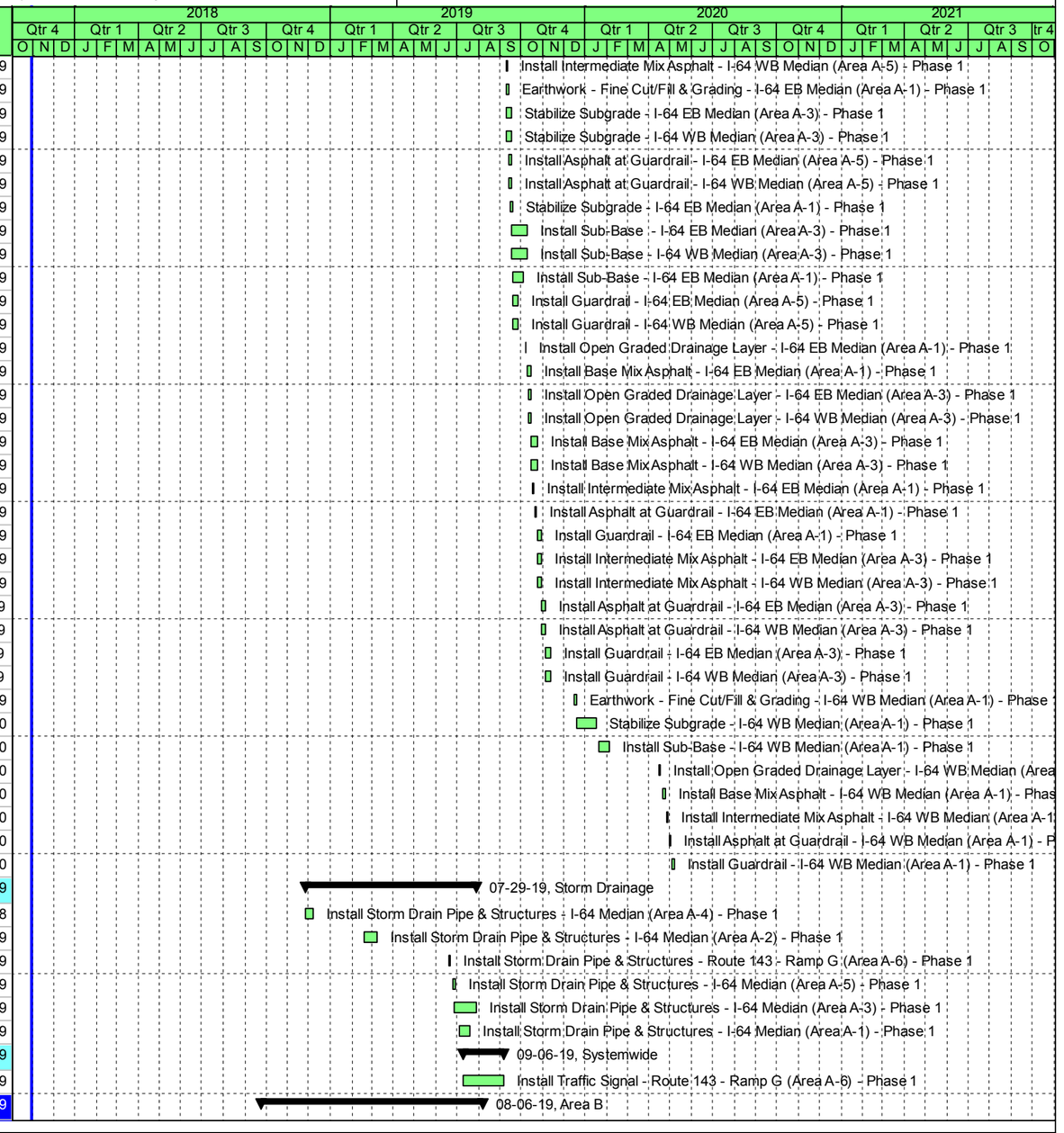
Activity ID	Activity Name	Original Duration	Start	Finish
64W.A5.ASIM.105	Install Intermediate Mix Asphalt - I-64 WB Median (Area A-5) - Phase 1	3	09-09-19	09-12-19
64E.A1.RGRD.105	Earthwork - Fine Cut/Fill & Grading - I-64 EB Median (Area A-1) - Phase 1	3	09-10-19	09-13-19
64E.A3.STAB.105	Stabilize Subgrade - I-64 EB Median (Area A-3) - Phase 1	3	09-10-19	09-16-19
64W.A3.STAB.105	Stabilize Subgrade - I-64 WB Median (Area A-3) - Phase 1	3	09-10-19	09-16-19
64E.A5.ASGR.105	Install Asphalt at Guardrail - I-64 EB Median (Area A-5) - Phase 1	3	09-13-19	09-17-19
64W.A5.ASGR.105	Install Asphalt at Guardrail - I-64 WB Median (Area A-5) - Phase 1	3	09-13-19	09-17-19
64E.A1.STAB.105	Stabilize Subgrade - I-64 EB Median (Area A-1) - Phase 1	3	09-16-19	09-19-19
64E.A3.BASE.105	Install Sub-Base - I-64 EB Median (Area A-3) - Phase 1	13	09-17-19	10-10-19
64W.A3.BASE.105	Install Sub-Base - I-64 WB Median (Area A-3) - Phase 1	13	09-17-19	10-10-19
64E.A1.BASE.105	Install Sub-Base - I-64 EB Median (Area A-1) - Phase 1	9	09-20-19	10-04-19
64E.A5.GRAIL.105	Install Guardrail - I-64 EB Median (Area A-5) - Phase 1	4	09-20-19	09-27-19
64W.A5.GRAIL.105	Install Guardrail - I-64 WB Median (Area A-5) - Phase 1	4	09-20-19	09-27-19
64E.A1.OGDL.105	Install Open Graded Drainage Layer - I-64 EB Median (Area A-1) - Phase	2	10-07-19	10-08-19
64E.A1.ASBM.105	Install Base Mix Asphalt - I-64 EB Median (Area A-1) - Phase 1	4	10-10-19	10-15-19
64E.A3.OGDL.105	Install Open Graded Drainage Layer - I-64 EB Median (Area A-3) - Phase	2	10-11-19	10-14-19
64W.A3.OGDL.105	Install Open Graded Drainage Layer - I-64 WB Median (Area A-3) - Phas	2	10-11-19	10-14-19
64E.A3.ASBM.105	Install Base Mix Asphalt - I-64 EB Median (Area A-3) - Phase 1	6	10-15-19	10-24-19
64W.A3.ASBM.105	Install Base Mix Asphalt - I-64 WB Median (Area A-3) - Phase 1	6	10-15-19	10-24-19
64E.A1.ASIM.105	Install Intermediate Mix Asphalt - I-64 EB Median (Area A-1) - Phase 1	2	10-17-19	10-18-19
64E.A1.ASGR.105	Install Asphalt at Guardrail - I-64 EB Median (Area A-1) - Phase 1	2	10-21-19	10-22-19
64E.A1.GRAIL.105	Install Guardrail - I-64 EB Median (Area A-1) - Phase 1	3	10-25-19	10-29-19
64E.A3.ASIM.105	Install Intermediate Mix Asphalt - I-64 EB Median (Area A-3) - Phase 1	3	10-25-19	10-29-19
64W.A3.ASIM.105	Install Intermediate Mix Asphalt - I-64 WB Median (Area A-3) - Phase 1	3	10-25-19	10-29-19
64E.A3.ASGR.105	Install Asphalt at Guardrail - I-64 EB Median (Area A-3) - Phase 1	3	10-31-19	11-04-19
64W.A3.ASGR.105	Install Asphalt at Guardrail - I-64 WB Median (Area A-3) - Phase 1	3	10-31-19	11-04-19
64E.A3.GRAIL.105	Install Guardrail - I-64 EB Median (Area A-3) - Phase 1	4	11-05-19	11-11-19
64W.A3.GRAIL.105	Install Guardrail - I-64 WB Median (Area A-3) - Phase 1	4	11-05-19	11-11-19
64W.A1.RGRD.105	Earthwork - Fine Cut/Fill & Grading - I-64 WB Median (Area A-1) - Phase	3	12-16-19	12-19-19
64W.A1.STAB.105	Stabilize Subgrade - I-64 WB Median (Area A-1) - Phase 1	3	12-20-19	01-17-20
64W.A1.BASE.105	Install Sub-Base - I-64 WB Median (Area A-1) - Phase 1	9	01-21-20	02-04-20
64W.A1.OGDL.105	Install Open Graded Drainage Layer - I-64 WB Median (Area A-1) - Phas	2	04-16-20	04-17-20
64W.A1.ASBM.105	Install Base Mix Asphalt - I-64 WB Median (Area A-1) - Phase 1	4	04-20-20	04-24-20
64W.A1.ASIM.105	Install Intermediate Mix Asphalt - I-64 WB Median (Area A-1) - Phase 1	2	04-27-20	04-28-20
64W.A1.ASGR.105	Install Asphalt at Guardrail - I-64 WB Median (Area A-1) - Phase 1	2	04-30-20	05-01-20
64W.A1.GRAIL.105	Install Guardrail - I-64 WB Median (Area A-1) - Phase 1	3	05-04-20	05-07-20
Storm Drainage		126	11-26-18	07-29-19
64M.A4.STORM.105	Install Storm Drain Pipe & Structures - I-64 Median (Area A-4) - Phase 1	7	11-26-18	12-07-18
64M.A2.STORM.105	Install Storm Drain Pipe & Structures - I-64 Median (Area A-2) - Phase 1	11	02-19-19	03-08-19
A6.RPG.STORM.105	Install Storm Drain Pipe & Structures - Route 143 - Ramp G (Area A-6) -	2	06-20-19	06-21-19
64M.A5.STORM.105	Install Storm Drain Pipe & Structures - I-64 Median (Area A-5) - Phase 1	3	06-25-19	06-28-19
64M.A3.STORM.105	Install Storm Drain Pipe & Structures - I-64 Median (Area A-3) - Phase 1	16	06-27-19	07-29-19
64M.A1.STORM.105	Install Storm Drain Pipe & Structures - I-64 Median (Area A-1) - Phase 1	8	07-05-19	07-19-19
Systemwide		30	07-11-19	09-06-19
A6.RPG.SIG.105	Install Traffic Signal - Route 143 - Ramp G (Area A-6) - Phase 1	30	07-11-19	09-06-19
Area B		317	09-24-18	08-06-19



Remaining Level of Effort | Critical Remaining Work
Actual Work | Milestone
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State Project No.: 0064-965-229, P-101, R-201, C-501, B-638, B-639, B-640, B-641, B-642, B-643, D-609, D-610, D-611
Federal Project No.: NHPP-064-3 (498)
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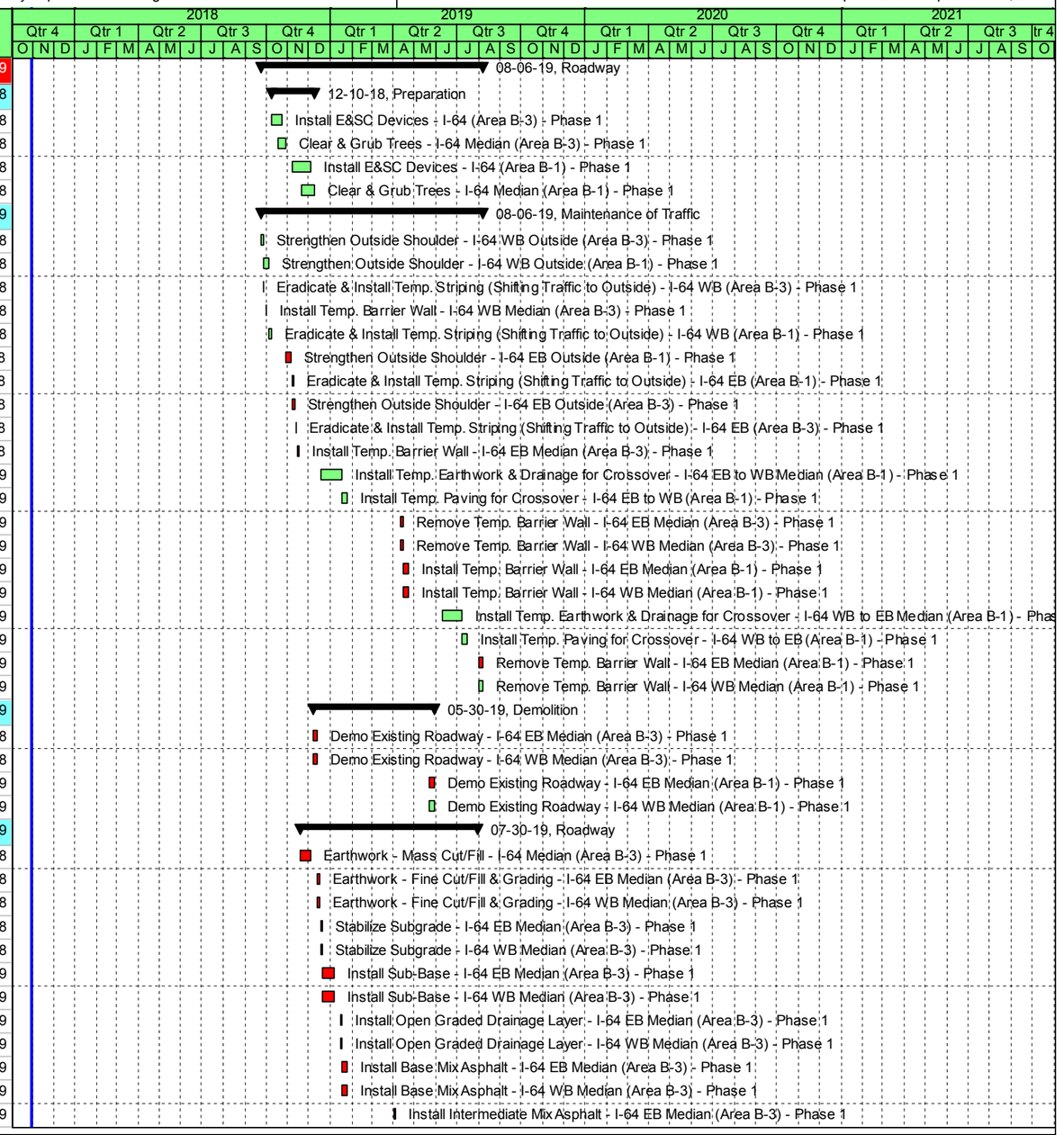
I-64 Capacity Improvements - Segment III

Proposal Date: September 14, 2017

Activity ID	Activity Name	Original Duration	Start	Finish
Roadway		317	09-24-18	08-06-19
Preparation		33	10-09-18	12-10-18
64.B3.ESC.105	Install E&SC Devices - I-64 (Area B-3) - Phase 1	9	10-09-18	10-23-18
64M.B3.CLR.105	Clear & Grub Trees - I-64 Median (Area B-3) - Phase 1	6	10-19-18	10-30-18
64.B1.ESC.105	Install E&SC Devices - I-64 (Area B-1) - Phase 1	12	11-08-18	12-03-18
64M.B1.CLR.105	Clear & Grub Trees - I-64 Median (Area B-1) - Phase 1	9	11-20-18	12-10-18
Maintenance of Traffic		317	09-24-18	08-06-19
64W.B3.TPAV.105	Strengthen Outside Shoulder - I-64 WB Outside (Area B-3) - Phase 1	3	09-24-18	09-27-18
64W.B1.TPAV.105	Strengthen Outside Shoulder - I-64 WB Outside (Area B-1) - Phase 1	4	09-28-18	10-04-18
64W.B3.TSTR.105	Eradicate & Install Temp. Striping (Shifting Traffic to Outside) - I-64 WB (A	1	09-28-18	09-28-18
64W.B3.TBAR.105	Install Temp. Barrier Wall - I-64 WB Median (Area B-3) - Phase 1	2	10-01-18	10-02-18
64W.B1.TSTR.105	Eradicate & Install Temp. Striping (Shifting Traffic to Outside) - I-64 WB (A	2	10-05-18	10-08-18
64E.B1.TPAV.105	Strengthen Outside Shoulder - I-64 EB Outside (Area B-1) - Phase 1	4	10-30-18	11-06-18
64E.B1.TSTR.105	Eradicate & Install Temp. Striping (Shifting Traffic to Outside) - I-64 EB (A	2	11-08-18	11-09-18
64E.B3.TPAV.105	Strengthen Outside Shoulder - I-64 EB Outside (Area B-3) - Phase 1	3	11-08-18	11-12-18
64E.B3.TSTR.105	Eradicate & Install Temp. Striping (Shifting Traffic to Outside) - I-64 EB (A	1	11-13-18	11-13-18
64E.B3.TBAR.105	Install Temp. Barrier Wall - I-64 EB Median (Area B-3) - Phase 1	2	11-15-18	11-16-18
64E.B3.CROSS.105	Install Temp. Earthwork & Drainage for Crossover - I-64 EB to WB Media	15	12-18-18	01-17-19
64E.B3.CROSS.110	Install Temp. Paving for Crossover - I-64 EB to WB (Area B-1) - Phase 1	3	01-18-19	01-24-19
64E.B3.RBAR.105	Remove Temp. Barrier Wall - I-64 EB Median (Area B-3) - Phase 1	2	04-12-19	04-15-19
64W.B3.RBAR.105	Remove Temp. Barrier Wall - I-64 WB Median (Area B-3) - Phase 1	2	04-12-19	04-15-19
64E.B1.TBAR.105	Install Temp. Barrier Wall - I-64 EB Median (Area B-1) - Phase 1	4	04-16-19	04-22-19
64W.B1.TBAR.105	Install Temp. Barrier Wall - I-64 WB Median (Area B-1) - Phase 1	4	04-16-19	04-22-19
64W.B1.CROSS.105	Install Temp. Earthwork & Drainage for Crossover - I-64 WB to EB Media	15	06-10-19	07-08-19
64W.B1.CROSS.110	Install Temp. Paving for Crossover - I-64 WB to EB (Area B-1) - Phase 1	3	07-09-19	07-15-19
64E.B1.RBAR.105	Remove Temp. Barrier Wall - I-64 EB Median (Area B-1) - Phase 1	4	08-01-19	08-06-19
64W.B1.RBAR.105	Remove Temp. Barrier Wall - I-64 WB Median (Area B-1) - Phase 1	4	08-01-19	08-06-19
Demolition		104	12-07-18	05-30-19
64E.B3.DRDW.105	Demo Existing Roadway - I-64 EB Median (Area B-3) - Phase 1	4	12-07-18	12-13-18
64W.B3.DRDW.105	Demo Existing Roadway - I-64 WB Median (Area B-3) - Phase 1	4	12-07-18	12-13-18
64E.B1.DRDW.105	Demo Existing Roadway - I-64 EB Median (Area B-1) - Phase 1	5	05-23-19	05-30-19
64W.B1.DRDW.105	Demo Existing Roadway - I-64 WB Median (Area B-1) - Phase 1	5	05-23-19	05-30-19
Roadway		254	11-19-18	07-30-19
64M.B3.ECUT.105	Earthwork - Mass Cut/Fill - I-64 Median (Area B-3) - Phase 1	6	11-19-18	12-03-18
64E.B3.RGRD.105	Earthwork - Fine Cut/Fill & Grading - I-64 EB Median (Area B-3) - Phase 1	2	12-14-18	12-17-18
64W.B3.RGRD.105	Earthwork - Fine Cut/Fill & Grading - I-64 WB Median (Area B-3) - Phase	2	12-14-18	12-17-18
64E.B3.STAB.105	Stabilize Subgrade - I-64 EB Median (Area B-3) - Phase 1	2	12-18-18	12-20-18
64W.B3.STAB.105	Stabilize Subgrade - I-64 WB Median (Area B-3) - Phase 1	2	12-18-18	12-20-18
64E.B3.BASE.105	Install Sub-Base - I-64 EB Median (Area B-3) - Phase 1	7	12-21-18	01-07-19
64W.B3.BASE.105	Install Sub-Base - I-64 WB Median (Area B-3) - Phase 1	7	12-21-18	01-07-19
64E.B3.OGDL.105	Install Open Graded Drainage Layer - I-64 EB Median (Area B-3) - Phase	2	01-15-19	01-17-19
64W.B3.OGDL.105	Install Open Graded Drainage Layer - I-64 WB Median (Area B-3) - Phas	2	01-15-19	01-17-19
64E.B3.ASBM.105	Install Base Mix Asphalt - I-64 EB Median (Area B-3) - Phase 1	3	01-18-19	01-24-19
64W.B3.ASBM.105	Install Base Mix Asphalt - I-64 WB Median (Area B-3) - Phase 1	3	01-18-19	01-24-19
64E.B3.ASIM.105	Install Intermediate Mix Asphalt - I-64 EB Median (Area B-3) - Phase 1	2	04-02-19	04-04-19



Remaining Level of Effort
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Summary

State Project No.: 0064-965-229, P-101, R-201, C-501, B-638, B-639, B-640, B-641, B-642, B-643, D-609, D-610, D-611
Federal Project No.: NHPP-064-3 (498)
Contract ID Number: C00106689DB97

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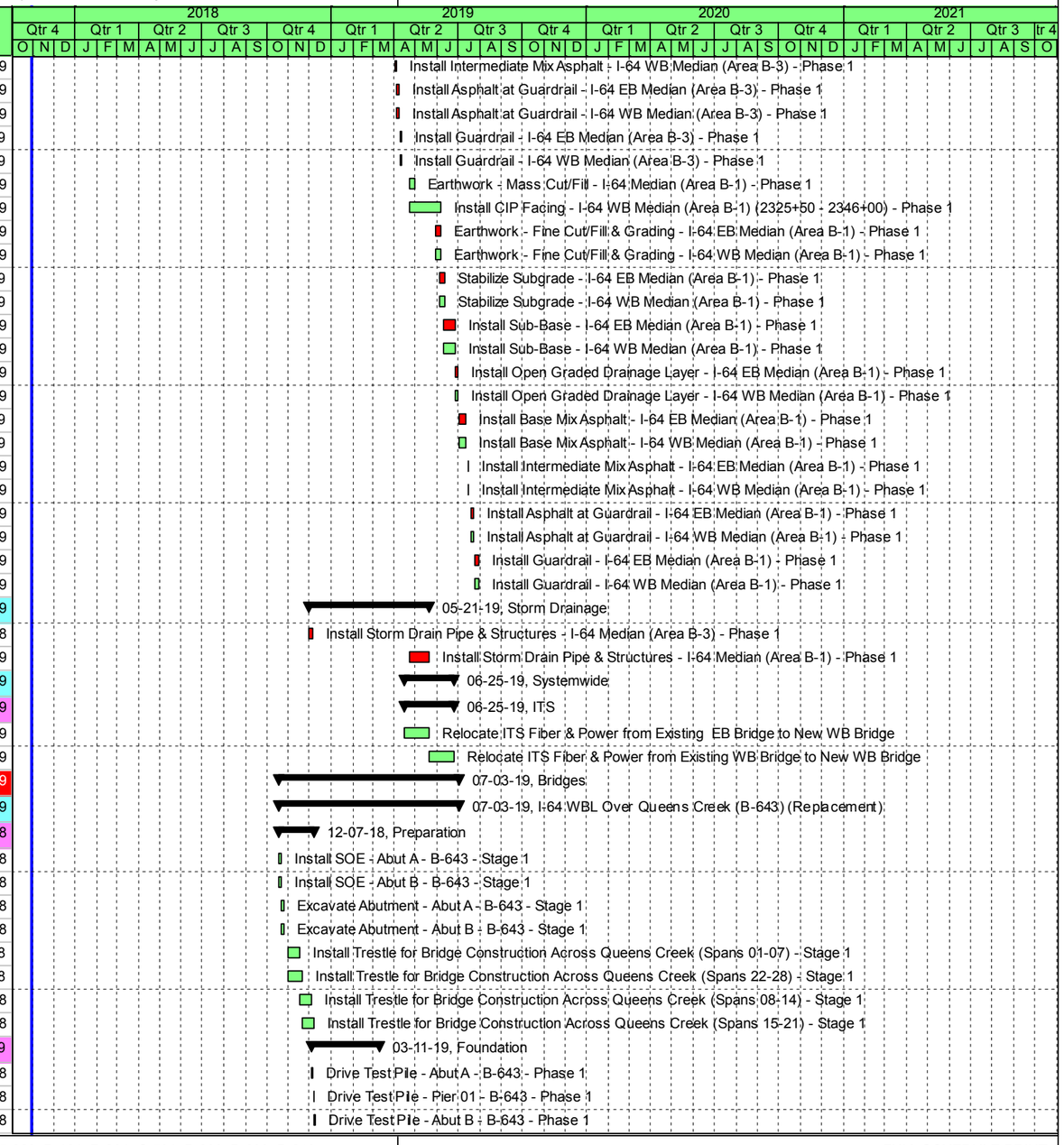
Activity ID	Activity Name	Original Duration	Start	Finish
64W.B3.ASIM.105	Install Intermediate Mix Asphalt - I-64 WB Median (Area B-3) - Phase 1	2	04-02-19	04-04-19
64E.B3.ASGR.105	Install Asphalt at Guardrail - I-64 EB Median (Area B-3) - Phase 1	2	04-05-19	04-08-19
64W.B3.ASGR.105	Install Asphalt at Guardrail - I-64 WB Median (Area B-3) - Phase 1	2	04-05-19	04-08-19
64E.B3.GRAIL.105	Install Guardrail - I-64 EB Median (Area B-3) - Phase 1	2	04-09-19	04-11-19
64W.B3.GRAIL.105	Install Guardrail - I-64 WB Median (Area B-3) - Phase 1	2	04-09-19	04-11-19
64M.B1.ECUT.105	Earthwork - Mass Cut/Fill - I-64 Median (Area B-1) - Phase 1	5	04-23-19	04-30-19
64W.B1.SPLW.115	Install CIP Facing - I-64 WB Median (Area B-1) (2325+50 - 2346+00) - Pl	25	04-23-19	06-06-19
64E.B1.RGRD.105	Earthwork - Fine Cut/Fill & Grading - I-64 EB Median (Area B-1) - Phase 1	4	05-31-19	06-06-19
64W.B1.RGRD.105	Earthwork - Fine Cut/Fill & Grading - I-64 WB Median (Area B-1) - Phase	4	05-31-19	06-06-19
64E.B1.STAB.105	Stabilize Subgrade - I-64 EB Median (Area B-1) - Phase 1	4	06-04-19	06-11-19
64W.B1.STAB.105	Stabilize Subgrade - I-64 WB Median (Area B-1) - Phase 1	4	06-04-19	06-11-19
64E.B1.BASE.105	Install Sub-Base - I-64 EB Median (Area B-1) - Phase 1	10	06-10-19	06-27-19
64W.B1.BASE.105	Install Sub-Base - I-64 WB Median (Area B-1) - Phase 1	10	06-10-19	06-27-19
64E.B1.OGDL.105	Install Open Graded Drainage Layer - I-64 EB Median (Area B-1) - Phase	2	06-28-19	07-01-19
64W.B1.OGDL.105	Install Open Graded Drainage Layer - I-64 WB Median (Area B-1) - Phas	2	06-28-19	07-01-19
64E.B1.ASBM.105	Install Base Mix Asphalt - I-64 EB Median (Area B-1) - Phase 1	5	07-02-19	07-11-19
64W.B1.ASBM.105	Install Base Mix Asphalt - I-64 WB Median (Area B-1) - Phase 1	5	07-02-19	07-11-19
64E.B1.ASIM.105	Install Intermediate Mix Asphalt - I-64 EB Median (Area B-1) - Phase 1	2	07-15-19	07-16-19
64W.B1.ASIM.105	Install Intermediate Mix Asphalt - I-64 WB Median (Area B-1) - Phase 1	2	07-15-19	07-16-19
64E.B1.ASGR.105	Install Asphalt at Guardrail - I-64 EB Median (Area B-1) - Phase 1	3	07-19-19	07-23-19
64W.B1.ASGR.105	Install Asphalt at Guardrail - I-64 WB Median (Area B-1) - Phase 1	3	07-19-19	07-23-19
64E.B1.GRAIL.105	Install Guardrail - I-64 EB Median (Area B-1) - Phase 1	3	07-26-19	07-30-19
64W.B1.GRAIL.105	Install Guardrail - I-64 WB Median (Area B-1) - Phase 1	3	07-26-19	07-30-19
Storm Drainage		90	11-30-18	05-21-19
64M.B3.STORM.105	Install Storm Drain Pipe & Structures - I-64 Median (Area B-3) - Phase 1	4	11-30-18	12-06-18
64M.B1.STORM.105	Install Storm Drain Pipe & Structures - I-64 Median (Area B-1) - Phase 1	16	04-23-19	05-21-19
Systemwide		38	04-15-19	06-25-19
ITS		38	04-15-19	06-25-19
64.B2.ITS.105	Relocate ITS Fiber & Power from Existing EB Bridge to New WB Bridge	19	04-15-19	05-20-19
64.B2.ITS.115	Relocate ITS Fiber & Power from Existing WB Bridge to New WB Bridge	19	05-21-19	06-25-19
Bridges		259	10-18-18	07-03-19
I-64 WBL Over Queens Creek (B-643) (Replacement)		259	10-18-18	07-03-19
Preparation		51	10-18-18	12-07-18
A3.B643.ABA.SOE.105	Install SOE - Abut A - B-643 - Stage 1	4	10-18-18	10-22-18
A3.B643.ABB.SOE.105	Install SOE - Abut B - B-643 - Stage 1	4	10-18-18	10-22-18
A3.B643.ABA.EXC.105	Excavate Abutment - Abut A - B-643 - Stage 1	3	10-22-18	10-26-18
A3.B643.ABB.EXC.105	Excavate Abutment - Abut B - B-643 - Stage 1	3	10-22-18	10-26-18
A3.QCTR.SP1.SP7	Install Trestle for Bridge Construction Across Queens Creek (Spans 01-(	14	10-31-18	11-16-18
A3.QCTR.SP22.SP28	Install Trestle for Bridge Construction Across Queens Creek (Spans 22-2	14	10-31-18	11-20-18
A3.QCTR.SP8.SP14	Install Trestle for Bridge Construction Across Queens Creek (Spans 08-'	11	11-17-18	12-03-18
A3.QCTR.SP15.SP21	Install Trestle for Bridge Construction Across Queens Creek (Spans 15-2	11	11-21-18	12-07-18
Foundation		70	12-04-18	03-11-19
B2.B643.TST.PLE.AA	Drive Test Pile - Abut A - B-643 - Phase 1	2	12-04-18	12-06-18
B2.B643.TST.PLE.P01	Drive Test Pile - Pier 01 - B-643 - Phase 1	2	12-07-18	12-08-18
B2.B643.TST.PLE.AB	Drive Test Pile - Abut B - B-643 - Phase 1	2	12-08-18	12-10-18



Remaining Level of Effort | Critical Remaining Work
Actual Work | Milestone
Remaining Work | Summary

State Project No.: 0064-965-229, P-101, R-201, C-501, B-638, B-639, B-640, B-641, B-642, B-643, D-609, D-610, D-611
Federal Project No.: NHPP-064-3 (498)
Contract ID Number: C00106689DB97

