Submitted to: VDOT Virginia Department of Transportation

TECHNICAL PROPOSAL

A DESIGN-BUILD PROJECT

MARCH 9, 2022 | 4:00PM

ROUTE 29
WIDENING PHASE II

FROM: 0.208 MILES WEST OF UNION MILL ROAD
TO: 0.460 MILES EAST OF BUCKLEY'S GATE DRIVE

FAIRFAX COUNTY, VIRGINIA

State Project No.: 0029-029-350, P101, R201, C501, D612

Federal Project No.: NHPP-5A01(917)

Contract ID Number.: C00110329DB113

Submitted by: ALLAN MYERS + WRA

VOLUME I

4.1 LETTER OF SUBMITTAL

March 9, 2022

Sudha Mudgade, PE, PMP, DBIA
Alternative Project Delivery Division
Virginia Department of Transportation
1401 East Broad Street, Annex Bldg, 5th Floor
Richmond, VA 23219

Letter of Submittal/Technical Proposal:
Route 29 Widening Phase II
Fairfax County, Virginia
Contract ID Number: C000110329DB113

Dear Sudha Mudgade:

The Team of Allan Myers (Myers) and Whitman Requardt & Associates, LLP (WRA), herein referred to as the Myers/WRA Team, brings together resources with proven VDOT design-build capabilities to design and construct the Route 29 Widening Phase II Project (Project). During the proposal development phase of this procurement, our local design and construction team has focused on a cost-effective approach to design and construction, simplifying the approach to maintenance of traffic, expediting construction of the shared use path to provide full access along the length of the Project corridor, and minimizing the risk associated with utility coordination/relocation efforts.

Our Team looks forward to partnering with VDOT NOVA District to deliver another successful design-build project to the Commonwealth.

As requested by Section 4.1 of the RFP, our Team presents the following information:

4.1.1 Allan Myers VA, Inc. (301 Concourse Blvd, Ste 300, Glen Allen, VA 23059) is the legal entity that will execute a contract with VDOT for the Project.

4.1.2 Allan Myers VA, Inc. intends to enter into a contract with VDOT for the Project in accordance with the terms of the RFP.

4.1.3 The offer in the Price Proposal will remain in full force and effect for one hundred and twenty (120) days after the Price Proposal is submitted to VDOT on April 12, 2022.

4.1.4 Director of Design-Build Thomas Heil will serve as the Point of Contact for Allan Myers.

Thomas Heil, PE, DBIA, Director of Design-Build	571.485.0387 (Telephone)
12500 Fair Lakes Circle, Suite 150	703.272.7230 (Fax)
Fairfax, VA 22033	tom.heil@allanmyers.com

4.1.5 Executive Vice President of Operations Aaron Myers is the Principal Officer for Allan Myers:

Aaron Myers, Executive Vice President of Operations	804.290.8500 (Telephone)
301 Concourse Blvd, Suite 300	804.418.7935 (Fax)
Glen Allen, VA 23059	aaron.myers@allanmyers.com

4.1.6 The Myers/WRA Team proposes a Final Completion date of August 31, 2026 for the Project.

4.1.7 The Myers/WRA Team is not proposing any unique milestone dates for the Project.

4.1.8 Myers has included an executed Proposal Payment Agreement (Attachment 9.3.1) in the Appendix.

4.1.9 Executed Certification Regarding Debarment Forms are included in the Appendix for all Team members.

4.1.10 Myers is committed to achieving the 9% DBE participation goal for the Project.

4.2.11 All Myers Team members meet the commercial/professional registration requirements specified, remain in good standing with all applicable regulatory bodies, and are eligible to provide the services required for the Project.

Respectfully,

Aaron T. Myers, Executive Vice President of Operations, Allan Myers

4.2 OFFEROR'S QUALIFICATIONS

4.2.1 CONFIRMATION OF SOQ INFORMATION

The information provided in the Myers/WRA Team's SOQ submitted on September 2, 2021 remains true and accurate. The only changes to the organizational structure of our Team are those requested by the RFP, denoted in subsequent sections with red text.

DEPUTY KEY PERSONNEL

To facilitate the training, growth, and promotion of key staff who will support VDOT's design-build (DB) program, our Team has expanded its organizational structure to include Deputy Design-Build Project Manager (DDBPM) Ivan Saer, PE, DBIA and Deputy Design Manager (DDM) Tyler Long, PE. These positions are included on the updated organizational chart on Page 4, and resumes are included on the Deputy Key Personnel Resume Form attached hereto as Attachment 4.2.1.

Figure 2.1: Deputy Key Personnel Experience Overview

Key Personnel	Years	Relevant Experience	Project Highlights
Deputy DBPM, Ivan Saer, PE, DBIA	26	• 10+ years DB experience • 19+ years NOVA project experience • Roadway widening expertise	• I-66 Outside the Beltway • Walney Road Widening DB • Fort Belvoir Hospital
Deputy DM, Tyler Long, PE	23	• 23 years VDOT Design experience • 10+ VDOT roadway widening projects • Joint DB experience with Myers	• Popes Head Road Interchange • Rolling Road Widening • Walney Road Widening DB

ORGANIZATIONAL CHART AND NARRATIVE

The Team's organizational structure supports schedule-conscious, cost-effective Project delivery. Our Team brings comprehensive risk management capabilities and expertise to successfully manage the Project risks, including utility coordination, maintenance of traffic, and culvert constructability. Design and construction staff will work together to incorporate safety and minimize environmental impacts in the Project approach. The key and value-added personnel discussed in the following narrative bring the expertise to mitigate the potential Project risks and ensure successful delivery.

Design-Build Project Manager Eric Eastin will report to VDOT and be responsible for overall Project performance. He will work closely with DDBPM Ivan Saer, DM John Maddox, CM Laurie Bryan, and QAM John Vicinski to develop and implement an expedited approach to design and construction throughout the proposal, design, and construction phases. Eric will ensure all contractual obligations/requirements are met and will proactively avoid/resolve disputes. He will coordinate with PR Manager Shannon Moody and VDOT for community and stakeholder outreach, including the County and FCPA; with Utility Manager Scott Styfco to proactively manage utility coordination efforts; and with Safety Manager Josh Brown to prioritize public safety during construction.

Deputy DBPM Ivan Saer, PE, DBIA will provide Project management oversight and support with direct oversight by DBPM Eric Eastin. He will collaborate with our DM, Deputy DM, CM, and QAM to help expedite delivery of the Project improvements while meeting all contractual requirements. As noted in the RFP, the deputy position may perform the key duties of the DBPM under direct oversight. Ivan will focus on ensuring the Team develops a design and construction approach that fulfills the contract obligations and expedites the schedule to meet early completion goals, if possible. Ivan worked closely with Deputy DM Tyler Long to successfully deliver the Walney Rd DB project in Fairfax County, VA. Their established working history and local presence will support successful delivery of the Project.

Quality Assurance Manager John Vicinski, PE will report to DBPM Eric Eastin, with oversight by VDOT. John will manage QA inspection/testing, including the Materials Notebook, to ensure all work and materials meet contract requirements. He will operate independently of both QC and Myers' production forces and will oversee the Non-Conformance Reporting and recovery processes. John will prepare/implement the Project QA/QC Plan, updating it as necessary. He will communicate frequently with VDOT, participate in weekly coordination meetings, and confirm construction QC is functioning properly. John also will ensure the design QA/QC process is followed prior to submittals.

Design Manager John Maddox, PE will report to DBPM Eric Eastin, and will manage a multidisciplinary team to meet design schedule milestones and ensure conformance with all contractual/technical requirements. Supported by

Design QA/QC Manager Regina Herr, PE, he will oversee adherence to the VDOT approved Design QA/QC Plan. John will coordinate with CM Laurie Bryan to develop an efficient, constructible design, and with Utility Manager Scott Styfco to incorporate impact avoidance measures into the design. He will engage in weekly design review meetings and periodic constructability reviews. During construction, John will validate design assumptions, approve shop drawings, and prepare as-builts.

Deputy DM Tyler Long, PE brings over 23 years of experience and will assist the DM in the management of all design elements of the Project, ensuring timely interdisciplinary reviews with a major focus on maintenance of traffic and constructability. He will attend the weekly design review meetings and present the status of plan submittals and plan reviews for the team. Tyler will assist in assuring all design requirements of the RFP are incorporated into each submittal to VDOT for all design disciplines. He will coordinate design efforts with CM Laurie Bryan and Utility Manager Scott Styfco to ensure each phase of construction has accounted for potential utility impacts and constructability of the Project.

Design QA/QC Manager Regina Herr, PE has 29 years of experience in the design of transportation projects. She has served as project manager for three consecutive Fairfax County Department of Transportation (FCDOT) On-call Contracts. Regina is the deputy project manager for the 5.5-mile Fairfax County Pkwy Widening and Popes Head Rd Interchange project. She served as the QC lead for the Walney Rd Widening DB project in Fairfax County and has managed numerous roadway projects for VDOT Northern Virginia District and FCDOT, including the Poplar Tree Rd Widening project. Regina's knowledge of VDOT's design criteria and experience with the NOVA District and Fairfax County will ensure quality design submissions for accelerated delivery of the Rte 29 Widening project.

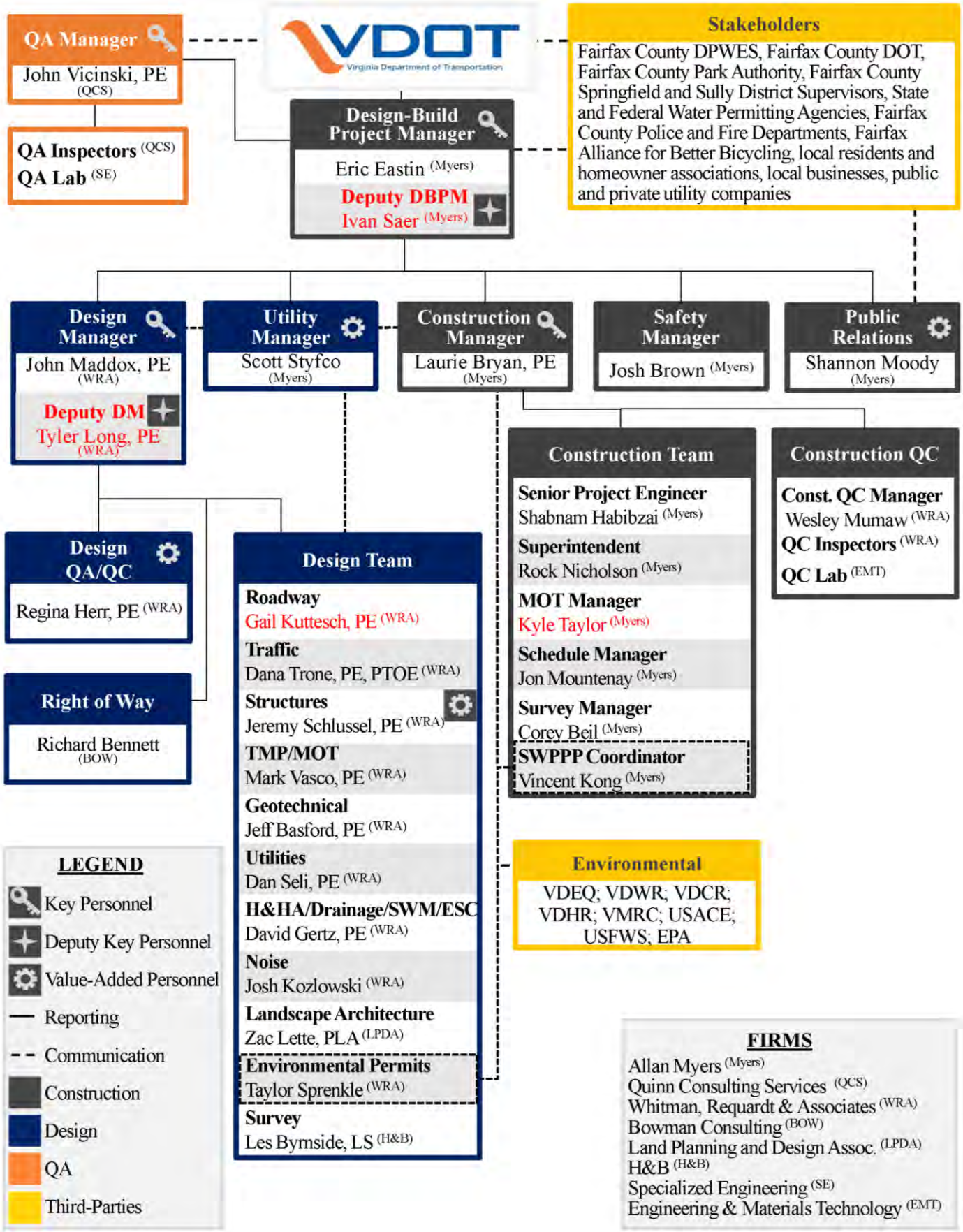
Structural Lead Jeremy Schlussel, PE has 25 years of experience with complex bridge structures and culverts design throughout Virginia. Recent similar projects include Rte 250 over Little Ivy Creek (Albemarle County) where an existing three-sided structure built in the 1930s was replaced using Accelerated Bridge Construction detailing to install a new quad 10-ft x 12-ft box culvert in 13 days during a roadway closure. Similarly, at Rte 655 over Sulphur Spring Run (Frederick County) the existing roadway was widened and raised about 6 ft, and the existing box culvert was replaced. Jeremy led the effort to develop a design using a three-sided structure to improve constructability and maintenance of traffic. He has extensive experience in the design of special structures, including retaining walls and combination retaining wall/sound barrier structures as provided on the Fairfax County Pkwy widening project from north of Rte 29 to north of Rte 50 in a similar geologic setting.

Construction Manager Laurie Bryan, PE will report to DBPM Eric Eastin and will be on site full time throughout construction. Laurie and Eric have been working together to deliver DB projects for the past eight years, including two roadway widening DB projects. Laurie will oversee all construction operations, including maintenance of traffic, utilities, and roadway construction. During the design phase, she will work closely with DBPM Eric Eastin and DM John Maddox to evaluate innovative construction approaches and ensure the sequence of work is consistent with construction means/methods. She will coordinate with Utility Manager Scott Styfco to incorporate utility relocations into the construction schedule and mitigate any potential utility delays. Laurie and Scott have worked together to successfully coordinate critical utility relocations on the I-66 Outside the Beltway project. With support from QC Manager Wesley Mumaw, Laurie will manage QC efforts to ensure the work and materials comply with the contract and will make certain that construction performance supports green-green-green status as evaluated by VDOT for cost, schedule, and environmental management.

Public Relations Manager Shannon Moody will work closely with VDOT and DBPM Eric Eastin to develop and implement a comprehensive public outreach effort. She will serve as an internal sounding board for the Team, sharing her understanding of Project success from a PR perspective to build trust and maintain community support. She has led public outreach on multiple DB projects, including the Walney Rd and Rolling Rd projects in Fairfax County.

Utility Manager Scott Styfco will investigate potential utility conflicts and avoidance strategies and will coordinate with utility owners to expedite relocation efforts without impacting any interim Project milestones or Project completion. He has been responsible for design and construction utility impact avoidance and mitigation on several DB projects, including I-66 Outside the Beltway and I-64 Segment II Widening. Scott will work closely with Utility Designer Dan Seli, PE to ensure design-related utility relocation activities are appropriately captured. Dan has provided utility design services for VDOT NOVA district since 1996.

Figure 2.2: Organizational Structure



4.3 DESIGN CONCEPT

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The Myers/WRA Team has extensive urban corridor experience implementing innovative design and construction techniques that minimize impacts for the traveling public, local communities, utility owners, and environmental resources. Our Team has provided successful project design services on roadway widenings, intersection improvements, and shared use path (SUP) facilities to VDOT for over 60 years and to Fairfax County for 20 years. This extensive experience enables our Team to provide design enhancements resulting in the highest quality project. Our Team's design expertise is supported by Myers' construction experience on more than 40 roadway widening projects over the past 10 years, including VDOT's Lynnhaven Pkwy, Rte 58 Laskin Blvd, and Route 60 Widening projects.

Although the Route 29 Widening Phase II Project (Project) is more completely developed than a typical design-build RFP, the Myers/WRA Team is committed to providing an efficient approach to design and construction that improves the overall Project concept, meets the needs of VDOT and Fairfax County, and achieves the Project goals of reducing congestion, improving safety and operations, and reducing Project costs. The improvements will include enhanced bicycle and pedestrian connectivity along the US Route 29 corridor and access to existing trails. We have completed a thorough, detailed review of the RFP requirements, conceptual layouts, and our proprietary meeting with VDOT. The meeting gave our Team the opportunity to discuss our design concepts and gain further understanding of the Project scope, constraints, risks, and stakeholder concerns.

Our proposed design concept supports VDOT's Project goals while allowing multiple areas of construction to be seamlessly coordinated. This approach will expedite construction and minimize construction impacts, allowing the traveling public to gain the Project's benefits in advance of Project completion. Furthermore, our approach to design enhances the RFP concept and provides increased value to the Project goals by:

- Improving safety throughout construction by providing a temporary SUP along the entire Project as an early element of work;
- Reducing Project cost and simplifying construction phasing by realigning the Willow Springs culvert to reduce overall length and footprint of the Project;
- Mitigating the schedule risk associated with utility relocation efforts through impact avoidance and minimization measures, including avoiding impacts to the water line at Union Mill Rd;
- Reducing impacts to the traveling public by using the existing roadway to the greatest extent possible and limiting the number of major traffic shifts to three; and
- Gaining stakeholder and public acceptance by constructing noise walls C1, C2, and G early in the Project, minimizing construction noise during future phases of work.

Graphical representations of the conceptual designs for all Project elements are provided in Concept Plans in *Volume II* of this Technical Proposal and described in greater detail in this section.

GENERAL INFORMATION

(A) DESIGN CRITERIA

As described in the RFP, the Project involves the reconstructing and widening of Route 29 from four to six lanes for approximately 1.6 miles and adding/improving SUPs on both sides for a total of 2.14 miles. Per the RFP, our Team has used the roadway inventory information provided in *Attachment 2.2* as a basis for ensuring the appropriate criteria to apply to the design of the Route 29 widening. A summary of the design criteria is provided in *Figure 3.1*. Our Team has analyzed the criteria and reviewed the design layout and details to evaluate opportunities to accelerate construction while reducing impacts to adjacent properties. Our design concept is fully compliant with the minimum requirements in the RFP and does not deviate from the allowed criteria.

Figure 3.1: Design Criteria

Roadway	VDOT Design Criteria	Posted Speed (MPH)	Design Speed (MPH)	"K" Crest (Min)	"K" Crest (Actual)	"K" Sag (Min)	"K" Sag (Actual)	Min Lane Width	Side Slope
Route 29 Lee Hwy	GS-5 – Other Urban Principal Arterial (Curb & Gutter)	45	45	61	61	79	44	11'	2:1
Route 645 (Stringfellow Rd & Clifton Rd)	GS-6 – Urban Minor Arterial (Curb & Gutter)	45	45	61	N/A	79	96	11'	2:1
Service Roads 1 & 3	GS-8 – Urban Local Street (Curb & Gutter)	25	25	12	25	26	N/A	10'	2:1
Service Road 2	GS-8 – Urban Local Street (Shoulder)	25	25	12	43	26	39	10'	3:1
Ramp A	GS-R – Interchange Ramp	45	45	61	N/A	79	N/A	16'	2:1

(B) RIGHT-OF WAY LIMITS

The Myers/WRA Team has reviewed the RFP design with regard to right-of-way (ROW) requirements and confirmed that the limits of construction and stormwater management (SWM) facilities are wholly contained within ROW limits as shown on the RFP conceptual plans. Our Team's design concept does not increase the amount of permanent or temporary easement areas as outlined in *RFP Section 1.5* and as shown in the conceptual plans.

(C) DESIGN EXCEPTIONS & WAIVERS

The Myers/WRA Team's proposed design will not introduce any new design exceptions or waivers to the Project. In an effort to remove substandard elements from the design, our Team has reviewed the stated approved design waivers and elements in *RFP Section 2.1.4*, which includes elements for the SUP width, buffer space width, SUP clear zone width, and entrance spacing criteria. We concur with the design developed in these locations based on the Project constraints and understand that eliminating these design waivers will negatively impact the Project limits and impacts. *RFP Section 2.1.4*, *Figure 3.2* illustrates the constraints that would be impacted by a design that eliminates the design waivers.

Figure 3.2: Design Waivers per the RFP

No.	Design Waiver Element	Station Range	Constraints
1	5-ft separation buffer	309+50-395+44	Reduce impact to existing service drive.
2	5-ft separation buffer, 8-ft width SUP	395+44-398+00	Reduce impact to existing service drive.
3	5-ft separation buffer, 8-ft width SUP, 2-ft clearance with HR-1 Ty. III (for maintenance purposes, the 2-ft clearance is to be paved)	398+00-402+75	Reduce impact to Betty's Azalea Ranch parking.
4	5-ft separation buffer, 8-ft width SUP	402+75-407+47	Reduce slope grading impact to adjacent parcels.

Our Team also has reviewed the access management design waivers shown in *RFP Section 2.1.4* to determine if the entrance spacing could be designed to eliminate the required design waivers. We evaluated the existing entrance locations and determined that relocating or adjusting these entrances would increase Project impacts and costs due to additional easements, grading, and construction. As stated in *RFP Section 1.5*, no increase to additional ROW or easement areas will be allowed; therefore, our Team's design concept maintains the entrance locations as shown in the RFP concept plans. *RFP Section 2.2.1*, *Figure 3.3* lists the locations of the entrances not meeting the minimum 305-ft entrance spacing criteria, per Table 2-2 RDM F-26. The proposed Project design will not introduce any new access management waivers.

Figure 3.3: Entrances Requiring Access Management Waivers per the RFP

Entrance Stations with Waivers	
• 372+00 R	• 381+17 L
• 375+44 L	• 402+96 R
• 377+42 L	• 403+61 R
• 379+81 L	• 405+53 R

4.3.1 CONCEPTUAL ROADWAY DESIGN

(A) GENERAL GEOMETRY

The Myers/WRA Team's design of Route 29 (including all connector roads, roadway crossings, service roads, and entrances) complies with the design criteria provided in *RFP Attachment 2.2*. Route 29 is proposed to be a six-lane facility incorporating 11-ft-wide lanes that meet the design requirements of a GS-5 "Other Principal Arterial" facility with a design speed of 45 mph. As required in *RFP Part 1 Section 4.3*, our Team is providing Conceptual Roadway Plans in *Volume II*. These plans will show all the general geometry, typical sections, horizontal and vertical alignments, and all other plan elements described in *RFP Part 1 Section 4.3*.

Intersection improvements consist of improvements to pedestrian and bicycle facilities and traffic signals, as well as median reconstruction and pavement resurfacing to Union Mill Rd, Centreville Farms Rd, Stringfellow Rd, Willow Rd, Sandy Point Ln, Hampton Forest Way, Meadow Estates Dr, Willowmeade Dr, Summit Dr, and Buckley's Gate Dr. Our Team's design for the intersection of Route 29 at Union Mill Rd and Centreville Farms Rd includes reconstruction of the southwest corner island, a new northeast corner island, minor widening, signal improvements, and lengthening of the Route 29 westbound double left turn lanes.

The intersection of Route 29 at Stringfellow Rd and Clifton Rd is shifted to the north to accommodate proposed service road #2 in the southeast quadrant. This proposed intersection shift will require widening to the north side of Route 29, pavement buildup, and slope correction. This intersection will also include new double left turn lanes along both directions of Route 29 and extended left turn lanes on Stringfellow Rd and Clifton Rd, as well as improved pedestrian and bicycle facilities in each quadrant of the intersection. The remaining intersections within the Project are generally reconstructed only as necessary to accommodate widening of Route 29, with the exception of Route 29 at Willowmeade Dr, which will be converted to a right in / right out intersection.

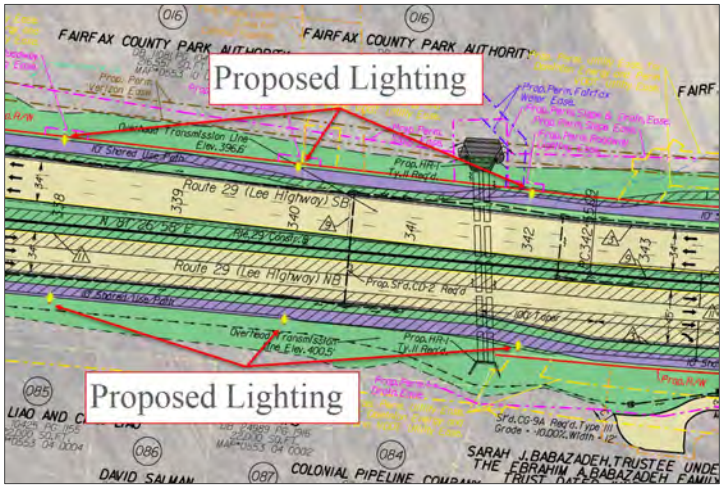
All the intersections shown in the *Volume II* Plans are consistent with the RFP turn lanes, pedestrian facility upgrades, safety improvements, design vehicles, and geometric configurations. All pedestrian and bicycle facilities are presented in the *Volume II* Plans. These facilities are provided through the entire length of Route 29 by 10-ft SUPs along both sides. As noted in the design waivers listed above and in the RFP, the SUP is reduced in certain locations.

(B) HORIZONTAL AND VERTICAL ALIGNMENTS

Horizontal alignment and curve data information are listed on the *Volume II* Plans and are consistent with the RFP plans. The horizontal alignment information as shown in the RFP plans is well established and more developed than typical RFP level design. Adjustments to the RFP horizontal alignment design would negatively impact the proposed intersection ties and ROW. Therefore, our Team is utilizing the RFP horizontal design alignments in the proposed design as shown in the *Volume II* Plans.

The vertical alignments and profiles of Route 29, connecting roadways, ramp A, and service roads shown in the *Volume II* plans follow the alignments depicted in the RFP plans. Our Team has noted that two vertical curves along Route 29 at Sta 329+37 and 340+70 do not meet the design criteria for minimum "K" values in a sag. As shown in the RFP plans, these vertical curves satisfy the comfort criteria. Sag vertical curves with "K" values below minimum length require additional lighting to achieve effective sight distance at night. Our Team's *Volume II* Plans, agreeing with the RFP requirements, include lighting in the sag vertical curve areas to provide the required sight distance at night, thus mitigating the below-minimum "K" values of the proposed sag vertical curves (see *Figure 3.4*).

Figure 3.4: Proposed Lighting to Mitigate "K" Value of Vertical Curve at Sta 340+70



(C) MAXIMUM GRADES FOR ALL SEGMENTS & CONNECTORS

The maximum grades shown on the *Volume II* Plans are consistent with the RFP plans. The vertical alignments as shown in the RFP plans are well established and more developed than typical RFP level design. Adjustments to the RFP design alignment would negatively impact the proposed intersection ties and ROW. Therefore, our Team is utilizing the RFP alignment in the proposed design to meet the current design criteria standards provided in *RFP Attachment 2.2*.

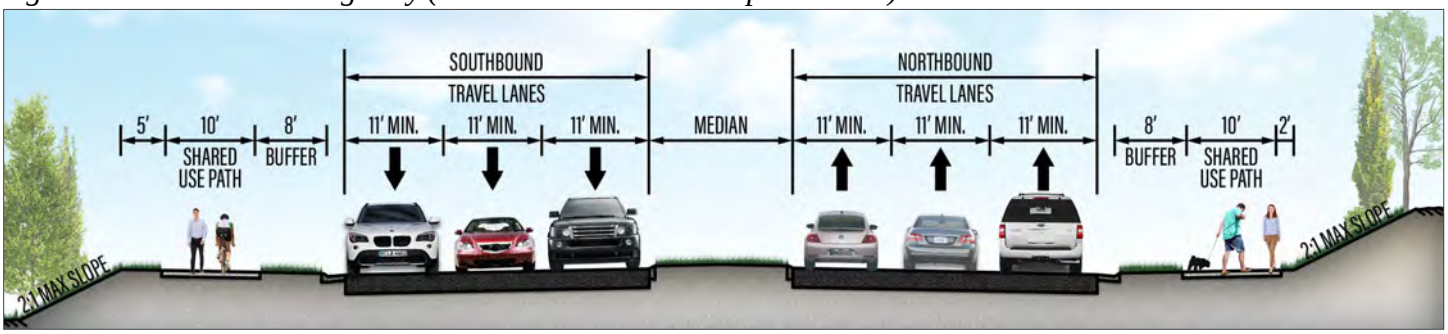
Figure 3.5: Roadway Grades per the RFP

Roadway	Max. Grade	Min. Grade
Route 29	5.34%	0.95%
Stringfellow Rd	2.60%	2.23%
Clifton Rd	2.11%	1.30%
Service Rd #1	4.20%	1.50%
Service Rd #2	4.63%	0.47%
Service Rd #3	4.75%	1.53%
Ramp A	1.60%	0.20%

(D) TYPICAL SECTIONS

The typical sections, provided in *Volume II* of the Technical Proposal, include all features required by the RFP. All proposed minimum pavement sections are in accordance with the RFP requirements.

Figure 3.6: Route 29 Lee Highway (GS-5 Other Urban Principal Arterial)



Roadway Segments, Shared Use Paths, and Sidewalks: Route 29 consists of six 11-ft-wide travel lanes, a variable width median with standard curb, and curb and gutter along the outside edge of roadway pavement. A 10-ft-wide SUP is provided along both the northbound (NB) and southbound (SB) lanes of Route 29 with generally an 8-ft buffer between the SUP and the curb and gutter. The SUP is reduced to 8 ft, the buffer is reduced to 5 ft, and the clearance to the handrail is reduced to 2 ft in the areas of the design waivers identified in the RFP. The proposed design does not introduce a need for additional design waivers associated with the SUP and buffer widths and is consistent with the RFP concept design.

Retaining Walls/Structures: The retaining walls shown on the *Volume II* Plans are mostly consistent with the RFP plans. MSE walls, VDOT Standard RW-3 walls, and combination noise/retaining walls will be used for construction of the retaining walls shown on the RFP plans. Noise walls will be post-and-panel type systems supported on concrete shafts, with the exception of noise wall C1 in the vicinity of Centreville Farms Rd. Due to the presence of hard, shallow diabase rock at this location, spread foundation systems will be used to support the post-and-panel noise wall. Our Team's unique design of the proposed double box culvert at Sta 353+50 allows for incorporation of the proposed double box culvert into the design of the retaining wall, such that the headwall and endwall of the proposed double box culvert will tie into the retaining walls required to support the roadway and SUP. This unique design reduces the length of the RFP concept culvert by 80 ft. The design also minimizes the necessary grading related to the Willow Spring Branch stream realignment by maintaining the existing alignment of the stream channel. Maintaining the existing stream alignment also allows for construction of the proposed culvert without the use of temporary drainage systems. The stream can be maintained in its existing location while the box culvert is installed in stages, one box following the other.

After installing support of excavation, a staged construction of the box is possible. Removal of the existing crossing within our work area is the first step. With the crossing removed, we will temporarily divert the stream around our work area and back into the existing crossing. Using temporary diversion measures such as sandbags or barrier wall, we will divert the stream flow to one side of the excavation area during construction of the first box section. Once diverted, we will redirect the stream through the new culvert section while constructing the adjacent box section. Each phase of culvert construction requires two stages. At the end of each phase, the creek returns to normal flow through the existing crossing.

(E) CONCEPTUAL HYDRAULIC, MAJOR DRAINAGE, AND SWM

Drainage Design: The proposed storm drainage will be designed in accordance with the VDOT Drainage Manual. Route 29 is classified as a Principal Arterial without shoulder and with a design speed of 45 mph. Inlets will be designed for an intensity of 4-in per hour and 6.5-in per hour will be used as the check storm event at sag locations. The 10-year storm event will be used for design of the proposed storm sewer pipes and analysis of the existing storm sewer system. Ditches will be designed for capacity to convey the 10-year flow, and to be non-erosive for a two-year flow using the Tractive Force Method. Based on the roadway classification of Route 29, all cross culverts must adequately convey the 50-year storm event and provide a headwater/diameter (HW/D) ratio of less than or equal to 1.5.

All existing pipes that are structurally deficient will be repaired or replaced as specified in the *Existing Pipes Inspection Recommendations Memo (2nd revision December 19, 2019)*. A hydraulic analysis will be completed for the pipes to ensure adequate capacity for the proposed design. The conceptual drainage layout consists of a combination of closed storm sewer system and ditches that convey the Project runoff to the 15 outfalls along the Project corridor. The drainage layout is designed to meet the stormwater management requirements.

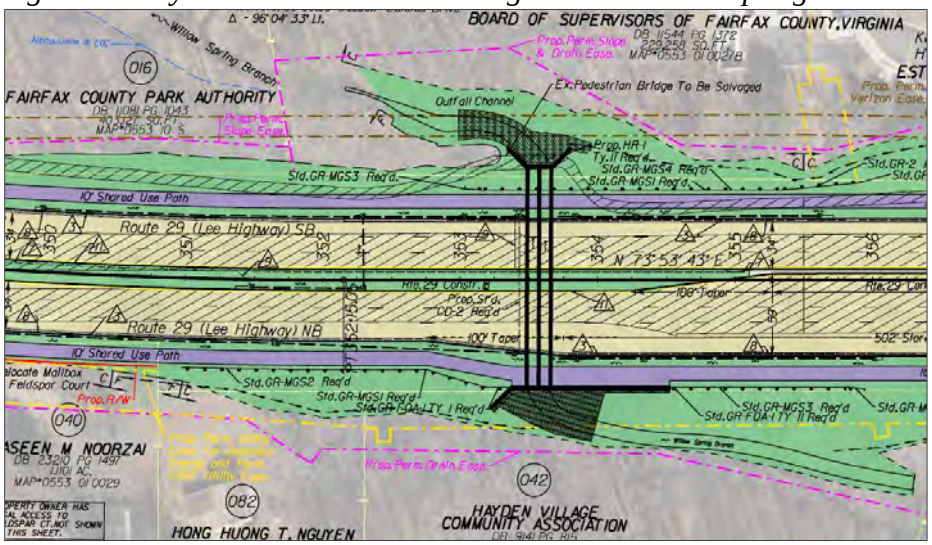
Our Team has reviewed the RFP plans to minimize utility conflicts. Through coordination of the drainage, traffic, and utilities designs, we have been able to reduce or avoid conflicts with existing utilities. Utility coordination will be a priority throughout design and construction of the Project. The Myers/WRA Team has a proven track record working together on highly urbanized projects with numerous existing utilities, including the Walney Rd DB project in Fairfax County. This experience will help us reduce costs and avoid schedule delays associated with utility relocations.

H/HA for Little Rocky Run and Willow Springs Branch: The hydrologic and hydraulic analysis will be performed in accordance with FEMA, FHWA, VDOT, and Fairfax County floodplain requirements. The Project will impact the Zone A FEMA floodplain at two locations: (1) The proposed fill widening of Route 29 will impact the edge of the Little Rocky Run floodplain, and (2) The Project will replace the existing structure carrying Route 29 over Willow Springs Branch.

After our Team completed a preliminary scour analysis for the culvert carrying Willow Springs Branch under Route 29, we concluded that a three-sided concrete bridge structure was not a viable solution for replacement of the existing culvert due to significant anticipated scour depths along the foundations. Therefore, a double concrete box culvert is recommended and will be armored with riprap at the upstream and downstream ends to mitigate the risk of future undermining due to scour. Riprap will be provided along the toe of the retaining wall to mitigate scour.

As specified in the minor foundation recommendations report, the bedding for the box culvert will be 18 inches of No. 3 aggregate, completely wrapped in a woven geotextile subgrade stabilization fabric, topped with 6 in of No. 25/26 aggregate bedding in accordance with PB-1 Box Culvert Bedding, to be placed along the entire length of the proposed box culvert.

Figure 3.7: Myers/WRA Team Culvert Alignment at Willow Springs



As a design innovation, our Team is proposing to place a double 8-ft x 8-ft box culvert at the same location as the existing bridge structure with a perpendicular crossing of Route 29 (*Figure 3.7*). This design change from the RFP plans reduces the proposed box culvert length from 241 to 161 ft, which results in cost savings for the Project. Additionally, it will be more efficient to construct a prefabricated box culvert that is not skewed. Myers used a similar approach on the US 113 DB project (see *Figure 3.8* on *Page 10*).

Placing the double 8-ft x 8-ft box culvert in the same location improves constructability by making it more efficient to remove the existing bridge structure. Our Team's solution also maintains the existing hydraulic opening throughout construction, reducing the potential for overtopping of Route 29 and the temporary flooding of private property as compared to the temporary drainage discussed in the H/HA report contained in the RFP Supplemental Information. This proposed design will not require any additional impacts.

Figure 3.8: Phased Culvert replacement on the US 113 DB project

Our proposed concept plans will also accelerate construction by eliminating the major temporary drainage of double 60-in pipes to be constructed under the existing bridge as detailed in the RFP supplemental information, and will allow for complete removal of the existing bridge structure as required by the RFP and VDOT's response to questions stating the existing bridge structure must be removed.

Due to the widening of Route 29, a portion of Willow Springs Branch stream will need to be relocated. However, our design will not require any additional stream impacts compared to the RFP design. Please refer to *Section 4.4.1 Environmental Management* in this proposal for additional details regarding the stream relocation.

Minor Culvert Crossings: There are two large-diameter storm drainage crossings on the Project (Station 328+75 and Station 341+60). However, these culverts do not require a Hydrologic and Hydraulic Analysis because the 100-year peak flow rate is less than 500 cfs. Our Team has reviewed the RFP plans and found that the proposed minor culvert crossings meet the VDOT Drainage Manual requirements. As shown also in the RFP plans, a proposed permanent drainage easement is upstream of the dual 48-in culvert at Sta 328+75 to encompass the 100-year water surface elevation. The proposed drainage easement will prohibit future development within the 100-year floodplain. There is another proposed culvert, a dual 60-inch culvert at Sta 341+60 adjacent to the Colonial Pipe Easement. A drainage easement is proposed on the upstream end to account for the increase in the 100-year water surface elevation.

Stormwater Management: The stormwater management design will comply with *Part II-B* of the *Virginia Stormwater Management Program (VSMP) regulations*, *VDOT Drainage Manual*, and *VDOT Instructional and Informational Memorandums (IIM)*. The Project is located within a single hydrologic unit code (HUC), PL46-Lower Bull Run, and is not subject to Fairfax County Water Supply Overlay District (WSPOD) requirements. VDOT has purchased nutrient credits to meet 25% of the Project's water quality requirement.

Our Team has reviewed the RFP conceptual stormwater management design and has found that the Project adequately meets the water quality requirements (19.32 lbs/yr per the RFP design) through purchasing nutrient credits and a proposed Level II Wet Pond "BMP A"- Level II. Likewise, the proposed design for water quantity control, performed in accordance with the VSMP Part II-B, meets the *Channel Protection and Flood Protection regulations*. Quantity control will be achieved by diverting runoff and providing additional detention volume in the proposed wet pond.

Due to the widening of Route 29, the Project will need to relocate an existing VDOT stormwater management facility (VDOT SWM#29106). Under the proposed conditions, onsite runoff will be diverted to the wet pond. This existing facility is capturing mostly off-site runoff. It will be reconstructed to account for its original SWM requirements and will not account for any additional water quality treatment for the Project.

(F) PROPOSED RIGHT-OF-WAY LIMITS

Differing from typical VDOT design-build projects, our Team's services will include all work necessary for ROW and easement acquisitions for the 32 parcels as identified in *Figure 3.9*. VDOT has acquired or will acquire ROW and easements as shown on the RFP Conceptual Plans for the 23 parcels listed. Our Team agrees to design and build the Project completely within the limits of the ROW for such parcels as certified on August 18, 2021. Currently, we are not contemplating any changes to the horizontal alignments elsewhere; therefore, the ultimate ROW is anticipated to be as shown on the RFP Conceptual Plans.

If during final design the need arises to slightly revise ROW or temporary, permanent, or utility easements, our Team will perform all ROW acquisition services necessary. All ROW acquisition costs (compensation paid to landowners for ROW or easements, including any damages, acquired improvements, and/or costs to cure) will be paid by VDOT, and are not included in our Team's Price Proposal.

Figure 3.9: ROW Parcels Impacted

VDOT Acquired Parcels (23 total)		DB Team Acquired Parcels (32 total)		
002	016	001	049	069
003	033	005	051	070
006	034	038	052	074
007	041	039	054	075
008	050	040	056	077
009	058	042	057	078
010	072	043	059	079
011	084	044	061	082
012	085	045	063	
013	086	046	065	
014	087	047	066	
015		048	068	

(G) UTILITY IMPACTS OF PROPOSED DESIGN

There are 15 utility providers whose existing utility infrastructure will require relocation as part of the Project scope as listed in *Figure 3.10*.

To mitigate the potential schedule impacts associated with utility relocation, our Team plans to strategically perform specific portions of the utility relocation and roadway construction. For example, the Myers/WRA Team proposes to phase the relocation of the Fairfax Water 24-inch water line at Willow Springs, relocate this waterline outside the SUP and above the proposed box culvert, and design the box culvert inverts to provide adequate water line clearance and cover per Fairfax Water requirements.

Our Team will also implement utility avoidance measures to the extent feasible. For the signal pole location at Union Mill Rd, we propose to locate the proposed signal pole in the SW quadrant away from the Fairfax Water 24-inch water line, eliminating 350-ft of relocation of the 24-inch water line and 130-ft of relocation of the 12-inch water line. The northernmost portion of the box culvert and this portion of the waterline will be constructed in Phase 2, leaving the existing 24-inch waterline in service until the final waterline cut-ins can be made.

To expedite relocation of the communications lines along the outside edge of the NB travel lanes, our Team has prepared a work phasing schedule that allows for relocation of these lines simultaneously with roadway construction of the SB travel lanes.

Figure 3.10: Utility Impacts of the Proposed Design

Utility Owner	Description	Status	Mitigation Strategy
Fairfax County Water Authority	24-in Water Line	Conflict	Relocate
Fairfax DPW Sewer	8-in &12-in Sanitary Sewer Lines	Conflict	Relocate
Colonial Pipeline	6-in, 32in, & 36-in Steel Gas Lines	Conflict	Extend casings (3)
Plantation Pipeline	6-in Steel Gas Line	Conflict	Extend casing
Dominion - Distribution	OH Electric Lines	Conflict	Relocate
Dominion Transmission	OH Electric Line	No conflict	Protect and remain in place
Lighting (Dominion)	Multiple light poles	Conflict	Remove/replace with permanent VDOT lighting per the RFP requirements
Washington Gas	2-in – 8-in Plastic Gas Lines	Conflict	Relocate at conflict points
Verizon Virginia	Multiple OH and UG Communication Lines and Poles	Conflict	Relocate in areas of conflict

Utility Owner	Description	Status	Mitigation Strategy
Zayo	Parallel & perpendicular UG crossing; NB lane	Conflict	Shares duct bank with Verizon for most of system
MCI/Verizon Business	UG and OH with a majority of lines along the SB lane	Conflict	Relocate in areas of conflict
Comcast	UG along SB lane	Conflict	Relocate in areas of conflict
AT&T	UG parallel and crossings; NB lane	Conflict	Shares ductbank system with Fiberlight; Relocate in areas of conflict
Fiberlight	UG along the NB lane	Conflict	Relocate in areas of conflict
Summit IG	Parallel to Clifton and Stringfellow Rd SB lane	Conflict	Relocate in areas of conflict
Cox Cable	OH parallel to the road and some crossings. NB lane	Conflict	On Dominion OH poles, relocate with Dominion
Shentel	OH parallel to the road and some crossings. NB lane	Conflict	On Dominion OH poles, relocate with Dominion

(H) NOISE WALL LOCATIONS

Based on the Final Design Noise Analysis that has been completed, our Team will construct Walls C, D, and G as identified on the RFP Plans. Our Team will work to resolve all engineering conflicts involved with construction of the proposed noise walls and conduct additional noise analyses and submit to VDOT for approval. The following ground-mounted walls would be constructed:

- **Wall C** is a system of two dependent walls (C1 and C2) located along the north side of Route 29, east of Centerville Farms Rd. It provides noise reductions for residences along Matthews Vista Dr, with a total length of approximately 801 ft; an average height of 16.7 ft; and a total surface area of 13,339 SF. Construction of this wall may impact the existing community sign at the intersection of Lee Hwy and Centerville Farms Rd and the privacy fence along Lee Hwy. The proposed gap and overlap of the wall system will maintain the sidewalk connection to the SUP along Route 29.
- **Wall D** is located along the south side of Route 29, east of Moore Rd. It provides noise reductions for residences along Regal Crest Dr, with a total length of approximately 1,122 ft; an average height of 15.7 ft; and a total surface area of 17,595 SF.
- **Wall G** is located along the north side of Route 29, between Meadow Estates Dr and Willowmeade Dr. It provides noise reduction for residences along Knight Arch Rd and Meadow Estates Dr, with a total length of approximately 964 ft; an average height of 20 ft; and a total surface area of 19,236 SF.

Walls C1, C2, and D are along SB Route 29 and will be constructed during the initial activities of Phase 2 of the sequence of construction. Including these walls in the early works of Phase 2 provides an early benefit to the community. *Figure 5.11 on page 42* shows the noise walls and other early benefits of the Project.

(I) OTHER KEY PROJECT FEATURES

ITS: We propose CCTV cameras at the Stringfellow Rd/Clifton Rd and Union Mill Rd/Centerville Farms Rd signalized intersections and will utilize broadband communication service drops. The broadband and electrical service will be shared with the traffic signal to minimize infrastructure and recurring monthly service charges to VDOT. The camera cabinets will be provided with network switches for use with fiber optic communications to be provided by others in the future. CCTV construction will be coordinated with traffic signal construction and MOT to avoid disruption to existing CCTVs until the new cameras are installed and operational, ensuring that VDOT will have traffic monitoring capabilities throughout construction. All ITS infrastructure and components will be demonstrated to be fully installed and fully operational by the Project's Final Completion Date, including completion of the 30-day in-service burn-in period specified by the RFP and completion of the field acceptance, integration, and system acceptance testing required by the standard specifications.

Signals: Traffic signal work consists of full signal reconstruction at Stringfellow Rd/Clifton Rd and significant modifications at the Union Mill Rd/Centreville Farms Rd, Meadow Estates Dr/Hampton Forest Way, and Summit Dr/ Buckley's Gate Dr intersections. All signalized intersections will be upgraded with Accessible Pedestrian Signals (APS) and Accessible Pedestrian Detectors (APD) to support the Project's pedestrian facility improvements. Traffic signal preemption will be provided at all intersections and the preemption cabling will use junction boxes separate from the signal and intersection lighting. Traffic signal construction will be coordinated with MOT to ensure signal operations are maintained and signal timings are adjusted to maintain efficient flow of traffic through the work zone. For example, signal reconstruction at the Stringfellow Rd/Clifton Rd intersection is complicated by significant roadway widening, intersection reconfiguration, and shifting of Route 29 alignment to the north. A temporary traffic signal will be required at this intersection beginning with Phase 2 so that existing signal equipment can be removed to allow roadway construction on the north side to proceed. The temporary signal is also required to provide signal head coverage of all temporary travel lanes as the lanes are shifted south in Phase 2, split during Phase 3, and north in Phase 4 (as shown in *Figure 4.5.2* in *Section 4.5*). Traffic signal conflicts with the proposed roadway design and MOT are not prevalent at the three remaining intersections, allowing construction of the proposed traffic signal equipment to occur while the existing signal equipment is maintained.

Lighting: Lighting will be provided at all signalized intersections to increase safety for all pedestrian crossing facilities. The lighting will use a mixture of std. MP-3 mast arm and combination luminaire mast arm poles and stand-alone light poles. Lighting also will be provided at the sag vertical curve on Route 29, east of Stringfellow Rd/ Clifton Rd, that only meets comfort criteria as an additional mitigation for safety. This lighting system will consist of 16 light poles on a separate meter and control cabinet. It will extend approximately 1,500 ft east of the intersection, utilizing the proposed permanent traffic control device easements shown on the RFP Concept Plans that are being acquired by VDOT. The 12 existing light poles on the NB Route 29 approach to Fairfax County Pkwy are impacted by the Project's SUP construction. These light poles will be replaced and reconnected into the existing interchange lighting electrical system. Photometrics calculations will determine an efficient LED luminaire and pole mounting height combination as well as luminaire spacing to light the required areas with a minimum number of poles to meet, without overly exceeding, VDOT lighting criteria, thereby reducing long-term maintenance for VDOT. All lighting will be powered from dedicated electric services separate from traffic signal services.

Our Team understands the Project requirement to maintain lighting during construction at locations where it exists today and maintain lighting in the permanent condition. Our intent is to sequence lighting construction so that permanent lighting is operational before any impacts to existing lighting, thereby reducing the need for temporary lighting and the associated cost. Existing VDOT lighting impacted by SUP construction on the NB Route 29 approach to the Fairfax County Pkwy interchange is in areas of shallow cut or fill. This will allow the existing lighting to remain operational while the new replacement lighting is constructed, eliminating the need for temporary lighting in this area. Our Team will coordinate with Dominion Energy (DE) and Fairfax County for relocation, replacement, and/or removal of existing DE-owned leased lighting, which is present throughout the Project area. Coordination will be performed in accordance with Chapter 15 of the *VDOT Utility Manual of Instructions*.

Signing: The signing design consists of furnishing and installing all required new, temporary, and permanent signs and structures with respect to the Project's final design and final configuration, including signing on adjacent roadways affected by the Project. The signing will include all regulatory, warning, guide, and supplemental signs designed in accordance with the MUTCD, Virginia Supplement to the MUTCD, and all VDOT standards. Clearview fonts will be used in the signing design following the *IIM-TE-337.3 – Clearview Highway Font Lettering for Guide Signs*. All advance guide signs on NB Route 29 approaching the Fairfax County Pkwy/West Ox Rd interchange will be mounted on overhead sign structures. The remainder of the signs will be installed on the appropriate sign supports (typically square tube post) or structures following the VDOT Traffic Engineering Design Manual (April 2020) guidance. Our preliminary investigation following *IIM-TE-380.1 – Overhead Sign Lighting* shows that sign lighting is not warranted for the overhead sign structures in this Project, which will reduce VDOT maintenance and Project costs.

4.4 PROJECT APPROACH

4.4.1 ENVIRONMENTAL MANAGEMENT

The Myers/WRA Team (Team) will leverage our proven history of managing complex design-build (DB) projects to implement environmental best practices and lessons learned throughout the delivery of the Route 29 Phase II Project (Project). Since our Team's design and construction staff are co-located just minutes from the Project location, we can quickly address environmental management issues that may arise during construction. WRA will lead all aspects of environmental management for the Project, including environmental compliance and permitting and addressing environmental conditions/areas of concern. ***Taylor Sprenkle, PWD,*** will lead WRA on environmental management and permitting, making sure environmental conditions/areas of concern are considered throughout the Project's duration. ***Gary Garrett***, DEQ E&SC Inspector, will serve as the environmental compliance manager and will lead the Project's environmental compliance program. Taylor and Gary will work closely with Myers' ***Vincent Kong***, who will serve as the Project's SWPPP coordinator. CM ***Laurie Bryan, PE,*** and Superintendent ***Rock Nicholson*** both hold active ESCCC certifications and will oversee compliance efforts in the field.

APPROACH TO ENVIRONMENTAL MANAGEMENT

Environmental Management Plan: Our Team will develop an Environmental Management Plan (EMP) based on an analysis of environmental resources along the Project corridor as outlined in the RFP. The EMP will outline environmental goals, including avoidance and minimization, mitigation, and risk reduction; ensure satisfaction of permit requirements; address schedule requirements for permitting and environmental compliance; and institute robust procedures for compliance, monitoring, reporting, and continuous improvement of our processes. To meet this commitment, the EMP will be reviewed semi-annually and updated throughout the Project duration.

Success with Implementing an Environmental Commitments Plan

Our Team recently prepared an Environmental Commitments Plan (ECP) for the Popes Head Road Interchange with Fairfax County Pkwy in Fairfax County, Virginia. This ECP informed engineers of environmental constraints and, early in the design process, enabled design around environmental constraints, including ***Fairfax County Park Authority property and the potential for asbestos soils****.*

Our EMP will discuss all elements listed in the RFP, including:

- Incorporating environmental commitments with processes, plans, and construction activities, including development of an Environmental Commitments Plan. Environmental commitments include environmental permits acquisition; adhering to Section 4(f) mitigation measures; performing asbestos inspections on all structures; and, as applicable, performing asbestos abatement, monitoring, notifications, and demolition in accordance with VDOT procedures.
- Maintaining an environmental compliance program. The EMP will include personnel contact information, a narrative describing the functional relationship between environmental compliance and construction personnel, and processes for developing and implementing corrective actions to address compliance deficiencies.
- Coordinating with resource agencies to verify permit requirements. The EMP will include inspection frequencies and timelines for submittal of reports and notifications to VDOT and regulatory agencies.
- Performing additional threatened and endangered (T&E) species reviews and cultural resources database reviews to ensure determinations remain valid.
- Maintaining communication with VDOT to identify any changes that may require additional environmental studies.
- Coordinating with Project stakeholders to conduct activities in an environmentally responsible manner.

Environmental Compliance: Our Team will take a proactive, comprehensive approach to environmental compliance through all phases of construction. Our Team's environmental compliance strategy will be documented in the EMP and includes the following:

- Creating an electronic permit compliance notebook (e.g. PlanGrid) that stores all relevant environmental permits, permit conditions, and regular review/updates to ensure compliance with permits and applicable regulations.

Environmental Compliance Services

Our Team includes environmental staff that served as a supplemental VDOT environmental monitor for the recently completed I-64 Segment III Capacity Improvements DB Project. The staff worked directly with the VDOT area chief engineer and VDOT construction managers to provide QA and oversight, ensuring the contractor complied with all environmental permits.

- Conducting regular erosion and sediment control (E&S) inspections, maintaining an up-to-date record set of E&S drawings, and conducting C-107s twice a week. During inspections, special attention will be paid to jurisdictional features, such as Willow Springs Branch, to ensure E&S controls are properly maintained.
- Implementing a proactive approach to E&S compliance, which includes pre-storm event inspection/maintenance, immediate corrective actions/ repairs as needed after storm events, and prompt coordination with regulatory agencies to report any incidents.
- Conducting environmental compliance training for construction crews before work begins and periodically throughout construction.
- Installing and maintaining orange safety fencing and signage for non-disturbed environmental features.
- Limiting tree clearing, conducting temporary work on mats, and restoring and stabilizing temporary impact areas to pre-construction contours.
- Conducting monthly VWP inspections and documentation.
- Completing biannual VWP Permit Construction Status Update Forms.

Training Experience

Allan Myers conducts formal Environmental Compliance Training with all construction project team members, including project managers, superintendents, project engineers, and field managers. To support our commitment to environmental compliance, we will take a similar approach to education and training on this Project.

Communication Methods: Consistent communication, both within our Team and with regulatory agencies, is crucial for maintaining the Project schedule. As documented in the EMP, our Team's communication methods will include:

- *Creating an Environmental Commitments Plan that depicts the location of any environmental constraints.* We will distribute this living document to all Team members so that we can responsibly design and construct around areas of environmental concern.
- *Holding weekly coordination meetings between design and construction personnel.* Our Team's co-location helps facilitate regular communication. These meetings will provide an opportunity to discuss and understand environmental constraints to ensure they are addressed by all disciplines, and to discuss anticipated permit requirements to facilitate avoidance and minimization efforts. In addition to formal coordination meetings, our environmental staff will work closely with design engineers to ensure environmental constraints are recognized throughout the design process and construction means and methods are understood in the permitting process. This communication eliminates rework during later stages of design and avoids potential permit modifications.
- *Conducting regulatory agency pre-application meeting(s).* During these meeting(s), ***Taylor Sprenkle*** will review impact limits with the appropriate regulatory agencies. This approach expedites the permitting process by allowing each agency to review, comment, and provide recommendations on the impacts before permit application submittal.
- *Conducting field meetings and inspections with regulatory personnel,* as coordinated/requested by the agencies. Our environmental compliance manager, ***Gary Garrett***, and our SWPPP coordinator, ***Vincent Kong***, will lead these efforts. Meeting side by side with regulatory personnel will enable us to rapidly respond to any environmental issues discovered during inspections.

ENVIRONMENTAL CONDITIONS/AREAS OF CONCERN

Identifying and addressing recognized environmental conditions/areas of concern early in the design process facilitates the timely issuance of environmental permits. Upon NTP, our Team will conduct fieldwork and perform technical services, as necessary, to make sure that information provided in the RFP remains valid. These services may include additional delineations outside of the Preliminary Jurisdictional Determination (PJD) area, stream assessments, T&E species reviews, hazardous materials investigations, and ensuring all elements of the final noise report are included in the Project design. All recognized environmental conditions/areas of concern identified, and those not identified in the RFP, will be incorporated into the EMP. Our approach to environmental conditions/areas of concern includes water quality permits and compensatory mitigation, section 4(f) resources, and the additional conditions/areas of concern identified in *Figure 4.2* on *page 17*.

Water Quality Permits and Compensatory Mitigation: Due to the narrow Project corridor and complex nature of the Project's stream crossings, our Team's conceptual design impacts are the same as the RFP design impacts (0.071 acres of wetlands and 1,947 linear ft of streams). However, our Team was able to realign and shift the proposed double box culvert crossing of Willow Spring Branch so that the culvert crosses Route 29 at a perpendicular angle instead of the skewed angle depicted in the RFP. Resource agencies prefer that resources are crossed at perpendicular angles, so this refinement will be viewed favorably by the permitting agencies.

Figure 4.1: Temporary Stream Diversion for Phased Culvert Replacement

Our Team proposes to construct the double 8-ft x 8-ft box culvert in phases to ensure continuous flow of Willow Spring Branch throughout construction. The Willow Springs Branch box culvert will be constructed in three phases by diverting the stream outside of (but parallel to) construction of the first precast box, similar to the approach shown in *Figure 4.1*. The stream will then be diverted into the newly constructed box, while the second precast box is placed. This same approach will be utilized in all three phases for constructing the double 8-ft x 8-ft box culvert and until the flow of Willow Springs Branch will be directed into its final post-construction location through the double box culvert. *Figure 4.1* shows construction of a phased culvert replacement using a temporary stream diversion on Myers' US 113 DB project.

Based on our proposed impacts, the Project will require an Individual Permit (IP) from DEQ and a State Programmatic General Permit (SPGP) from USACE. The Project does not cross any streams with drainage areas greater than five square miles; therefore, no Virginia Marine Resources Commission (VMRC) permit will be necessary. Our proposed impacts to wetlands and streams will be mitigated through the purchase of approximately 0.16 wetland credits and 2,278 stream credits from approved mitigation banks. Based on a Regulatory In-Lieu Fee and Bank Information Tracking System (RIBITS) query conducted on January 26, 2022, there are 10.05 primary service area wetland credits and 49,696.8 primary service area stream credits available for purchase. Therefore, successful mitigation is anticipated.

Once permits are secured, permit conditions and special conditions will be incorporated into the EMP. During construction, if permit modifications are required, our Team will avoid increasing wetland and stream impacts and delays to the Project schedule to the maximum extent practicable.

Section 4(f) Resources: Since our Team's proposed conceptual design, including utility relocation, is entirely within the footprint of the RFP design concept, the previously determined 4(f) de minimus finding, dated June 22, 2021, will remain valid. This finding allowed for 0.456 acres of temporary grading and construction easements, 1.976 acres for permanent easements, and 1.254 acres in permanent fee simple taking from Willow Pond Park. Our Team will adhere to the proposed mitigation measures of de minimus impacts as stipulated in the de minimus finding. To manage pedestrian/bicycle traffic during construction, a temporary shared use path (SUP) will be constructed alongside NB Route 29. This path will remain operational throughout construction of the Project. The current trail along SB Route 29 will be removed entirely and replaced with a SUP that is entirely within the right-of-way (ROW). Per the June 22, 2021 de minimus finding, VDOT will mitigate removal of trees at Willow Pond Park through compensation at the market value contribution the trees make on the highest and best use of land, which is park land.

As design advances following NTP, all efforts will be made to avoid impacts to 4(f) resources outside of the impacts illustrated in the RFP Conceptual Plans; avoid utilizing 4(f) resources for staging, borrow/disposal, or easements; and avoid changes to ROW or easements on 4(f) properties as shown on the RFP conceptual plans, as these changes could require additional 4(f) technical studies and analysis and thus unanticipated changes to the Project schedule. Our Team will continue to coordinate 4(f) resources with Fairfax County and Fairfax County Park Authority and will obtain a Right of Entry or Special Use Permit prior to accessing the 4(f) properties.

Other Environmental Conditions/Areas of Concern: In addition to the water quality permits, compensatory mitigation, and 4(f) resources described above, the Myers/WRA Team will address other environmental conditions/areas of concern as documented in *Figure 4.2*.

Figure 4.2: Environmental Conditions and Mitigation Strategies

Environmental Condition/ Area of Concern	Risk Mitigation Strategy
NEPA	• Carry out all NEPA commitments and support with appropriate documentation. • Avoid changes to Project footprint that result in additional NEPA work and unanticipated schedule changes. • Support VDOT's preparation of Final Re-Evaluations before ROW acquisition (EQ-103, EQ-200, EQ-201).
Cultural Resources	• Previously concluded Section 106 No Effect determination (10/4/2018) remains valid. • Avoid changes to Project scope/footprint that could require additional review/coordination/resource studies. • Avoid utilizing 4(f) resources for staging, borrow/disposal, or easements. • Immediately notify VDOT if any unanticipated cultural resources are identified during construction.
Threatened and Endangered Species	• Upon NTP, verify that northern long-eared bat is the only T&E species with potential Project impacts. • Utilize the findings of the January 5, 2016 Final 4(d) Rule to satisfy Section 7 obligations.
Hazardous Materials	• Comply with the contract's hazardous materials special provisions and guidance documents. • Perform asbestos inspections on all structures and, as applicable, perform asbestos abatement, abatement monitoring, notifications, and demolition in accordance with VDOT procedures. • Natural asbestos in soil is known to exist between Stringfellow Rd and Willowmeade Dr. Our Team will be responsible for asbestos monitoring by a DPOR qualified asbestos professional and containment, removal, and legal disposal in accordance with the *Special Provision for Asbestos Containing Soils*. • Develop a SPCC Plan prior to the start of construction. • Avoid acquisition of any additional property beyond what is shown in the RFP Conceptual Plans to avoid the potential for additional hazmat studies, which could impact the Project schedule.
Air Quality	• Adhere to the air regulatory requirements (included in the Air Report in the RFP info package). • Limit emissions of VOC and NOx during construction and adhere to all relevant regulations.
Noise Mitigation	• Construct noise barriers C, D, and G as identified in the Final Noise Abatement Design Report. • Perform additional noise analysis if deviations in horizontal or vertical alignment are proposed and provide to VDOT for review and approval.

SCHEDULE INTEGRATION

Obtaining environmental permits and approvals in a timely manner is a schedule and planning priority for our Team because construction within regulated features cannot start until permits are issued. As described above and in *Section 4.6*, our Team has already integrated key environmental permits, environmental hold points, and approval activities into the Project schedule and the EMP. Upon NTP, our Team will immediately begin preparing permit applications to minimize the possibility of permitting delays. As part of the permitting process, our Team will re-query threatened and endangered species databases to determine if any new species may be present in the Project area that could affect the schedule. Based on the information provided in the RFP, no time of year restrictions are anticipated for listed species since the Project will utilize the findings of the January 5, 2016 Final 4(d) Rule to satisfy northern long-eared bat Section 7 obligations. If any additional threatened and endangered species are identified in the new database queries, our Team will immediately coordinate with resource agencies to determine if these new findings could result in impacts to the Project schedule. Any environmental conditions/areas of concern identified throughout the Project's duration will be promptly incorporated into the Project schedule and EMP to minimize the possibility of delays.

A robust Project schedule that includes all pertinent environmental activities is described in *Section 4.6* of this proposal and along with the longest path is included in *Volume II*. We have developed a schedule work breakdown structure for permitting / environmental activities that include the VPDES, Waters of the US Permits, pollution prevention, SWPPP, and hazardous materials. Key schedule milestone environmental permitting dates are shown in *Figure 4.3* below.

Figure 4.3: Environmental Permitting Schedule Overview

Milestone	Schedule Dates
Notice to Proceed	June 17, 2022
VDOT Approved FI/RW Plans	January 9, 2023
VDOT Approved Final Pollution Prevention Plan for Phase 1 Activities	April 13, 2023
Agencies Issue Final Waters of the US Permit	September 23, 2023
Develop SWPPP Compliance Notebook	October 16, 2023
Notice to Commence Construction – Phase 2 MOT / TMP	October 18, 2023
Final Completion	August 31, 2026

4.4.2 UTILITIES

APPROACH TO UTILITY COORDINATION, ADJUSTMENTS, AND RELOCATIONS

Our top priority for utility coordination is avoidance of conflicts. Therefore, during final design, the Myers/WRA Team (Team) will be mindful of the existence, ownership, horizontal and vertical location of each utility in the corridor and will revise the design to eliminate conflicts wherever possible. For conflicts that cannot be avoided, our Team's focus will be successful utility relocation through early, frequent, and open communication with the utility companies. Our Team will refine design work packages to support utility relocations and will implement a work plan if a previously unidentified utility is encountered during construction. Our Team will take an active approach to utility coordination and relocation that follows the VDOT Utility Manual of Instructions, Utility Relocation Policies & Procedures. Hands-on coordination will continue throughout the Project to keep the utility companies focused and cooperating toward the shared goal of timely and cost-effective relocations. Our Team also will ensure accurate and complete recordkeeping and timely posting of utility relocation data in the VDOT RUMS system.

Figure 4.4 highlights our Team's approach to utility coordination and relocations, with further detail described below.

Figure 4.4: The Myers/WRA Team's Utility Coordination Approach

Provide Experienced Utility Coordination Experts: Our Team has significant experience in designing, constructing, and coordinating relocations with the utility companies in the NOVA area. Our Utility Task Force is comprised of Myers' Utility Manager **Scott Styfco**; Utilities Design Lead **Dan Seli, PE**; and ROW Manager **Richard Bennett**. They bring more than 110 years of collective experience in design, construction, and relocation services for major communication companies, natural gas transmission companies, water, sewer, and energy companies. They have worked together to manage extensive design-build (DB) projects.

Scott has served as deputy manager of the Utility Department for the Ferrovial-Allan Myers JV constructing the I-66 Outside the Beltway project since October 2017. His team is responsible for extensive coordination with 54 utility owners and over 300 separate utility relocations, leading conflict identification and relocation design efforts, coordinating with communications owners, and providing management-level oversight. Through this process, **Scott** has forged relationships with all of the utility owners and most of the owners' representatives involved in this Project. **Dan** has been providing utility relocation coordination and design services in the Northern Virginia Region for the past 25 years, including numerous interactions with the utility owners involved in this Project.

The Myers/WRA Team's most recent utility experience includes interactions with Bobby Cotton and Patrick Huynh of Fairfax Water, Asghar Pariroo of Fairfax DPWES, Heath Bryant of Colonial Pipeline, Washington Gas, Zhi Chen of Dominion Energy, Gene Muller of Verizon, Crystal Balwinski of KCI as designer for AT&T, Mark Slebrch of Comcast, and Pete Milewski of NTD Fiber as designer for MCI/Verizon Business. Our Team has also coordinated closely with Rick Miller of VDOT on numerous other projects involving multiple other communication companies. Through this experience, our Team has developed excellent working relationships with the utilities, which will result in successful relocations throughout the Project. Team members also are well-versed in working with the Utility Relocation Policies and Procedures laid out in VDOT's Utility Manual.

Coordinate Early to Clearly Define Impacts and Responsibility: Throughout the RFP process, our Team has built on the utility coordination work performed earlier by VDOT. This includes requesting as-builts, prior right determinations, UT-9s, and Plans and Estimates (P&Es) per standard *VDOT Utility Manual* procedures. This completed work provides a springboard for our Team to finalize and formalize utility relocation efforts expeditiously after receiving formal Notice to Proceed. Meetings/communication between our Team and the utility companies to date are listed in *Figure 4.5* (next page).

Figure 4.5: Myers/WRA Team Utility Coordination Efforts to Date

Date	Coordination Effort
12/2/21	Pre-proposal utility meeting with VDOT and utility companies
12/13/21	Requested and received as-builts, UT-9, prior rights from Peter Milewski of MCI/Verizon Business via e-mail
12/13/21	Requested and received partial UT-9 and prior rights from Ronnie Peters of Verizon via e-mail
12/14/21	Requested and received as-built plan from Mark Slebrch of Comcast via e-mail
12/14/21	Requested and received as-built plan from Isaac Herrera of Fiberlight via e-mail
12/14/21	Requested and received plans from Steve Summa of SummitIG
12/14/21	Virtual meeting with Heath Bryant of Colonial Pipeline; plans and estimate underway, to be complete 2/28
12/15/21	Requested and received no prior rights and as-built plans from Rodman Birtwell of Zayo
12/16/21	Requested and received information from AT&T, including no prior rights, from Crystal Balwinski of AT&T
12/17/21	Requested and received as-builts and conflict markups from Jonathan Shelly of Washington Gas
12/23/21	Requested and received as-builts plan and profile of the transmission line from Trey Rydel of Dominion Energy
1/10/22	Requested and received as-builts from Patrick Huynh of Fairfax Water
1/20/22	Held virtual meeting with Fairfax Water
1/20/22	Held virtual meeting with Fairfax DPW
1/24/22	Phone conversation with Jose Pedraza of Kinder Morgan regarding Plantation Pipeline
2/4/22	From Mike Morgan of MCI/Verizon Business via e-mail
2/11/22	Requested and received preliminary cost estimate and schedule from Jeff Acierto of Cox
2/16/22	Phone call with Pascal Arcese of Michael Baker re: cost estimate to complete water line relocation design
2/17/22	Received updated schedule and prior rights information from Jeff Acierto of Cox via e-mail
2/17/22	Phone conversation with Patrick Huynh of Fairfax Water re: estimate of cost to complete water line design
2/25/22	Requested and received status of relocation plans from Heath Bryant of Colonial Pipeline via e-mail
3/4/22	Requested updated as-builts from Jose Pedraza of Plantation Pipeline via e-mail
3/4/22	Received pricing from Fairfax Water as to design costs associated with 24-in waterline relocation

Avoid and Minimize Utility Impacts to the Greatest Extent Feasible: Our top priority is to avoid relocations wherever possible and minimize the impact to utilities in other areas. **Scott** will coordinate closely with the design team to investigate potential changes to the roadway profile and other roadway features, including drainage structures and unsuitable materials. He will closely coordinate the design of underground elements such as drainage to minimize or eliminate impacts to existing utilities. A specific example of design revisions already implemented by our Team is shifting the southern signal poles at Union Mill Rd. This shift will allow the 24-in waterline to remain in place, eliminating significant conflicts with the traveling public as this portion of the waterline crosses both legs of the intersection. **Scott** will also coordinate with the utility owners to consider protect-in-place and lift-and-lay alternatives to relocation where practicable.

Early Inspection of Utilities: Our Team will perform early field inspection of all existing visible utilities to determine their conditions. This will enable the design and construction teams to develop the most appropriate means and methods for relocation or temporary support. Specific examples include supplemental utility test holes at the major drainage crossings and along Verizon's nine-way duct bank.

Sequence Construction to Prevent Schedule Delays: Each identified utility conflict has been accounted for in estimating the cost and time required for relocating the utility. In developing the RFP Plans, potential conflicts were reviewed with design and construction personnel to determine where the 90% design could be tailored to avoid or minimize conflicts. A specific example of conflict avoidance is the design of the Willow Springs box culvert on the existing location, which will reduce utility impacts. As the horizontal and vertical alignment are well developed, these areas of improvement included the cross culverts and storm sewer designs.

The following are critical path utility relocation tasks that will require immediate and frequent attention:

- Colonial Pipeline
- Plantation Pipeline
- Dominion Power parallel line
- MCI/Verizon Business OH
- Fairfax Water
- Verizon nine-way duct bank
- Washington Gas

Expedite the Schedule through Enabling Work: To expedite construction, the Myers/WRA Team plans to assist the utility companies with clearing and/or grubbing efforts; right-of-way (ROW) and easement stakeout; traffic control; construction of access road and laydown areas; installation of conduits, encasement pipes, and pull boxes; and any other work our Team can perform expeditiously and cost effectively. We will determine with the utility companies if relocation work (i.e. manhole/handhole construction, trenching, etc.) can be performed by our Team to further expedite the schedule. Partnering with the utility companies to support relocations saves them the time and expense of hiring outside contractors and reduces schedule risk.

Monitor Progress to Prevent Potential Delays: Our Team will maintain frequent communication with utility companies to ensure they stay on schedule and allow time to adjust operation sequencing. **Scott** will monitor progress with each utility owner using a tracking matrix, which will be updated and provided to the DBPM, DM, CM, and VDOT bi-weekly. The matrix will include all utility milestones to facilitate design and relocation on a regimented schedule. The most significant milestone for utility companies is the re-submission of P&Es (some were previously submitted when VDOT was managing the Project).

As mentioned above, a Utility Task Force comprised of **Scott, Dan**, and **Richard** will streamline the management, review, and approval of P&Es. Our Team will capitalize on prior success and existing relationships with facility owners to proactively identify and prevent potential delays. We will continue to function during utility relocation construction activities to assist the utility company's contractor with execution of work and resolving issues before they become critical and potentially affect the project schedule. Potential issues with relocations exceeding the UFI schedule will be flagged, mitigation measures identified, and remediation measures implemented to maintain the schedule. Our Team will partner with the utility companies and VDOT regarding any delay or lack of progress and assist in defining recovery strategies. Per standard VDOT utility practice, our Team will monitor and report on the progress and timing of utility relocation construction until the work is completed.

To mitigate the schedule risk associated with lead time issues for Myers' self-perform water and sewer work, our Team will pre-purchase ductile iron pipe and other materials, as necessary. This will prevent potential Project delays associated with supply chain issues.

UTILITY CONFLICTS AND SOLUTIONS

Building from the preliminary utility information provided by VDOT, our Team has identified and confirmed the following utility impacts, prior rights, and mitigation strategies (*Figure 4.6*).

Figure 4.6: Utility Impacts Summary and Mitigation Strategies

Utility Owner	Location	Description	Status	Cost Responsibility	Mitigation Strategy
Fairfax County Water Authority	Parallel - NB & SB Lanes with Multiple Crossings Sta. 301+28 - Sta 409+31	24-in Water Line	Conflict	Myers/WRA	Relocate in areas of conflict
Fairfax DPW Sewer	Multiple Crossings, Sta. 329+75, Sta. 343+10, Sta. 352+90	8 &12-in Sanitary Sewer Lines	Conflict	Myers/WRA	Relocate
Colonial Pipeline	Three (3) Crossings, Sta. 341+00 area	6, 32, & 36-in Steel Gas Lines	Conflict	Myers/WRA	Extend Casings (3)
Plantation Pipeline	Single (1) Crossing Sta. 357+25	6-in Steel Gas Line	Conflict	Myers/WRA	Extend Casing,
Dominion - Distribution	Parallel - NB & SB Lanes, Sta. 301+28 - Sta 409+31	OH Electric Lines	Conflict	51% Myers/WRA 49% Utility	Relocate

Utility Owner	Location	Description	Status	Cost Responsibility	Mitigation Strategy
Dominion Transmission	Crossing Sta. 340+65	OH Electric Line	No conflict	N/A	Protect in place
Lighting (Dominion)	Parallel - NB & SB Lanes, Sta. 301+28 - Sta 409+31	Multiple light poles	Conflict	N/A	Remove and Replace with permanent VDOT lighting
Washington Gas	Parallel - NB & SB Lanes, Sta. 301+28 - Sta 403+75	2-8-in Plastic Gas Lines	Conflict	Utility	Relocate at conflict points (Multiple assumed)
Verizon Virginia	Parallel - NB & SB Lanes, Sta. 301+28 - Sta 403+75	Multiple OH and UG Lines and Poles	Conflict	Utility	Relocate in areas of conflict
Zayo	312+35 to 329+60 Lee HWY	Parallel & perpendicular UG crossing; NB lane	Conflict	Utility	Shares Duct bank with Verizon for most of system
MCI/Verizon Business	Lee HWY: 301+50 to 398+75 Centreville Farm RD: 10+80 to 11+68	UG and OH, majority along SB	Conflict	Utility	Relocate in areas of conflict
Comcast	parallel - SB side to Stringfellow 50+65 to 52+25, Lee HWY 305+75 to 326+25, Crosses Centreville Farm RD 11+65	UG along SB lane	Conflict	Utility	Relocate in areas of conflict
AT&T	301+28 to 405+00	UG parallel and crossings; NB lane	Conflict	Utility	In Fiberlight shared duct bank, relocate in areas of conflict
Fiberlight	Lee HWY 301+28 to 405+00 Clifton RD 40+95 to 42+50	UG along the NB lane	Conflict	Utility	Relocate in areas of conflict
Summit IG	Lee HWY 325+40 to 326+50; Stringfellow RD 50+10 to 53+00 Clifton RD 40+95 to 42+50	Parallel to Clifton and Springfellow Rd SB lane	Conflict	Utility	Relocate in areas of conflict
Cox Cable	Lee HWY: 299+90 to 387+40 Summit 111+70, Clifton 41+75	NB, OH parallel, a few crossings	Conflict	Utility	Relocate in areas of conflict
Shentel	302+90 to 315+45	NB, OH parallel, a few crossings	Conflict	51% Myers/WRA 49% Utility	On Dominion OH poles, relocate with Dominion

SCHEDULE & COST MANAGEMENT

During construction, the Myers/WRA Team plans to assist the utility companies with any components of utility relocation work that we can perform expeditiously and cost effectively. This will both advance the utility relocation schedule and reduce relocation costs. In addition, our Team will:

- Coordinate closely with utility companies to complete enabling work that helps expedite relocations;
- Assist the utility companies with clearing and/or grubbing efforts, ROW and easement stakeout, construction of access road and laydown areas;
- Ensure that the utility companies have continuous, unimpeded access to their facilities;
- Install conduits, encasement pipes, pull boxes, and other items;
- Construct joint use duct banks (similar to approach used by our Team on Walney Rd DB Project);
- Self-perform the Fairfax Water and Sewer work, which will expedite the schedule and reduce construction costs by not having to have another contractor mobilize on and off the Project; and
- Phase construction activities to allow SB widening work while utility relocations are finalized along NB lanes.

Unidentified/Non-Located Utilities: If a previously unidentified utility is encountered during construction, our Team will engage utility designation crews within hours. The utility will be uncovered, identified, and traced; and an as-built drawing will be created to designate location and ownership. If relocation is necessary, the potential schedule impact will

be identified and incorporated into the schedule. Our Utility Task Force will manage and assist, to the extent possible, with the preliminary engineering and development of the P&Es. They will work with each involved company to develop pro-rates and UT-9 documents, and coordinate relocations with the Project design to ensure all conflicts are resolved in the submitted P&E. We will seek approval of each P&E submittal from VDOT before recommending authorization. If needed, when relocation work begins in the field, our MOT coordinator will take the lead on coordinating lane closures and work areas with the companies that are performing the utility work, allowing for smoother coordination with construction activities.

SCHEDULE INTEGRATION

The Myers/WRA Team has developed an integrated schedule management approach for the coordination, design, and relocation of utilities to expedite utility relocation work and ensure that critical utility design and relocation activities are at the forefront. Utility design activities are part of the Project schedule included in *Volume II*, are shown on page 10 of 31 of the Project schedule printout and coded as C000110329DB113.UT. The work breakdown structure for these design activities includes subsections for utility coordination/planning, utility field inspection, and utility plans and estimates. Utility relocation activities are included within each construction phase and listed by utility segment. As an example, utility relocations for Phase 1 Segment B are included on **pages 15 and 16** of the Project schedule and coded as C000110329DB113.CN.1.B.U. In summary, all planned utility coordination, design, and relocation activities are fully integrated within the schedule and the work planned is consistent with the RFP. Using this approach, our Team will minimize the possibility of schedule delays due to utility issues.

As an overview of the more schedule-critical utility relocation efforts, we are providing the following list of utilities, their locations, the anticipated work necessary to accomplish the relocation, and the phase within which each utility will be relocated. Armed with this information, our Team can assess the criticality of the relocation, plan the necessary resources to accomplish the work, and monitor progress. Each relocation is integrated within the *Volume II* schedule.

- ***Colonial Pipeline (three perpendicular lines, Sta. 340+00)*** – Extension of casing required for SB lanes; this work to be sequenced in Phase 1.
- ***Plantation Pipeline (perpendicular, Sta. 357+25)*** – Extension of casing required for NB lanes; this work to be sequenced in Phase 1.
- ***Dominion Energy Distribution (parallel overhead along NB lanes)*** – Relocation required along majority of Project length; this work to be sequenced in Phase 1 and Phase 2.
- ***Verizon nine-way duct bank (parallel along NB lanes)*** – Relocation required Sta 326+75 to Sta 355+50; this work to be sequenced in Phase 1 and Phase 2.
- ***Fairfax 24-in Waterline at Willow Springs*** – Waterline to be relocated above the box culvert. Design has been revised to provide adequate waterline clearance and cover. The box culvert and this portion of the waterline will be constructed in Phase 2 leaving the existing 24-in waterline in service until final cut-ins can be made.
- ***Fairfax 24-in Waterline Relocations (Sta 318+50 to 329+25; 337+75 to 349+00; 363+50 to 376+50)*** – Waterline to be relocated at multiple conflict points throughout the SB widening during Phase 2 construction.
- ***Fairfax DPW Sanitary sewer (perpendicular crossing at Sta. 329+75)*** – Redesign relocation to remove existing manhole and extend sewer main to the north, thereby removing full width road crossing.
- ***Washington Gas –*** Relocation required along the majority of the Project to avoid storm sewer and major culverts; this work to be sequenced within Phase 1 and Phase 2.

A powerful element of the Project scheduling software is its ability to identify the critical or longest path. The Project's longest path is included in *Volume II* of this Technical Proposal and includes specific utility elements that need to be completed to ensure on-time delivery of the Project. For ease of review, we have provided in *Figure 4.7* a summary of schedule-critical utility activities that need to be monitored and managed to ensure successful completion of the Project. One specific benefit to our Team is that Myers self-performs wet utilities so construction of Fairfax Water and Sewer work can be completed in-phase and managed by our own forces. This provides schedule certainty and in-house mitigation options, should they be needed.

Figure 4.7: Utility Relocations / Sequence of Work

Milestone	Schedule Dates
Notice to Proceed	June 17, 2022
Advance RFP Plans to FI/RW Plans	August 26, 2022
VDOT Review/Comment FI/RW Plans / SWM Report	November 16, 2022
Conduct / Document UFI Meeting / Discuss potential Utility Conflicts	December 16, 2022
Advance to Final Relocation Plan / Complete UT 9's – Verizon	April 27, 2023
VDOT Approves Final Utility Relocation Plan / Myers Issues NTP to Verizon	May 26, 2023
VDOT Issues – Limited Notice to Commence Construction – Phase 1 Utility Relocation / G&D Plans	June 7, 2023
R/W Parcels Clear for Construction – Packages 1 through 5	August 21, 2023
Relocations Complete – Secure UT-11's – Plantation Pipeline (Segment B)	January 24, 2024
Phase 1 Complete – In Phase Utility Relocations to Allow Advancement of SB Route 29 Widening	April 2, 2024
Relocation Complete – Secure UT-11's – MCI/Verizon Business (Segment C)	April 9, 2024
Begin Phase 2 – Route 29 SB Roadway Construction (Segment B)	April 22, 2024
Relocation Complete – Secure UT-11's – Dominion Energy Distribution (Segment D)	October 24, 2024
Out of Phase Utility Relocations Complete	November 13, 2024
Phase 2 Complete	April 1, 2025
Final Completion	August 31, 2026

4.4.3 GEOTECHNICAL

Our Geotechnical Design Team consists of **Jeff Basford, PE** and **John Fargher, PE** to successfully mitigate any geotechnical risks associated with the Project. **Jeff** brings over two decades of experience on numerous VDOT projects. He was the geotechnical design engineer on the Fairfax County Pkwy at Fair Lakes project, which required a similar combination post and panel retaining wall/sound barrier wall and MSE wall on soft ground. **John** has over 25 years of design experience on transportation projects in the region. He will provide the necessary geotechnical design analysis and prepare the final geotechnical report for the Project.

The Project area encompasses the boundary between two significantly different geologic terrains in west-central Fairfax County. The western third of the Project corridor lies atop the **Culpeper Basin**. Diabase, in the form of dikes, sills, and sheets, created areas of both diabase and hornfels intruded sedimentary "country rock." The surface materials resulting from the in-place weathering of Culpeper Basin bedrock can range widely; however, it consists generally of clay-rich silts, sands, and gravels with variable concentrations of weathered rock fragments and/or boulders. Residual soils of diabase can occasionally occur as highly plastic, expansive clay that can be very sensitive to minor changes in moisture content. The eastern two-thirds of the Project lies atop substantially older units of the **Virginia Piedmont**, primarily metamorphic rocks. The boundary between the two geologic terrains lies just west of, and approximately parallel to, the alignment of Stringfellow Rd/Clifton Rd near the intersection with Route 29.

The Virginia Piedmont bedrock consists primarily of schist with significant inclusions of metagabbro, plagiogranite, serpentine, and soapstone. Excavations within the **Piney Branch** formation have occasionally encountered the presence of naturally occurring asbestos (NOA) in the forms of actinolite and tremolite fibers. Surface materials resulting from the in-place weathering of piedmont bedrocks are typically silts and clays with variable concentrations of sand and gravel. Some of the finer soils can be very plastic, exhibit high shrink-swell capabilities, and have very poor soil support characteristics.

VDOT provided a substantial level of geotechnical investigation and recommendations in the *Geotechnical Data Report (GDR)* and the *Foundation Design Recommendations*; however, we believe that more investigation is needed to design some structures. VDOT's level of investigation has enabled the Myers/WRA Team (Team) to target specific areas of geotechnical concern by targeting only a few locations for additional borings, specifically, in-situ testing consisting of Flat Plate Dilatometer Testing (DMT), particularly at Retaining Wall A (Sta 314+55 to 317+77.25 LT), Retaining Wall E (Sta. 96+13.63 to 97+07.53 RT) and the deep-fill locations to determine soil modulus for better settlement prediction, and to refine undercut or Densified Aggregate Pier (DAP) size and spacing for long-term performance.

LOW STRENGTH SUBGRADE SOILS AND UNSUITABLE SOILS

The potential for encountering low strength subgrade soils and unsuitable soils is a critical risk for the Project. Throughout the Project corridor, the provided geotechnical data suggest that surficial soils consist predominantly of moisture-sensitive, moderate- to high-plasticity, and fine-grained soils. These soils exhibit elevated moistures within the upper strata in many areas (in-situ moisture content over 20% of optimum moisture content), are not suitable for retaining wall backfill (due to plasticity), cannot be placed within the top 3 ft of embankment fill in pavement subgrades (CBR<5), and have reduced shear strength when wet. The presence of these unsuitable soils will impact construction schedule duration due to the time required to dry or stabilize the material with admixtures (cement and/or lime), and/or to remove and replace the materials with suitable fill. Impacts may further include the need for a disposal area off-site for unsuitable soils, the need to import suitable embankment fill material, and a stockpile area for the storage of quicklime or cement that will be used for drying/modification. Unsuitable materials at the base of retaining walls and within deeper fills could create quality concerns and schedule impacts. Due to the limited work areas, this could necessitate costly support of excavation (temporary shoring).

The Myers/WRA Team will mitigate the geotechnical risks associated with unsuitable soils on the Project by confirming the extent of the potential impacts with a targeted geotechnical exploration program; selecting appropriate design and remediation strategies; and managing safe and efficient construction operations to minimize cost, schedule, and public

safety impacts. We will manage the risks associated with unsuitable soils by meeting the requirements of the MOI to define the limits of unsuitable soils, proactively planning for soil remediation and settlement, and minimizing potential schedule impacts.

Figure 4.8: Myers/WRA Team Geotechnical Process

Geotechnical Mitigation Strategies
1. Conduct thorough geotechnical investigation to comply with MOI
2. Identify locations of potential unsuitable soils with planned mitigation approach
3. Create a Soils Remediation Plan
4. Incorporate planned mitigation efforts into the Project schedule
5. Increase geotechnical representation onsite during critical operations

To evaluate and delineate unsuitable soils, our Team will follow a mitigation strategy that includes five major action items undertaken from Project commencement through final construction as listed in *Figure 4.8*. This geotechnical process meets the minimum VDOT MOI requirements for volume and quantity of testing. Our Team will conduct thorough geotechnical investigation in compliance with VDOT MOI Chapter III. Roadway boring logs were provided at a spacing of 200 to 300 ft. To minimize the amount of ground improvements, we will supplement MOI-compliant investigation with in-situ testing and dilatometer or CPT testing will be conducted at the MSE wall area to refine the need for undercutting and aggregate pier spacing.

The Myers/WRA Team will proactively manage schedule impacts associated with remediation efforts by incorporating planned mitigation efforts and improvement strategies into the Project schedule. Where stretches of unsuitable soil exceed 500 ft, lime mixing crews will be incorporated into the construction schedule. The Soils Remediation Plan will include haul-off, treatment types/locations, and borrow sources. During critical earthwork and foundation operations, our Team will provide increased oversight and guidance onsite to manage mitigation efforts.

Our Team has developed strategies to maximize the use of onsite soils, due to the Project being a borrow job. We will develop a Soils Remediation Plan, which may include undercut/ replacement, in-place drying/ scarification, lime modification (moisture reduction), or lime/cement stabilization (altering the plasticity of the soil) as noted in *Figure 4.9*. Lime/cement stabilization can be used throughout the Project corridor to reduce undercut and waste with the exception of where diabase-derived, highly plastic, montmorillonite-rich clays are present in the first third of the alignment.

We anticipate that chemical modification by lime will be applicable to soils on the remaining two-thirds of the Project. We will review admixture options, such as soil cement or lime modification of the subgrade, to determine their feasibility in areas of the proposed plan and the optimum percentage to mix to either dry or modify the plasticity to the target range.

Figure 4.9: Route 29 Undercut/Soils Stabilization for Pavements

Station	Direction	Condition	Depth	Treatment
308+50 to 316+25	EB	Elastic silt	24 in	(a) or (f)
318+50 to 320+50	EB	Elastic silt	24 in	(a) or (f)
320+50 to 325+50	EB	Wet	12 in	(b) or (f)
327+00 to 331+00	EB	Wet, very soft, elastic silt	24in	(a) or (f)
337+00 to 340+00	EB	Wet, below ex. grade	12 in	(b) or (f)
340+00 to 346+00	EB	Wet, very soft, water	18 in	(c)
349+00 to 355+50	EB/WB	Wet, very soft, elastic silt	18 in	(c)
355+50 to 359+00	EB	Wet	12 in	(d) or (f)
363+00 to 366+00	EB/WB	Wet, elastic silt	24 in	(a) or (f)
366+00 to 370+00	EB	Wet	12 in	(b) or (f)
373+00 to 376+00	EB	Wet	12 in	(b) or (f)
327+00 to 328+00	WB	Wet, soft	12 in	(b) or (f)
330+50 to 333+50	WB	Wet, elastic silt	18 in	(a) or (f)
340+00 to 342+00	WB	Wet, soft	18 in	(b) or (f)
345+50 to 349+00	WB	Wet, elastic silt	24 in	(a) or (f)

(a) Excavate, replace with select material, type I (min CBR-30), placed on a woven geotextile subgrade stabilization fabric

(b) Excavate, replace with select material, type I (min CBR-30), placed on a woven geotextile subgrade stabilization fabric

(c) Excavate, replace with #2/#3 aggregate completed wrapped in a geotextile subgrade stabilization fabric; extend to daylight with modified CD-1 or CD-2 wrapped in geotextile drainage fabric

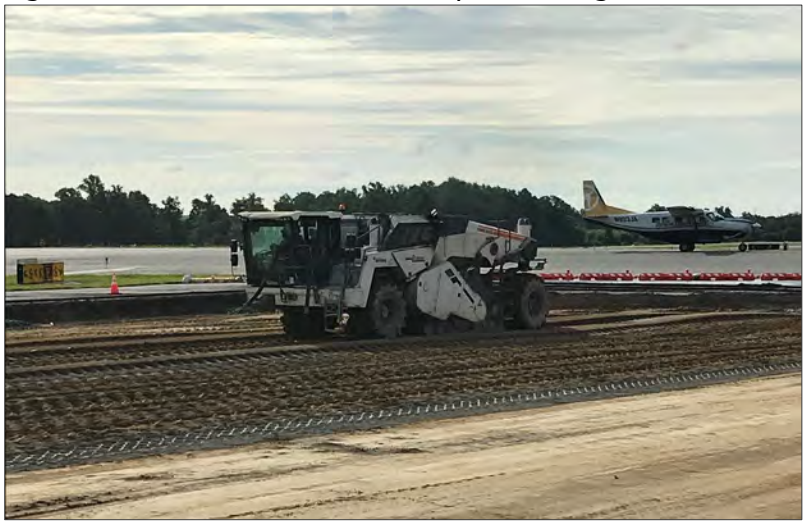
(d) Excavate, replace with regular embankment (min CBR-5)

(e) Lime stabilization

(f) Cement stabilization

These techniques have been shown to reduce the amount of undercut and haul-off of unsuitable soil located at the subgrade elevation. Our Team will fully evaluate the use of onsite material, as it limits the amount of soil that needs to come from off site, keeping dump trucks off local roadways and reducing impacts to traffic and public safety. Myers' ability to self-perform chemical stabilization of unsuitable soils, as performed on I-64 Segment II and various other projects (*see Figure 4.10*), provides additional cost control and schedule flexibility.

Figure 4.10: Chemical Stabilization of Low Strength Soils

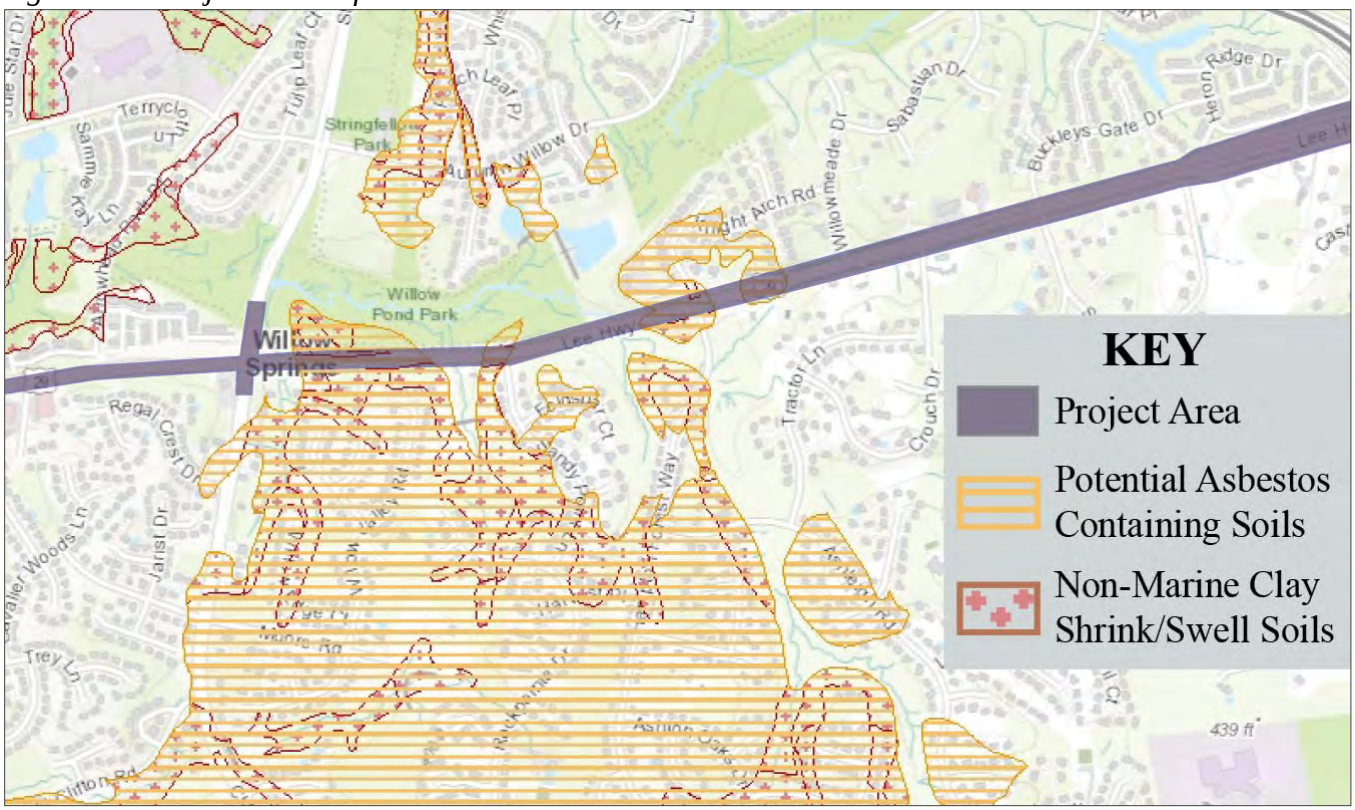


When we implement chemical modification of subgrade soils or improve ground stiffness with aggregate piers, our geotechnical designer will be onsite to confirm the design intent is being met. Design staff input will be used not only to confirm the ground is reacting to the treatment as anticipated in the design, but also to determine if a larger or smaller area requires treatment.

NATURALLY OCCURRING ASBESTOS SOILS

Naturally Occurring Asbestos (NOA) soils are mapped within the Project corridor; specifically, the Piney Branch Formation, which underlies the Project alignment along Route 29 between the intersections with Stringfellow Rd/Clifton Rd and Willowmeade Dr. *Figure 4.11* was obtained from the Fairfax County online GIS application, which identifies areas underlain by asbestos-bearing soils. Additional laboratory testing was performed by Schnabel Engineering in February 2019 to investigate the presence of NOA soils. Although concentration test results were all below the reporting limits, the need remains to monitor for NOA soils during construction.

Figure 4.11: Project Limits of NOA Soil



Approach and Solution: Our Team's mitigation protocols include adequately wetting the Project site to prevent airborne soil particles from leaving the immediate work area. A qualified asbestos DPOR licensed professional will perform air monitoring for asbestos on a periodic basis and retain all test results. If the results indicate levels that exceed NESHAP standards, we will cease operations until additional measures can be taken to reduce airborne asbestos below acceptable levels. On the I-66 Outside the Beltway project, an NOA mitigation plan was put in place in the event that NOA soils were encountered.

DIABASE ROCK

Geologic mapping indicates that Jurassic-Age diabase underlies the western-most Project segment roughly between the Route 29 intersections with Centreville Farms Rd and Moore Rd. Encountering diabase rock predominantly affects the construction schedule and cost of noise wall foundations. Our Team's experience in the area with diabase rock indicates that production rates on drilled shafts for noise wall posts could drop to a few feet per day and a switchover from rock augers to a down-the-hole hammer would be required. This would raise mobilization costs and vibration levels.

Approach and Solution: Our Team is considering geophysical testing to delineate shallow rock along the noise walls and retaining walls so that our construction crews can better prepare for installation of the foundations. Where near-surface diabase is found, spread footing foundations will be considered for the noise walls (i.e. NW C1 first 100 ft at corner of Centerville Farm diabase and part of NW D).

Spread foundation options have limitations when wall heights increase in that there is a maximum spread footing size due to adjacent roadway, slopes, and private properties. Another mitigation strategy we will utilize to advance the construction of noise wall foundations when drill shafts are selected involves tailoring the design shaft embedment length to account for the exact thickness of soil intermediate geomaterial (IGM) and hard sound rock in the drilled shaft. A maximum combination of IGM and hard rock pile embedment requirement will be computed, as opposed to specifying a minimum pile tip elevation to limit rock excavation and speed construction.

SCOUR AND UNDERMINING AT WILLOW SPRINGS CULVERT

The existing structure supporting Route 29 over Willow Springs Branch exhibits undermining due to scour at the existing foundations. Preliminary scour analysis completed by our Team indicates that the anticipated depth of proposed scour within the stream channel at the Willow Springs Branch Culvert is significant.

Approach and Solution: Our Team proposes a double box culvert in lieu of a bridge structure at this location. The box structure will be armored with riprap at the upstream and downstream ends to prevent scour and undermining. The bottom of the box arrests scour under the center of the structure, eliminating it as a risk to the overlying roadway.

4.4.4 QUALITY ASSURANCE/QUALITY CONTROL

APPROACH TO QA/QC

The Myers/WRA Team (Team) believes that quality is a partnership among design and construction staff, Quality Control (QC) management and inspection technicians/testers, the independent Quality Assurance Manager (QAM) and Quality Assurance (QA) staff, and VDOT—driven by the goal of exceeding VDOT's project quality requirements and minimizing QA/QC oversight by VDOT. To accomplish this goal, the quality team, led by QAM **John Vicinski, PE** from Quinn Consulting Services (QCS) will prepare, present, obtain approval of, and continually update the Route 29 Phase II QA/QC plan (QA/QC Plan) which will be based on *VDOT's Minimum Requirements for Quality Assurance and Quality Control on Design-Build and Public-Private Transportation Act Projects, July 2018 (VDOT QA/QC Manual).*

Facilitating Safe Inspections
The Myers/WRA Team will provide a well-maintained and safe construction site with safe access for all inspectors, including QA, QC, IA/IV, and VDOT. Quality inspection staff will be requested to attend Project-specific safety orientation and training prior to performing work on the Project.

The QA/QC plan will be composed of QA requirements, a Design Quality Management Plan (DQMP), and a Construction Quality Management Plan (CQMP). Each section will include quality staff roles and responsibilities, inspector certification requirements, authorities, organizational structure, individual quality inspection requirements, and the role of VDOT in IA/IV oversight. Our quality team, composed of Myers, WRA, and QCS, will implement the QA/QC Plan to verify that contract requirements are met; work and materials are provided correctly and installed properly the first time; and records, materials notebook, and documentation of quality activities are accurate and complete. In addition to meeting *VDOT's QA/QC Manual* guidelines, the Myers QA/QC Plan will:

- ✓ Minimize the potential for design and construction re-work;
- ✓ Provide documented and streamlined QA/QC procedures for both design and construction phases; and
- ✓ Limit VDOT's need to assign additional resources to overcome any quality deficiencies.

Myers has previously used this sound quality approach to develop, execute, and update seven individual QA/QC plans, including the approved QA/QC Plans for the successful **Rolling Rd** and **Walney Rd DB** projects in NOVA District. The success of those plans was rooted in setting clear and concise expectations and effectively communicating them to the entire quality team, so that when a situation arises, established lines of communication engage the right people to quickly implement collaborative solutions.

QUALITY ASSURANCE PROGRAM

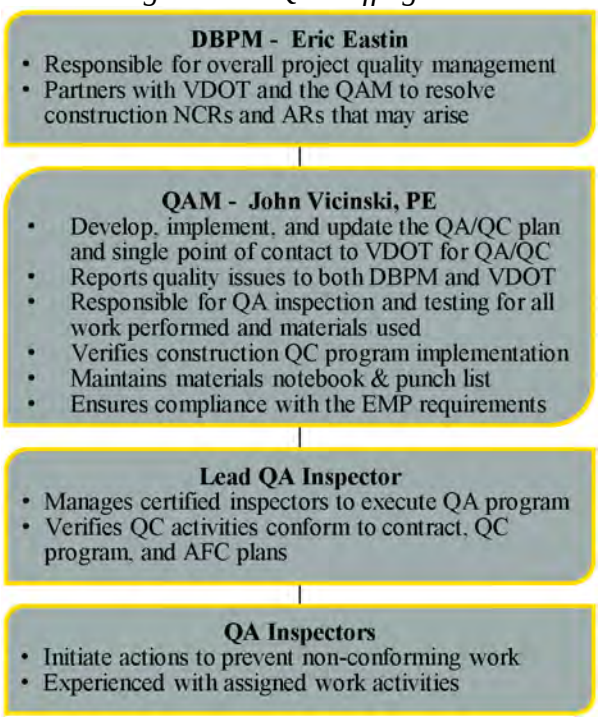
Our Team's approach to quality assurance management is focused on continuous improvement and ensuring that all levels of the design and construction team obtain, understand, implement, monitor, and document quality procedures as outlined within the approved QA/QC Plan. The QA program will be clearly described within the QA/QC Plan, including a description of the role of VDOT and the DBPM within the QA framework. As it relates to QA, *Figure 4.12* shows the relationships between **John** and **DBPM Eric Eastin,** noting that **John** reports to **Eric** but also reports to VDOT. This dual reporting relationship ensures the independence of the QAM and his ability to manage Project quality independent of construction. The QA portion of the QA/QC Plan will:

QAM Certification
*Prior to beginning any work element, **John Vicinski, PE** (QAM), will review the requirements of the QA/QC Plan with design, construction, and quality stakeholders to ensure they understand and commit to following all outlined procedures. This process incorporates quality into every level of design and construction and makes certain all team members understand their responsibilities.*

- Provide clear provisions for identifying, notifying**,** and tracking potential non-conforming work, materials, or equipment (NCRs) and administering a quality assurance auditing and recovery (AR) plan;
- Clearly stipulate that the QAM does not report to production forces; has the authority to stop work; and will communicate daily with **CM Laurie Bryan**, **QCM Wesley Mumaw**, and lead quality inspectors;
- Outline preparatory meetings directed by **John** to ensure that all items, submittals, certifications, and requirements necessary to begin a construction operation are completed; and
- Provide a communications framework for interactions between the QAM and VDOT IA/IV staff to track resolution of NCRs, audit AR plans, and monitor assembly of the materials notebook.

As shown in *Figure 4.12*, **John** will serve as the QAM for this Project and report to **Eric** while lead QA inspectors and inspectors report to him. **John**'s work will be independent from the designer, contractor, and QC Teams to ensure that the quality of design and construction meet the Project requirements. During the design phase, **John** will work with **Eric** and **DM John Maddox** at least bi-weekly to ensure that proper policies and procedures of the DQMP are administered.

Figure 4.12: QA Staffing Plan



During construction, **John** and his QA staff will work closely with **Laurie** and the construction QC team led by **Wesley** to implement the CQMP. **John's** efforts will ensure that construction QC testing and inspection requirements are followed, and that documentation of QC results are accurate and complete. He will lead preparatory meetings to ensure that prior to the start of work, all proper certifications, inspection requirements and checklists, schedules, and other requirements are in place. **John** and his team will ensure QC inspection and testing requirements have been established and testing completed to assess construction compliance relative to the applicable standards and specifications. **John** will also ensure that the proper QA inspection and testing are completed to confirm the results of the QC program.

Prior to all preparatory meetings, **John** will provide established processes and procedures for approving Project C-25 submissions, maintain the materials notebook, track frequency of testing (FOT) requirements, and identify/document deficiencies and non-conformance reporting. QCS's successful track record in providing independent QA will enhance the Department's confidence that the Project is being constructed in accordance with the contract documents and minimizes required IA/IV resources. As an additional task, **John** will be involved in oversight of the environmental management plan (EMP) required for this Project. **John's** QA inspection staff will ensure that the EMP is a key element of the quality assurance process as the plan requires periodic inspections, field visits, and oversight from regulatory agency representatives. He will verify that the EMP is being administered, all commitments have been incorporated into the approved contract documents, and that all commitments are being followed in the field during construction.

DESIGN QUALITY MANAGEMENT PLAN

Our approach to the design QA/QC begins with development of the DQMP, which will be presented to VDOT for review in advance of the kick-off meeting held after the Date of Commencement of the contract. The DQMP is a partnership and collaborative process among **John Vicinski**, **John Maddox**, designers, design QA/QC managers, interdisciplinary reviewers, QA reviewers, and QC reviewers—all focused on producing AFC plans in accordance with contract requirements, specifications, and sound engineering practice. Each step of the design process overlaps and integrates constructability reviews, done by **Laurie** and her superintendents, to provide design feedback and prevent construction issues in a later phase. Further, our Team will collaborate with VDOT through Over-the-Shoulder reviews (OTSR) during the design process to incorporate VDOT comments in the design.

The design QA/QC Team process depicted in *Figure 4.13* is overseen by **Eric** and will be led by **John Maddox,** who is focused on providing quality designs and plans in accordance with *VDOT QA/QC Guidance* and the QA/QC Plan to minimize VDOT's administrative efforts by:

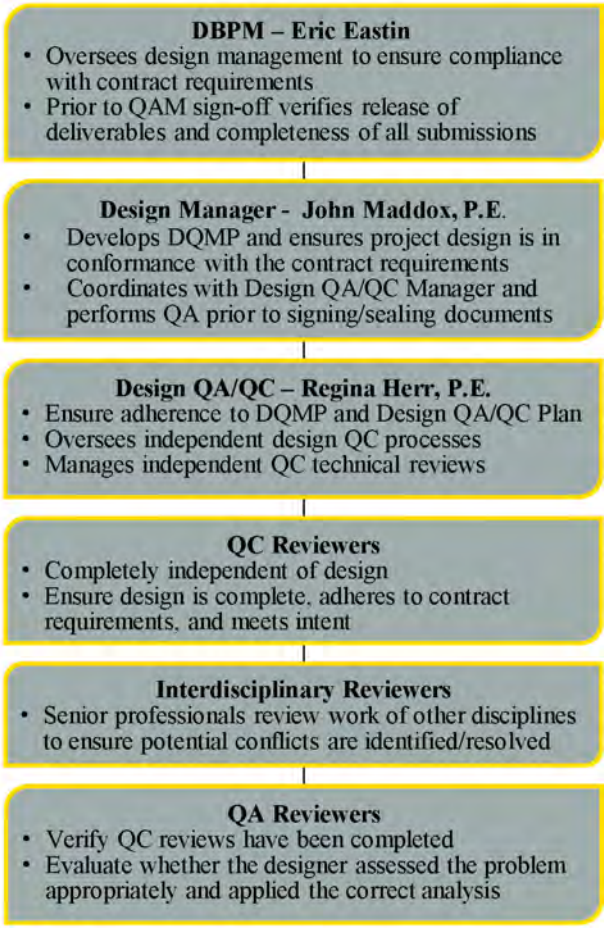
- Designing features that are safe and meet or exceed VDOT requirements and design manuals;
- Conforming to all RFP standards and reference documents;
- Designing elements that are constructible, durable, economical, and minimize maintenance;
- Meeting design schedule, budget, and staging requirements; and
- Providing an organized and indexed set of design calculations, criteria, and assumptions.

To kick off the DQMP process, **John Maddox**, the lead design discipline engineers, and **Design QA/QC Manager Regina Heir** will establish the design criteria and checklists for each element, then distribute to assigned staff engineers and subconsultants. Design deliverables will be prepared under the lead discipline engineers and reviewed to ensure completeness, including all necessary construction requirements and details. Under **Regina's** direction, the process/ procedures identified in the DQMP will be strictly enforced and thoroughly documented to minimize VDOT review. To ensure design compliance is well-structured and easily audited, all documents, forms, and certifications will be completed and electronically submitted with each design submittal to digitally track drawing review certifications, calculation review certifications, and the release for deliverable plans.

Weekly design meetings, attended by **Eric** and **Deputy DBPM Ivan Saer** and led by **John Maddox**, will include the lead discipline engineers **Laurie** (for constructability review) and **John** (for bi-weekly QAM input). VDOT and key stakeholders will be invited to participate in the OTSR to streamline the review process by citing preferences and clarifications in the construction documents.

For final submittals, **John Maddox** will certify that the final plans have been completed in accordance with procedures required in the DQMP. **Eric** and **John** will then sign off on their acceptance of the plan development process prior to submission to VDOT for final review and acceptance.