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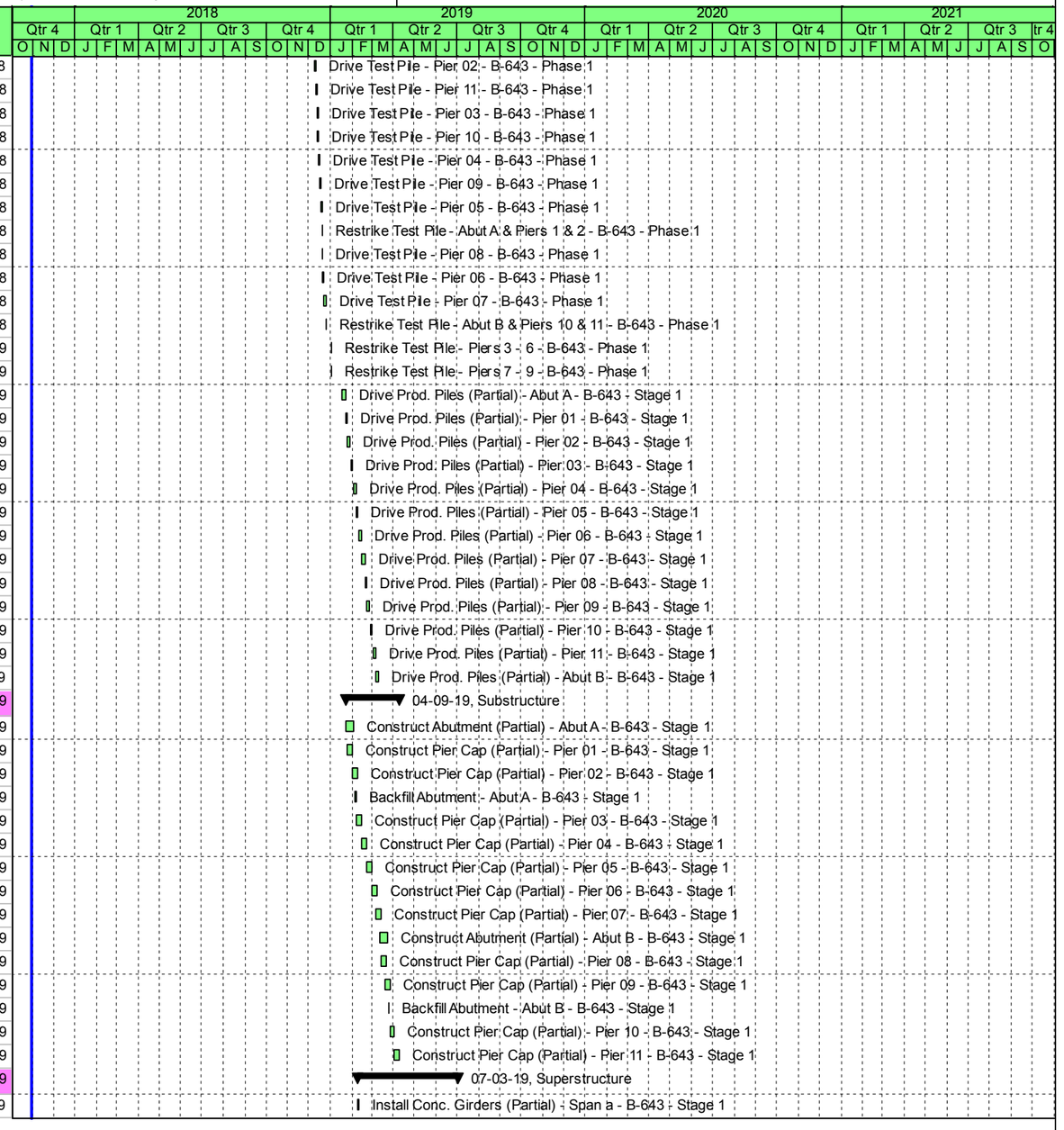
Activity ID	Activity Name	Original Duration	Start	Finish
B2.B643.TST.PLE.P02	Drive Test Pile - Pier 02 - B-643 - Phase 1	2	12-10-18	12-11-18
B2.B643.TST.PLE.P11	Drive Test Pile - Pier 11 - B-643 - Phase 1	2	12-11-18	12-13-18
B2.B643.TST.PLE.P03	Drive Test Pile - Pier 03 - B-643 - Phase 1	2	12-13-18	12-14-18
B2.B643.TST.PLE.P10	Drive Test Pile - Pier 10 - B-643 - Phase 1	2	12-14-18	12-15-18
B2.B643.TST.PLE.P04	Drive Test Pile - Pier 04 - B-643 - Phase 1	2	12-15-18	12-17-18
B2.B643.TST.PLE.P09	Drive Test Pile - Pier 09 - B-643 - Phase 1	2	12-17-18	12-18-18
B2.B643.TST.PLE.P05	Drive Test Pile - Pier 05 - B-643 - Phase 1	2	12-18-18	12-20-18
B2.B643.RSTRK.005	Restrike Test Pile - Abut A & Piers 1 & 2 - B-643 - Phase 1	1	12-20-18	12-20-18
B2.B643.TST.PLE.P08	Drive Test Pile - Pier 08 - B-643 - Phase 1	2	12-20-18	12-21-18
B2.B643.TST.PLE.P06	Drive Test Pile - Pier 06 - B-643 - Phase 1	2	12-21-18	12-22-18
B2.B643.TST.PLE.P07	Drive Test Pile - Pier 07 - B-643 - Phase 1	2	12-22-18	12-26-18
B2.B643.RSTRK.015	Restrike Test Pile - Abut B & Piers 10 & 11 - B-643 - Phase 1	1	12-26-18	12-26-18
B2.B643.RSTRK.010	Restrike Test Pile - Piers 3 - 6 - B-643 - Phase 1	1	01-02-19	01-02-19
B2.B643.RSTRK.020	Restrike Test Pile - Piers 7 - 9 - B-643 - Phase 1	1	01-03-19	01-03-19
A3.B643.ABA.PLE.105	Drive Prod. Piles (Partial) - Abut A - B-643 - Stage 1	3	01-18-19	01-22-19
A3.B643.P01.PLE.105	Drive Prod. Piles (Partial) - Pier 01 - B-643 - Stage 1	3	01-23-19	01-25-19
A3.B643.P02.PLE.105	Drive Prod. Piles (Partial) - Pier 02 - B-643 - Stage 1	3	01-26-19	01-29-19
A3.B643.P03.PLE.105	Drive Prod. Piles (Partial) - Pier 03 - B-643 - Stage 1	3	01-31-19	02-02-19
A3.B643.P04.PLE.105	Drive Prod. Piles (Partial) - Pier 04 - B-643 - Stage 1	3	02-04-19	02-06-19
A3.B643.P05.PLE.105	Drive Prod. Piles (Partial) - Pier 05 - B-643 - Stage 1	3	02-07-19	02-09-19
A3.B643.P06.PLE.105	Drive Prod. Piles (Partial) - Pier 06 - B-643 - Stage 1	3	02-11-19	02-14-19
A3.B643.P07.PLE.105	Drive Prod. Piles (Partial) - Pier 07 - B-643 - Stage 1	3	02-15-19	02-19-19
A3.B643.P08.PLE.105	Drive Prod. Piles (Partial) - Pier 08 - B-643 - Stage 1	3	02-20-19	02-22-19
A3.B643.P09.PLE.105	Drive Prod. Piles (Partial) - Pier 09 - B-643 - Stage 1	3	02-23-19	02-26-19
A3.B643.P10.PLE.105	Drive Prod. Piles (Partial) - Pier 10 - B-643 - Stage 1	3	02-28-19	03-02-19
A3.B643.P11.PLE.105	Drive Prod. Piles (Partial) - Pier 11 - B-643 - Stage 1	3	03-04-19	03-07-19
A3.B643.ABB.PLE.105	Drive Prod. Piles (Partial) - Abut B - B-643 - Stage 1	3	03-08-19	03-11-19
Substructure		77	01-23-19	04-09-19
A3.B643.ABA.ABUT.105	Construct Abutment (Partial) - Abut A - B-643 - Stage 1	10	01-23-19	02-04-19
A3.B643.P01.CAP.105	Construct Pier Cap (Partial) - Pier 01 - B-643 - Stage 1	6	01-26-19	02-02-19
A3.B643.P02.CAP.105	Construct Pier Cap (Partial) - Pier 02 - B-643 - Stage 1	6	02-02-19	02-08-19
A3.B643.ABA.BKF.105	Backfill Abutment - Abut A - B-643 - Stage 1	2	02-05-19	02-07-19
A3.B643.P03.CAP.105	Construct Pier Cap (Partial) - Pier 03 - B-643 - Stage 1	6	02-08-19	02-15-19
A3.B643.P04.CAP.105	Construct Pier Cap (Partial) - Pier 04 - B-643 - Stage 1	6	02-15-19	02-22-19
A3.B643.P05.CAP.105	Construct Pier Cap (Partial) - Pier 05 - B-643 - Stage 1	6	02-22-19	03-01-19
A3.B643.P06.CAP.105	Construct Pier Cap (Partial) - Pier 06 - B-643 - Stage 1	6	03-01-19	03-08-19
A3.B643.P07.CAP.105	Construct Pier Cap (Partial) - Pier 07 - B-643 - Stage 1	6	03-08-19	03-14-19
A3.B643.ABB.ABUT.105	Construct Abutment (Partial) - Abut B - B-643 - Stage 1	10	03-12-19	03-23-19
A3.B643.P08.CAP.105	Construct Pier Cap (Partial) - Pier 08 - B-643 - Stage 1	6	03-14-19	03-21-19
A3.B643.P09.CAP.105	Construct Pier Cap (Partial) - Pier 09 - B-643 - Stage 1	6	03-21-19	03-27-19
A3.B643.ABB.BKF.105	Backfill Abutment - Abut B - B-643 - Stage 1	2	03-25-19	03-26-19
A3.B643.P10.CAP.105	Construct Pier Cap (Partial) - Pier 10 - B-643 - Stage 1	6	03-27-19	04-02-19
A3.B643.P11.CAP.105	Construct Pier Cap (Partial) - Pier 11 - B-643 - Stage 1	6	04-02-19	04-09-19
Superstructure		145	02-09-19	07-03-19
A3.B643.SA.GRD.105	Install Conc. Girders (Partial) - Span a - B-643 - Stage 1	2	02-09-19	02-11-19



Remaining Level of Effort
Actual Work
Remaining Work
Critical Remaining Work
Milestone
Summary

State Project No.: 0064-965-229, P-101, R-201, C-501, B-638, B-639, B-640, B-641, B-642, B-643, D-609, D-610, D-611
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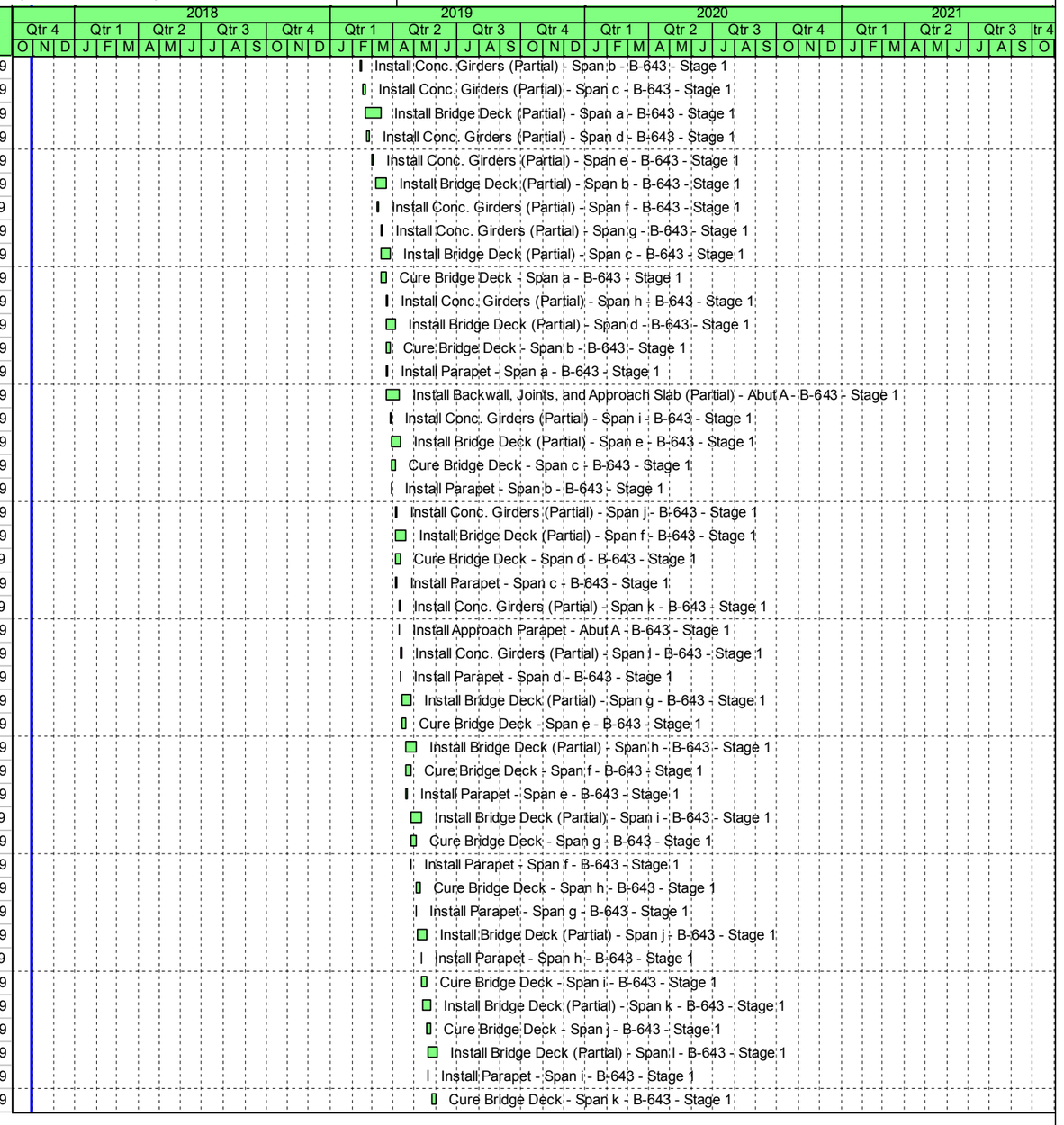
A3.B643.SB.GRD.105	Install Conc. Girders (Partial) - Span b - B-643 - Stage 1	2	02-12-19	02-14-19
A3.B643.SC.GRD.105	Install Conc. Girders (Partial) - Span c - B-643 - Stage 1	2	02-16-19	02-19-19
A3.B643.SA.DEK.105	Install Bridge Deck (Partial) - Span a - B-643 - Stage 1	13	02-21-19	03-14-19
A3.B643.SD.GRD.105	Install Conc. Girders (Partial) - Span d - B-643 - Stage 1	2	02-23-19	02-25-19
A3.B643.SE.GRD.105	Install Conc. Girders (Partial) - Span e - B-643 - Stage 1	2	03-02-19	03-04-19
A3.B643.SB.DEK.105	Install Bridge Deck (Partial) - Span b - B-643 - Stage 1	10	03-08-19	03-21-19
A3.B643.SF.GRD.105	Install Conc. Girders (Partial) - Span f - B-643 - Stage 1	2	03-09-19	03-11-19
A3.B643.SG.GRD.105	Install Conc. Girders (Partial) - Span g - B-643 - Stage 1	2	03-15-19	03-16-19
A3.B643.SC.DEK.105	Install Bridge Deck (Partial) - Span c - B-643 - Stage 1	10	03-15-19	03-28-19
A3.B643.SA.CUR.105	Cure Bridge Deck - Span a - B-643 - Stage 1	7	03-15-19	03-21-19
A3.B643.SH.GRD.105	Install Conc. Girders (Partial) - Span h - B-643 - Stage 1	2	03-22-19	03-23-19
A3.B643.SD.DEK.105	Install Bridge Deck (Partial) - Span d - B-643 - Stage 1	10	03-22-19	04-04-19
A3.B643.SB.CUR.105	Cure Bridge Deck - Span b - B-643 - Stage 1	7	03-22-19	03-28-19
A3.B643.SA.BAR.105	Install Parapet - Span a - B-643 - Stage 1	2	03-22-19	03-23-19
A3.B643.ABA.APR.105	Install Backwall, Joints, and Approach Slab (Partial) - Abut A - B-643 - Sta	15	03-22-19	04-09-19
A3.B643.SI.GRD.105	Install Conc. Girders (Partial) - Span i - B-643 - Stage 1	2	03-28-19	03-29-19
A3.B643.SE.DEK.105	Install Bridge Deck (Partial) - Span e - B-643 - Stage 1	10	03-29-19	04-12-19
A3.B643.SC.CUR.105	Cure Bridge Deck - Span c - B-643 - Stage 1	7	03-29-19	04-04-19
A3.B643.SB.BAR.105	Install Parapet - Span b - B-643 - Stage 1	1	03-29-19	03-29-19
A3.B643.SJ.GRD.105	Install Conc. Girders (Partial) - Span j - B-643 - Stage 1	2	04-04-19	04-05-19
A3.B643.SF.DEK.105	Install Bridge Deck (Partial) - Span f - B-643 - Stage 1	10	04-05-19	04-19-19
A3.B643.SD.CUR.105	Cure Bridge Deck - Span d - B-643 - Stage 1	7	04-05-19	04-11-19
A3.B643.SC.BAR.105	Install Parapet - Span c - B-643 - Stage 1	1	04-05-19	04-05-19
A3.B643.SK.GRD.105	Install Conc. Girders (Partial) - Span k - B-643 - Stage 1	2	04-10-19	04-11-19
A3.B643.ABA.BAR.105	Install Approach Parapet - Abut A - B-643 - Stage 1	1	04-10-19	04-10-19
A3.B643.SL.GRD.105	Install Conc. Girders (Partial) - Span l - B-643 - Stage 1	2	04-12-19	04-13-19
A3.B643.SD.BAR.105	Install Parapet - Span d - B-643 - Stage 1	1	04-12-19	04-12-19
A3.B643.SG.DEK.105	Install Bridge Deck (Partial) - Span g - B-643 - Stage 1	10	04-13-19	04-26-19
A3.B643.SE.CUR.105	Cure Bridge Deck - Span e - B-643 - Stage 1	7	04-13-19	04-19-19
A3.B643.SH.DEK.105	Install Bridge Deck (Partial) - Span h - B-643 - Stage 1	10	04-20-19	05-03-19
A3.B643.SF.CUR.105	Cure Bridge Deck - Span f - B-643 - Stage 1	7	04-20-19	04-26-19
A3.B643.SE.BAR.105	Install Parapet - Span e - B-643 - Stage 1	1	04-20-19	04-20-19
A3.B643.SI.DEK.105	Install Bridge Deck (Partial) - Span i - B-643 - Stage 1	10	04-27-19	05-11-19
A3.B643.SG.CUR.105	Cure Bridge Deck - Span g - B-643 - Stage 1	7	04-27-19	05-03-19
A3.B643.SF.BAR.105	Install Parapet - Span f - B-643 - Stage 1	1	04-27-19	04-27-19
A3.B643.SH.CUR.105	Cure Bridge Deck - Span h - B-643 - Stage 1	7	05-04-19	05-10-19
A3.B643.SG.BAR.105	Install Parapet - Span g - B-643 - Stage 1	1	05-04-19	05-04-19
A3.B643.SJ.DEK.105	Install Bridge Deck (Partial) - Span j - B-643 - Stage 1	10	05-06-19	05-18-19
A3.B643.SH.BAR.105	Install Parapet - Span h - B-643 - Stage 1	1	05-11-19	05-11-19
A3.B643.SI.CUR.105	Cure Bridge Deck - Span i - B-643 - Stage 1	7	05-12-19	05-18-19
A3.B643.SK.DEK.105	Install Bridge Deck (Partial) - Span k - B-643 - Stage 1	10	05-13-19	05-25-19
A3.B643.SJ.CUR.105	Cure Bridge Deck - Span j - B-643 - Stage 1	7	05-19-19	05-25-19
A3.B643.SL.DEK.105	Install Bridge Deck (Partial) - Span l - B-643 - Stage 1	10	05-20-19	06-03-19
A3.B643.SI.BAR.105	Install Parapet - Span i - B-643 - Stage 1	1	05-20-19	05-20-19
A3.B643.SK.CUR.105	Cure Bridge Deck - Span k - B-643 - Stage 1	7	05-26-19	06-01-19



Remaining Level of Effort
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State Project No.: 0064-965-229, P-101, R-201, C-501, B-638, B-639, B-640, B-641, B-642, B-643, D-609, D-610, D-611
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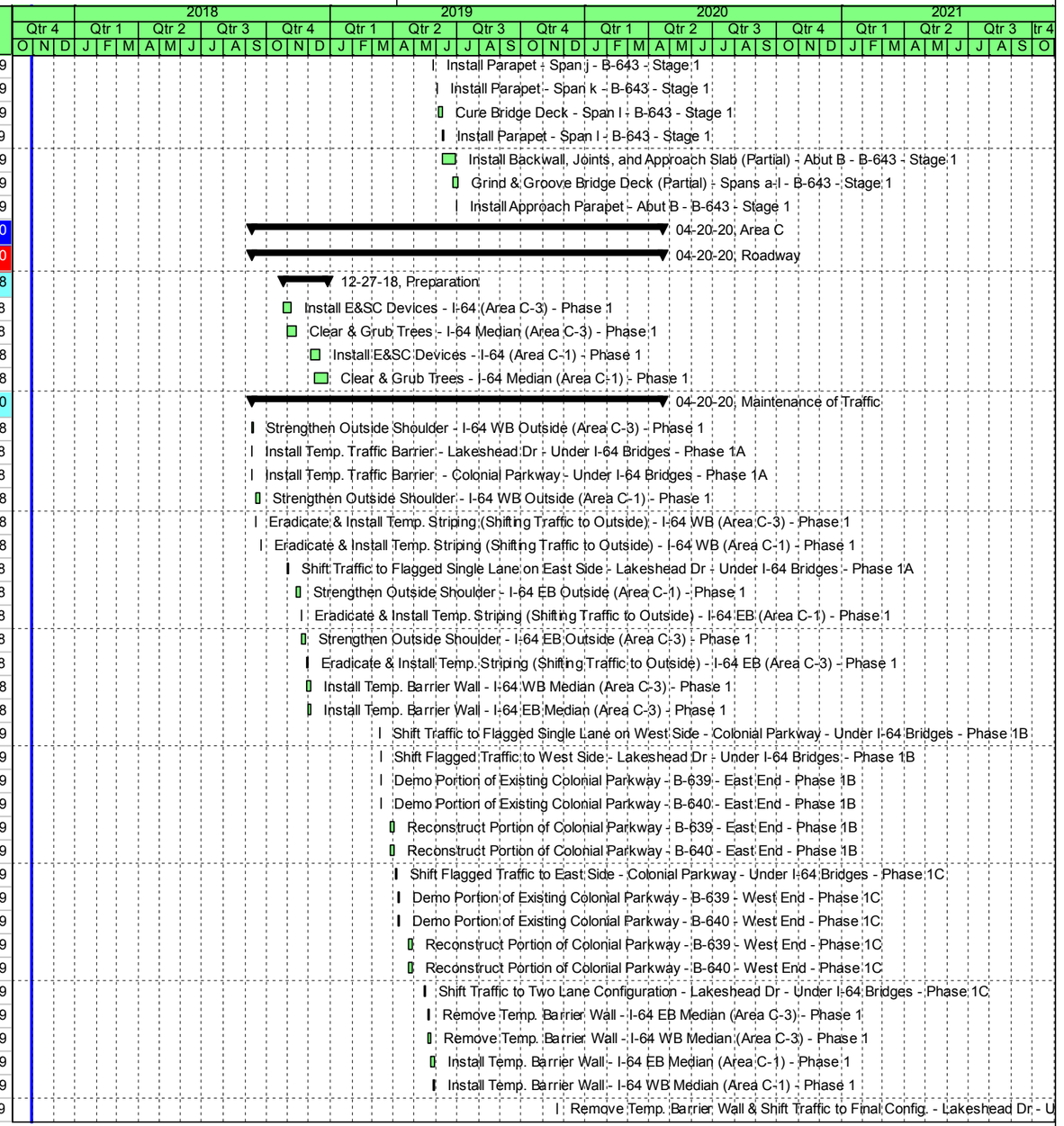
Activity ID	Activity Name	Original Duration	Start	Finish
A3.B643.SJ.BAR.105	Install Parapet - Span j - B-643 - Stage 1	1	05-28-19	05-28-19
A3.B643.SK.BAR.105	Install Parapet - Span k - B-643 - Stage 1	1	06-03-19	06-03-19
A3.B643.SL.CUR.105	Cure Bridge Deck - Span l - B-643 - Stage 1	7	06-04-19	06-10-19
A3.B643.SL.BAR.105	Install Parapet - Span l - B-643 - Stage 1	1	06-11-19	06-11-19
A3.B643.ABB.APR.105	Install Backwall, Joints, and Approach Slab (Partial) - Abut B - B-643 - Sta	15	06-11-19	06-29-19
A3.B643.SAQ.GRV.105	Grind & Groove Bridge Deck (Partial) - Spans a-l - B-643 - Stage 1	8	06-25-19	07-03-19
A3.B643.ABB.BAR.105	Install Approach Parapet - Abut B - B-643 - Stage 1	1	07-01-19	07-01-19
Area C		589	09-10-18	04-20-20
Roadway		589	09-10-18	04-20-20
Preparation		31	10-26-18	12-27-18
64.C3.ESC.105	Install E&SC Devices - I-64 (Area C-3) - Phase 1	8	10-26-18	11-06-18
64M.C3.CLR.105	Clear & Grub Trees - I-64 Median (Area C-3) - Phase 1	8	11-01-18	11-13-18
64.C1.ESC.105	Install E&SC Devices - I-64 (Area C-1) - Phase 1	8	12-03-18	12-17-18
64M.C1.CLR.105	Clear & Grub Trees - I-64 Median (Area C-1) - Phase 1	8	12-10-18	12-27-18
Maintenance of Traffic		589	09-10-18	04-20-20
64W.C3.TPAV.105	Strengthen Outside Shoulder - I-64 WB Outside (Area C-3) - Phase 1	3	09-10-18	09-13-18
C2.LHD.TBAR.1A05	Install Temp. Traffic Barrier - Lakeshead Dr - Under I-64 Bridges - Phase	2	09-10-18	09-11-18
C2.COL.TBARR.1A05	Install Temp. Traffic Barrier - Colonial Parkway - Under I-64 Bridges - Ph	2	09-10-18	09-11-18
64W.C1.TPAV.105	Strengthen Outside Shoulder - I-64 WB Outside (Area C-1) - Phase 1	4	09-17-18	09-21-18
64W.C3.TSTR.105	Eradicate & Install Temp. Striping (Shifting Traffic to Outside) - I-64 WB (A	1	09-17-18	09-17-18
64W.C1.TSTR.105	Eradicate & Install Temp. Striping (Shifting Traffic to Outside) - I-64 WB (A	1	09-24-18	09-24-18
C2.LHD.TRAFF.1A05	Shift Traffic to Flagged Single Lane on East Side - Lakeshead Dr - Under	1	11-01-18	11-01-18
64E.C1.TPAV.105	Strengthen Outside Shoulder - I-64 EB Outside (Area C-1) - Phase 1	4	11-13-18	11-19-18
64E.C1.TSTR.105	Eradicate & Install Temp. Striping (Shifting Traffic to Outside) - I-64 EB (A	1	11-20-18	11-20-18
64E.C3.TPAV.105	Strengthen Outside Shoulder - I-64 EB Outside (Area C-3) - Phase 1	3	11-20-18	11-27-18
64E.C3.TSTR.105	Eradicate & Install Temp. Striping (Shifting Traffic to Outside) - I-64 EB (A	1	11-29-18	11-29-18
64W.C3.TBAR.105	Install Temp. Barrier Wall - I-64 WB Median (Area C-3) - Phase 1	3	11-29-18	12-03-18
64E.C3.TBAR.105	Install Temp. Barrier Wall - I-64 EB Median (Area C-3) - Phase 1	3	11-30-18	12-04-18
C2.COL.TRAF.1B05	Shift Traffic to Flagged Single Lane on West Side - Colonial Parkway - Un	2	03-12-19	03-13-19
C2.LHD.TRAFF.1B05	Shift Flagged Traffic to West Side - Lakeshead Dr - Under I-64 Bridges -	2	03-14-19	03-15-19
C2.COL.DRDWY.1B05	Demo Portion of Existing Colonial Parkway - B-639 - East End - Phase 1B	2	03-14-19	03-15-19
C2.COL.DRDWY.1B10	Demo Portion of Existing Colonial Parkway - B-640 - East End - Phase 1B	2	03-14-19	03-15-19
C2.COL.RDWY.1B05	Reconstruct Portion of Colonial Parkway - B-639 - East End - Phase 1B	5	03-27-19	04-02-19
C2.COL.RDWY.1B10	Reconstruct Portion of Colonial Parkway - B-640 - East End - Phase 1B	5	03-27-19	04-02-19
C2.COL.TRAF.1C05	Shift Flagged Traffic to East Side - Colonial Parkway - Under I-64 Bridges	2	04-04-19	04-05-19
C2.COL.DRDWY.1C05	Demo Portion of Existing Colonial Parkway - B-639 - West End - Phase 1	2	04-08-19	04-09-19
C2.COL.DRDWY.1C10	Demo Portion of Existing Colonial Parkway - B-640 - West End - Phase 1	2	04-08-19	04-09-19
C2.COL.RDWY.1C05	Reconstruct Portion of Colonial Parkway - B-639 - West End - Phase 1C	5	04-22-19	04-29-19
C2.COL.RDWY.1C10	Reconstruct Portion of Colonial Parkway - B-640 - West End - Phase 1C	5	04-22-19	04-29-19
C2.LHD.TRAFF.1C05	Shift Traffic to Two Lane Configuration - Lakeshead Dr - Under I-64 Bridg	2	05-16-19	05-17-19
64E.C3.RBAR.105	Remove Temp. Barrier Wall - I-64 EB Median (Area C-3) - Phase 1	3	05-20-19	05-23-19
64W.C3.RBAR.105	Remove Temp. Barrier Wall - I-64 WB Median (Area C-3) - Phase 1	3	05-21-19	05-24-19
64E.C1.TBAR.105	Install Temp. Barrier Wall - I-64 EB Median (Area C-1) - Phase 1	3	05-24-19	05-29-19
64W.C1.TBAR.105	Install Temp. Barrier Wall - I-64 WB Median (Area C-1) - Phase 1	3	05-28-19	05-30-19
C2.LHD.RBAR.1C05	Remove Temp. Barrier Wall & Shift Traffic to Final Config. - Lakeshead Dr	2	11-21-19	11-22-19



Remaining Level of Effort
Actual Work
Remaining Work
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Milestone
Summary

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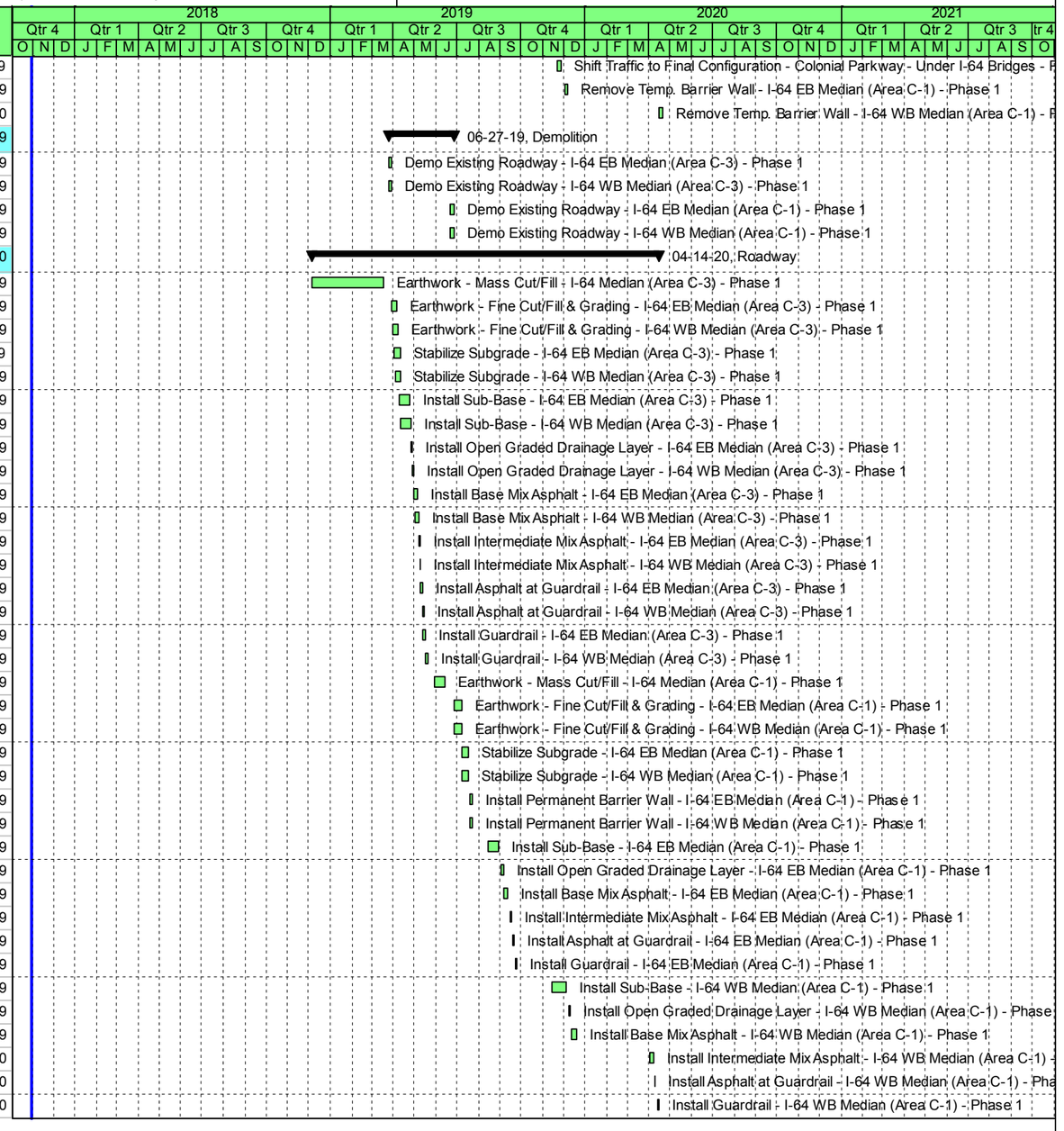
Activity ID	Activity Name	Original Duration	Start	Finish
C2.COL.TRAF.1D10	Shift Traffic to Final Configuration - Colonial Parkway - Under I-64 Bridges	3	11-22-19	11-26-19
64E.C1.RBAR.105	Remove Temp. Barrier Wall - I-64 EB Median (Area C-1) - Phase 1	3	12-03-19	12-06-19
64W.C1.RBAR.105	Remove Temp. Barrier Wall - I-64 WB Median (Area C-1) - Phase 1	3	04-16-20	04-20-20
Demolition		59	03-25-19	06-27-19
64E.C3.DRDW.105	Demo Existing Roadway - I-64 EB Median (Area C-3) - Phase 1	5	03-25-19	03-29-19
64W.C3.DRDW.105	Demo Existing Roadway - I-64 WB Median (Area C-3) - Phase 1	5	03-25-19	03-29-19
64E.C1.DRDW.105	Demo Existing Roadway - I-64 EB Median (Area C-1) - Phase 1	5	06-21-19	06-27-19
64W.C1.DRDW.105	Demo Existing Roadway - I-64 WB Median (Area C-1) - Phase 1	5	06-21-19	06-27-19
Roadway		496	12-06-18	04-14-20
64M.C3.ECUT.105	Earthwork - Mass Cut/Fill - I-64 Median (Area C-3) - Phase 1	28	12-06-18	03-18-19
64E.C3.RGRD.105	Earthwork - Fine Cut/Fill & Grading - I-64 EB Median (Area C-3) - Phase	5	03-29-19	04-05-19
64W.C3.RGRD.105	Earthwork - Fine Cut/Fill & Grading - I-64 WB Median (Area C-3) - Phase	5	04-01-19	04-08-19
64E.C3.STAB.105	Stabilize Subgrade - I-64 EB Median (Area C-3) - Phase 1	5	04-02-19	04-11-19
64W.C3.STAB.105	Stabilize Subgrade - I-64 WB Median (Area C-3) - Phase 1	5	04-04-19	04-12-19
64E.C3.BASE.105	Install Sub-Base - I-64 EB Median (Area C-3) - Phase 1	9	04-09-19	04-25-19
64W.C3.BASE.105	Install Sub-Base - I-64 WB Median (Area C-3) - Phase 1	9	04-11-19	04-26-19
64E.C3.OGDL.105	Install Open Graded Drainage Layer - I-64 EB Median (Area C-3) - Phase	2	04-26-19	04-29-19
64W.C3.OGDL.105	Install Open Graded Drainage Layer - I-64 WB Median (Area C-3) - Phas	2	04-29-19	04-30-19
64E.C3.ASBM.105	Install Base Mix Asphalt - I-64 EB Median (Area C-3) - Phase 1	4	04-30-19	05-06-19
64W.C3.ASBM.105	Install Base Mix Asphalt - I-64 WB Median (Area C-3) - Phase 1	4	05-02-19	05-07-19
64E.C3.ASIM.105	Install Intermediate Mix Asphalt - I-64 EB Median (Area C-3) - Phase 1	2	05-07-19	05-09-19
64W.C3.ASIM.105	Install Intermediate Mix Asphalt - I-64 WB Median (Area C-3) - Phase 1	2	05-09-19	05-10-19
64E.C3.ASGR.105	Install Asphalt at Guardrail - I-64 EB Median (Area C-3) - Phase 1	2	05-10-19	05-13-19
64W.C3.ASGR.105	Install Asphalt at Guardrail - I-64 WB Median (Area C-3) - Phase 1	2	05-13-19	05-14-19
64E.C3.GRAIL.105	Install Guardrail - I-64 EB Median (Area C-3) - Phase 1	2	05-14-19	05-17-19
64W.C3.GRAIL.105	Install Guardrail - I-64 WB Median (Area C-3) - Phase 1	2	05-17-19	05-20-19
64M.C1.ECUT.105	Earthwork - Mass Cut/Fill - I-64 Median (Area C-1) - Phase 1	7	05-31-19	06-14-19
64E.C1.RGRD.105	Earthwork - Fine Cut/Fill & Grading - I-64 EB Median (Area C-1) - Phase	5	06-28-19	07-08-19
64W.C1.RGRD.105	Earthwork - Fine Cut/Fill & Grading - I-64 WB Median (Area C-1) - Phase	5	06-28-19	07-08-19
64E.C1.STAB.105	Stabilize Subgrade - I-64 EB Median (Area C-1) - Phase 1	5	07-09-19	07-18-19
64W.C1.STAB.105	Stabilize Subgrade - I-64 WB Median (Area C-1) - Phase 1	5	07-09-19	07-18-19
64E.C1.BARR.105	Install Permanent Barrier Wall - I-64 EB Median (Area C-1) - Phase 1	3	07-19-19	07-23-19
64W.C1.BARR.105	Install Permanent Barrier Wall - I-64 WB Median (Area C-1) - Phase 1	3	07-19-19	07-23-19
64E.C1.BASE.105	Install Sub-Base - I-64 EB Median (Area C-1) - Phase 1	9	08-15-19	08-30-19
64E.C1.OGDL.105	Install Open Graded Drainage Layer - I-64 EB Median (Area C-1) - Phase	2	09-03-19	09-05-19
64E.C1.ASBM.105	Install Base Mix Asphalt - I-64 EB Median (Area C-1) - Phase 1	4	09-06-19	09-12-19
64E.C1.ASIM.105	Install Intermediate Mix Asphalt - I-64 EB Median (Area C-1) - Phase 1	2	09-16-19	09-17-19
64E.C1.ASGR.105	Install Asphalt at Guardrail - I-64 EB Median (Area C-1) - Phase 1	2	09-19-19	09-20-19
64E.C1.GRAIL.105	Install Guardrail - I-64 EB Median (Area C-1) - Phase 1	2	09-23-19	09-24-19
64W.C1.BASE.105	Install Sub-Base - I-64 WB Median (Area C-1) - Phase 1	9	11-15-19	12-05-19
64W.C1.OGDL.105	Install Open Graded Drainage Layer - I-64 WB Median (Area C-1) - Phas	2	12-09-19	12-10-19
64W.C1.ASBM.105	Install Base Mix Asphalt - I-64 WB Median (Area C-1) - Phase 1	4	12-13-19	12-19-19
64W.C1.ASIM.105	Install Intermediate Mix Asphalt - I-64 WB Median (Area C-1) - Phase 1	2	04-02-20	04-07-20
64W.C1.ASGR.105	Install Asphalt at Guardrail - I-64 WB Median (Area C-1) - Phase 1	2	04-09-20	04-10-20
64W.C1.GRAIL.105	Install Guardrail - I-64 WB Median (Area C-1) - Phase 1	2	04-13-20	04-14-20