Figure 4.13: Design QA/QC Staffing Plan

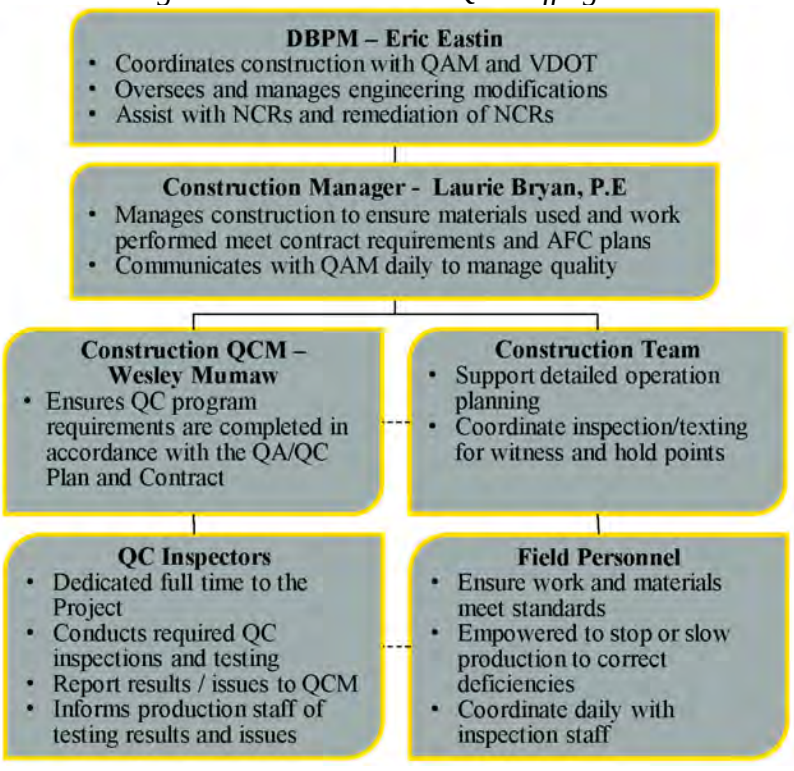


CONSTRUCTION QUALITY MANAGEMENT PLAN

The Myers practice of ***Safe Production Done Right*** uses a Production System approach that incorporates quality, safety, and production into one comprehensive planning process. Our Team's CQMP will be developed and implemented in accordance with VDOTs QA/QC guidance and embedded within the overall QA/QC Plan. Construction QC staff (as shown in *Figure 4.14)* will ensure that construction is carried out with minimum intervention by VDOT using set procedures for inspections, testing, reporting, materials documentation, diaries/checklists, safety, and environmental monitoring.

Our ***Safe Production Done Right*** planning process promotes transparency and inclusion among **Laurie** and the construction team, **Wesley** and QC staff, **John** and QA staff, the safety manager, and field managers—all of whom review and provide feedback on the operation plans. Quality and safety related tasks are integrated into the plans, and an operation does not begin until each item is addressed.

Figure 4.14: Construction QC Staffing Plan



Integration of the QA and QC staff into the construction planning and monitoring operation processes is an invaluable key to the Project's success. This includes integrating the QA and QC staff into the short-term scheduling process on a weekly basis. Beginning with the preliminary baseline schedule, our Team performs high-level scope and resource planning that includes the needs of the quality staff and the resources necessary to implement the CQMP. As design and construction evolve and progress, planning is further developed to create the following more detailed deliverables:

> ***Proactively Preventing Deficiencies***
> *Myers' Production System focuses on collectively planning for and creating a safe, delay-free work area and empowers employees to stop or slow down production to quickly correct any defects that surface.*

- ***Monthly:*** Update the CPM schedule with actual progress and activity schedules for the remainder of the contract.
- ***Weekly:*** Short-term, five-week, look-ahead schedule showing each crew and subcontractor performance, including a detailed schedule for the upcoming week that allows **John** and **Wesley** to assign inspection staff.
- ***Daily:*** Updated daily schedule confirming exactly what each crew will be doing that day.

Our Team involves QA and QC staff in each of these planning activities as part of a collaborative environment that enables us to communicate the construction plan and incorporate feedback on any potential quality issues/concerns. Following approval of the CQMP, **Eric** and **Laurie** will meet with **Wesley** to begin planning QC efforts. As a former QC manager on multiple projects at BWI Airport, **Laurie** makes sure quality is planned into the work operations with the goal of ***"safe production done right the first time."*** **Wesley**, working closely with the QA, will develop the FOT requirements and convey them to the QC quality team. **Wesley** will meet with superintendents and field managers to ensure that FOT is accurately aligned with the production planned for that day, allowing production to progress smoothly while respecting all QA and QC hold points. QC inspectors and testers will observe daily construction practices and perform inspections and testing in accordance with FOT requirements, ensure materials meet contract provisions, and, if needed, encourage field personnel to slow down production to meet testing requirements and obtain approvals.

All Project team members, including QC staff, superintendents, field managers, subcontractors, engineers, and VDOT staff, will have access to Bluebeam Studio, which enables powerful document management and real-time collaboration. Studio Project provides a single, centralized location to store Project documents in the cloud. Studio will allow **Laurie, Wesley**, **John** and QA staff, and construction personnel the ability to review, mark-up, and update the same files at the same time. By having one set of approved construction plans that all construction and quality personnel can view simultaneously, we avoid any situation in which someone could be working from a different version of the plans.

QA AND QC STAFFING LEVELS

The QA/QC staffing anticipated will vary as the Project progresses from clearing and grubbing to utility relocations, grading and drainage, through final roadway construction. As shown in *Figure 4.15,* key quality staff members will include **John**, senior QA inspectors, QA inspectors/testers, **Wesley,** and QC inspectors/testers—all supported by the appropriate independent QA and QC laboratories. Our Team commits to ensuring that **John** has sufficient time and resources to meet the requirements of the QA/QC Plan. *Figure 4.15* includes the general staffing levels anticipated based on the scope of work. Construction activities and the requirements of the approved QA/QC Plan will dictate the exact number of staff needed during any given operation.

Figure 4.15: Summary of QA/QC Staffing Requirements and Description of Roles and Responsibilities

Role	Personnel Committed	Role and Responsibility
QAM	1 Part-time	Responsible for Project compliance with the Route 29 QA/QC Plan. Authorized to initiate work stoppages and recommend withholding payments for NCRs.
Senior QA Inspector	1 Full-time 1 Part-time	Onsite during construction, monitor actions to prevent the occurrence non-conformities (NCDs) and verify the implementation NCR solutions.
QA Inspector /Tester	1 Full-time 1 Part-time	Conduct QA inspection and testing following the FOT requirements, record/document test results, and report any inconsistencies to the Senior QA Inspector.
Construction QC Manager	1 Full-time	Responsible for construction inspection and testing oversight and responsible for the processes, methods, production, and documentation of the QC program.
QC Inspector / Tester	2 Full-time 4 Part-time	Conduct QC inspections and testing in accordance with the FOT requirements, record and document test results and report inconsistencies to QC Manager .

4.5 CONSTRUCTION OF PROJECT

4.5.1 SEQUENCE OF CONSTRUCTION

The Myers/WRA Team's approach to construction phasing and sequencing minimizes the duration of construction, reduces impacts to the public, provides schedule flexibility, and provides a safe work zone for both the traveling public and our workforce. Phasing begins with co-locating our design and construction teams in our Fair Lakes Circle offices, minutes away from the Project, to expedite and coordinate the design and pre-construction phasing. We also will partner with VDOT to improve plan review procedures and support timely conflict resolution.

To provide the greatest schedule control and flexibility, our Team has divided the Project into six geographic segments. We anticipate completing the work in a sequence that minimizes traffic shifts; however, shifts can be implemented separately in some segments, if necessary. The ability to phase construction independently in each segment minimizes the chance of delays to the overall Project schedule. For example, if one segment experiences an unexpected delay due to a ROW permitting or utility relocation issue, work in other segments can still proceed. We designed the Project segments to provide early access to new facilities and maximize our ability to achieve the Project completion incentive.

PROJECT SEGMENTATION

The six construction segments for the Project shown in *Figure 5.1* (next page) specify areas where construction activities can be performed independently from adjacent segments to maximize efficiency and public safety, both vehicular and pedestrian. We based the location of each segment on the scope of work performed therein, providing a logical basis for planning construction operations and implementing a safe and efficient Transportation Management Plan (TMP). Segmentation creates definable work locations, minimizes traffic impacts, provides clear construction access, designates locations that can be progressed independently or concurrently, and optimizes sequencing to expedite beneficial occupancy of the Project improvements.

Segment A extends from the west end of the Project to approximately Sta 313+50. It consists of the work along both directions of Route 29 that are south of where the roadway widening ends. The major scopes of work in this segment include new curb islands, signalization at the Union Mill/Centerville Farm Rd intersection, a right turn lane for northbound (NB) traffic onto Moore Rd, storm drainage, curb along Route 29, pavement overlays, construction of the shared use path (SUP), and noise walls C1 and C2.

Segment B starts at approximately Sta 313+50 and continues NB to approximately Sta 360+00 at the intersection of Meadow Estates Dr/Hampton Forest Way. This segment includes most of the reconstruction work along Route 29, encompassing widening in both directions and installation of a new box culvert crossing for Willow Springs Branch. Other major scopes include relocating the FCWA 24-in watermain, storm sewer installation, intersection improvements at Stringfellow Rd/Clifton Rd, construction of new service roads 1 & 2, Walls A and D, and the SUP. The overall Project centers around this segment and the requirements in this length of roadway drive the Project's TMP.

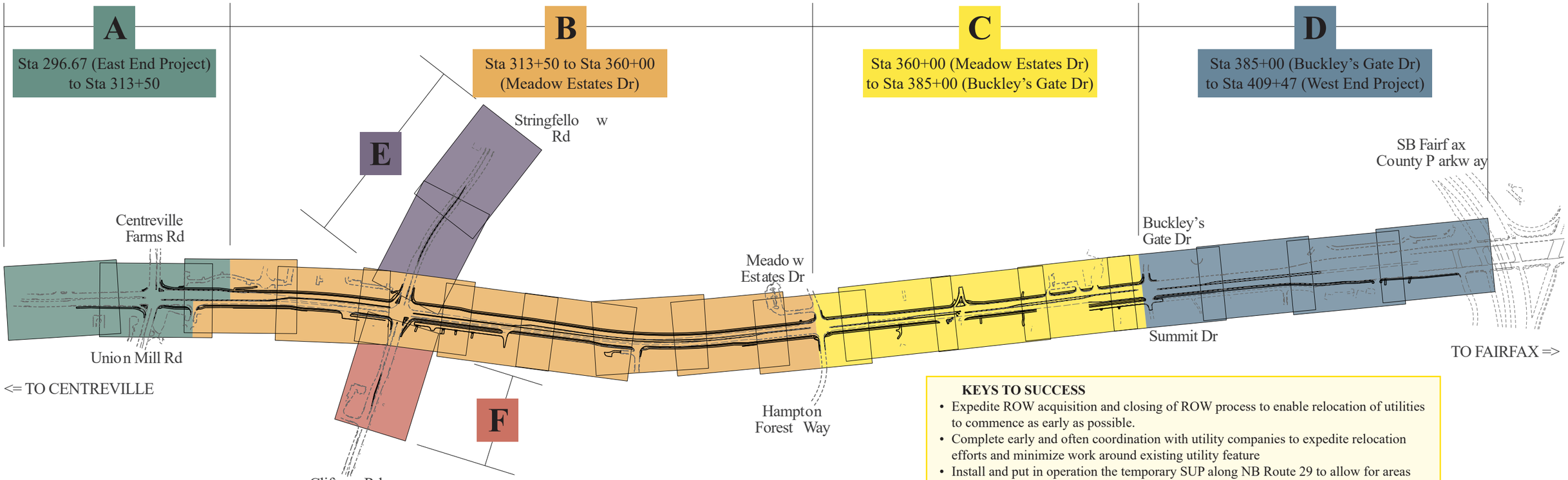
Segment C begins at approximately Sta 360+00 at the intersection of Meadow Estates Dr/Hampton Forest Way, and encompasses the new construction work from this location to approximately Sta 385+00. The key scopes include noise wall G running from the southern end of the segment to Willowmeade Dr and the stormwater management (SWM) ponds along the NB lanes. Construction of the SWM ponds is a key early delivery item to allow for temporary drainage and erosion and sediment control during construction. The northern end of this segment is the intersection with Buckley's Gate Rd/Summit Dr. Other major scopes of work include additional relocation of the FCWA 24-in watermain, lengthening of the left turn lane on southbound (SB) Route 29 to Hampton Forrest Way, installation of storm sewer and curb/gutter, construction of Service Road 3, and construction of the SUPs.

Segment D begins at approximately Sta 385+00, includes the Buckley's Gate Rd/Summit Dr intersection, and continues to the east end of the Project. This segment includes construction of the SUP along the NB lanes of Route 29 and up Ramp A. Major scopes include building the SUP, drainage improvements, replacement of the curb/gutter, construction of Wall E, and reconstruction of the entrance to Betty's Azalea Ranch. Other scope items include installation of lighting along Ramp A, and the milling/ overlay of both the NB and SB lanes. This segment may progress independently at an earlier phase should utility relocations occur efficiently.

Segment E includes the ancillary mill, overlay, and median reconstruction work along Stringfellow Rd.

Segment F includes the ancillary mill, overlay, and median reconstruction work along Clifton Rd.

Figure 5.1 Construction Segments: Critical Schedule Items



KEYS TO SUCCESS

- Expedite ROW acquisition and closing of ROW process to enable relocation of utilities to commence as early as possible.
- Complete early and often coordination with utility companies to expedite relocation efforts and minimize work around existing utility feature
- Install and put in operation the temporary SUP along NB Route 29 to allow for areas of existing SUP to be free of pedestrian traffic
- If schedule and utility relocations permit, accelerate construction of the NB Route 29 SUP and put in service early in the construction schedule
- Closely follow the prescribed MOT phasing plan to ensure minimal number of traffi switches and maximize safety to the traveling public
- Utilize an approved detour and/or night and weekend operations and lane closures to complete milling and wedging and leveling of Route 29 to minimize traffic disruptio

SEGMENT A	SEGMENT B	SEGMENT C	SEGMENT D
CRITICAL SCHEDULE ITEMS • Install Noise Walls C1 and C2 utilizing spread footers on Noise Walls C1 to limit potential diabase rock excavation. • Complete temporary extension of existing NB SUP in front of the 7-11 convenience store through to the existing Clifton Rd crosswalk • Close the SB SUP and detour pedestrian traffic at Centreville Farm Road to cros Route 29 at the existing signalized intersection and join the temporary NB SUP • Install new drainage, median, curb, and gutter • Complete pavement mill and overlay from start of Project to approx. Sta. 313+50	**CRITICAL SCHEDULE ITEMS** • Initiate utility relocation efforts within Segment, with special attention to the relocation of the Colonial Pipeline and Plantation Pipeline • Continue to provide a safe area for pedestrian by extending the temporary SUP along NB Route 29 from Clifton Rd to approximate Sta. 360+00 • Following clearing of ROW, relocate conflicting utilities and initiate ground improvements and construction of Retaining Wall A • Construct combination Retaining Wall / Noise Wall D • Complete phased construction of the two large twin culvers between Stringfellow Rd and Sandy Point Ln • Execute the four phased widening and reconstruction of Route 29 in both direction from Stringfellow Rd/ Clifton Rd to the intersection of Meadow Estates Dr • Construct the new phased box culvert at the Willow Branch stream crossing under Route 29 and remove the existing structure in phases • Relocate FCWA 24" watermain • Construct Service Road #2 and coordinate and install lighting along Route 29 • Construct, widen, and mill and overlay in phases the Stringfellow Rd intersection • Complete pavement reconstruction, mill, and overlay throughout the Segment	**CRITICAL SCHEDULE ITEMS** • Continue utility relocations (Verizon duct bank and Dominion Overhead) through the segment as ROW is acquired • Construct SWM ponds excavations for use during phased erosion & sediment control • To minimize impacts to the existing residents, construct Noise Wall G • Continue SUP detour from Segments A and B by continuing the temporary SUP along NB Route 29 through the segment to the existing signalized intersection with Buckley's Gate Dr • Construct new SUP along both NB and SB Route 29 • Install new drainage, median, curb and gutter throughout segment • Relocate FCWA 24" watermain • Construct Service Road #3 and install lighting along Route 29 and at the Meadow Estates Dr intersection	**CRITICAL SCHEDULE ITEMS** • Construct Retaining Wall E • Install new drainage, median, and curb and gutter throughout section • Complete permanent SUP along NB Route 29 • Coordinate and install lighting through segment • Complete Route 29 pavement mill and overlay to Sta. 398+75 • Complete Ramp A mill and overlay **SEGMENT E** Stringfellow Rd (Sta 61+00) to Sta 52+00 **SEGMENT F** NB Clifton Rd (Sta 47+75) to Sta 41+50

APPROACH TO CONSTRUCTION PHASING

The Project phasing plan overlays with our Project segments in a four-phased construction plan that permits an efficient, safe, and simple approach to construction. Phase 1 consists primarily of utility relocations and construction of the temporary SUP along NB Route 29. It includes any prerequisite work required to support utility relocations, such as clearing and grubbing, E&SC, and grading. Phases 2 through 4 include phased traffic switches starting with construction of the outside widening along SB Route 29 and the first section of the new culvert. Phases 3 and 4 move traffic in sequence onto the new widened section and then onto the new median section to complete roadway and culvert construction, finishing with the new NB Route 29 lanes. Each maintenance of traffic (MOT) phase runs the length of the Project, limiting major traffic switches to just the three required to place traffic onto newly constructed roadway sections.

The Project's success will depend upon an early and aggressive approach to work involving third parties: specifically, ROW acquisition, utility relocations, and the prerequisite work enabling relocations. Expediting this work with early design packages for clearing/grubbing, MOT, and grading/drainage will set up the Project schedule for success and achievement of the early completion incentive. Once utility relocation and ROW acquisition processes are complete, construction operations will have a clear corridor to execute the remaining three phases of the construction plan without delay from third parties. By allowing the maximum time for utility relocations, the risk of impact to the overall Project schedule can be mitigated since the construction impacts will be localized.

CONSTRUCTION PHASING

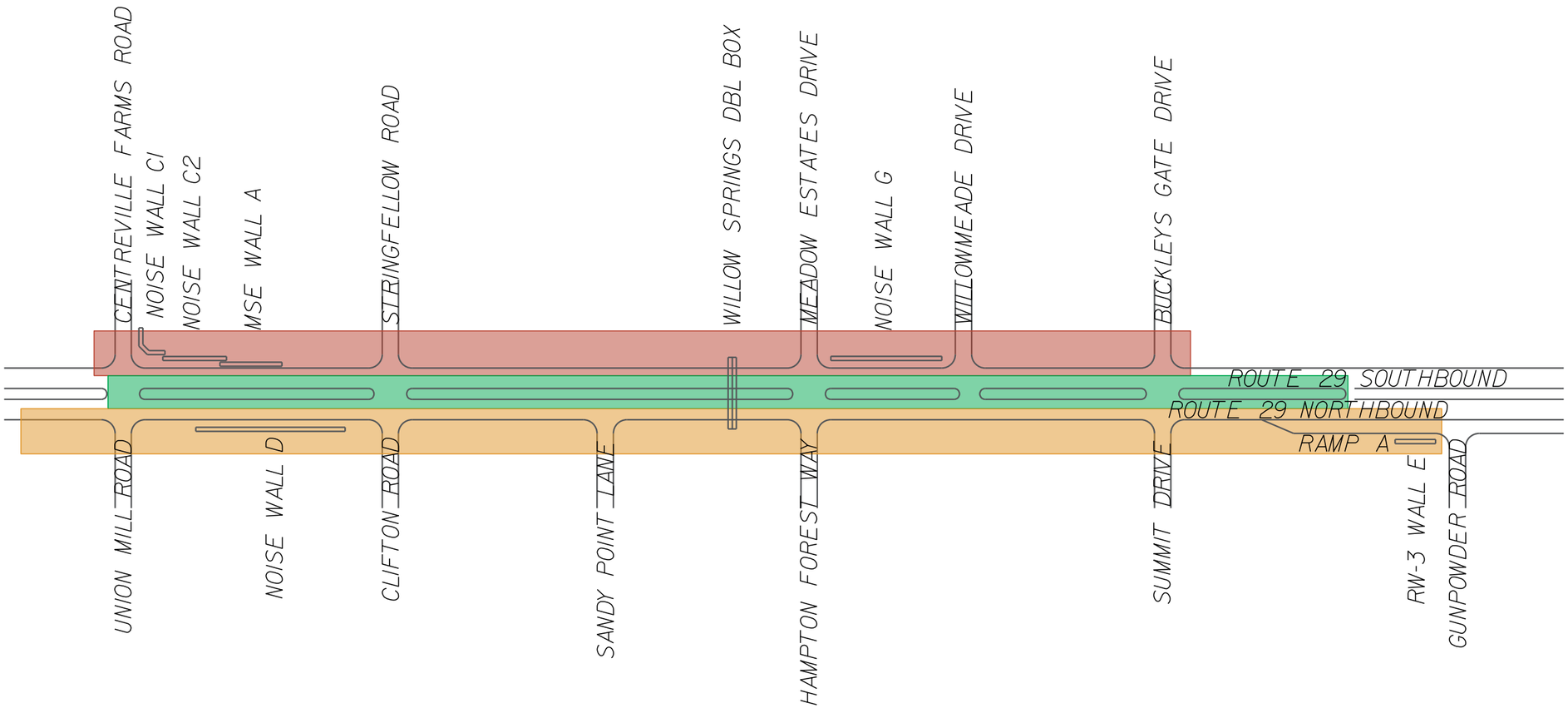
Our Team's concept is to implement a four-phased construction approach as shown on *Figure 5.2* (next page). Each phase includes work coordinated to take place simultaneously across multiple segments of the Project. Our approach requires only two major traffic switches between construction phases and a final switch into the permanent configuration. Approaching the work this way allows for early Project delivery of certain key facilities as well as safer work zones for both the traveling public and our construction workforce.

Phase 1 Utility Relocations and Early Works: Phase 1 construction consists of preparation work to support utility relocations, which is required for success in future phases of the Project. Concurrently, completing ROW acquisition by early 2023 is a key goal, including clearance of VDOT-acquired parcels by December 31, 2022. Also key is expediting utility relocations that could impact the start of construction along SB Route 29 in summer of 2023. Specifically:

- Colonial Pipeline casing extension along future SB widening;
- Plantation Pipeline casing extension for future SB widening;
- Washington Gas multiple relocations along SB;
- MCI/Verizon Business OH Fiber Optic Relocation along SB widening; and
- Fairfax County Sanitary Sewer multiple relocations along SB.

The above utility relocations are critical to the start of Phase 2 roadway construction. Other utility relocations will begin concurrently in Phase 1 but may extend beyond Phase 2, as their completion is not critical to the start of SB widening. Other work activities in Phase 1 will include installation of perimeter E&S controls and construction of temporary SWM ponds along NB Route 29 near Hampton Farms Way. Conversion of these ponds to permanent facilities will take place at the end of the Project. Phase 1 operations also involve completion of a temporary SUP that will run along NB Route 29 starting at Union Mill Rd and ending at Summit Dr, where it will reconnect with the existing sidewalk along SB Route 29. Completion of this SUP will create the needed conditions for open construction access along the SB Route 29 lanes and most of the widening work for the new roadway section. ***The new, continuous SUP will operate throughout most of construction until replacement with the permanent SUP in Phase 4***. In addition, construction of temporary inside widening and use of the paved median from Sta 346+00 to 358+50 sets up our operations for culvert construction starting along the SB Route 29 lanes in the next phase (see *Figure 5.3*).

Figure 5.2: Sequence of Construction (Simplified)

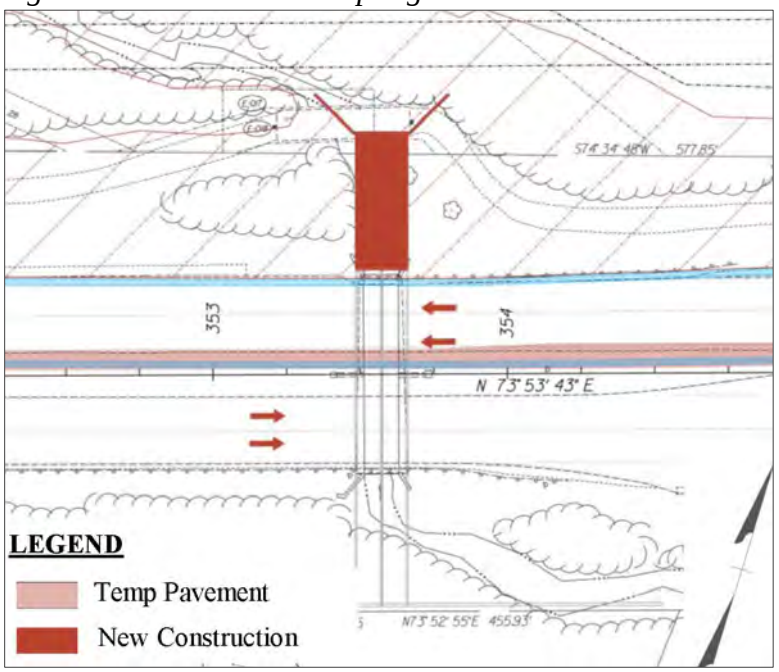


PHASE 1 Site Preparation	**PHASE 2** Perform Work / Close North Sedction NB and SB Traffic on South Secti	**PHASE 3** Perform Work / Close Center of Route 29 SB Traffic on North Section / N Traffic on South Secti	**PHASE 4** Perform Work / Close South Section NB and SB Traffic on North Secti
• Complete ROW Acquistion • Critical utility relocations • Temporary NB SUP placement from Union Mill Rd to Summit Dr • Construct temporary pavement and traffic cros over from 346+00 to 360+00 • Install temporary SWMP at Hampton Forest Way • Complete perimeter E&S • Coordinate lighting with Dominion Power • Detour all SUP traffic to N temp path	• Construct walls C1, C2, A, and G • Develop new widened section along outside SB Route 29 • Remove existing Willow Springs bridge to phase line and install SOE • Install new Willow Springs culvert to phase line • Stage pavement reconstruction, pavement build up, and temporary wedging for Stringfellow Rd/Clifton Farms Rd intersection • Construct both twin culverts between Stringfellow Rd and Sandy Point Ln to phase line • Complete major drainage crossings to phase line • Temporarily pave along new SB section for future Phase 3 TMP • Construct new SB SUP in Segments A, C, and D • Construct remaining utility relocations along Route 29 NB	• Shift existing SB traffic onto new roadway section t the north • Construct SOE at Phase 4 line and remove existing Willow Springs bridge to phase line • Construct center section of culvert • Remove existing SB lanes and complete new roadway section grading and widening • Pave Phase 3 section for temporary reverse direction configuration in Phase • Construct Segment B temp SB SUP sta. 346+00-360+00 for Phase 4 • Paving for MOT during Phase 4 construction • Segments A, C, D construct median, curb and gutters • Construct both twin culverts between Stringfellow Rd and Sandy Point Ln to phase line	• Shift existing NB traffic onto temp pavement construction in Phase • Close NB SUP for final reconstruction and detour onto completed SB SUP • Open temp SUP from 347+00 to 360+00 for final SB Route 29 section and future SUP • Remove existing NB lanes and complete new NB grading and widening • Install final section of Willow Springs crossing from Phase 3 line • Remove final section of existing Willow Springs bridge • Construct combination wall D and retaining wall E • Construct both twin culverts between Stringfellow Rd and Sandy Point Ln to phase line • Complete new service roads • Complete final curb, gutte , and median sections • Stage final mill, overla , and striping all segments

Phase 2 Roadway Widening along SB Route 29: Phase 2 broadly includes all work along the north side of the Project through Segments A, B, and C. This is the scope that completes most of the new construction along the SB lanes of Route 29. Phase 2 construction starts with shifting pedestrian traffic onto the NB Route 29 temporary SUP and closing the SB path.

In Segment A, the SUP detour allows completion of noise walls C1 and C2 and MSE Wall A in this phase. Further to the north in segment B, shifting the SB traffic to a newly constructed temporary inside roadway widening at Sta 346+00 leads to the first phase of the Willow Springs culvert replacement, which starts with the new sections to the north side of Route 29 as shown on *Figure 5.3*.

Figure 5.3: Phase 2 Willow Springs Culvert Construction

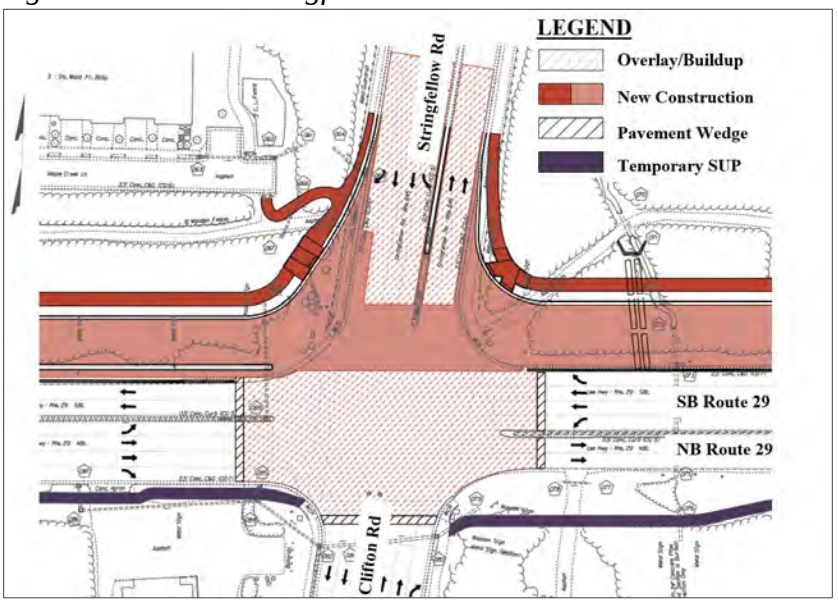


Additional construction includes widening along the outside of the existing SB lanes and first leg of the new drainage culverts at approximately Sta 328+50 and 341+50. In phase with these activities, we will install and complete relocation of the 24-in FCWA watermain as construction progresses along SB Route 29.

In conjunction with the widening as shown on *Figure 5.4,* we will proceed with a staged reconstruction of the intersection at Route 29 and Stringfellow Rd/Clifton Rd. Given the complexity of maintaining traffic through this intersection, we will complete most of the ultimate new section and pavement buildup with temporary wedging in this phase. Work will include an approved detour or nightly lane closures and MOT to complete pavement reconstruction, asphalt overlays, and wedging. While completing the intersection, we will construct the new median and overlay scope for Segment E on Stringfellow Rd.

The new widened section along SB Route 29 will include temporary pavement designed to carry the SB traffic temporarily in future phases. A key part of Segment B is the staged relocation of the 24-in FCWA main. In Segment C, we will complete construction of noise wall G. Throughout the length of this phase, we will complete all permanent curb/gutter, drainage, and construction for the future SUP along the SB lanes.

Figure 5.4: Phase 2 Stringfellow Rd Construction



Phase 3 Construct Center Section: Phase 3 starts with the first major traffic switch of the Project. Utilizing the temporary lanes placed along SB Route 29 in Phase 2, the existing SB traffic will shift onto these lanes while NB Route 29 traffic remains in the current configuration. This switch will open the center section of the Project for Segments A through D. The primary focus of Phase 3 construction is Segment B, which includes constructing the center section of the Willow Springs culvert and removal of existing SB Route 29 lanes up to the SOE limit at the edge of NB Route 29 (*Figure 5.5*). This includes constructing the center legs of the major crossing at Sta 328+50 and 341+50.

Figure 5.5: Phase 3 Willow Springs Culvert Construction

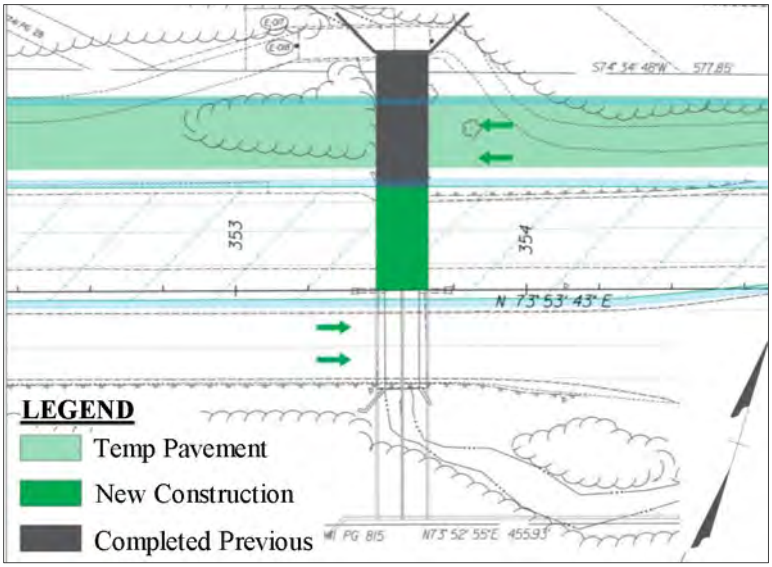
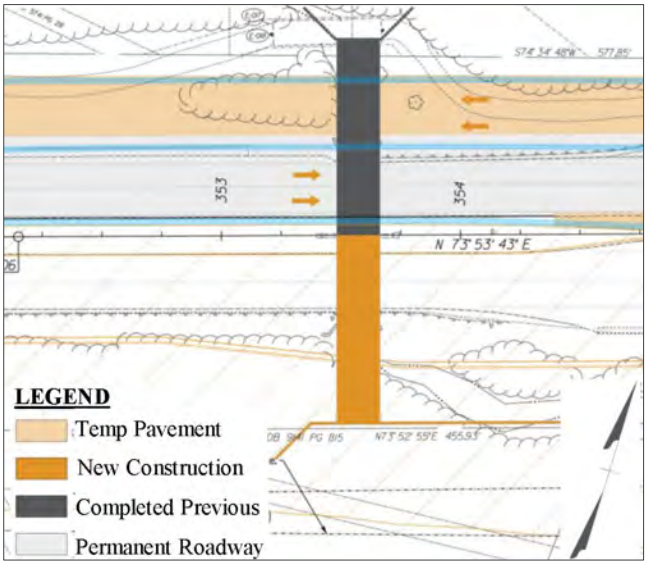


Figure 5.6: Phase 4 Willow Springs Culvert Construction

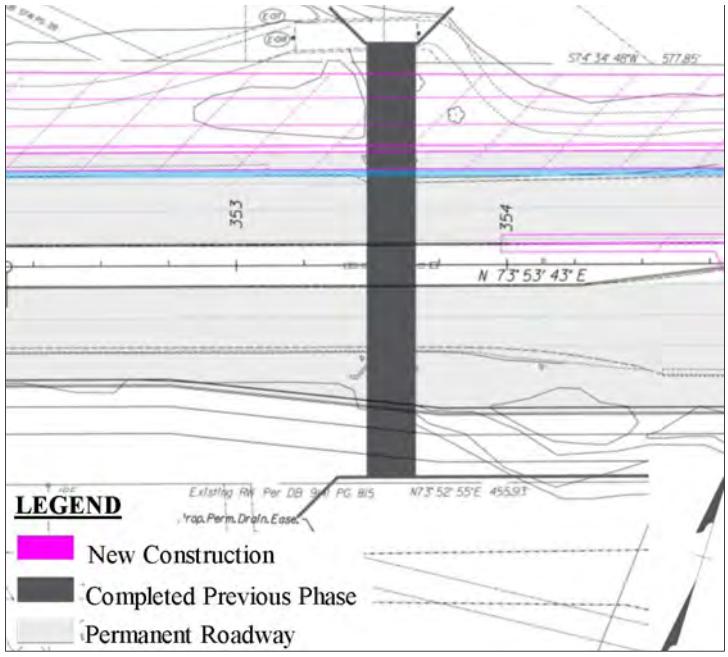


Through Segment B, we will also complete the new roadway section to final grade and place temporary paving for MOT during Phase 4 construction activities. In Segments A, C, and D, construction work will focus on completing new median, curb/gutter, and drainage.

Phase 4 Roadway Widening along NB Route 29: The second major traffic switch starts Phase 4. Utilizing the pavement section for future SB Route 29 constructed in Phase 3, NB traffic is shifted to the new section in the center of the roadway alignment (*Figure 5.6*). In addition, construction removes the temporary NB SUP and all path traffic detours onto the newly constructed SB SUP. The only exception is a temporary path constructed to the outside of the work area from Sta 346+00 to 358+00 along SB Route 29. This allows removing the temporary paving from Phase 2 and Phase 3 for permanent replacement and construction of the final SB SUP (*Figure 5.7*).

Phase 4 consists of the work along the outside of the NB Route 29 lanes and reconstruction of the existing NB lanes to the final grade and section. The final stage of the Willow Springs culvert replacement and completion of the other major pipes crossings completes the major drainage under Route 29.

Figure 5.7: Phase 4 SUP Completion at Willow Springs Culvert



Additional work in Segment B includes completion of the combination retaining/noise wall D. Phase 4 encompasses the final major construction scopes of Segment C and D with construction of retaining wall E and conversion of the temporary SWM ponds to permanent condition.

Throughout the length of NB Route 29, we will construct all permanent median and curb/gutter while completing segment F, the permanent section of the NB Route 29 SUP, and new service roads.

Before the final traffic switch into final configuration, paving operations will conduct staged striping, milling, and overlay of all required surfaces to provide a clean, permanent new roadway surface and SUPs along both NB and SB Route 29.

CONSTRUCTION OPERATIONS: SAFE PRODUCTION PLANNING

The Myers Production System is fundamental to our culture. Every employee, from management to field staff, embraces this system. We encourage shared learning and pre-planning of work operations to ensure that our work is done "***Better, Faster, Safe,***" just like it says on our hardhats. The major objectives of our systematic approach to construction operation planning include sending everyone home safe every night, achieving daily production goals, and exceeding quality expectations. Our construction team will plan all details of the work before the crews begin working, minimizing delays and maximizing production. We incorporate the company "playbook" of best practices for all major work operations, including MSE walls, post and panel noise walls and retaining walls, DIP waterline installation, slide rail shoring for deep drainage, RCP drainage installation, excavation to embankment, underdrain, stone placement, asphalt paving, and MOT.

Myers' design-build experience has shown the best approach is to integrate ALL team members—including the construction QC/QA staff; environmental, traffic, and safety managers; and all major subcontractor partners—into the short-term planning and scheduling process on a weekly and longer-term basis. Beginning with the CPM schedule, Myers performs scope and resource planning, which we will share with VDOT and all Project partners. Our comprehensive planning and scheduling process includes monthly CPM schedule updates, weekly development of five-week look-ahead schedules for each crew and subcontractor, weekly schedule coordination meetings, weekly/bi-weekly subcontractor meetings, weekly/bi-weekly progress meetings, a daily schedule of activities, daily work plans, before-action reviews, and after-action reviews.

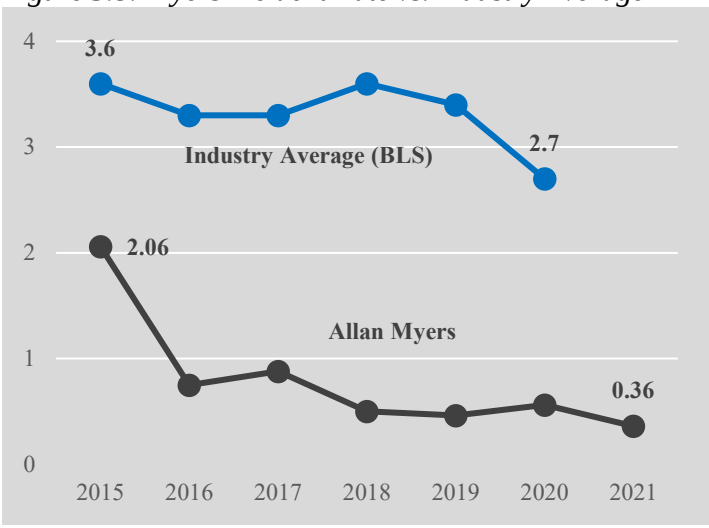
Five-week look-ahead schedules are created with input from the field manager responsible for the scope of work as a breakdown of the activities defined by the long-term CPM Project schedule. As schedule activities move from Week 5 to Week 1, the Project team creates progressively smaller and more detailed work activity listings. For the upcoming work on Week 1, all constraints have been removed, all preliminary planning and preparation has been completed, and the work activities listed can and will be successfully completed. This schedule is distributed weekly to all Project team members, including VDOT, QA, and QC inspection staff.

Operation Work Plans developed during planning and preparation activities are key to finding the most efficient way to build each Project element while ensuring safety. The operation planning process ensures workflow and constraint removal for our crews and subcontractors. Distilled work zone diagrams are developed for activities from Week 1 and Week 2 on the five-week look-ahead schedules, providing crews with the most current and accurate information to complete their work efficiently while meeting all quality standards.

SAFETY: HOME SAFE TONIGHT AND INCIDENT- AND INJURY-FREE CONSTRUCTION

Myers' ***"Home Safe Tonight"*** safety culture stems from a belief shared throughout the company that all incidents are preventable, and none are acceptable, no matter the severity. Our culture of preventing incidents through industry-leading training, in-depth and detailed planning, and decades of experience have resulted in a best-in-class recordable incident rate—currently 0.36, over seven times safer than the industry average (*see Figure 5.8*). Design-build projects provide us with the opportunity to influence the sequence of construction and work with designers to "engineer out" hazards to both our construction workforce and the traveling public. With our toolbox of safe work practices, we will minimize the hazards to make sure the Project workforce goes home safely to their families, each and every night.

Figure 5.8: Myers Incident Rate vs. Industry Average



To support our *Home Safe Tonight* culture and incident- and injury-free construction, Myers treats safety as an inseparable part of the planning process. Comprehensive safety planning considers potential risks to construction personnel, motorists, pedestrians, inspection staff, site

visitors, and any others who enter the work zone. In addition, each employee is empowered with Stop Work Authority to address safety concerns that arise.

Safety Risk – Worker Safety: Working in traffic is one of the highest risk activities our employees and subcontractor partners perform. In 2021, Myers placed a major focus on improving the safety of our work zones near active traffic. We call this initiative "***Respect the Risk***" (see *Figure 5.9*). It is a focal point when planning, working, and interacting with the traveling public. The program includes intensive employee training, planning to reduce or eliminate the need for work outside of barriers, and increasing illumination and visibility in our work zones by utilizing cutting-edge technologies. In addition, we enhanced our paving equipment with extensive stadium-style lighting to mitigate the risk associated with MOT on high volume roadways like Route 29.

Figure 5.9: Myers' "Respect the Risk" Initiative Overview

Safety Risk – Utilities: Myers has a well-established approach to excavating around and relocating utilities without any damage or loss of service. Our methods go above and beyond the minimum Virginia Miss Utility laws and have enabled us to become an industry leader in safe excavation around existing utilities. In 2021, our procedures for utility locating resulted in achieving a record low number of utility strikes. This includes Myers' crews achieving ZERO utility strikes on the I-66 Outside the Beltway project during the 316,181 manhours of production work in 2021.

Project-Specific Health and Safety Plan: An integrated member of our Team, HSE Manager **Josh Brown** will be responsible for overall Project safety in compliance with all regulatory and VDOT requirements and policies. In addition to managing Myers' internal safety program focused on the construction staff, **Josh** will oversee our traffic and safety program to ensure motorists, pedestrians, and bicyclists safely navigate the construction work zones. He will develop a Project-specific Health and Safety Plan (HASP) to address project-wide safety requirements, with a specific focus on traffic safety and utilities. The specific components of Myers' HASP that will support zero incidents on the Project include:

Jobsite Safety Orientation: Our best practice of a project-specific "safe start" safety orientation will be conducted for the Project. The orientation will review the project-specific HASP, discuss unique risks and challenges associated with this Project, and review work area access points and traffic-related concerns.

Project-Wide HSE Meetings: In addition to daily beginning-of-shift huddles held by each field manager with their crew, Myers will hold regular project-wide safety meetings to discuss project-wide safety or issues as well as upcoming

changes to access and traffic patterns. These meetings are also an effective forum to address any trends or frequently observed issues/concerns.

Job Hazard Analysis: Myers' job hazard analysis process will break down specific scope elements into a step-by-step format to analyze the hazards associated with each individual element of the work and the controls available to be implemented. In addition, each field manager will complete a daily work plan which specifically identifies hazards that will be encountered during this shift and the controls the crew will implement to mitigate those hazards.

Beginning and End-of-Shift Huddles: Conducting an effective beginning-of-shift huddle is a critical component of the Myers safety culture. Traditionally a time to discuss production, our huddles have become a time for building camaraderie and discussing potential safety hazards for the shift ahead. Team member contributions are acknowledged, concerns are voiced, and plans are built together to deal with challenges the crew is facing. Project-wide huddles (see *Figure 5.10*) are held regularly to address changing traffic conditions, major safety concerns, and Project progress.

Figure 5.10 Beginning-of-Shift Safety Huddle

Weekly Toolbox Talks: Weekly safety training modules led by the field manager are completed with each crew for topics relevant to the work at hand. These training modules are also tracked in HCSS and monitored for compliance weekly. As part of the beginning-of-shift huddle, Myers' daily safety flash is reviewed with each crew. Daily flashes can include near misses, current weather-related reminders, or general safety training refresher modules.

Proactive Safety Management: In addition to the safety practices mentioned above, Myers has effectively implemented several commitment-based safety initiatives and best practices that have shown promising results in reducing the frequency and severity of injuries on similar roadway widening projects.

- *Dynamic Stretching*: Developed specifically to prevent strain/sprain injuries due to repetitive construction activities, our team of occupational trainers developed and implemented a dynamic stretching program as part of daily beginning-of-shift huddles.
- *Extreme Housekeeping*: The Extreme Housekeeping program was developed to define, improve, and track housekeeping performance to reduce employee injuries and vehicle and equipment incidents that occur due to poor housekeeping.
- *Craft Voice in Safety (CVIS)*: Myers CVIS program empowers craft representatives to take responsibility for addressing safety concerns. Designated CVIS team members receive additional safety training and become a go-to person with the designated authority to address and correct unsafe conditions.
- *Near Misses*: Our Near Miss program is an integral part of identifying potential risks, tracking trends, and empowering employees to take corrective action if needed. The Near Miss program is an opportunity for Myers to acknowledge employees who stepped up to address an unsafe condition, share learning with employees throughout the company, and reinforce our safety culture of learning and continuous improvement.

STAGING AND STORAGE DURING CONSTRUCTION

Our approach to materials management for the Project is focused on providing on-time delivery of materials to the site, since there is very little room within the already provided right-of-way for storage. There is some opportunity for storage near the SWM ponds and during the design phase we will investigate making agreements with local businesses for parking lot space. We will also utilize our local equipment yard in Manassas, VA as well as our existing laydown yard at Stringfellow Rd and I-66. Off-site borrow material will need to be imported during Phase 2, and we will utilize our local contacts and nearby projects for on-time delivery. We plan to minimize import/export as much as possible by utilizing the chemical treatment options noted in *Section 4.4.3* of this Technical Proposal.

EARLY BENEFICIAL USE OF PROJECT ELEMENTS

Figure 5.11 illustrates the location of Project facilities that our plan will construct early in the schedule. By providing early benefits, each of these elements will increase public acceptance of the Project while increasing public safety.

Our early package includes construction of a complete SUP along NB Route 29. This approach will enhance safety for pedestrians by separating the SUP from construction operations in each phase, eliminating potentially dangerous choke points between the SUP and construction, especially where the SB SUP is near the widening along SB Route 29. Completing the SUP along NB Route 29 also minimizes SUP traffic switches during construction. Once we create the detour onto the NB SUP, it remains in place until the final Phase 4 when we place the new SB SUP into service, with the exception of one short detour around the culvert outfall section. We accomplish two key goals for VDOT with this design and construction approach: (1) We enable early access to a full SUP through the Project, which currently does not exist, and (2) We maximize safety by placing SUP traffic away from construction activity and protected from traffic.

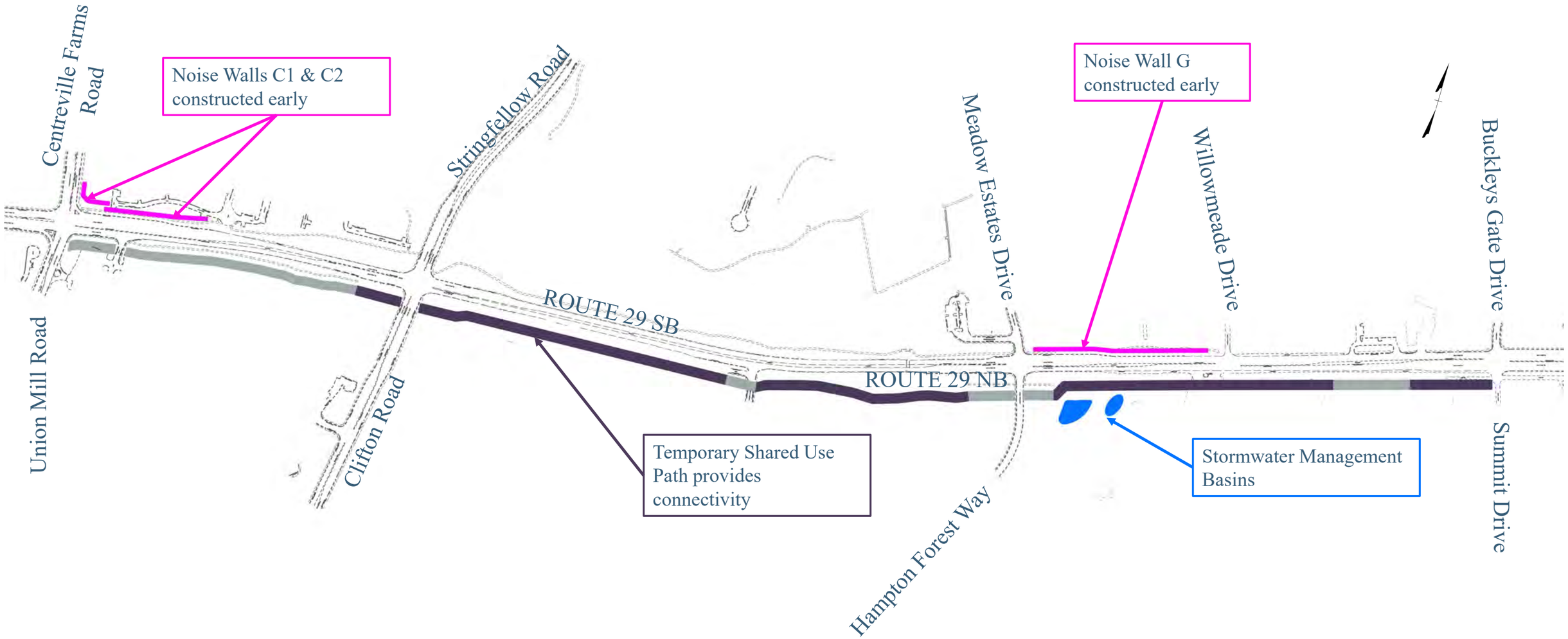
This early package also includes design to construct the new SWM ponds along NB Route 29 in Segment C near Hampton Forest Way. The current incomplete drainage system utilizes the existing pond in this area. We will construct and utilize the ponds for temporary drainage and E&S control during construction. Early delivery will enable construction operations to work in an environmentally sensitive manner and reduce the need for temporary SWM storage measures in other areas of the Project.

A critical choke point in Segment A is the proximity of the existing SUP to the construction of noise walls C1 and C2. In addition, the location of the new noise walls is close to existing townhomes. As part of our phasing plan, our Team will build walls C1 and C2 in the first phase of construction, as soon as utility relocations are complete. This will enhance public relations by moving away from the most impacted residential areas first. Additionally, with the walls in place during Phase 2, when we begin major construction activities, they will provide construction noise mitigation throughout the remainder of the Project.

A similar complex phasing issue exists with noise wall G in segment C. The existing SUP, which does not connect through the Project, is near the new wall. Construction in this segment will impact the residential area along Buckley's Gate Rd. Therefore, we will deliver noise wall G early in Phase 2, simultaneously with walls C1 and C2. The wall will then provide noise reduction for the neighborhood during all future phases of construction.

Roadway lighting is proposed on Route 29, east of the Stringfellow Rd / Clifton Rd intersection, as a mitigation for the sag vertical curve that only meets comfort criteria. The portion of this lighting system along the SB lanes will be constructed to its permanent condition in Phase 2. This approach will provide a safety benefit during subsequent stages of construction by lighting the temporary travel lanes, particularly during Phase 4 when the NB lanes are shifted to the north side of the roadway.

Figure 5.11 Early Benefits Delivered by the Myers/WRA Team



4.5.2 TRANSPORTATION MANAGEMENT PLAN

The Myers/WRA Team (Team) is dedicated to a Transportation Management Plan (TMP) that will deliver an efficiently constructed Project with minimal impact to the traveling public and that exceeds the expectations of VDOT, Fairfax County, and other Project stakeholders. MOT/Traffic Lead **Dana Trone, PE, PTOE** will lead all aspects of the TMP. The Temporary Traffic Control (TTC) Plans will be developed as stipulated by the requirements set forth in *RFP Section 2.11*. The TMP will be Type C, Category V TMP per I&IM-241/TE-351 as stated in the RFP. **Dana** brings extensive expertise in design and oversight of TMP implementation having led the Myers/WRA Team's efforts on the Walney Rd DB project and the design and analysis of the TMP and Work Zone Impact Analysis for the Fairfax County Pkwy and Fair Lakes Pkwy Interchange Project for VDOT.

Our Team's design efforts will be thoroughly coordinated with the technical requirements, including the *Virginia Work Area Protection Manual* (VWAPM) and the *Manual on Uniform Traffic Control Devices* (MUTCD). Our Team understands the requirements of *Section 2.11.2* and will schedule all lane and shoulder closures in accordance with the NOVA District memorandum dated September 29, 2016. Our Team will explore various options to accelerate construction and provide early Project benefits to the traveling public and the community. Any implementation of detours to facilitate accelerated construction will meet the requirements set forth in *RFP Section 2.11.2* and *Addendum #3*. The proposed design minimizes the number of access points and lane closures, reducing impacts to the traveling public and streamlining our work. We will also implement TTC to identify the required traffic control elements, barrier locations, temporary signage, and pavement markings. Our Team will maintain safety and efficiency throughout the duration of the Project by monitoring the effectiveness of the TMP. We will coordinate the proposed Maintenance of Traffic (MOT) plan with VDOT, Fairfax County, and other stakeholders, as needed.

MAINTENANCE OF TRAFFIC

Our Team bases its TMP on the area's unique traffic conditions and changing traffic patterns. Following Notice of Award, we will hold an initial partnering meeting with VDOT, the County, and third-party stakeholders. During this meeting, all parties will review the Project requirements and discuss traffic concerns related to construction. Together, we will develop a checklist of responsibilities and timelines for successfully achieving agreed-upon TMP activities and goals.

Project-Wide Maintenance of Traffic: Our Team has developed a TMP that minimizes impacts by requiring only three traffic shifts over the four phases of construction. *Figure 5.2* in *Section 4.5.1 Sequence of Construction* provides an overall phasing concept for the Project as described in the Sequence of Construction.

Phase 1 – Utility Relocation and Early Works: This phase will consist of clearing and grubbing operations, utility relocations, installation of erosion and sediment (E&S) controls, grading and drainage installation, and construction of the temporary SUP.

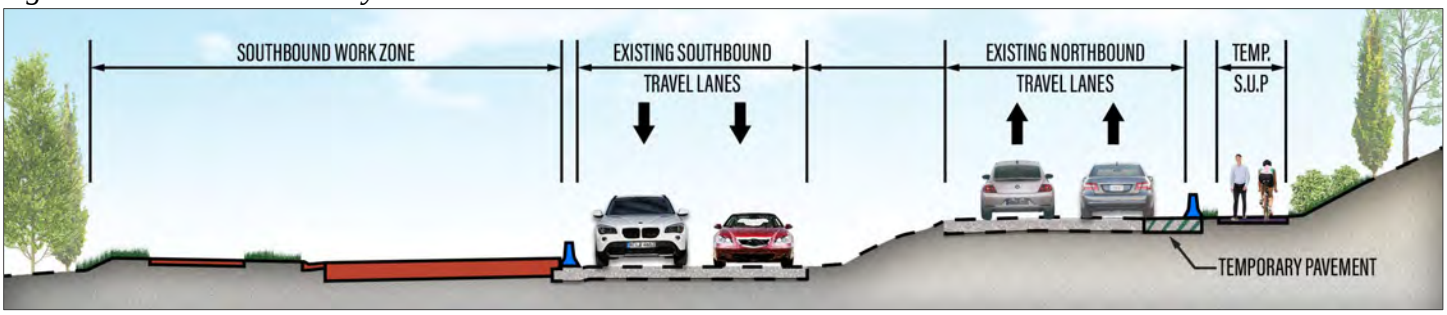
- Initial clearing and grubbing will be accomplished outside of existing travel lanes to prepare work zones for utility relocations and installation of E&S controls.
- Using the allowable lane closure time frames and flagging operations, we will coordinate with the utility companies to perform utility relocations along the Project corridor.
- The temporary SUP along the NB lanes between Sta 308+00 at Union Mill Rd and Sta 385+00 at Summit Dr will be primarily constructed outside of the existing roadway to provide the early Project benefit of a continuous pedestrian and bicycle facility along the length of the Project *(see Figure 5.11)*. Single-lane and shoulder closures, in accordance with the RFP, will be utilized to construct the temporary SUP as necessary.

Phase 2 – Roadway Widening along SB Route 29: This phase will consist of widening construction along the SB side of the Project, including the improvements at Stringfellow Rd.

- Utilizing nighttime single-lane closures, we will place temporary barriers along the SB pavement edge.
- We will demolish the existing median between Sta 345+00 and 358+75 and install temporary pavement and barriers along the SB inside edge of pavement utilizing nighttime single-lane closures and flagging operations.

- SB traffic will be maintained in the existing lanes from Sta 306+50 to 345+00 and Sta 358+75 to 386+00. NB traffic will be maintained in the existing lanes and will be barrier separated from the NB side temporary SUP between Sta 346+50 to 349+00 *(see Figure 5.12)*.
- The SB Route 29 widening, retaining walls, noise walls, and drainage will be constructed.
- Pedestrians and bicyclists will continue to utilize the temporary SUP along NB Route 29.

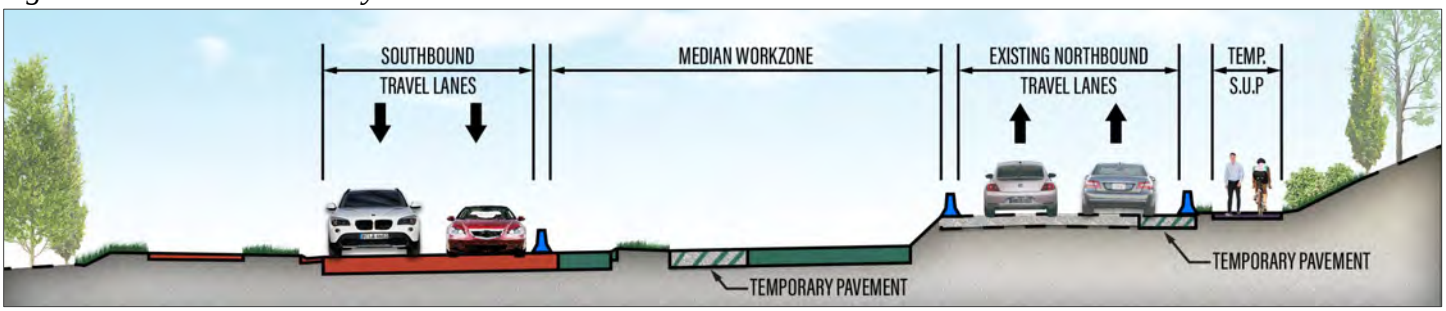
Figure 5.12: Phase 2 Roadway Section Sta 347+00



Phase 3 – Construct Center Section: This phase will consist of construction of the inside travel lanes and median and will open the two outside SB lanes of Route 29.

- Utilizing nighttime single-lane closures, we will place temporary barriers along the NB inside edge of pavement.
- SB traffic will be transitioned to the new outer lanes from Sta 306+50 to 345+00 and Sta 358+75 to 386+00. NB traffic will be maintained in the existing lanes and will be barrier separated from the NB side temporary SUP between Sta 346+50 to 349+00 (see *Figure 5.13*).
- NB traffic will run on temporary pavement from Station 360+00 to 376+00 for construction of the center section segment of Route 29.
- The center section median and inside lanes of Route 29 will be constructed.
- Pedestrians and bicyclists will continue to utilize the temporary SUP along NB Route 29.

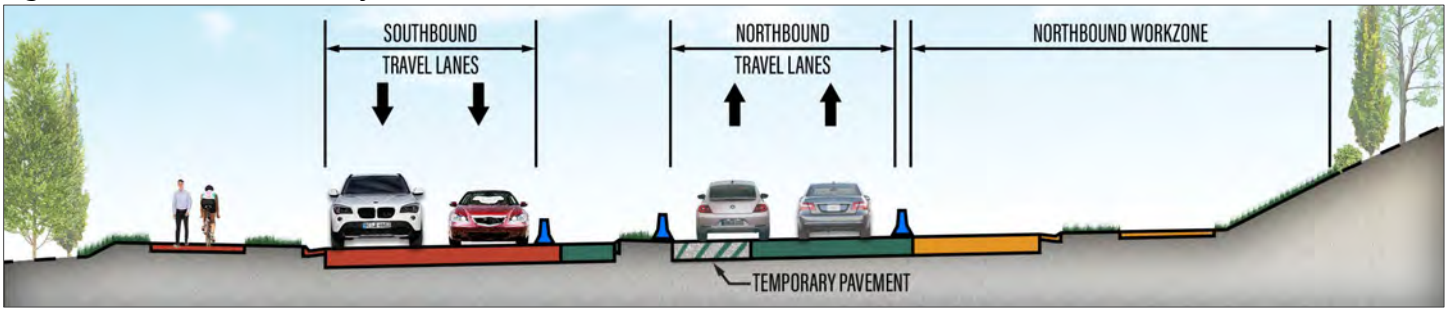
Figure 5.13: Phase 3 Roadway Section Station 347+00



Phase 4 – Roadway Widening along NB Route 29: This phase will consist of widening construction along the NB side of the Project, including the improvements at Clifton Rd, construction of the final median portions, and opening the completed Project to traffic.

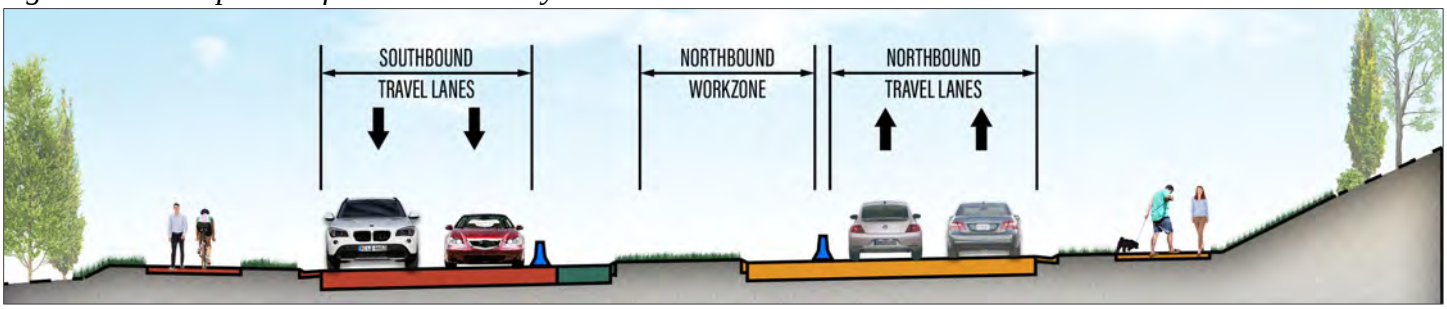
- NB widening construction will be accomplished by maintaining SB traffic on the new outer lanes of the SB roadway and shifting NB traffic onto the new inside lanes of the NB roadway.
- Pedestrians and bicyclists will be moved to the new SUP along SB Route 29, away from the NB work zone.
- Utilizing nighttime single-lane closures, we will install temporary barriers along the outside edge of NB lanes.
- Utilizing nighttime single-lane closures, we will install temporary pavement and barriers between Station 345+00 and 358+00 and shift the NB lanes to the new SB roadway for double box culvert construction (*Figure 5.14*, next page).

Figure 5.14: Phase 4 Roadway Section Station 347+00



- The NB widening, retaining walls, noise walls, service roads and Ramp A improvements will be constructed.
- Temporary pavement will be removed and final construction of the SUP and curb and gutter over the double box culvert will be completed.
- The completed SUP in both directions will be opened to pedestrians and bicycle users.
- Temporary pavement will be removed and final construction of the median between Sta 345+00 and 376+00 will be completed utilizing single-lane closures and flagging operations (see *Figure 5.15*).
- Upon completion of final median construction, we will open all six lanes of completed Route 29 to traffic.

Figure 5.15: Completion of Phase 4 Roadway Section

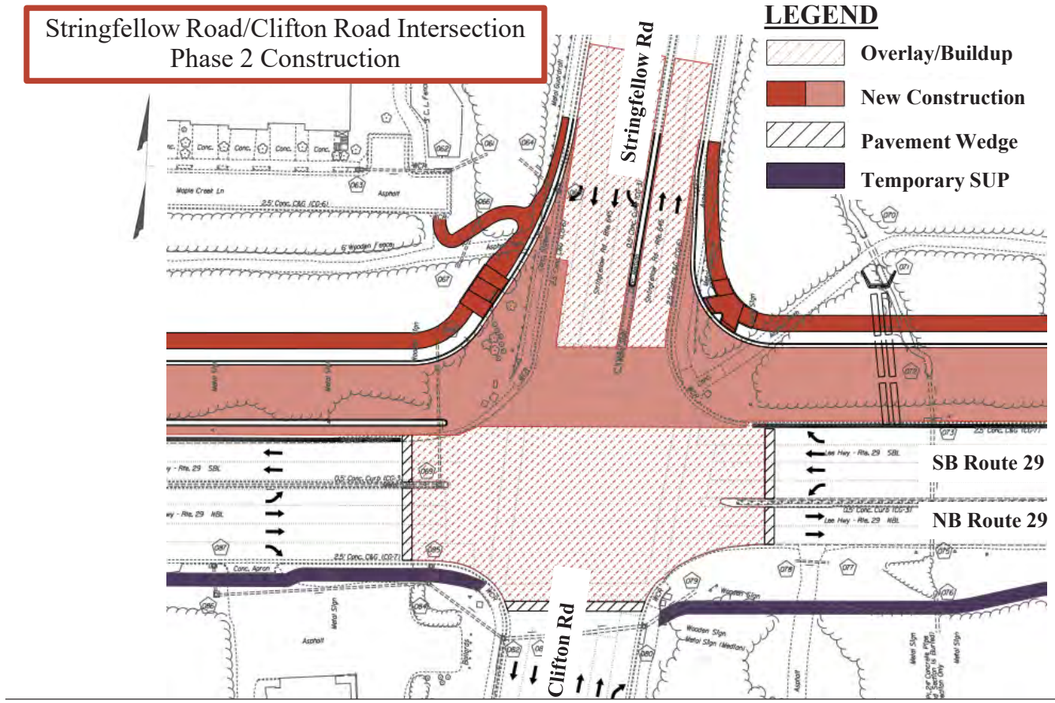


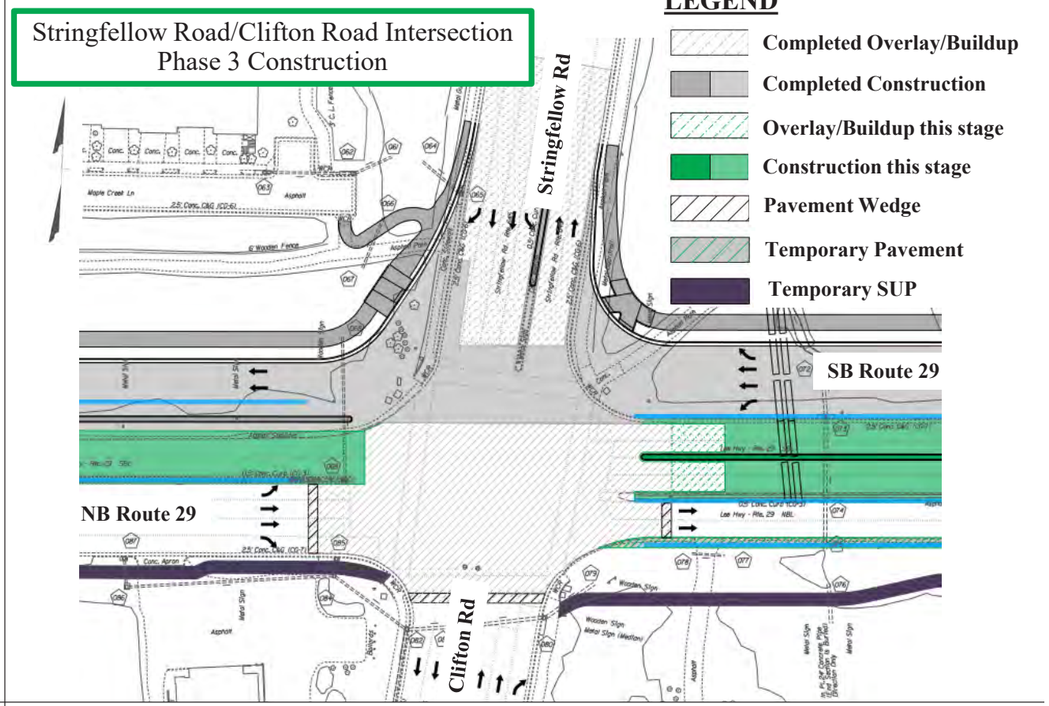
Our Team also has identified and addressed in the TMP two specific areas that are complex from an MOT perspective. They are the Stringfellow Rd/Clifton Rd intersection and Willow Springs Double Box Culvert as detailed below.

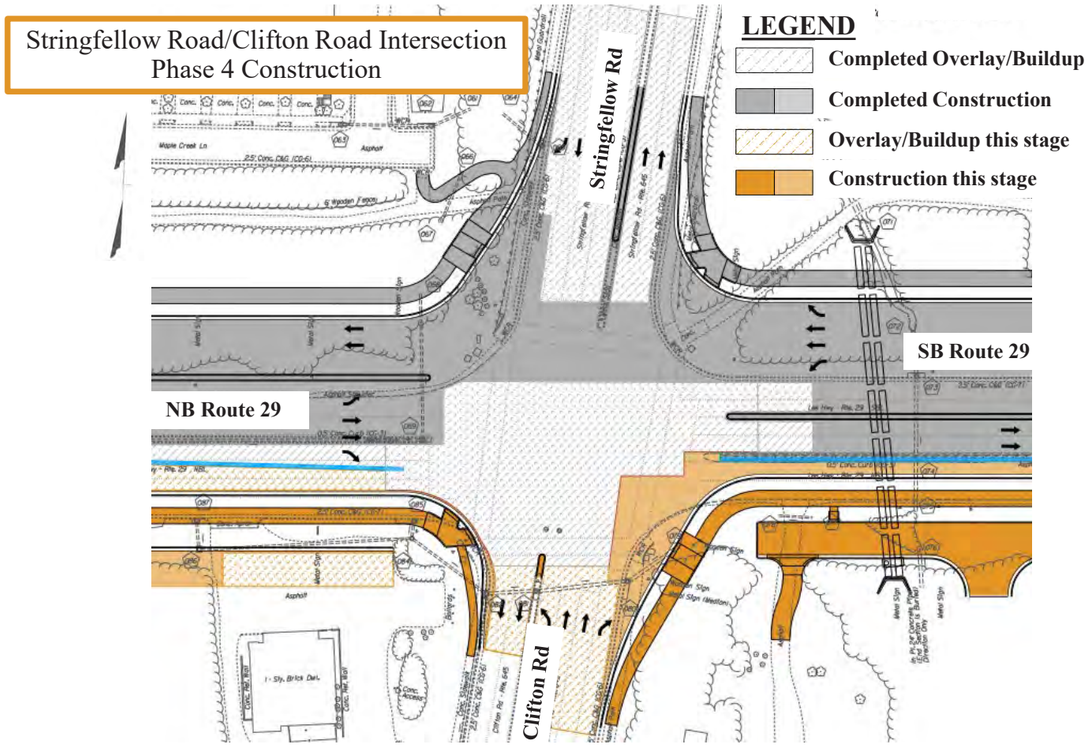
Stringfellow Rd/Clifton Rd Intersection: The improvements will be constructed in three phases across the intersection from Stringfellow Rd to Clifton Rd (see *Figure 5.16*, next page). Our Team will maintain two lanes of traffic throughout construction of the intersection. Traffic will be maintained utilizing traffic shifts to construct the pavement buildup in phases as generally depicted in *Figure 5.16* and as described below:

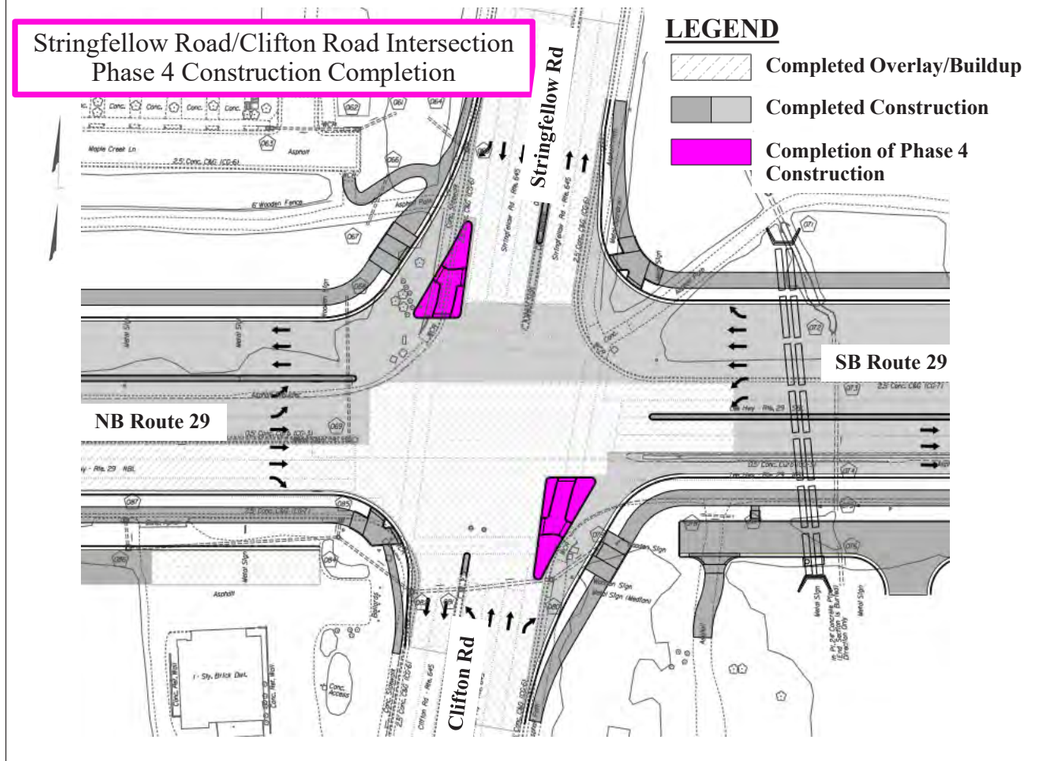
- Phase 2: Construct the north side intersection improvements at Stringfellow Rd. Utilizing an approved detour and/or nighttime single-lane closures and flagging operations, traffic will be shifted to construct the full depth pavement and pavement buildup within the intersection, and to accommodate wedge and leveling through the intersection.
- Phase 3: Construct the median and left turn lanes of Route 29 at the intersection at Stringfellow Rd. Temporary signalization at the intersection will be installed and traffic shifts for work within the intersection will be accomplished utilizing nighttime single-lane closures and flagging operations.
- Phase 4: Construct the south side intersection improvements at Clifton Rd. Utilizing nighttime single-lane closures and flagging operations, traffic will be shifted for full depth pavement construction within the intersection. Construct the channelizing islands, utilizing temporary lane closures in accordance with *RFP Section 2.11.2*.

Figure 5.16 Stringfellow Rd Intersection







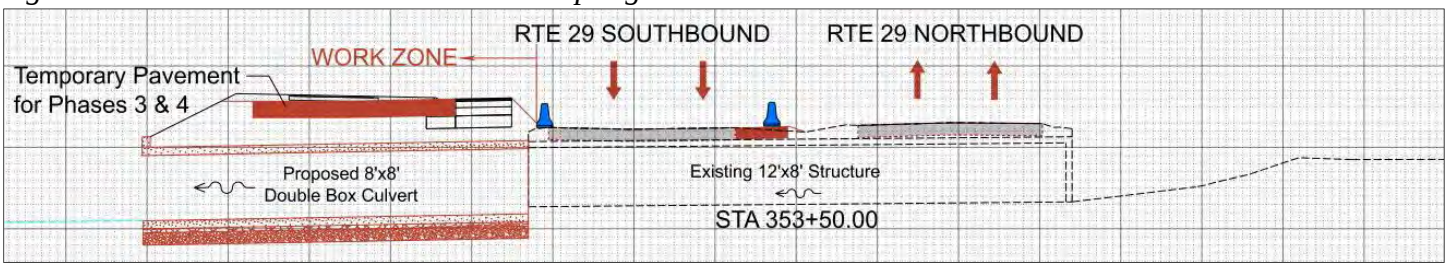


Willow Springs Double Box Culvert: The double box culvert will be constructed in Phases 2 through 4. Our Team's design allows for construction of the new double box culvert while simultaneously removing the existing structure as required by the RFP. This approach reduces earthwork, support of excavation, and construction duration. The handling of traffic at the box culvert will be as follows:

SB traffic will be maintained in the existing lanes except for being shifted onto the SB temporary pavement in the existing median between Sta 345+00 and 358+00 to create sufficient space for SB side removal of the existing structure and construction of the double box culvert at Sta 353+50. At the conclusion of this phase, temporary pavement will be placed for use of the SB lanes during the subsequent construction phases (*Figure 5.17*).

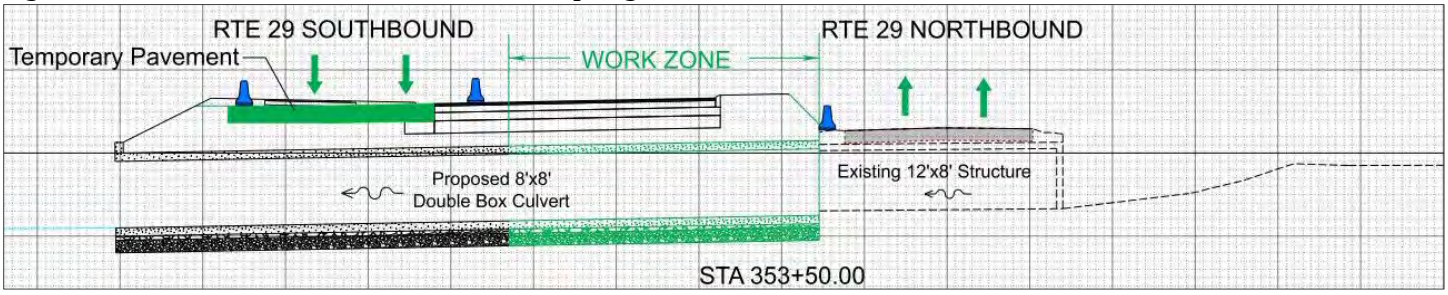
The outlet segments of the existing structure will be removed, and the double box culvert will be constructed.

Figure 5.17: Phase 2 Cross Section at Willow Springs Box Culvert Station 353+50



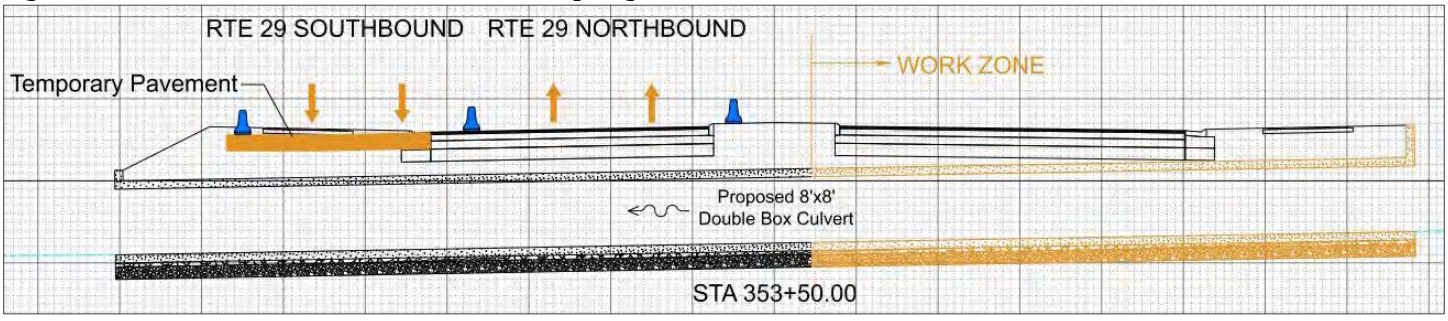
Upon completion of the outfall section, SB traffic will move to temporary pavement over the double box culvert to provide sufficient space for center section removal of the existing structure and construction of the double box culvert (*Figure 5.18*). NB traffic will continue to utilize the existing NB travel lanes. The center section segments of the existing structure will be removed, and the double box culvert will be extended.

Figure 5.18: Phase 3 Cross Section at Willow Springs Box Culvert Station 353+50



Upon completion of the center culvert section, SB traffic will remain on the temporary pavement over the culvert. NB traffic will be shifted to the new SB roadway between Sta 345+00 and 358+00 over the double box culvert to provide sufficient room for removal of the existing structure and construction of the double box culvert as shown in *Figure 5.19*. The existing structure will be removed, and the inlet portion of the new double box culvert will be constructed.

Figure 5.19: Phase 4 Cross Section at Willow Springs Box Culvert Station 353+50



CONSTRUCTION IMPACTS

Limiting Disruptions to Vehicular Traffic: The Myers/WRA Team understands that (1) during peak travel times, traffic volumes are heavy along the Route 29 corridor and through the intersections at Stringfellow Rd/Clifton Rd and Union Mill Rd/Centreville Falls Rd, (2) drivers, residents, and the community must be well informed of impending traffic changes, and (3) fewer temporary traffic changes correlates with improved safety. Our Team's TTC plan will incorporate temporary signalization and maintain existing turn lane lengths to minimize impacts to traffic during construction.

Our Team will coordinate with VDOT Northern Region Operations well in advance of any changes to traffic patterns due to construction phasing and allowable lanes closures, specifically for traffic shifts associated with the Willow Springs double box culvert construction and the intersection improvements at Stringfellow Rd and Clifton Rd. Once traffic patterns are in place, we will coordinate to adjust signal timing and warning signage to keep traffic moving safely. At times during each construction phase – such as in advance of Phases 2 and 3 traffic shifts – temporary off-peak lane closures will be needed. These instances will be scheduled two weeks in advance and coordinated with VDOT. Notice will be provided on PCMS signs in advance of the work zone prior to implementation.

Limiting Disruptions to Pedestrian Traffic: Pedestrians and bicyclists actively use the existing facilities along the Project. The proposed location of the temporary SUP along NB Route 29, as shown in our construction phasing, allows for early delivery of connectivity and continuous use along the entire length of the Project corridor. Our Team will use barricades and safety fence to safely direct pedestrians and bicyclists. This will reduce confusion during construction as there will be no significant changes to the path once completed.

Incident Management: Our Team understands that, should a traffic incident occur, prompt response and action are vital to minimizing impacts to the traveling public. As part of our Team's commitment to public outreach and safety, we will partner with VDOT, the County, and first responders in advance of changes to traffic patterns and will incorporate the following in the event of an incident:

- Provide prompt notification to the local authorities and Virginia State Police when a traffic incident occurs;
- Provide potential detour routes if a shutdown of the roadway is necessary;
- Implement a predetermined plan to contact local wreckers for removing vehicles from travel lanes; and
- Activate a changeable message sign to provide advance warnings.

STAKEHOLDER IMPACTS AND PUBLIC OUTREACH

The Myers/WRA Team sees communication, both internal and external, as a critical aspect of the Project's success. Building on the public outreach work performed by VDOT to date, Public Relations Specialist **Shannon Moody** will communicate with stakeholders and government entities continuously and transparently throughout design and construction, as she did for the **Walney Road DB Project** in NOVA. Formal partnering with VDOT and Fairfax County will be requested and can be facilitated by our Team to promote routine, open communication, and create an atmosphere of trust between VDOT and our Team. Project stakeholders, potential impacts, and communication strategies are outlined in *Figure 5.20*.

Figure 5.20: Stakeholder Impacts and Communication Strategies

Stakeholder	Potential Impacts	Communication Methods	Benefits
Fairfax County Board of Supervisors	Perceptions and issues raised by residents, motorists, and business owners	Email updates, meetings, media	• Opportunity to provide valuable input • Consistent information to provide to constituents
Fairfax County Dept of Transportation	Project oversight, traffic impacts, incident management	Coordination meetings, partnering	• Opportunity to provide valuable input • Most updated information • Consistent public information
Fairfax County Park Authority	Perceptions and issues raised by users	Media, meetings, email updates	• Opportunity to provide valuable input • Most updated information • Consistent public information

Stakeholder	Potential Impacts	Communication Methods	Benefits
Fairfax County Police/Fire	MOT, traffic impacts, incident management	Coordination meetings, direct POC	• Timely response • Responder understanding of construction activities, traffic impacts, etc. • Accurate contact information • Consistent public safety
VDOT	Perceptions and issues raised by residents, motorists, and business owners	Coordination meetings	• Opportunity to provide valuable input • Consistent information to provide to constituents
NVTA	Perceptions and issues raised by members	Email updates	• Consistent information to provide to constituents
Local interests	Impacts of construction and MOT to travel and commute times, access	Email updates, traditional media, social media, stakeholder meetings	• Awareness of impacts as soon as possible • Understanding of construction impacts • Community awareness of construction progress and timeline
Local residents and motorists along Route 29, Stringfellow Rd, Clifton Rd, Fairfax County Pkwy; HOAs	Impacts of construction and MOT, access	Email updates, traditional media, social media	• Awareness of impacts as soon as possible • Understanding of construction impacts • Community awareness of construction progress and timeline

The Myers/WRA Team believes that Project stakeholders can offer direct feedback that is valuable to the success of the Project. We will ensure stakeholders are given a voice and are kept updated on design and construction activities and potential impacts through all phases of the Project. Our Team will design a communications plan to effectively share information with stakeholders at all phases of the Project regarding construction impacts, design, and project development. The Plan will be presented to VDOT within 45 days of the Date of Commencement for review/comment and will remain a living document throughout the Project. All outreach activities will comply with the *VDOT Policy Manual for Public Participation in Transportation Projects*. Fully coordinating with the County, our Team will implement the following tools to ensure transparent, two-way communications with Project stakeholders:

- ***Pardon Our Dust Meeting***: This meeting will provide an opportunity for all interested parties to review the Project design, ask questions, and voice concerns. This engages the community and promotes awareness.
- ***Stakeholder Meetings***: Stakeholder meetings will be held through pre-construction and construction to discuss access issues, schedule/progress, and construction impacts. These meetings will provide opportunities to resolve any conflicts or concerns and alleviate any potential impacts to the schedule.
- ***E-mail Updates***: Our Team will maintain a stakeholder list and email regular Project updates, including upcoming activities, to help manage expectations while being transparent and informative.
- ***Website and Social Media Updates***: Our Team will provide timely and comprehensive content for VDOT NOVA's website and social media channels, and for Fairfax County's media channels.
- ***Media***: Our Team will provide timely and comprehensive content to the VDOT NOVA Communications Team for response to inquiries and to support media outreach, including Project updates and impacts.
- ***Emergency Response Contacts***: We will designate key points of contact with the construction team and share contact information with emergency response agencies for immediate emergency needs.
- ***Log of Stakeholder Inquiries***: Our Team will keep a log of stakeholder concerns, questions, and inquiries and how they were addressed. This log will be available for VDOT use as requested.
- ***Traffic Impacts and Traffic Alerts***: We will coordinate upcoming traffic impacts with VDOT NOVA Communications weekly and/or two weeks ahead of the event, according to LCAMS.
- ***Monthly Briefing***: Our Team will provide construction progress photos, the Project look-ahead schedule, and planned traffic impacts to VDOT NOVA Communications for distribution to email subscribers.

PUBLIC SAFETY

The Myers/WRA Team's public safety solution includes several inherent advantages that will limit disruptions to vehicular and pedestrian traffic through the work area, as well as adjacent public transportation facilities and roadways. The NB temporary SUP separates pedestrian and bicycle traffic from construction. With this configuration, Myers can proceed with construction along SB Route 29, including noise walls C1, C2, G, and retaining wall A, without having to phase the SUP around this work. The temporary SUP also creates a safe corridor connecting both ends of the Project, which does not currently exist. This eliminates sections along SB Route 29 that currently require pedestrian/bicycle access along the roadway shoulder adjacent to traffic.

Our four-phased construction approach simplifies MOT for the Project, with fewer changes to traffic patterns, meaning fewer chances for motorist confusion throughout construction. Our solution outlines three total traffic switches, including the switch into the final configuration. With extensive outreach, signs, and marking to help communicate upcoming changes, our Team's approach will minimize confusion, resulting in fewer accidents.

The Stringfellow Rd intersection represents the most critical safety junction in the Project. With Stringfellow Rd serving as a multi-lane north/south roadway, providing access to and from I-66, and feeding to and from the Fairfax County Connector Bus Park and Ride less than a mile to the north, the intersection sees the most traffic and congestion along the Project corridor. All four phases of the Project will impact this crossroads due to its central location and the scope of its widening requirements. Rather than building the intersection partially during three phases, we will complete the intersection pavement buildup work in Phase 2, providing a safe intersection until final paving at the end of the Project. Our plan is to conduct paving overlay and wedging buildup using an approved detour and/or staged weekend and nighttime work. Completing work here early will limit the total time and impacts of construction at this location. Providing a more even pavement surface (with all wedges outside the intersection) in this early phase delivers further safety advantages for turning movements throughout the intersection.

To ensure we construct this major transportation Project with zero incidents and injuries to our workforce and the traveling public, we will implement our proactive safety culture. We focus on the human side of safety, empowering people to take responsibility for their personal safety and the safety of those around them. We promote dignity and respect for our workforce, the QA/QC inspection team, the VDOT representative, and the public. In this team environment, every employee feels comfortable bringing up safety concerns.

We are relentless in our commitment to send every employee home safely to their families each and every night. In contrast to the traditional compliance approach to safety, Myers integrates its safety team members into construction teams to incorporate safety planning into operation work plans. Our approach has resulted in Myers becoming an industry leader in safety performance over the past 15 years. HSE Manager **Josh Brown** will oversee HSE efforts for the Project and will assign additional staff to support operation planning, safety training, inspections, and subcontractor mentoring programs. We anticipate and will assign additional safety staff to support peak production efforts as needed. On the $141M I-64 Segment II DB project, Myers assigned four full-time safety team members during the startup phase and modified safety staffing levels as the project progressed.

Our safety culture extends to public safety – creating and maintaining safe corridors for motorists, pedestrians, and cyclists. Our phasing plan limits the number of directional changes and crossovers in the construction zone, keeping traffic in as straight a line as possible. In this way, we limit maneuvers that could cause accidents. Our Team will meet monthly to review and evaluate the functionality of the TMP. Additional meetings will take place prior to critical traffic changes. Our Team will also address steps our construction team can take to optimize travel through the work zone. Highlights of our TMP approach include:

- Constructing a significant portion of the improvements without impacting or changing existing traffic patterns;
- Following VDOT Northern Virginia District's requirements for lane closures, with additional restrictions self-imposed to minimize public impacts;
- Utilizing temporary lane closures for nighttime paving, shoulder improvements, placement of traffic barriers, and delivery of materials; and
- Implementing a communications plan that includes continuous coordination with impacted utility companies and other Project stakeholders.

4.6 PROPOSAL SCHEDULE NARRATIVE

4.6.1 PROPOSAL SCHEDULE

The Proposal Schedule, included in *Volume II*, uses Primavera software and critical path method scheduling to depict the scope and sequence of work to complete the Project per the RFP requirements. A summary schedule is also provided which depicts the longest path of the Project. In addition to the PDF copy of the Proposed Schedule in *Volume II*, the source document in Primavera version 20.12 (.XER) is included with the Technical Proposal submission.

4.6.2 PROPOSAL SCHEDULE NARRATIVE

Project milestones have been established to support and monitor the Myers/WRA Team's commitment to deliver the Project on time and in accordance with all contractual requirements **on or before August 31, 2026**. Myers believes that an earlier delivery of the Project is possible provided utility companies adhere to their schedules and commitments; however, due to current experiences with those same utility companies on the I-66 Outside the Beltway project, we are not willing to commit to an early completion date at this time. *Figure 6.1* provides a summary of the dates that will be achieved for key milestone activities, along with the Project final completion.

Figure 6.1 – Schedule Overview

Milestone	Schedule Completion Date
Notice of Intent to Award	April 21, 2022
CTB Approval / Notice to Award	May 18, 2022
Notice to Proceed	June 17, 2022
Initiate Field Studies and Administrative / Design Activities	July 11, 2022
Right-of-Way Plans – 60% complete	January 12, 2023
Issuance of VPDES Construction Permit	March 16, 2023
Notice to Commence Construction – Phase 1 MOT / TMP	March 25, 2023
Notice to Commence Construction – Phase 1 Utility Relocations	June 7, 2023
Notice to Commence Construction – Final Roadway Plans	August 1, 2023
Issuance of Project Individual Permit for Wetland Disturbance	October 2, 2023
Notice to Commence Construction – Phase 2 MOT / TMP	October 18, 2023
Completion of Phase 1 Utility Relocations	April 2, 2024
Completion of Phase 2 – Route 29 SB Work	April 1, 2025
Completion of Phase 3 – Route 29 Median Work	October 2, 2025
Completion of Phase 4 – Route 29 NB Work	July 30, 2026
Final Completion	August 31, 2026

SEQUENCE OF WORK

To achieve the Project milestones, our Team will proactively begin certain design phase activities at our own risk. Following VDOT issuance of the Notice of Intent to Award the contract, we will:

- ✓ Initiate assessment of existing data and supplemental data requirements
- ✓ Prepare the Supplemental Boring Plan Package
- ✓ Initiate Hazardous Materials and Safety Plan development
- ✓ Develop the Route 29 Phase II QA/QC Plan and Public Information and Communication Plan
- ✓ Complete contract agreements with design consultants

Following CTB approval, the Myers/WRA Team will develop the preliminary Utility Status Report. Following NTP and in addition to all identified schedule activities, we will complete the schedule critical activities including:

- ✓ Submit to VDOT for review and approval the Route 29 Phase II QA/QC Plan
- ✓ Submit the Supplemental Boring Plan to VDOT for review and comment

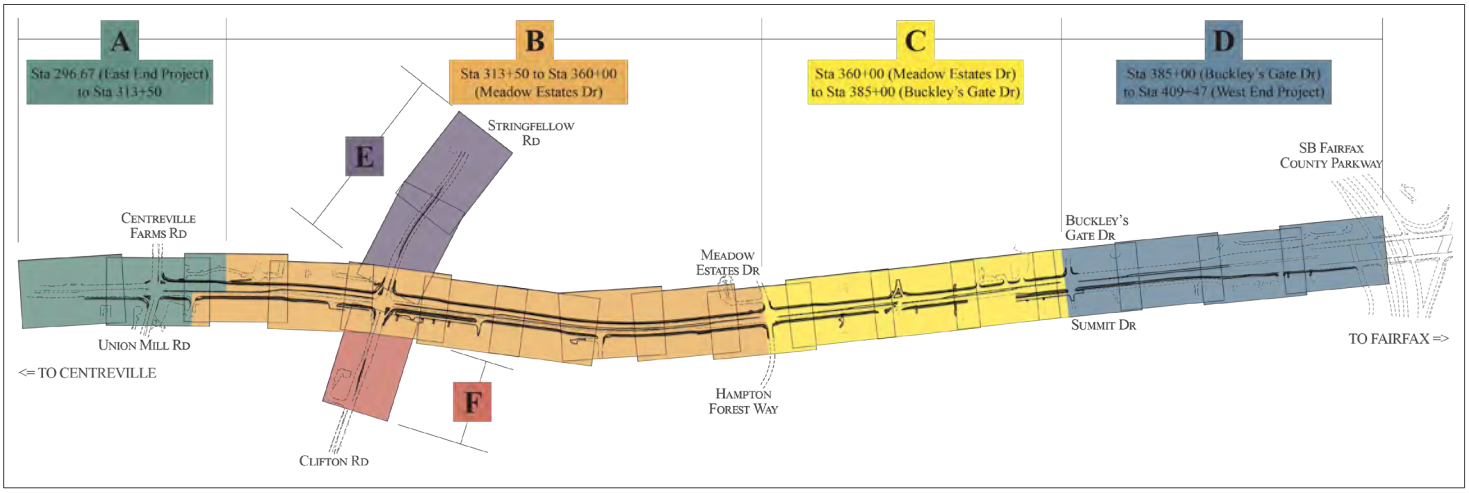
- ✓ Prepare and submit the Property Owner Access Notification Letters to VDOT for review and comment
- ✓ Distribute the final Property Owner Access Notification Letters
- ✓ Initiate soil borings along all structures and roadways
- ✓ Prepare and submit the Right-of-Way (ROW) Acquisition Plan to VDOT for review and approval
- ✓ Update RUMS with Utility status Report date, initiate development of the UT-9's and schedule kick off meeting with District Utility Engineer

At a high level, post notice to proceed, the priorities are with activities that support design of the utility relocations and completion of the ROW Plans to facilities acquisition of right-of-way and utility easements. This also includes development and acquisition of the VPDES construction permit and approval of the Project's Individual Permit for Wetland Disturbances. These efforts will allow the Myers/WRA Team to initiate construction of the Temporary (SUP) along the NB Route 29 lanes and initiation of the Phase 1 Utility Relocation Plan efforts.

SEQUENCING AND PHASING

The Myers/WRA Team's plan proposes dividing the Project into six segments and four phases (as shown in *Figure 6.2*) to provide smaller, manageable areas to meet the traffic maintenance requirements and to provide the greatest flexibility possible in the scheduling. Focusing on the goal of providing early completion of the entire Project, construction will be active in the multiple segments of the project for each phase of construction envisioned.

Figure 6.2: Project Segments Graphic



Construction phasing was developed with a focus on providing early access through right-of-way acquisition and design of utility relocations. Loosely, the Project is predicated on design from mid-2022 through mid-2023, Phase 1 utility relocations from mid-2023 through mid-2024, and Phase 2 through 4 roadway construction culminating in final Project Completion on or before August 31, 2026. Phase 1 utility relocations require approval and execution of a Phase 1 clearing and grubbing package, Phase 1 MOT/TMP, and Phase 1 grading and drainage package. This will allow the Myers/WRA Team to advance the relocation of all Project utilities focusing on the SB Route 29 utility relocations to allow for Phase 2, initial SB roadway construction, to commence in logical order. It is anticipated that the utility relocation effort along NB Route 29 will continue into 2024 while Phase 2 roadway construction continues. Within Phase 1, the Myers/WRA Team will construct and divert pedestrian traffic to the temporary SUP to be installed along NB Route 29.

Once all utility relocations have been completed, except of those utilities that will be completed in phase with the roadway construction, roadway construction will commence unimpeded. Phase 2 of the Project includes the SB widening of Route 29 and associated in-phase utility relocations. Phase 2 also includes the wedge and leveling of the Stringfellow Road/Clifton Road intersection to ensure vertical continuity with the proposed SB widening work. Once Phase 2 is completed, traffic will be shifted to the new roadway and Phase 3 work will commence on the Route 29 median. Again, work and in-phase utility relocations will commence in logical order including construction of the major culvert crossings and the Willow Spring box culver. Following Phase 3, Phase 4 includes the remaining NB Route 29 widening, in-phase

utilities, phased major drainage culverts, the final phase of the Willow Springs box culvert, and final surface asphalt throughout the project.

INCENTIVES FOR EARLY COMPLETION

VDOT has provided a "No Excuses" incentive for early completion, RFP Attachment to part 3, Article 5. The provision states that VDOT will pay the Design-Builder if work under the Contract Documents is completed at least 123 days early. This incentive amount is reduced by a prescribed amount for three early complete periods until the final completion date is achieved on August 31, 2026. Should Work under the Contract Documents extend beyond the Final Completion Date, the Design-Builder will be assessed liquidated damages.

The Myers/WRA Team has established our Project schedule with the intent of achieving early completion; however, due to right-of-way acquisition and utility relocation uncertainties, our current schedule shows completion of the Project on-time and on or before the August 31, 2026 completion date. It is our intent to manage the Project schedule in a way to achieve the early completion milestone. We will take advantage of any and all opportunities to accelerate the work in order to deliver the Project early and minimize disruptions to the local and traveling public.

WORK BREAKDOWN STRUCTURE

The proposal schedule is organized using a hierarchical Work Breakdown Structure (WBS) and is broken down by major scope of work as shown below. For pre-construction scope areas, the WBS further details major work efforts. For construction, the WBS is broken down by construction phase then by geographical segments as shown in *Figure 6.2* and described in Sequence and Phasing Section above. The following represents the primary schedule WBS section and subsections used to develop the RFP level Project Schedule.

Project Milestones: The key Project Milestones section includes key points in the Project schedule that will be the basis for the high-level schedule management and assist the Myers/WRA Team in tracking monitoring, and meeting our commitment to deliver the Project to VDOT and the traveling public on-time or earlier than the stipulated Project Completion date of August 31, 2026.

Project Administration: The Project administration section includes activities related to the overall management of the Project and includes the following subsections of the WBS:

- ✓ ***Project Startup:*** Mobilization activities are included here
- ✓ ***Management Submittals:*** This section includes activities related to project management submittals including the Project-Specific Safety Plan, Hazardous materials Management Plan, ROW Acquisition Plan, and Environmental Management Plan.
- ✓ ***General Conditions/Miscellaneous Payments:*** This section contains the activities for creation of the initial Project Baseline schedule.
- ✓ ***Quality Assurance/Quality Control:*** This section tracks the submission and approval of the QA/QC Plan and payment of monthly QA/QC efforts.
- ✓ ***Project Closeout:*** This section includes punch list and As-built drawing submission activities.

Scope Validation Period: The scope validation period is 120 days and this section includes activities related to the scope validation process such as investigations, submittals, and negotiations, if necessary.

Public Involvement: The public involvement section includes activities related to the Project interaction with the public and key Project stakeholders. This section includes preparation and approval of the Design-Builders Communication Plan, the Design-Builders communication plan presentation to VDOT staff, and outreach strategies to be employed during both the design and construction phases. It also includes distribution and tracking of property notification letters.

Design: This design section includes activities related to the design efforts needed to develop and track notice to commence construction, including approved for construction plans. Subsections of the WBS are:

- ✓ ***General Design Efforts:*** This section includes design support activities such as reviewing final contract requirements, finalizing and optimization alternatives and assessing additional data requirements that need to be obtained through additional field investigation, borings, and evaluations.
- ✓ ***Design Surveys:*** This section includes activities related to performing additional data through field survey and investigations.

- ✓ ***Geotechnical:*** This section includes activities related to performing additional soil boings, laboratory analyses geotechnical analysis and design.
- ✓ ***Hydrologic and Hydraulic Analysis:*** This section includes activities related to the development and approval of the H&H analysis for the Willow Springs Culvert and Little Rocky Run.
- ✓ ***Advanced Roadway Plans:*** This section is used for the design plans required to accelerate Phase 1 construction where right-of-way acquisition is required. Included in this section are the Phase 1 MOT / TMP, Phase 1 Clearing and Grubbing, Initial Grading and Drainage package, Erosion and Sediment Control Plans, and the FI/RW Plans.
- ✓ ***Final Roadway Plans:*** This section includes activities related to the preparation, submission, and approval of the AFC Roadway Plans as well as the MOT of the remainder of the Project, Willow Springs box culvert plans, landscape plans, and lighting/ITS/Signal Plans.
- ✓ ***Soundwall Design:*** This section includes the development and approval of the Project Sound Wall line and grade detail plans

Permitting / Environmental: The Permitting/Environmental section includes activities related to the efforts needed to obtain necessary environmental permits for the Project. The activities in this section represent a conservative approach to the environmental activities on the Project. Subsections of the WBS are:

- ✓ ***VPDES:*** This section includes activities related to the preparation, submission, and issuance of the VPDES permit which is required prior to the commencement of land disturbing activities.
- ✓ ***Waters of the US Permit:*** This section includes activities related to the confirmation of the Preliminary Waters of the US delineation, prepare a Waters of the US Delineation Report, request jurisdictional determination of wetlands, and obtain the individual Waters of the US permit.
- ✓ ***Stormwater Pollution Prevention Plan:*** This section includes activities associated with setting up and maintaining the SWPPP documentation is the design progresses.
- ✓ ***Hazardous Materials:*** This section only includes an activity for confirmation and treatment of naturally occurring asbestos containing soils.
- ✓ ***Preconstruction Inspection and Monitoring:*** This section includes activities to perform and document any required preconstruction surveys.

Right-of-Way: The Right-of-Way (ROW) section includes activities related to the efforts needed to acquire ROW required to commence construction of the Project. This section includes both VDOT acquired and Design-Builder acquired properties. The acquisition of ROW is separated by individual parcels which that all VDOT identified potentially affected parcels (23 parcels in all) are individually addressed within this section. Further, the remaining parcels (32 parcels in all) to be acquired by the Design-Builder are assembled within five (5) priority acquisition packages based on utility relocation needs. Subsections of this WBS are:

- ✓ ***Site Assessments/Survey/Research:*** This section includes activities related to the site investigations and research for parcels potentially affected by the Project.
- ✓ ***Appraisals:*** This section includes activities related to the development of appraisals for parcels that are confirmed to be affected by the Project design.
- ✓ ***Negotiations:*** This section includes activities related to negotiating the purchase price of the parcel, where necessary, and the closing other acquisition process whether it be through acquisition or condemnation.

Utilities: This section includes activities related to the efforts needed to relocate utilities in conflict with the final design. Each subsection below is broken down by utility owner and geographical section. Where the Myers/WRA Team expects to find no conflicts with a particular utility, revisions to the utility WBS will be updated in a subsequent baseline submission. Subsections of the WBS are:

- ✓ ***Utility Coordination/Planning:*** This section includes activities related to the early coordination and issuance of the Master Utility Agreements.
- ✓ ***Utility Field Inspections:*** This section includes activities related to field investigations, development of the SUE drawing and test hole investigations, and utility relocation concept plans for each utility owner.
- ✓ ***Plan and Estimates:*** This section includes activities related to the development and approval of Plan and Estimates and final utility relocations.

Procurement: This section includes activities related to the efforts related to relationships between Myers and its vendors and subcontractors. Subsections of this WBS are:

- ✓ ***Vendor Procurement:*** This section includes activities related to procurement of materials vendors and subcontractors needed to construct the approved design. The activities in this section are not necessarily to represent completion of the procurement, but rather to provide adequate lead times between design approval and the start of construction.
- ✓ ***Construction Submittals:*** This section includes tracking pre-construction working drawings and show drawings for key long lead items.
- ✓ ***Fabrication:*** This section includes activities related to the lead times for major materials.

Construction: The construction section includes activities related to the efforts needed to construct the approval design. This WBS section is broken down by geographical segmentation, then by phase, then specific area as shown below. Please note that all stationing and the WBS subsection are as follows:

- ✓ Phase 1
  - o Traffic Control Measures
  - o Segment A
    - ▪ Erosion Control Measures
    - ▪ Roadway
    - ▪ Utility Relocations
  - o Segment B
    - ▪ Erosion Control Measures
    - ▪ Roadway
    - ▪ Utility Relocations
  - o Segment C
    - ▪ Erosion Control Measures
    - ▪ Roadway
    - ▪ Utility Relocations
  - o Segment D
    - ▪ Erosion Control Measures
    - ▪ Utility Relocations
- ✓ Phase 2
  - o Traffic Control Measures
  - o Erosion Control Measures
  - o Segment A
    - ▪ Roadway
    - ▪ Structures
    - ▪ Utilities
  - o Segment B
    - ▪ Roadway
    - ▪ Structures
    - ▪ Utilities
  - o Segment C
    - ▪ Roadway
    - ▪ Structures
    - ▪ Utilities
  - o Segment E
    - ▪ Roadway

- ✓ Phase 3
  - o Traffic Control Measures
  - o Erosion Control Measures
  - o Segment A
    - ▪ Roadway
  - o Segment B
    - ▪ Roadway
    - ▪ Structures
  - o Segment C
    - ▪ Roadway
- ✓ Phase 4
  - o Traffic Control Measures
  - o Erosion Control Measures
  - o Segment A
    - ▪ Roadway
  - o Segment B
    - ▪ Roadway
    - ▪ Structures
    - ▪ Utilities
  - o Segment C
    - ▪ Roadway
  - o Segment D
    - ▪ Roadway
    - ▪ Structures
    - ▪ Utilities
  - o Segment F
  - o Roadway

CRITICAL PATH

Per VDOT specifications, the critical path on the Project has been defined as the Longest Path. The determined longest path includes the following activities from the Notice to Proceed (June 17, 2022) through the Final Completion (August 31, 2026) and includes the following activities:

- ✓ Notice to Proceed
- ✓ FI/RW Plans
- ✓ Utility (UFI) Plans and Meeting
- ✓ Verizon Utility Relocation Plans
- ✓ MCI/Verizon Business Utility Relocation Plans
- ✓ MCI/Verizon Business Utility Relocations
- ✓ Phase 2 traffic and erosion control measures
- ✓ Excavation and subgrade improvements of portion of Segment B SB Phase 2
- ✓ Segments B & C water line relocations and drainage SB Phase 2
- ✓ Portion of Segment C roadway construction SB Phase 2
- ✓ Segment B median construction Phase 3
- ✓ NB Route 29 Segment B roadway construction and improvements Phase 4
- ✓ Punchlist
- ✓ Project Closeout and Final Completion

MEANS & METHODS

The durations in the Proposal Schedule were calculated based on estimated quantities known at the time of the proposal as well as historical averages productions experienced on similar projects. As design progresses and quantities are finalized, the construction schedule will be reviewed and monitored. Any major modifications to the design or design quantities will be reviewed with VDOT and reflected in the potential revisions to the Project schedule.

Geotechnical Improvements: As reflected by activities in the Proposal Schedule, the Myers/WRA Team will perform geotechnical investigations and analysis to determine the most cost effective and schedule efficient method of stabilizing unsuitable soils. Where possible, we plan to utilize an in-situ stabilization method. These methods are typically faster which will provide schedule savings. In addition, in-situ stabilization will reduce/eliminate the need for on-road trucks to travel in and out of the work zone under traffic to dispose of the material, increasing safety for the Project and the traveling public.

Reviews and Approvals: For each major deliverable in the schedule, there are activities for the preparation, submission, review and comment, and review and approve said deliverable. To further clarify the reviewer's responsibility, R/C is used for Review/Comment while R/A is used for Review/Approve.

Upon award, the Myers/WRA Team will utilize the activity code C000110329DB113 *"Responsible Stakeholder"* to identify the reviewing party on each of the R/C and R/A activities. This code will be utilized to identify which key stakeholder is responsible for review and review/approval of each deliverable identified in the Proposal Schedule. Know stakeholders that will be review and approval responsibilities include, but are not limited to, VDOT, Fairfax County, Utility Owners, and Fairfax County Park Authority.

Subcontractors and Suppliers: Lessons learned from schedule management on previous Design-Build Projects have led to the inclusion of a Procurement section in the Proposal Schedule. This section of the WBS captures the activities needed to execute contracts with various subcontractors and suppliers once the design is submitted for approval. This section also contains activities for the fabrication and delivery of major materials that typically have longer lead times such as precast drainage structures and sound wall panels.

Resource Management: Initial assessments of crew flow and allocation are performed at a high-level to make sure that there were no major challenges with resource needs on the Project and so that Myers can be confident that the schedule is achievable. Post-award, Primavera's role and resource functions may be used to monitor and track the number of self-perform and subcontract resources needed in the construction phase of the Project.

Prior to the procurement phase, resources would be allocated to show what types of subcontractors and suppliers would be needed for each construction activity. Once a specific vendor is procured, an activity code would be assigned to that activity to represent the specific firm procured. For example, a bridge activity would assign the resource "Bridge Contractor" pre-procurement. Post procurement, the activity would be assigned a specific activity code with the firm's name, "ABC Structural Company". These assignments would allow the procurement and construction management staff to strategically plan with all resource availability considerations in mind. This will also help differentiate between work being self-performed by the Myers/WRA Team and work being performed by others.