Remaining Level of Effort | Critical Remaining Work
Actual Work | Milestone
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State Project No.: 0064-965-229, P-101, R-201, C-501, B-638, B-639, B-640, B-641, B-642, B-643, D-609, D-610, D-611
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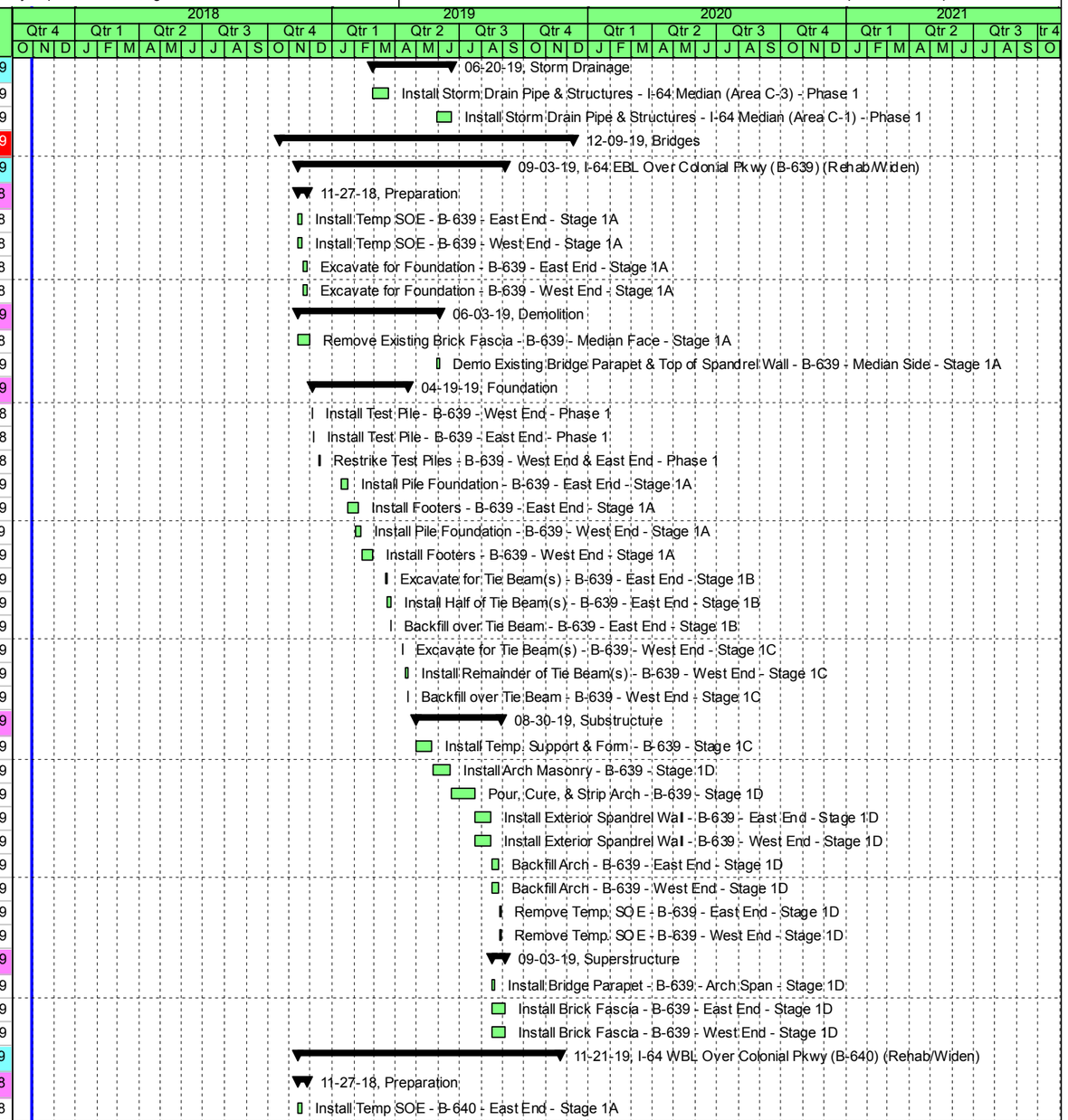
Storm Drainage		60	02-28-19	06-20-19
64M.C3.STORM.105	Install Storm Drain Pipe & Structures - I-64 Median (Area C-3) - Phase 1	13	02-28-19	03-22-19
64M.C1.STORM.105	Install Storm Drain Pipe & Structures - I-64 Median (Area C-1) - Phase 1	10	05-31-19	06-20-19
Bridges		417	10-19-18	12-09-19
I-64 EBL Over Colonial Pkwy (B-639) (Rehab/Widen)		295	11-13-18	09-03-19
Preparation		15	11-13-18	11-27-18
A3.B639.TSOE.1A05	Install Temp SOE - B-639 - East End - Stage 1A	4	11-13-18	11-19-18
A3.B639.TSOE.1A10	Install Temp SOE - B-639 - West End - Stage 1A	4	11-13-18	11-19-18
A3.B639.EFDN.1A05	Excavate for Foundation - B-639 - East End - Stage 1A	3	11-20-18	11-27-18
A3.B639.EFDN.1A10	Excavate for Foundation - B-639 - West End - Stage 1A	3	11-20-18	11-27-18
Demolition		119	11-13-18	06-03-19
A3.B639.DFAS.1A05	Remove Existing Brick Fascia - B-639 - Median Face - Stage 1A	10	11-13-18	11-30-18
A3.B639.DPAR.1A05	Demo Existing Bridge Parapet & Top of Spandrel Wall - B-639 - Median Si	3	05-30-19	06-03-19
Foundation		138	12-03-18	04-19-19
A3.B639.TPLE.1A05	Install Test Pile - B-639 - West End - Phase 1	1	12-03-18	12-03-18
A3.B639.TPLE.1A10	Install Test Pile - B-639 - East End - Phase 1	1	12-06-18	12-06-18
A3.B639.TPILE.1A15	Restrike Test Piles - B-639 - West End & East End - Phase 1	1	12-14-18	12-14-18
A3.B639.PFDN.1A05	Install Pile Foundation - B-639 - East End - Stage 1A	6	01-14-19	01-23-19
A3.B639.FOOT.1A05	Install Footers - B-639 - East End - Stage 1A	10	01-24-19	02-07-19
A3.B639.PFDN.1A10	Install Pile Foundation - B-639 - West End - Stage 1A	6	02-04-19	02-11-19
A3.B639.FOOT.1A10	Install Footers - B-639 - West End - Stage 1A	10	02-12-19	02-28-19
A3.B639.ETBM.1B05	Excavate for Tie Beam(s) - B-639 - East End - Stage 1B	2	03-18-19	03-19-19
A3.B639.TBEM.1B05	Install Half of Tie Beam(s) - B-639 - East End - Stage 1B	3	03-21-19	03-25-19
A3.B639.BKF.1B05	Backfill over Tie Beam - B-639 - East End - Stage 1B	1	03-26-19	03-26-19
A3.B639.ETBM.1C05	Excavate for Tie Beam(s) - B-639 - West End - Stage 1C	2	04-11-19	04-12-19
A3.B639.TBEM.1C05	Install Remainder of Tie Beam(s) - B-639 - West End - Stage 1C	3	04-15-19	04-18-19
A3.B639.BKF.1C05	Backfill over Tie Beam - B-639 - West End - Stage 1C	1	04-19-19	04-19-19
Substructure		123	04-30-19	08-30-19
A3.B639.ARCH.1C05	Install Temp. Support & Form - B-639 - Stage 1C	15	04-30-19	05-23-19
A3.B639.ARCH.1D05	Install Arch Masonry - B-639 - Stage 1D	15	05-24-19	06-18-19
A3.B639.ARCH.1D15	Pour, Cure, & Strip Arch - B-639 - Stage 1D	20	06-20-19	07-22-19
A3.B639.SPAND.1D05	Install Exterior Spandrel Wall - B-639 - East End - Stage 1D	15	07-23-19	08-15-19
A3.B639.SPAND.1D10	Install Exterior Spandrel Wall - B-639 - West End - Stage 1D	15	07-23-19	08-15-19
A3.B639.BKFA.1D05	Backfill Arch - B-639 - East End - Stage 1D	5	08-16-19	08-26-19
A3.B639.BKFA.1D10	Backfill Arch - B-639 - West End - Stage 1D	5	08-16-19	08-26-19
A3.B639.RSOE.1D05	Remove Temp. SOE - B-639 - East End - Stage 1D	3	08-27-19	08-30-19
A3.B639.RSOE.1D10	Remove Temp. SOE - B-639 - West End - Stage 1D	3	08-27-19	08-30-19
Superstructure		10	08-16-19	09-03-19
A3.B639.BARR.1D05	Install Bridge Parapet - B-639 - Arch Span - Stage 1D	2	08-16-19	08-19-19
A3.B639.FASC.1D05	Install Brick Fascia - B-639 - East End - Stage 1D	10	08-16-19	09-03-19
A3.B639.FASC.1D10	Install Brick Fascia - B-639 - West End - Stage 1D	10	08-16-19	09-03-19
I-64 WBL Over Colonial Pkwy (B-640) (Rehab/Widen)		374	11-13-18	11-21-19
Preparation		15	11-13-18	11-27-18
A3.B640.TSOE.1A05	Install Temp SOE - B-640 - East End - Stage 1A	4	11-13-18	11-19-18



Remaining Level of Effort | Critical Remaining Work
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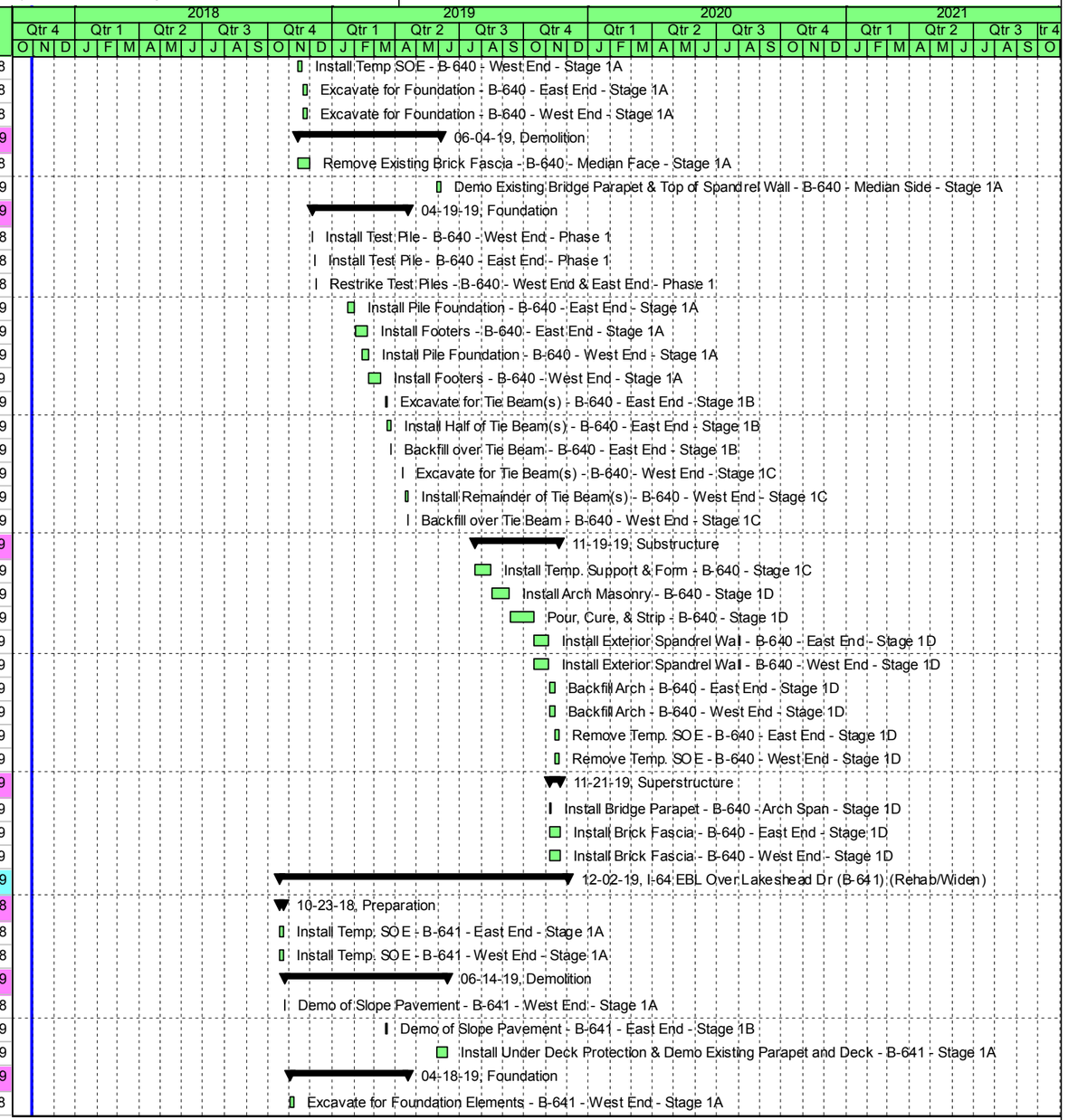
A3.B640.TSOE.1A10	Install Temp SOE - B-640 - West End - Stage 1A	4	11-13-18	11-19-18
A3.B640.EFDN.1A05	Excavate for Foundation - B-640 - East End - Stage 1A	3	11-20-18	11-27-18
A3.B640.EFDN.1A10	Excavate for Foundation - B-640 - West End - Stage 1A	3	11-20-18	11-27-18
Demolition		120	11-13-18	06-04-19
A3.B640.DFAS.1A05	Remove Existing Brick Fascia - B-640 - Median Face - Stage 1A	10	11-13-18	11-30-18
A3.B640.DPAR.1A05	Demo Existing Bridge Parapet & Top of Spandrel Wall - B-640 - Median Si	3	05-31-19	06-04-19
Foundation		137	12-04-18	04-19-19
A3.B640.TPLE.1A05	Install Test Pile - B-640 - West End - Phase 1	1	12-04-18	12-04-18
A3.B640.TPLE.1A10	Install Test Pile - B-640 - East End - Phase 1	1	12-07-18	12-07-18
A3.B640.TPLE.1A15	Restrike Test Piles - B-640 - West End & East End - Phase 1	1	12-10-18	12-10-18
A3.B640.PFDN.1A05	Install Pile Foundation - B-640 - East End - Stage 1A	6	01-24-19	02-01-19
A3.B640.FOOT.1A05	Install Footers - B-640 - East End - Stage 1A	10	02-04-19	02-19-19
A3.B640.PFDN.1A10	Install Pile Foundation - B-640 - West End - Stage 1A	6	02-12-19	02-21-19
A3.B640.FOOT.1A10	Install Footers - B-640 - West End - Stage 1A	10	02-22-19	03-11-19
A3.B640.ETBM.1B05	Excavate for Tie Beam(s) - B-640 - East End - Stage 1B	2	03-18-19	03-19-19
A3.B640.TBEM.1B05	Install Half of Tie Beam(s) - B-640 - East End - Stage 1B	3	03-21-19	03-25-19
A3.B640.BKF.1B05	Backfill over Tie Beam - B-640 - East End - Stage 1B	1	03-26-19	03-26-19
A3.B640.ETBM.1C05	Excavate for Tie Beam(s) - B-640 - West End - Stage 1C	2	04-11-19	04-12-19
A3.B640.TBEM.1C05	Install Remainder of Tie Beam(s) - B-640 - West End - Stage 1C	3	04-15-19	04-18-19
A3.B640.BKF.1C05	Backfill over Tie Beam - B-640 - West End - Stage 1C	1	04-19-19	04-19-19
Substructure		120	07-23-19	11-19-19
A3.B640.ARCH.1C05	Install Temp. Support & Form - B-640 - Stage 1C	15	07-23-19	08-15-19
A3.B640.ARCH.1D05	Install Arch Masonry - B-640 - Stage 1D	15	08-16-19	09-10-19
A3.B640.ARCH.1D15	Pour, Cure, & Strip - B-640 - Stage 1D	20	09-12-19	10-14-19
A3.B640.SPAND.1D05	Install Exterior Spandrel Wall - B-640 - East End - Stage 1D	15	10-15-19	11-05-19
A3.B640.SPAND.1D10	Install Exterior Spandrel Wall - B-640 - West End - Stage 1D	15	10-15-19	11-05-19
A3.B640.BKFA.1D05	Backfill Arch - B-640 - East End - Stage 1D	5	11-07-19	11-14-19
A3.B640.BKFA.1D10	Backfill Arch - B-640 - West End - Stage 1D	5	11-07-19	11-14-19
A3.B640.RSOE.1D05	Remove Temp. SOE - B-640 - East End - Stage 1D	3	11-15-19	11-19-19
A3.B640.RSOE.1D10	Remove Temp. SOE - B-640 - West End - Stage 1D	3	11-15-19	11-19-19
Superstructure		10	11-07-19	11-21-19
A3.B640.BARR.1D05	Install Bridge Parapet - B-640 - Arch Span - Stage 1D	2	11-07-19	11-08-19
A3.B640.FASC.1D05	Install Brick Fascia - B-640 - East End - Stage 1D	10	11-07-19	11-21-19
A3.B640.FASC.1D10	Install Brick Fascia - B-640 - West End - Stage 1D	10	11-07-19	11-21-19
I-64 EBL Over Lakeshead Dr (B-641) (Rehab/Widen)		410	10-19-18	12-02-19
Preparation		3	10-19-18	10-23-18
A3.B641.TSOE.1A05	Install Temp. SOE - B-641 - East End - Stage 1A	3	10-19-18	10-23-18
A3.B641.TSOE.1A10	Install Temp. SOE - B-641 - West End - Stage 1A	3	10-19-18	10-23-18
Demolition		139	10-25-18	06-14-19
A3.B641.DSLP.1A05	Demo of Slope Pavement - B-641 - West End - Stage 1A	2	10-25-18	10-26-18
A3.B641.DSLP.1B05	Demo of Slope Pavement - B-641 - East End - Stage 1B	2	03-18-19	03-19-19
A3.B641.DBARR.1A05	Install Under Deck Protection & Demo Existing Parapet and Deck - B-641	10	05-30-19	06-14-19
Foundation		168	11-02-18	04-18-19
A3.B641.EXC.1A05	Excavate for Foundation Elements - B-641 - West End - Stage 1A	4	11-02-18	11-08-18



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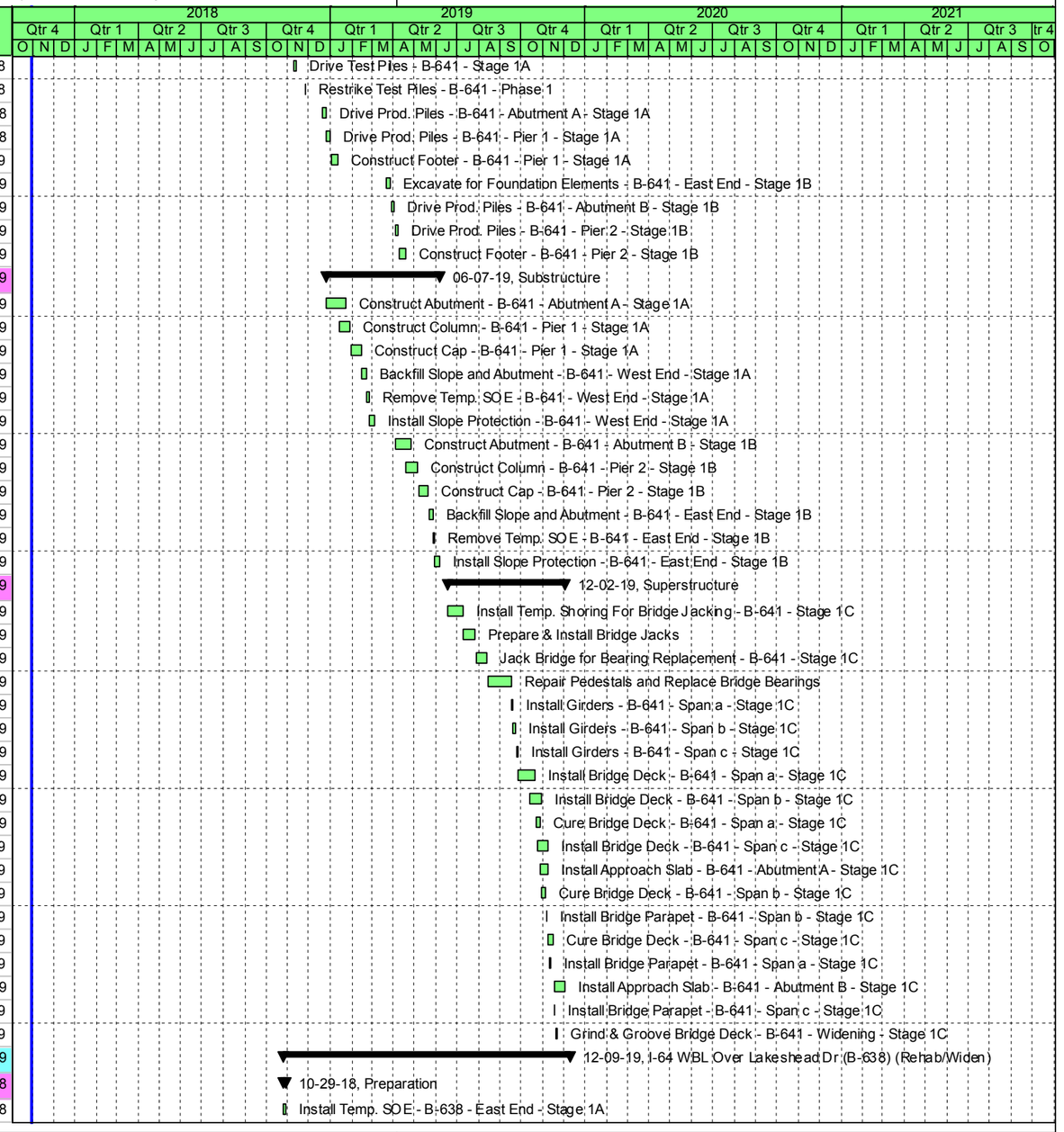
A3.B641.TPILE.1A05	Drive Test Piles - B-641 - Stage 1A	3	11-09-18	11-13-18
A3.B641.TPILE.1A15	Restrike Test Piles - B-641 - Phase 1	1	11-26-18	11-26-18
A3.B641.PILE.1A05	Drive Prod. Piles - B-641 - Abutment A - Stage 1A	3	12-20-18	12-26-18
A3.B641.PILE.1A10	Drive Prod. Piles - B-641 - Pier 1 - Stage 1A	3	12-27-18	12-31-18
A3.B641.FOOT.1A05	Construct Footer - B-641 - Pier 1 - Stage 1A	7	01-02-19	01-11-19
A3.B641.EXC.1B05	Excavate for Foundation Elements - B-641 - East End - Stage 1B	4	03-22-19	03-28-19
A3.B641.PILE.1B05	Drive Prod. Piles - B-641 - Abutment B - Stage 1B	3	03-29-19	04-02-19
A3.B641.PILE.1B10	Drive Prod. Piles - B-641 - Pier 2 - Stage 1B	3	04-04-19	04-08-19
A3.B641.FOOT.1B05	Construct Footer - B-641 - Pier 2 - Stage 1B	7	04-09-19	04-18-19
Substructure		163	12-27-18	06-07-19
A3.B641.ABUT.1A05	Construct Abutment - B-641 - Abutment A - Stage 1A	15	12-27-18	01-22-19
A3.B641.COL.1A05	Construct Column - B-641 - Pier 1 - Stage 1A	10	01-14-19	01-29-19
A3.B641.CAP.1A05	Construct Cap - B-641 - Pier 1 - Stage 1A	10	01-31-19	02-14-19
A3.B641.BKF.1A05	Backfill Slope and Abutment - B-641 - West End - Stage 1A	3	02-15-19	02-21-19
A3.B641.RSOE.1A05	Remove Temp. SOE - B-641 - West End - Stage 1A	2	02-22-19	02-25-19
A3.B641.SLP.1A05	Install Slope Protection - B-641 - West End - Stage 1A	5	02-26-19	03-05-19
A3.B641.ABUT.1B05	Construct Abutment - B-641 - Abutment B - Stage 1B	15	04-04-19	04-26-19
A3.B641.COL.1B05	Construct Column - B-641 - Pier 2 - Stage 1B	10	04-19-19	05-06-19
A3.B641.CAP.1B05	Construct Cap - B-641 - Pier 2 - Stage 1B	10	05-07-19	05-21-19
A3.B641.BKF.1B05	Backfill Slope and Abutment - B-641 - East End - Stage 1B	3	05-23-19	05-28-19
A3.B641.RSOE.1B05	Remove Temp. SOE - B-641 - East End - Stage 1B	2	05-29-19	05-30-19
A3.B641.SLP.1B05	Install Slope Protection - B-641 - East End - Stage 1B	5	05-31-19	06-07-19
Superstructure		169	06-17-19	12-02-19
C1.B641.JACK.1C05	Install Temp. Shoring For Bridge Jacking - B-641 - Stage 1C	15	06-17-19	07-09-19
C1.B641.JACK.1C10	Prepare & Install Bridge Jacks	10	07-11-19	07-26-19
C1.B641.JACK.1C15	Jack Bridge for Bearing Replacement - B-641 - Stage 1C	10	07-29-19	08-13-19
C1.B641.JACK.1C20	Repair Pedestals and Replace Bridge Bearings	20	08-14-19	09-16-19
A3.B641.GIRD.1C05	Install Girders - B-641 - Span a - Stage 1C	2	09-17-19	09-19-19
A3.B641.GIRD.1C10	Install Girders - B-641 - Span b - Stage 1C	2	09-20-19	09-23-19
A3.B641.GIRD.1C15	Install Girders - B-641 - Span c - Stage 1C	2	09-24-19	09-26-19
A3.B641.DECK.1C05	Install Bridge Deck - B-641 - Span a - Stage 1C	15	09-27-19	10-21-19
A3.B641.DECK.1C10	Install Bridge Deck - B-641 - Span b - Stage 1C	10	10-14-19	10-29-19
A3.B641.CURE.1C05	Cure Bridge Deck - B-641 - Span a - Stage 1C	7	10-22-19	10-28-19
A3.B641.DECK.1C15	Install Bridge Deck - B-641 - Span c - Stage 1C	10	10-24-19	11-08-19
A3.B641.APPR.1C05	Install Approach Slab - B-641 - Abutment A - Stage 1C	7	10-29-19	11-08-19
A3.B641.CURE.1C10	Cure Bridge Deck - B-641 - Span b - Stage 1C	7	10-30-19	11-05-19
A3.B641.BARR.1C10	Install Bridge Parapet - B-641 - Span b - Stage 1C	1	11-07-19	11-07-19
A3.B641.CURE.1C15	Cure Bridge Deck - B-641 - Span c - Stage 1C	7	11-09-19	11-15-19
A3.B641.BARR.1C05	Install Bridge Parapet - B-641 - Span a - Stage 1C	2	11-11-19	11-12-19
A3.B641.APPR.1C10	Install Approach Slab - B-641 - Abutment B - Stage 1C	7	11-18-19	12-02-19
A3.B641.BARR.1C15	Install Bridge Parapet - B-641 - Span c - Stage 1C	1	11-18-19	11-18-19
A3.B641.GRV.1C05	Grind & Groove Bridge Deck - B-641 - Widening - Stage 1C	3	11-19-19	11-22-19
I-64 WBL Over Lakeshead Dr (B-638) (Rehab/Widen)		411	10-25-18	12-09-19
Preparation		3	10-25-18	10-29-18
A3.B638.TSOE.1A05	Install Temp. SOE - B-638 - East End - Stage 1A	3	10-25-18	10-29-18



Remaining Level of Effort
Actual Work
Remaining Work
Critical Remaining Work
Milestone
Summary

State Project No.: 0064-965-229, P-101, R-201, C-501, B-638, B-639, B-640, B-641, B-642, B-643, D-609, D-610, D-611
Federal Project No.: NHPP-064-3 (498)
Contract ID Number: C00106689DB97

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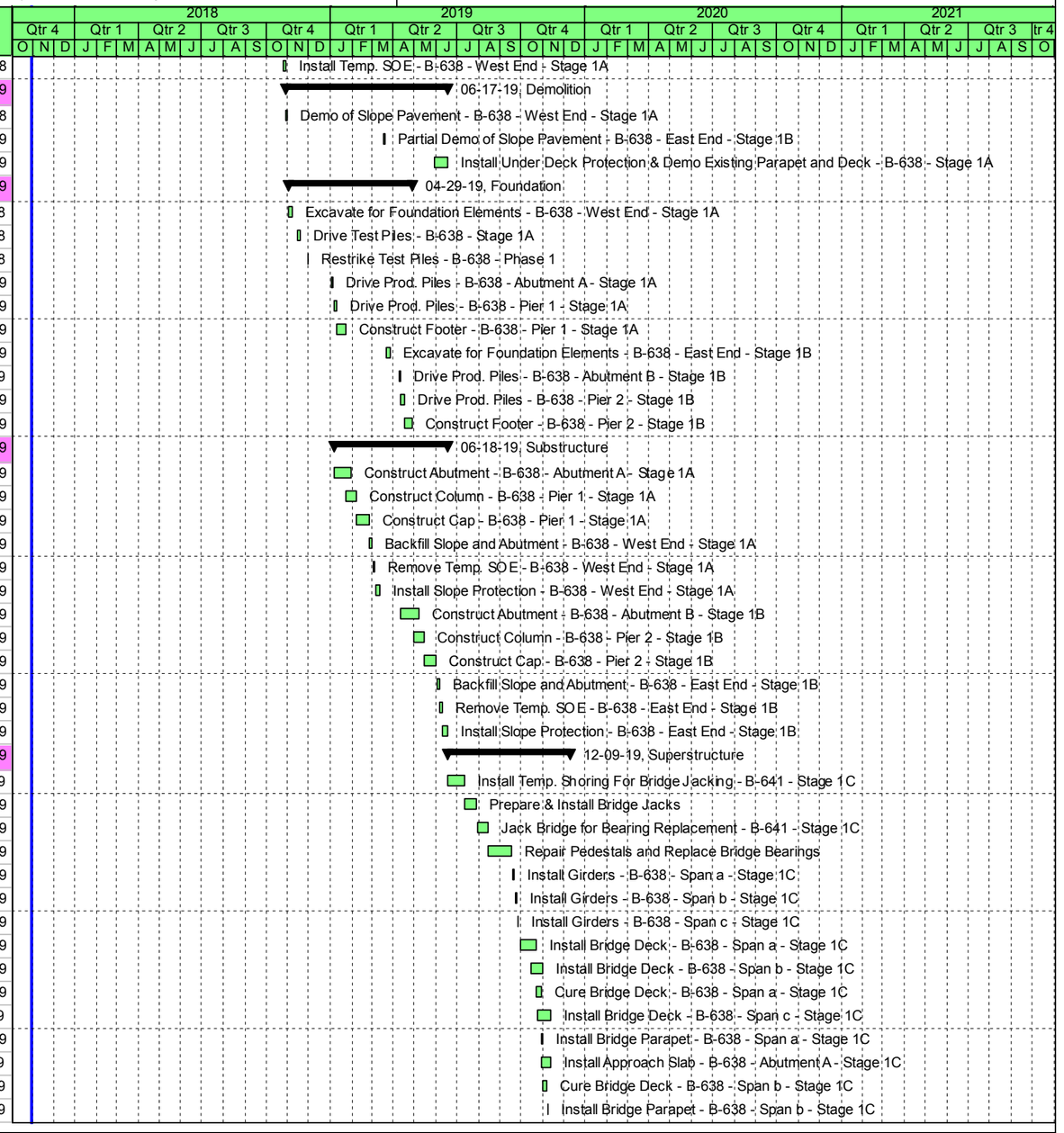
Activity ID	Activity Name	Original Duration	Start	Finish
A3.B638.TSOE.1A10	Install Temp. SOE - B-638 - West End - Stage 1A	3	10-25-18	10-29-18
Demolition		137	10-30-18	06-17-19
A3.B638.DSLP.1A05	Demo of Slope Pavement - B-638 - West End - Stage 1A	2	10-30-18	10-31-18
A3.B638.DSLP.1B05	Partial Demo of Slope Pavement - B-638 - East End - Stage 1B	2	03-18-19	03-19-19
A3.B638.DBARR.1A05	Install Under Deck Protection & Demo Existing Parapet and Deck - B-638	10	05-31-19	06-17-19
Foundation		179	11-02-18	04-29-19
A3.B638.EXC.1A05	Excavate for Foundation Elements - B-638 - West End - Stage 1A	4	11-02-18	11-08-18
A3.B638.TPILE.1A05	Drive Test Piles - B-638 - Stage 1A	3	11-15-18	11-19-18
A3.B638.TPILE.1A15	Restrike Test Piles - B-638 - Phase 1	1	11-30-18	11-30-18
A3.B638.PILE.1A05	Drive Prod. Piles - B-638 - Abutment A - Stage 1A	3	01-02-19	01-04-19
A3.B638.PILE.1A10	Drive Prod. Piles - B-638 - Pier 1 - Stage 1A	3	01-07-19	01-10-19
A3.B638.FOOT.1A05	Construct Footer - B-638 - Pier 1 - Stage 1A	7	01-11-19	01-23-19
A3.B638.EXC.1B05	Excavate for Foundation Elements - B-638 - East End - Stage 1B	4	03-22-19	03-28-19
A3.B638.PILE.1B05	Drive Prod. Piles - B-638 - Abutment B - Stage 1B	3	04-09-19	04-11-19
A3.B638.PILE.1B10	Drive Prod. Piles - B-638 - Pier 2 - Stage 1B	3	04-12-19	04-16-19
A3.B638.FOOT.1B05	Construct Footer - B-638 - Pier 2 - Stage 1B	7	04-18-19	04-29-19
Substructure		163	01-07-19	06-18-19
A3.B638.ABUT.1A05	Construct Abutment - B-638 - Abutment A - Stage 1A	15	01-07-19	01-31-19
A3.B638.COL.1A05	Construct Column - B-638 - Pier 1 - Stage 1A	10	01-24-19	02-07-19
A3.B638.CAP.1A05	Construct Cap - B-638 - Pier 1 - Stage 1A	10	02-08-19	02-25-19
A3.B638.BKF.1A05	Backfill Slope and Abutment - B-638 - West End - Stage 1A	3	02-26-19	03-01-19
A3.B638.RSOE.1A05	Remove Temp. SOE - B-638 - West End - Stage 1A	2	03-04-19	03-05-19
A3.B638.SLP.1A05	Install Slope Protection - B-638 - West End - Stage 1A	5	03-07-19	03-13-19
A3.B638.ABUT.1B05	Construct Abutment - B-638 - Abutment B - Stage 1B	15	04-12-19	05-07-19
A3.B638.COL.1B05	Construct Column - B-638 - Pier 2 - Stage 1B	10	04-30-19	05-14-19
A3.B638.CAP.1B05	Construct Cap - B-638 - Pier 2 - Stage 1B	10	05-16-19	05-31-19
A3.B638.BKF.1B05	Backfill Slope and Abutment - B-638 - East End - Stage 1B	3	06-03-19	06-06-19
A3.B638.RSOE.1B05	Remove Temp. SOE - B-638 - East End - Stage 1B	2	06-07-19	06-10-19
A3.B638.SLP.1B05	Install Slope Protection - B-638 - East End - Stage 1B	5	06-11-19	06-18-19
Superstructure		175	06-18-19	12-09-19
C1.B638.JACK.1C05	Install Temp. Shoring For Bridge Jacking - B-641 - Stage 1C	15	06-18-19	07-11-19
C1.B638.JACK.1C10	Prepare & Install Bridge Jacks	10	07-12-19	07-29-19
C1.B638.JACK.1C15	Jack Bridge for Bearing Replacement - B-641 - Stage 1C	10	07-30-19	08-14-19
C1.B638.JACK.1C20	Repair Pedestals and Replace Bridge Bearings	20	08-15-19	09-17-19
A3.B638.GIRD.1C05	Install Girders - B-638 - Span a - Stage 1C	2	09-19-19	09-20-19
A3.B638.GIRD.1C10	Install Girders - B-638 - Span b - Stage 1C	2	09-23-19	09-24-19
A3.B638.GIRD.1C15	Install Girders - B-638 - Span c - Stage 1C	2	09-26-19	09-27-19
A3.B638.DECK.1C05	Install Bridge Deck - B-638 - Span a - Stage 1C	15	09-30-19	10-22-19
A3.B638.DECK.1C10	Install Bridge Deck - B-638 - Span b - Stage 1C	10	10-15-19	10-31-19
A3.B638.CURE.1C05	Cure Bridge Deck - B-638 - Span a - Stage 1C	7	10-23-19	10-29-19
A3.B638.DECK.1C15	Install Bridge Deck - B-638 - Span c - Stage 1C	10	10-25-19	11-11-19
A3.B638.BARR.1C05	Install Bridge Parapet - B-638 - Span a - Stage 1C	2	10-30-19	10-31-19
A3.B638.APPR.1C05	Install Approach Slab - B-638 - Abutment A - Stage 1C	7	10-31-19	11-11-19
A3.B638.CURE.1C10	Cure Bridge Deck - B-638 - Span b - Stage 1C	7	11-01-19	11-07-19
A3.B638.BARR.1C10	Install Bridge Parapet - B-638 - Span b - Stage 1C	1	11-08-19	11-08-19