SCHEDULE ASSUMPTIONS

To properly manage the Project schedule, it is important to understand the scope of work and interdisciplinary dependencies for proper management. In addition, it is important to understand the technical capabilities of the schedule management software. Care has been given to the setup of the Primavera Schedule to ease future schedule management and to properly account for schedule risks to reduce potential impacts.

Calendars: Project specific calendars have been set up in Primavera to represent various restrictions and assumptions that must be applied to the Project activities.

- ✓ ***C000110329DB113 – 5 Day Office:***
  - This calendar allows work five days per week except standard state holidays.
  - It is assigned to all preconstruction activities that are not dependent on weather and would be primarily performed in an office.

- ✓ ***C000110329DB113 – 5 Day Field:***
  - This calendar allows five days per week except standard state holidays. It also accounts for normal weather patterns that would affect field activities, such as precipitation histories.
  - It is assigned to all field activities that may be affected by weather or precipitation events.
- ✓ ***C000110329DB113 – 5 Day Paving:***
  - This calendar allows work five days per week except standard state holidays. In addition to accounting for normal weather patterns, as shown in the "5 Day Field" calendar, it also reduces working days to one day per week from December 15 of each year to March 1 of each year.
  - It is assigned to all paving activities.
- ✓ ***C000110329DB113 – 7 Day:***
  - This calendar allows work seven days per week.
  - It is assigned to cure activities and any activity whose duration is based on calendar days; such are review activities.

Consistent Activity Names and IDs: We have taken care to maintain consistency in each activity's name and ID throughout the Proposal Schedule. Each Activity ID is ten digits long. The first six digits mirror the WBS code in which the activity is located. Likewise, activities of similar type follow a consistent naming convention. Activities for installing asphalt, for example, are consistently named "Place Asphalt" throughout the schedule rather than "Install Asphalt" in one location or "Place Pavement" in another. In addition, activities that are duplicative in multiple areas of the Proposal Schedule have a suffix for the specific and applicable segment, phase, and detail. For example, the activity for the drainage on the SB side of Route 29 between stations 313+50 and 326+00 will be "Install Drainage – Sta. 313+50 to 326+00 SB – Segment B – Phase 2".

Activity Codes: Project-specific activity codes have not been established at this point. However, the baseline schedule will contain various activity codes representing such items as phase, segment of the Project, specific areas within each segment, type of work, and responsible party. This will allow custom filters and layouts to be created to better communicate various aspects of the Project Schedule to different stakeholders and contributors.

Schedule risk and Management: There are several sections of the Proposal Schedule where adequate information is not yet available to thoroughly define schedule activities as a Baseline Schedule level of detail. In these areas, the Myers/WRA Team has drawn from previous DB experiences to build a schedule that minimizes the risk of future impacts once additional details are known. Examples of known risks areas and risk minimization measures include:

- ✓ ***Plan Packaging:*** The Proposal Schedule shows the design packages being broken down by priority of work needed for construction. Myers construction staff have worked with the designers to define Advanced Work Packages ("AWPs") that will allow an accelerated start to construction with low risk of future rework due to design progression. Key packages currently identified are:
  - Phase 1 – MOT/TMP
  - Phase 1 – Clearing and Grubbing / Initial Erosion and Sediment Control
  - Phase 1 – Utility Relocations and Temporary SUP Construction / Grading and Drainage
- ✓ ***Plan Reviews:*** Two cycles are shown for almost every design submittal in the Proposal Schedule. Using a collaborative approach to resolving comments should allow substantial time to get plans approved.
- ✓ ***Utility Relocations:*** All potential conflicts known at the time of submission of the Technical Proposal Plans are shown to be relocated in the Proposal Schedule. The Myers/WRA Team will continue to strive to minimize or eliminate conflicts such that relocations shown in the schedule may not be necessary at all – allowing construction to advance earlier than projected in the Proposal Schedule.
- ✓ ***ROW Acquisition:*** All potential parcel impacts known at the time of submission of the Technical Proposal Plans are shown to be acquired in the Proposal Schedule. The Myers/WRA Team will continue to strive to minimize or eliminate parcel impacts such that acquisitions shown in the schedule may not be necessary at all—minimizing dependencies on acquisition as much as possible.

Upon Notice of Intent to Award, the Myers/WRA Team will cost load the first three months of the Proposal Schedule and make any modifications necessary to meet the Contract Requirements for a Preliminary Schedule, updating any areas where additional information is known. Following submission of the Preliminary Schedule and as the design progresses, Myers may break down some areas to a high level of detail necessary to properly manage a Baseline Schedule of the Project. This breakdown will allow for better management of resources in addition to accurate monitoring of progress.

The CPM schedule will be the driving force behind all long-term and short-term planning efforts. Design work and other preconstruction activities will be closely monitored with the schedule. A formal CPM schedule update will be submitted monthly to VDOT and distributed to the appropriate Project stakeholders, as requested.

In addition to the CPM schedule, the Myers/WRA Team will use a complete schedule process summarized in *Figure 6.3* below:

Figure 6.3: Schedule Management Tools

Tool	Description
CPM Schedule	The CPM will be updated monthly (at a minimum) and as needed to track design and construction progress.
Design Schedule Management	Technical work groups will monitor design progress and provide schedule updates.
Delay-Free Work Plans	Using the CPM schedule, operation-specific planning packets will be created for each element of the Project and distributed to field managers.
Project Team Planner	Schedule based to-do lists of management tasks will identify work zone, crew and equipment needs, and remove work operation constraints.
Morning and End-of-Day Shift Huddles	Daily coordination meetings for field operations will provide daily schedule updates to construction management staff.
Look-Ahead Schedules	Weekly break downs of the CPM schedule activities into day-to-day operations to coordinate upcoming activities, traffic controls, subcontractors, and submittals.

3.6 FORM C-78-RFP

ATTACHMENT 3.7

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION

RFP NO. C00117841DB111

PROJECT NO.: 0064-114-374 P101, R201, C501

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 3.7, 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 RFP – November 10, 2021 (Date)
2. Cover letter of RFP Addendum #1 - December 17,2021 (Date)
3. Cover letter of RFP Addendum #2 - January 25, 2022 (Date)
4. Cover letter of RFP Addendum #3 – February 15, 2022 (Date)

SIGNATURE

March 9, 2022
DATE

Aaron T. Myers
PRINTED NAME

Executive Vice President - Operations
TITLE

4.0.1.1 TECHNICAL PROPOSAL CHECKLIST AND CONTENTS

ATTACHMENT 4.0.1.1

Route 29 Widening Phase II

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	Vol.I, 4.0.1.1
Acknowledgement of RFP, Revisions, and/or Addenda	Attachment 3.6 (Form C-78-RFP)	Sections 3.6, 4.0.1.1	no	Vol.I, 3.6
Letter of Submittal	NA	Sections 4.1		Vol.I, p.1
Letter of Submittal on Offeror's letterhead	NA	Section 4.1.1	yes	Vol.I, p.1
Identify the full legal name and address of Offeror	NA	Section 4.1.1	yes	Vol.I, p.1
Authorized representative's original signature	NA	Section 4.1.1	yes	Vol.I, p.1
Declaration of intent	NA	Section 4.1.2	yes	Vol.I, p.1
120 day declaration	NA	Section 4.1.3	yes	Vol.I, p.1
Point of Contact information	NA	Section 4.1.4	yes	Vol.I, p.1
Principal Officer information	NA	Section 4.1.5	yes	Vol.I, p.1
Final Completion Date	NA	Section 4.1.6	yes	Vol.I, p.1
Any Unique Milestone dates introduced by the Offeror	NA	Section 4.1.7	yes	Vol.I, p.1
Proposal Payment Agreement or Waiver of Proposal Payment	Attachment 9.3.1 or 9.3.2	Section 4.1.8	no	Vol.I, 4.1.8
Certification Regarding Debarment Forms	Attachment 11.8.6(a) Attachment 11.8.6(b)	Section 4.1.9	no	Vol.I, 4.1.9
Written statement of percent DBE participation	NA	Section 4.1.10	no	Vol.I, p.1

ATTACHMENT 4.0.1.1

Route 29 Widening Phase II

TECHNICAL PROPOSAL CHECKLIST AND CONTENTS

Technical Proposal Component	Form (if any)	RFP Part 1 Cross Reference	Included within page limit?	Technical Proposal Page Reference
Confirmation on commercial and professional registration requirements	NA	Section 4.1.11	no	Vol.I, p.1
Offeror's Qualifications	NA	Section 4.2		Vol.I, pp.2-4
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	Vol.I, p.2
Organizational chart with any updates since the SOQ submittal clearly identifying the changes	NA	Section 4.2.1	yes	Vol.I, p.4
Organizational chart shall identify the names of the individuals selected for the positions of Deputy Key Personnel (if applicable).	NA	Section 4.2.1	yes	Vol.I, p.4
Revised narrative when organizational chart includes updates since the SOQ submittal	NA	Section 4.2.1	yes	Vol.I, pp.2-3
Design Concept	NA	Section 4.3		Vol.I, pp.5-13
Conceptual Roadway Plans and description	NA	Section 4.3	yes	Vol.II, pp.51-77
Project Approach	NA	Section 4.4		Vol.I, pp.14-31
Environmental Management	NA	Section 4.4.1	yes	Vol.I, pp.14-17
Utilities	NA	Section 4.4.2	yes	Vol.I, pp.18-23

ATTACHMENT 4.0.1.1

Route 29 Widening Phase II

TECHNICAL PROPOSAL CHECKLIST AND CONTENTS

Technical Proposal Component	Form (if any)	RFP Part 1 Cross Reference	Included within page limit?	Technical Proposal Page Reference
Geotechnical	NA	Section 4.4.3	yes	Vol.I, pp.24-27
Quality Assurance/ Quality Control (QA/QC)	NA	Section 4.4.4	yes	Vol.I, pp.28-31
Construction of Project	NA	Section 4.5		Vol.I, pp.32-50
Sequence of Construction	NA	Section 4.5.1	yes	Vol.I, pp.32-42
Transportation Management Plan	NA	Section 4.5.2	yes	Vol.I, pp.43-50
Proposal Schedule	NA	Section 4.6		See below
Proposal Schedule	NA	Section 4.6	no	Vol.II, 4.6
Proposal Schedule Narrative	NA	Section 4.6	no	Vol.I, pp.SCH1-9
Proposal Schedule in electronic format	NA	Section 4.6	no	Provided as Attachment

4.1.8 PROPOSAL PAYMENT AGREEMENT

ATTACHMENT 9.3.1
PROPOSAL PAYMENT AGREEMENT

THIS PROPOSAL PAYMENT AGREEMENT (this "Agreement") is made and entered into as of this 9th day of March, 2022, by and between the Virginia Department of Transportation ("VDOT"), and Allan Myers VA, Inc. ("Offeror").

WITNESSETH:

WHEREAS, Offeror is one of the entities who submitted Statements of Qualifications ("SOQs") pursuant to VDOT's July 27, 2021 Request for Qualifications ("RFQ") and was invited to submit proposals in response to a Request for Proposals ("RFP") for the **Route 29 Widening Phase II, Project No. 0029-029-350, P101, R201, C501, D612** ("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 **Seventy five thousand and 00/100 Dollars ($75,000.00)** ("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: _____

[Insert Offeror's Name] **Allan Myers VA, Inc.**

By: _____

Name: Aaron T. Myers

Title: Executive Vice President - Operations

4.1.9 CERTIFICATION REGARDING DEBARMENT FORMS

ATTACHMENT 11.8.6(a)
CERTIFICATION REGARDING DEBARMENT
PRIMARY COVERED TRANSACTIONS

Project No.: 0029-029-350, P101, R201, C501, D612

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.

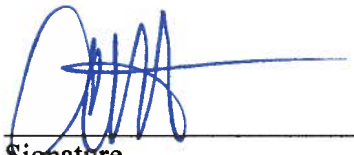
b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under 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.



3-9-2022

Signature Date

Executive Vice President - Operations

Title

Allan Myers VA, Inc.

Name of Firm

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

Project No.: 0029-029-350, P101, R201, C501, D612

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.

3/7/2021

Director of Right of way & Utility Coordination

Signature Date Title

Bowman Consulting Group, Ltd

Name of Firm

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

Project No.: 0029-029-350, P101, R201, C501, D612

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.

Mazba . 3-7-2022 Principal Engineer

Signature Date Title

Engineering & Materials Technologies, Inc. (E.M. Tech)

Name of Firm

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

Project No.: 0029-029-350, P101, R201, C501, D612

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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.

Leslie R. Bynside March 3, 2022 Vice President
Signature Date Title

H & B Surveying and Mapping, LLC
Name of Firm

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

Project No.: 0029-029-350, P101, R201, C501, D612

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.

03/03/2022	President
Signature Date	Title

Land Planning and Design Associates, Inc.

Name of Firm

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

Project No.: 0029-029-350, P101, R201, C501, D612

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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 2/22/22 President
Signature Date Title

Quinn Consulting Services, Inc.
Name of Firm

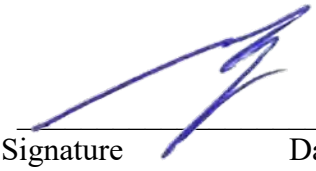
ATTACHMENT 11.8.6(b)
CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0029-029-350, P101, R201, C501, D612

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	February 28, 2022 Date	VP of Business Development Title

DIW Group, Inc. t/a Specialized Engineering
Name of Firm

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

Project No.: 0029-029-350, P101, R201, C501, D612

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.

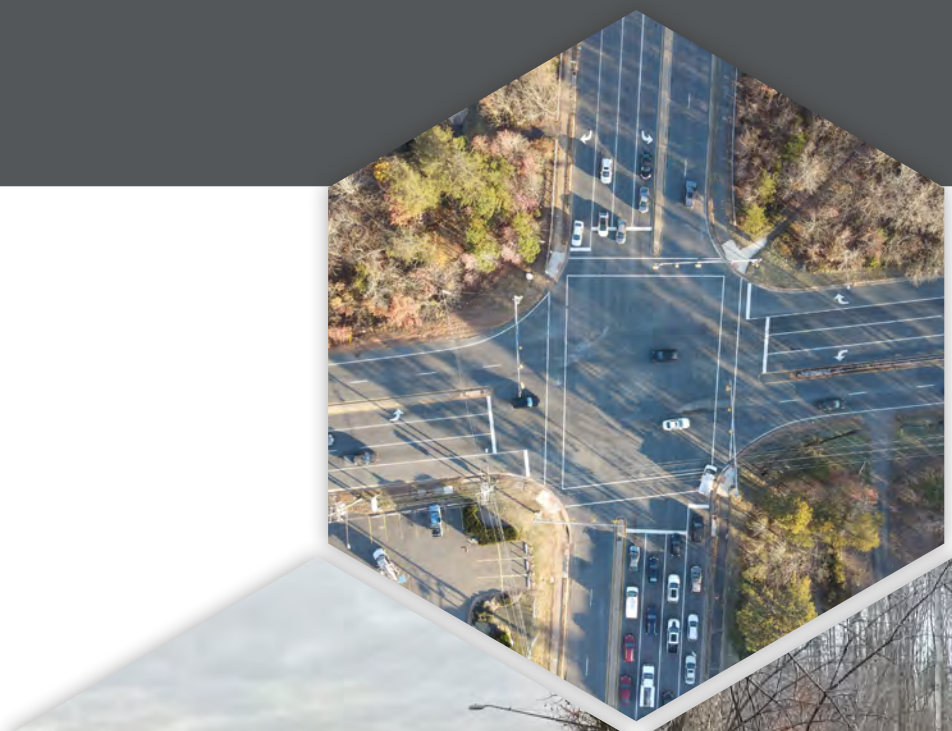
The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

March 7, 2022	Partner
Signature Date	Title

Whitman, Requardt & Associates, LLP

Name of Firm

ATTACHMENT 4.2.1 RESUMES



ATTACHMENT 4.2.1

DEPUTY KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

a. Name & Title: **Ivan Saer, Project Manager**

b. Project Assignment: **Deputy Design-Build Project Manager**

c. Name of the Firm with which you are employed at the time of submitting Technical Proposal: **Allan Myers**

d. Employment History: With this Firm **20** Years With Other Firms **6** Years

Please list chronologically (most recent first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below):

Allan Myers, Construction Manager (2006 – present): Ivan is responsible for managing all aspects of his projects, including planning and scheduling work activities; construction engineering; submittal preparation/oversight; pay estimates; coordination with owner, subcontractors, suppliers and other stakeholders; customer satisfaction; and safety for all phases of construction. He interprets and ensures compliance with all contract requirements, monitors the project schedule to meet the contract completion date, documents plan changes and oversees distribution to all field personnel to ensure construction employees maximize production. He ensures quality, minimizes costs, promotes safety, and monitors and interprets daily costs reports. Ivan also encourages and promotes teaming, employee development, and retention with direct reports and construction crews. Ivan has 14 years of experience constructing VDOT transportation projects and his expertise includes roadway and bridge improvements, complex MOT for pedestrian and multi-modal accommodations, and utility relocation projects.

Allan Myers, Project Engineer (2002 – 2006): Ivan pre-planned each activity of construction to ensure a smooth flow of each operation and reduce conflict and constraints within the activities, which increased production and maintained schedules. He managed and monitored the submittal process, including all project correspondence. Ivan assisted in managing the project scope and contract administration. He tracked production quantities to analyze job costs for successfully executing the project within budget. He scheduled the job to ensure timely material procurement and subcontractor management, thus avoiding schedule overruns.

e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:

Pontificia Universidad Javeriana, Bogota, Colombia/BS/1995/Civil Engineering
Virginia Polytechnic Institute and State University, Blacksburg, Virginia/MS/2002/Construction Management

f. Active Registration: Year First Registered/ Discipline/VA Registration #:

2011/ Professional Engineer/Virginia #046577
Virginia DCR Responsible Land Disturber Certification/#40428
VDOT Erosion and Sediment Control Contractor Certification/#3-00141

g. Document the extent and depth of your experience and qualifications relevant to the Project.

1. *Note your role, responsibility, and specific job duties for each project, not those of the firm.*
2. *Note whether experience is with current firm or with other firm.*
3. *Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.*

(List only three (3) relevant projects for which you have performed a similar function. On-call contracts with multiple task orders (on multiple projects) should not be listed as a single project.

I-66 OUTSIDE THE BELTWAY ($1.2B) FAIRFAX COUNTY, VA

Firm: Allan Myers **Role:** Construction Manager **Dates:** 01/2016 – 12/2022

Role: As construction manager for the DBJV, Ivan is responsible for all aspects of performance, ensuring contractual obligations and schedule milestones are met, and delivering the work safely and within budget. He oversees field operations, quality management, and contract administration. Ivan coordinates with VDOT, Fairfax County, and project stakeholders to proactively avoid/resolve disputes.

Project Description: I-66 Outside the Beltway transforms 22.5 miles of I-66 into a multimodal corridor to increase mobility, improve travel time reliability, and offer new travel options. The project is a public-private partnership among VDOT and I-66 Express Mobility Partners. Significant bridge structures include B616 Jermantown Rd, a 407-ft, two-span steel bridge with Virginia abutments and wall piers with drainage/girder conflict; B620 Cedar Ln, a 291-ft, two-span steel bridge with semi-integral abutments and wall piers (staged) with drainage/girder conflict; and B621 Gallows Rd, a 359-ft, two-span steel bridge with semi-integral abutments and wall piers (staged) with drainage/girder conflict.

The project relieves congestion and threads through a dense residential/commercial area requiring walls at each of the abutments to reduce right-of-way impacts.

Similarities: The I-66 Outside the Beltway project is focused on installation of infrastructure to widen I-66 from three to five lanes in each direction. This work includes retaining walls, utility relocations, maintenance of traffic, and construction of the proposed widened roadway, drainage, and associated facilities. This work is similar but on a larger scale than the work envisioned for the Route 29 widening project. The work requires close coordination and public outreach to inform users of upcoming roadway shifts and working with adjacent property owners to ensure all work is completed in accordance with prescribed easements and right-of-way (ROW).

Impact on the Project: Ivan provided constructability reviews to assess cost and schedule optimization of the design, active risk management to identify risk and mitigation strategies, and innovative construction means and methods. During construction, Ivan had full project oversight through close-out and turnover. In this role, Ivan was responsible for contract management, subcontractor coordination, planning and scheduling of bridge work, management of submittals, CPM scheduling, cost management, and quality control.

WALNEY ROAD WIDENING DB PROJECT ($11.3M) LOUDOUN COUNTY, VA

Firm: Allan Myers **Role:** Construction Advisor **Dates:** 02/2014 – 05/2015

Role: Ivan was responsible for all aspects of project performance, ensuring contractual obligations were met, and delivering the project safely, on time, and within budget. He oversaw design and construction, quality management, and contract administration.

Project Description: This project included widening Walney Rd from two to four lanes; replacing and raising the existing Walney Rd bridge, overseeing a FCPA easement acquisition/vacation effort, and coordinating a TMP/MOT plan.

Similarities: This project was an urban roadway widening with a bridge replacement, pedestrian and bicycle facilities, and design of traffic signals and street lighting. It included coordination with the FCPA for acquisition of park property that impacted an existing conservation easement. This required minimization of ROW impacts and replacement property for the impacted area of the conservation easement. Extensive utility coordination was critical to the ROW and construction schedule.

Impact on the Project: Ivan provided pre-construction and construction management support, including oversight and management of constructability reviews and schedule/budget comparisons against the base bid prior to plan submissions. He worked with field managers to plan utility relocation and roadway construction.

FORT BELVOIR COMMUNITY HOSPITAL PROJECT ($53M) FAIRFAX COUNTY, VA

Firm: Allan Myers **Role:** Construction Manager **Dates:** 10/2007 – 07/2011

Role: Ivan served as construction manager for the site work portion of this $920 million state-of-the-art healthcare facility that delivers world class medical services to our nation's troops and their families. He was responsible for complete site development services and oversaw construction, quality management, and contract administration.

Project Description: This project included bulk excavation; 39,800 SF of soldier pile and lagging; 17,796 SF of retaining wall; 24,700 LF of utility line; six precast concrete vaults; 61,000 SF of bioretention-pond; one sanitary and three storm pump stations; 7,000 SY of heavy duty concrete; and 54,500 SY of asphalt paving.

Similarities: Located in Fairfax County, this critical infrastructure project included extensive utility installation, roadway construction, and coordination with various project stakeholders to ensure successful delivery.

Impact on the Project: Ivan coordinated with stakeholders to increase constructability and reduce design omissions and errors while consistently performing high quality work. Through continuous coordination with the Turner/Gilbane Joint Venture and the Army Corp of Engineers, all schedule milestones were met, and construction was completed within budget.

ATTACHMENT 4.2.1

DEPUTY KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

a. Name & Title: **Tyler Long, PE, Associate**

b. Project Assignment: **Deputy Design Manager**

c. Name of the Firm with which you are employed at the time of submitting Technical Proposal: **Whitman, Requardt & Associates, LLP (WRA)**

d. Employment History: With this Firm **18** Years With Other Firms **5** Years

Please list chronologically (most recent first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below):

Whitman, Requardt & Associates, LLP; Design Manager/Associate/Senior Project Engineer/Project Engineer (2003 – present): Tyler has served as a design manager and design engineer for major VDOT design projects continuously since 2003 and recently as the design manager on the Rolling Rd Widening for the VDOT Northern Virginia District. He routinely manages design of major transportation roadway and interchange projects with a wide range in construction values, including urban widening, intersection modifications, pedestrian and bicycle improvements, interchange design, and interstate improvements. He specializes in the design of complex projects requiring a multi-discipline design team. As associate/design manager, Tyler is responsible for the complete design effort, including interchange, roadway, bridge, retaining walls, H&H, traffic engineering, utility relocation, environmental compliance, and right-of-way (ROW) coordination. He is responsible for establishing and overseeing a QA/QC program for all disciplines involved in design, including review of design, working plans, shop drawings, specifications, and constructability. He is responsible for coordinating the individual design disciplines and ensuring the overall Project design is in conformance with the contract documents.

e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:
Valparaiso University, Valparaiso, Indiana / Bachelor of Science / 1997 / Civil Engineering

f. Active Registration: Year First Registered/ Discipline/VA Registration #:
2002 / Professional Engineer /VA Professional Engineer Registration #0402037688

g. Document the extent and depth of your experience and qualifications relevant to the Project.

1. *Note your role, responsibility, and specific job duties for each project, not those of the firm.*
2. *Note whether experience is with current firm or with other firm.*
3. *Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.*

(List only three (3) relevant projects for which you have performed a similar function. On-call contracts with multiple task orders (on multiple projects) should not be listed as a single project.

VDOT ROLLING RD WIDENING ($40M) FAIRFAX COUNTY, VA

Firm: WRA **Role:** Lead Roadway Designer **Dates:** Oct 2015 - Present

Role: Tyler is design manager/lead roadway designer for the widening of Rolling Rd from two to four lanes in West Springfield, from Old Keene Mill Rd to Fairfax County Pkwy, to reduce congestion and improve safety. He coordinates the design with all design disciplines to ensure the project is designed per VDOT standards and specifications. He coordinates with the VDOT project manager to ensure tasks are completed and project development is on schedule and within budget.

Project Description: The tasks included development of multiple widening improvement alternatives, including bicycle and pedestrian facilities, establishing design criteria for roadways, horizontal and vertical geometry design, coordination with Fairfax County and project stakeholders, public involvement/outreach, bid item quantification, and construction cost estimating.

Similarities: The Rolling Rd Widening project is located along a tight urban corridor that includes numerous residential properties, entrances, and intersections. Right of way is constrained along the length of the project and impacts to adjacent properties are minimized. Maintenance of traffic (MOT) is complex, with multiple phases to maintain two lanes of traffic, including pedestrian and bicycle facilities, as well as maintain intersections and entrances through each phase of construction. The efforts include stakeholder coordination, extensive utility relocation, and lighting facilities design.

Impact on the Project: Tyler coordinated design disciplines to ensure the construction plans were complete and submitted on schedule at each project milestone. He constantly communicates with the VDOT project manager to ensure updates to the design are implemented rapidly to maintain the project development schedule. During construction of Phase 1, Tyler assisted the VDOT project manager in responding to contractor questions and requests for information. He also assisted the VDOT project manager in cost comparison analysis while working to optimize the project's

construction, right of way, and utility relocations costs. Tyler developed and coordinated graphic materials for stakeholder and public outreach efforts in coordination with the VDOT project manager and preliminary engineering group.

VDOT FAIRFAX COUNTY PKWY (SEGMENT 1) POPES HEAD RD INTERCHANGE ($190M) FAIRFAX COUNTY, VIRGINIA

Firm: WRA **Role:** Lead Roadway Designer **Dates:** Mar 2017 – Present

Role: Tyler is design manager/lead roadway designer for design and construction of the Fairfax County Pkwy and Popes Head Rd Interchange in Fairfax County, to reduce congestion and improve safety. He coordinates and reviews the design with all design disciplines to ensure the project is designed per VDOT standards and specifications. He coordinates with the project manager to ensure tasks are understood and completed, and that project development is on schedule and within budget. He managed development of the MOT plan and sequence of construction, and coordinated the erosion and sediment control design with the construction phasing.

Project Description: The project involves removing an existing traffic signal, constructing a grade-separated interchange at the Popes Head Rd intersection and the Shirley Gate Rd extension. It includes design of interchange ramps, Popes Head Rd and Shirley Gate Rd extension bridges, three roundabouts, Ladues End Ln extension, realignment of Popes Head Rd, tie-in to Shirley Gate Rd extension, Shirley Gate Connector Rd, and a shared use path along west side of Fairfax County Pkwy within project limits of Segment I. Additionally, it includes five stormwater management (SWM) basins, special design retaining walls, and a box culvert extension.

Similarities: Fairfax County Pkwy is a heavily traveled corridor providing a critical connection among I-66, Route 29, and Route 123. The project includes roadway improvements and widening, interchange design, ramp design, a connection to the proposed future Shirley Gate Rd extension, and complex MOT and construction sequencing. Significant ROW impacts are necessary at the interchange with Popes Head Rd. The MOT involves multiple phases to maintain two lanes of traffic, protect pedestrian and bicycle facilities, maintain intersections and entrances, a major culvert crossing, and minimize impacts to adjacent neighborhoods.

Impact on the Project: Tyler coordinated design disciplines to ensure construction plans were complete and submitted on schedule at the ROW and utility field inspection milestones. He constantly communicates with the discipline leads to ensure updates to the design are implemented rapidly to maintain the project development schedule. Tyler has assisted with tasks that needed to be completed during ROW negotiations. He also assisted in reviews of quantities and unit costs to optimize the project's construction, ROW and utility relocations costs. Tyler developed and coordinated graphic materials for stakeholder and public outreach efforts.

VDOT WALNEY RD WIDENING DB PROJECT ($11.3M) LOUDOUN COUNTY, VA

Firm: WRA **Role:** Roadway Task Manager **Dates:** Mar 2014 – Dec 2015

Role: As roadway task manager, Tyler was responsible for design of the bridge replacement and urban roadway widening and reconstruction of Walney Rd from two lanes to a four-lane curb and gutter section. The project included bike lanes along the entire length. The bridge over Flatlick Branch is located in the Fairfax County Park Authority (FCPA) Stream Valley Park, requiring coordination with the FCPA. Tyler performed QA/QC reviews of the construction plan packages and ensured cross discipline coordination throughout the design and construction plan development.

Project Description: The project length was 0.6 miles and provided a four-lane undivided urban section with bike lanes and a shared use path on the east side, and a sidewalk on the west side. A key element was coordination of the alignment, profile and bridge design of Walney Rd with the hydraulic analysis of Flatlick Branch to avoid increasing the FEMA 100-year floodplain elevation. The alignment and profile were also designed to minimize ROW impacts. The design included analysis and retiming of all signals along the detour route for the proposed road closure. A conservation easement and FCPA Stream Valley Park extended along Flatlick Branch and the Walney Rd project corridor. A portion of the conservation easement impacted by the project was replaced outside of the project construction footprint along the western side of Walney Rd, adjacent to the existing FCPA property.

Similarities: This project was an urban roadway widening with a bridge replacement, pedestrian and bicycle facilities, and design of traffic signals and street lighting. It included coordination with the FCPA for acquisition of park property that impacted an existing conservation easement. This required minimization of ROW impacts and replacement property for the impacted area of the conservation easement. Extensive utility coordination was critical to the ROW and construction schedule. Hydraulic analysis of the bridge crossing required establishing a bridge opening that maintained the FEMA 100-year flood elevation.

Impact on the Project: Tyler helped to ensure design coordination among the different disciplines resulted in a project that reduced impacts to adjacent properties and provided clear construction plan documents to Allan Myers. His timely and thorough reviews ensured the project scope was maintained, costs were minimized, and the project was completed two months early.

12500 Fair Lakes Circle #150
Fairfax, VA 22033
703-502-7500

801 South Caroline St
Baltimore, MD 21231
410-235-3540

Submitted to: VDOT Virginia Department of Transportation

TECHNICAL PROPOSAL

A DESIGN-BUILD PROJECT

ROUTE 29
WIDENING PHASE II

FROM: 0.208 MILES WEST OF UNION MILL ROAD
TO: 0.460 MILES EAST OF BUCKLEY'S GATE DRIVE

FAIRFAX COUNTY, VIRGINIA

State Project No.: 0029–029–350, P101, R201, C501, D612

Federal Project No.: NHPP-5A01(917)

Contract ID Number.: C00110329DB113

MARCH 9, 2022 | **4:00PM**

Submitted by: ALLAN MYERS + WRA

VOLUME II

4.3

CONCEPTUAL ROADWAY PLANS

PROJECT MANAGER Jenny Ha, P.E. (703) 259-2907 (VDOT NOVA)
SURVEYED BY, DATE Brian Fletcher, L.S. (703) 259-2355 (VDOT NOVA) 12/14/17 & 10/1/18
SUBSURFACE UTILITY BY, DATE Accumark (804) 550-7740 12/14/17 & 10/27/18

FOR INDEX OF SHEETS SEE SHEET 1B

STATE	FEDERAL AID PROJECT	ROUTE	STATE PROJECT	SHEET NO.
VA.	NHPP-5A01() NHPP-5B01() (SEE TABULATION BELOW FOR SECTION NUMBERS)	29	(NFO) 0029-029-350 (SEE TABULATION BELOW FOR SECTION NUMBERS)	1

FHWA 534 DATA 43103

THIS PROJECT WAS DEVELOPED UTILIZING THE DEPARTMENT'S ENGINEERING DESIGN PACKAGE (OpenRoads / GEOPAK).
OpenRoads / GEOPAK Computer Identification No. 110329

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

COMMONWEALTH OF VIRGINIA

DEPARTMENT OF TRANSPORTATION

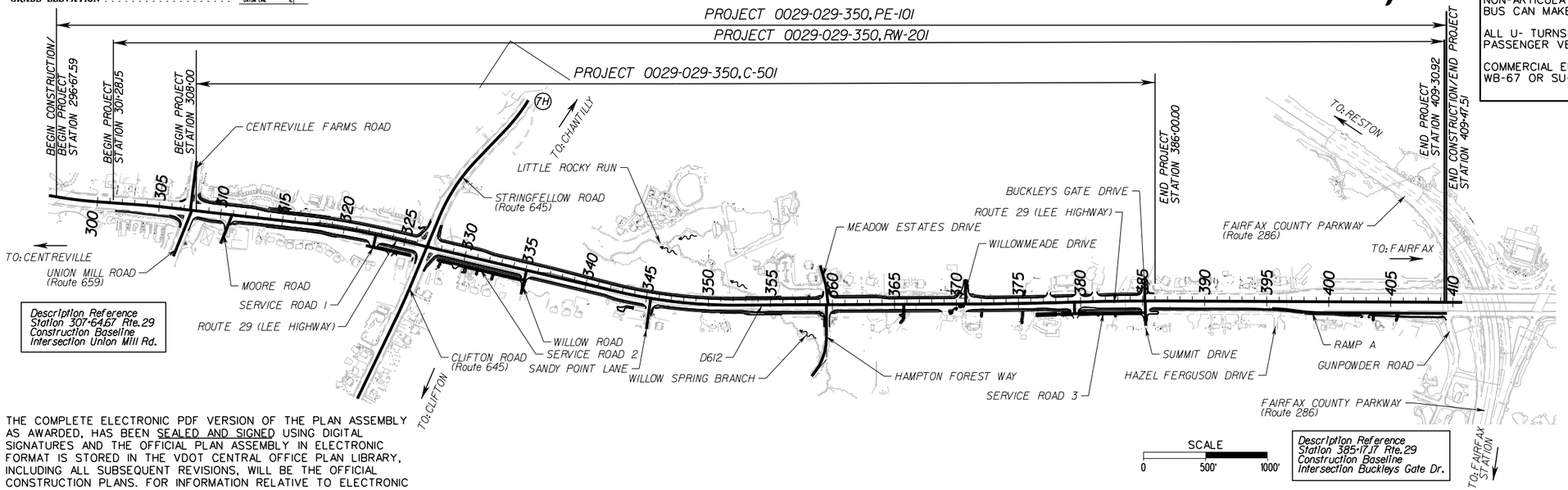
PLAN AND PROFILE OF PROPOSED
STATE HIGHWAY

FAIRFAX COUNTY
Route 29 Lee Highway Widening Phase II
From: 0.208 Mi. West of the Intersection of Union Mill Road (RTE 659)
To: 0.460 East of the Intersection of Buckleys Gate Drive

FUNCTIONAL CLASSIFICATION AND TRAFFIC DATA	
OTHER URBAN PRINCIPAL ARTERIAL WITH CURB & GUTTER (NHS FACILITY) (GS-5) DIVIDED - ROLLING - 45 MPH MIN. DESIGN SPEED	
	Fr: 0.208 Mi. West of the Intersection of Union Mill Rd. (RTE 659) To: 0.460 East of the Intersection of Buckleys Gate Drive
ADT (2018)	33,000
ADT (2043)	44,000
DHV	4,400
D (%) (design hour)	75/25
T (%) (design hour)	5
V (MPH)	*

* SEE PLAN AND PROFILE SHEETS FOR HORIZONTAL AND VERTICAL DESIGN SPEED. CONNECTION FUNCTIONAL CLASSIFICATION, ADT AND MINIMUM DESIGN SPEED IS PROVIDED ON SHEET 1A.

PROPOSED DESIGN VEHICLES FOR AUTOTURN MOVEMENTS
SIGNALIZED INTERSECTIONS: WB-62 or SU-40 FOR ALL MOVEMENTS, EXCEPT U-TURNS, DEPENDING ON FUNCTIONAL CLASSIFICATION OF ROADS. REFER TO SHEET 1A FOR FUNCTIONAL CLASSIFICATION OF SIDE ROADS NEIGHBORHOODS: SU-40 WHICH APPROXIMATES THE LENGTH OF AN EMERGENCY VEHICLE (AVERAGE FIRE TRUCK NON-ARTICULATED) AND ENSURES A SMALLER SCHOOL BUS CAN MAKE THE MOVEMENT. ALL U- TURNS: PASSENGER VEHICLES COMMERCIAL ENTRANCES: WB-67 OR SU-40 DEPENDING ON BUSINESS TYPE.



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 2020 ROAD AND BRIDGE SPECIFICATIONS, 2016 ROAD AND BRIDGE STANDARDS, 2009 MUTCD, 2011 VIRGINIA SUPPLEMENT TO THE MUTCD, 2011 VIRGINIA WORK AREA PROTECTION MANUAL 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-5.11U , 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.

Fairfax County Population 1,081,726 (2010 Census)

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	FEET	MILES	FEET	MILES			
0029-029-350	PE-101	NHPP-5A01(917)	PENG	110329	+1.34'	11,281.26	2.137	11,281.26	2.137		PRELIM. ENGR.	FROM: 0.208 Mi. West of the intersection of Union Mill Rd. TO: 0.460 Mi. East of the intersection of Buckleys Gate Dr.
	RW-201	NHPP-5B01(147)	ROWA	110329	+1.34'	10,804.11	2.046	10,804.11	2.046		RIGHT OF WAY	FROM: 0.174 Mi. West of the intersection of Union Mill Rd. TO: 0.457 Mi. East of the intersection of Buckleys Gate Dr.
	C-501	NHPP-5B01(165)	I000	110329	+1.34'	7,801.34	1.478	7,801.34	1.478		CONSTRUCTION	FROM: 0.006 Mi. East of the intersection of Union Mill Rd. TO: 0.016 Mi. East of the intersection of Buckleys Gate Dr.
	D612	NHPP-5B01(165)	X028	110329	NONE	23.44	0.004				BOX CULVERT	ROUTE 29 OVER WILLOW SPRING BRANCH

Project Lengths are based on Route 29 Construction Baseline.

VOLUME II - TECHNICAL PROPOSAL
CONCEPT PLANS

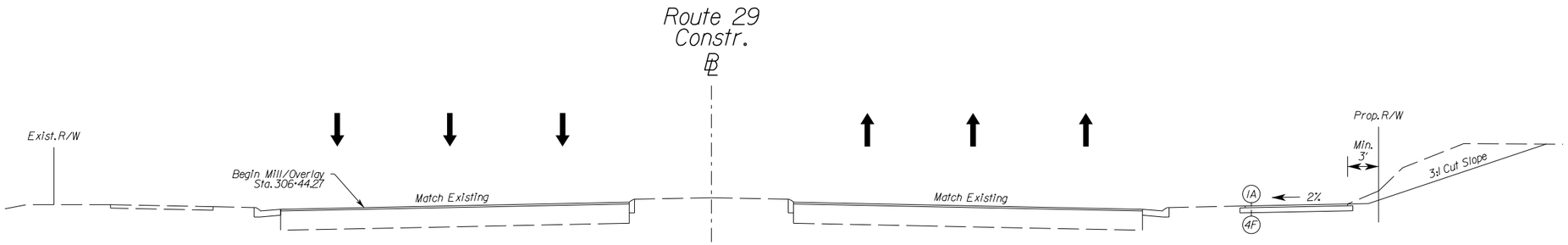
ALLAN MYERS + WRA

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	29	0029-029-350 RW-201, C-501	2A

(1A) 2" SMA-9.5 estimated at 240 lbs./s.y.

(4F) 6" Aggregate Base Material, Type I, Size No. 21B extended 6" beyond the edge of the surface material.

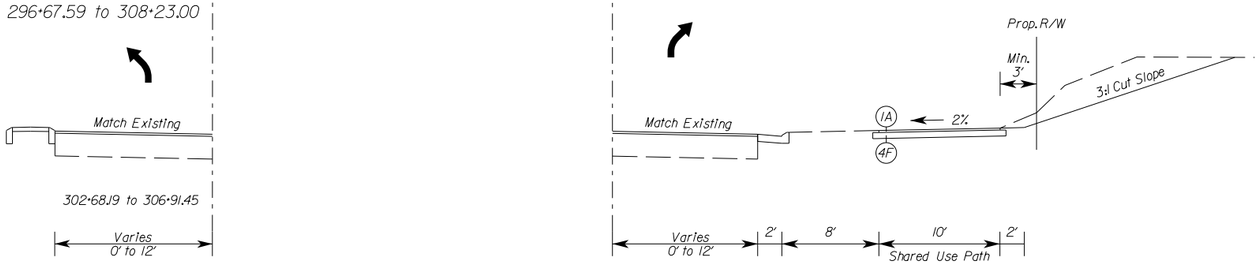
TYPICAL SECTIONS



Station to Station
296+67.59 to 308+23.00

1' | Varies 11' to 12' | Varies 11' to 12' | Varies 11' to 12' | 2' | 8' | *10' Shared Use Path | 2'

*Sta. 301+81.91 to 302+63.09



Station to Station
Taper 300+52.28 to 302+52.28
Full Width 302+52.28 to 306+65.90

Station to Station
Taper 302+63.09 to 304+25.00
Full Width 304+25.00 to 306+05.37

Notes:

1. All pavement widening shall be performed in accordance with Standard WP-2.

2. In widening sections, the existing pavement shall be saw cut full depth a minimum 1' inside the mainline pavement prior to widening.

3. In widening areas, the existing pavement surface shall be milled a minimum depth if 1.5" and replaced with 1.5" Asphalt Concrete Type SM-9.5D estimated at 175 lbs/sq.yd.

4. In widening areas, Sta. 364+40 to Sta. 386+00, the top of the proposed CTA layer shall be placed level with the top of the existing CTA layer. This may require additional base asphalt, BM-25.0A to attain the existing surface grade.

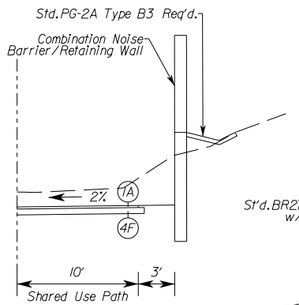
5. The final surface course shall be placed in a continuous operation across the full pavement width after all previous layers have been completed and shall include all areas where eradication of existing pavement markings has been performed for temporary tie-ins and maintenance of traffic shifts.

6. When widening existing pavement, the pavement subgrade slope shall be designed such that the existing pavement subbase material can properly drain to a standard UD-4 edge drain.

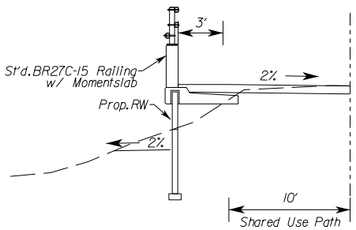
7. All existing paved shoulders and existing gore areas shall be cut with a smooth vertical face to expose the original mainline pavement structure, demolished and reconstructed with the asphalt pavement section identified above. The Design-Builder shall consider that existing pavement edge lines may not necessarily indicate the edge of the mainline pavement structure, and it is the Design-Builder's responsibility to identify the limits of the existing full-strength mainline pavement prior to saw-cutting the pavement or setting barriers.

8. Pavement widening for locations not identified above shall be designed in accordance with the requirements of VDOT Standard WP-2.

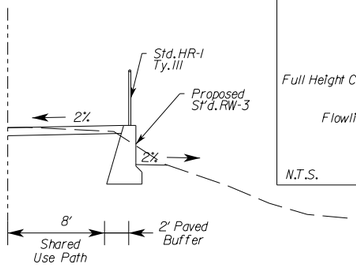
Typical Application of Shared Use Path Adjacent to Retaining Walls



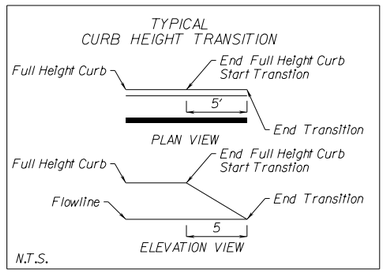
Station to Station
313+70.00 to 319+50.00



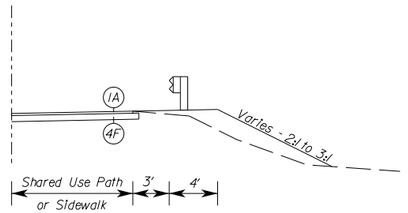
Station to Station
314+55.00 to 318+77.25



Station to Station
Ramp A - 96+13.53 to 97+07.53



Typical Application of Shared Use Path Adjacent to Guardrail



Station to Station

Route 29 NB - 352+75.00 to 355+94.27
Route 29 SB - 352+78.92 to 355+89.20
Stringfellow Road NB - 51+25.80 to 52+08.49
Stringfellow Road SB - 51+67.59 to 52+14.78

ALLAN MYERS + WRA

Not to Scale	PROJECT 0029-029-350	SHEET NO. 2A

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	29	0029-029-350 RW-201,C-501	2A(1)

TYPICAL SECTIONS

(1) 1.5" SMA-9.5 estimated at 175 lbs./s.y.

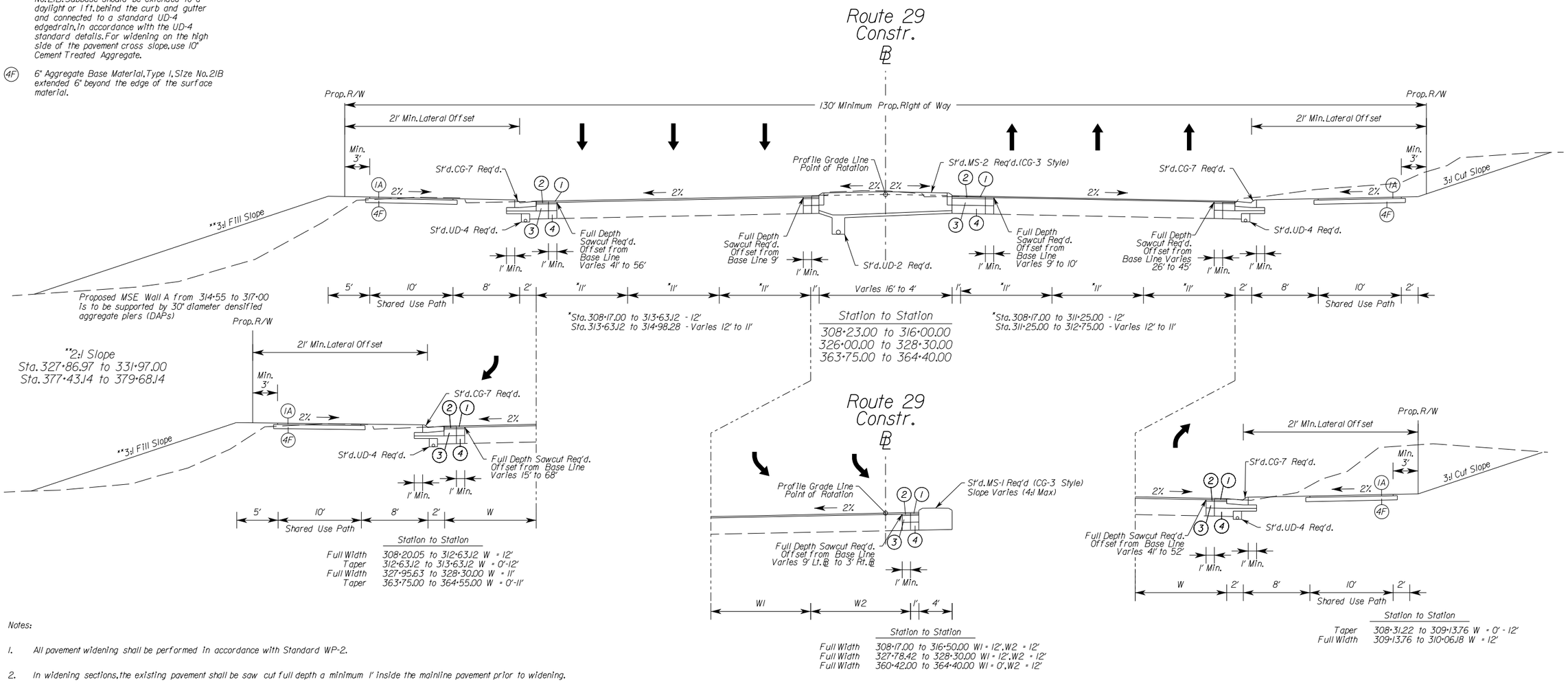
(1A) 2" SMA-9.5 estimated at 240 lbs./s.y.

(2) 2" IM-19.0D estimated at 242 lbs./s.y.

(3) 10" BM-25.0A

(4) 12" Aggregate Base Material, Type I, Size No. 21B. Subbase should be extended to a daylight or 1 ft. behind the curb and gutter and connected to a standard UD-4 edgedrain, in accordance with the UD-4 standard details. For widening on the high side of the pavement cross slope, use 10" Cement Treated Aggregate.

(4F) 6" Aggregate Base Material, Type I, Size No. 21B extended 6" beyond the edge of the surface material.



Notes:

1. All pavement widening shall be performed in accordance with Standard WP-2.
2. In widening sections, the existing pavement shall be saw cut full depth a minimum 1' inside the mainline pavement prior to widening.
3. In widening areas, the existing pavement surface shall be milled a minimum depth if 1.5" and replaced with 1.5" Asphalt Concrete Type SM-9.5D estimated at 175 lbs/sq.yd.
4. In widening areas, Sta. 364+40 to Sta. 386+00, the top of the proposed CTA layer shall be placed level with the top of the existing CTA layer. This may require additional base asphalt, BM-25.0A to attain the existing surface grade.
5. The final surface course shall be placed in a continuous operation across the full pavement width after all previous layers have been completed and shall include all areas where eradication of existing pavement markings has been performed for temporary tie-ins and maintenance of traffic shifts.
6. When widening existing pavement, the pavement subgrade slope shall be designed such that the existing pavement subbase material can properly drain to a standard UD-4 edge drain.
7. All existing paved shoulders and existing gore areas shall be cut with a smooth vertical face to expose the original mainline pavement structure, demolished and reconstructed with the asphalt pavement section identified above. The Design-Builder shall consider that existing pavement edge lines may not necessarily indicate the edge of the mainline pavement structure, and it is the Design-Builder's responsibility to identify the limits of the existing full-strength mainline pavement prior to saw-cutting the pavement or setting barriers.
8. Pavement widening for locations not identified above shall be designed in accordance with the requirements of VDOT Standard WP-2.

ALLAN MYERS + WRA

Not to Scale	PROJECT 0029-029-350	SHEET NO. 2A(1)

REVISED	STATE	STATE		SHEET NO.
		ROUTE	PROJECT	
	VA.	29	0029-029-350 RW-201, C-501	2A(2)

TYPICAL SECTIONS

(1) 1.5" SMA-9.5 estimated at 175 lbs./s.y.

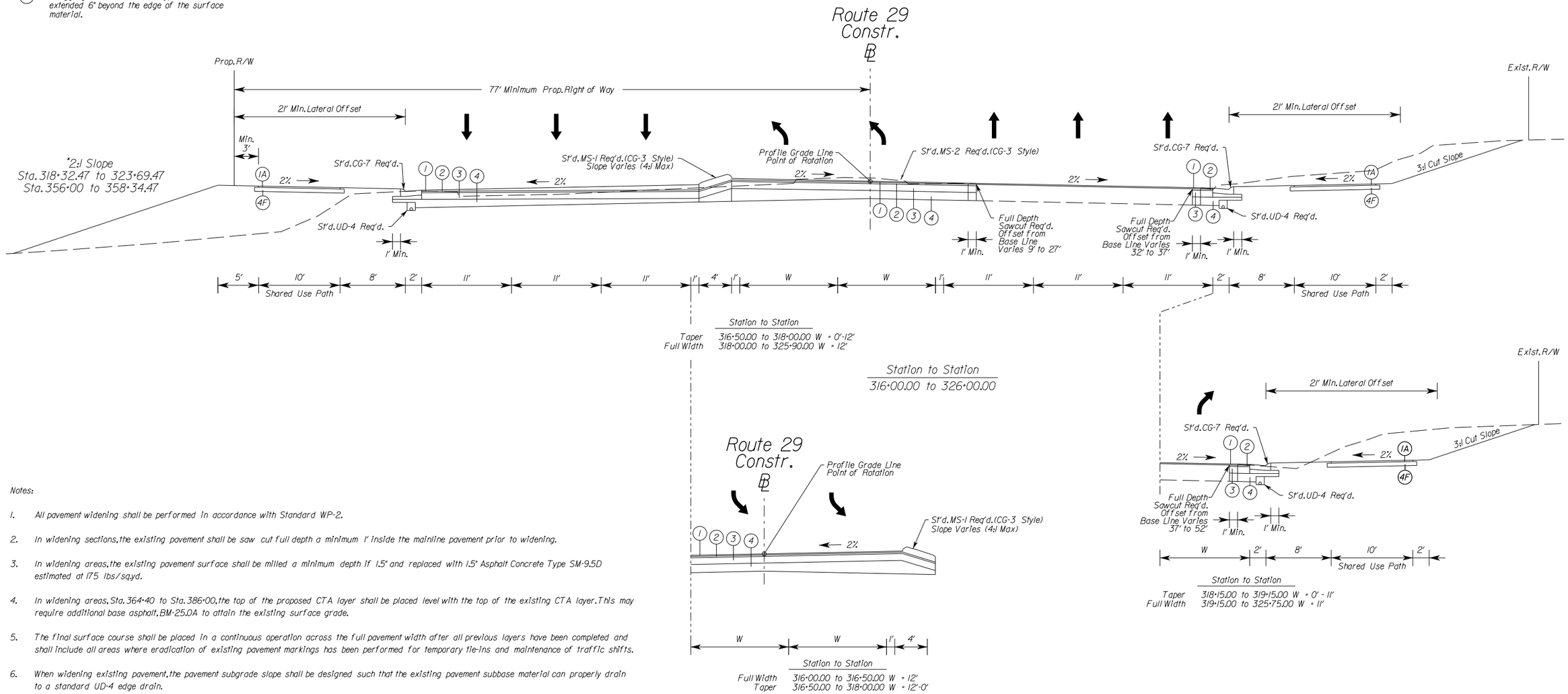
(1A) 2" SMA-9.5 estimated at 240 lbs./s.y.

(2) 2" IM-19.0D estimated at 242 lbs./s.y.

(3) 10" BM-25.0A

(4) 12" Aggregate Base Material, Type 1, Size No. 21B. Subbase should be extended to a daylight or 1 ft. behind the curb and gutter and connected to a standard UD-4 edgedrain. In accordance with the UD-4 standard details. For widening on the high side of the pavement cross slope, use 10" Cement Treated Aggregate.

(4F) 6" Aggregate Base Material, Type 1, Size No. 21B extended 6" beyond the edge of the surface material.



Notes:

1. All pavement widening shall be performed in accordance with Standard WP-2.
2. In widening sections, the existing pavement shall be saw cut full depth a minimum 1' inside the mainline pavement prior to widening.
3. In widening areas, the existing pavement surface shall be milled a minimum depth if 1.5" and replaced with 1.5" Asphalt Concrete Type SM-9.5D estimated at 175 lbs/sq.yd.
4. In widening areas, Sta. 364+40 to Sta. 386+00, the top of the proposed CTA layer shall be placed level with the top of the existing CTA layer. This may require additional base asphalt, BM-25.0A to attain the existing surface grade.
5. The final surface course shall be placed in a continuous operation across the full pavement width after all previous layers have been completed and shall include all areas where eradication of existing pavement markings has been performed for temporary tie-ins and maintenance of traffic shifts.
6. When widening existing pavement, the pavement subgrade slope shall be designed such that the existing pavement subbase material can properly drain to a standard UD-4 edge drain.
7. All existing paved shoulders and existing gore areas shall be cut with a smooth vertical face to expose the original mainline pavement structure, demolished and reconstructed with the asphalt pavement section identified above. The Design-Builder shall consider that existing pavement edge lines may not necessarily indicate the edge of the mainline pavement structure, and it is the Design-Builder's responsibility to identify the limits of the existing full-strength mainline pavement prior to saw-cutting the pavement or setting barriers.
8. Pavement widening for locations not identified above shall be designed in accordance with the requirements of VDOT Standard WP-2.

ALLAN MYERS + WRA

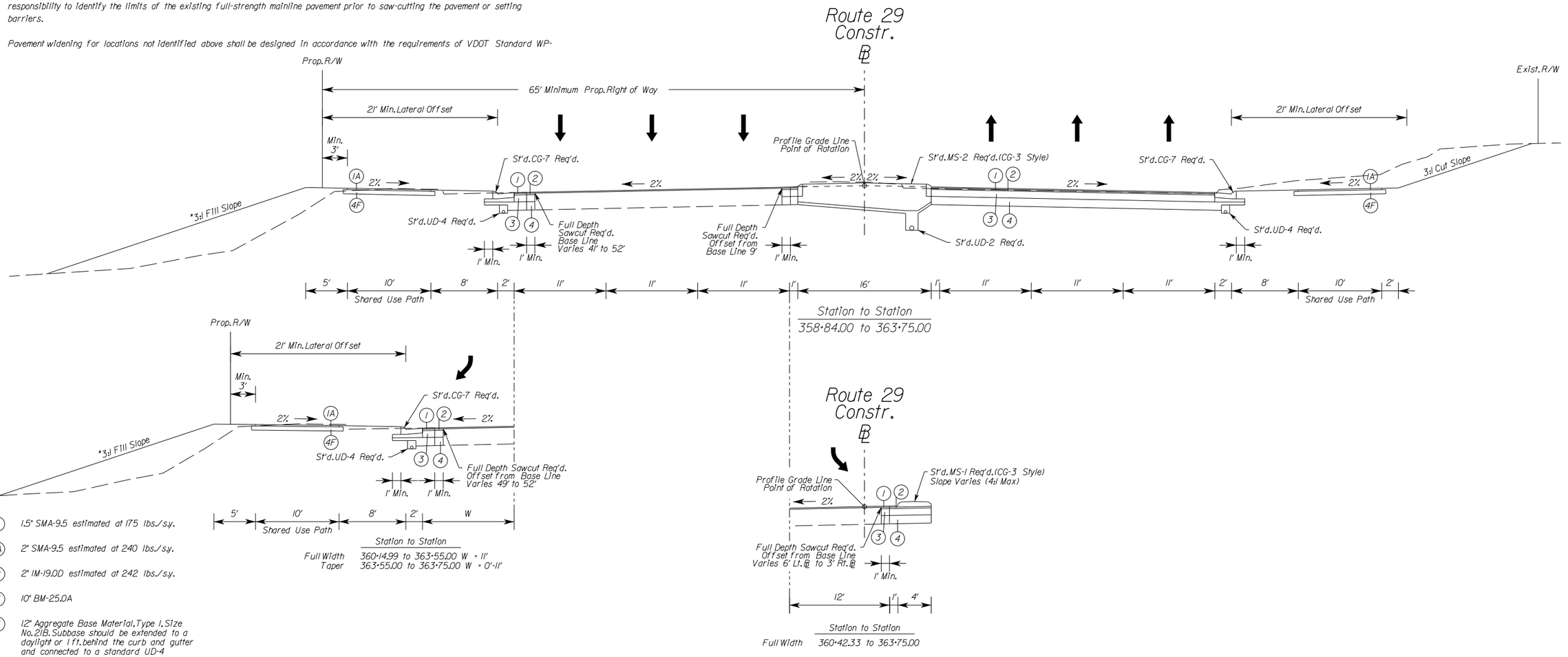
Not to Scale	PROJECT 0029-029-350	SHEET NO. 2A(2)

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	29	0029-029-350 RW-201, C-501	2A(3)

TYPICAL SECTIONS

Notes:

1. All pavement widening shall be performed in accordance with Standard WP-2.
2. In widening sections, the existing pavement shall be saw cut full depth a minimum 1' inside the mainline pavement prior to widening.
3. In widening areas, the existing pavement surface shall be milled a minimum depth if 1.5" and replaced with 1.5" Asphalt Concrete Type SM-9.5D estimated at 175 lbs/sq.yd.
4. In widening areas, Sta. 364+40 to Sta. 386+00, the top of the proposed CTA layer shall be placed level with the top of the existing CTA layer. This may require additional base asphalt, BM-25.0A to attain the existing surface grade.
5. The final surface course shall be placed in a continuous operation across the full pavement width after all previous layers have been completed and shall include all areas where eradication of existing pavement markings has been performed for temporary tie-ins and maintenance of traffic shifts.
6. When widening existing pavement, the pavement subgrade slope shall be designed such that the existing pavement subbase material can properly drain to a standard UD-4 edge drain.
7. All existing paved shoulders and existing gore areas shall be cut with a smooth vertical face to expose the original mainline pavement structure, demolished and reconstructed with the asphalt pavement section identified above. The Design-Builder shall consider that existing pavement edge lines may not necessarily indicate the edge of the mainline pavement structure, and it is the Design-Builder's responsibility to identify the limits of the existing full-strength mainline pavement prior to saw-cutting the pavement or setting barriers.
8. Pavement widening for locations not identified above shall be designed in accordance with the requirements of VDOT Standard WP-



(1) 1.5" SMA-9.5 estimated at 175 lbs./s.y.

(1A) 2" SMA-9.5 estimated at 240 lbs./s.y.

(2) 2" IM-19.0D estimated at 242 lbs./s.y.

(3) 10" BM-25.0A

(4) 12" Aggregate Base Material, Type 1, Size No. 21B. Subbase should be extended to a daylight or 1 ft. behind the curb and gutter and connected to a standard UD-4 edgedrain, in accordance with the UD-4 standard details. For widening on the high side of the pavement cross slope, use 10" Cement Treated Aggregate.

(4F) 6" Aggregate Base Material, Type 1, Size No. 21B extended 6" beyond the edge of the surface material.

ALLAN MYERS + WRA

Not to Scale	PROJECT 0029-029-350	SHEET NO. 2A(3)

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	29	0029-029-350 RW-201,C-501	2A(4)

TYPICAL SECTIONS

(1) 1.5" SMA-9.5 estimated at 175 lbs./s.y.

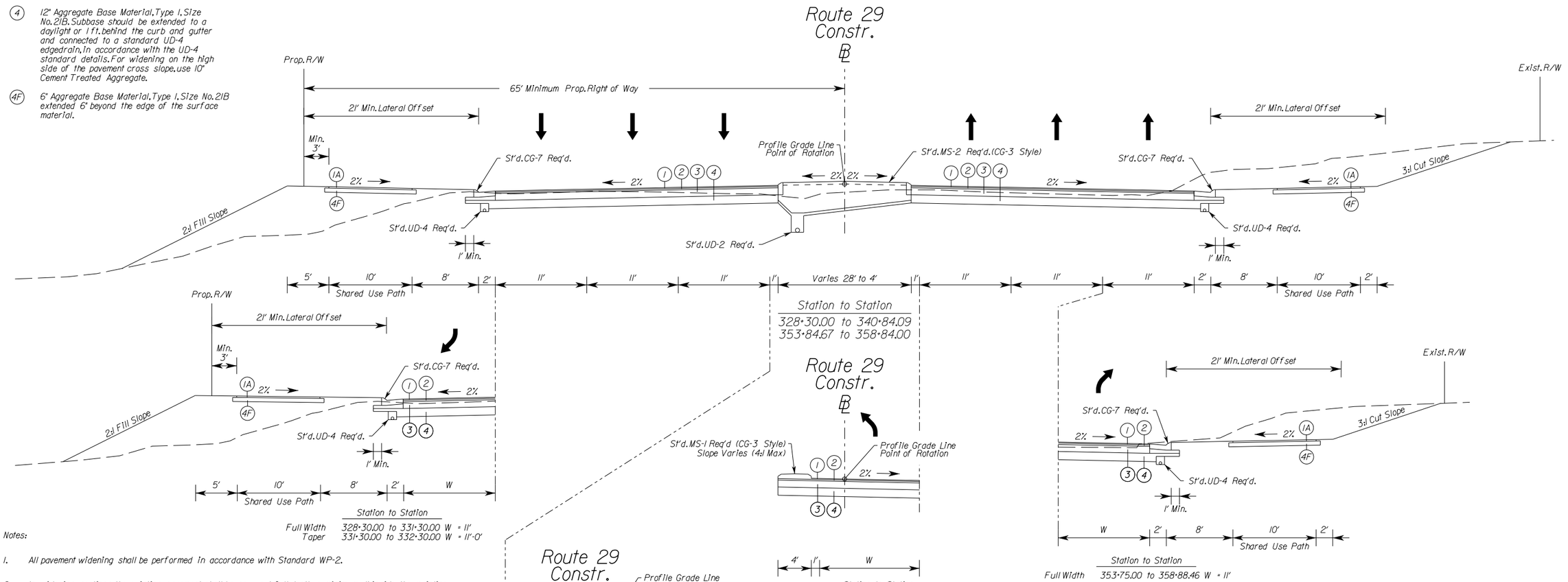
(1A) 2" SMA-9.5 estimated at 240 lbs./s.y.

(2) 2" IM-19.0D estimated at 242 lbs./s.y.

(3) 10" BM-25.0A

(4) 12" Aggregate Base Material, Type 1, Size No. 21B. Subbase should be extended to a daylight or 1 ft. behind the curb and gutter and connected to a standard UD-4 edgedrain, in accordance with the UD-4 standard details. For widening on the high side of the pavement cross slope, use 10" Cement Treated Aggregate.

(4F) 6" Aggregate Base Material, Type 1, Size No. 21B extended 6" beyond the edge of the surface material.



Notes:

1. All pavement widening shall be performed in accordance with Standard WP-2.
2. In widening sections, the existing pavement shall be saw cut full depth a minimum 1' inside the mainline pavement prior to widening.
3. In widening areas, the existing pavement surface shall be milled a minimum depth if 1.5" and replaced with 1.5" Asphalt Concrete Type SM-9.5D estimated at 175 lbs/sqyd.
4. In widening areas, Sta. 364+40 to Sta. 386+00, the top of the proposed CTA layer shall be placed level with the top of the existing CTA layer. This may require additional base asphalt, BM-25.0A to attain the existing surface grade.
5. The final surface course shall be placed in a continuous operation across the full pavement width after all previous layers have been completed and shall include all areas where eradication of existing pavement markings has been performed for temporary tie-ins and maintenance of traffic shifts.
6. When widening existing pavement, the pavement subgrade slope shall be designed such that the existing pavement subbase material can properly drain to a standard UD-4 edge drain.
7. All existing paved shoulders and existing gore areas shall be cut with a smooth vertical face to expose the original mainline pavement structure, demolished and reconstructed with the asphalt pavement section identified above. The Design-Builder shall consider that existing pavement edge lines may not necessarily indicate the edge of the mainline pavement structure, and it is the Design-Builder's responsibility to identify the limits of the existing full-strength mainline pavement prior to saw-cutting the pavement or setting barriers.
8. Pavement widening for locations not identified above shall be designed in accordance with the requirements of VDOT Standard WP-2.

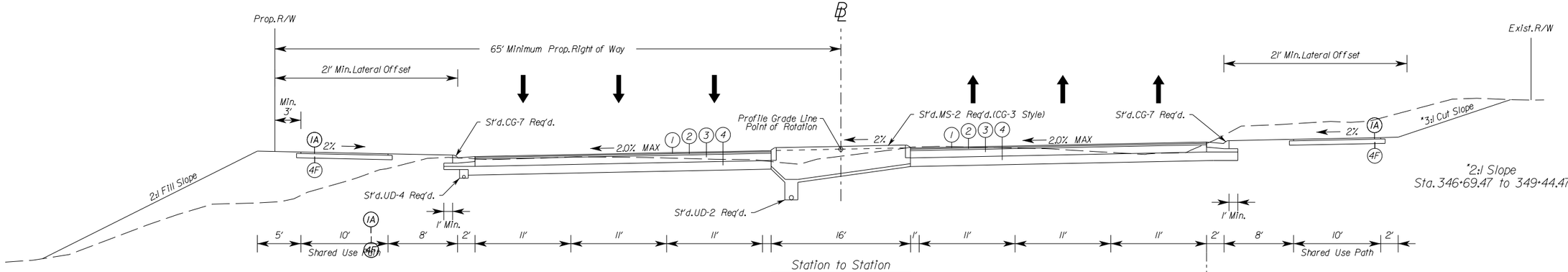
ALLAN MYERS + WRA

Not to Scale	PROJECT 0029-029-350	SHEET NO. 2A(4)

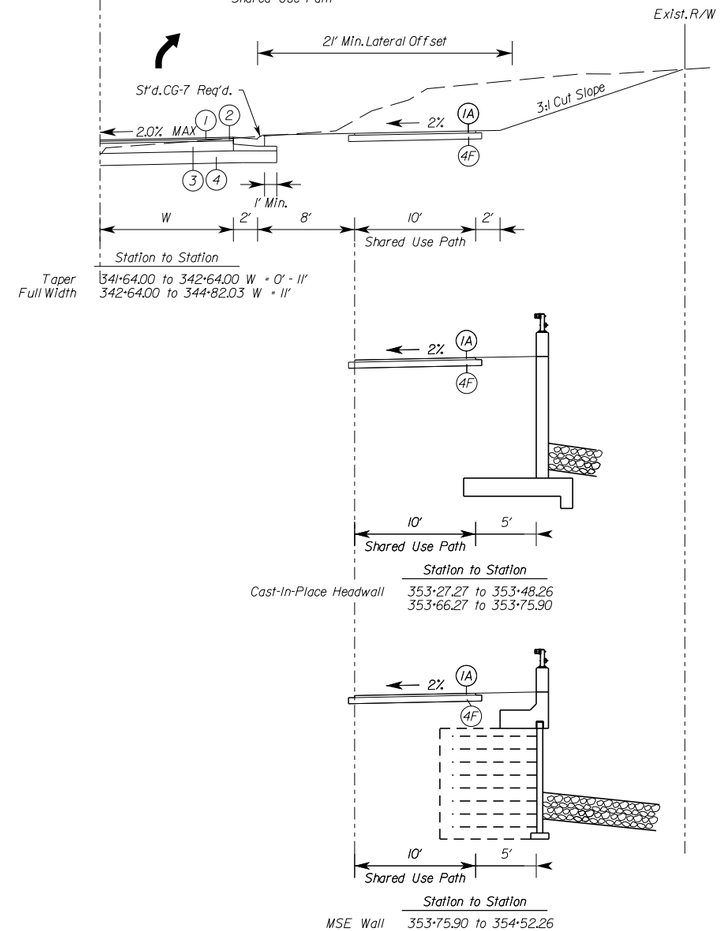
REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	29	0029-029-350 RW-201,C-501	2A(5)

TYPICAL SECTIONS

Route 29 Constr. ℄



Station to Station
340+85.09 to 353+84.67



	Station to Station
Taper	341+64.00 to 342+64.00 W = 0' - 11'
Full Width	342+64.00 to 344+82.03 W = 11'
Cast-In-Place Headwall	353+27.27 to 353+48.26 353+66.27 to 353+75.90
MSE Wall	353+75.90 to 354+52.26

(1) 1.5" SMA-9.5 estimated at 175 lbs./s.y.

(1A) 2" SMA-9.5 estimated at 240 lbs./s.y.

(2) 2" IM-19.0D estimated at 242 lbs./s.y.

(3) 10" BM-25.0A

(4) 12" Aggregate Base Material,Type 1,Size No.21B.Subbase should be extended to a daylight or 1 ft.behind the curb and gutter and connected to a standard UD-4 edgedrain,in accordance with the UD-4 standard details.For widening on the high side of the pavement cross slope,use 10" Cement Treated Aggregate.

(4F) 6" Aggregate Base Material,Type 1,Size No.21B extended 6" beyond the edge of the surface material.

Notes:

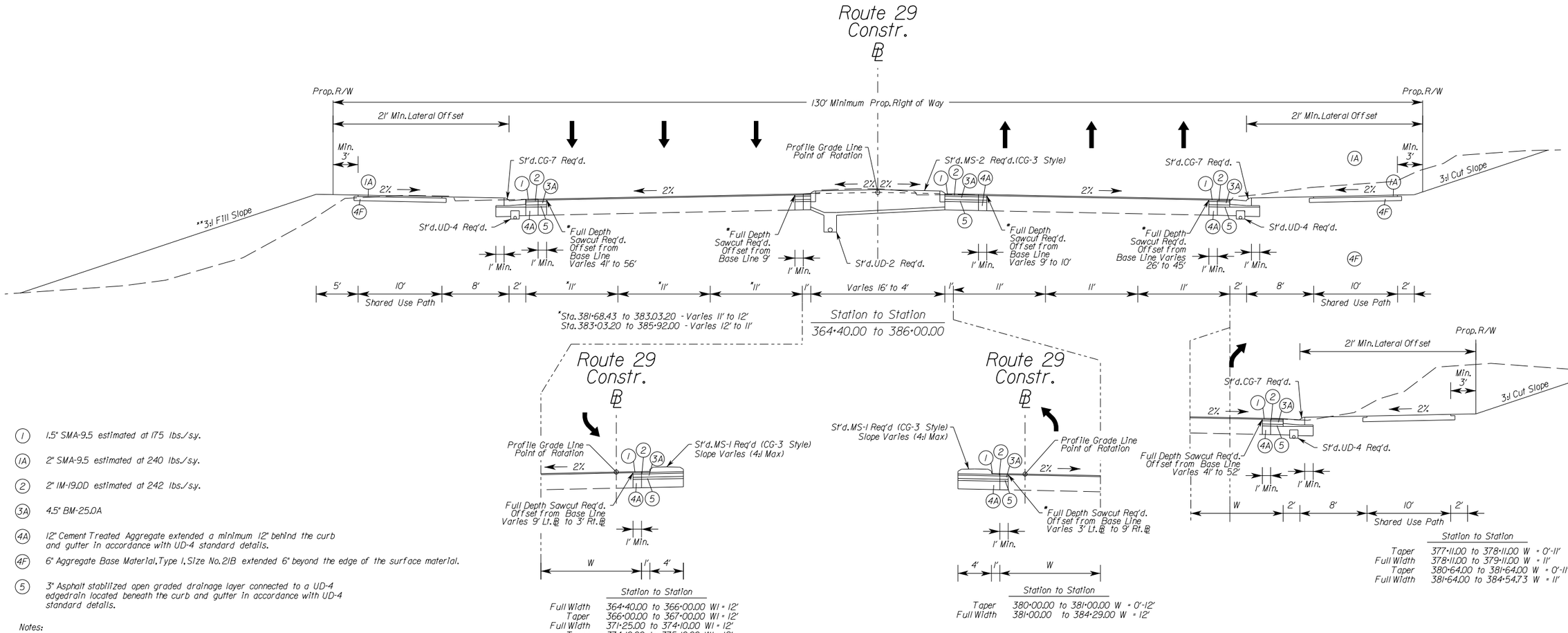
1. All pavement widening shall be performed in accordance with Standard WP-2.
2. In widening sections,the existing pavement shall be saw cut full depth a minimum 1' inside the mainline pavement prior to widening.
3. In widening areas,the existing pavement surface shall be milled a minimum depth if 1.5" and replaced with 1.5" Asphalt Concrete Type SM-9.5D estimated at 175 lbs/sq.yd.
4. In widening areas,Sta.364+40 to Sta.386+00,the top of the proposed CTA layer shall be placed level with the top of the existing CTA layer.This may require additional base asphalt,BM-25.0A to attain the existing surface grade.
5. The final surface course shall be placed in a continuous operation across the full pavement width after all previous layers have been completed and shall include all areas where eradication of existing pavement markings has been performed for temporary tie-ins and maintenance of traffic shifts.
6. When widening existing pavement,the pavement subgrade slope shall be designed such that the existing pavement subbase material can properly drain to a standard UD-4 edge drain.
7. All existing paved shoulders and existing gore areas shall be cut with a smooth vertical face to expose the original mainline pavement structure,demolished and reconstructed with the asphalt pavement section identified above.The Design-Builder shall consider that existing pavement edge lines may not necessarily indicate the edge of the mainline pavement structure,and it is the Design-Builder's responsibility to identify the limits of the existing full-strength mainline pavement prior to saw-cutting the pavement or setting barriers.
8. Pavement widening for locations not identified above shall be designed in accordance with the requirements of VDOT Standard WP-2.

ALLAN MYERS + WRA

Not to Scale	PROJECT 0029-029-350	SHEET NO. 2A(5)

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	29	0029-029-350 RW-201,C-501	2A(6)

TYPICAL SECTIONS



(1) 1.5" SMA-9.5 estimated at 175 lbs./s.y.

(1A) 2" SMA-9.5 estimated at 240 lbs./s.y.

(2) 2" IM-19.0D estimated at 242 lbs./s.y.

(3A) 4.5" BM-25.0A

(4A) 12" Cement Treated Aggregate extended a minimum 12" behind the curb and gutter in accordance with UD-4 standard details.

(4F) 6" Aggregate Base Material,Type I,Size No.21B extended 6" beyond the edge of the surface material.

(5) 3" Asphalt stabilized open graded drainage layer connected to a UD-4 edgedrain located beneath the curb and gutter in accordance with UD-4 standard details.

Notes:

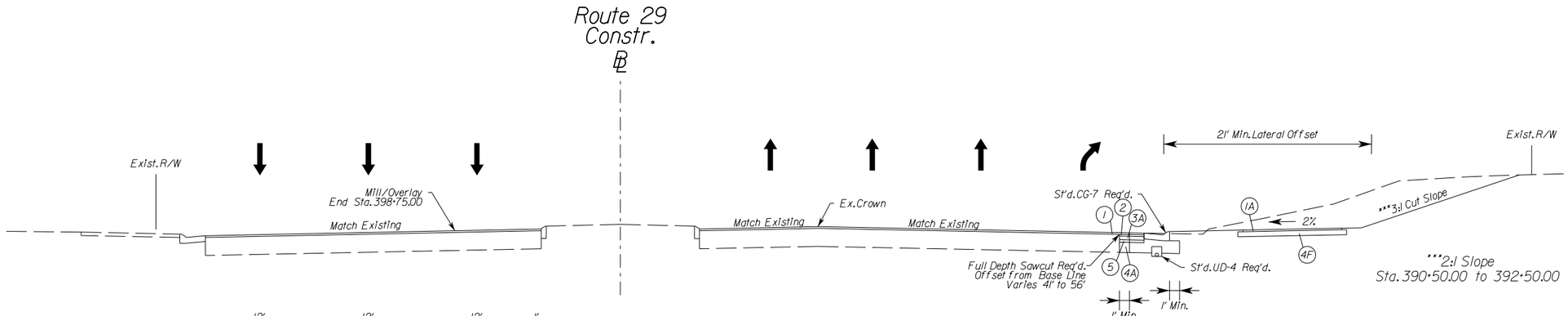
1. All pavement widening shall be performed in accordance with Standard WP-2.
2. In widening sections,the existing pavement shall be saw cut full depth a minimum 1' inside the mainline pavement prior to widening.
3. In widening areas,the existing pavement surface shall be milled a minimum depth if 1.5" and replaced with 1.5" Asphalt Concrete Type SM-9.5D estimated at 175 lbs/sq.yd.
4. In widening areas, Sta. 364+40 to Sta. 386+00,the top of the proposed CTA layer shall be placed level with the top of the existing CTA layer.This may require additional base asphalt,BM-25.0A to attain the existing surface grade.
5. The final surface course shall be placed in a continuous operation across the full pavement width after all previous layers have been completed and shall include all areas where eradication of existing pavement markings has been performed for temporary tie-ins and maintenance of traffic shifts.
6. When widening existing pavement,the pavement subgrade slope shall be designed such that the existing pavement subbase material can properly drain to a standard UD-4 edge drain.
7. All existing paved shoulders and existing gore areas shall be cut with a smooth vertical face to expose the original mainline pavement structure,demolished and reconstructed with the asphalt pavement section identified above.The Design-Builder shall consider that existing pavement edge lines may not necessarily indicate the edge of the mainline pavement structure,and it is the Design-Builder's responsibility to identify the limits of the existing full-strength mainline pavement prior to saw-cutting the pavement or setting barriers.
8. Pavement widening for locations not identified above shall be designed in accordance with the requirements of VDOT Standard WP-2.

ALLAN MYERS + WRA

Not to Scale	PROJECT 0029-029-350	SHEET NO. 2A(6)

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	29	0029-029-350 RW-201,C-501	2A(7)

TYPICAL SECTIONS



*Sta.393+50.00 to 395+43.80 - Varies 11' to 12'

**Station 390+50.00 to 395+43.80 - 5' Reduced Buffer Width

***Station 393+63.75 to 395+43.80 - 10' - 8'

Station to Station

Full Width 386+00.00 to 393+49.97 W = 11'

Full Width 393+49.97 to 395+43.77 W = 11' - 12'

(1) 1.5" SMA-9.5 estimated at 175 lbs./s.y.

(1A) 2" SMA-9.5 estimated at 240 lbs./s.y.

(2) 2" IM-19.0D estimated at 242 lbs./s.y.

(3A) 4.5" BM-25.0A

(4A) 12" Cement Treated Aggregate extended a minimum 12" behind the curb and gutter in accordance with UD-4 standard details.

(4F) 6" Aggregate Base Material,Type I,Size No.21B extended 6" beyond the edge of the surface material.

(5) 3" Asphalt stabilized open graded drainage layer connected to a UD-4 edgedrain located beneath the curb and gutter in accordance with UD-4 standard details.

Notes:

1. All pavement widening shall be performed in accordance with Standard WP-2.
2. In widening sections,the existing pavement shall be saw cut full depth a minimum 1' inside the mainline pavement prior to widening.
3. In widening areas,the existing pavement surface shall be milled a minimum depth if 1.5" and replaced with 1.5" Asphalt Concrete Type SM-9.5D estimated at 175 lbs/sq.yd.
4. In widening areas, Sta. 364+40 to Sta. 386+00, the top of the proposed CTA layer shall be placed level with the top of the existing CTA layer. This may require additional base asphalt, BM-25.0A to attain the existing surface grade.
5. The final surface course shall be placed in a continuous operation across the full pavement width after all previous layers have been completed and shall include all areas where eradication of existing pavement markings has been performed for temporary tie-ins and maintenance of traffic shifts.
6. When widening existing pavement, the pavement subgrade slope shall be designed such that the existing pavement subbase material can properly drain to a standard UD-4 edge drain.
7. All existing paved shoulders and existing gore areas shall be cut with a smooth vertical face to expose the original mainline pavement structure, demolished and reconstructed with the asphalt pavement section identified above. The Design-Builder shall consider that existing pavement edge lines may not necessarily indicate the edge of the mainline pavement structure, and it is the Design-Builder's responsibility to identify the limits of the existing full-strength mainline pavement prior to saw-cutting the pavement or setting barriers.
8. Pavement widening for locations not identified above shall be designed in accordance with the requirements of VDOT Standard WP-2.

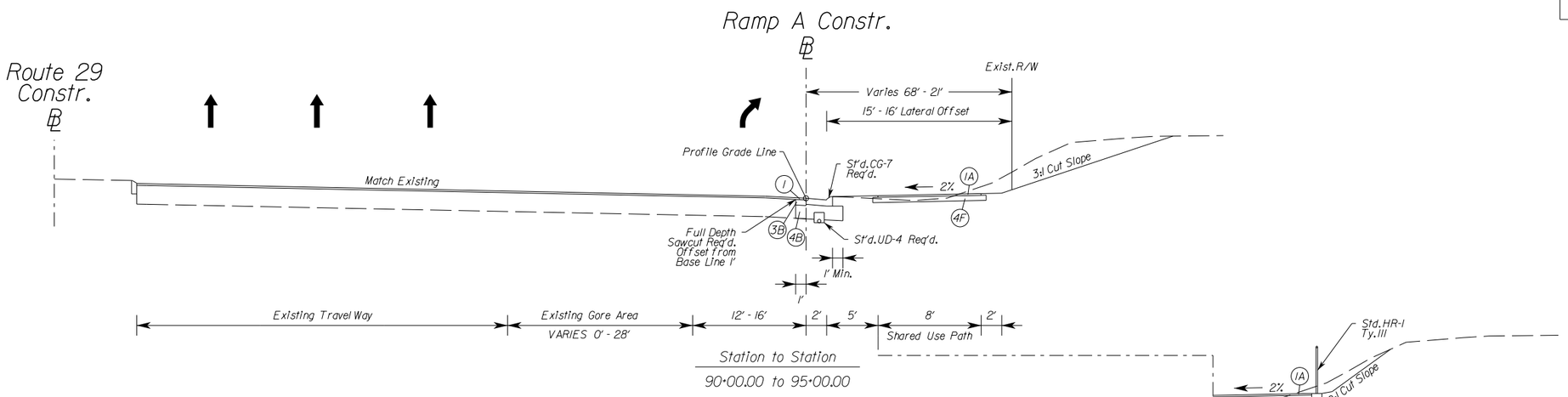
ALLAN MYERS + WRA

Not to Scale	PROJECT 0029-029-350	SHEET NO. 2A(7)

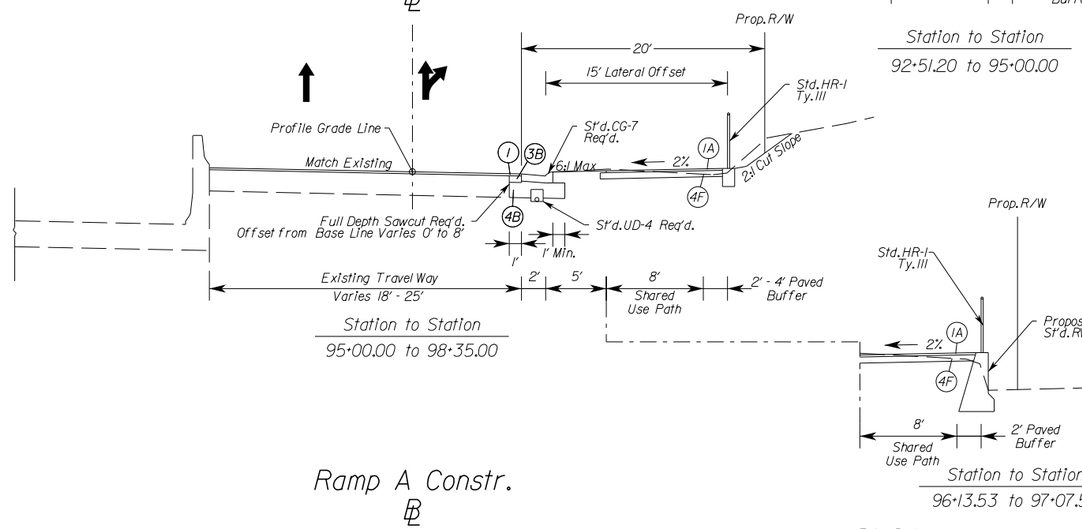
REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	29	0029-029-350 RW-201, C-501	2A(8)

TYPICAL SECTIONS

Ramp A Constr. — Station to Station 90•00.00 to 95•00.00



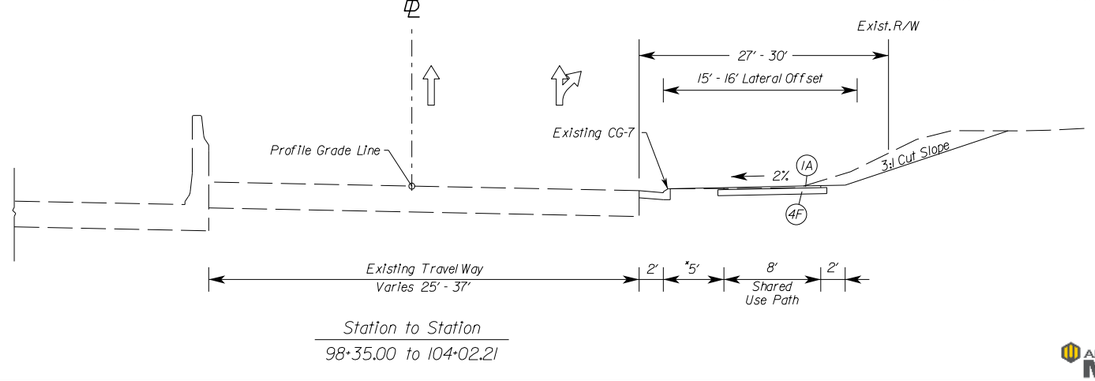
Ramp A Constr. — Station to Station 92•51.20 to 95•00.00



Station to Station 95•00.00 to 98•35.00

Ramp A Constr. — Station to Station 96•13.53 to 97•07.53

Ramp A Constr. — Station to Station 98•35.00 to 104•02.21



(1) 1.5" SMA-9.5 estimated at 175 lbs./s.y.

(1A) 2" SMA-9.5 estimated at 240 lbs./s.y.

(3B) 6.5" BM-25.0A

(4B) 18" Aggregate Base Material, Type I, Size No. 21B. Subbase should be extended to a daylight or 1 ft. behind the curb and gutter and connected to a standard UD-4 edgedrain, in accordance with the UD-4 standard details.

(4F) 6" Aggregate Base Material, Type I, Size No. 21B extended 6" beyond the edge of the surface material.

Notes:

1. All pavement widening shall be performed in accordance with Standard WP-2.
2. In widening sections, the existing pavement shall be saw cut full depth a minimum 1' inside the mainline pavement prior to widening.
3. In widening areas, the existing pavement surface shall be milled a minimum depth if 1.5" and replaced with 1.5" Asphalt Concrete Type SM-9.5D estimated at 175 lbs/sq.yd.
4. In widening areas, Sta. 364+40 to Sta. 386+00, the top of the proposed CTA layer shall be placed level with the top of the existing CTA layer. This may require additional base asphalt, BM-25.0A to attain the existing surface grade.
5. The final surface course shall be placed in a continuous operation across the full pavement width after all previous layers have been completed and shall include all areas where eradication of existing pavement markings has been performed for temporary tie-ins and maintenance of traffic shifts.
6. When widening existing pavement, the pavement subgrade slope shall be designed such that the existing pavement subbase material can properly drain to a standard UD-4 edge drain.
7. All existing paved shoulders and existing gore areas shall be cut with a smooth vertical face to expose the original mainline pavement structure, demolished and reconstructed with the asphalt pavement section identified above. The Design-Builder shall consider that existing pavement edge lines may not necessarily indicate the edge of the mainline pavement structure, and it is the Design-Builder's responsibility to identify the limits of the existing full-strength mainline pavement prior to saw-cutting the pavement or setting barriers.
8. Pavement widening for locations not identified above shall be designed in accordance with the requirements of VDOT Standard WP-2.

ALLAN MYERS + WRA

Not to Scale	PROJECT 0029-029-350	SHEET NO. 2A(8)

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	29	0029-029-350 RW-201,C-501	2A(9)

TYPICAL SECTIONS

(1) 1.5" SMA-9.5 estimated at 175 lbs./s.y.

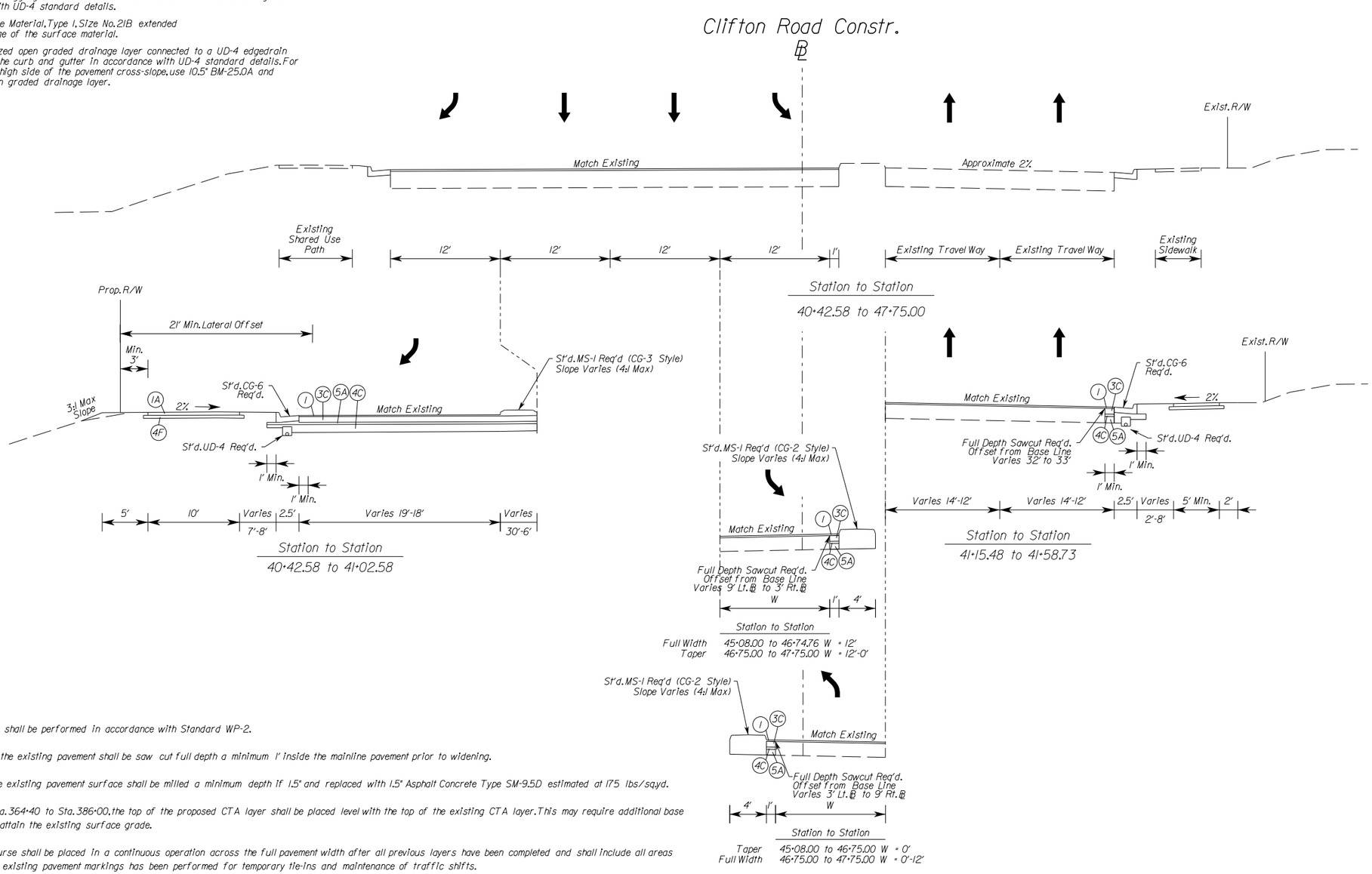
(1A) 2" SMA-9.5 estimated at 240 lbs./s.y.

(3C) 7.5" BM-25.0A

(4C) 8" Cement Treated Aggregate extended a minimum 12" behind the curb and gutter in accordance with UD-4 standard details.

(4F) 6" Aggregate Base Material,Type I,Size No.21B extended 6" beyond the edge of the surface material.

(5A) 3" Asphalt stabilized open graded drainage layer connected to a UD-4 edgedrain located beneath the curb and gutter in accordance with UD-4 standard details.For widening on the high side of the pavement cross-slope,use 10.5" BM-25.0A and eliminate the open graded drainage layer.



Notes:

1. All pavement widening shall be performed in accordance with Standard WP-2.
2. In widening sections,the existing pavement shall be saw cut full depth a minimum 1' inside the mainline pavement prior to widening.
3. In widening areas,the existing pavement surface shall be milled a minimum depth if 1.5" and replaced with 1.5" Asphalt Concrete Type SM-9.5D estimated at 175 lbs/sq.yd.
4. In widening areas,Sta.364+40 to Sta.386+00,the top of the proposed CTA layer shall be placed level with the top of the existing CTA layer.This may require additional base asphalt,BM-25.0A to attain the existing surface grade.
5. The final surface course shall be placed in a continuous operation across the full pavement width after all previous layers have been completed and shall include all areas where eradication of existing pavement markings has been performed for temporary tie-ins and maintenance of traffic shifts.
6. When widening existing pavement,the pavement subgrade slope shall be designed such that the existing pavement subbase material can properly drain to a standard UD-4 edge drain.
7. All existing paved shoulders and existing gore areas shall be cut with a smooth vertical face to expose the original mainline pavement structure,demolished and reconstructed with the asphalt pavement section identified above.The Design-Builder shall consider that existing pavement edge lines may not necessarily indicate the edge of the mainline pavement structure,and it is the Design-Builder's responsibility to identify the limits of the existing full-strength mainline pavement prior to saw-cutting the pavement or setting barriers.
8. Pavement widening for locations not identified above shall be designed in accordance with the requirements of VDOT Standard WP-2.

ALLAN MYERS + WRA

Not to Scale	PROJECT 0029-029-350	SHEET NO. 2A(9)

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	29	0029-029-350 RW-201, C-501	2A(10)

TYPICAL SECTIONS

(1) 1.5" SMA-9.5 estimated at 175 lbs./s.y.

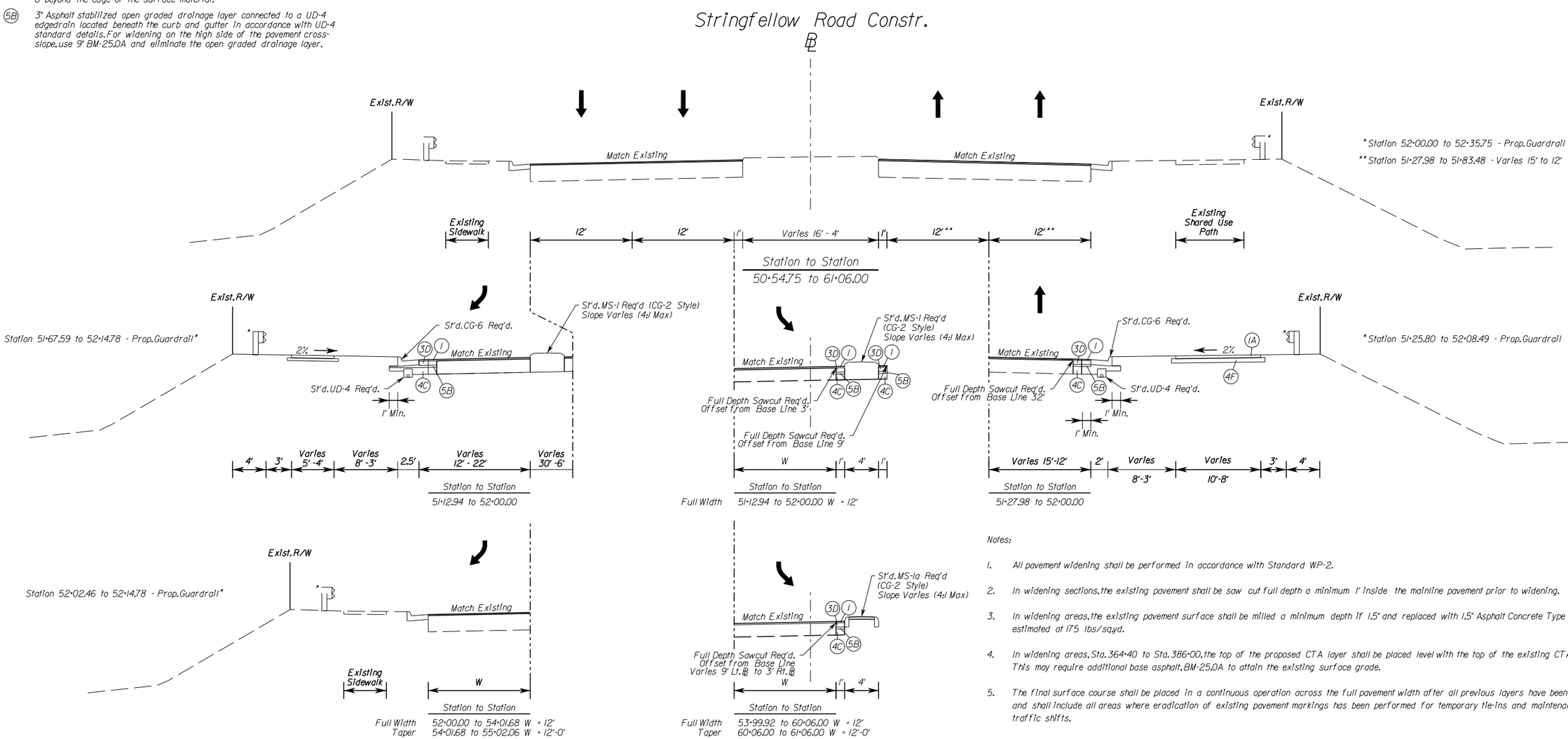
(1A) 2" SMA-9.5 estimated at 240 lbs./s.y.

(3D) 6" BM-25.0A

(4C) 8" Cement Treated Aggregate extended a minimum 12" behind the curb and gutter in accordance with UD-4 standard details.

(4F) 6" Aggregate Base Material, Type I, Size No. 21B extended 6" beyond the edge of the surface material.

(5B) 3" Asphalt stabilized open graded drainage layer connected to a UD-4 edgedrain located beneath the curb and gutter in accordance with UD-4 standard details. For widening on the high side of the pavement cross-slope, use 9" BM-25.0A and eliminate the open graded drainage layer.



Notes:

1. All pavement widening shall be performed in accordance with Standard WP-2.
2. In widening sections, the existing pavement shall be saw cut full depth a minimum 1' inside the mainline pavement prior to widening.
3. In widening areas, the existing pavement surface shall be milled a minimum depth if 1.5" and replaced with 1.5" Asphalt Concrete Type SM-9.5D estimated at 175 lbs/sq.yd.
4. In widening areas, Sta. 364+40 to Sta. 386+00, the top of the proposed CTA layer shall be placed level with the top of the existing CTA layer. This may require additional base asphalt, BM-25.0A to attain the existing surface grade.
5. The final surface course shall be placed in a continuous operation across the full pavement width after all previous layers have been completed and shall include all areas where eradication of existing pavement markings has been performed for temporary tie-ins and maintenance of traffic shifts.
6. When widening existing pavement, the pavement subgrade slope shall be designed such that the existing pavement subbase material can properly drain to a standard UD-4 edge drain.
7. All existing paved shoulders and existing gore areas shall be cut with a smooth vertical face to expose the original mainline pavement structure, demolished and reconstructed with the asphalt pavement section identified above. The Design-Builder shall consider that existing pavement edge lines may not necessarily indicate the edge of the mainline pavement structure, and it is the Design-Builder's responsibility to identify the limits of the existing full-strength mainline pavement prior to saw-cutting the pavement or setting barriers.
8. Pavement widening for locations not identified above shall be designed in accordance with the requirements of VDOT Standard WP-2.

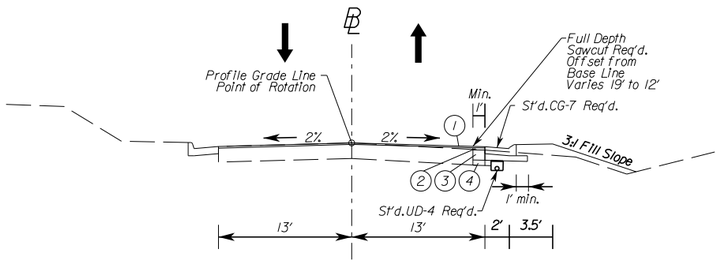
ALLAN MYERS + WRA

Not to Scale	PROJECT 0029-029-350	SHEET NO. 2A(10)

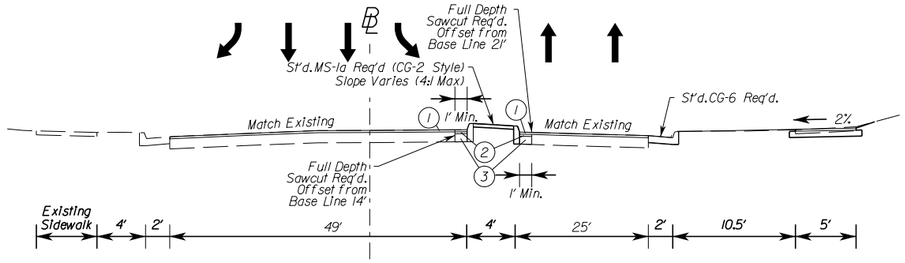
TYPICAL SECTIONS

Side Roads

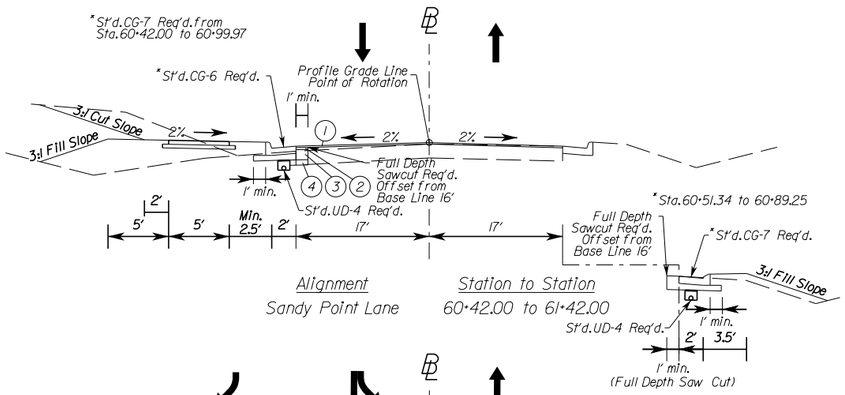
REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	29	0029-029-350 RW-201, C-501	2A(11)



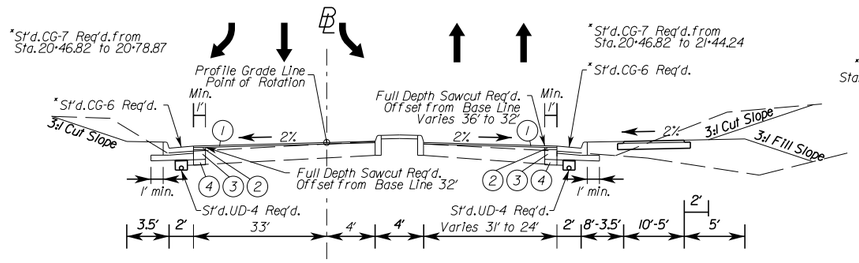
Alignment: Moore Road — Station to Station: 30+93.38 to 31+30.96



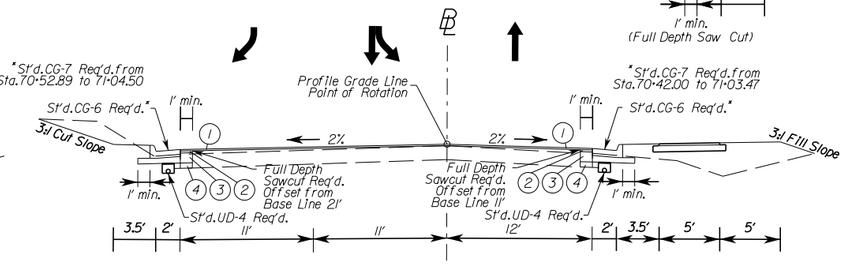
Alignment: Centreville Farms Road — Station to Station: 10+57.00 to 11+28.92



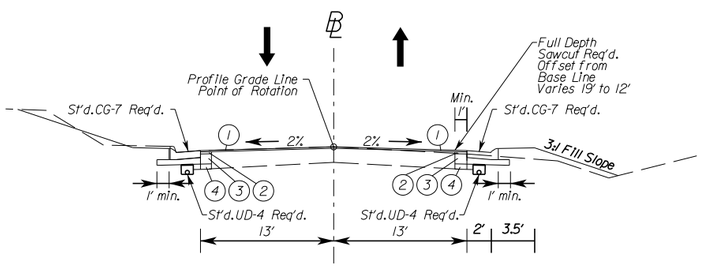
Alignment: Sandy Point Lane — Station to Station: 60+42.00 to 61+42.00



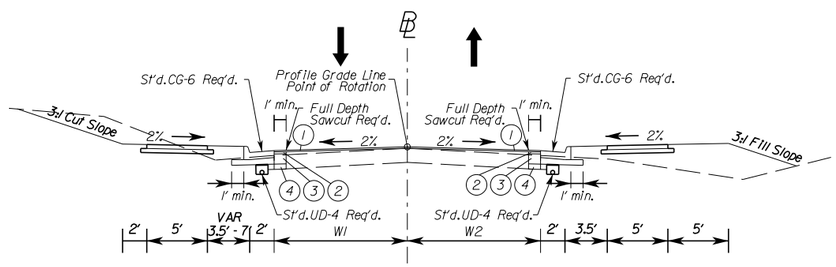
Alignment: Union Mill Road — Station to Station: 20+46.82 to 21+62.92



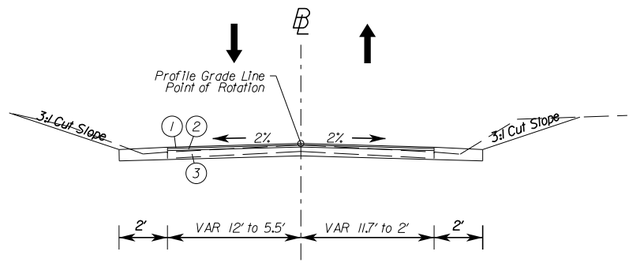
Alignment: Hampton Forest Way — Station to Station: 70+42.00 to 71+80.00



Alignment: Moore Road — Station to Station: 30+46.65 to 30+93.38



Alignment	Station to Station	W1	W2	Inset
Meadow Estates Drive	80+84.61 to 81+31.53	23'	16'	B
Buckleys Gate Drive	100+96.18 to 101+25.00	17'	17'	J



Alignment: Willow Road — Station to Station: 120+42.00 to 121+80.37

(1) 1.5" SMA-9.5 estimated at 175 lbs./s.y.

(2) 2" IM-19.0D estimated at 242 lbs./s.y.

(3) 10" BM-25.0A

(4) 12" Aggregate Base Material, Type 1, Size No. 21B. Subbase should be extended to a daylight or 1 ft. behind the curb and gutter and connected to a standard UD-4 edgedrain. In accordance with the UD-4 standard details. For widening on the high side of the pavement cross slope, use 10" Cement Treated Aggregate.

Notes:

1. All pavement widening shall be performed in accordance with Standard WP-2.
2. In widening sections, the existing pavement shall be saw cut full depth a minimum 1' inside the mainline pavement prior to widening.
3. In widening areas, the existing pavement surface shall be milled a minimum depth of 1.5" and replaced with 1.5" Asphalt Concrete Type SM-9.5D estimated at 175 lbs/sq.yd.
4. In widening areas, Sta. 364+40 to Sta. 386+00, the top of the proposed CTA layer shall be placed level with the top of the existing CTA layer. This may require additional base asphalt, BM-25.0A to attain the existing surface grade.
5. The final surface course shall be placed in a continuous operation across the full pavement width after all previous layers have been completed and shall include all areas where eradication of existing pavement markings has been performed for temporary tie-ins and maintenance of traffic shifts.
6. When widening existing pavement, the pavement subgrade slope shall be designed such that the existing pavement subbase material can properly drain to a standard UD-4 edge drain.
7. All existing paved shoulders and existing gore areas shall be cut with a smooth vertical face to expose the original mainline pavement structure, demolished and reconstructed with the asphalt pavement section identified above. The Design-Builder shall consider that existing pavement edge lines may not necessarily indicate the edge of the mainline pavement structure, and it is the Design-Builder's responsibility to identify the limits of the existing full-strength mainline pavement prior to saw-cutting the pavement or setting barriers.
8. Pavement widening for locations not identified above shall be designed in accordance with the requirements of VDOT Standard WP-2.