Remaining Level of Effort
Actual Work
Remaining Work
Critical Remaining Work
Milestone
Summary

State Project No.: 0064-965-229, P-101, R-201, C-501, B-638, B-639, B-640, B-641, B-642, B-643, D-609, D-610, D-611
Federal Project No.: NHPP-064-3 (498)
Contract ID Number: C00106689DB97

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Activity ID	Activity Name	Original Duration	Start	Finish
A3.B638.CURE.1C15	Cure Bridge Deck - B-638 - Span c - Stage 1C	7	11-12-19	11-18-19
A3.B638.APPR.1C10	Install Approach Slab - B-638 - Abutment B - Stage 1C	7	11-19-19	12-03-19
A3.B638.BARR.1C15	Install Bridge Parapet - B-638 - Span c - Stage 1C	1	11-19-19	11-19-19
A3.B638.GRV.1C05	Grind & Groove Bridge Deck - B-638 - Widening - Stage 1C	3	12-05-19	12-09-19
Stage 2 - Construction		729	05-24-19	05-21-21
Area A		593	10-07-19	05-21-21
Roadway		593	10-07-19	05-21-21
64W.A6.STORM.205	Install Storm Drain Pipe & Structures - I-64 WB Outside (Area A-6) - Phas	9	11-01-19	11-15-19
64W.A5.STORM.205	Install Storm Drain Pipe & Structures - I-64 WB Outside (Area A-5) - Phas	4	08-27-20	09-01-20
Preparation		232	10-11-19	01-07-21
64W.A6.CLGR.205	Clear & Grub Trees - I-64 WB Outside (Area A-6) - Phase 2	3	10-11-19	10-17-19
64E.A2.CLGR.205	Clear & Grub Trees - I-64 EB Outside (Area A-2) - Phase 2	3	11-22-19	11-26-19
64W.A4.CLGR.205	Clear & Grub Trees - I-64 WB Outside (Area A-4) - Phase 2	3	12-10-19	12-16-19
64E.A4.CLGR.205	Clear & Grub Trees - I-64 EB Outside (Area A-4) - Phase 2	3	02-14-20	02-20-20
64E.A6.CLGR.205	Clear & Grub Trees - I-64 EB Outside (Area A-6) - Phase 2	3	04-30-20	05-04-20
64W.A2.CLGR.205	Clear & Grub Trees - I-64 WB Outside (Area A-2) - Phase 2	3	05-19-20	05-22-20
64E.A1.CLGR.205	Clear & Grub Trees - I-64 EB Outside (Area A-1) - Phase 2	3	07-13-20	07-17-20
64W.A5.CLGR.205	Clear & Grub Trees - I-64 WB Outside (Area A-5) - Phase 2	3	08-03-20	08-06-20
64E.A3.CLGR.205	Clear & Grub Trees - I-64 EB Outside (Area A-3) - Phase 2	3	09-10-20	09-14-20
64W.A3.CLGR.205	Clear & Grub Trees - I-64 WB Outside (Area A-3) - Phase 2	3	10-01-20	10-05-20
64E.A5.CLGR.205	Clear & Grub Trees - I-64 EB Outside (Area A-5) - Phase 2	3	12-21-20	12-23-20
64W.A1.CLGR.205	Clear & Grub Trees - I-64 WB Outside (Area A-1) - Phase 2	3	01-04-21	01-07-21
Maintenance of Traffic		575	10-07-19	05-03-21
64E.A5.TSTR.205	Eradicate & Install Temp. Striping (Shifting Traffic to Median) - I-64 EB Ou	2	10-07-19	10-08-19
64E.A6.TSTR.205	Eradicate & Install Temp. Striping (Shifting Traffic to Median) - I-64 EB Ou	2	10-07-19	10-08-19
64W.A5.TSTR.205	Eradicate & Install Temp. Striping (Shifting Traffic to Median) - I-64 WB Ou	2	10-07-19	10-08-19
64W.A6.TSTR.205	Eradicate & Install Temp. Striping (Shifting Traffic to Median) - I-64 WB Ou	2	10-07-19	10-08-19
64W.A6.TBAR.205	Install Temp. Barrier Wall - I-64 WB Outside (Area A-6) - Phase 2	5	10-10-19	10-16-19
64E.A1.TSTR.205	Eradicate & Install Temp. Striping (Shifting Traffic to Median) - I-64 EB Ou	2	11-04-19	11-05-19
64E.A2.TSTR.205	Eradicate & Install Temp. Striping (Shifting Traffic to Median) - I-64 EB Ou	2	11-18-19	11-19-19
64E.A3.TSTR.205	Eradicate & Install Temp. Striping (Shifting Traffic to Median) - I-64 EB Ou	2	11-18-19	11-19-19
64E.A4.TSTR.205	Eradicate & Install Temp. Striping (Shifting Traffic to Median) - I-64 EB Ou	2	11-18-19	11-19-19
64W.A3.TSTR.205	Eradicate & Install Temp. Striping (Shifting Traffic to Median) - I-64 WB Ou	2	11-18-19	11-19-19
64W.A4.TSTR.205	Eradicate & Install Temp. Striping (Shifting Traffic to Median) - I-64 WB Ou	2	11-18-19	11-19-19
64E.A2.TBAR.205	Install Temp. Barrier Wall - I-64 EB Outside (Area A-2) - Phase 2	4	11-21-19	11-26-19
64W.A4.TBAR.205	Install Temp. Barrier Wall - I-64 WB Outside (Area A-4) - Phase 2	4	12-10-19	12-16-19
64E.A4.TBAR.205	Install Temp. Barrier Wall - I-64 EB Outside (Area A-4) - Phase 2	4	02-14-20	02-20-20
64E.A2.RBAR.205	Remove Temp Barrier - I-64 EB Outside (Area A-2) - Phase 2	4	04-23-20	04-28-20
64W.A4.RBAR.205	Remove Temp Barrier - I-64 WB Outside (Area A-4) - Phase 2	4	04-23-20	04-28-20
64W.A6.RBAR.205	Remove Temp Barrier - I-64 WB Outside (Area A-6) - Phase 2	5	04-23-20	04-30-20
64E.A6.TBAR.205	Install Temp. Barrier Wall - I-64 EB Outside (Area A-6) - Phase 2	5	04-27-20	05-04-20
64E.A2.TSTR.210	Eradicate & Install Temp. Striping (Shifting Traffic to Final Configuration) -	2	04-30-20	05-04-20
64W.A4.TSTR.210	Eradicate & Install Temp. Striping (Shifting Traffic to Final Configuration) -	2	04-30-20	05-04-20
64W.A6.TSTR.210	Eradicate & Install Temp. Striping (Shifting Traffic to Final Configuration) -	2	05-04-20	05-05-20
64W.A1.TSTR.205	Eradicate & Install Temp. Striping (Shifting Traffic to Median) - I-64 WB Ou	2	05-14-20	05-15-20

Remaining Level of Effort
Actual Work
Remaining Work
Critical Remaining Work
Milestone
Summary

State Project No.: 0064-965-229, P-101, R-201, C-501, B-638, B-639, B-640, B-641, B-642, B-643, D-609, D-610, D-611
Federal Project No.: NHPP-064-3 (498)
Contract ID Number: C00106689DB97

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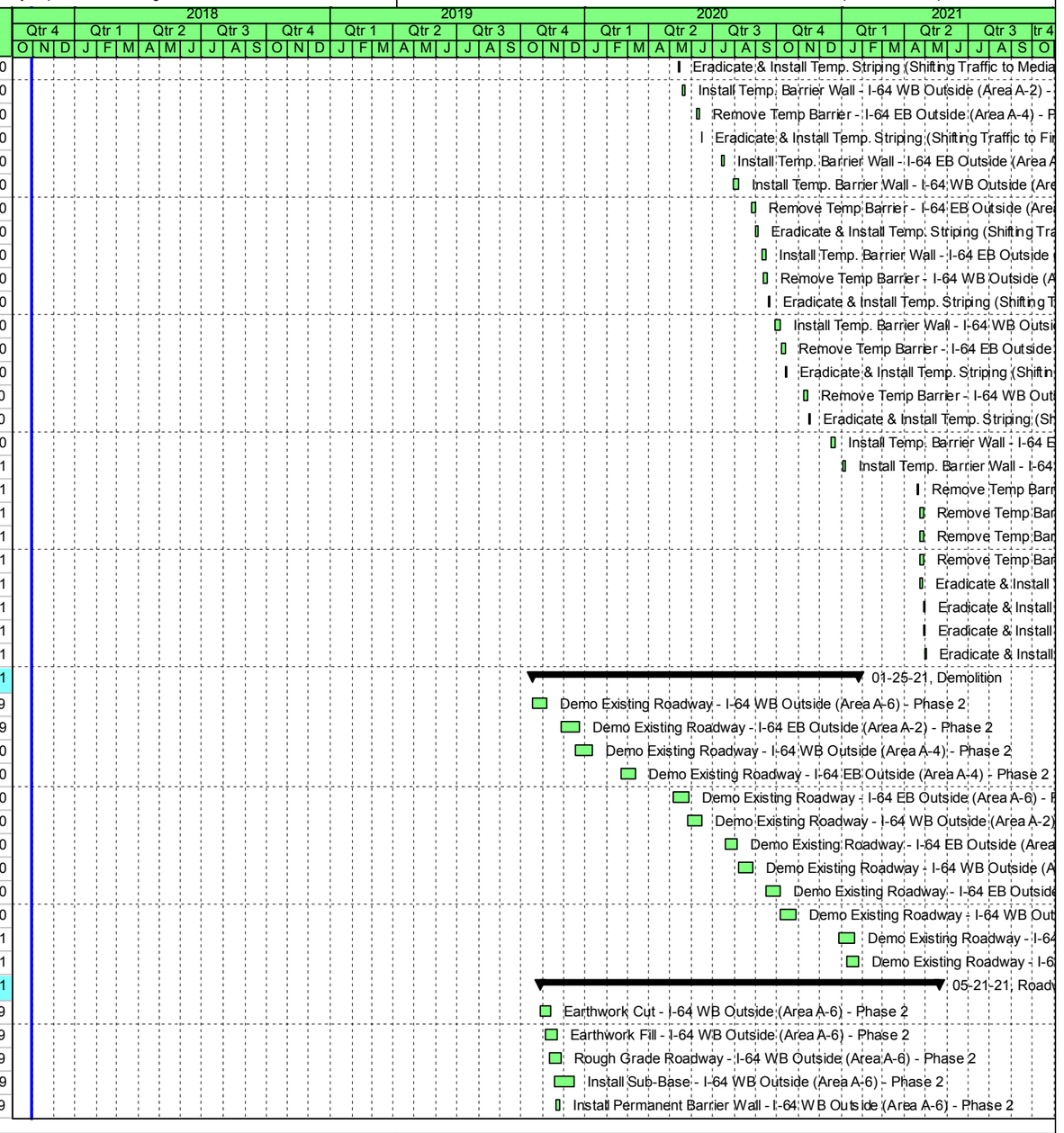
I-64 Capacity Improvements - Segment III

Proposal Date: September 14, 2017

Activity ID	Activity Name	Original Duration	Start	Finish
64W.A2.TSTR.205	Eradicate & Install Temp. Striping (Shifting Traffic to Median) - I-64 WB Ou	2	05-14-20	05-15-20
64W.A2.TBAR.205	Install Temp. Barrier Wall - I-64 WB Outside (Area A-2) - Phase 2	4	05-18-20	05-22-20
64E.A4.RBAR.205	Remove Temp Barrier - I-64 EB Outside (Area A-4) - Phase 2	4	06-08-20	06-12-20
64E.A4.TSTR.210	Eradicate & Install Temp. Striping (Shifting Traffic to Final Configuration) -	2	06-15-20	06-16-20
64E.A1.TBAR.205	Install Temp. Barrier Wall - I-64 EB Outside (Area A-1) - Phase 2	3	07-14-20	07-17-20
64W.A5.TBAR.205	Install Temp. Barrier Wall - I-64 WB Outside (Area A-5) - Phase 2	5	07-30-20	08-06-20
64E.A6.RBAR.205	Remove Temp Barrier - I-64 EB Outside (Area A-6) - Phase 2	5	08-25-20	08-31-20
64E.A6.TSTR.210	Eradicate & Install Temp. Striping (Shifting Traffic to Final Configuration) -	2	09-01-20	09-03-20
64E.A3.TBAR.205	Install Temp. Barrier Wall - I-64 EB Outside (Area A-3) - Phase 2	4	09-09-20	09-14-20
64W.A2.RBAR.205	Remove Temp Barrier - I-64 WB Outside (Area A-2) - Phase 2	4	09-11-20	09-17-20
64W.A2.TSTR.210	Eradicate & Install Temp. Striping (Shifting Traffic to Final Configuration) -	2	09-18-20	09-21-20
64W.A3.TBAR.205	Install Temp. Barrier Wall - I-64 WB Outside (Area A-3) - Phase 2	4	09-29-20	10-05-20
64E.A1.RBAR.205	Remove Temp Barrier - I-64 EB Outside (Area A-1) - Phase 2	3	10-08-20	10-12-20
64E.A1.TSTR.210	Eradicate & Install Temp. Striping (Shifting Traffic to Final Configuration) -	2	10-13-20	10-15-20
64W.A5.RBAR.205	Remove Temp Barrier - I-64 WB Outside (Area A-5) - Phase 2	5	11-09-20	11-13-20
64W.A5.TSTR.210	Eradicate & Install Temp. Striping (Shifting Traffic to Final Configuration) -	2	11-16-20	11-17-20
64E.A5.TBAR.205	Install Temp. Barrier Wall - I-64 EB Outside (Area A-5) - Phase 2	5	12-17-20	12-23-20
64W.A1.TBAR.205	Install Temp. Barrier Wall - I-64 WB Outside (Area A-1) - Phase 2	3	01-04-21	01-07-21
64W.A1.RBAR.205	Remove Temp Barrier - I-64 WB Outside (Area A-1) - Phase 2	3	04-19-21	04-22-21
64E.A3.RBAR.205	Remove Temp Barrier - I-64 EB Outside (Area A-3) - Phase 2	4	04-23-21	04-28-21
64E.A5.RBAR.205	Remove Temp Barrier - I-64 EB Outside (Area A-5) - Phase 2	5	04-23-21	04-29-21
64W.A3.RBAR.205	Remove Temp Barrier - I-64 WB Outside (Area A-3) - Phase 2	4	04-23-21	04-28-21
64W.A1.TSTR.210	Eradicate & Install Temp. Striping (Shifting Traffic to Final Configuration) -	2	04-23-21	04-26-21
64E.A3.TSTR.210	Eradicate & Install Temp. Striping (Shifting Traffic to Final Configuration) -	2	04-29-21	04-30-21
64W.A3.TSTR.210	Eradicate & Install Temp. Striping (Shifting Traffic to Final Configuration) -	2	04-29-21	04-30-21
64E.A5.TSTR.210	Eradicate & Install Temp. Striping (Shifting Traffic to Final Configuration) -	2	04-30-21	05-03-21
Demolition		276	10-17-19	01-25-21
64W.A6.DRDW.205	Demo Existing Roadway - I-64 WB Outside (Area A-6) - Phase 2	14	10-17-19	11-07-19
64E.A2.DRDW.205	Demo Existing Roadway - I-64 EB Outside (Area A-2) - Phase 2	14	11-27-19	12-23-19
64W.A4.DRDW.205	Demo Existing Roadway - I-64 WB Outside (Area A-4) - Phase 2	14	12-17-19	01-10-20
64E.A4.DRDW.205	Demo Existing Roadway - I-64 EB Outside (Area A-4) - Phase 2	14	02-21-20	03-13-20
64E.A6.DRDW.205	Demo Existing Roadway - I-64 EB Outside (Area A-6) - Phase 2	14	05-05-20	05-28-20
64W.A2.DRDW.205	Demo Existing Roadway - I-64 WB Outside (Area A-2) - Phase 2	14	05-26-20	06-16-20
64E.A1.DRDW.205	Demo Existing Roadway - I-64 EB Outside (Area A-1) - Phase 2	10	07-20-20	08-04-20
64W.A5.DRDW.205	Demo Existing Roadway - I-64 WB Outside (Area A-5) - Phase 2	14	08-07-20	08-28-20
64E.A3.DRDW.205	Demo Existing Roadway - I-64 EB Outside (Area A-3) - Phase 2	14	09-15-20	10-06-20
64W.A3.DRDW.205	Demo Existing Roadway - I-64 WB Outside (Area A-3) - Phase 2	14	10-06-20	10-27-20
64E.A5.DRDW.205	Demo Existing Roadway - I-64 EB Outside (Area A-5) - Phase 2	14	12-28-20	01-20-21
64W.A1.DRDW.205	Demo Existing Roadway - I-64 WB Outside (Area A-1) - Phase 2	10	01-08-21	01-25-21
Roadway		572	10-28-19	05-21-21
64W.A6.ECUT.205	Earthwork Cut - I-64 WB Outside (Area A-6) - Phase 2	10	10-28-19	11-12-19
64W.A6.EFIL.205	Earthwork Fill - I-64 WB Outside (Area A-6) - Phase 2	10	11-05-19	11-22-19
64W.A6.RGRD.205	Rough Grade Roadway - I-64 WB Outside (Area A-6) - Phase 2	9	11-11-19	11-26-19
64W.A6.BASE.205	Install Sub-Base - I-64 WB Outside (Area A-6) - Phase 2	12	11-18-19	12-16-19
64W.A6.BARR.205	Install Permanent Barrier Wall - I-64 WB Outside (Area A-6) - Phase 2	4	11-19-19	11-25-19



Remaining Level of Effort
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Milestone
Summary

State Project No.: 0064-965-229, P-101, R-201, C-501, B-638, B-639, B-640, B-641, B-642, B-643, D-609, D-610, D-611
Federal Project No.: NHPP-064-3 (498)
Contract ID Number: C00106689DB97

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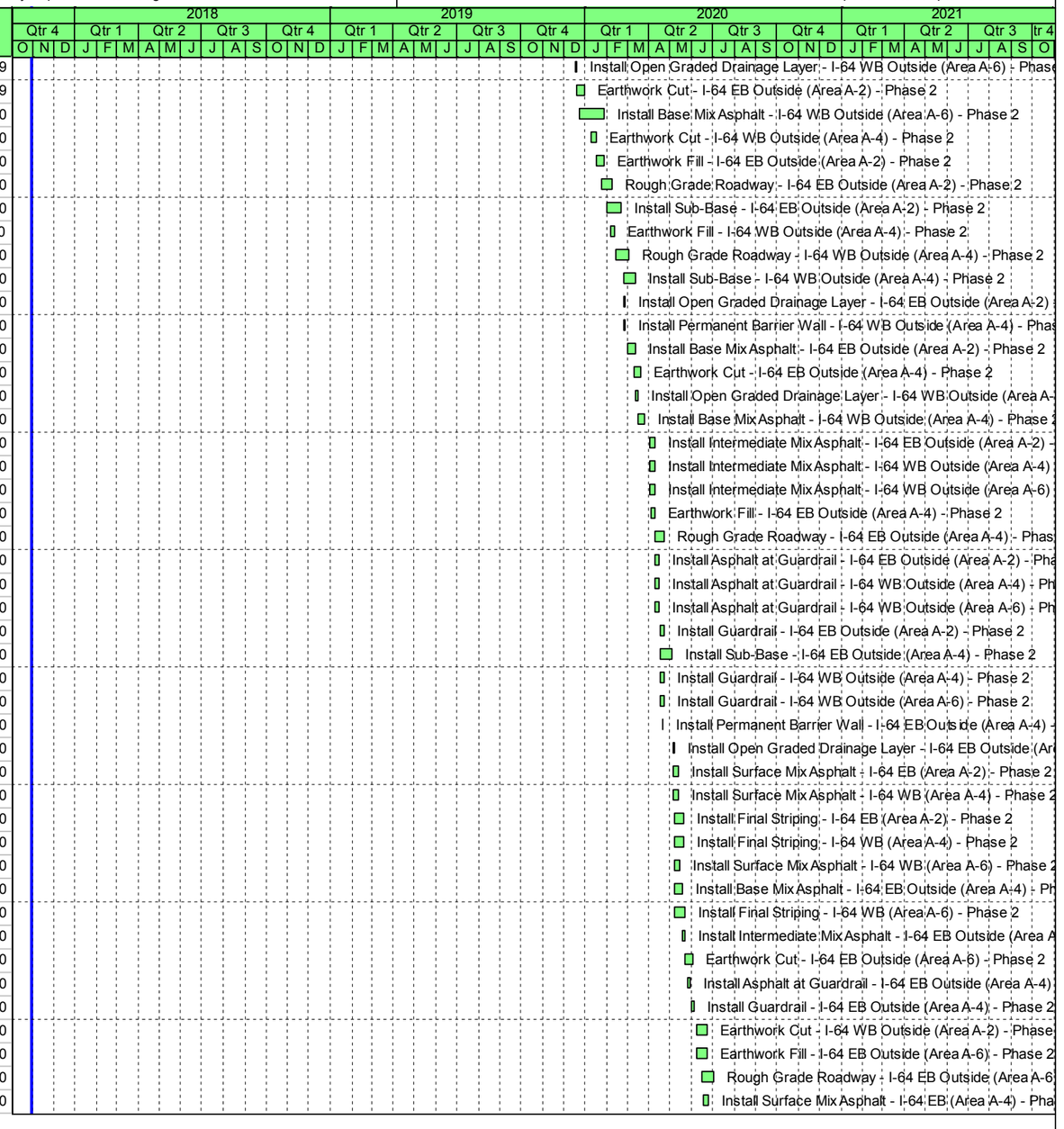
I-64 Capacity Improvements - Segment III

Proposal Date: September 14, 2017

Activity ID	Activity Name	Original Duration	Start	Finish
64W.A6.OGDL.205	Install Open Graded Drainage Layer - I-64 WB Outside (Area A-6) - Phas	3	12-17-19	12-20-19
64E.A2.ECUT.205	Earthwork Cut - I-64 EB Outside (Area A-2) - Phase 2	5	12-20-19	12-30-19
64W.A6.ASBM.205	Install Base Mix Asphalt - I-64 WB Outside (Area A-6) - Phase 2	6	12-23-19	01-27-20
64W.A4.ECUT.205	Earthwork Cut - I-64 WB Outside (Area A-4) - Phase 2	4	01-10-20	01-16-20
64E.A2.EFIL.205	Earthwork Fill - I-64 EB Outside (Area A-2) - Phase 2	5	01-17-20	01-27-20
64E.A2.RGRD.205	Rough Grade Roadway - I-64 EB Outside (Area A-2) - Phase 2	9	01-24-20	02-07-20
64E.A2.BASE.205	Install Sub-Base - I-64 EB Outside (Area A-2) - Phase 2	11	01-31-20	02-20-20
64W.A4.EFIL.205	Earthwork Fill - I-64 WB Outside (Area A-4) - Phase 2	4	02-06-20	02-11-20
64W.A4.RGRD.205	Rough Grade Roadway - I-64 WB Outside (Area A-4) - Phase 2	9	02-14-20	03-02-20
64W.A4.BASE.205	Install Sub-Base - I-64 WB Outside (Area A-4) - Phase 2	11	02-24-20	03-12-20
64E.A2.OGDL.205	Install Open Graded Drainage Layer - I-64 EB Outside (Area A-2) - Phas	2	02-25-20	02-27-20
64W.A4.BARR.205	Install Permanent Barrier Wall - I-64 WB Outside (Area A-4) - Phase 2	2	02-25-20	02-27-20
64E.A2.ASBM.205	Install Base Mix Asphalt - I-64 EB Outside (Area A-2) - Phase 2	6	03-02-20	03-12-20
64E.A4.ECUT.205	Earthwork Cut - I-64 EB Outside (Area A-4) - Phase 2	5	03-10-20	03-20-20
64W.A4.OGDL.205	Install Open Graded Drainage Layer - I-64 WB Outside (Area A-4) - Phas	2	03-13-20	03-16-20
64W.A4.ASBM.205	Install Base Mix Asphalt - I-64 WB Outside (Area A-4) - Phase 2	6	03-17-20	03-26-20
64E.A2.ASIM.205	Install Intermediate Mix Asphalt - I-64 EB Outside (Area A-2) - Phase 2	3	04-02-20	04-09-20
64W.A4.ASIM.205	Install Intermediate Mix Asphalt - I-64 WB Outside (Area A-4) - Phase 2	3	04-02-20	04-09-20
64W.A6.ASIM.205	Install Intermediate Mix Asphalt - I-64 WB Outside (Area A-6) - Phase 2	3	04-02-20	04-09-20
64E.A4.EFIL.205	Earthwork Fill - I-64 EB Outside (Area A-4) - Phase 2	5	04-03-20	04-10-20
64E.A4.RGRD.205	Rough Grade Roadway - I-64 EB Outside (Area A-4) - Phase 2	9	04-09-20	04-23-20
64E.A2.ASGR.205	Install Asphalt at Guardrail - I-64 EB Outside (Area A-2) - Phase 2	3	04-10-20	04-14-20
64W.A4.ASGR.205	Install Asphalt at Guardrail - I-64 WB Outside (Area A-4) - Phase 2	3	04-10-20	04-14-20
64W.A6.ASGR.205	Install Asphalt at Guardrail - I-64 WB Outside (Area A-6) - Phase 2	3	04-10-20	04-14-20
64E.A2.GRAIL.205	Install Guardrail - I-64 EB Outside (Area A-2) - Phase 2	4	04-17-20	04-22-20
64E.A4.BASE.205	Install Sub-Base - I-64 EB Outside (Area A-4) - Phase 2	11	04-17-20	05-04-20
64W.A4.GRAIL.205	Install Guardrail - I-64 WB Outside (Area A-4) - Phase 2	4	04-17-20	04-22-20
64W.A6.GRAIL.205	Install Guardrail - I-64 WB Outside (Area A-6) - Phase 2	4	04-17-20	04-22-20
64E.A4.BARR.205	Install Permanent Barrier Wall - I-64 EB Outside (Area A-4) - Phase 2	2	04-20-20	04-21-20
64E.A4.OGDL.205	Install Open Graded Drainage Layer - I-64 EB Outside (Area A-4) - Phas	2	05-05-20	05-07-20
64E.A2.ASSM.210	Install Surface Mix Asphalt - I-64 EB (Area A-2) - Phase 2	5	05-05-20	05-12-20
64W.A4.ASSM.210	Install Surface Mix Asphalt - I-64 WB (Area A-4) - Phase 2	5	05-05-20	05-12-20
64E.A2.PSTR.210	Install Final Striping - I-64 EB (Area A-2) - Phase 2	9	05-07-20	05-21-20
64W.A4.PSTR.210	Install Final Striping - I-64 WB (Area A-4) - Phase 2	9	05-07-20	05-21-20
64W.A6.ASSM.210	Install Surface Mix Asphalt - I-64 WB (Area A-6) - Phase 2	5	05-07-20	05-14-20
64E.A4.ASBM.205	Install Base Mix Asphalt - I-64 EB Outside (Area A-4) - Phase 2	6	05-08-20	05-18-20
64W.A6.PSTR.210	Install Final Striping - I-64 WB (Area A-6) - Phase 2	9	05-08-20	05-22-20
64E.A4.ASIM.205	Install Intermediate Mix Asphalt - I-64 EB Outside (Area A-4) - Phase 2	3	05-19-20	05-22-20
64E.A6.ECUT.205	Earthwork Cut - I-64 EB Outside (Area A-6) - Phase 2	6	05-22-20	06-02-20
64E.A4.ASGR.205	Install Asphalt at Guardrail - I-64 EB Outside (Area A-4) - Phase 2	3	05-26-20	05-29-20
64E.A4.GRAIL.205	Install Guardrail - I-64 EB Outside (Area A-4) - Phase 2	4	06-01-20	06-05-20
64W.A2.ECUT.205	Earthwork Cut - I-64 WB Outside (Area A-2) - Phase 2	7	06-08-20	06-22-20
64E.A6.EFIL.205	Earthwork Fill - I-64 EB Outside (Area A-6) - Phase 2	6	06-09-20	06-22-20
64E.A6.RGRD.205	Rough Grade Roadway - I-64 EB Outside (Area A-6) - Phase 2	9	06-16-20	07-02-20
64E.A4.ASSM.210	Install Surface Mix Asphalt - I-64 EB (Area A-4) - Phase 2	5	06-18-20	06-25-20



Remaining Level of Effort
Actual Work
Remaining Work
Critical Remaining Work
Milestone
Summary

State Project No.: 0064-965-229, P-101, R-201, C-501, B-638, B-639, B-640, B-641, B-642, B-643, D-609, D-610, D-611
Federal Project No.: NHPP-064-3 (498)
Contract ID Number: C00106689DB97

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Activity ID	Activity Name	Original Duration	Start	Finish
64E.A4.PSTR.210	Install Final Striping - I-64 EB (Area A-4) - Phase 2	9	06-19-20	07-06-20
64E.A6.BASE.205	Install Sub-Base - I-64 EB Outside (Area A-6) - Phase 2	12	06-25-20	07-17-20
64E.A6.BARR.205	Install Permanent Barrier Wall - I-64 EB Outside (Area A-6) - Phase 2	4	06-26-20	07-01-20
64W.A2.EFIL.205	Earthwork Fill - I-64 WB Outside (Area A-2) - Phase 2	7	07-02-20	07-14-20
64W.A2.RGRD.205	Rough Grade Roadway - I-64 WB Outside (Area A-2) - Phase 2	9	07-09-20	07-24-20
64W.A2.BASE.205	Install Sub-Base - I-64 WB Outside (Area A-2) - Phase 2	11	07-17-20	08-06-20
64E.A6.OGDL.205	Install Open Graded Drainage Layer - I-64 EB Outside (Area A-6) - Phas	3	07-20-20	07-23-20
64E.A6.ASBM.205	Install Base Mix Asphalt - I-64 EB Outside (Area A-6) - Phase 2	6	07-24-20	08-03-20
64E.A6.ASIM.205	Install Intermediate Mix Asphalt - I-64 EB Outside (Area A-6) - Phase 2	3	08-04-20	08-10-20
64E.A1.ECUT.205	Earthwork Cut - I-64 EB Outside (Area A-1) - Phase 2	3	08-06-20	08-10-20
64W.A2.OGDL.205	Install Open Graded Drainage Layer - I-64 WB Outside (Area A-2) - Phas	2	08-10-20	08-11-20
64E.A6.ASGR.205	Install Asphalt at Guardrail - I-64 EB Outside (Area A-6) - Phase 2	3	08-11-20	08-17-20
64W.A2.ASBM.205	Install Base Mix Asphalt - I-64 WB Outside (Area A-2) - Phase 2	6	08-13-20	08-21-20
64E.A1.EFIL.205	Earthwork Fill - I-64 EB Outside (Area A-1) - Phase 2	3	08-18-20	08-21-20
64E.A6.GRAIL.205	Install Guardrail - I-64 EB Outside (Area A-6) - Phase 2	4	08-18-20	08-24-20
64W.A5.ECUT.205	Earthwork Cut - I-64 WB Outside (Area A-5) - Phase 2	7	08-21-20	09-04-20
64E.A1.RGRD.205	Rough Grade Roadway - I-64 EB Outside (Area A-1) - Phase 2	6	08-24-20	09-01-20
64W.A2.ASIM.205	Install Intermediate Mix Asphalt - I-64 WB Outside (Area A-2) - Phase 2	3	08-24-20	08-27-20
64W.A2.ASGR.205	Install Asphalt at Guardrail - I-64 WB Outside (Area A-2) - Phase 2	3	08-28-20	09-01-20
64E.A1.BASE.205	Install Sub-Base - I-64 EB Outside (Area A-1) - Phase 2	8	08-31-20	09-14-20
64W.A5.EFIL.205	Earthwork Fill - I-64 WB Outside (Area A-5) - Phase 2	7	08-31-20	09-11-20
64W.A2.GRAIL.205	Install Guardrail - I-64 WB Outside (Area A-2) - Phase 2	4	09-04-20	09-10-20
64E.A6.ASSM.210	Install Surface Mix Asphalt - I-64 EB (Area A-6) - Phase 2	5	09-04-20	09-14-20
64W.A5.RGRD.205	Rough Grade Roadway - I-64 WB Outside (Area A-5) - Phase 2	9	09-08-20	09-22-20
64E.A6.PSTR.210	Install Final Striping - I-64 EB (Area A-6) - Phase 2	9	09-08-20	09-22-20
64W.A5.BASE.205	Install Sub-Base - I-64 WB Outside (Area A-5) - Phase 2	12	09-14-20	10-05-20
64E.A1.OGDL.205	Install Open Graded Drainage Layer - I-64 EB Outside (Area A-1) - Phas	2	09-15-20	09-17-20
64E.A1.ASBM.205	Install Base Mix Asphalt - I-64 EB Outside (Area A-1) - Phase 2	4	09-18-20	09-24-20
64W.A2.ASSM.210	Install Surface Mix Asphalt - I-64 WB (Area A-2) - Phase 2	5	09-22-20	09-29-20
64W.A2.PSTR.210	Install Final Striping - I-64 WB (Area A-2) - Phase 2	9	09-24-20	10-09-20
64E.A1.ASIM.205	Install Intermediate Mix Asphalt - I-64 EB Outside (Area A-1) - Phase 2	2	09-25-20	09-28-20
64E.A1.ASGR.205	Install Asphalt at Guardrail - I-64 EB Outside (Area A-1) - Phase 2	2	09-29-20	10-01-20
64E.A1.GRAIL.205	Install Guardrail - I-64 EB Outside (Area A-1) - Phase 2	3	10-02-20	10-06-20
64W.A5.OGDL.205	Install Open Graded Drainage Layer - I-64 WB Outside (Area A-5) - Phas	3	10-06-20	10-09-20
64E.A3.ECUT.205	Earthwork Cut - I-64 EB Outside (Area A-3) - Phase 2	3	10-08-20	10-12-20
64W.A5.ASBM.205	Install Base Mix Asphalt - I-64 WB Outside (Area A-5) - Phase 2	6	10-12-20	10-20-20
64E.A1.ASSM.210	Install Surface Mix Asphalt - I-64 EB (Area A-1) - Phase 2	3	10-16-20	10-20-20
64E.A1.PSTR.210	Install Final Striping - I-64 EB (Area A-1) - Phase 2	6	10-19-20	10-27-20
64W.A5.ASIM.205	Install Intermediate Mix Asphalt - I-64 WB Outside (Area A-5) - Phase 2	3	10-22-20	10-26-20
64W.A3.ECUT.205	Earthwork Cut - I-64 WB Outside (Area A-3) - Phase 2	5	10-23-20	10-30-20
64W.A5.ASGR.205	Install Asphalt at Guardrail - I-64 WB Outside (Area A-5) - Phase 2	3	10-27-20	10-30-20
64W.A5.GRAIL.205	Install Guardrail - I-64 WB Outside (Area A-5) - Phase 2	4	11-02-20	11-06-20
64E.A3.EFIL.205	Earthwork Fill - I-64 EB Outside (Area A-3) - Phase 2	3	11-17-20	11-23-20
64W.A5.ASSM.210	Install Surface Mix Asphalt - I-64 WB (Area A-5) - Phase 2	5	11-19-20	04-13-21
64E.A3.RGRD.205	Rough Grade Roadway - I-64 EB Outside (Area A-3) - Phase 2	9	11-24-20	12-14-20

Remaining Level of Effort
Actual Work
Remaining Work
Critical Remaining Work
Milestone
Summary

State Project No.: 0064-965-229, P-101, R-201, C-501, B-638, B-639, B-640, B-641, B-642, B-643, D-609, D-610, D-611
Federal Project No.: NHPP-064-3 (498)
Contract ID Number: C00106689DB97

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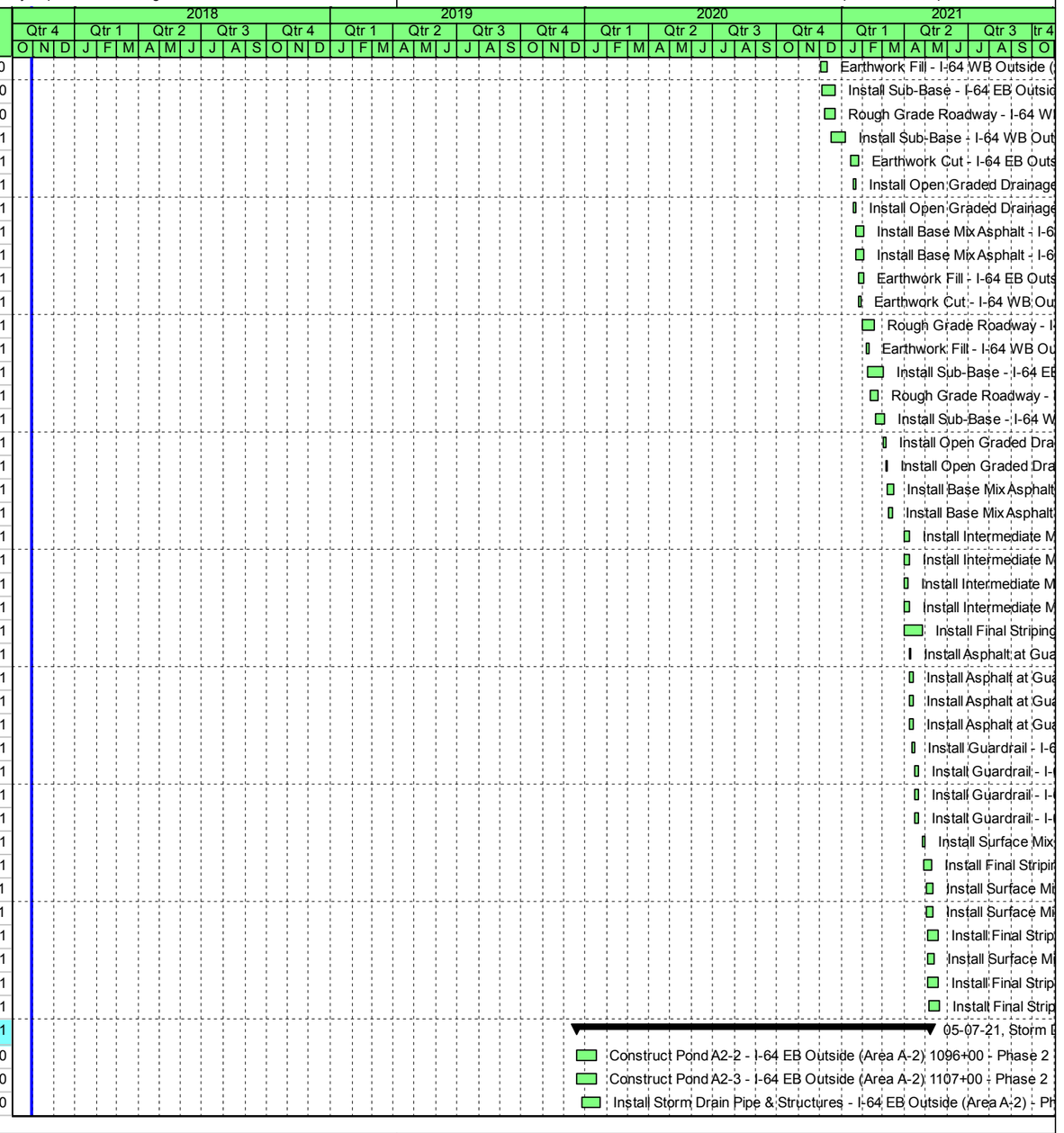
I-64 Capacity Improvements - Segment III

Proposal Date: September 14, 2017

Activity ID	Activity Name	Original Duration	Start	Finish
64W.A3.EFIL.205	Earthwork Fill - I-64 WB Outside (Area A-3) - Phase 2	5	12-03-20	12-11-20
64E.A3.BASE.205	Install Sub-Base - I-64 EB Outside (Area A-3) - Phase 2	11	12-04-20	12-23-20
64W.A3.RGRD.205	Rough Grade Roadway - I-64 WB Outside (Area A-3) - Phase 2	9	12-08-20	12-23-20
64W.A3.BASE.205	Install Sub-Base - I-64 WB Outside (Area A-3) - Phase 2	11	12-17-20	01-07-21
64E.A5.ECUT.205	Earthwork Cut - I-64 EB Outside (Area A-5) - Phase 2	5	01-15-21	01-25-21
64E.A3.OGDL.205	Install Open Graded Drainage Layer - I-64 EB Outside (Area A-3) - Phas	2	01-19-21	01-21-21
64W.A3.OGDL.205	Install Open Graded Drainage Layer - I-64 WB Outside (Area A-3) - Phas	2	01-19-21	01-21-21
64E.A3.ASBM.205	Install Base Mix Asphalt - I-64 EB Outside (Area A-3) - Phase 2	6	01-22-21	02-02-21
64W.A3.ASBM.205	Install Base Mix Asphalt - I-64 WB Outside (Area A-3) - Phase 2	6	01-22-21	02-02-21
64E.A5.EFIL.205	Earthwork Fill - I-64 EB Outside (Area A-5) - Phase 2	5	01-26-21	02-02-21
64W.A1.ECUT.205	Earthwork Cut - I-64 WB Outside (Area A-1) - Phase 2	3	01-26-21	01-29-21
64E.A5.RGRD.205	Rough Grade Roadway - I-64 EB Outside (Area A-5) - Phase 2	9	02-01-21	02-16-21
64W.A1.EFIL.205	Earthwork Fill - I-64 WB Outside (Area A-1) - Phase 2	3	02-05-21	02-09-21
64E.A5.BASE.205	Install Sub-Base - I-64 EB Outside (Area A-5) - Phase 2	12	02-08-21	03-01-21
64W.A1.RGRD.205	Rough Grade Roadway - I-64 WB Outside (Area A-1) - Phase 2	6	02-11-21	02-22-21
64W.A1.BASE.205	Install Sub-Base - I-64 WB Outside (Area A-1) - Phase 2	8	02-19-21	03-04-21
64E.A5.OGDL.205	Install Open Graded Drainage Layer - I-64 EB Outside (Area A-5) - Phas	3	03-02-21	03-05-21
64W.A1.OGDL.205	Install Open Graded Drainage Layer - I-64 WB Outside (Area A-1) - Phas	2	03-05-21	03-08-21
64E.A5.ASBM.205	Install Base Mix Asphalt - I-64 EB Outside (Area A-5) - Phase 2	6	03-08-21	03-16-21
64W.A1.ASBM.205	Install Base Mix Asphalt - I-64 WB Outside (Area A-1) - Phase 2	4	03-09-21	03-15-21
64E.A3.ASIM.205	Install Intermediate Mix Asphalt - I-64 EB Outside (Area A-3) - Phase 2	3	04-01-21	04-08-21
64E.A5.ASIM.205	Install Intermediate Mix Asphalt - I-64 EB Outside (Area A-5) - Phase 2	3	04-01-21	04-08-21
64W.A1.ASIM.205	Install Intermediate Mix Asphalt - I-64 WB Outside (Area A-1) - Phase 2	2	04-01-21	04-06-21
64W.A3.ASIM.205	Install Intermediate Mix Asphalt - I-64 WB Outside (Area A-3) - Phase 2	3	04-01-21	04-08-21
64W.A5.PSTR.210	Install Final Striping - I-64 WB (Area A-5) - Phase 2	9	04-01-21	04-27-21
64W.A1.ASGR.205	Install Asphalt at Guardrail - I-64 WB Outside (Area A-1) - Phase 2	2	04-08-21	04-09-21
64E.A3.ASGR.205	Install Asphalt at Guardrail - I-64 EB Outside (Area A-3) - Phase 2	3	04-09-21	04-13-21
64W.A1.ASGR.205	Install Asphalt at Guardrail - I-64 WB Outside (Area A-1) - Phase 2	2	04-08-21	04-09-21
64E.A3.ASGR.205	Install Asphalt at Guardrail - I-64 EB Outside (Area A-3) - Phase 2	3	04-09-21	04-13-21
64E.A5.ASGR.205	Install Asphalt at Guardrail - I-64 EB Outside (Area A-5) - Phase 2	3	04-09-21	04-13-21
64W.A3.ASGR.205	Install Asphalt at Guardrail - I-64 WB Outside (Area A-3) - Phase 2	3	04-09-21	04-13-21
64W.A1.GRAIL.205	Install Guardrail - I-64 WB Outside (Area A-1) - Phase 2	3	04-12-21	04-16-21
64E.A3.GRAIL.205	Install Guardrail - I-64 EB Outside (Area A-3) - Phase 2	4	04-16-21	04-22-21
64E.A5.GRAIL.205	Install Guardrail - I-64 EB Outside (Area A-5) - Phase 2	4	04-16-21	04-22-21
64W.A3.GRAIL.205	Install Guardrail - I-64 WB Outside (Area A-3) - Phase 2	4	04-16-21	04-22-21
64W.A1.ASSM.210	Install Surface Mix Asphalt - I-64 WB (Area A-1) - Phase 2	3	04-27-21	04-30-21
64W.A1.PSTR.210	Install Final Striping - I-64 WB (Area A-1) - Phase 2	6	04-29-21	05-10-21
64E.A3.ASSM.210	Install Surface Mix Asphalt - I-64 EB (Area A-3) - Phase 2	5	05-03-21	05-11-21
64W.A3.ASSM.210	Install Surface Mix Asphalt - I-64 WB (Area A-3) - Phase 2	5	05-03-21	05-11-21
64E.A3.PSTR.210	Install Final Striping - I-64 EB (Area A-3) - Phase 2	9	05-04-21	05-20-21
64E.A5.ASSM.210	Install Surface Mix Asphalt - I-64 EB (Area A-5) - Phase 2	5	05-04-21	05-13-21
64W.A3.PSTR.210	Install Final Striping - I-64 WB (Area A-3) - Phase 2	9	05-04-21	05-20-21
64E.A5.PSTR.210	Install Final Striping - I-64 EB (Area A-5) - Phase 2	9	05-06-21	05-21-21
Storm Drainage		263	12-20-19	05-07-21
64E.A2.SWMP.A2-2.205	Construct Pond A2-2 - I-64 EB Outside (Area A-2) 1096+00 - Phase 2	15	12-20-19	01-17-20
64E.A2.SWMP.A2-3.205	Construct Pond A2-3 - I-64 EB Outside (Area A-2) 1107+00 - Phase 2	15	12-20-19	01-17-20
64E.A2.STORM.205	Install Storm Drain Pipe & Structures - I-64 EB Outside (Area A-2) - Phas	13	12-27-19	01-21-20



Remaining Level of Effort
Actual Work
Remaining Work
Critical Remaining Work
Milestone
Summary

State Project No.: 0064-965-229, P-101, R-201, C-501, B-638, B-639, B-640, B-641, B-642, B-643, D-609, D-610, D-611
Federal Project No.: NHPP-064-3 (498)
Contract ID Number: C00106689DB97

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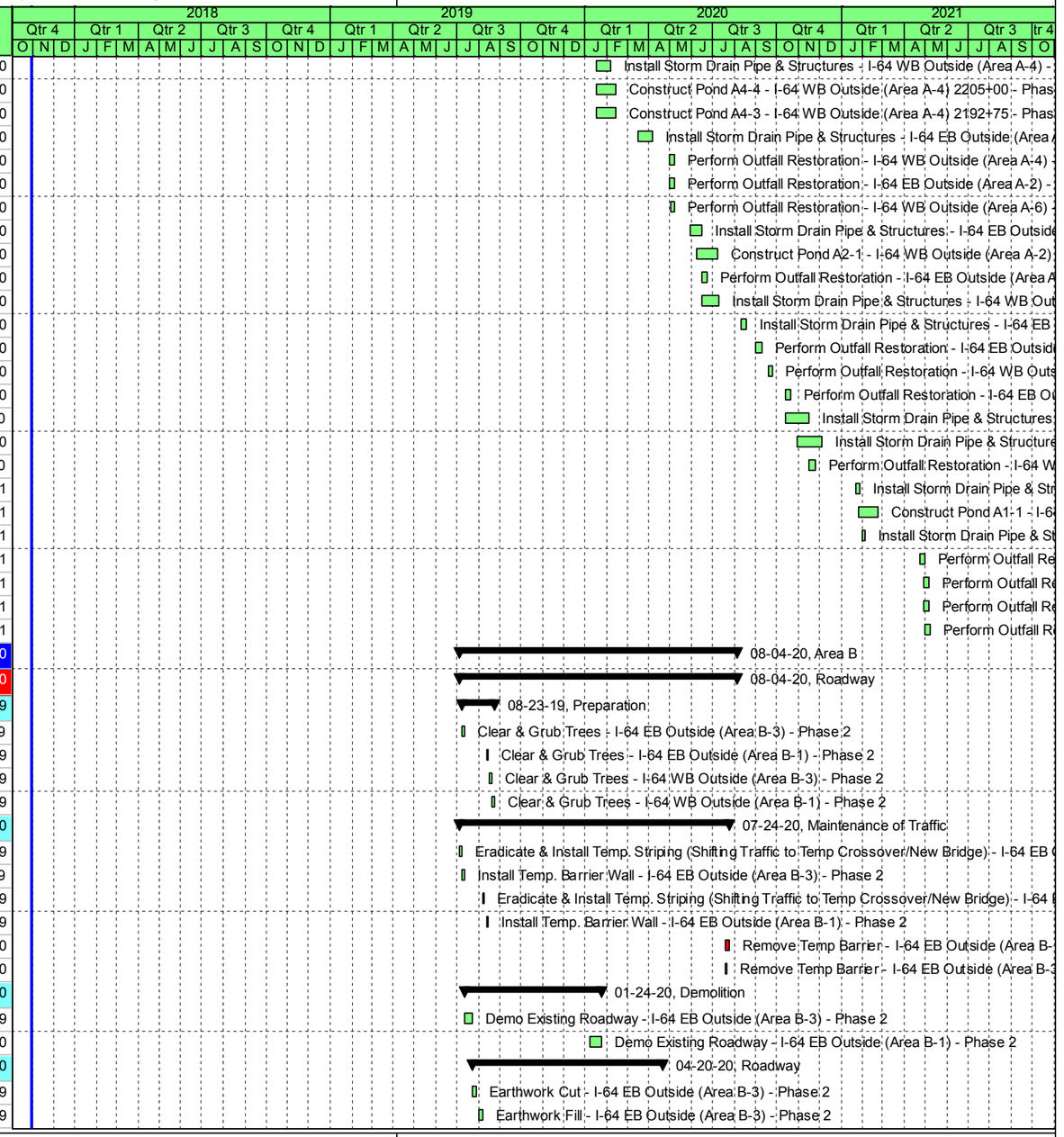
Activity ID	Activity Name	Original Duration	Start	Finish
64W.A4.STORM.205	Install Storm Drain Pipe & Structures - I-64 WB Outside (Area A-4) - Pha	12	01-16-20	02-06-20
64E.A4.SWMP.A4-2.205	Construct Pond A4-4 - I-64 WB Outside (Area A-4) 2205+00 - Phase 2	15	01-17-20	02-13-20
64W.A4.SWMP.A4-3.205	Construct Pond A4-3 - I-64 WB Outside (Area A-4) 2192+75 - Phase 2	15	01-17-20	02-13-20
64E.A4.STORM.205	Install Storm Drain Pipe & Structures - I-64 EB Outside (Area A-4) - Phas	12	03-16-20	04-06-20
64W.A4.OFAL.205	Perform Outfall Restoration - I-64 WB Outside (Area A-4) - Phase 2	5	04-30-20	05-07-20
64E.A2.OFAL.205	Perform Outfall Restoration - I-64 EB Outside (Area A-2) - Phase 2	5	04-30-20	05-07-20
64W.A6.OFAL.205	Perform Outfall Restoration - I-64 WB Outside (Area A-6) - Phase 2	5	05-01-20	05-08-20
64E.A6.STORM.205	Install Storm Drain Pipe & Structures - I-64 EB Outside (Area A-6) - Phas	9	05-29-20	06-15-20
64W.A2.SWMP.A2-1.205	Construct Pond A2-1 - I-64 WB Outside (Area A-2) 2090+00 - Phase 2	15	06-08-20	07-07-20
64E.A4.OFAL.205	Perform Outfall Restoration - I-64 EB Outside (Area A-4) - Phase 2	5	06-15-20	06-23-20
64W.A2.STORM.205	Install Storm Drain Pipe & Structures - I-64 WB Outside (Area A-2) - Pha	13	06-15-20	07-09-20
64E.A1.STORM.205	Install Storm Drain Pipe & Structures - I-64 EB Outside (Area A-1) - Phas	3	08-11-20	08-17-20
64E.A6.OFAL.205	Perform Outfall Restoration - I-64 EB Outside (Area A-6) - Phase 2	5	09-01-20	09-10-20
64W.A2.OFAL.205	Perform Outfall Restoration - I-64 WB Outside (Area A-2) - Phase 2	5	09-18-20	09-25-20
64E.A1.OFAL.205	Perform Outfall Restoration - I-64 EB Outside (Area A-1) - Phase 2	5	10-13-20	10-20-20
64E.A3.STORM.205	Install Storm Drain Pipe & Structures - I-64 EB Outside (Area A-3) - Phas	19	10-13-20	11-16-20
64W.A3.STORM.205	Install Storm Drain Pipe & Structures - I-64 WB Outside (Area A-3) - Pha	19	10-29-20	12-04-20
64W.A5.OFAL.205	Perform Outfall Restoration - I-64 WB Outside (Area A-5) - Phase 2	5	11-16-20	11-24-20
64E.A5.STORM.205	Install Storm Drain Pipe & Structures - I-64 EB Outside (Area A-5) - Phas	4	01-22-21	01-28-21
64W.A1.SWMP.A1-1.205	Construct Pond A1-1 - I-64 WB Outside (Area A-1) 2041+00 - Phase 2	15	01-26-21	02-22-21
64W.A1.STORM.205	Install Storm Drain Pipe & Structures - I-64 WB Outside (Area A-1) - Pha	3	02-01-21	02-04-21
64W.A1.OFAL.205	Perform Outfall Restoration - I-64 WB Outside (Area A-1) - Phase 2	5	04-23-21	04-30-21
64W.A3.OFAL.205	Perform Outfall Restoration - I-64 WB Outside (Area A-3) - Phase 2	5	04-29-21	05-06-21
64E.A3.OFAL.205	Perform Outfall Restoration - I-64 EB Outside (Area A-3) - Phase 2	5	04-29-21	05-06-21
64E.A5.OFAL.205	Perform Outfall Restoration - I-64 EB Outside (Area A-5) - Phase 2	5	04-30-21	05-07-21
Area B		397	07-05-19	08-04-20
Roadway		397	07-05-19	08-04-20
Preparation		24	07-09-19	08-23-19
64E.B3.CLGR.205	Clear & Grub Trees - I-64 EB Outside (Area B-3) - Phase 2	2	07-09-19	07-11-19
64E.B1.CLGR.205	Clear & Grub Trees - I-64 EB Outside (Area B-1) - Phase 2	2	08-13-19	08-15-19
64E.B3.CLGR.215	Clear & Grub Trees - I-64 WB Outside (Area B-3) - Phase 2	2	08-16-19	08-19-19
64W.B1.CLGR.205	Clear & Grub Trees - I-64 WB Outside (Area B-1) - Phase 2	2	08-20-19	08-23-19
Maintenance of Traffic		386	07-05-19	07-24-20
64E.B3.TSTR.205	Eradicate & Install Temp. Striping (Shifting Traffic to Temp Crossover/Nev	2	07-05-19	07-08-19
64E.B3.TBAR.205	Install Temp. Barrier Wall - I-64 EB Outside (Area B-3) - Phase 2	2	07-09-19	07-11-19
64E.B1.TSTR.205	Eradicate & Install Temp. Striping (Shifting Traffic to Temp Crossover/Nev	2	08-08-19	08-09-19
64E.B1.TBAR.205	Install Temp. Barrier Wall - I-64 EB Outside (Area B-1) - Phase 2	4	08-12-19	08-15-19
64E.B1.RBAR.205	Remove Temp Barrier - I-64 EB Outside (Area B-1) - Phase 2	4	07-20-20	07-24-20
64E.B3.RBAR.205	Remove Temp Barrier - I-64 EB Outside (Area B-3) - Phase 2	2	07-20-20	07-21-20
Demolition		116	07-12-19	01-24-20
64E.B3.DRDW.205	Demo Existing Roadway - I-64 EB Outside (Area B-3) - Phase 2	7	07-12-19	07-23-19
64E.B1.DRDW.205	Demo Existing Roadway - I-64 EB Outside (Area B-1) - Phase 2	11	01-07-20	01-24-20
Roadway		273	07-23-19	04-20-20
64E.B3.ECUT.205	Earthwork Cut - I-64 EB Outside (Area B-3) - Phase 2	3	07-23-19	07-29-19
64E.B3.EFIL.205	Earthwork Fill - I-64 EB Outside (Area B-3) - Phase 2	3	08-02-19	08-06-19



Remaining Level of Effort
Actual Work
Remaining Work
Critical Remaining Work
Milestone
Summary

State Project No.: 0064-965-229, P-101, R-201, C-501, B-638, B-639, B-640, B-641, B-642, B-643, D-609, D-610, D-611
Federal Project No.: NHPP-064-3 (498)
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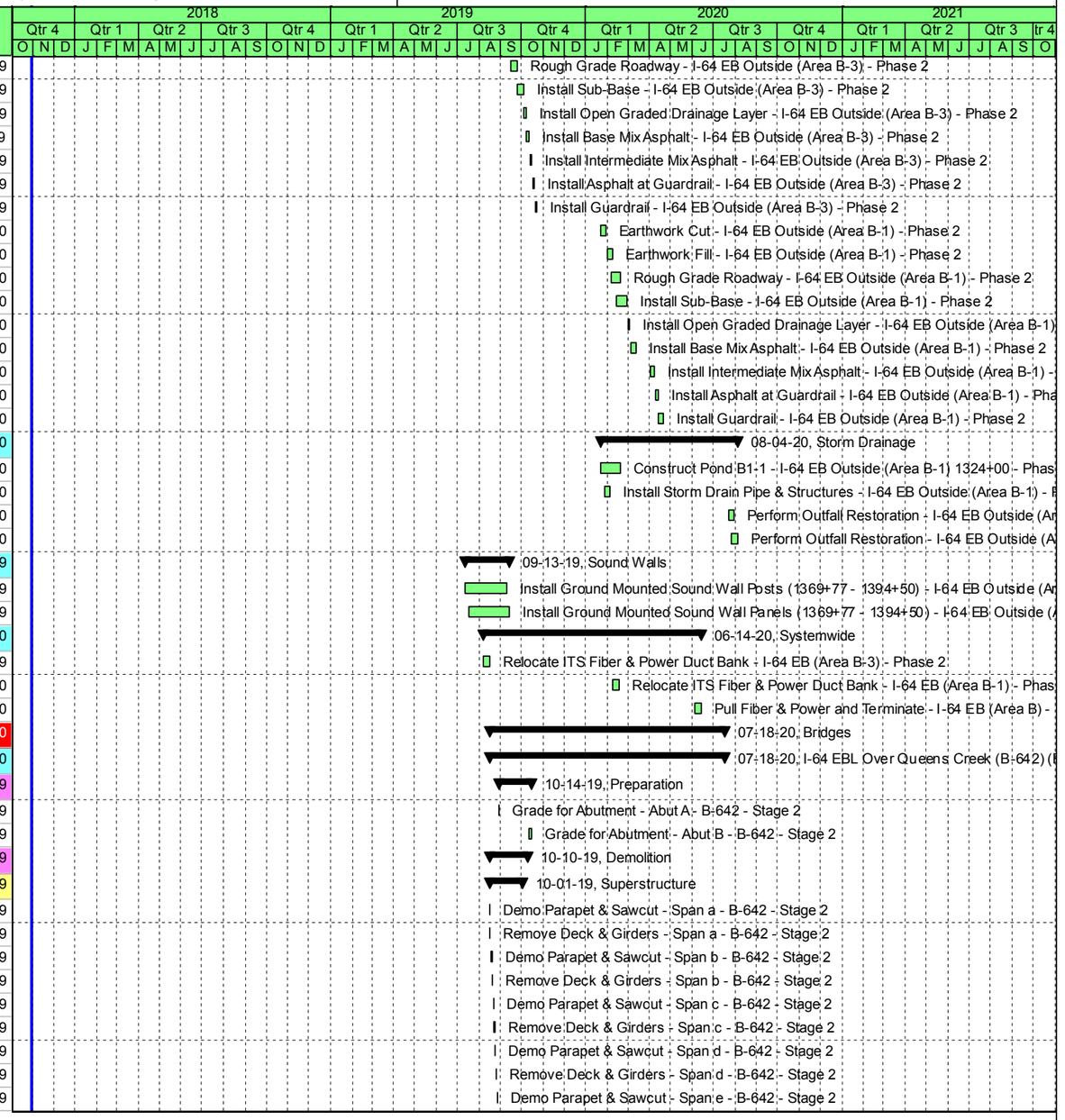
Activity ID	Activity Name	Original Duration	Start	Finish
64E.B3.RGRD.205	Rough Grade Roadway - I-64 EB Outside (Area B-3) - Phase 2	5	09-16-19	09-24-19
64E.B3.BASE.205	Install Sub-Base - I-64 EB Outside (Area B-3) - Phase 2	6	09-24-19	10-03-19
64E.B3.OGDL.205	Install Open Graded Drainage Layer - I-64 EB Outside (Area B-3) - Phas	2	10-04-19	10-07-19
64E.B3.ASBM.205	Install Base Mix Asphalt - I-64 EB Outside (Area B-3) - Phase 2	3	10-08-19	10-11-19
64E.B3.ASIM.205	Install Intermediate Mix Asphalt - I-64 EB Outside (Area B-3) - Phase 2	2	10-14-19	10-15-19
64E.B3.ASGR.205	Install Asphalt at Guardrail - I-64 EB Outside (Area B-3) - Phase 2	2	10-17-19	10-18-19
64E.B3.GRAIL.205	Install Guardrail - I-64 EB Outside (Area B-3) - Phase 2	2	10-21-19	10-22-19
64E.B1.ECUT.205	Earthwork Cut - I-64 EB Outside (Area B-1) - Phase 2	5	01-23-20	01-30-20
64E.B1.EFIL.205	Earthwork Fill - I-64 EB Outside (Area B-1) - Phase 2	5	01-31-20	02-07-20
64E.B1.RGRD.205	Rough Grade Roadway - I-64 EB Outside (Area B-1) - Phase 2	7	02-06-20	02-18-20
64E.B1.BASE.205	Install Sub-Base - I-64 EB Outside (Area B-1) - Phase 2	9	02-13-20	02-28-20
64E.B1.OGDL.205	Install Open Graded Drainage Layer - I-64 EB Outside (Area B-1) - Phas	2	03-02-20	03-03-20
64E.B1.ASBM.205	Install Base Mix Asphalt - I-64 EB Outside (Area B-1) - Phase 2	5	03-05-20	03-13-20
64E.B1.ASIM.205	Install Intermediate Mix Asphalt - I-64 EB Outside (Area B-1) - Phase 2	2	04-02-20	04-07-20
64E.B1.ASGR.205	Install Asphalt at Guardrail - I-64 EB Outside (Area B-1) - Phase 2	3	04-09-20	04-13-20
64E.B1.GRAIL.205	Install Guardrail - I-64 EB Outside (Area B-1) - Phase 2	3	04-14-20	04-20-20
Storm Drainage		103	01-23-20	08-04-20
64E.B1.SWMP.B1-1.205	Construct Pond B1-1 - I-64 EB Outside (Area B-1) 1324+00 - Phase 2	15	01-23-20	02-18-20
64E.B1.STORM.205	Install Storm Drain Pipe & Structures - I-64 EB Outside (Area B-1) - Phas	4	01-28-20	02-03-20
64E.B3.OFAL.205	Perform Outfall Restoration - I-64 EB Outside (Area B-3) - Phase 2	5	07-23-20	07-31-20
64E.B1.OFAL.205	Perform Outfall Restoration - I-64 EB Outside (Area B-1) - Phase 2	5	07-27-20	08-04-20
Sound Walls		45	07-12-19	09-13-19
64E.B3.GMSW.205	Install Ground Mounted Sound Wall Posts (1369+77 - 1394+50) - I-64 EB	42	07-12-19	09-10-19
64E.B3.GMSW.210	Install Ground Mounted Sound Wall Panels (1369+77 - 1394+50) - I-64 EI	42	07-17-19	09-13-19
Systemwide		313	08-07-19	06-14-20
64E.B3.ITS.205	Relocate ITS Fiber & Power Duct Bank - I-64 EB (Area B-3) - Phase 2	10	08-07-19	08-16-19
64E.B1.ITS.205	Relocate ITS Fiber & Power Duct Bank - I-64 EB (Area B-1) - Phase 2	10	02-08-20	02-17-20
64E.B3.ITS.215	Pull Fiber & Power and Terminate - I-64 EB (Area B) - Phase 2	10	06-05-20	06-14-20
Bridges		338	08-16-19	07-18-20
I-64 EBL Over Queens Creek (B-642) (Replacement)		338	08-16-19	07-18-20
Preparation		25	08-29-19	10-14-19
A3.B642.ABA.GRAD.205	Grade for Abutment - Abut A - B-642 - Stage 2	2	08-29-19	08-30-19
A3.B642.ABB.GRAD.205	Grade for Abutment - Abut B - B-642 - Stage 2	2	10-11-19	10-14-19
Demolition		41	08-16-19	10-10-19
Superstructure		34	08-16-19	10-01-19
A3.B642.SA.DDEK.205	Demo Parapet & Sawcut - Span a - B-642 - Stage 2	1	08-16-19	08-16-19
A3.B642.SA.DGRD.205	Remove Deck & Girders - Span a - B-642 - Stage 2	1	08-17-19	08-17-19
A3.B642.SB.DDEK.205	Demo Parapet & Sawcut - Span b - B-642 - Stage 2	1	08-19-19	08-19-19
A3.B642.SB.DGRD.205	Remove Deck & Girders - Span b - B-642 - Stage 2	1	08-20-19	08-20-19
A3.B642.SC.DDEK.205	Demo Parapet & Sawcut - Span c - B-642 - Stage 2	1	08-22-19	08-22-19
A3.B642.SC.DGRD.205	Remove Deck & Girders - Span c - B-642 - Stage 2	1	08-23-19	08-23-19
A3.B642.SD.DDEK.205	Demo Parapet & Sawcut - Span d - B-642 - Stage 2	1	08-24-19	08-24-19
A3.B642.SD.DGRD.205	Remove Deck & Girders - Span d - B-642 - Stage 2	1	08-26-19	08-26-19
A3.B642.SE.DDEK.205	Demo Parapet & Sawcut - Span e - B-642 - Stage 2	1	08-27-19	08-27-19