ALLAN MYERS + WRA

Not to Scale	PROJECT 0029-029-350	SHEET NO. 2A(11)

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	29	0029-029-350 RW-201, C-501	2A(12)

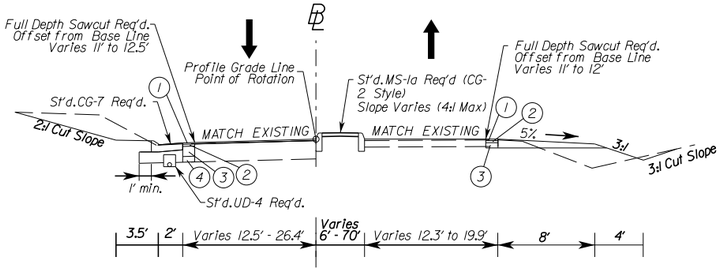
TYPICAL SECTIONS

Side Roads & Service Roads

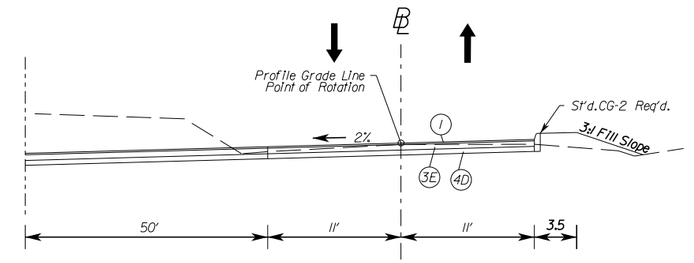
Notes:

1. All pavement widening shall be performed in accordance with Standard WP-2.
2. In widening sections, the existing pavement shall be saw cut full depth a minimum 1' inside the mainline pavement prior to widening.
3. In widening areas, the existing pavement surface shall be milled a minimum depth if 1.5" and replaced with 1.5" Asphalt Concrete Type SM-9.5D estimated at 175 lbs/sq.yd.
4. In widening areas, Sta. 364+40 to Sta. 386+00, the top of the proposed CT-A layer shall be placed level with the top of the existing CT-A layer. This may require additional base asphalt, BM-25.0A to attain the existing surface grade.
5. The final surface course shall be placed in a continuous operation across the full pavement width after all previous layers have been completed and shall include all areas where eradication of existing pavement markings has been performed for temporary tie-ins and maintenance of traffic shifts.
6. When widening existing pavement, the pavement subgrade slope shall be designed such that the existing pavement subbase material can properly drain to a standard UD-4 edge drain.
7. All existing paved shoulders and existing gore areas shall be cut with a smooth vertical face to expose the original mainline pavement structure, demolished and reconstructed with the asphalt pavement section identified above. The Design-Builder shall consider that existing pavement edge lines may not necessarily indicate the edge of the mainline pavement structure, and it is the Design-Builder's responsibility to identify the limits of the existing full-strength mainline pavement prior to saw-cutting the pavement or setting barriers.
8. Pavement widening for locations not identified above shall be designed in accordance with the requirements of VDOT Standard WP-2.

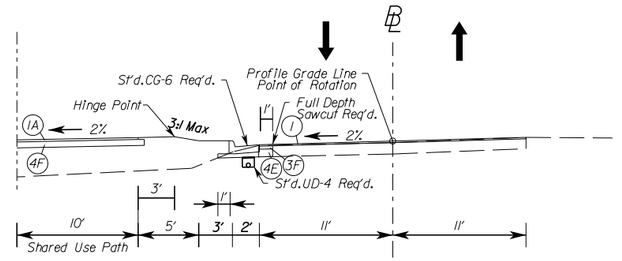
(1) 1.5" SMA-9.5 estimated at 175 lbs./s.y.
(1A) 2" SMA-9.5 estimated at 240 lbs./s.y.
(2) 2" IM-19.0D estimated at 242 lbs./s.y.
(3) 10" BM-25.0A
(3E) 5.5" BM-25.0A
(3F) 3" BM-25.0A
(4) 12" Aggregate Base Material, Type 1, Size No. 21B. Subbase should be extended to a daylight or 1 ft. behind the curb and gutter and connected to a standard UD-4 edgedrain, in accordance with the UD-4 standard details. For widening on the high side of the pavement cross slope, use 10" Cement Treated Aggregate.
(4D) 8" Aggregate Base Material, Type 1, Size No. 21B. The subbase should be extended to daylight or 12" behind the curb and gutter and connected to a standard UD-4 edgedrain, in accordance with UD-4 standard details.
(4E) 6" Aggregate Base Material, Type 1, Size No. 21B. The subbase should be extended to daylight or 12" behind the curb and gutter and connected to a standard UD-4 edgedrain, in accordance with UD-4 standard details.
(4F) 6" Aggregate Base Material, Type 1, Size No. 21B extended 6" beyond the edge of the surface material.



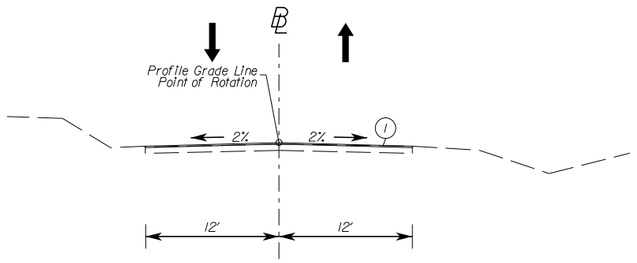
Alignment: Willowmeade Drive
Station to Station: 91+22.56 to 91+93.73



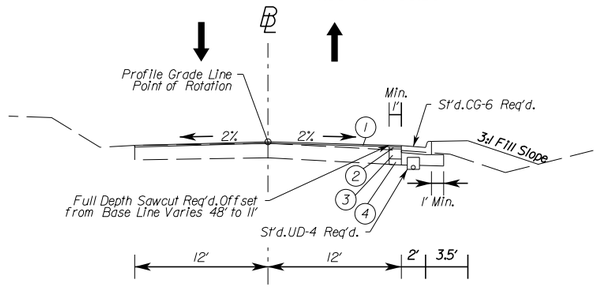
Alignment: Service Road #1
Station to Station: 1+29.52 to 1+95.57



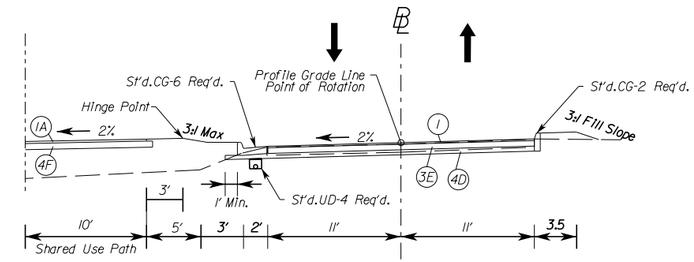
Alignment: Service Road #1
Station to Station: 3+60.00 to 4+73.00



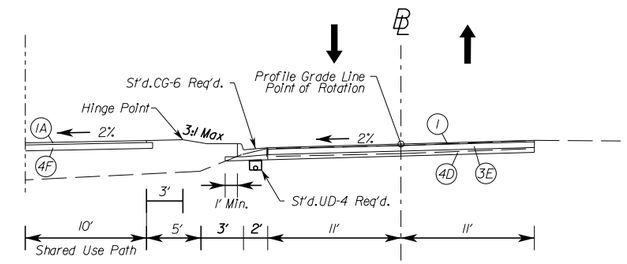
Alignment: Summit Drive
Station to Station: 110+80.21 to 111+06.07
111+41.06 to 111+60.50



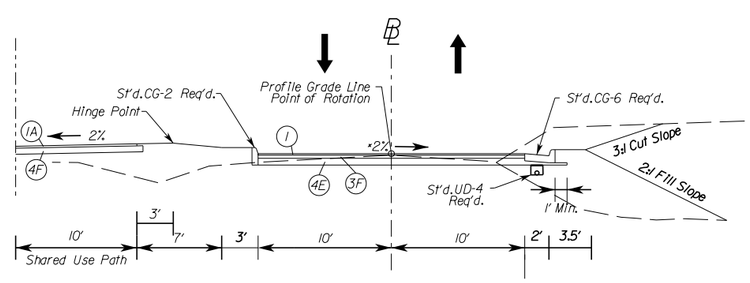
Alignment: Summit Drive
Station to Station: 110+42.01 to 111+41.06



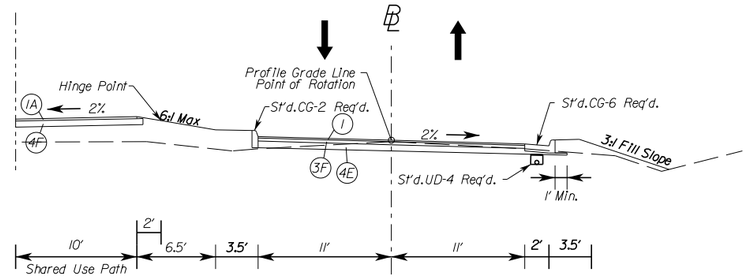
Alignment: Service Road #1
Station to Station: 1+95.57 to 2+50.33



Alignment: Service Road #1
Station to Station: 2+50.33 to 3+60.00



Alignment: Service Road #2
Station to Station: 1+82.50 to 8+62.67
*2% Reverse Crown From Sta. 5+60 to 8+62.67



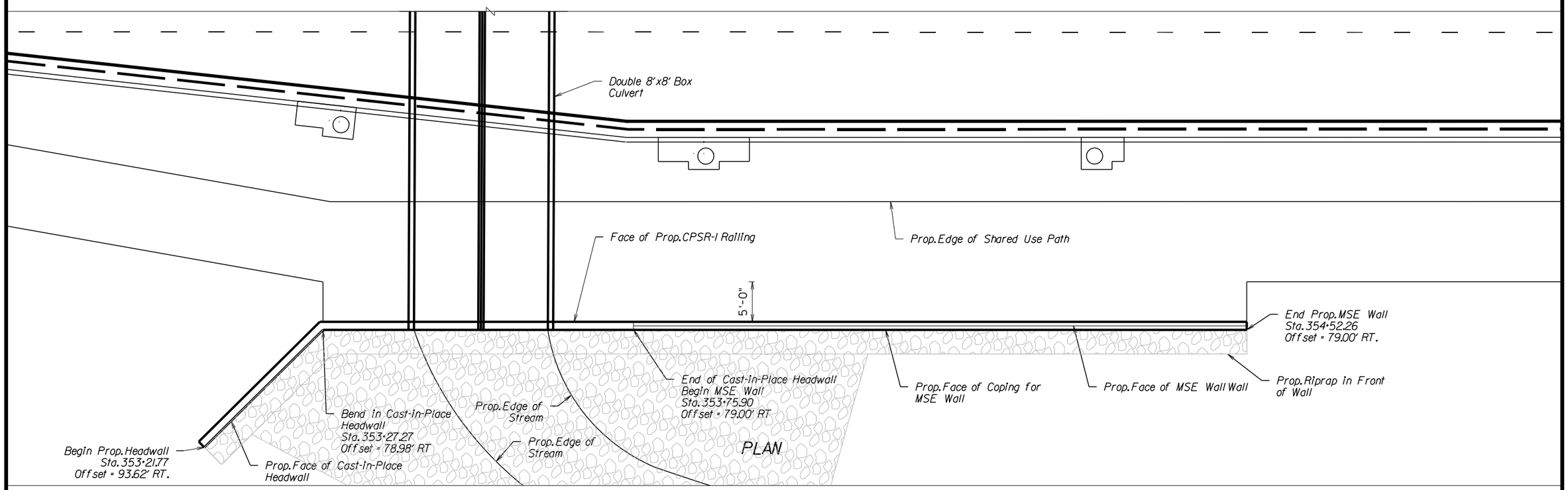
Alignment: Service Road #3
Station to Station: 7+04.16 to 11+37.12

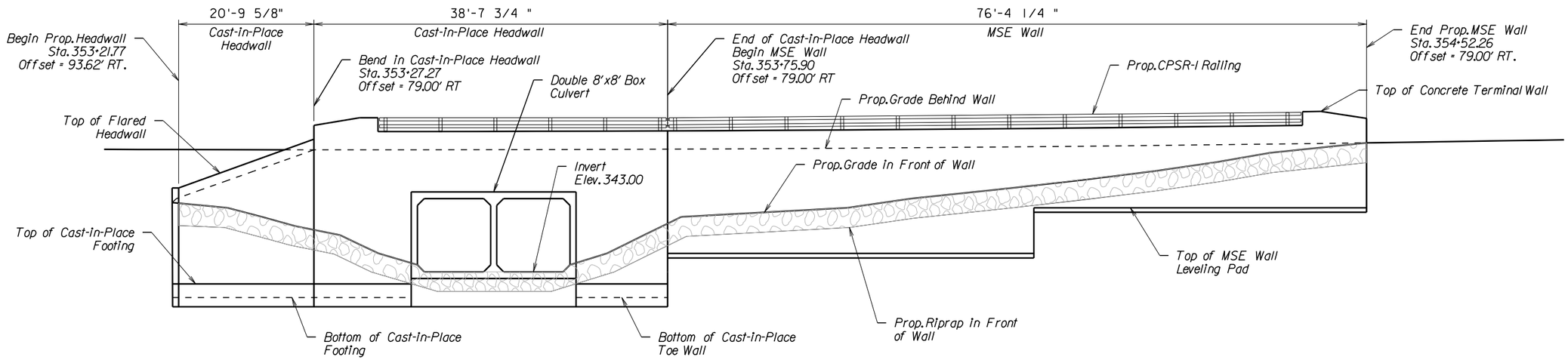
ALLAN MYERS + WRA

Not to Scale	PROJECT 0029-029-350	SHEET NO. 2A(12)

HEADWALL FOR WILLOW SPRINGS DOUBLE 8'X8' BOX CULVERT

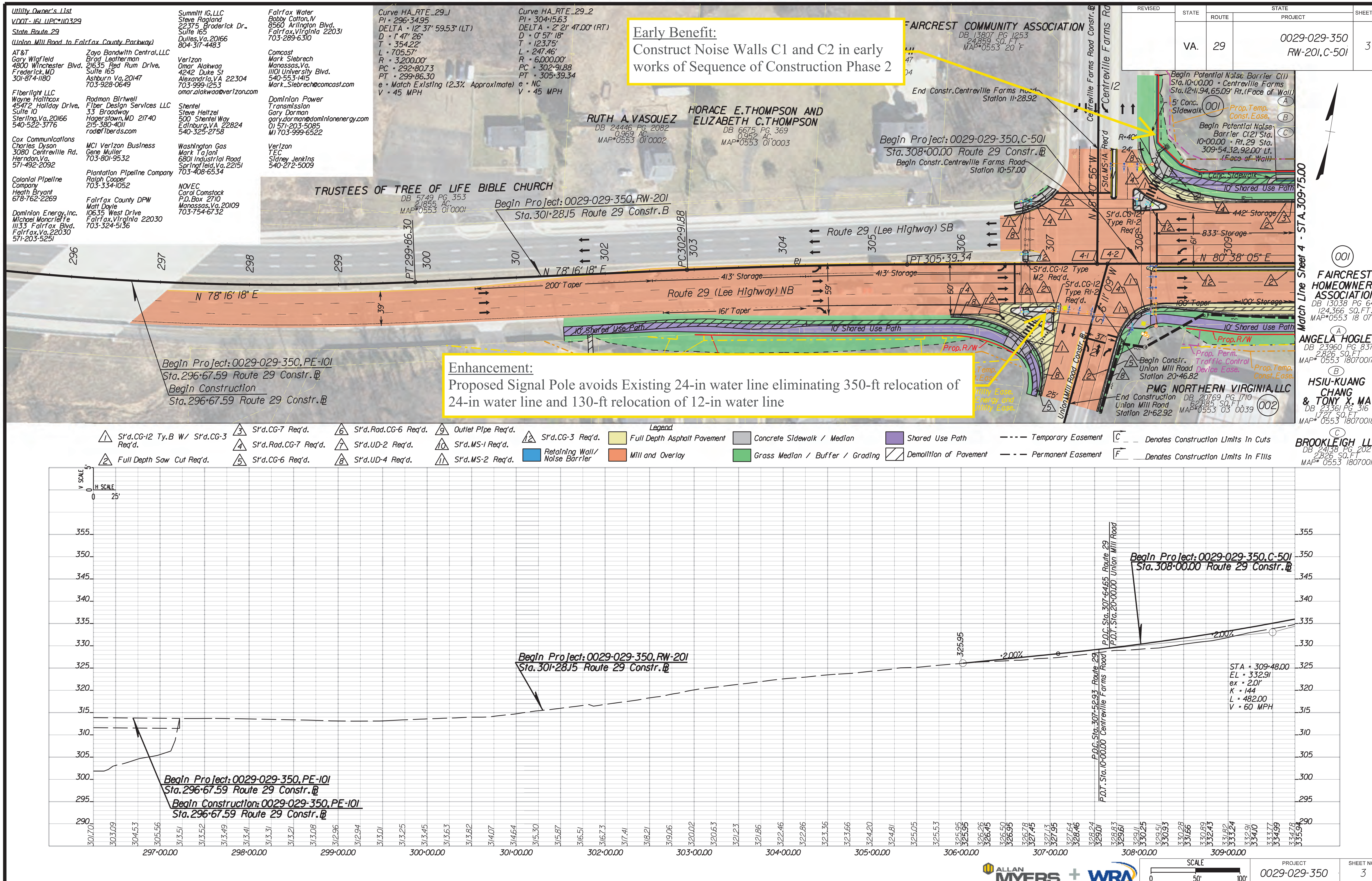
REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	29	0029-029-350 RW-201, C-501	2A(13)





ELEVATION

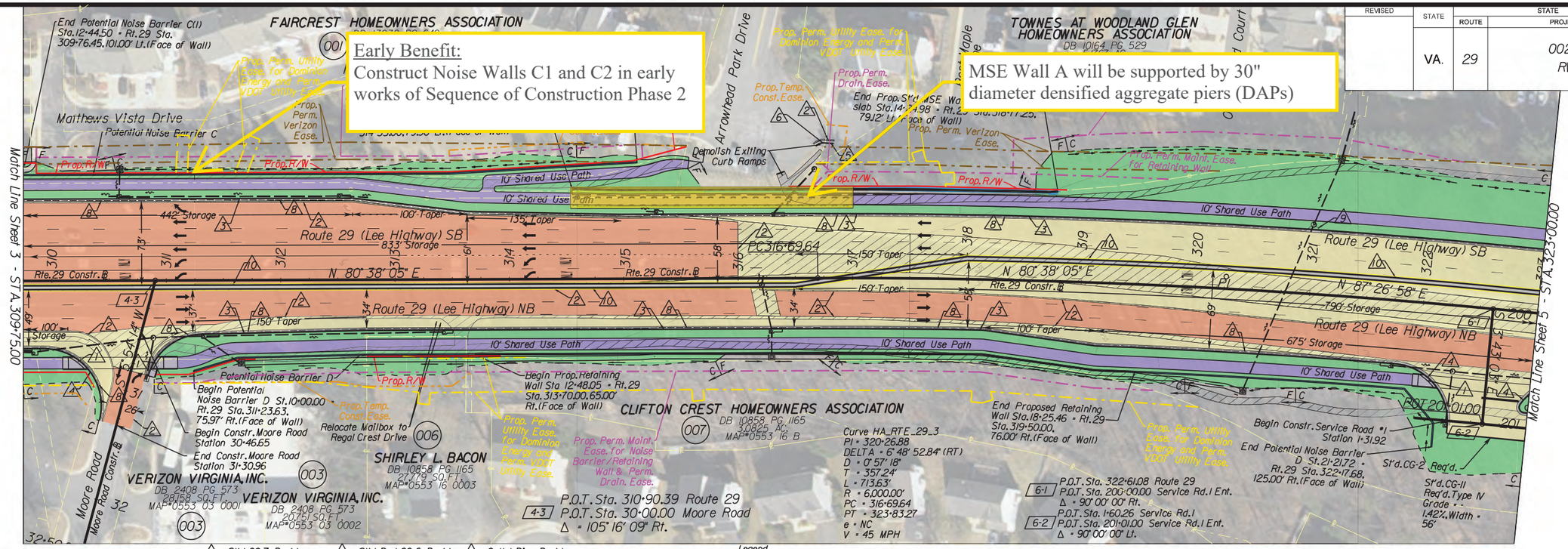
Not to Scale	PROJECT 0029-029-350	SHEET NO. 2A(13)	


Early Benefit:
Construct Noise Walls C1 and C2 in early works of Sequence of Construction Phase 2
Enhancement:
Proposed Signal Pole avoids Existing 24-in water line eliminating 350-ft relocation of 24-in water line and 130-ft relocation of 12-in water line
TRUSTEES OF TREE OF LIFE BIBLE CHURCH
RUTH A. VASQUEZ
HORACE E. THOMPSON AND ELIZABETH C. THOMPSON
FAIRCREST COMMUNITY ASSOCIATION
FAIRCREST HOMEOWNERS ASSOCIATION
ANGELA HOGLER
HSIU-KUANG CHANG & TONY X. MA
PMG NORTHERN VIRGINIA, LLC
BROOKLEIGH LLC
Route 29 (Lee Highway) SB
Route 29 (Lee Highway) NB
Begin Project: 0029-029-350, PE-101
Sta. 296+67.59 Route 29 Constr.
Begin Project: 0029-029-350, RW-201
Sta. 301+28.15 Route 29 Constr.
Begin Project: 0029-029-350, C-501
Sta. 308+00.00 Route 29 Constr.
Match Line Sheet 4 - STA. 309+75.00
Legend
Full Depth Asphalt Pavement
Mill and Overlay
Concrete Sidewalk / Median
Grass Median / Buffer / Grading
Shared Use Path
Demolition of Pavement
Temporary Easement
Permanent Easement
Retaining Wall/ Noise Barrier
VA. 29 0029-029-350 RW-201, C-501 3
ALLAN MYERS + WRA

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	29	0029-029-350 RW-201,C-501	4

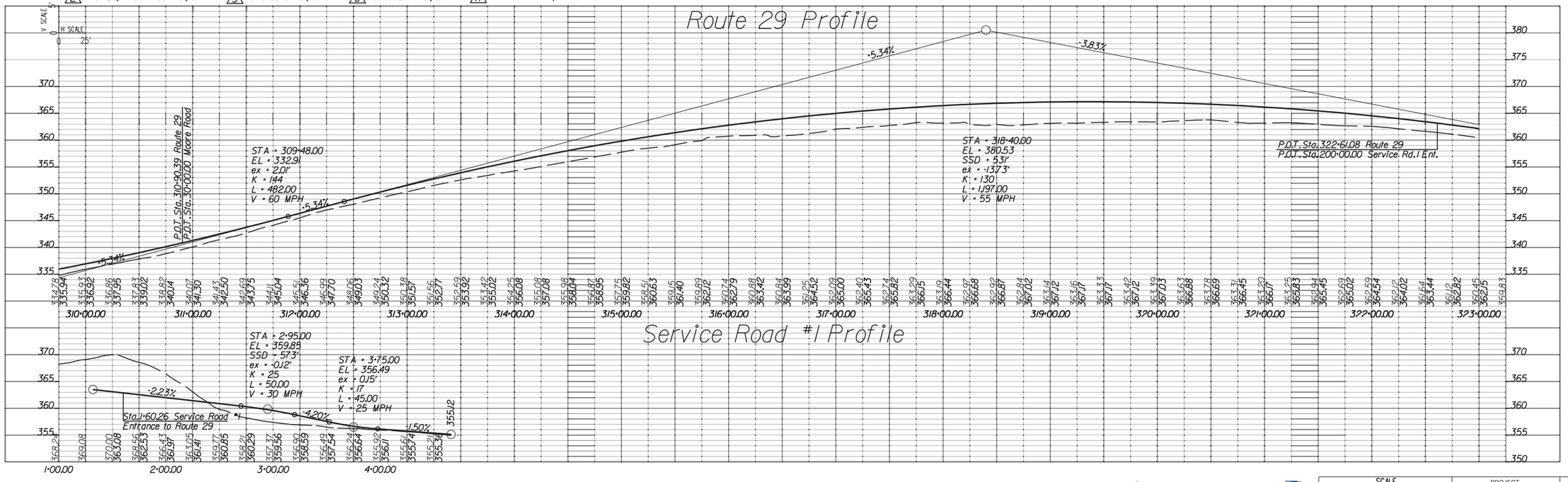
Early Benefit:
Construct Noise Walls C1 and C2 in early works of Sequence of Construction Phase 2

MSE Wall A will be supported by 30" diameter densified aggregate piers (DAPs)



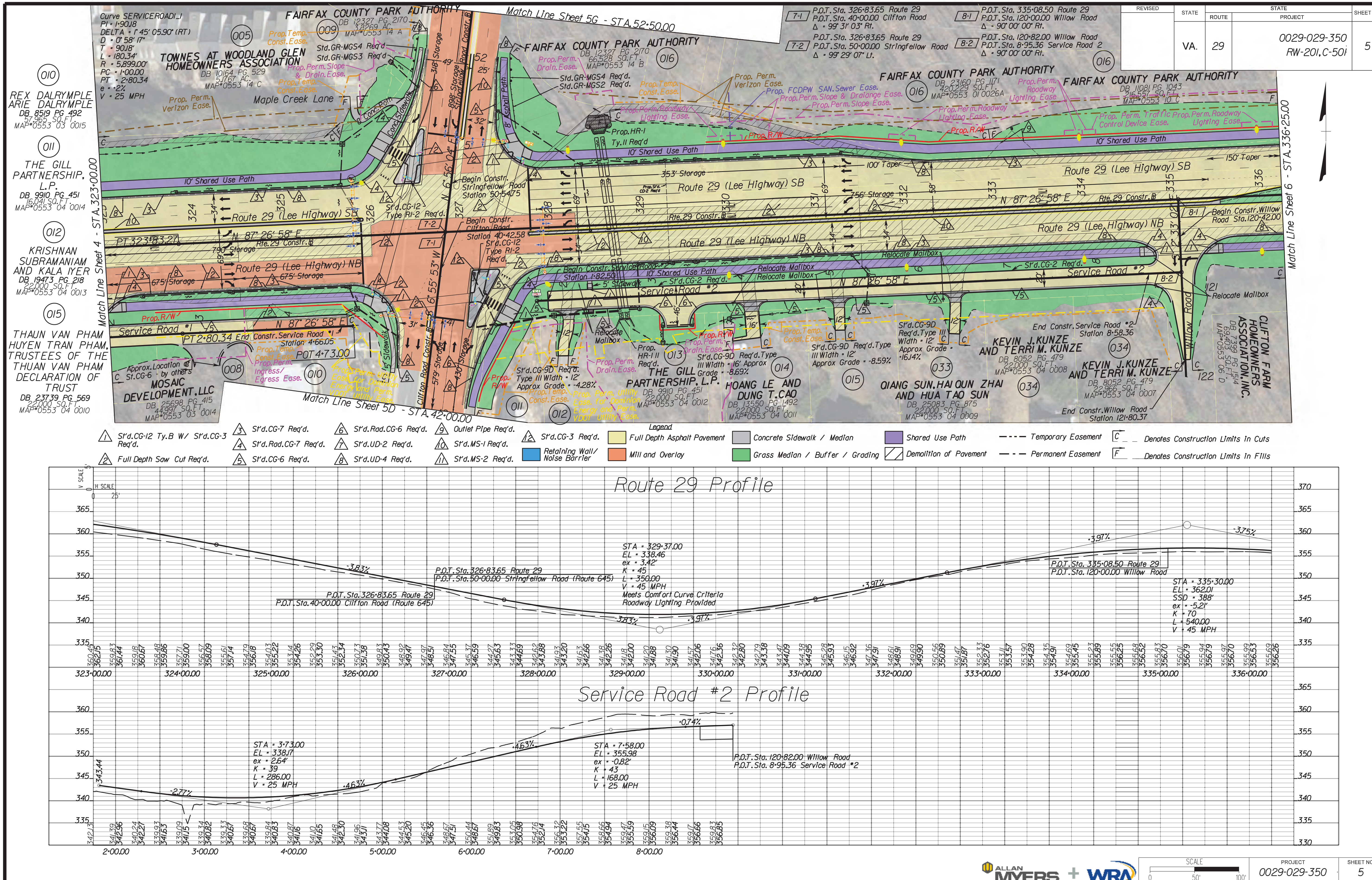
Legend

1 St'd.CG-12 Ty.B W/ St'd.CG-3 Req'd.	3 St'd.CG-7 Req'd.	6 St'd.Rad.CG-6 Req'd.	9 Outlet Pipe Req'd.	12 St'd.CG-3 Req'd.	Full Depth Asphalt Pavement	Concrete Sidewalk / Median	Shared Use Path	Temporary Easement	C Denotes Construction Limits In Cuts
2 Full Depth Saw Cut Req'd.	4 St'd.Rad.CG-7 Req'd.	7 St'd.UD-2 Req'd.	10 St'd.MS-1 Req'd.	Retaining Wall/ Noise Barrier	Mill and Overlay	Grass Median / Buffer / Grading	Demolition of Pavement	Permanent Easement	F Denotes Construction Limits In Fills
	5 St'd.CG-6 Req'd.	8 St'd.UD-4 Req'd.	11 St'd.MS-2 Req'd.						



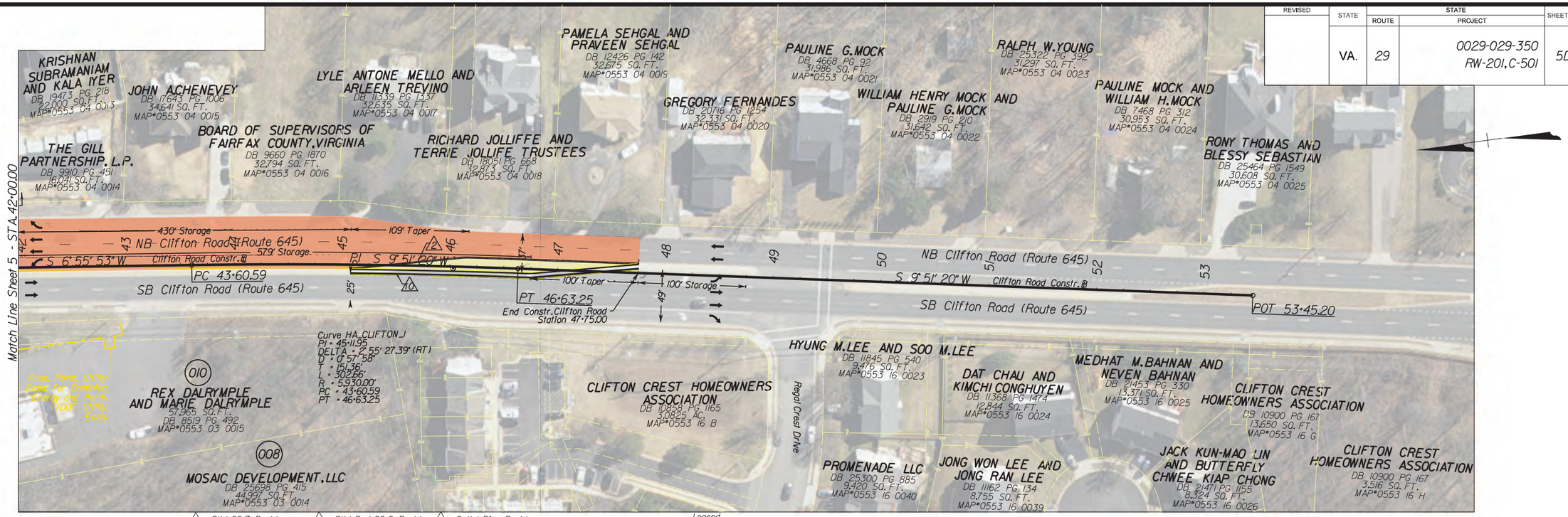
ALLAN MYERS + WRA

SCALE	PROJECT	SHEET NO.
0 50' 100'	0029-029-350	4



STATE VA.
ROUTE 29
PROJECT 0029-029-350
RW-201, C-501
SHEET NO. 5
Match Line Sheet 5G - STA. 52+50.00
Match Line Sheet 5D - STA. 42+00.00
Match Line Sheet 4 - STA. 323+00.00
Match Line Sheet 6 - STA. 336+25.00
FAIRFAX COUNTY PARK AUTHORITY
TOWNES AT WOODLAND GLEN HOMEOWNERS ASSOCIATION
REX DALRYMPLE ARIE DALRYMPLE
THE GILL PARTNERSHIP, L.P.
KRISHNAN SUBRAMANIAM AND KALA IYER
THAUN VAN PHAM HUYEN TRAN PHAM, TRUSTEES OF THE THUAN VAN PHAM DECLARATION OF TRUST
MOSAIC DEVELOPMENT, LLC
HOANG LE AND DUNG T. CAO
QIANG SUN, HAI QUN ZHAI AND HUA TAO SUN
KEVIN J. KUNZE AND TERRI M. KUNZE
CLIFTON FARM HOMEOWNERS ASSOCIATION, INC.
Route 29 (Lee Highway) SB
Route 29 (Lee Highway) NB
Service Road #1
Service Road #2
Maple Creek Lane
Clifton Road
Stringfellow Road
Willow Road
10' Shared Use Path
Legend
Std. CG-12 Ty. B W/ Std. CG-3 Req'd.
Full Depth Saw Cut Req'd.
Std. CG-7 Req'd.
Std. Rad. CG-7 Req'd.
Std. CG-6 Req'd.
Std. Rad. CG-6 Req'd.
Std. UD-2 Req'd.
Std. UD-4 Req'd.
Outlet Pipe Req'd.
Std. MS-1 Req'd.
Std. MS-2 Req'd.
Std. CG-3 Req'd.
Retaining Wall / Noise Barrier
Full Depth Asphalt Pavement
Mill and Overlay
Concrete Sidewalk / Median
Grass Median / Buffer / Grading
Shared Use Path
Demolition of Pavement
Temporary Easement
Permanent Easement
Denotes Construction Limits In Cuts
Denotes Construction Limits In Fills
Route 29 Profile
Service Road #2 Profile
ALLAN MYERS + WRA
SCALE 0 50' 100'
PROJECT 0029-029-350
SHEET NO. 5

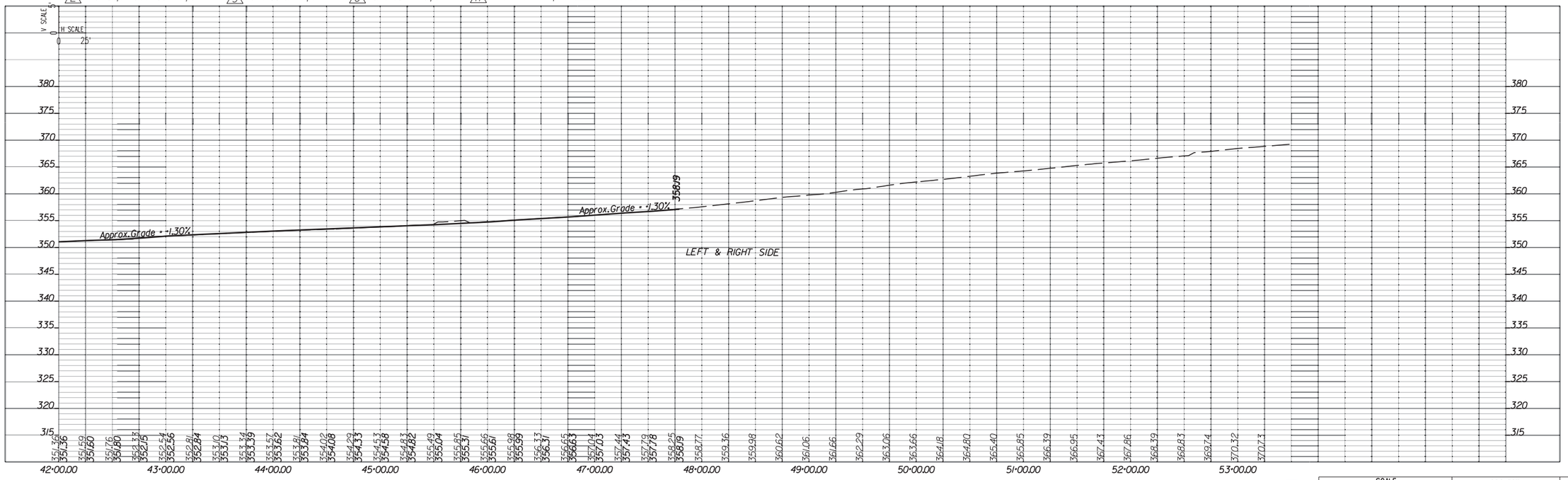
REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	29	0029-029-350 RW-201,C-501	5D



Legend

1. St'd.CG-12 Ty.B W/ St'd.CG-3 Req'd.
2. Full Depth Saw Cut Req'd.
3. St'd.CG-7 Req'd.
4. St'd.Rad.CG-7 Req'd.
5. St'd.CG-6 Req'd.
6. St'd.Rad.CG-6 Req'd.
7. St'd.UD-2 Req'd.
8. St'd.UD-4 Req'd.
9. Outlet Pipe Req'd.
10. St'd.MS-1 Req'd.
11. St'd.MS-2 Req'd.
12. St'd.CG-3 Req'd.

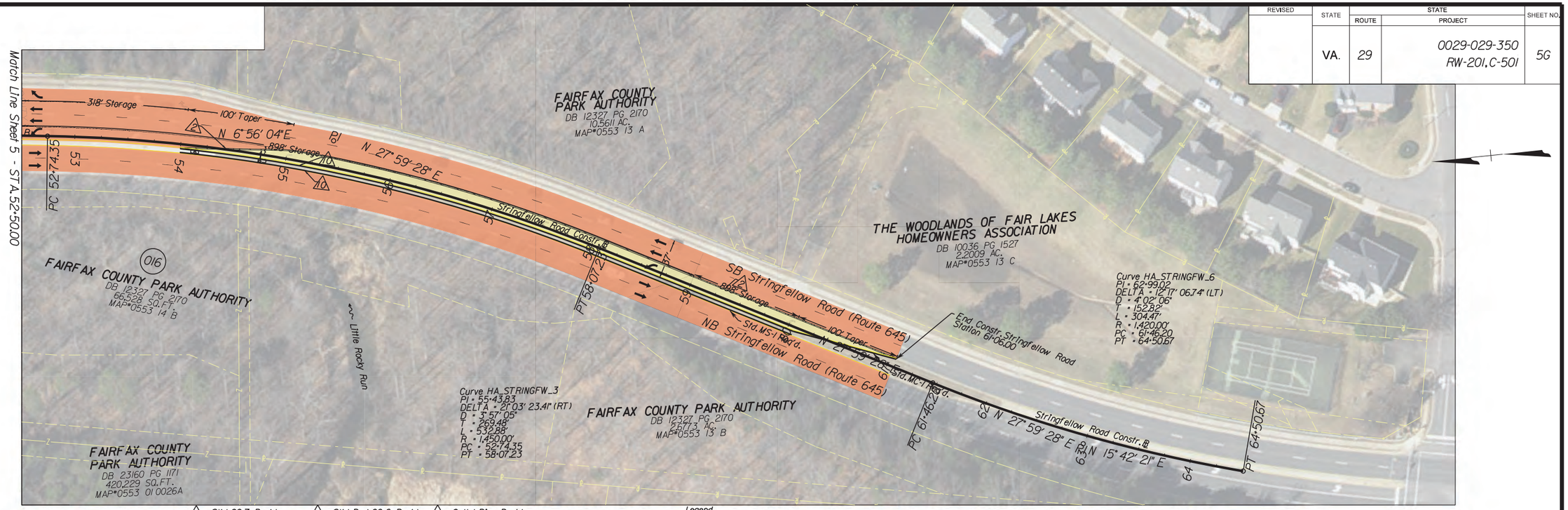
Retaining Wall/ Noise Barrier
Full Depth Asphalt Pavement
Mill and Overlay
Concrete Sidewalk / Median
Grass Median / Buffer / Grading
Shared Use Path
Demolition of Pavement
Temporary Easement
Permanent Easement
C Denotes Construction Limits In Cuts
F Denotes Construction Limits In Fills



ALLAN MYERS + WRA

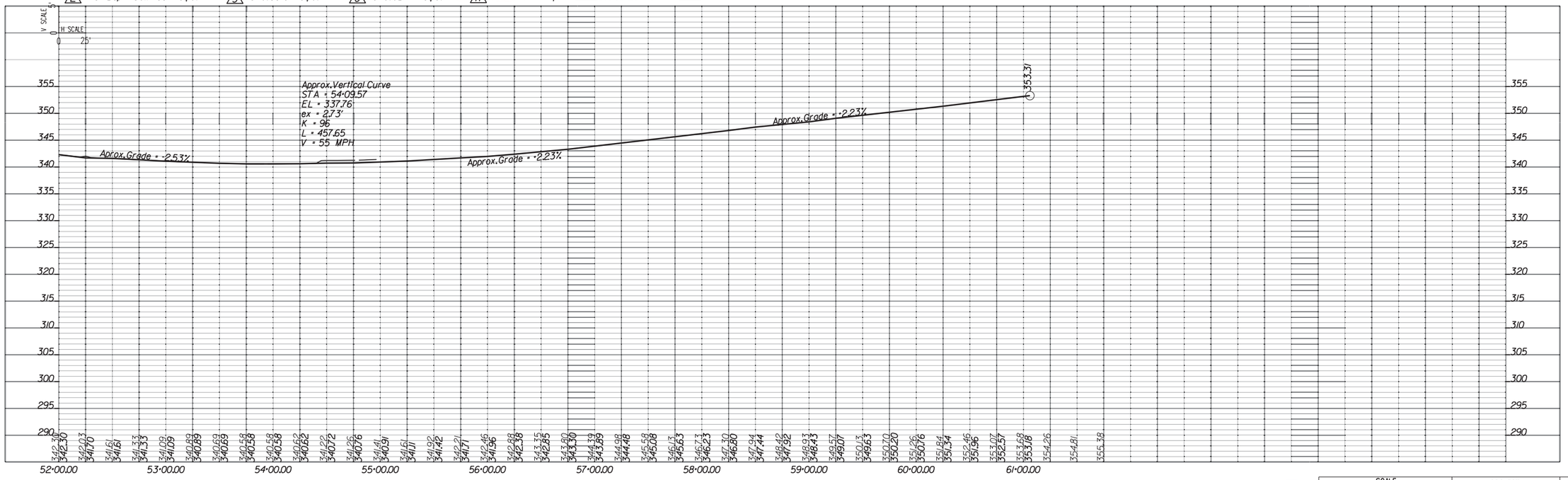
SCALE	PROJECT	SHEET NO.
0 50' 100'	0029-029-350	5D

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	29	0029-029-350 RW-201,C-501	5G



Legend

1 Std.CG-12 Ty.B W/ Std.CG-3 Req'd.	3 Std.CG-7 Req'd.	6 Std.Rad.CG-6 Req'd.	9 Outlet Pipe Req'd.	12 Std.CG-3 Req'd.	Full Depth Asphalt Pavement	Concrete Sidewalk / Median	Shared Use Path	Temporary Easement	C Denotes Construction Limits In Cuts
2 Full Depth Saw Cut Req'd.	4 Std.Rad.CG-7 Req'd.	7 Std.UD-2 Req'd.	10 Std.MS-1 Req'd.	Retaining Wall/ Noise Barrier	Mill and Overlay	Grass Median / Buffer / Grading	Demolition of Pavement	Permanent Easement	F Denotes Construction Limits In Fills
	5 Std.CG-6 Req'd.	8 Std.UD-4 Req'd.	11 Std.MS-2 Req'd.						



ALLAN MYERS + WRA

SCALE	PROJECT	SHEET NO.
0 50' 100'	0029-029-350	5G

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	29	0029-029-350 RW-201,C-501	6

Match Line Sheet 5 - STA 336+25.00

Match Line Sheet 7 - STA 349+50.00

Curve HA_RTE_29_4
PI = 347+37.33
DELTA = 13° 33' 14.86" (LT)
D = 1°24' 43"
T = 482.24'
L = 959.98'
R = 4058.00'
PC = 342+55.09
PT = 352+15.06
e = 2.0%
Lr = 10'
Lt = 10'
V = 45 MPH

FAIRFAX COUNTY PARK AUTHORITY
DB 11081 PG 1043
216,582 SQ.FT.
MAP#0553 10 C

FAIRFAX COUNTY PARK AUTHORITY
DB 11081 PG 1043
403,127 SQ.FT.
MAP#0553 10 S

FAIRFAX COUNTY PARK AUTHORITY
DB 11081 PG 1043
167,966 SQ.FT.
MAP#0553 10 D

FAIRFAX COUNTY PARK AUTHORITY
DB 11081 PG 1043
403,127 SQ.FT.
MAP#0553 10 S

WU-HSIUNG LIAO AND CHIH LIAO
DB 10425 PG 1155
22,000 SQ.FT.
MAP#0553 04 0004

CLIFTON FARM HOMEOWNER ASSOCIATION, INC.
DB 7399 PG 1614
69,403 SQ.FT.
MAP#0553 06 D

DAVID SALMAN
DB 24182 PG 542
22,000 SQ.FT.
MAP#0553 04 0003

ISA SARAC
DB 24989 PG 1916
22,000 SQ.FT.
MAP#0553 04 0002

COLONIAL PIPELINE COMPANY
DB 2554 PG 327
22,001 SQ.FT.
MAP#0553 04 0001

SARAH J.BABAZADEH,TRUSTEE UNDER THE EBRAHIM A.BABAZADEH FAMILY TRUST DATED JUNE 5,2010
DB 21631 PG 1966
1.825 AC.
MAP#0553 01 0028

HAYDEN VILLAGE COMMUNITY ASSOCIATION
DB 9141 PG 815
27,284 SQ.FT.
MAP#0553 08 F

Route 29 (Lee Highway) SB
Route 29 (Lee Highway) NB
N 87°26'58" E
Rte.29 Constr.℄
10' Shared Use Path
Overhead Transmission Line Elev.396.5'
Overhead Transmission Line Elev.400.5'
Prop.R/W
Prop.HR-1 Ty.II Req'd.
Prop.Std.CD-2 Req'd
100' Taper
Begin Constr.Sandy Point Lane Station 60+42.90
250' Storage
Existing Service Road
5' Sidewalk
Std.CG-9A Req'd.Type III Grade = -10.00%,Width = 12'
Prop. Perm. Utility Ease. for Dominion Energy and Perm. VDOT Utility Ease.
Prop.Perm.Roadway Lighting Ease.
Prop.Perm.Verizon Ease.
Prop.Perm.Fairfax Water Ease.
Prop.Perm.Slope & Drain.Ease.
Prop.Perm.Slope Ease.
Prop.Perm.Drain.Ease.
Prop. Temp. Const. Ease. for Colonial Pipeline
Prop. Temp. Const. Ease. For Entrance
Approx.Limits of EOC

Enhancement:
2:1 slope reduces the limits of construction and fill

Legend

1 Std.CG-12 Ty.B W/ Std.CG-3 Req'd.	3 Std.CG-7 Req'd.	6 Std.Rad.CG-6 Req'd.	9 Outlet Pipe Req'd.
2 Full Depth Saw Cut Req'd.	4 Std.Rad.CG-7 Req'd.	7 Std.UD-2 Req'd.	10 Std.MS-1 Req'd.
	5 Std.CG-6 Req'd.	8 Std.UD-4 Req'd.	11 Std.MS-2 Req'd.

12 Std.CG-3 Req'd.
Retaining Wall/ Noise Barrier
Full Depth Asphalt Pavement
Mill and Overlay
Concrete Sidewalk / Median
Grass Median / Buffer / Grading
Shared Use Path
Demolition of Pavement
Temporary Easement
Permanent Easement
C Denotes Construction Limits In Cuts
F Denotes Construction Limits In Fills

V SCALE 0 5'
H SCALE 0 25'

ST.A = 335+30.00
EL = 362.01
SSD = 388'
ex = -5.2%
K = 70
L = 540.00
V = 45 MPH

-3.75%

ST.A = 340+70.00
EL = 341.76
ex = 3.90%
K = 44
L = 370.00
V = 45 MPH
Meets Comfort Curve Criteria
Roadway Lighting Provided

-3.75%
4.68%

36" GASLINE CROSSING
EL.=336.97'

6" GASLINE CROSSING
EL.=339.12'

32" GASLINE CROSSING
EL.=337.96'

4.68%

P.O.T.Sta.345+34.30 Route 29
P.O.T.Sta.60+00.00 Sandy Point Lane

ST.A = 347+50.00
EL = 373.58
SSD = 369'
ex = -5.67%
K = 63
L = 535.00
V = 45 MPH

-3.80%

385 380 375 370 365 360 355 350 345 340 335 330 325 320 315

337+00.00 338+00.00 339+00.00 340+00.00 341+00.00 342+00.00 343+00.00 344+00.00 345+00.00 346+00.00 347+00.00 348+00.00 349+00.00

390 385 380 375 370 365 360 355 350 345 340 335 330 325 320 315

ALLAN MYERS + WRA

SCALE 0 50' 100'

PROJECT	SHEET NO.
0029-029-350	6

Enhancement:
Proposed Willow Springs Double Box Culvert location reduces outfall grading.

Enhancement:
Proposed Willow Springs Double Box Culvert in the same location of the existing structure improves constructability and minimizes earthwork excavation.

Enhancement:
2:1 slope reduces the limits of construction and fill

Enhancement:
2:1 slope reduces the limits of construction and fill

Early Benefit:
Construct Stormwater Management Ponds in Phase 1

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	29	0029-029-350 RW-201,C-501	7

Match Line Sheet 6 - STA.349+50.00

Match Line Sheet 8 - STA.362+75.00

Match Line Sheet 7D - STA.72+00.00

BOARD OF SUPERVISORS OF FAIRFAX COUNTY,VIRGINIA
DB 11544 PG 1372
229,258 SQ.FT.
MAP#0553 01 0027

FAIRFAX COUNTY PARK AUTHORITY
DB 11081 PG 1043
403,121 SQ.FT.
MAP#0553 10 S

CUONG NGUYEN
DB 22005 PG 2189
0.382 AC.
MAP#0554 18 0001

JURGEN J. GIEZEN
DB 23083 PG 487
0.3652 AC.
MAP#0554 18 0040

HARJINDER SINGH AND AMRIK KAUR
DB 18716 PG 1937
0.7015 AC.
MAP#0554 18 0041

YASEEN M NOORZAI
DB 23210 PG 1497
1.1101 AC.
MAP#0553 01 0029

PROPERTY OWNER HAS LEGAL ACCESS TO FELDSPAR CT. NOT SHOWN ON THIS SHEET.