Remaining Level of Effort
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Summary

State Project No.: 0064-965-229, P-101, R-201, C-501, B-638, B-639, B-640, B-641, B-642, B-643, D-609, D-610, D-611
Federal Project No.: NHPP-064-3 (498)
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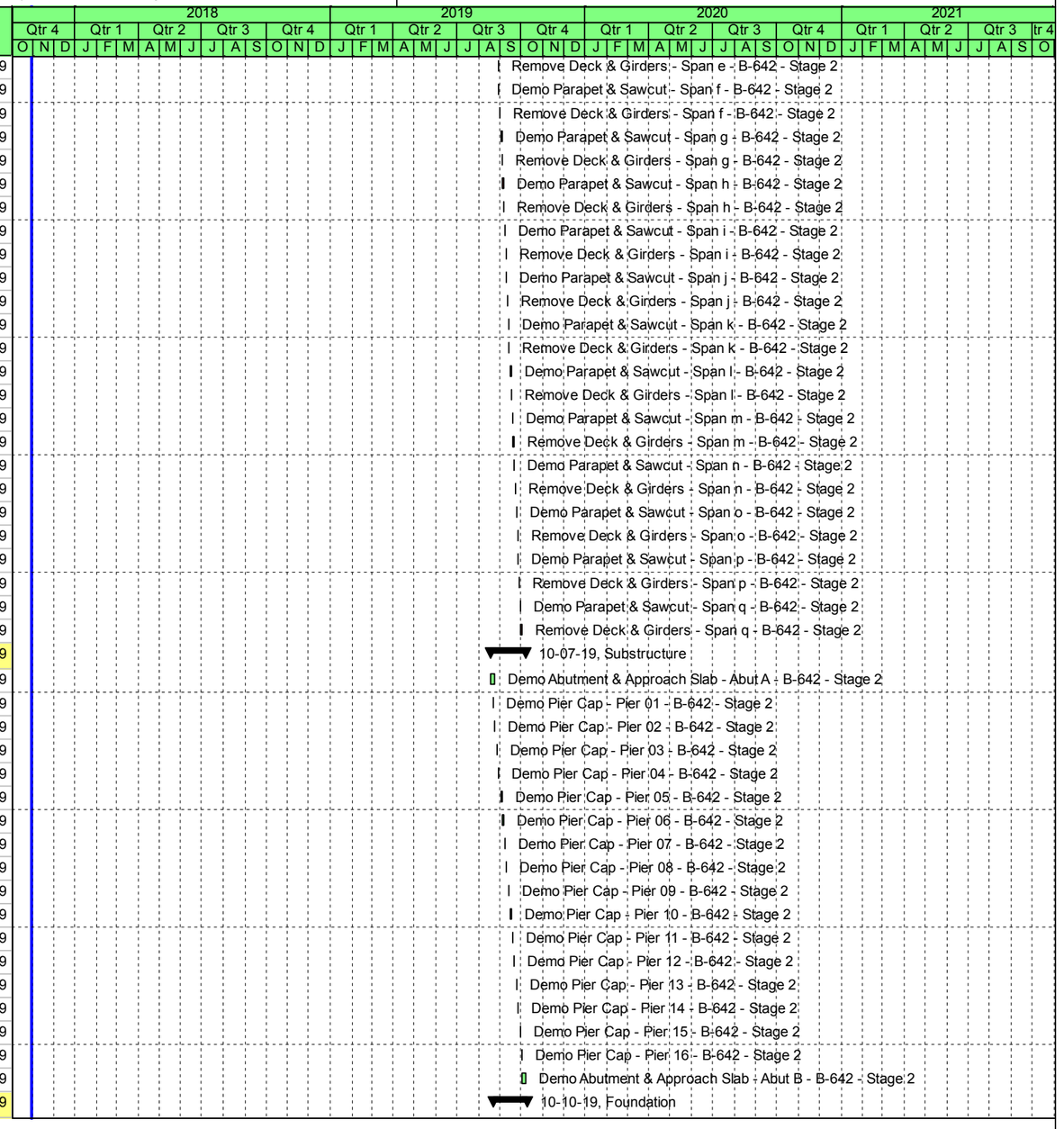
Activity ID	Activity Name	Original Duration	Start	Finish
A3.B642.SE.DGRD.205	Remove Deck & Girders - Span e - B-642 - Stage 2	1	08-29-19	08-29-19
A3.B642.SF.DDEK.205	Demo Parapet & Sawcut - Span f - B-642 - Stage 2	1	08-30-19	08-30-19
A3.B642.SF.DGRD.205	Remove Deck & Girders - Span f - B-642 - Stage 2	1	08-31-19	08-31-19
A3.B642.SG.DDEK.205	Demo Parapet & Sawcut - Span g - B-642 - Stage 2	1	09-03-19	09-03-19
A3.B642.SG.DGRD.205	Remove Deck & Girders - Span g - B-642 - Stage 2	1	09-04-19	09-04-19
A3.B642.SH.DDEK.205	Demo Parapet & Sawcut - Span h - B-642 - Stage 2	1	09-05-19	09-05-19
A3.B642.SH.DGRD.205	Remove Deck & Girders - Span h - B-642 - Stage 2	1	09-06-19	09-06-19
A3.B642.SI.DDEK.205	Demo Parapet & Sawcut - Span i - B-642 - Stage 2	1	09-07-19	09-07-19
A3.B642.SI.DGRD.205	Remove Deck & Girders - Span i - B-642 - Stage 2	1	09-09-19	09-09-19
A3.B642.SJ.DDEK.205	Demo Parapet & Sawcut - Span j - B-642 - Stage 2	1	09-10-19	09-10-19
A3.B642.SJ.DGRD.205	Remove Deck & Girders - Span j - B-642 - Stage 2	1	09-12-19	09-12-19
A3.B642.SK.DDEK.205	Demo Parapet & Sawcut - Span k - B-642 - Stage 2	1	09-13-19	09-13-19
A3.B642.SK.DGRD.205	Remove Deck & Girders - Span k - B-642 - Stage 2	1	09-14-19	09-14-19
A3.B642.SL.DDEK.205	Demo Parapet & Sawcut - Span l - B-642 - Stage 2	1	09-16-19	09-16-19
A3.B642.SL.DGRD.205	Remove Deck & Girders - Span l - B-642 - Stage 2	1	09-17-19	09-17-19
A3.B642.SM.DDEK.205	Demo Parapet & Sawcut - Span m - B-642 - Stage 2	1	09-19-19	09-19-19
A3.B642.SM.DGRD.205	Remove Deck & Girders - Span m - B-642 - Stage 2	1	09-20-19	09-20-19
A3.B642.SN.DDEK.205	Demo Parapet & Sawcut - Span n - B-642 - Stage 2	1	09-21-19	09-21-19
A3.B642.SN.DGRD.205	Remove Deck & Girders - Span n - B-642 - Stage 2	1	09-23-19	09-23-19
A3.B642.SO.DDEK.205	Demo Parapet & Sawcut - Span o - B-642 - Stage 2	1	09-24-19	09-24-19
A3.B642.SO.DGRD.205	Remove Deck & Girders - Span o - B-642 - Stage 2	1	09-26-19	09-26-19
A3.B642.SP.DDEK.205	Demo Parapet & Sawcut - Span p - B-642 - Stage 2	1	09-27-19	09-27-19
A3.B642.SP.DGRD.205	Remove Deck & Girders - Span p - B-642 - Stage 2	1	09-28-19	09-28-19
A3.B642.SQ.DDEK.205	Demo Parapet & Sawcut - Span q - B-642 - Stage 2	1	09-30-19	09-30-19
A3.B642.SQ.DGRD.205	Remove Deck & Girders - Span q - B-642 - Stage 2	1	10-01-19	10-01-19
Substructure		37	08-19-19	10-07-19
A3.B642.ABA.DABT.205	Demo Abutment & Approach Slab - Abut A - B-642 - Stage 2	5	08-19-19	08-24-19
A3.B642.P01.DCAP.205	Demo Pier Cap - Pier 01 - B-642 - Stage 2	1	08-22-19	08-22-19
A3.B642.P02.DCAP.205	Demo Pier Cap - Pier 02 - B-642 - Stage 2	1	08-24-19	08-24-19
A3.B642.P03.DCAP.205	Demo Pier Cap - Pier 03 - B-642 - Stage 2	1	08-27-19	08-27-19
A3.B642.P04.DCAP.205	Demo Pier Cap - Pier 04 - B-642 - Stage 2	1	08-30-19	08-30-19
A3.B642.P05.DCAP.205	Demo Pier Cap - Pier 05 - B-642 - Stage 2	1	09-03-19	09-03-19
A3.B642.P06.DCAP.205	Demo Pier Cap - Pier 06 - B-642 - Stage 2	1	09-05-19	09-05-19
A3.B642.P07.DCAP.205	Demo Pier Cap - Pier 07 - B-642 - Stage 2	1	09-07-19	09-07-19
A3.B642.P08.DCAP.205	Demo Pier Cap - Pier 08 - B-642 - Stage 2	1	09-10-19	09-10-19
A3.B642.P09.DCAP.205	Demo Pier Cap - Pier 09 - B-642 - Stage 2	1	09-13-19	09-13-19
A3.B642.P10.DCAP.205	Demo Pier Cap - Pier 10 - B-642 - Stage 2	1	09-16-19	09-16-19
A3.B642.P11.DCAP.205	Demo Pier Cap - Pier 11 - B-642 - Stage 2	1	09-19-19	09-19-19
A3.B642.P12.DCAP.205	Demo Pier Cap - Pier 12 - B-642 - Stage 2	1	09-21-19	09-21-19
A3.B642.P13.DCAP.205	Demo Pier Cap - Pier 13 - B-642 - Stage 2	1	09-24-19	09-24-19
A3.B642.P14.DCAP.205	Demo Pier Cap - Pier 14 - B-642 - Stage 2	1	09-27-19	09-27-19
A3.B642.P15.DCAP.205	Demo Pier Cap - Pier 15 - B-642 - Stage 2	1	09-30-19	09-30-19
A3.B642.P16.DCAP.205	Demo Pier Cap - Pier 16 - B-642 - Stage 2	1	10-02-19	10-02-19
A3.B642.ABB.DABT.205	Demo Abutment & Approach Slab - Abut B - B-642 - Stage 2	5	10-02-19	10-07-19
Foundation		36	08-23-19	10-10-19



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State Project No.: 0064-965-229, P-101, R-201, C-501, B-638, B-639, B-640, B-641, B-642, B-643, D-609, D-610, D-611
Federal Project No.: NHPP-064-3 (498)
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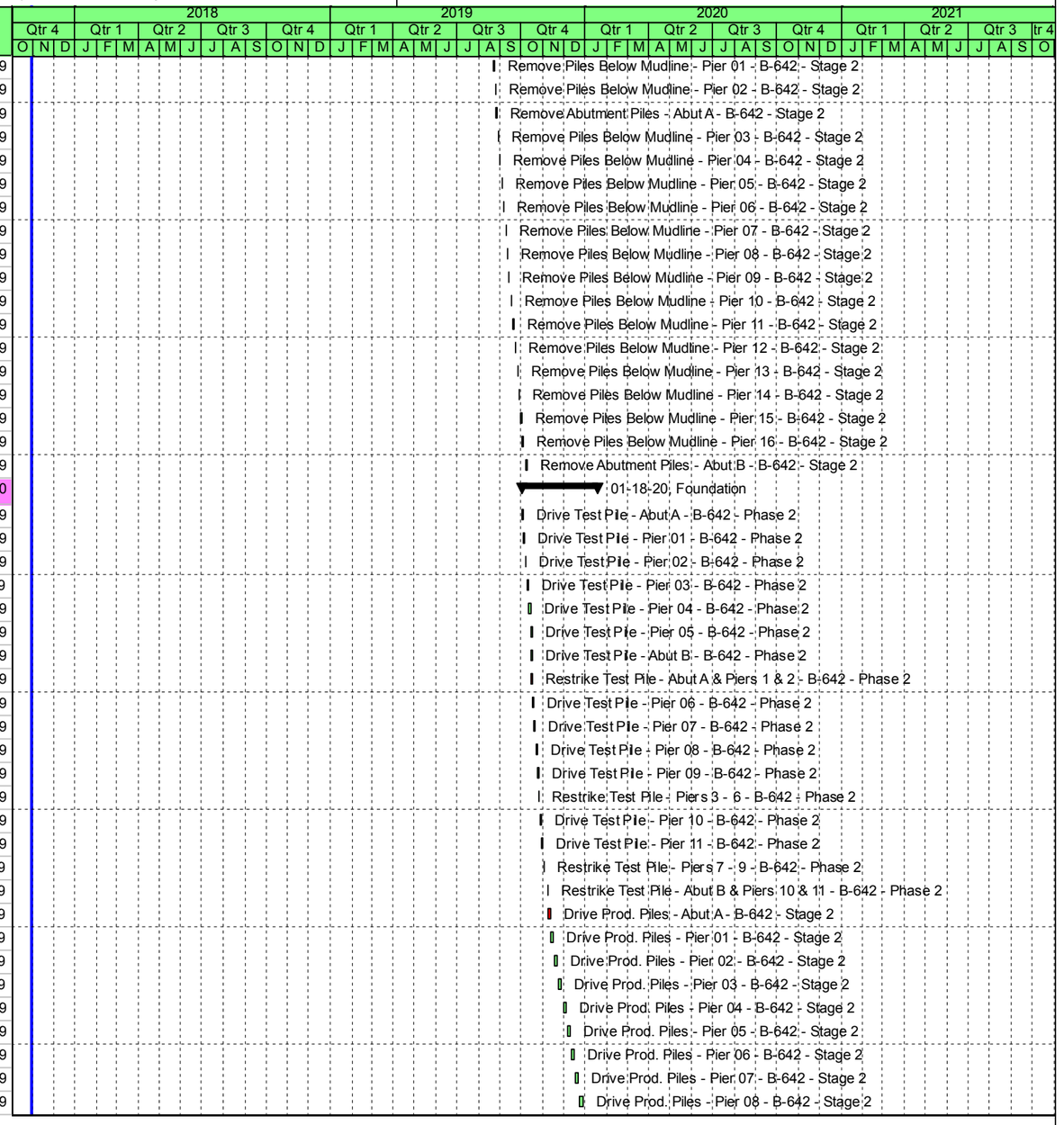
Activity ID	Activity Name	Original Duration	Start	Finish
A3.B642.P01.DPLE.205	Remove Piles Below Mudline - Pier 01 - B-642 - Stage 2	1	08-23-19	08-23-19
A3.B642.P02.DPLE.205	Remove Piles Below Mudline - Pier 02 - B-642 - Stage 2	1	08-26-19	08-26-19
A3.B642.ABA.DPLE.205	Remove Abutment Piles - Abut A - B-642 - Stage 2	2	08-26-19	08-27-19
A3.B642.P03.DPLE.205	Remove Piles Below Mudline - Pier 03 - B-642 - Stage 2	1	08-29-19	08-29-19
A3.B642.P04.DPLE.205	Remove Piles Below Mudline - Pier 04 - B-642 - Stage 2	1	08-31-19	08-31-19
A3.B642.P05.DPLE.205	Remove Piles Below Mudline - Pier 05 - B-642 - Stage 2	1	09-04-19	09-04-19
A3.B642.P06.DPLE.205	Remove Piles Below Mudline - Pier 06 - B-642 - Stage 2	1	09-06-19	09-06-19
A3.B642.P07.DPLE.205	Remove Piles Below Mudline - Pier 07 - B-642 - Stage 2	1	09-09-19	09-09-19
A3.B642.P08.DPLE.205	Remove Piles Below Mudline - Pier 08 - B-642 - Stage 2	1	09-12-19	09-12-19
A3.B642.P09.DPLE.205	Remove Piles Below Mudline - Pier 09 - B-642 - Stage 2	1	09-14-19	09-14-19
A3.B642.P10.DPLE.205	Remove Piles Below Mudline - Pier 10 - B-642 - Stage 2	1	09-17-19	09-17-19
A3.B642.P11.DPLE.205	Remove Piles Below Mudline - Pier 11 - B-642 - Stage 2	1	09-20-19	09-20-19
A3.B642.P12.DPLE.205	Remove Piles Below Mudline - Pier 12 - B-642 - Stage 2	1	09-23-19	09-23-19
A3.B642.P13.DPLE.205	Remove Piles Below Mudline - Pier 13 - B-642 - Stage 2	1	09-26-19	09-26-19
A3.B642.P14.DPLE.205	Remove Piles Below Mudline - Pier 14 - B-642 - Stage 2	1	09-28-19	09-28-19
A3.B642.P15.DPLE.205	Remove Piles Below Mudline - Pier 15 - B-642 - Stage 2	1	10-01-19	10-01-19
A3.B642.P16.DPLE.205	Remove Piles Below Mudline - Pier 16 - B-642 - Stage 2	1	10-03-19	10-03-19
A3.B642.ABB.DPLE.205	Remove Abutment Piles - Abut B - B-642 - Stage 2	2	10-08-19	10-10-19
Foundation		80	10-02-19	01-18-20
B2.B642.TST.PLE.AA	Drive Test Pile - Abut A - B-642 - Phase 2	2	10-02-19	10-03-19
B2.B642.TST.PLE.P01	Drive Test Pile - Pier 01 - B-642 - Phase 2	2	10-04-19	10-05-19
B2.B642.TST.PLE.P02	Drive Test Pile - Pier 02 - B-642 - Phase 2	2	10-07-19	10-08-19
B2.B642.TST.PLE.P03	Drive Test Pile - Pier 03 - B-642 - Phase 2	2	10-10-19	10-11-19
B2.B642.TST.PLE.P04	Drive Test Pile - Pier 04 - B-642 - Phase 2	2	10-12-19	10-14-19
B2.B642.TST.PLE.P05	Drive Test Pile - Pier 05 - B-642 - Phase 2	2	10-15-19	10-16-19
B2.B642.TST.PLE.AB	Drive Test Pile - Abut B - B-642 - Phase 2	2	10-15-19	10-16-19
B2.B642.RSTRK.005	Restrike Test Pile - Abut A & Piers 1 & 2 - B-642 - Phase 2	1	10-16-19	10-16-19
B2.B642.TST.PLE.P06	Drive Test Pile - Pier 06 - B-642 - Phase 2	2	10-17-19	10-18-19
B2.B642.TST.PLE.P07	Drive Test Pile - Pier 07 - B-642 - Phase 2	2	10-19-19	10-21-19
B2.B642.TST.PLE.P08	Drive Test Pile - Pier 08 - B-642 - Phase 2	2	10-22-19	10-24-19
B2.B642.TST.PLE.P09	Drive Test Pile - Pier 09 - B-642 - Phase 2	2	10-25-19	10-26-19
B2.B642.RSTRK.010	Restrike Test Pile - Piers 3 - 6 - B-642 - Phase 2	1	10-26-19	10-26-19
B2.B642.TST.PLE.P10	Drive Test Pile - Pier 10 - B-642 - Phase 2	2	10-28-19	10-29-19
B2.B642.TST.PLE.P11	Drive Test Pile - Pier 11 - B-642 - Phase 2	2	10-30-19	10-31-19
B2.B642.RSTRK.020	Restrike Test Pile - Piers 7 - 9 - B-642 - Phase 2	1	11-02-19	11-02-19
B2.B642.RSTRK.015	Restrike Test Pile - Abut B & Piers 10 & 11 - B-642 - Phase 2	1	11-08-19	11-08-19
A3.B642.ABA.PLE.205	Drive Prod. Piles - Abut A - B-642 - Stage 2	3	11-09-19	11-12-19
A3.B642.P01.PLE.205	Drive Prod. Piles - Pier 01 - B-642 - Stage 2	4	11-13-19	11-16-19
A3.B642.P02.PLE.205	Drive Prod. Piles - Pier 02 - B-642 - Stage 2	4	11-18-19	11-22-19
A3.B642.P03.PLE.205	Drive Prod. Piles - Pier 03 - B-642 - Stage 2	4	11-23-19	11-27-19
A3.B642.P04.PLE.205	Drive Prod. Piles - Pier 04 - B-642 - Stage 2	4	11-30-19	12-05-19
A3.B642.P05.PLE.205	Drive Prod. Piles - Pier 05 - B-642 - Stage 2	4	12-06-19	12-10-19
A3.B642.P06.PLE.205	Drive Prod. Piles - Pier 06 - B-642 - Stage 2	4	12-12-19	12-16-19
A3.B642.P07.PLE.205	Drive Prod. Piles - Pier 07 - B-642 - Stage 2	4	12-17-19	12-21-19
A3.B642.P08.PLE.205	Drive Prod. Piles - Pier 08 - B-642 - Stage 2	4	12-23-19	12-28-19



Remaining Level of Effort
Actual Work
Remaining Work
Critical Remaining Work
Milestone
Summary

State Project No.: 0064-965-229, P-101, R-201, C-501, B-638, B-639, B-640, B-641, B-642, B-643, D-609, D-610, D-611
Federal Project No.: NHPP-064-3 (498)
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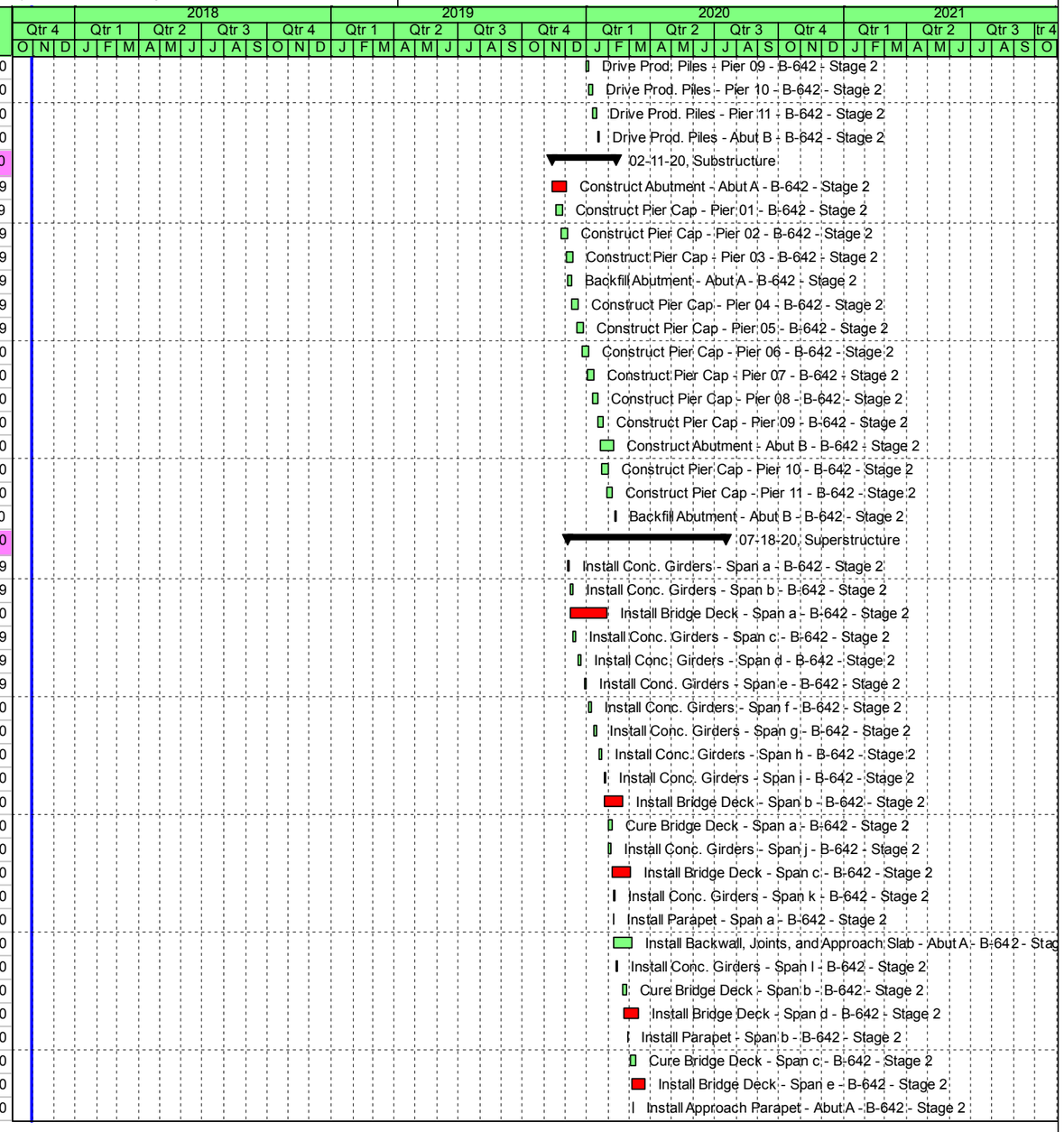
Activity ID	Activity Name	Original Duration	Start	Finish
A3.B642.P09.PLE.205	Drive Prod. Piles - Pier 09 - B-642 - Stage 2	4	12-30-19	01-03-20
A3.B642.P10.PLE.205	Drive Prod. Piles - Pier 10 - B-642 - Stage 2	4	01-04-20	01-09-20
A3.B642.P11.PLE.205	Drive Prod. Piles - Pier 11 - B-642 - Stage 2	4	01-10-20	01-14-20
A3.B642.ABB.PLE.205	Drive Prod. Piles - Abut B - B-642 - Stage 2	3	01-16-20	01-18-20
Substructure		91	11-13-19	02-11-20
A3.B642.ABA.ABUT.205	Construct Abutment - Abut A - B-642 - Stage 2	15	11-13-19	12-03-19
A3.B642.P01.CAP.205	Construct Pier Cap - Pier 01 - B-642 - Stage 2	7	11-18-19	11-26-19
A3.B642.P02.CAP.205	Construct Pier Cap - Pier 02 - B-642 - Stage 2	7	11-25-19	12-05-19
A3.B642.P03.CAP.205	Construct Pier Cap - Pier 03 - B-642 - Stage 2	7	12-03-19	12-12-19
A3.B642.ABA.BKF.205	Backfill Abutment - Abut A - B-642 - Stage 2	2	12-05-19	12-09-19
A3.B642.P04.CAP.205	Construct Pier Cap - Pier 04 - B-642 - Stage 2	7	12-10-19	12-19-19
A3.B642.P05.CAP.205	Construct Pier Cap - Pier 05 - B-642 - Stage 2	7	12-17-19	12-27-19
A3.B642.P06.CAP.205	Construct Pier Cap - Pier 06 - B-642 - Stage 2	7	12-26-19	01-03-20
A3.B642.P07.CAP.205	Construct Pier Cap - Pier 07 - B-642 - Stage 2	7	01-02-20	01-10-20
A3.B642.P08.CAP.205	Construct Pier Cap - Pier 08 - B-642 - Stage 2	7	01-09-20	01-17-20
A3.B642.P09.CAP.205	Construct Pier Cap - Pier 09 - B-642 - Stage 2	7	01-16-20	01-24-20
A3.B642.ABB.ABUT.205	Construct Abutment - Abut B - B-642 - Stage 2	15	01-21-20	02-07-20
A3.B642.P10.CAP.205	Construct Pier Cap - Pier 10 - B-642 - Stage 2	7	01-23-20	01-31-20
A3.B642.P11.CAP.205	Construct Pier Cap - Pier 11 - B-642 - Stage 2	7	01-30-20	02-06-20
A3.B642.ABB.BKF.205	Backfill Abutment - Abut B - B-642 - Stage 2	2	02-10-20	02-11-20
Superstructure		227	12-05-19	07-18-20
A3.B642.SA.GRD.205	Install Conc. Girders - Span a - B-642 - Stage 2	3	12-05-19	12-07-19
A3.B642.SB.GRD.205	Install Conc. Girders - Span b - B-642 - Stage 2	3	12-09-19	12-12-19
A3.B642.SA.DEK.205	Install Bridge Deck - Span a - B-642 - Stage 2	15	12-09-19	01-30-20
A3.B642.SC.GRD.205	Install Conc. Girders - Span c - B-642 - Stage 2	3	12-13-19	12-16-19
A3.B642.SD.GRD.205	Install Conc. Girders - Span d - B-642 - Stage 2	3	12-20-19	12-23-19
A3.B642.SE.GRD.205	Install Conc. Girders - Span e - B-642 - Stage 2	3	12-28-19	12-31-19
A3.B642.SF.GRD.205	Install Conc. Girders - Span f - B-642 - Stage 2	3	01-04-20	01-07-20
A3.B642.SG.GRD.205	Install Conc. Girders - Span g - B-642 - Stage 2	3	01-11-20	01-14-20
A3.B642.SH.GRD.205	Install Conc. Girders - Span h - B-642 - Stage 2	3	01-18-20	01-22-20
A3.B642.SI.GRD.205	Install Conc. Girders - Span i - B-642 - Stage 2	3	01-25-20	01-28-20
A3.B642.SB.DEK.205	Install Bridge Deck - Span b - B-642 - Stage 2	12	01-25-20	02-20-20
A3.B642.SA.CUR.205	Cure Bridge Deck - Span a - B-642 - Stage 2	7	01-31-20	02-06-20
A3.B642.SJ.GRD.205	Install Conc. Girders - Span j - B-642 - Stage 2	3	02-01-20	02-04-20
A3.B642.SC.DEK.205	Install Bridge Deck - Span c - B-642 - Stage 2	12	02-06-20	03-03-20
A3.B642.SK.GRD.205	Install Conc. Girders - Span k - B-642 - Stage 2	3	02-07-20	02-10-20
A3.B642.SA.BAR.205	Install Parapet - Span a - B-642 - Stage 2	2	02-07-20	02-08-20
A3.B642.ABA.APR.205	Install Backwall, Joints, and Approach Slab - Abut A - B-642 - Stage 2	20	02-07-20	03-05-20
A3.B642.SL.GRD.205	Install Conc. Girders - Span l - B-642 - Stage 2	3	02-11-20	02-14-20
A3.B642.SB.CUR.205	Cure Bridge Deck - Span b - B-642 - Stage 2	7	02-21-20	02-27-20
A3.B642.SD.DEK.205	Install Bridge Deck - Span d - B-642 - Stage 2	12	02-22-20	03-14-20
A3.B642.SB.BAR.205	Install Parapet - Span b - B-642 - Stage 2	2	02-28-20	02-29-20
A3.B642.SC.CUR.205	Cure Bridge Deck - Span c - B-642 - Stage 2	7	03-04-20	03-10-20
A3.B642.SE.DEK.205	Install Bridge Deck - Span e - B-642 - Stage 2	12	03-05-20	03-23-20
A3.B642.ABA.BAR.205	Install Approach Parapet - Abut A - B-642 - Stage 2	1	03-06-20	03-06-20



Remaining Level of Effort
Actual Work
Remaining Work
Critical Remaining Work
Milestone
Summary

State Project No.: 0064-965-229, P-101, R-201, C-501, B-638, B-639, B-640, B-641, B-642, B-643, D-609, D-610, D-611
Federal Project No.: NHPP-064-3 (498)
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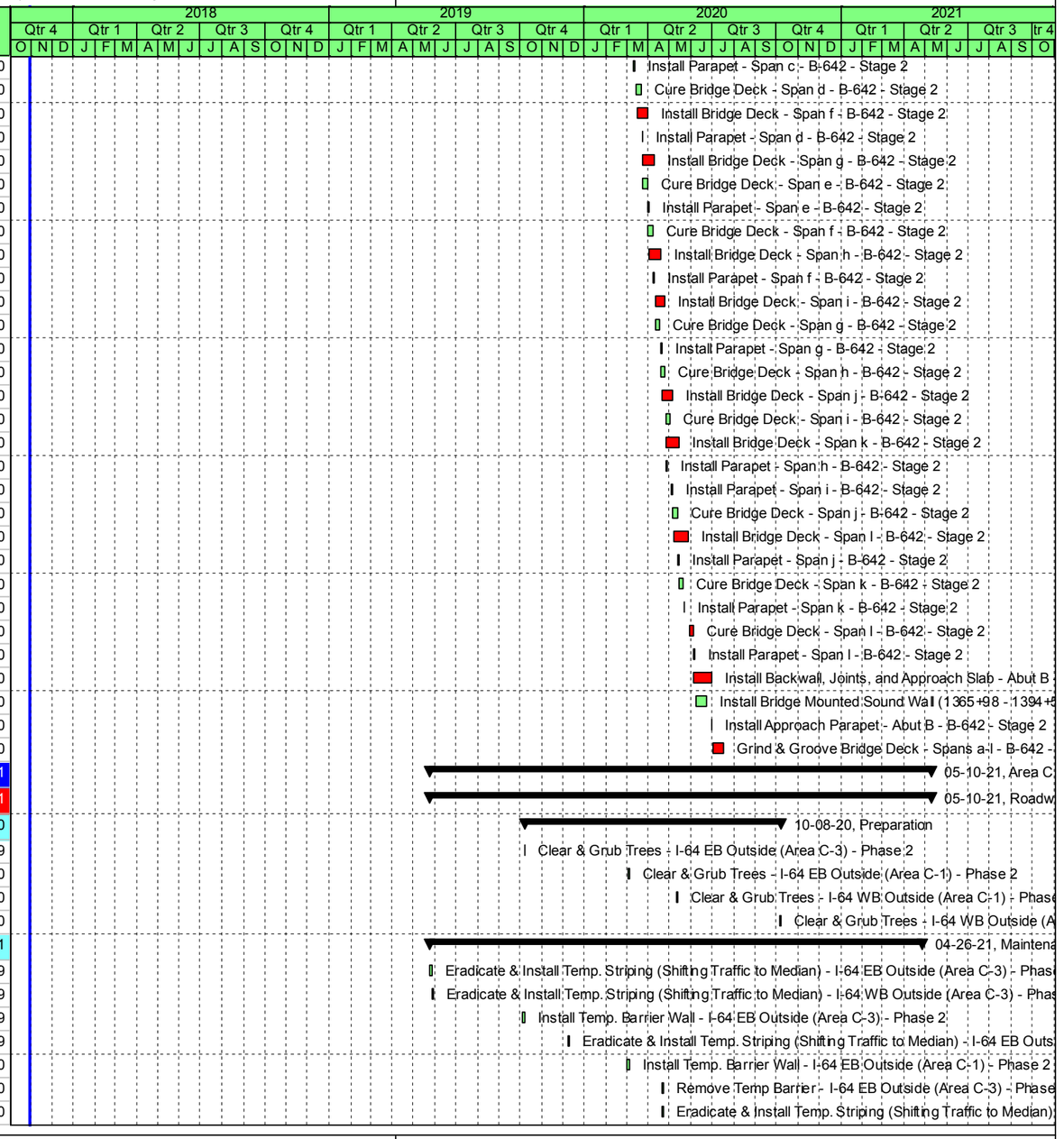
Activity ID	Activity Name	Original Duration	Start	Finish
A3.B642.SC.BAR.205	Install Parapet - Span c - B-642 - Stage 2	2	03-11-20	03-12-20
A3.B642.SD.CUR.205	Cure Bridge Deck - Span d - B-642 - Stage 2	7	03-15-20	03-21-20
A3.B642.SF.DEK.205	Install Bridge Deck - Span f - B-642 - Stage 2	12	03-16-20	03-31-20
A3.B642.SD.BAR.205	Install Parapet - Span d - B-642 - Stage 2	2	03-23-20	03-24-20
A3.B642.SG.DEK.205	Install Bridge Deck - Span g - B-642 - Stage 2	12	03-24-20	04-10-20
A3.B642.SE.CUR.205	Cure Bridge Deck - Span e - B-642 - Stage 2	7	03-24-20	03-30-20
A3.B642.SE.BAR.205	Install Parapet - Span e - B-642 - Stage 2	2	03-31-20	04-02-20
A3.B642.SF.CUR.205	Cure Bridge Deck - Span f - B-642 - Stage 2	7	04-01-20	04-07-20
A3.B642.SH.DEK.205	Install Bridge Deck - Span h - B-642 - Stage 2	12	04-02-20	04-18-20
A3.B642.SF.BAR.205	Install Parapet - Span f - B-642 - Stage 2	2	04-08-20	04-09-20
A3.B642.SI.DEK.205	Install Bridge Deck - Span i - B-642 - Stage 2	12	04-11-20	04-25-20
A3.B642.SG.CUR.205	Cure Bridge Deck - Span g - B-642 - Stage 2	7	04-11-20	04-17-20
A3.B642.SG.BAR.205	Install Parapet - Span g - B-642 - Stage 2	2	04-18-20	04-20-20
A3.B642.SH.CUR.205	Cure Bridge Deck - Span h - B-642 - Stage 2	7	04-19-20	04-25-20
A3.B642.SJ.DEK.205	Install Bridge Deck - Span j - B-642 - Stage 2	12	04-20-20	05-05-20
A3.B642.SI.CUR.205	Cure Bridge Deck - Span i - B-642 - Stage 2	7	04-26-20	05-02-20
A3.B642.SK.DEK.205	Install Bridge Deck - Span k - B-642 - Stage 2	12	04-27-20	05-14-20
A3.B642.SH.BAR.205	Install Parapet - Span h - B-642 - Stage 2	2	04-27-20	04-28-20
A3.B642.SI.BAR.205	Install Parapet - Span i - B-642 - Stage 2	2	05-04-20	05-05-20
A3.B642.SJ.CUR.205	Cure Bridge Deck - Span j - B-642 - Stage 2	7	05-06-20	05-12-20
A3.B642.SL.DEK.205	Install Bridge Deck - Span l - B-642 - Stage 2	15	05-07-20	05-28-20
A3.B642.SJ.BAR.205	Install Parapet - Span j - B-642 - Stage 2	2	05-14-20	05-15-20
A3.B642.SK.CUR.205	Cure Bridge Deck - Span k - B-642 - Stage 2	7	05-15-20	05-21-20
A3.B642.SK.BAR.205	Install Parapet - Span k - B-642 - Stage 2	2	05-22-20	05-23-20
A3.B642.SL.CUR.205	Cure Bridge Deck - Span l - B-642 - Stage 2	7	05-29-20	06-04-20
A3.B642.SL.BAR.205	Install Parapet - Span l - B-642 - Stage 2	2	06-05-20	06-06-20
A3.B642.ABB.APR.205	Install Backwall, Joints, and Approach Slab - Abut B - B-642 - Stage 2	20	06-05-20	06-30-20
B2.B642.SWAL.205	Install Bridge Mounted Sound Wall (1365+98 - 1394+50) - B-642 - Stage 2	12	06-08-20	06-23-20
A3.B642.ABB.BAR.205	Install Approach Parapet - Abut B - B-642 - Stage 2	1	07-01-20	07-01-20
A3.B642.SAQ.GRV.205	Grind & Groove Bridge Deck - Spans a-l - B-642 - Stage 2	12	07-02-20	07-18-20
Area C		718	05-24-19	05-10-21
Roadway		718	05-24-19	05-10-21
Preparation		190	10-07-19	10-08-20
64E.C3.CLGR.205	Clear & Grub Trees - I-64 EB Outside (Area C-3) - Phase 2	2	10-07-19	10-08-19
64E.C1.CLGR.205	Clear & Grub Trees - I-64 EB Outside (Area C-1) - Phase 2	2	03-03-20	03-05-20
64W.C1.CLGR.205	Clear & Grub Trees - I-64 WB Outside (Area C-1) - Phase 2	2	05-11-20	05-12-20
64W.C3.CLGR.205	Clear & Grub Trees - I-64 WB Outside (Area C-3) - Phase 2	2	10-06-20	10-08-20
Maintenance of Traffic		704	05-24-19	04-26-21
64E.C3.TSTR.205	Eradicate & Install Temp. Striping (Shifting Traffic to Median) - I-64 EB Ou	2	05-24-19	05-28-19
64W.C3.TSTR.205	Eradicate & Install Temp. Striping (Shifting Traffic to Median) - I-64 WB O	2	05-28-19	05-30-19
64E.C3.TBAR.205	Install Temp. Barrier Wall - I-64 EB Outside (Area C-3) - Phase 2	3	10-04-19	10-08-19
64E.C1.TSTR.205	Eradicate & Install Temp. Striping (Shifting Traffic to Median) - I-64 EB Ou	2	12-09-19	12-10-19
64E.C1.TBAR.205	Install Temp. Barrier Wall - I-64 EB Outside (Area C-1) - Phase 2	3	03-02-20	03-05-20
64E.C3.RBAR.205	Remove Temp Barrier - I-64 EB Outside (Area C-3) - Phase 2	3	04-20-20	04-22-20
64W.C1.TSTR.205	Eradicate & Install Temp. Striping (Shifting Traffic to Median) - I-64 WB O	2	04-21-20	04-23-20



Remaining Level of Effort
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Milestone
Summary

State Project No.: 0064-965-229, P-101, R-201, C-501, B-638, B-639, B-640, B-641, B-642, B-643, D-609, D-610, D-611
Federal Project No.: NHPP-064-3 (498)
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Activity ID	Activity Name	Original Duration	Start	Finish
64E.C3.TSTR.210	Eradicate & Install Temp. Striping (Shifting Traffic to Final Configuration) -	2	04-23-20	04-24-20
64W.C1.TBAR.205	Install Temp. Barrier Wall - I-64 WB Outside (Area C-1) - Phase 2	3	05-08-20	05-12-20
64E.C1.RBAR.205	Remove Temp Barrier - I-64 EB Outside (Area C-1) - Phase 2	3	06-01-20	06-04-20
64E.C1.TSTR.210	Eradicate & Install Temp. Striping (Shifting Traffic to Final Configuration) -	1	06-05-20	06-05-20
64W.C1.RBAR.205	Remove Temp Barrier - I-64 WB Outside (Area C-1) - Phase 2	3	08-13-20	08-17-20
64W.C1.TSTR.210	Eradicate & Install Temp. Striping (Shifting Traffic to Final Configuration) -	1	08-18-20	08-18-20
64W.C3.TBAR.205	Install Temp. Barrier Wall - I-64 WB Outside (Area C-3) - Phase 2	3	10-05-20	10-08-20
64W.C3.RBAR.205	Remove Temp Barrier - I-64 WB Outside (Area C-3) - Phase 2	3	04-19-21	04-22-21
64W.C3.TSTR.210	Eradicate & Install Temp. Striping (Shifting Traffic to Final Configuration) -	2	04-23-21	04-26-21
Demolition		227	10-10-19	10-22-20
64E.C3.DRDW.205	Demo Existing Roadway - I-64 EB Outside (Area C-3) - Phase 2	9	10-10-19	10-22-19
64E.C1.DRDW.205	Demo Existing Roadway - I-64 EB Outside (Area C-1) - Phase 2	9	03-06-20	03-19-20
64W.C1.DRDW.205	Demo Existing Roadway - I-64 WB Outside (Area C-1) - Phase 2	9	05-14-20	05-28-20
64W.C3.DRDW.205	Demo Existing Roadway - I-64 WB Outside (Area C-3) - Phase 2	9	10-09-20	10-22-20
Roadway		572	10-17-19	05-10-21
64E.C3.ECUT.205	Earthwork Cut - I-64 EB Outside (Area C-3) - Phase 2	6	10-17-19	10-28-19
64E.C3.EFIL.205	Earthwork Fill - I-64 EB Outside (Area C-3) - Phase 2	6	11-11-19	11-19-19
64E.C3.RGRD.205	Rough Grade Roadway - I-64 EB Outside (Area C-3) - Phase 2	6	12-13-19	12-23-19
64E.C3.BASE.205	Install Sub-Base - I-64 EB Outside (Area C-3) - Phase 2	8	12-20-19	01-06-20
64E.C3.OGDL.205	Install Open Graded Drainage Layer - I-64 EB Outside (Area C-3) - Phas	2	01-17-20	01-21-20
64E.C3.ASBM.205	Install Base Mix Asphalt - I-64 EB Outside (Area C-3) - Phase 2	4	01-23-20	01-28-20
64E.C1.ECUT.205	Earthwork Cut - I-64 EB Outside (Area C-1) - Phase 2	6	03-13-20	03-24-20
64E.C3.ASIM.205	Install Intermediate Mix Asphalt - I-64 EB Outside (Area C-3) - Phase 2	2	04-02-20	04-07-20
64E.C3.ASGR.205	Install Asphalt at Guardrail - I-64 EB Outside (Area C-3) - Phase 2	2	04-09-20	04-10-20
64E.C1.EFIL.205	Earthwork Fill - I-64 EB Outside (Area C-1) - Phase 2	6	04-10-20	04-21-20
64E.C3.GRAIL.205	Install Guardrail - I-64 EB Outside (Area C-3) - Phase 2	3	04-13-20	04-17-20
64E.C1.RGRD.205	Rough Grade Roadway - I-64 EB Outside (Area C-1) - Phase 2	6	04-17-20	04-24-20
64E.C1.BARR.205	Install Permanent Barrier Wall - I-64 EB Outside (Area C-1) - Phase 2	3	04-24-20	04-28-20
64E.C1.BASE.205	Install Sub-Base - I-64 EB Outside (Area C-1) - Phase 2	8	04-24-20	05-07-20
64E.C3.ASSM.210	Install Surface Mix Asphalt - I-64 EB (Area C-3) - Phase 2	3	04-27-20	04-30-20
64E.C3.PSTR.210	Install Final Striping - I-64 EB (Area C-3) - Phase 2	6	04-28-20	05-08-20
64E.C1.OGDL.205	Install Open Graded Drainage Layer - I-64 EB Outside (Area C-1) - Phas	2	05-08-20	05-11-20
64E.C1.ASBM.205	Install Base Mix Asphalt - I-64 EB Outside (Area C-1) - Phase 2	4	05-12-20	05-18-20
64E.C1.ASIM.205	Install Intermediate Mix Asphalt - I-64 EB Outside (Area C-1) - Phase 2	2	05-19-20	05-21-20
64E.C1.ASGR.205	Install Asphalt at Guardrail - I-64 EB Outside (Area C-1) - Phase 2	2	05-22-20	05-26-20
64W.C1.ECUT.205	Earthwork Cut - I-64 WB Outside (Area C-1) - Phase 2	6	05-22-20	06-02-20
64E.C1.GRAIL.205	Install Guardrail - I-64 EB Outside (Area C-1) - Phase 2	2	05-28-20	05-29-20
64E.C1.ASSM.210	Install Surface Mix Asphalt - I-64 EB (Area C-1) - Phase 2	3	06-08-20	06-11-20
64E.C1.PSTR.210	Install Final Striping - I-64 EB (Area C-1) - Phase 2	6	06-09-20	06-19-20
64W.C1.EFIL.205	Earthwork Fill - I-64 WB Outside (Area C-1) - Phase 2	6	06-23-20	07-02-20
64W.C1.RGRD.205	Rough Grade Roadway - I-64 WB Outside (Area C-1) - Phase 2	6	06-29-20	07-09-20
64W.C1.BASE.205	Install Sub-Base - I-64 WB Outside (Area C-1) - Phase 2	8	07-07-20	07-21-20
64W.C1.BARR.205	Install Permanent Barrier Wall - I-64 WB Outside (Area C-1) - Phase 2	3	07-09-20	07-13-20
64W.C1.OGDL.205	Install Open Graded Drainage Layer - I-64 WB Outside (Area C-1) - Phas	2	07-23-20	07-24-20
64W.C1.ASBM.205	Install Base Mix Asphalt - I-64 WB Outside (Area C-1) - Phase 2	4	07-27-20	07-31-20

Remaining Level of Effort
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State Project No.: 0064-965-229, P-101, R-201, C-501, B-638, B-639, B-640, B-641, B-642, B-643, D-609, D-610, D-611
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SKANSKA

I-64 Capacity Improvements - Segment III

Proposal Date: September 14, 2017

Activity ID	Activity Name	Original Duration	Start	Finish
64W.C1.ASIM.205	Install Intermediate Mix Asphalt - I-64 WB Outside (Area C-1) - Phase 2	2	08-03-20	08-04-20
64W.C1.ASGR.205	Install Asphalt at Guardrail - I-64 WB Outside (Area C-1) - Phase 2	2	08-06-20	08-07-20
64W.C1.GRAIL.205	Install Guardrail - I-64 WB Outside (Area C-1) - Phase 2	2	08-10-20	08-11-20
64W.C1.ASSM.210	Install Surface Mix Asphalt - I-64 WB (Area C-1) - Phase 2	3	08-20-20	08-24-20
64W.C1.PSTR.210	Install Final Striping - I-64 WB (Area C-1) - Phase 2	6	08-21-20	08-31-20
64W.C3.ECUT.205	Earthwork Cut - I-64 WB Outside (Area C-3) - Phase 2	6	10-16-20	10-27-20
64W.C3.EFIL.205	Earthwork Fill - I-64 WB Outside (Area C-3) - Phase 2	6	11-10-20	11-20-20
64W.C3.RGRD.205	Rough Grade Roadway - I-64 WB Outside (Area C-3) - Phase 2	6	11-16-20	11-30-20
64W.C3.BASE.205	Install Sub-Base - I-64 WB Outside (Area C-3) - Phase 2	8	11-24-20	12-11-20
64W.C3.OGDL.205	Install Open Graded Drainage Layer - I-64 WB Outside (Area C-3) - Phas	2	12-14-20	12-15-20
64W.C3.ASBM.205	Install Base Mix Asphalt - I-64 WB Outside (Area C-3) - Phase 2	4	12-17-20	12-22-20
64W.C3.ASIM.205	Install Intermediate Mix Asphalt - I-64 WB Outside (Area C-3) - Phase 2	2	04-01-21	04-06-21
64W.C3.ASGR.205	Install Asphalt at Guardrail - I-64 WB Outside (Area C-3) - Phase 2	2	04-08-21	04-09-21
64W.C3.GRAIL.205	Install Guardrail - I-64 WB Outside (Area C-3) - Phase 2	3	04-12-21	04-16-21
64W.C3.ASSM.210	Install Surface Mix Asphalt - I-64 WB (Area C-3) - Phase 2	3	04-27-21	04-30-21
64W.C3.PSTR.210	Install Final Striping - I-64 WB (Area C-3) - Phase 2	6	04-29-21	05-10-21
Storm Drainage		295	10-17-19	05-10-21
64E.C3.SWMP.C3-3.205	Construct Pond C3-3 - I-64 EB Outside (Area C-3) 1464+00 - Phase 2	15	10-17-19	11-12-19
64E.C3.STORM.205	Install Storm Drain Pipe & Structures - I-64 EB Outside (Area C-3) - Phas	13	10-22-19	11-14-19
64E.C1.SWMP.C1-2.205	Construct Pond C1-2 - I-64 EB Outside (Area C-1) 1416+50 - Phase 2	15	03-13-20	04-09-20
64E.C1.STORM.205	Install Storm Drain Pipe & Structures - I-64 EB Outside (Area C-1) - Phas	15	03-20-20	04-14-20
64E.C3.OFAL.205	Perform Outfall Restoration - I-64 EB Outside (Area C-3) - Phase 2	5	04-23-20	04-30-20
64W.C1.SWMP.C1-1.205	Construct Pond C1-1 - I-64 WB Outside (Area C-1) 2410+00 - Phase 2	15	05-22-20	06-22-20
64W.C1.STORM.205	Install Storm Drain Pipe & Structures - I-64 WB Outside (Area C-1) - Pha	15	05-29-20	06-26-20
64E.C1.OFAL.205	Perform Outfall Restoration - I-64 EB Outside (Area C-1) - Phase 2	5	06-05-20	06-15-20
64W.C1.OFAL.205	Perform Outfall Restoration - I-64 WB Outside (Area C-1) - Phase 2	5	08-18-20	08-25-20
64W.C3.SWMP.C3-1.205	Construct Pond C3-1 - I-64 WB Outside (Area C-3) 2435+50 - Phase 2	15	10-16-20	11-12-20
64W.C3.SWMP.C3-2.205	Construct Pond C3-2 - I-64 WB Outside (Area C-3) 2441+00 - Phase 2	15	10-16-20	11-12-20
64W.C3.STORM.205	Install Storm Drain Pipe & Structures - I-64 WB Outside (Area C-3) - Pha	13	10-23-20	11-13-20
64W.C3.OFAL.205	Perform Outfall & Head Cut Restoration - I-64 WB Outside (Area C-3) - F	10	04-23-21	05-10-21
Sound Wall		43	10-09-19	12-10-19
64E.C3.GMSW.205	Install Ground Mounted Sound Wall Posts (1431+99 - 1443+21) - I-64 EB	20	10-09-19	11-05-19
64E.C3.GMSW.210	Install Ground Mounted Sound Wall Panels (1431+99 - 1443+21) - I-64 EB	20	10-14-19	11-08-19
64E.C3.GMSW.215	Install Ground Mounted Sound Wall Posts (1446+25 - 1457+48) - I-64 EB	20	11-06-19	12-05-19
64E.C3.GMSW.220	Install Ground Mounted Sound Wall Panels (1446+25 - 1457+48) - I-64 EB	20	11-11-19	12-10-19
Bridges		275	11-25-19	08-25-20
I-64 EBL Over Lakeshead Dr (B-641) (Rehab/Widen)		204	11-25-19	06-15-20
Superstructure		204	11-25-19	06-15-20
A3.B641.PATCH.200	Perform Spall Repair on Sub-Structure & Superstructure - B-641 - Stage	20	11-25-19	12-31-19
A3.B641.PATCH.205	Remove Overlay & Perform Deck Patching - B-641 - Stage 2	12	03-06-20	03-26-20
A3.B641.OVERLAY.205	Overlay Bridge Deck - B-641 - Stage 2	5	06-05-20	06-15-20
I-64 WBL Over Lakeshead Dr (B-638) (Rehab/Widen)		260	12-10-19	08-25-20
Superstructure		260	12-10-19	08-25-20
A3.B638.PATCH.200	Perform Spall Repair on Sub-Structure & Superstructure - B-641 - Stage	20	12-10-19	01-14-20
A3.B638.PATCH.205	Remove Overlay & Perform Deck Patching - B-638 - Stage 2	15	05-14-20	06-09-20

Remaining Level of Effort
Actual Work
Remaining Work
Critical Remaining Work
Milestone
Summary

State Project No.: 0064-965-229, P-101, R-201, C-501, B-638, B-639, B-640, B-641, B-642, B-643, D-609, D-610, D-611
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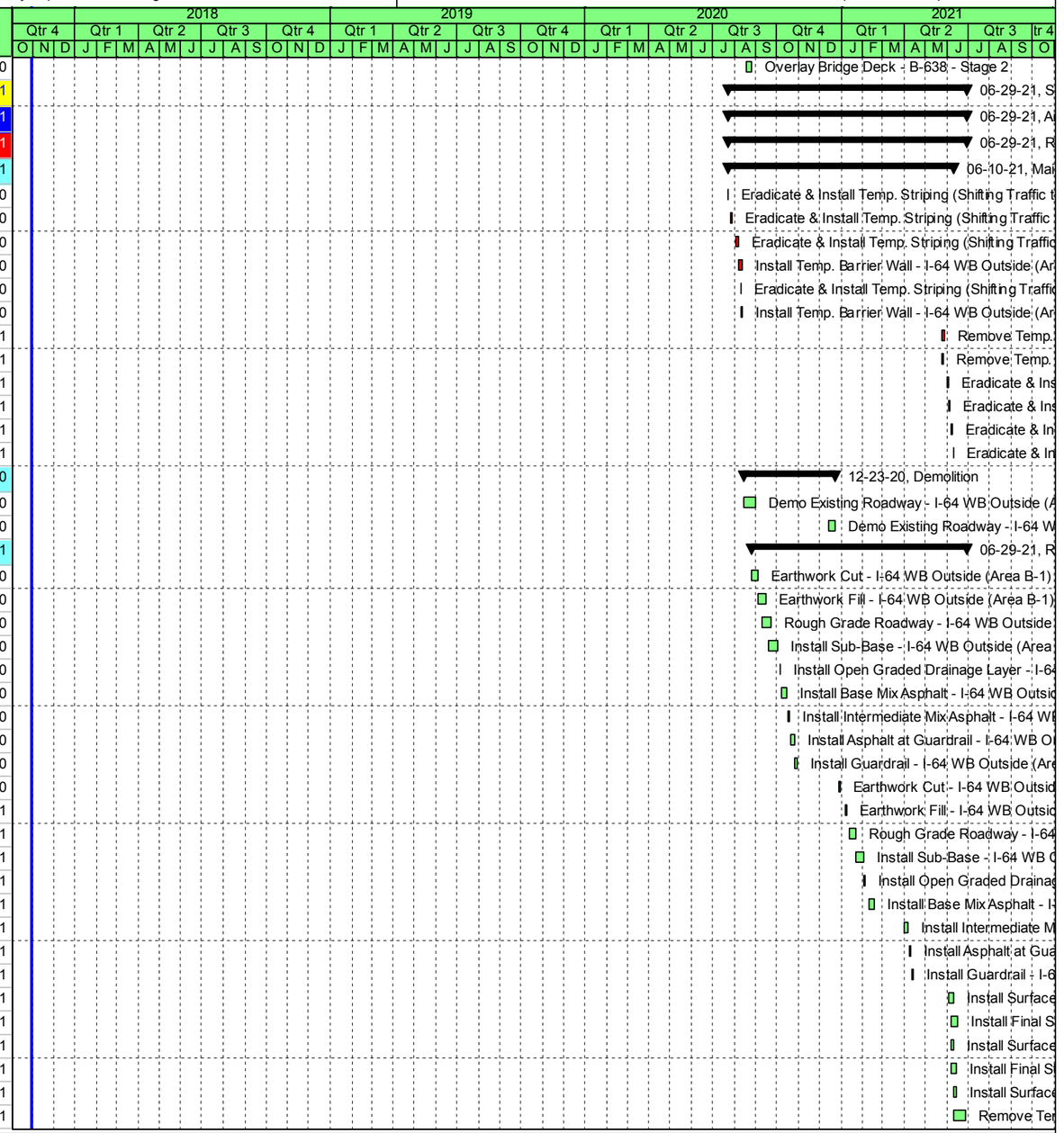
Activity ID	Activity Name	Original Duration	Start	Finish
A3.B638.OVERLAY.205	Overlay Bridge Deck - B-638 - Stage 2	5	08-18-20	08-25-20
Stage 3 - Construction		342	07-23-20	06-29-21
Area B		342	07-23-20	06-29-21
Roadway		342	07-23-20	06-29-21
Maintenance of Traffic		323	07-23-20	06-10-21
64E.B3.TSTR.305	Eradicate & Install Temp. Striping (Shifting Traffic to Outside) - I-64 EB Ou	1	07-23-20	07-23-20
64E.B1.TSTR.305	Eradicate & Install Temp. Striping (Shifting Traffic to Outside) - I-64 EB Ou	2	07-27-20	07-28-20
64W.B1.TSTR.305	Eradicate & Install Temp. Striping (Shifting Traffic to Temp Crossover/New	2	08-04-20	08-06-20
64W.B1.TBAR.305	Install Temp. Barrier Wall - I-64 WB Outside (Area B-1) - Phase 3	4	08-07-20	08-13-20
64W.B3.TSTR.305	Eradicate & Install Temp. Striping (Shifting Traffic to Temp Crossover/New	1	08-10-20	08-10-20
64W.B3.TBAR.305	Install Temp. Barrier Wall - I-64 WB Outside (Area B-3) - Phase 3	2	08-11-20	08-13-20
64W.B1.RBAR.305	Remove Temp. Barrier Wall - I-64 WB Outside (Area B-1) - Phase 3	4	05-25-21	05-28-21
64W.B3.RBAR.305	Remove Temp. Barrier Wall - I-64 WB Outside (Area B-3) - Phase 3	2	05-25-21	05-26-21
64W.B1.TSTR.310	Eradicate & Install Temp. Striping (Shifting Traffic to Final Configuration) -	2	06-01-21	06-03-21
64W.B3.TSTR.310	Eradicate & Install Temp. Striping (Shifting Traffic to Final Configuration) -	1	06-04-21	06-04-21
64E.B1.TSTR.310	Eradicate & Install Temp. Striping (Shifting Traffic to Final Configuration) -	2	06-07-21	06-08-21
64E.B3.TSTR.310	Eradicate & Install Temp. Striping (Shifting Traffic to Final Configuration) -	1	06-10-21	06-10-21
Demolition		80	08-14-20	12-23-20
64W.B1.DRDW.305	Demo Existing Roadway - I-64 WB Outside (Area B-1) - Phase 3	11	08-14-20	08-31-20
64W.B3.DRDW.305	Demo Existing Roadway - I-64 WB Outside (Area B-3) - Phase 3	7	12-14-20	12-23-20
Roadway		309	08-25-20	06-29-21
64W.B1.ECUT.305	Earthwork Cut - I-64 WB Outside (Area B-1) - Phase 3	6	08-25-20	09-04-20
64W.B1.EFIL.305	Earthwork Fill - I-64 WB Outside (Area B-1) - Phase 3	6	09-04-20	09-14-20
64W.B1.RGRD.305	Rough Grade Roadway - I-64 WB Outside (Area B-1) - Phase 3	7	09-10-20	09-22-20
64W.B1.BASE.305	Install Sub-Base - I-64 WB Outside (Area B-1) - Phase 3	9	09-18-20	10-02-20
64W.B1.OGDL.305	Install Open Graded Drainage Layer - I-64 WB Outside (Area B-1) - Phas	2	10-05-20	10-06-20
64W.B1.ASBM.305	Install Base Mix Asphalt - I-64 WB Outside (Area B-1) - Phase 3	5	10-08-20	10-15-20
64W.B1.ASIM.305	Install Intermediate Mix Asphalt - I-64 WB Outside (Area B-1) - Phase 3	2	10-16-20	10-19-20
64W.B1.ASGR.305	Install Asphalt at Guardrail - I-64 WB Outside (Area B-1) - Phase 3	3	10-20-20	10-26-20
64W.B1.GRAIL.305	Install Guardrail - I-64 WB Outside (Area B-1) - Phase 3	3	10-27-20	10-30-20
64W.B3.ECUT.305	Earthwork Cut - I-64 WB Outside (Area B-3) - Phase 3	2	12-28-20	12-31-20
64W.B3.EFIL.305	Earthwork Fill - I-64 WB Outside (Area B-3) - Phase 3	2	01-07-21	01-08-21
64W.B3.RGRD.305	Rough Grade Roadway - I-64 WB Outside (Area B-3) - Phase 3	5	01-12-21	01-22-21
64W.B3.BASE.305	Install Sub-Base - I-64 WB Outside (Area B-3) - Phase 3	6	01-22-21	02-01-21
64W.B3.OGDL.305	Install Open Graded Drainage Layer - I-64 WB Outside (Area B-3) - Phas	2	02-02-21	02-04-21
64W.B3.ASBM.305	Install Base Mix Asphalt - I-64 WB Outside (Area B-3) - Phase 3	3	02-09-21	02-16-21
64W.B3.ASIM.305	Install Intermediate Mix Asphalt - I-64 WB Outside (Area B-3) - Phase 3	2	04-01-21	04-06-21
64W.B3.ASGR.305	Install Asphalt at Guardrail - I-64 WB Outside (Area B-3) - Phase 3	2	04-08-21	04-09-21
64W.B3.GRAIL.305	Install Guardrail - I-64 WB Outside (Area B-3) - Phase 3	2	04-12-21	04-13-21
64W.B1.ASSM.310	Install Surface Mix Asphalt - I-64 WB (Area B-1) - Phase 3	4	06-04-21	06-10-21
64W.B1.PSTR.310	Install Final Striping - I-64 WB (Area B-1) - Phase 3	7	06-07-21	06-17-21
64W.B3.ASSM.310	Install Surface Mix Asphalt - I-64 WB (Area B-3) - Phase 3	3	06-07-21	06-10-21
64W.B3.PSTR.310	Install Final Striping - I-64 WB (Area B-3) - Phase 3	5	06-08-21	06-15-21
64E.B1.ASSM.310	Install Surface Mix Asphalt - I-64 EB (Area B-1) - Phase 3	4	06-10-21	06-15-21
64.B1.GRAD.305	Remove Temp.Crossover and Finish Grade Median - I-64 Median (Area	10	06-10-21	06-28-21



Remaining Level of Effort
Actual Work
Remaining Work
Critical Remaining Work
Milestone
Summary

State Project No.: 0064-965-229, P-101, R-201, C-501, B-638, B-639, B-640, B-641, B-642, B-643, D-609, D-610, D-611
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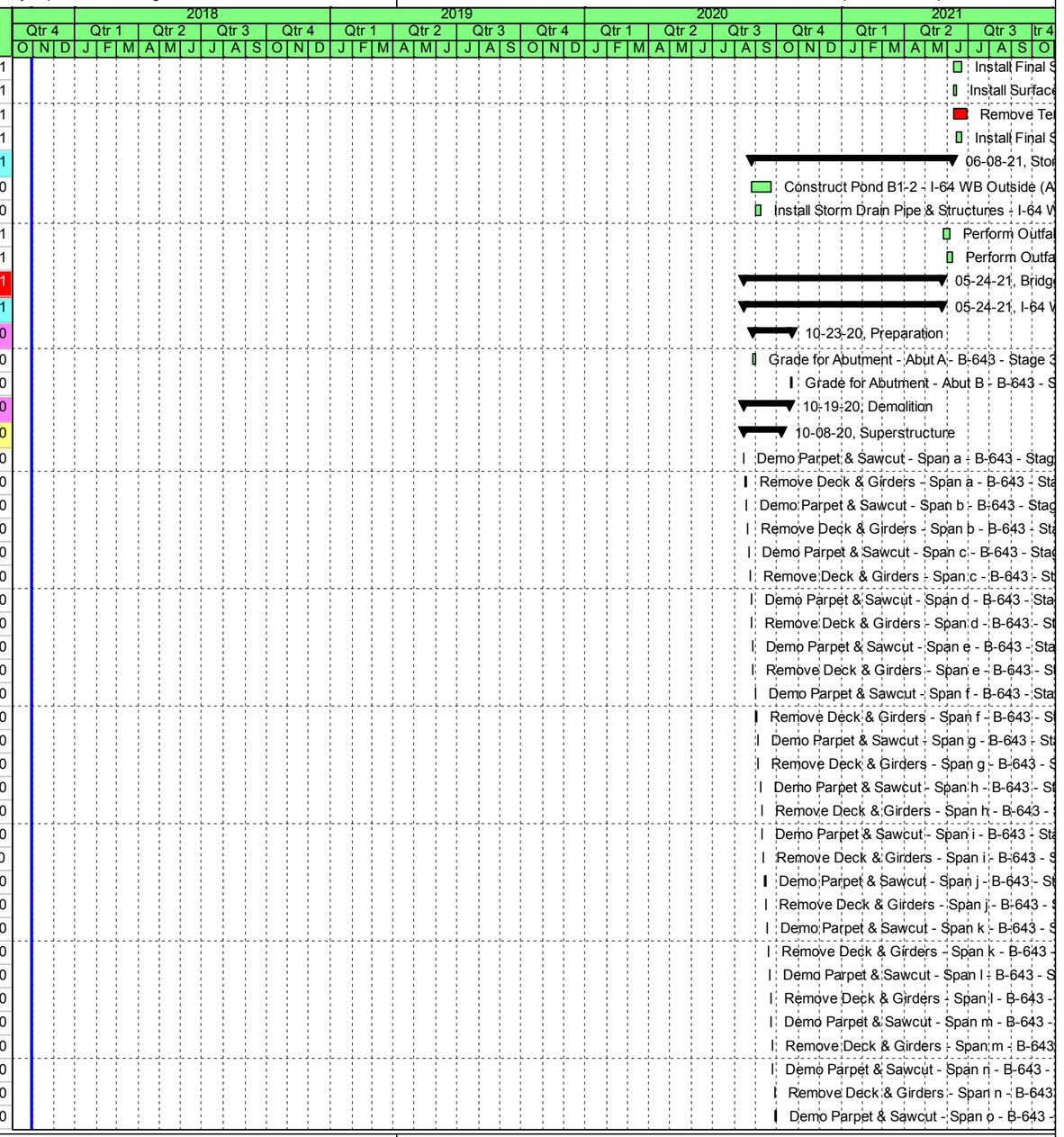
64E.B1.PSTR.310	Install Final Striping - I-64 EB (Area B-1) - Phase 3	7	06-11-21	06-22-21
64E.B3.ASSM.310	Install Surface Mix Asphalt - I-64 EB (Area B-3) - Phase 3	3	06-11-21	06-15-21
64.B3.GRAD.305	Remove Temp.Crossover and Finish Grade Median - I-64 Median (Area	10	06-11-21	06-29-21
64E.B3.PSTR.310	Install Final Striping - I-64 EB (Area B-3) - Phase 3	5	06-14-21	06-21-21
Storm Drainage		150	08-25-20	06-08-21
64W.B1.SWMP.B1-2.305	Construct Pond B1-2 - I-64 WB Outside (Area B-1) 2341+25 - Phase 3	15	08-25-20	09-22-20
64W.B1.STORM.305	Install Storm Drain Pipe & Structures - I-64 WB Outside (Area B-1) - Pha	4	08-31-20	09-08-20
64W.B3.OFAL.305	Perform Outfall Restoration - I-64 WB Outside (Area B-3) - Phase 3	5	05-27-21	06-04-21
64W.B1.OFAL.305	Perform Outfall Restoration - I-64 WB Outside (Area B-1) - Phase 3	5	06-01-21	06-08-21
Bridges		284	08-14-20	05-24-21
I-64 WBL Over Queens Creek (B-643) (Replacement)		284	08-14-20	05-24-21
Preparation		30	08-28-20	10-23-20
A3.B643.ABA.GRAD.305	Grade for Abutment - Abut A - B-643 - Stage 3	2	08-28-20	08-31-20
A3.B643.ABB.GRAD.305	Grade for Abutment - Abut B - B-643 - Stage 3	2	10-20-20	10-23-20
Demolition		41	08-14-20	10-19-20
Superstructure		34	08-14-20	10-08-20
A3.B643.SA.DDEK.305	Demo Parpet & Sawcut - Span a - B-643 - Stage 3	1	08-14-20	08-14-20
A3.B643.SA.DGRD.305	Remove Deck & Girders - Span a - B-643 - Stage 3	1	08-17-20	08-17-20
A3.B643.SB.DDEK.305	Demo Parpet & Sawcut - Span b - B-643 - Stage 3	1	08-18-20	08-18-20
A3.B643.SB.DGRD.305	Remove Deck & Girders - Span b - B-643 - Stage 3	1	08-20-20	08-20-20
A3.B643.SC.DDEK.305	Demo Parpet & Sawcut - Span c - B-643 - Stage 3	1	08-21-20	08-21-20
A3.B643.SC.DGRD.305	Remove Deck & Girders - Span c - B-643 - Stage 3	1	08-24-20	08-24-20
A3.B643.SD.DDEK.305	Demo Parpet & Sawcut - Span d - B-643 - Stage 3	1	08-25-20	08-25-20
A3.B643.SD.DGRD.305	Remove Deck & Girders - Span d - B-643 - Stage 3	1	08-26-20	08-26-20
A3.B643.SE.DDEK.305	Demo Parpet & Sawcut - Span e - B-643 - Stage 3	1	08-27-20	08-27-20
A3.B643.SE.DGRD.305	Remove Deck & Girders - Span e - B-643 - Stage 3	1	08-28-20	08-28-20
A3.B643.SF.DDEK.305	Demo Parpet & Sawcut - Span f - B-643 - Stage 3	1	08-31-20	08-31-20
A3.B643.SF.DGRD.305	Remove Deck & Girders - Span f - B-643 - Stage 3	1	09-01-20	09-01-20
A3.B643.SG.DDEK.305	Demo Parpet & Sawcut - Span g - B-643 - Stage 3	1	09-03-20	09-03-20
A3.B643.SG.DGRD.305	Remove Deck & Girders - Span g - B-643 - Stage 3	1	09-04-20	09-04-20
A3.B643.SH.DDEK.305	Demo Parpet & Sawcut - Span h - B-643 - Stage 3	1	09-08-20	09-08-20
A3.B643.SH.DGRD.305	Remove Deck & Girders - Span h - B-643 - Stage 3	1	09-09-20	09-09-20
A3.B643.SI.DDEK.305	Demo Parpet & Sawcut - Span i - B-643 - Stage 3	1	09-10-20	09-10-20
A3.B643.SI.DGRD.305	Remove Deck & Girders - Span i - B-643 - Stage 3	1	09-11-20	09-11-20
A3.B643.SJ.DDEK.305	Demo Parpet & Sawcut - Span j - B-643 - Stage 3	1	09-14-20	09-14-20
A3.B643.SJ.DGRD.305	Remove Deck & Girders - Span j - B-643 - Stage 3	1	09-15-20	09-15-20
A3.B643.SK.DDEK.305	Demo Parpet & Sawcut - Span k - B-643 - Stage 3	1	09-17-20	09-17-20
A3.B643.SK.DGRD.305	Remove Deck & Girders - Span k - B-643 - Stage 3	1	09-18-20	09-18-20
A3.B643.SL.DDEK.305	Demo Parpet & Sawcut - Span l - B-643 - Stage 3	1	09-21-20	09-21-20
A3.B643.SL.DGRD.305	Remove Deck & Girders - Span l - B-643 - Stage 3	1	09-22-20	09-22-20
A3.B643.SM.DDEK.305	Demo Parpet & Sawcut - Span m - B-643 - Stage 3	1	09-23-20	09-23-20
A3.B643.SM.DGRD.305	Remove Deck & Girders - Span m - B-643 - Stage 3	1	09-24-20	09-24-20
A3.B643.SN.DDEK.305	Demo Parpet & Sawcut - Span n - B-643 - Stage 3	1	09-25-20	09-25-20
A3.B643.SN.DGRD.305	Remove Deck & Girders - Span n - B-643 - Stage 3	1	09-28-20	09-28-20
A3.B643.SO.DDEK.305	Demo Parpet & Sawcut - Span o - B-643 - Stage 3	1	09-29-20	09-29-20



Remaining Level of Effort
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Summary

State Project No.: 0064-965-229, P-101, R-201, C-501, B-638, B-639, B-640, B-641, B-642, B-643, D-609, D-610, D-611
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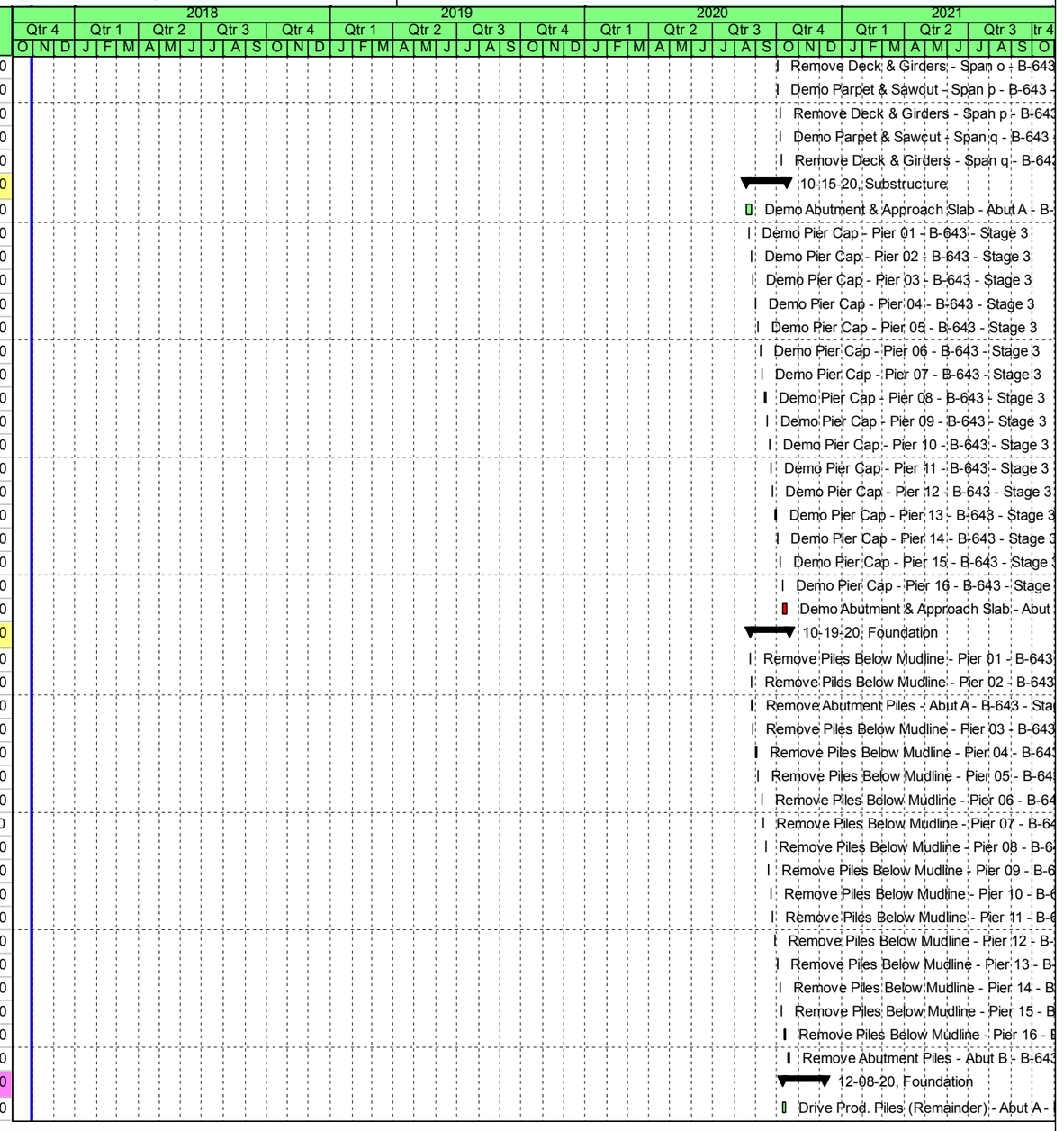
A3.B643.SO.DGRD.305	Remove Deck & Girders - Span o - B-643 - Stage 3	1	10-01-20	10-01-20
A3.B643.SP.DDEK.305	Demo Parpet & Sawcut - Span p - B-643 - Stage 3	1	10-02-20	10-02-20
A3.B643.SP.DGRD.305	Remove Deck & Girders - Span p - B-643 - Stage 3	1	10-05-20	10-05-20
A3.B643.SQ.DDEK.305	Demo Parpet & Sawcut - Span q - B-643 - Stage 3	1	10-06-20	10-06-20
A3.B643.SQ.DGRD.305	Remove Deck & Girders - Span q - B-643 - Stage 3	1	10-08-20	10-08-20
Substructure		37	08-18-20	10-15-20
A3.B643.ABA.DABT.305	Demo Abutment & Approach Slab - Abut A - B-643 - Stage 3	5	08-18-20	08-25-20
A3.B643.P01.DCAP.305	Demo Pier Cap - Pier 01 - B-643 - Stage 3	1	08-21-20	08-21-20
A3.B643.P02.DCAP.305	Demo Pier Cap - Pier 02 - B-643 - Stage 3	1	08-25-20	08-25-20
A3.B643.P03.DCAP.305	Demo Pier Cap - Pier 03 - B-643 - Stage 3	1	08-27-20	08-27-20
A3.B643.P04.DCAP.305	Demo Pier Cap - Pier 04 - B-643 - Stage 3	1	08-31-20	08-31-20
A3.B643.P05.DCAP.305	Demo Pier Cap - Pier 05 - B-643 - Stage 3	1	09-03-20	09-03-20
A3.B643.P06.DCAP.305	Demo Pier Cap - Pier 06 - B-643 - Stage 3	1	09-08-20	09-08-20
A3.B643.P07.DCAP.305	Demo Pier Cap - Pier 07 - B-643 - Stage 3	1	09-10-20	09-10-20
A3.B643.P08.DCAP.305	Demo Pier Cap - Pier 08 - B-643 - Stage 3	1	09-14-20	09-14-20
A3.B643.P09.DCAP.305	Demo Pier Cap - Pier 09 - B-643 - Stage 3	1	09-17-20	09-17-20
A3.B643.P10.DCAP.305	Demo Pier Cap - Pier 10 - B-643 - Stage 3	1	09-21-20	09-21-20
A3.B643.P11.DCAP.305	Demo Pier Cap - Pier 11 - B-643 - Stage 3	1	09-23-20	09-23-20
A3.B643.P12.DCAP.305	Demo Pier Cap - Pier 12 - B-643 - Stage 3	1	09-25-20	09-25-20
A3.B643.P13.DCAP.305	Demo Pier Cap - Pier 13 - B-643 - Stage 3	1	09-29-20	09-29-20
A3.B643.P14.DCAP.305	Demo Pier Cap - Pier 14 - B-643 - Stage 3	1	10-02-20	10-02-20
A3.B643.P15.DCAP.305	Demo Pier Cap - Pier 15 - B-643 - Stage 3	1	10-06-20	10-06-20
A3.B643.P16.DCAP.305	Demo Pier Cap - Pier 16 - B-643 - Stage 3	1	10-09-20	10-09-20
A3.B643.ABB.DABT.305	Demo Abutment & Approach Slab - Abut B - B-643 - Stage 3	5	10-09-20	10-15-20
Foundation		36	08-24-20	10-19-20
A3.B643.P01.DPLE.305	Remove Piles Below Mudline - Pier 01 - B-643 - Stage 3	1	08-24-20	08-24-20
A3.B643.P02.DPLE.305	Remove Piles Below Mudline - Pier 02 - B-643 - Stage 3	1	08-26-20	08-26-20
A3.B643.ABA.DPLE.305	Remove Abutment Piles - Abut A - B-643 - Stage 3	2	08-26-20	08-27-20
A3.B643.P03.DPLE.305	Remove Piles Below Mudline - Pier 03 - B-643 - Stage 3	1	08-28-20	08-28-20
A3.B643.P04.DPLE.305	Remove Piles Below Mudline - Pier 04 - B-643 - Stage 3	1	09-01-20	09-01-20
A3.B643.P05.DPLE.305	Remove Piles Below Mudline - Pier 05 - B-643 - Stage 3	1	09-04-20	09-04-20
A3.B643.P06.DPLE.305	Remove Piles Below Mudline - Pier 06 - B-643 - Stage 3	1	09-09-20	09-09-20
A3.B643.P07.DPLE.305	Remove Piles Below Mudline - Pier 07 - B-643 - Stage 3	1	09-11-20	09-11-20
A3.B643.P08.DPLE.305	Remove Piles Below Mudline - Pier 08 - B-643 - Stage 3	1	09-15-20	09-15-20
A3.B643.P09.DPLE.305	Remove Piles Below Mudline - Pier 09 - B-643 - Stage 3	1	09-18-20	09-18-20
A3.B643.P10.DPLE.305	Remove Piles Below Mudline - Pier 10 - B-643 - Stage 3	1	09-22-20	09-22-20
A3.B643.P11.DPLE.305	Remove Piles Below Mudline - Pier 11 - B-643 - Stage 3	1	09-24-20	09-24-20
A3.B643.P12.DPLE.305	Remove Piles Below Mudline - Pier 12 - B-643 - Stage 3	1	09-28-20	09-28-20
A3.B643.P13.DPLE.305	Remove Piles Below Mudline - Pier 13 - B-643 - Stage 3	1	10-01-20	10-01-20
A3.B643.P14.DPLE.305	Remove Piles Below Mudline - Pier 14 - B-643 - Stage 3	1	10-05-20	10-05-20
A3.B643.P15.DPLE.305	Remove Piles Below Mudline - Pier 15 - B-643 - Stage 3	1	10-08-20	10-08-20
A3.B643.P16.DPLE.305	Remove Piles Below Mudline - Pier 16 - B-643 - Stage 3	1	10-12-20	10-12-20
A3.B643.ABB.DPLE.305	Remove Abutment Piles - Abut B - B-643 - Stage 3	2	10-16-20	10-19-20
Foundation		37	10-09-20	12-08-20
A3.B643.ABA.PLE.305	Drive Prod. Piles (Remainder) - Abut A - B-643 - Stage 3	2	10-09-20	10-12-20



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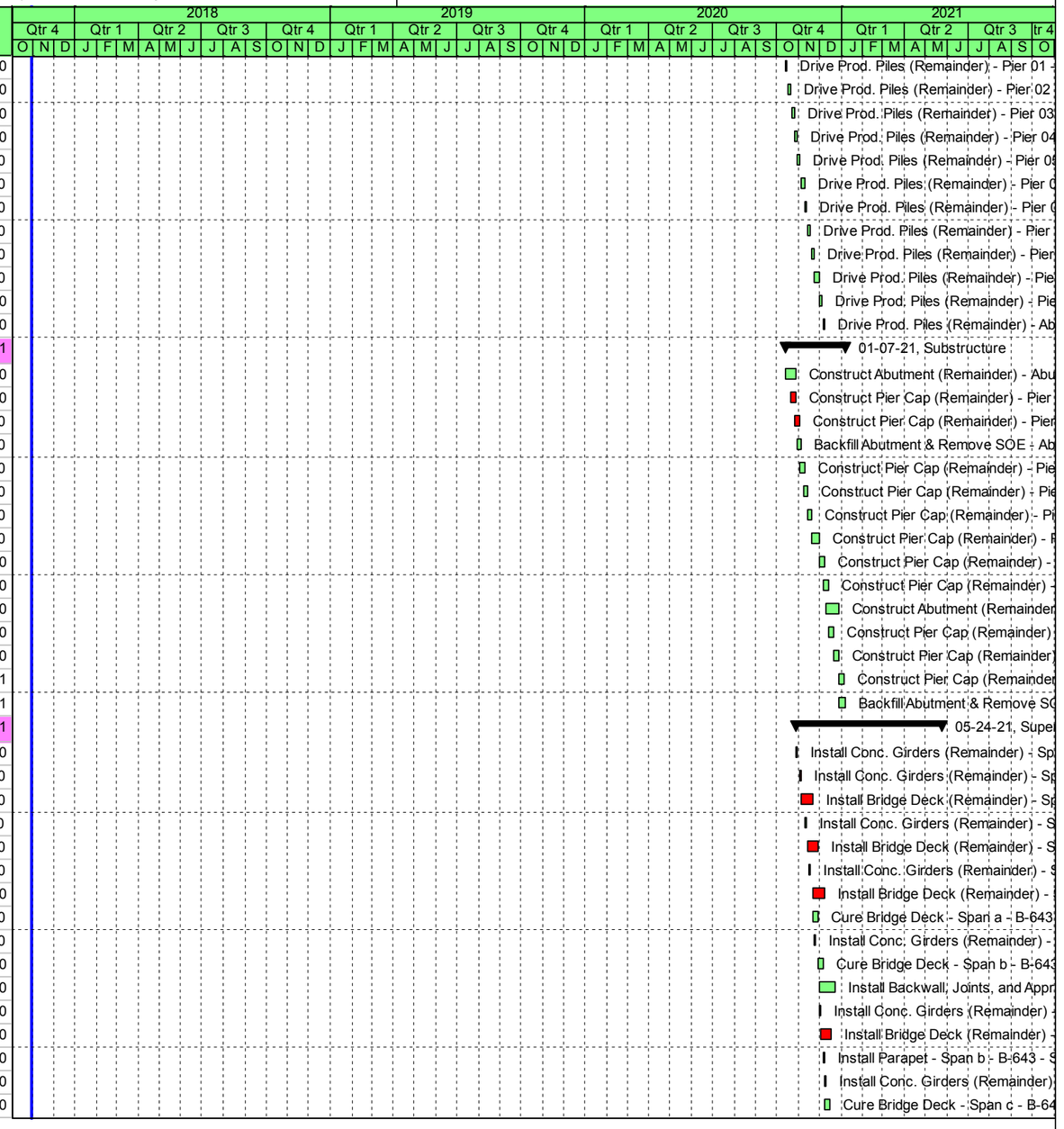
Activity ID	Activity Name	Original Duration	Start	Finish
A3.B643.P01.PLE.305	Drive Prod. Piles (Remainder) - Pier 01 - B-643 - Stage 3	3	10-13-20	10-15-20
A3.B643.P02.PLE.305	Drive Prod. Piles (Remainder) - Pier 02 - B-643 - Stage 3	3	10-16-20	10-20-20
A3.B643.P03.PLE.305	Drive Prod. Piles (Remainder) - Pier 03 - B-643 - Stage 3	3	10-22-20	10-26-20
A3.B643.P04.PLE.305	Drive Prod. Piles (Remainder) - Pier 04 - B-643 - Stage 3	3	10-27-20	10-29-20
A3.B643.P05.PLE.305	Drive Prod. Piles (Remainder) - Pier 05 - B-643 - Stage 3	3	10-30-20	11-03-20
A3.B643.P06.PLE.305	Drive Prod. Piles (Remainder) - Pier 06 - B-643 - Stage 3	3	11-05-20	11-09-20
A3.B643.P07.PLE.305	Drive Prod. Piles (Remainder) - Pier 07 - B-643 - Stage 3	3	11-10-20	11-12-20
A3.B643.P08.PLE.305	Drive Prod. Piles (Remainder) - Pier 08 - B-643 - Stage 3	3	11-13-20	11-17-20
A3.B643.P09.PLE.305	Drive Prod. Piles (Remainder) - Pier 09 - B-643 - Stage 3	3	11-19-20	11-23-20
A3.B643.P10.PLE.305	Drive Prod. Piles (Remainder) - Pier 10 - B-643 - Stage 3	3	11-24-20	11-30-20
A3.B643.P11.PLE.305	Drive Prod. Piles (Remainder) - Pier 11 - B-643 - Stage 3	3	12-01-20	12-04-20
A3.B643.ABB.PLE.305	Drive Prod. Piles (Remainder) - Abut B - B-643 - Stage 3	2	12-07-20	12-08-20
Substructure		87	10-13-20	01-07-21
A3.B643.ABA.ABUT.305	Construct Abutment (Remainder) - Abut A - B-643 - Stage 3	10	10-13-20	10-27-20
A3.B643.P01.CAP.305	Construct Pier Cap (Remainder) - Pier 01 - B-643 - Stage 3	5	10-20-20	10-27-20
A3.B643.P02.CAP.305	Construct Pier Cap (Remainder) - Pier 02 - B-643 - Stage 3	5	10-27-20	11-02-20
A3.B643.ABA.BKF.305	Backfill Abutment & Remove SOE - Abut A - B-643 - Stage 3	5	10-29-20	11-05-20
A3.B643.P03.CAP.305	Construct Pier Cap (Remainder) - Pier 03 - B-643 - Stage 3	5	11-02-20	11-09-20
A3.B643.P04.CAP.305	Construct Pier Cap (Remainder) - Pier 04 - B-643 - Stage 3	5	11-09-20	11-13-20
A3.B643.P05.CAP.305	Construct Pier Cap (Remainder) - Pier 05 - B-643 - Stage 3	5	11-13-20	11-20-20
A3.B643.P06.CAP.305	Construct Pier Cap (Remainder) - Pier 06 - B-643 - Stage 3	5	11-20-20	11-30-20
A3.B643.P07.CAP.305	Construct Pier Cap (Remainder) - Pier 07 - B-643 - Stage 3	5	11-30-20	12-07-20
A3.B643.P08.CAP.305	Construct Pier Cap (Remainder) - Pier 08 - B-643 - Stage 3	5	12-07-20	12-14-20
A3.B643.ABB.ABUT.305	Construct Abutment (Remainder) - Abut B - B-643 - Stage 3	10	12-10-20	12-28-20
A3.B643.P09.CAP.305	Construct Pier Cap (Remainder) - Pier 09 - B-643 - Stage 3	5	12-14-20	12-21-20
A3.B643.P10.CAP.305	Construct Pier Cap (Remainder) - Pier 10 - B-643 - Stage 3	5	12-21-20	12-29-20
A3.B643.P11.CAP.305	Construct Pier Cap (Remainder) - Pier 11 - B-643 - Stage 3	5	12-29-20	01-05-21
A3.B643.ABB.BKF.305	Backfill Abutment & Remove SOE - Abut B - B-643 - Stage 3	5	12-29-20	01-07-21
Superstructure		209	10-28-20	05-24-21
A3.B643.SA.GRD.305	Install Conc. Girders (Remainder) - Span a - B-643 - Stage 3	2	10-28-20	10-29-20
A3.B643.SB.GRD.305	Install Conc. Girders (Remainder) - Span b - B-643 - Stage 3	2	11-03-20	11-05-20
A3.B643.SA.DEK.305	Install Bridge Deck (Remainder) - Span a - B-643 - Stage 3	13	11-05-20	11-21-20
A3.B643.SC.GRD.305	Install Conc. Girders (Remainder) - Span c - B-643 - Stage 3	2	11-10-20	11-11-20
A3.B643.SB.DEK.305	Install Bridge Deck (Remainder) - Span b - B-643 - Stage 3	10	11-13-20	11-28-20
A3.B643.SD.GRD.305	Install Conc. Girders (Remainder) - Span d - B-643 - Stage 3	2	11-16-20	11-17-20
A3.B643.SC.DEK.305	Install Bridge Deck (Remainder) - Span c - B-643 - Stage 3	10	11-21-20	12-08-20
A3.B643.SA.CUR.305	Cure Bridge Deck - Span a - B-643 - Stage 3	7	11-22-20	11-28-20
A3.B643.SE.GRD.305	Install Conc. Girders (Remainder) - Span e - B-643 - Stage 3	2	11-23-20	11-24-20
A3.B643.SB.CUR.305	Cure Bridge Deck - Span b - B-643 - Stage 3	7	11-29-20	12-05-20
A3.B643.ABA.APR.305	Install Backwall, Joints, and Approach Slab (Remainder) - Abut A - B-643	15	11-30-20	12-23-20
A3.B643.SF.GRD.305	Install Conc. Girders (Remainder) - Span f - B-643 - Stage 3	2	12-01-20	12-03-20
A3.B643.SD.DEK.305	Install Bridge Deck (Remainder) - Span d - B-643 - Stage 3	10	12-03-20	12-17-20
A3.B643.SB.BAR.305	Install Parapet - Span b - B-643 - Stage 3	1	12-07-20	12-07-20
A3.B643.SG.GRD.305	Install Conc. Girders (Remainder) - Span g - B-643 - Stage 3	2	12-08-20	12-10-20
A3.B643.SC.CUR.305	Cure Bridge Deck - Span c - B-643 - Stage 3	7	12-09-20	12-15-20



Remaining Level of Effort
Actual Work
Remaining Work
Critical Remaining Work
Milestone
Summary

State Project No.: 0064-965-229, P-101, R-201, C-501, B-638, B-639, B-640, B-641, B-642, B-643, D-609, D-610, D-611
Federal Project No.: NHPP-064-3 (498)
Contract ID Number: C00106689DB97

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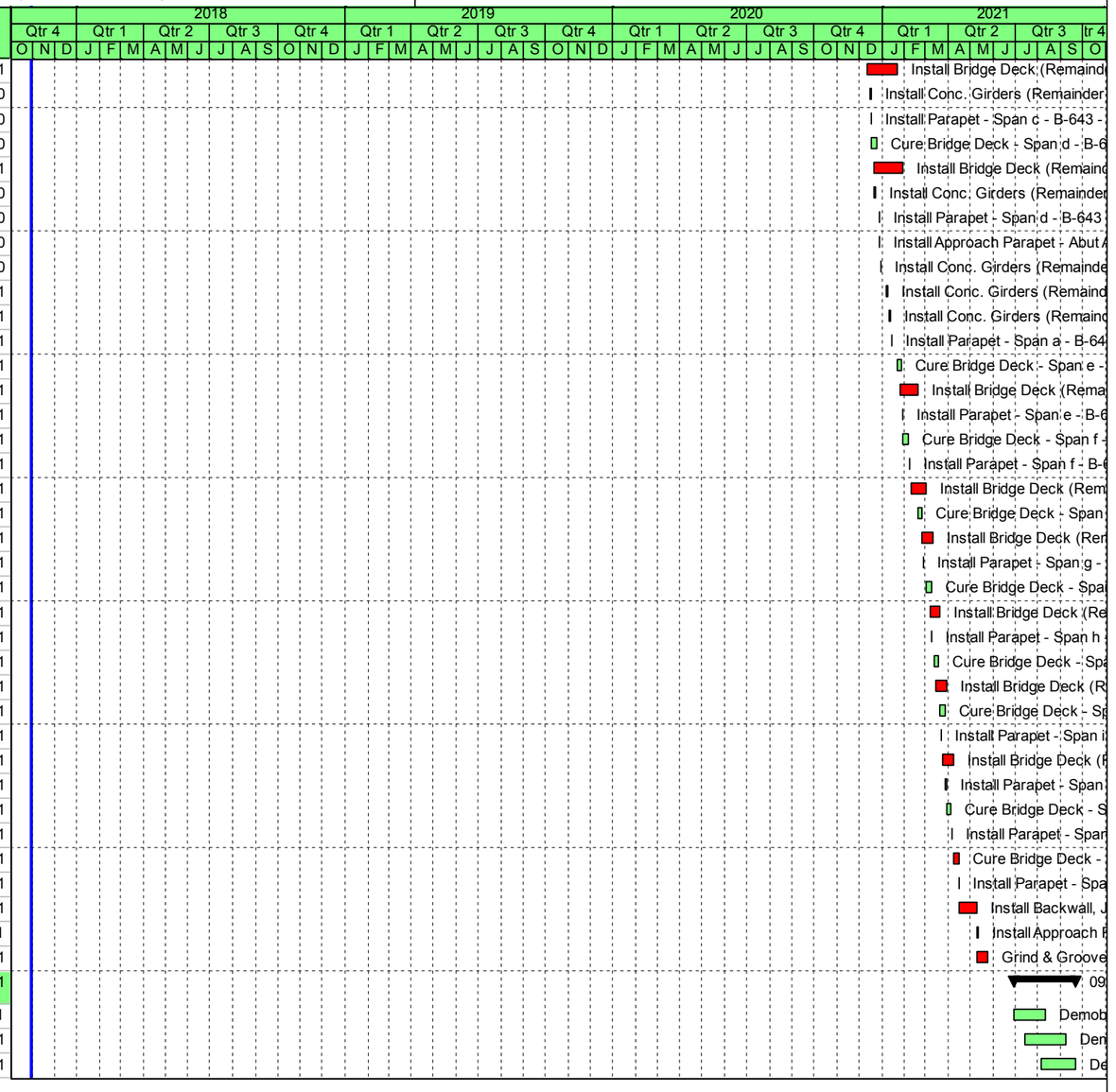
I-64 Capacity Improvements - Segment III

Proposal Date: September 14, 2017

Activity ID	Activity Name	Original Duration	Start	Finish
A3.B643.SE.DEK.305	Install Bridge Deck (Remainder) - Span e - B-643 - Stage 3	10	12-12-20	01-21-21
A3.B643.SH.GRD.305	Install Conc. Girders (Remainder) - Span h - B-643 - Stage 3	2	12-15-20	12-17-20
A3.B643.SC.BAR.305	Install Parapet - Span c - B-643 - Stage 3	1	12-17-20	12-17-20
A3.B643.SD.CUR.305	Cure Bridge Deck - Span d - B-643 - Stage 3	7	12-18-20	12-24-20
A3.B643.SF.DEK.305	Install Bridge Deck (Remainder) - Span f - B-643 - Stage 3	10	12-21-20	01-29-21
A3.B643.SI.GRD.305	Install Conc. Girders (Remainder) - Span i - B-643 - Stage 3	2	12-22-20	12-23-20
A3.B643.SD.BAR.305	Install Parapet - Span d - B-643 - Stage 3	1	12-28-20	12-28-20
A3.B643.ABA.BAR.305	Install Approach Parapet - Abut A - B-643 - Stage 3	1	12-28-20	12-28-20
A3.B643.SJ.GRD.305	Install Conc. Girders (Remainder) - Span j - B-643 - Stage 3	2	12-30-20	12-31-20
A3.B643.SK.GRD.305	Install Conc. Girders (Remainder) - Span k - B-643 - Stage 3	2	01-07-21	01-08-21
A3.B643.SL.GRD.305	Install Conc. Girders (Remainder) - Span l - B-643 - Stage 3	2	01-11-21	01-12-21
A3.B643.SA.BAR.305	Install Parapet - Span a - B-643 - Stage 3	2	01-14-21	01-15-21
A3.B643.SE.CUR.305	Cure Bridge Deck - Span e - B-643 - Stage 3	7	01-22-21	01-28-21
A3.B643.SG.DEK.305	Install Bridge Deck (Remainder) - Span g - B-643 - Stage 3	10	01-25-21	02-18-21
A3.B643.SE.BAR.305	Install Parapet - Span e - B-643 - Stage 3	1	01-29-21	01-29-21
A3.B643.SF.CUR.305	Cure Bridge Deck - Span f - B-643 - Stage 3	7	01-30-21	02-05-21
A3.B643.SF.BAR.305	Install Parapet - Span f - B-643 - Stage 3	1	02-08-21	02-08-21
A3.B643.SH.DEK.305	Install Bridge Deck (Remainder) - Span h - B-643 - Stage 3	10	02-09-21	03-02-21
A3.B643.SG.CUR.305	Cure Bridge Deck - Span g - B-643 - Stage 3	7	02-19-21	02-25-21
A3.B643.SI.DEK.305	Install Bridge Deck (Remainder) - Span i - B-643 - Stage 3	10	02-25-21	03-12-21
A3.B643.SG.BAR.305	Install Parapet - Span g - B-643 - Stage 3	1	02-26-21	02-26-21
A3.B643.SH.CUR.305	Cure Bridge Deck - Span h - B-643 - Stage 3	7	03-03-21	03-09-21
A3.B643.SJ.DEK.305	Install Bridge Deck (Remainder) - Span j - B-643 - Stage 3	10	03-08-21	03-20-21
A3.B643.SH.BAR.305	Install Parapet - Span h - B-643 - Stage 3	1	03-10-21	03-10-21
A3.B643.SI.CUR.305	Cure Bridge Deck - Span i - B-643 - Stage 3	7	03-13-21	03-19-21
A3.B643.SK.DEK.305	Install Bridge Deck (Remainder) - Span k - B-643 - Stage 3	10	03-16-21	03-29-21
A3.B643.SJ.CUR.305	Cure Bridge Deck - Span j - B-643 - Stage 3	7	03-21-21	03-27-21
A3.B643.SI.BAR.305	Install Parapet - Span i - B-643 - Stage 3	1	03-22-21	03-22-21
A3.B643.SL.DEK.305	Install Bridge Deck (Remainder) - Span l - B-643 - Stage 3	10	03-25-21	04-08-21
A3.B643.SJ.BAR.305	Install Parapet - Span j - B-643 - Stage 3	1	03-29-21	03-29-21
A3.B643.SK.CUR.305	Cure Bridge Deck - Span k - B-643 - Stage 3	7	03-30-21	04-05-21
A3.B643.SK.BAR.305	Install Parapet - Span k - B-643 - Stage 3	1	04-06-21	04-06-21
A3.B643.SL.CUR.305	Cure Bridge Deck - Span l - B-643 - Stage 3	7	04-09-21	04-15-21
A3.B643.SL.BAR.305	Install Parapet - Span l - B-643 - Stage 3	1	04-16-21	04-16-21
A3.B643.ABB.APR.305	Install Backwall, Joints, and Approach Slab (Remainder) - Abut B - B-643	15	04-16-21	05-10-21
A3.B643.ABB.BAR.305	Install Approach Parapet - Abut B - B-643 - Stage 3	1	05-11-21	05-11-21
A3.B643.SAQ.GRV.305	Grind & Groove Remainder of Bridge Deck - Spans a-l - B-643 - Stage 3	8	05-11-21	05-24-21
Demobilization		59	06-30-21	09-22-21
DEMOB.EQUIP	Demob. Project Equipment	30	06-30-21	08-11-21
DEMOB.OFFICE	Demob. Project Office	40	07-15-21	09-09-21
DEMOB.STAFF	Demob. Project Staff	34	08-05-21	09-22-21



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Summary

State Project No.: 0064-965-229, P-101, R-201, C-501, B-638, B-639, B-640, B-641, B-642, B-643, D-609, D-610, D-611
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I-64 Capacity Improvements - Segment III

Submitted by: Skanska USA
Civil Southeast Inc.

September 14, 2017

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