HONG HUONG T. NGUYEN AND KHANG D. LE
DB 20144 PG 1076
43,110 SQ.FT.
MAP#0553 12 0008

HAMPTON FOREST HOMEOWNERS ASSOCIATION
DB 5939 PG 1980
103,745 SQ.FT.
MAP#0554 07 A

Curve HA_MEADOW1
PI = 81+47.48
DELTA = 9°17'19.64" (LT)
D = 36°57'54"
T = 12.59'
L = 25.13'
R = 155.00'
PC = 81+34.89
PT = 81+60.02
e = 4.0%
Lr = 102'
Lf = 53'
V = 25 MPH

Legend

1 St'd.CG-12 Ty.B W/ St'd.CG-3 Req'd.
2 Full Depth Saw Cut Req'd.
3 St'd.CG-7 Req'd.
4 St'd.Rad.CG-7 Req'd.
5 St'd.CG-6 Req'd.
6 St'd.Rad.CG-6 Req'd.
7 St'd.UD-2 Req'd.
8 St'd.UD-4 Req'd.
9 Outlet Pipe Req'd.
10 St'd.MS-1 Req'd.
11 St'd.MS-2 Req'd.
12 St'd.CG-3 Req'd.
Retaining Wall / Noise Barrier
Full Depth Asphalt Pavement
Mill and Overlay
Concrete Sidewalk / Median
Grass Median / Buffer / Grading
Shared Use Path
Demolition of Pavement
Temporary Easement
Permanent Easement
C Denotes Construction Limits In Cuts
F Denotes Construction Limits In Fills

V SCALE 5' 0
H SCALE 0 25'

STA = 347+50.00
EL = 373.58
SSD = 369'
ex = -5.67'
K = 63
L = 535.00
V = 45 MPH

-3.80%

Begin DBL Box Culvert D-612
Sta. 354+30.00 Route 29 Constr.B

End DBL Box Culvert D-612
Sta. 354+865 Route 29 Constr.B

STA = 353+75.00
EL = 349.83
ex = 7.01'
K = 79
L = 665.50
V = 45 MPH

-3.80%

.462%

GASLINE CROSSING
EL.=359.34'

STA = 358+30.00
EL = 370.87
SSD = 406'
ex = -1.03'
K = 61
L = 225.00
V = 45 MPH

.462%

.95%

P.O.T. Sta.359+65.39 Route 29
P.O.T. Sta.80+00.00 Meadow Estates Drive

P.O.T. Sta.359+5.39 Route 2
P.O.T. Sta.170+00.00 Hampton

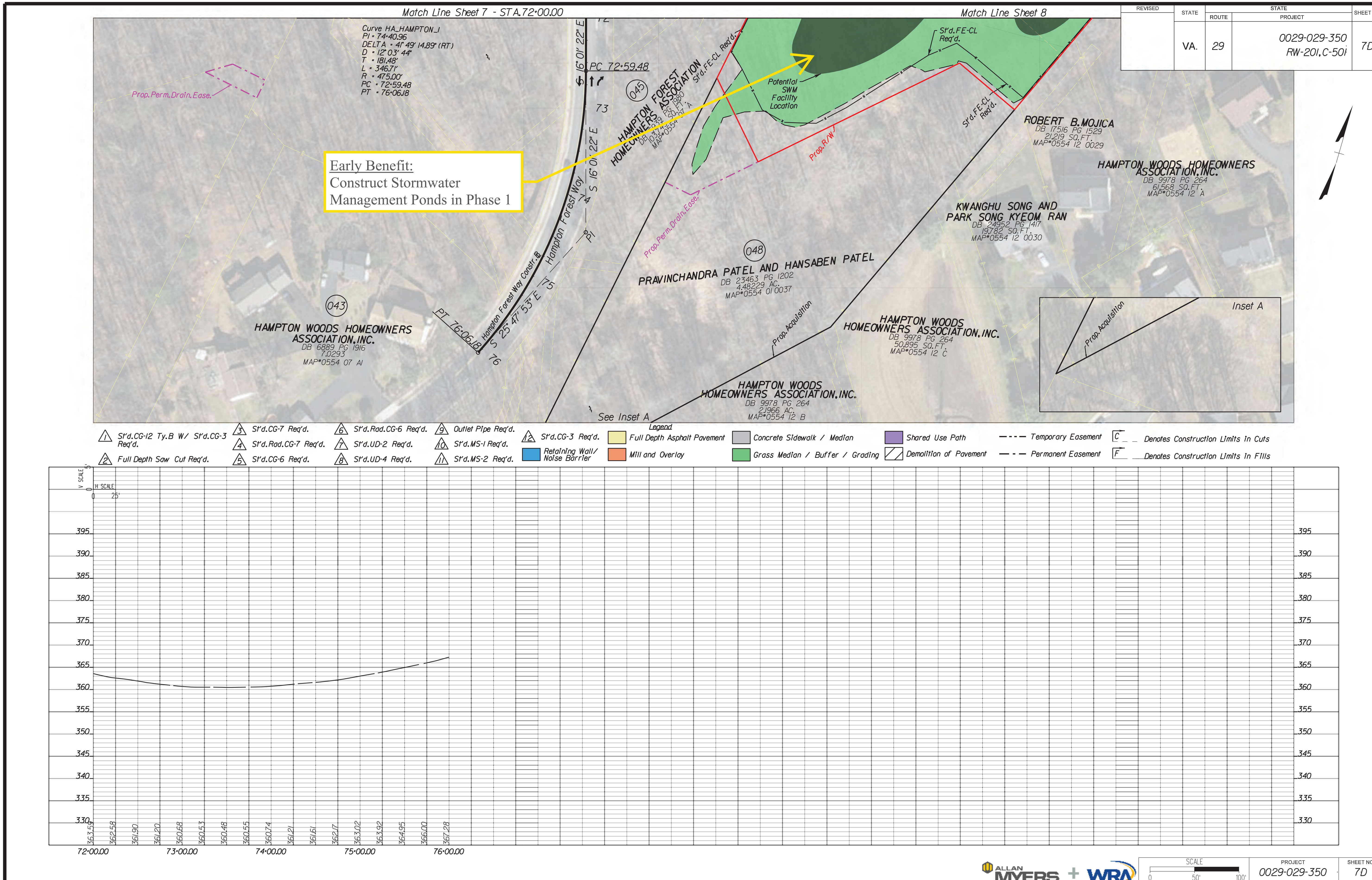
.95%

350+00.00 351+00.00 352+00.00 353+00.00 354+00.00 355+00.00 356+00.00 357+00.00 358+00.00 359+00.00 360+00.00 361+00.00 362+00.00 363+00.00

ALLAN MYERS + WRA

SCALE 0 50' 100'

PROJECT	SHEET NO.
0029-029-350	7

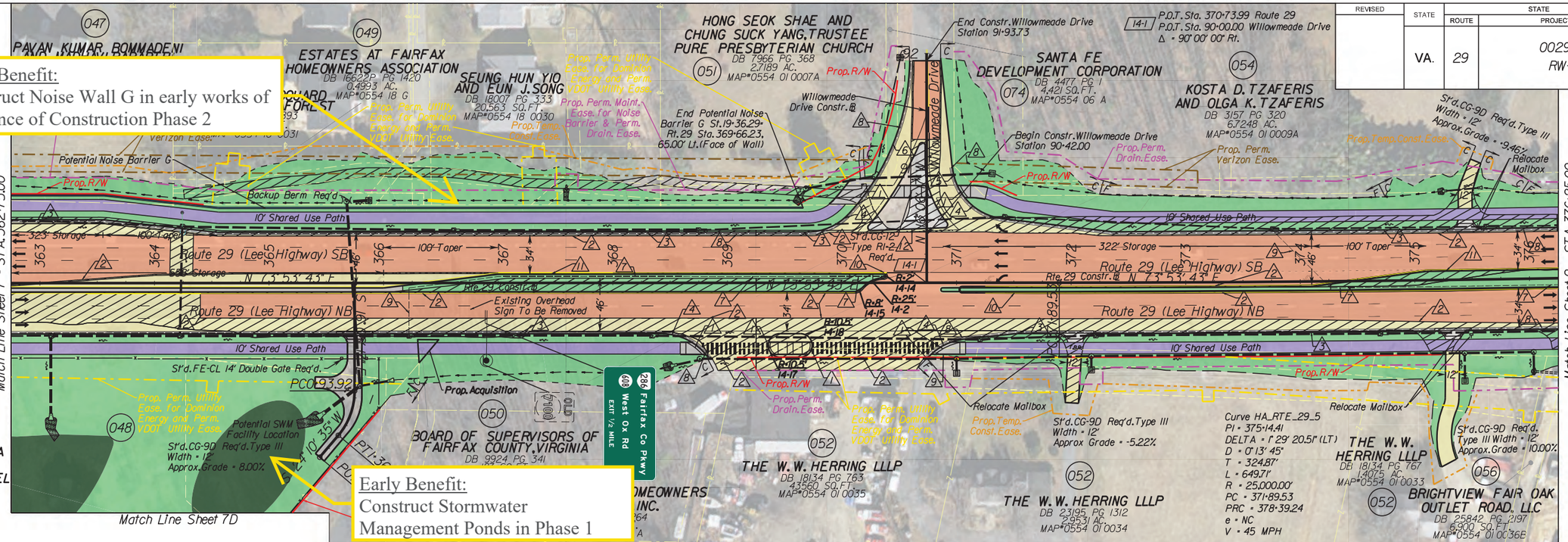


Match Line Sheet 7 - STA.72+00.00
Match Line Sheet 8
REVISED
STATE
ROUTE
STATE PROJECT
SHEET NO.
VA.
29
0029-029-350 RW-201, C-501
7D
Curve HA_HAMPTON_1
PI = 74+40.96
DELTA = 41° 49' 14.89" (RT)
D = 12° 03' 44"
T = 181.48'
L = 346.71'
R = 475.00'
PC = 72+59.48
PT = 76+06.18
PC 72+59.48
PT 76+06.18
Prop.Perm.Drain.Ease.
Early Benefit:
Construct Stormwater Management Ponds in Phase 1
Potential SWM Facility Location
Std.FE-CL Req'd.
Prop.R/W
Hampton Forest Way
Hampton Forest Way Constr. B
S 16° 01' 22" E
S 25° 47' 53" E
045
HAMPTON FOREST HOMEOWNERS ASSOCIATION
ROBERT B.MOJICA
DB 17516 PG 1529
21,219 SQ.FT.
MAP#0554 12 0029
HAMPTON WOODS HOMEOWNERS ASSOCIATION,INC.
DB 9978 PG 264
61,568 SQ.FT.
MAP#0554 12 A
KWANGHU SONG AND PARK SONG KYEOM RAN
DB 24952 PG 1417
19,782 SQ.FT.
MAP#0554 12 0030
048
PRAVINCHANDRA PATEL AND HANSABEN PATEL
DB 23463 PG 1202
4.48229 AC.
MAP#0554 01 0037
043
HAMPTON WOODS HOMEOWNERS ASSOCIATION,INC.
DB 6889 PG 1916
7.0293
MAP#0554 07 A1
Prop.Acquisition
HAMPTON WOODS HOMEOWNERS ASSOCIATION,INC.
DB 9978 PG 264
50,895 SQ.FT.
MAP#0554 12 C
HAMPTON WOODS HOMEOWNERS ASSOCIATION,INC.
DB 9978 PG 264
21,966 AC.
MAP#0554 12 B
See Inset A
Inset A
Legend
1 Std.CG-12 Ty.B W/ Std.CG-3 Req'd.
2 Full Depth Saw Cut Req'd.
3 Std.CG-7 Req'd.
4 Std.Rad.CG-7 Req'd.
5 Std.CG-6 Req'd.
6 Std.Rad.CG-6 Req'd.
7 Std.UD-2 Req'd.
8 Std.UD-4 Req'd.
9 Outlet Pipe Req'd.
10 Std.MS-1 Req'd.
11 Std.MS-2 Req'd.
12 Std.CG-3 Req'd.
Retaining Wall/ Noise Barrier
Full Depth Asphalt Pavement
Mill and Overlay
Concrete Sidewalk / Median
Grass Median / Buffer / Grading
Shared Use Path
Demolition of Pavement
Temporary Easement
Permanent Easement
Denotes Construction Limits In Cuts
Denotes Construction Limits In Fills
V SCALE
H SCALE
0 25'
395
390
385
380
375
370
365
360
355
350
345
340
335
330
363.59
362.58
361.90
361.20
360.68
360.53
360.48
360.55
360.74
361.21
361.61
362.17
363.02
363.92
364.95
366.00
367.28
72+00.00
73+00.00
74+00.00
75+00.00
76+00.00
ALLAN MYERS + WRA
SCALE
0 50' 100'
PROJECT
0029-029-350
SHEET NO.
7D

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	29	0029-029-350 RW-201,C-501	8

Early Benefit:
Construct Noise Wall G in early works of Sequence of Construction Phase 2

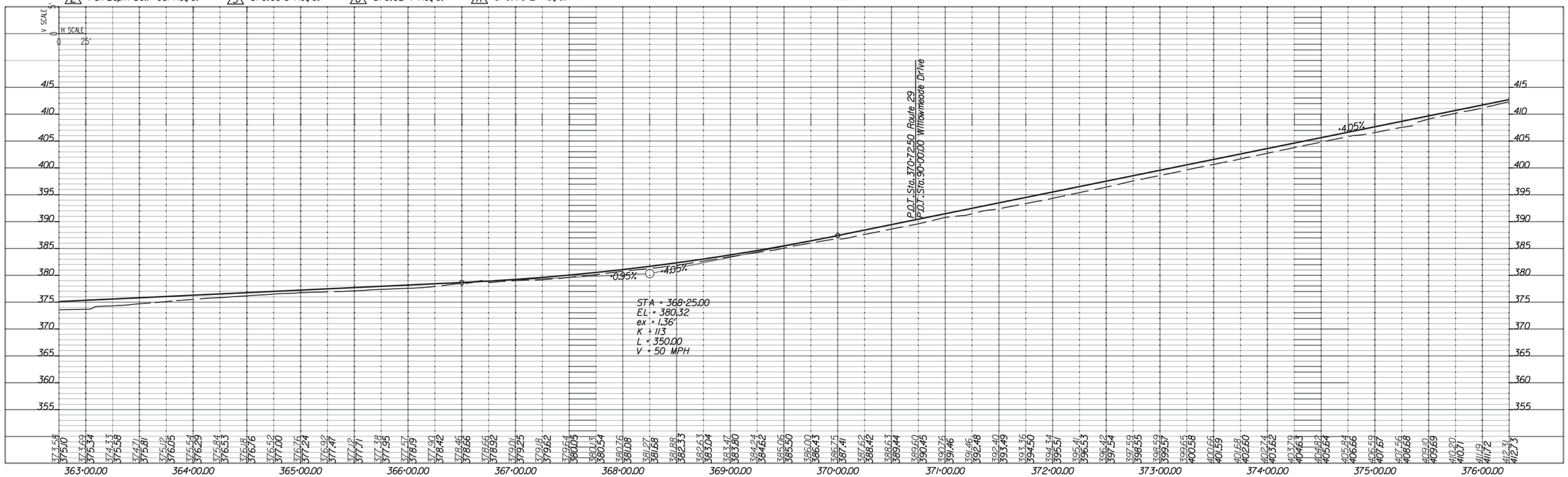
Early Benefit:
Construct Stormwater Management Ponds in Phase 1



Legend

1 St'd.CG-12 Ty.B W/ St'd.CG-3 Req'd.	3 St'd.CG-7 Req'd.	6 St'd.Rad.CG-6 Req'd.	9 Outlet Pipe Req'd.	12 St'd.CG-3 Req'd.	Full Depth Asphalt Pavement	Concrete Sidewalk / Median	Shared Use Path
2 Full Depth Saw Cut Req'd.	4 St'd.Rad.CG-7 Req'd.	7 St'd.UD-2 Req'd.	10 St'd.MS-1 Req'd.	Retaining Wall/ Noise Barrier	Mill and Overlay	Grass Median / Buffer / Grading	Demolition of Pavement
	5 St'd.CG-6 Req'd.	8 St'd.UD-4 Req'd.	11 St'd.MS-2 Req'd.				

Temporary Easement — Permanent Easement — C Denotes Construction Limits In Cuts — F Denotes Construction Limits In Fills



ALLAN MYERS + WRA

SCALE	PROJECT	SHEET NO.
0 50' 100'	0029-029-350	8

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	29	0029-029-350 RW-201, C-501	9

Enhancement:
Leaving the existing median in place reducing construction costs and duration.

Match Line Sheet 7 - STA 376+25.00

Match Line Sheet 9 - STA 389+75.00

Legend

- 1 St'd.CG-12 Ty.B W/ St'd.CG-3 Req'd.
- 2 Full Depth Saw Cut Req'd.
- 3 St'd.CG-7 Req'd.
- 4 St'd.Rad.CG-7 Req'd.
- 5 St'd.CG-6 Req'd.
- 6 St'd.Rad.CG-6 Req'd.
- 7 St'd.UD-2 Req'd.
- 8 St'd.UD-4 Req'd.
- 9 Outlet Pipe Req'd.
- 10 St'd.MS-1 Req'd.
- 11 St'd.MS-2 Req'd.
- 12 St'd.CG-3 Req'd.
- Retaining Wall / Noise Barrier
- Full Depth Asphalt Pavement
- Mill and Overlay
- Concrete Sidewalk / Median
- Grass Median / Buffer / Grading
- Shared Use Path
- Demolition of Pavement
- Temporary Easement
- Permanent Easement
- C Denotes Construction Limits In Cuts
- F Denotes Construction Limits In Fills

Route 29 Profile

End Project: 0029-029-350, C-501
Sta. 386+00.00 Route 29 Constr. B

P.O.T. Sta. 385+17.17 Route 29
P.O.T. Sta. 100+00.00 Buckleys Gate Drive

P.O.T. Sta. 385+20.44 Route 29
P.O.T. Sta. 110+00.00 Summit Drive

STA = 379+66.00
EL = 426.55
SSD = 622'
ex = -0.97'
K = 140
L = 330.00
V = 55 MPH

P.O.T. Sta. 379+50.14 Route 29
P.O.T. Sta. 300+00.00 Service Rd. 3 Ent.

-4.05%
+1.69%
+1.69%
+0.48%

Service Road #3 Profile

STA = 5+90.00
EL = 424.73
SSD = 585'
K = 155
L = 500.00
V = 60 MPH

Sta. 6+07.91 Service Road #3
Entrance to Route 29

-4.75%
+1.53%
-1.53%

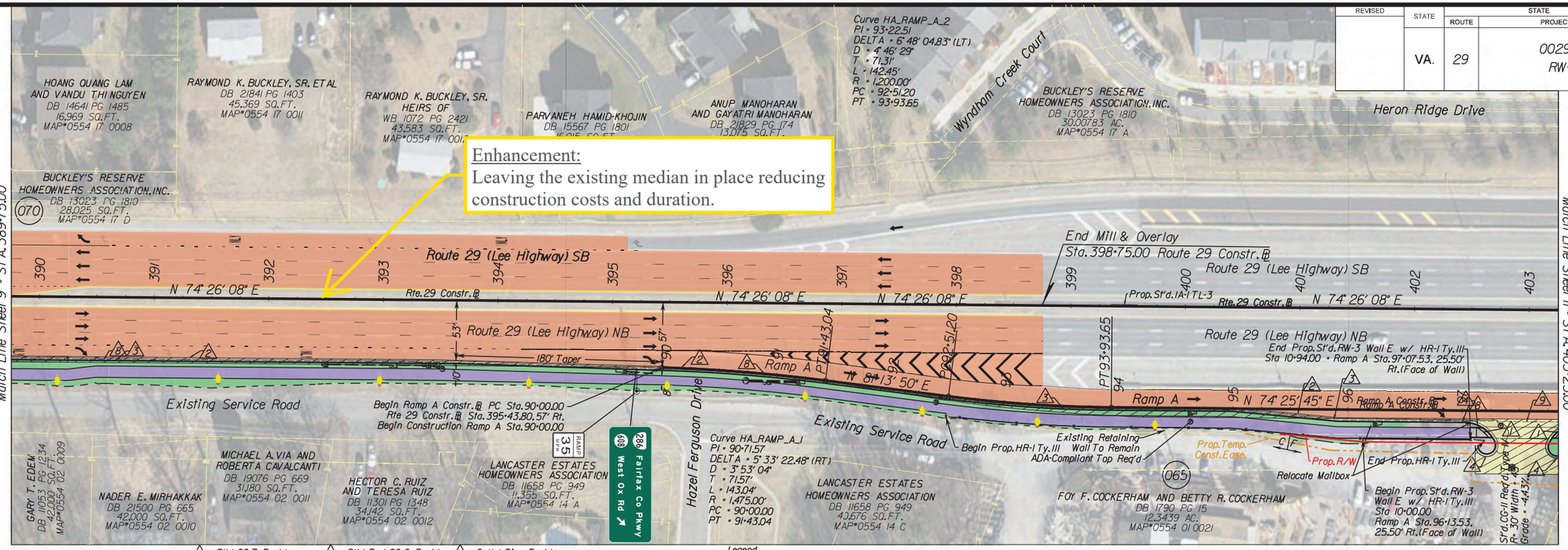
P.O.C. Sta. 110+94.02 Summit Drive
P.O.T. Sta. 11+78.02 Service Road #3

STA = 11+37.12
EL = 433.10

ALLAN MYERS + WRA	SCALE 0 50' 100'	PROJECT 0029-029-350	SHEET NO. 9

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	29	0029-029-350 RW-201,C-501	10

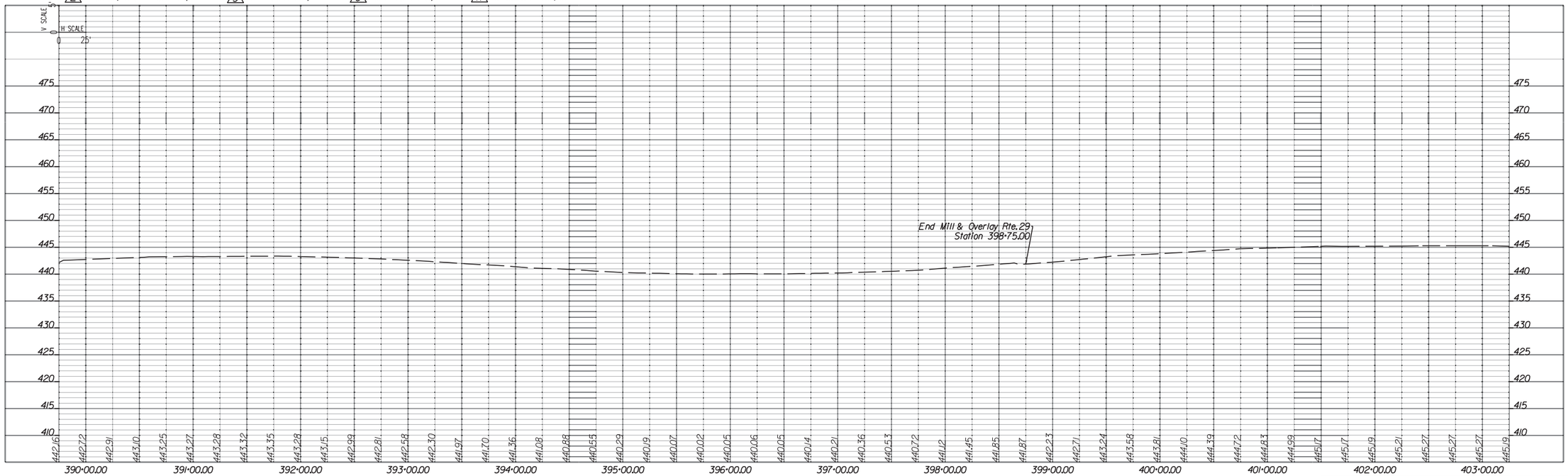
Enhancement:
Leaving the existing median in place reducing construction costs and duration.



Legend

1 St'd.CG-12 Ty.B W/ St'd.CG-3 Req'd.	3 St'd.CG-7 Req'd.	6 St'd.Rad.CG-6 Req'd.	9 Outlet Pipe Req'd.
2 Full Depth Saw Cut Req'd.	4 St'd.Rad.CG-7 Req'd.	7 St'd.UD-2 Req'd.	10 St'd.MS-1 Req'd.
	5 St'd.CG-6 Req'd.	8 St'd.UD-4 Req'd.	11 St'd.MS-2 Req'd.

2 St'd.CG-3 Req'd.	Full Depth Asphalt Pavement	Concrete Sidewalk / Median	Shared Use Path	Temporary Easement	C Denotes Construction Limits In Cuts
Retaining Wall/ Noise Barrier	Mill and Overlay	Grass Median / Buffer / Grading	Demolition of Pavement	Permanent Easement	F Denotes Construction Limits In Fills



ALLAN MYERS + WRA

SCALE	PROJECT	SHEET NO.
0 50' 100'	0029-029-350	10

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	29	0029-029-350 RW-201, C-501	11

BUCKLEY'S RESERVE HOMEOWNERS ASSOCIATION, INC.
DB 13023 PG 1810
3.000783 AC.
MAP#0554 12 A

Heron Ridge Drive

Fairfax County Parkway (Route 286)

Match Line Sheet 10 - STA. 403+25.00

Route 29 (Lee Highway) SB

Route 29 (Lee Highway) NB

End Construction/End Project: 0029-029-350, PE-101
Sta. 409+47.51 Route 29 Constr. ℄

End Project: 0029-029-350, RW-201
Sta. 409+30.92 Route 29 Constr. ℄

POT 410+75.62

N 74° 26' 08" E

Rte. 29 Constr. ℄

POT 104+10.13

End Constr. Ramp A
Station 104+04.69

N 74° 25' 45" E

Ramp A Constr. ℄

Ramp A

Reset Mailbox

Reset Mailbox

Begin Removal Existing Guardrail

End Removal Existing Guardrail

Prop. R/W

Prop. Perm. Slope Ease.

Prop. Temp. Const. Ease. For Entrance

Gunpowder Road

066
BOYD ALTON MAYS AND LINDA D. MAYS
DB 3373 PG 68
1.9645 AC.
MAP#0554 01 0019

068
FIRST ADDITION TO CANNON RIDGE HOMOWNERS ASSOCIATION
DB 12229 PG 74
8,416 SQ.FT.
MAP#0554 16 B

FOY F. COCKERHAM AND BETTY R. COCKERHAM
DB 1790 PG 15
1.9923 AC.
MAP#0554 01 0020

068

THANH B. BUI AND TUAN M. NGO
DB 13072 PG 875
41,137 SQ.FT.
MAP#0554 16 0001

069

ALAA ELGIBALI
DB 22894 PG 2138
2.2945 AC.
MAP#0554 04 0038

075

Fairfax Co Pkwy
286
Springfield
NEXT SIGNAL
Reston
SECOND SIGNAL

St'd. CG-9D Req'd
Type III Width = 12'
Approx. Grade = 8.45%

St'd. CG-9D Req'd.
Type III Width = 12'
Approx. Grade = 10.00%

Legend

1. St'd. CG-12 Ty. B W/ St'd. CG-3 Req'd.
2. Full Depth Saw Cut Req'd.
3. St'd. CG-7 Req'd.
4. St'd. Rad. CG-7 Req'd.
5. St'd. CG-6 Req'd.
6. St'd. Rad. CG-6 Req'd.
7. St'd. UD-2 Req'd.
8. St'd. UD-4 Req'd.
9. Outlet Pipe Req'd.
10. St'd. MS-1 Req'd.
11. St'd. MS-2 Req'd.
12. St'd. CG-3 Req'd.

Retaining Wall / Noise Barrier
Full Depth Asphalt Pavement
Mill and Overlay
Concrete Sidewalk / Median
Grass Median / Buffer / Grading
Shared Use Path
Demolition of Pavement
Temporary Easement
Permanent Easement
C Denotes Construction Limits In Cuts
F Denotes Construction Limits In Fills

V SCALE 5' 0
H SCALE 0 25'

475 470 465 460 455 450 445 440 435 430 425 420 415 410

445.19 445.05 444.95 444.74 444.47 444.16 443.88 443.61 443.22 442.84 442.46 442.07 441.79 441.50 440.94 440.44 439.79 439.13 438.43 437.83 437.16 436.44 435.87 435.15 434.51 433.85 433.23 432.66

404+00.00 405+00.00 406+00.00 407+00.00 408+00.00 409+00.00 410+00.00

405 410 415 420 425 430 435 440 445 450 455 460 465 470 475

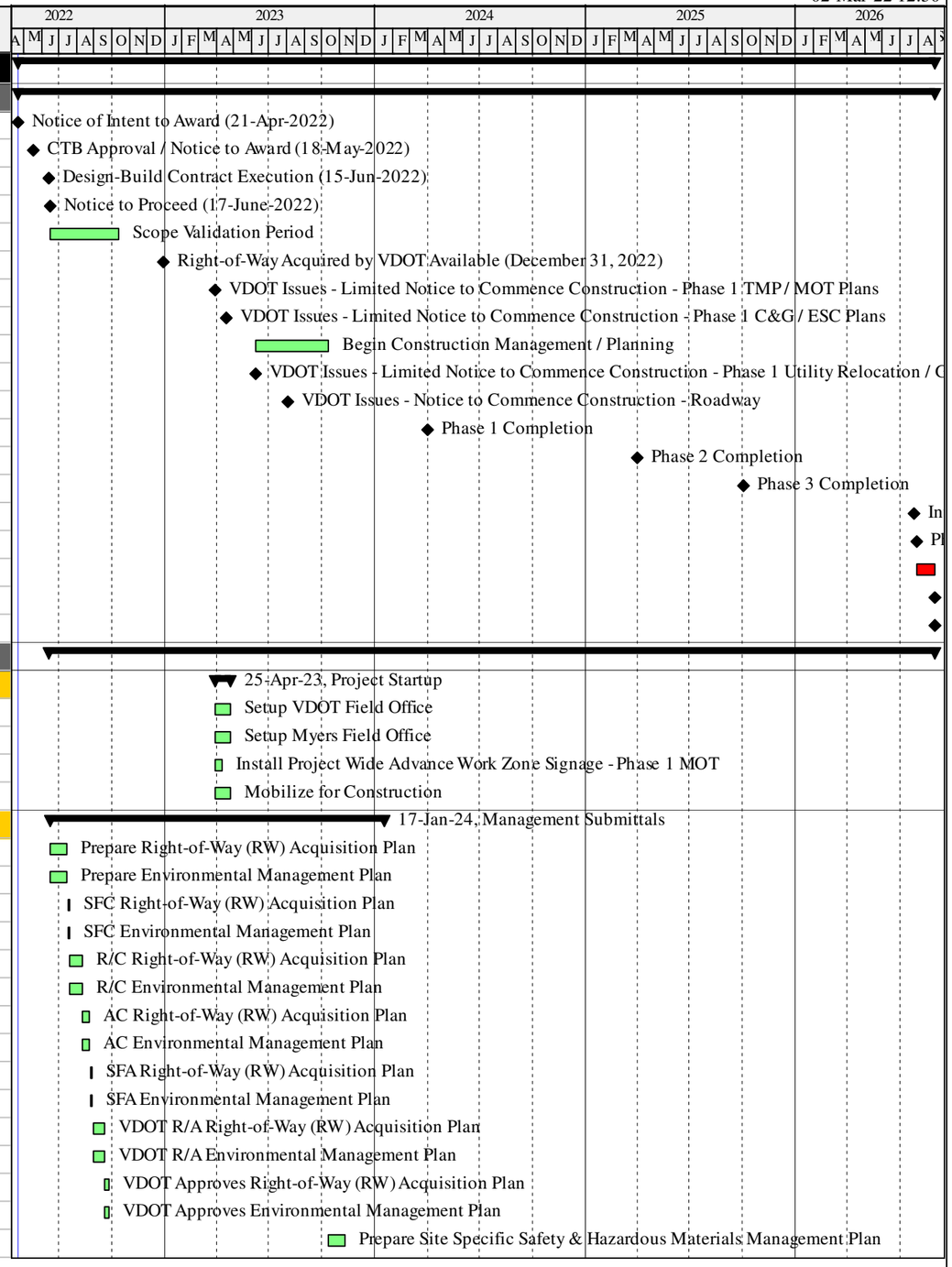
ALLAN MYERS + WRA

SCALE	PROJECT	SHEET NO.
0 50' 100'	0029-029-350	11

4.6

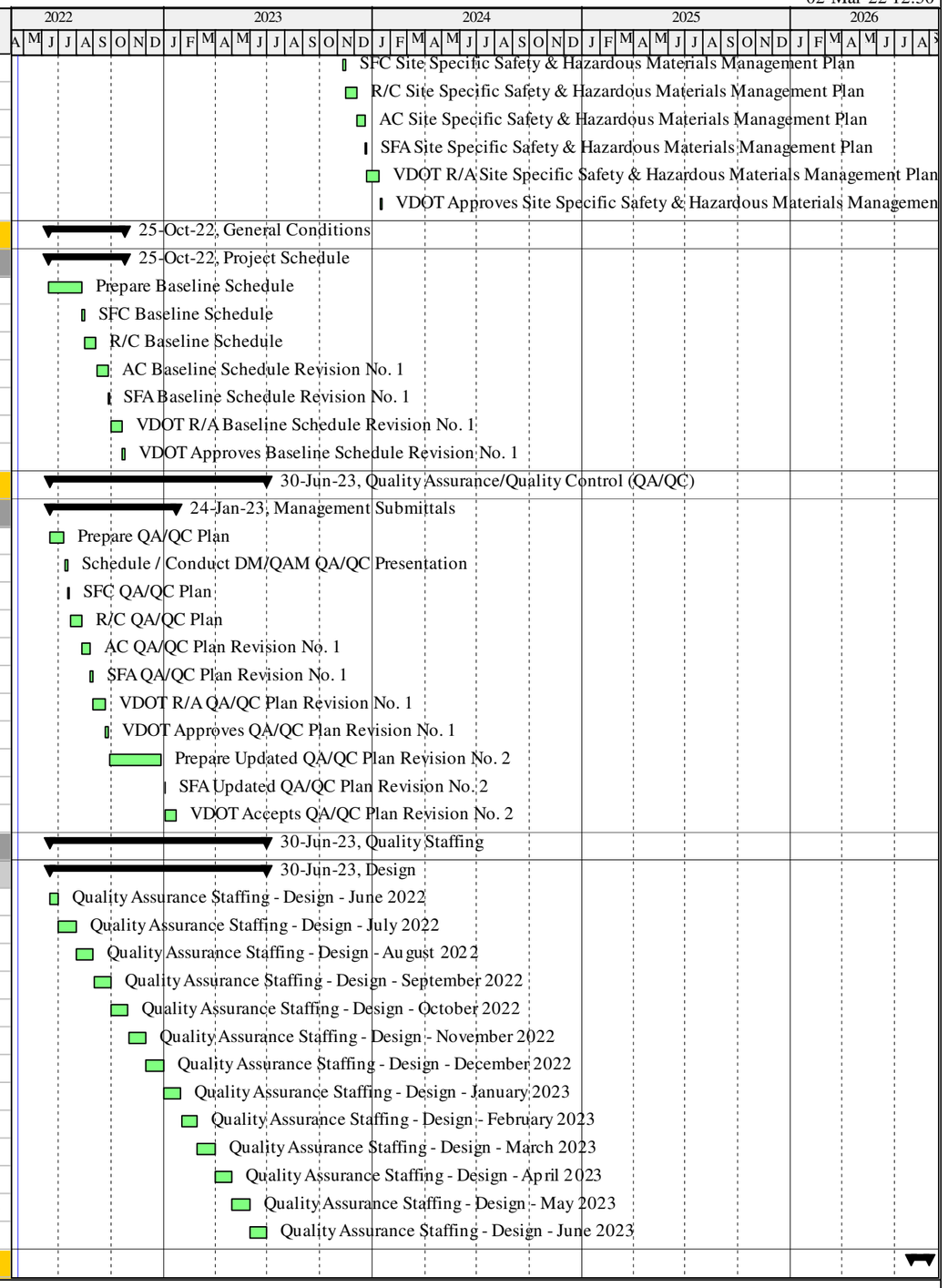
PROPOSAL SCHEDULE

Activity ID	Activity Name	Original Duration	Start	Finish
Route 29 Widening Phase II		920	21-Apr-22	31-Aug-26
Milestones		1594	21-Apr-22	31-Aug-26
MS00001000	Notice of Intent to Award (21-Apr-2022)	0	21-Apr-22	
MS00001010	CTB Approval / Notice to Award (18-May-2022)	0	18-May-22*	
MS00001020	Design-Build Contract Execution (15-Jun-2022)	0	15-Jun-22*	
MS00001030	Notice to Proceed (17-June-2022)	0	17-Jun-22*	
MS00001040	Scope Validation Period	120	17-Jun-22	14-Oct-22
MS00002000	Right-of-Way Acquired by VDOT Available (December 31, 2022)	0	31-Dec-22*	
MS00001060	VDOT Issues - Limited Notice to Commence Construction - Phase 1 TMP / MOT Plans	0	29-Mar-23	
MS00001070	VDOT Issues - Limited Notice to Commence Construction - Phase 1 C&G / ESC Plans	0	19-Apr-23	
MS00001050	Begin Construction Management / Planning	128	07-Jun-23	12-Oct-23
MS00001080	VDOT Issues - Limited Notice to Commence Construction - Phase 1 Utility Relocation / G&D Pl	0	07-Jun-23	
MS00001090	VDOT Issues - Notice to Commence Construction - Roadway	0	02-Aug-23	
MS00005010	Phase 1 Completion	0		02-Apr-24
MS00005020	Phase 2 Completion	0		01-Apr-25
MS00005030	Phase 3 Completion	0		02-Oct-25
MS99999900	Interim Completion Milestone - All Roadways Open toi Traffic	0		24-Jul-26
MS00005040	Phase 4 Completion	0		30-Jul-26
MS99999920	VDOT/Myers Complete Project Closeout	32	31-Jul-26	31-Aug-26
MS99999910	Final Completion - VDOT Issues C-5	0		31-Aug-26
MS99999930	Project Closeout Complete	0		31-Aug-26
Project Administration		885	15-Jun-22	31-Aug-26
Project Startup		20	29-Mar-23	25-Apr-23
PAS0001000	Setup VDOT Field Office	20	29-Mar-23	25-Apr-23
PAS0001010	Setup Myers Field Office	20	29-Mar-23	25-Apr-23
PAS0001020	Install Project Wide Advance Work Zone Signage - Phase 1 MOT	10	29-Mar-23	11-Apr-23
PAS0001030	Mobilize for Construction	20	29-Mar-23	25-Apr-23
Management Submittals		328	17-Jun-22	17-Jan-24
PAM0002000	Prepare Right-of-Way (RW) Acquisition Plan	20	17-Jun-22	15-Jul-22
PAM0003000	Prepare Environmental Management Plan	20	17-Jun-22	15-Jul-22
PAM0002010	SFC Right-of-Way (RW) Acquisition Plan	3	18-Jul-22	20-Jul-22
PAM0003010	SFC Environmental Management Plan	3	18-Jul-22	20-Jul-22
PAM0002020	R/C Right-of-Way (RW) Acquisition Plan	21	21-Jul-22	10-Aug-22
PAM0003020	R/C Environmental Management Plan	21	21-Jul-22	10-Aug-22
PAM0002030	AC Right-of-Way (RW) Acquisition Plan	10	11-Aug-22	24-Aug-22
PAM0003030	AC Environmental Management Plan	10	11-Aug-22	24-Aug-22
PAM0002040	SFA Right-of-Way (RW) Acquisition Plan	3	25-Aug-22	29-Aug-22
PAM0003040	SFA Environmental Management Plan	3	25-Aug-22	29-Aug-22
PAM0002050	VDOT R/A Right-of-Way (RW) Acquisition Plan	21	30-Aug-22	19-Sep-22
PAM0003050	VDOT R/A Environmental Management Plan	21	30-Aug-22	19-Sep-22
PAM0002060	VDOT Approves Right-of-Way (RW) Acquisition Plan	5	20-Sep-22	26-Sep-22
PAM0003060	VDOT Approves Environmental Management Plan	5	20-Sep-22	26-Sep-22
PAM0001000	Prepare Site Specific Safety & Hazardous Materials Management Plan	20	13-Oct-23	09-Nov-23



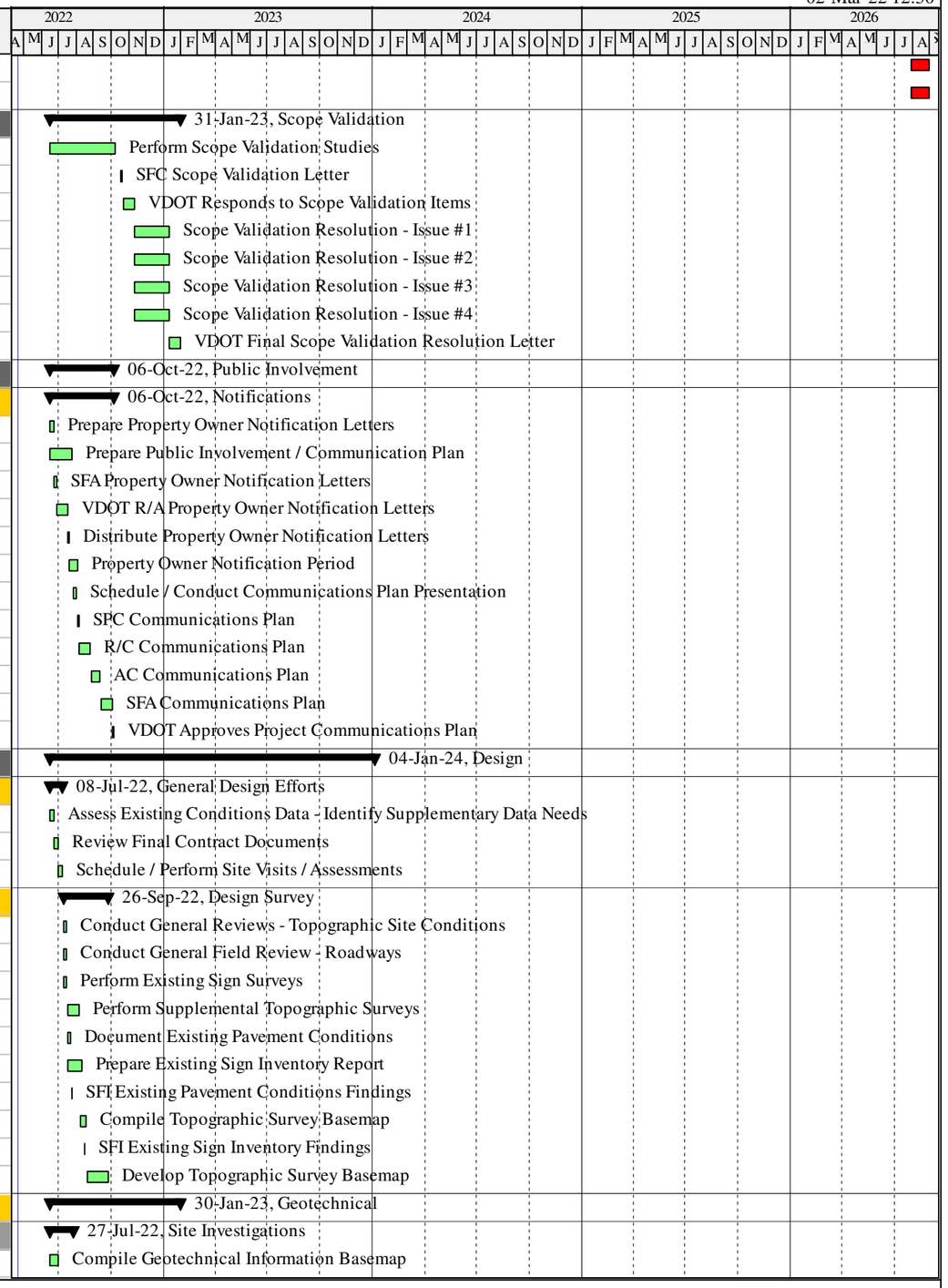
Remaining Level of Effort — Actual Work — Critical Remaining Work
Actual Level of Effort — Remaining Work — Milestone

Activity ID	Activity Name	Original Duration	Start	Finish
PAM0001010	SFC Site Specific Safety & Hazardous Materials Management Plan	3	10-Nov-23	14-Nov-23
PAM0001020	R/C Site Specific Safety & Hazardous Materials Management Plan	21	15-Nov-23	05-Dec-23
PAM0001030	AC Site Specific Safety & Hazardous Materials Management Plan	10	06-Dec-23	19-Dec-23
PAM0001040	SFA Site Specific Safety & Hazardous Materials Management Plan	3	20-Dec-23	22-Dec-23
PAM0001050	VDOT R/A Site Specific Safety & Hazardous Materials Management Plan	21	23-Dec-23	12-Jan-24
PAM0001060	VDOT Approves Site Specific Safety & Hazardous Materials Management Plan	3	15-Jan-24	17-Jan-24
General Conditions		82	15-Jun-22	25-Oct-22
Project Schedule		82	15-Jun-22	25-Oct-22
PAGPS01000	Prepare Baseline Schedule	40	15-Jun-22	10-Aug-22
PAGPS01010	SFC Baseline Schedule	3	11-Aug-22	15-Aug-22
PAGPS01020	R/C Baseline Schedule	21	16-Aug-22	05-Sep-22
PAGPS01030	AC Baseline Schedule Revision No. 1	15	06-Sep-22	26-Sep-22
PAGPS01040	SFA Baseline Schedule Revision No. 1	3	27-Sep-22	29-Sep-22
PAGPS01050	VDOT R/A Baseline Schedule Revision No. 1	21	30-Sep-22	20-Oct-22
PAGPS01060	VDOT Approves Baseline Schedule Revision No. 1	3	21-Oct-22	25-Oct-22
Quality Assurance/Quality Control (QA/QC)		218	17-Jun-22	30-Jun-23
Management Submittals		123	17-Jun-22	24-Jan-23
PAQMS01000	Prepare QA/QC Plan	25	17-Jun-22	11-Jul-22
PAQMS01010	Schedule / Conduct DM/QAM QA/QC Presentation	5	12-Jul-22	18-Jul-22
PAQMS01020	SFC QA/QC Plan	3	19-Jul-22	21-Jul-22
PAQMS01030	R/C QA/QC Plan	21	22-Jul-22	11-Aug-22
PAQMS01040	AC QA/QC Plan Revision No. 1	10	12-Aug-22	25-Aug-22
PAQMS01050	SFA QA/QC Plan Revision No. 1	3	26-Aug-22	30-Aug-22
PAQMS01060	VDOT R/A QA/QC Plan Revision No. 1	21	31-Aug-22	20-Sep-22
PAQMS01070	VDOT Approves QA/QC Plan Revision No. 1	5	21-Sep-22	27-Sep-22
PAQMS01080	Prepare Updated QA/QC Plan Revision No. 2	90	28-Sep-22	26-Dec-22
PAQMS01090	SFA Updated QA/QC Plan Revision No. 2	1	03-Jan-23	03-Jan-23
PAQMS01100	VDOT Accepts QA/QC Plan Revision No. 2	21	04-Jan-23	24-Jan-23
Quality Staffing		379	17-Jun-22	30-Jun-23
Design		379	17-Jun-22	30-Jun-23
PAQQAD1000	Quality Assurance Staffing - Design - June 2022	14	17-Jun-22	30-Jun-22
PAQQAD1010	Quality Assurance Staffing - Design - July 2022	31	01-Jul-22	31-Jul-22
PAQQAD1020	Quality Assurance Staffing - Design - August 2022	31	01-Aug-22	31-Aug-22
PAQQAD1030	Quality Assurance Staffing - Design - September 2022	30	01-Sep-22	30-Sep-22
PAQQAD1040	Quality Assurance Staffing - Design - October 2022	31	01-Oct-22	31-Oct-22
PAQQAD1050	Quality Assurance Staffing - Design - November 2022	30	01-Nov-22	30-Nov-22
PAQQAD1060	Quality Assurance Staffing - Design - December 2022	31	01-Dec-22	31-Dec-22
PAQQAD1070	Quality Assurance Staffing - Design - January 2023	31	01-Jan-23	31-Jan-23
PAQQAD1080	Quality Assurance Staffing - Design - February 2023	28	01-Feb-23	28-Feb-23
PAQQAD1090	Quality Assurance Staffing - Design - March 2023	31	01-Mar-23	31-Mar-23
PAQQAD1100	Quality Assurance Staffing - Design - April 2023	30	01-Apr-23	30-Apr-23
PAQQAD1110	Quality Assurance Staffing - Design - May 2023	31	01-May-23	31-May-23
PAQQAD1120	Quality Assurance Staffing - Design - June 2023	30	01-Jun-23	30-Jun-23
Project Closeout		32	31-Jul-26	31-Aug-26



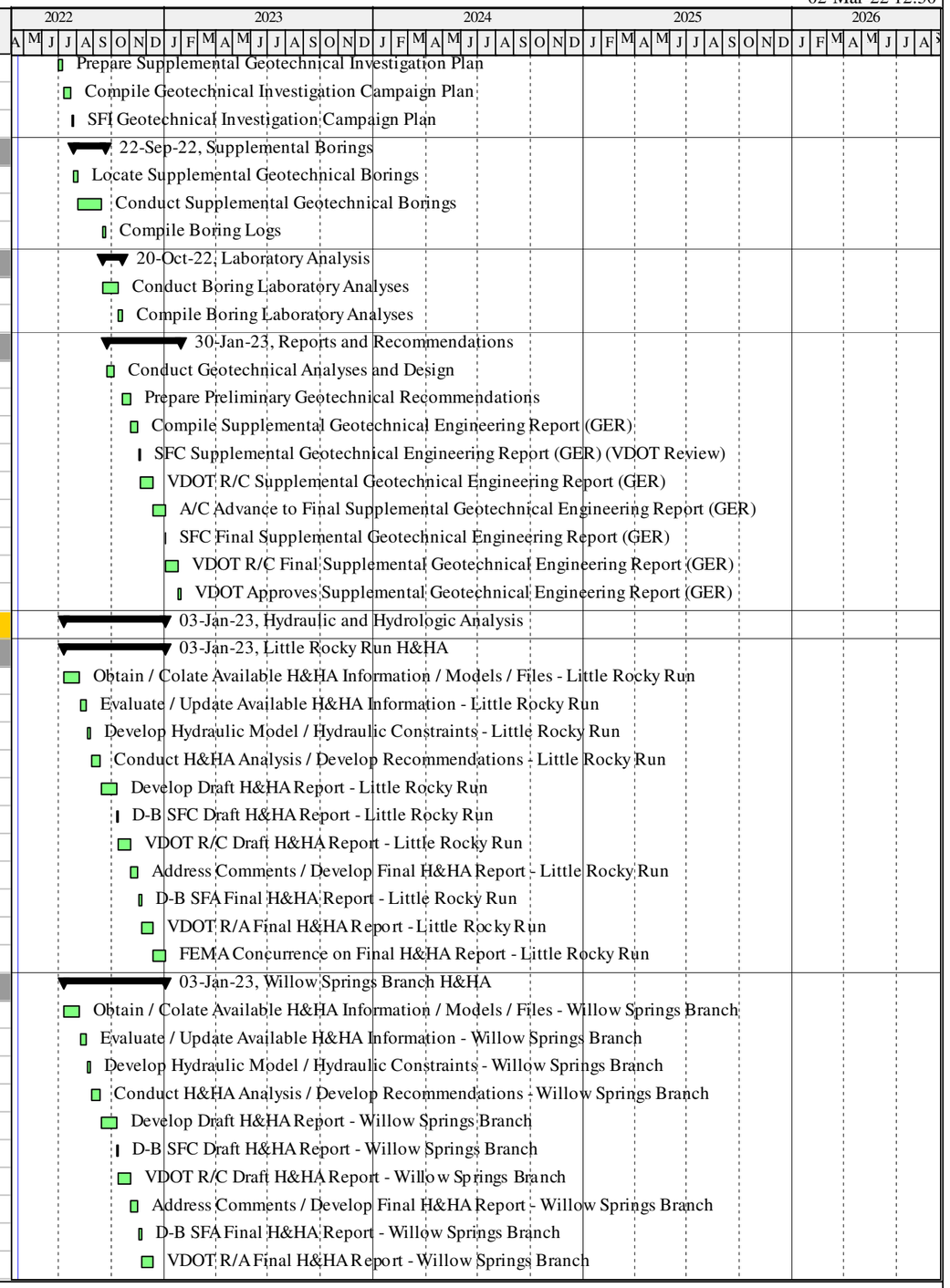
Remaining Level of Effort | Actual Work | Critical Remaining Work
Actual Level of Effort | Remaining Work | Milestone

Activity ID	Activity Name	Original Duration	Start	Finish
PAP0009010	Final Punchlist / VDOT Issues Completed C-5	32	31-Jul-26	31-Aug-26
PAP0009020	Project Closeout / As-Built Drawings	32	31-Jul-26	31-Aug-26
Scope Validation		126	17-Jun-22	31-Jan-23
SV00000000	Perform Scope Validation Studies	115	17-Jun-22	09-Oct-22
SV00000010	SFC Scope Validation Letter	5	17-Oct-22	21-Oct-22
SV00000020	VDOT Responds to Scope Validation Items	21	22-Oct-22	11-Nov-22
SV00001000	Scope Validation Resolution - Issue #1	60	12-Nov-22	10-Jan-23
SV00002000	Scope Validation Resolution - Issue #2	60	12-Nov-22	10-Jan-23
SV00003000	Scope Validation Resolution - Issue #3	60	12-Nov-22	10-Jan-23
SV00004000	Scope Validation Resolution - Issue #4	60	12-Nov-22	10-Jan-23
SV00005000	VDOT Final Scope Validation Resolution Letter	21	11-Jan-23	31-Jan-23
Public Involvement		70	17-Jun-22	06-Oct-22
Notifications		70	17-Jun-22	06-Oct-22
PNN0000010	Prepare Property Owner Notification Letters	5	17-Jun-22	23-Jun-22
PNN0000060	Prepare Public Involvement / Communication Plan	40	17-Jun-22	26-Jul-22
PNN0000020	SFA Property Owner Notification Letters	2	24-Jun-22	27-Jun-22
PNN0000030	VDOT R/A Property Owner Notification Letters	21	28-Jun-22	18-Jul-22
PNN0000040	Distribute Property Owner Notification Letters	1	19-Jul-22	19-Jul-22
PNN0000050	Property Owner Notification Period	15	20-Jul-22	03-Aug-22
PNN0000070	Schedule / Conduct Communications Plan Presentation	5	27-Jul-22	02-Aug-22
PNN0000080	SPC Communications Plan	3	03-Aug-22	05-Aug-22
PNN0000090	R/C Communications Plan	21	06-Aug-22	26-Aug-22
PNN0000100	AC Communications Plan	10	29-Aug-22	12-Sep-22
PNN0000110	SFA Communications Plan	21	13-Sep-22	03-Oct-22
PNN0000120	VDOT Approves Project Communications Plan	3	04-Oct-22	06-Oct-22
Design		322	17-Jun-22	04-Jan-24
General Design Efforts		15	17-Jun-22	08-Jul-22
DSD0001000	Assess Existing Conditions Data - Identify Supplementary Data Needs	5	17-Jun-22	23-Jun-22
DSD0001010	Review Final Contract Documents	5	24-Jun-22	30-Jun-22
DSD0001020	Schedule / Perform Site Visits / Assessments	5	01-Jul-22	08-Jul-22
Design Survey		55	11-Jul-22	26-Sep-22
DSS0001000	Conduct General Reviews - Topographic Site Conditions	5	11-Jul-22	15-Jul-22
DSS0002000	Conduct General Field Review - Roadways	5	11-Jul-22	15-Jul-22
DSS0003000	Perform Existing Sign Surveys	5	11-Jul-22	15-Jul-22
DSS0001010	Perform Supplemental Topographic Surveys	15	18-Jul-22	05-Aug-22
DSS0002010	Document Existing Pavement Conditions	5	18-Jul-22	22-Jul-22
DSS0003010	Prepare Existing Sign Inventory Report	20	18-Jul-22	12-Aug-22
DSS0002020	SFI Existing Pavement Conditions Findings	1	25-Jul-22	25-Jul-22
DSS0001040	Compile Topographic Survey Basemap	10	08-Aug-22	19-Aug-22
DSS0003020	SFI Existing Sign Inventory Findings	1	15-Aug-22	15-Aug-22
DSS0001050	Develop Topographic Survey Basemap	25	22-Aug-22	26-Sep-22
Geotechnical		125	17-Jun-22	30-Jan-23
Site Investigations		28	17-Jun-22	27-Jul-22
DSGSS01000	Compile Geotechnical Information Basemap	10	17-Jun-22	30-Jun-22



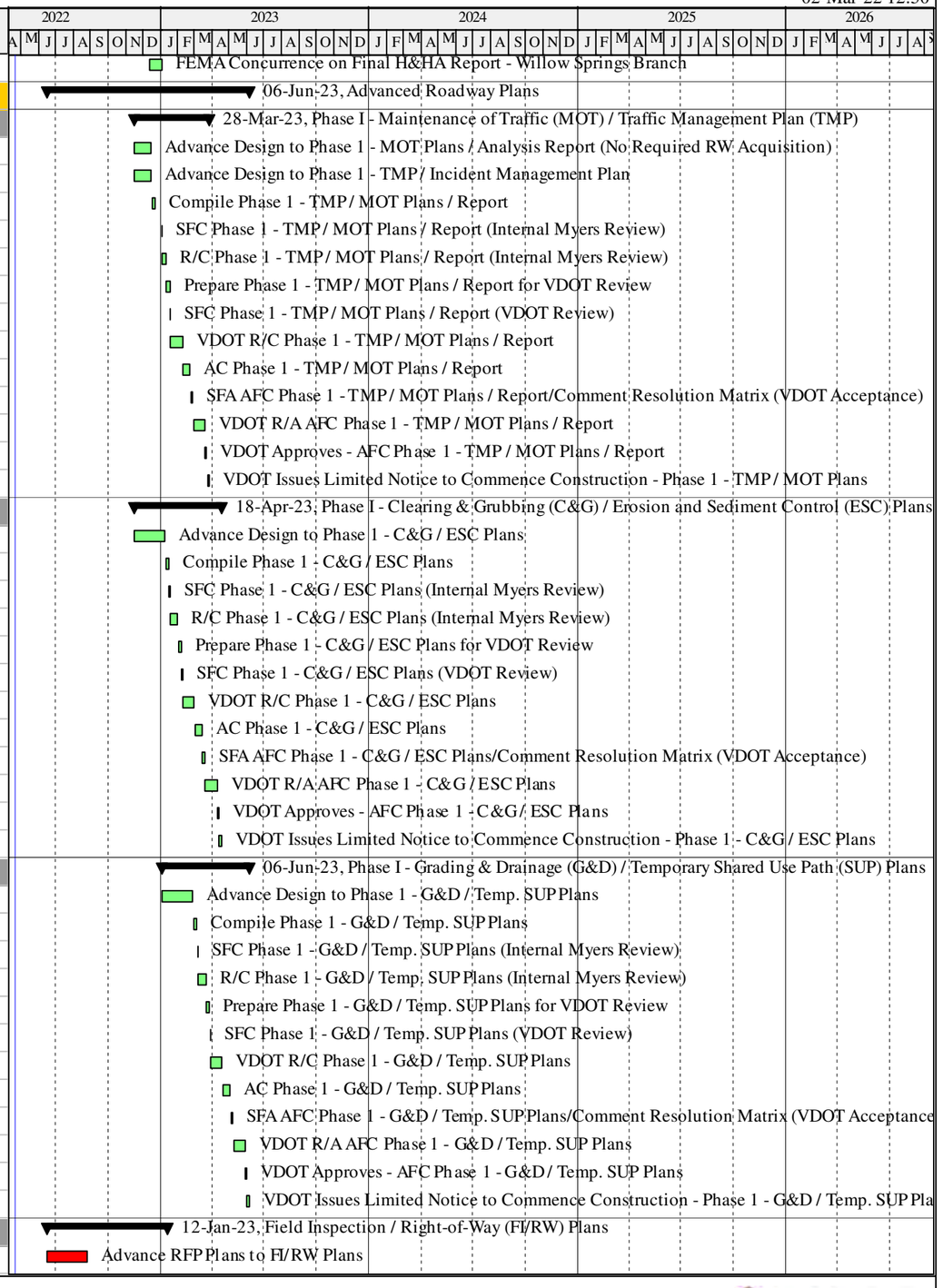
Remaining Level of Effort — Actual Work — Critical Remaining Work
Actual Level of Effort — Remaining Work — Milestone

Activity ID	Activity Name	Original Duration	Start	Finish
DSGSS01010	Prepare Supplemental Geotechnical Investigation Plan	5	01-Jul-22	08-Jul-22
DSGSS01040	Compile Geotechnical Investigation Campaign Plan	10	11-Jul-22	22-Jul-22
DSGSS01050	SFI Geotechnical Investigation Campaign Plan	3	25-Jul-22	27-Jul-22
Supplemental Borings		40	28-Jul-22	22-Sep-22
DSGSB01000	Locate Supplemental Geotechnical Borings	5	28-Jul-22	03-Aug-22
DSGSB01010	Conduct Supplemental Geotechnical Borings	30	04-Aug-22	15-Sep-22
DSGSB01020	Compile Boring Logs	5	16-Sep-22	22-Sep-22
Laboratory Analysis		25	16-Sep-22	20-Oct-22
DSGLA01000	Conduct Boring Laboratory Analyses	20	16-Sep-22	13-Oct-22
DSGLA01010	Compile Boring Laboratory Analyses	5	14-Oct-22	20-Oct-22
Reports and Recommendations		63	23-Sep-22	30-Jan-23
DSGRR01000	Conduct Geotechnical Analyses and Design	10	23-Sep-22	06-Oct-22
DSGRR01010	Prepare Preliminary Geotechnical Recommendations	10	21-Oct-22	03-Nov-22
DSGRR04000	Compile Supplemental Geotechnical Engineering Report (GER)	10	04-Nov-22	17-Nov-22
DSGRR04010	SFC Supplemental Geotechnical Engineering Report (GER) (VDOT Review)	2	18-Nov-22	21-Nov-22
DSGRR04020	VDOT R/C Supplemental Geotechnical Engineering Report (GER)	21	22-Nov-22	12-Dec-22
DSGRR04030	A/C Advance to Final Supplemental Geotechnical Engineering Report (GER)	10	13-Dec-22	03-Jan-23
DSGRR04040	SFC Final Supplemental Geotechnical Engineering Report (GER)	1	04-Jan-23	04-Jan-23
DSGRR04050	VDOT R/C Final Supplemental Geotechnical Engineering Report (GER)	21	05-Jan-23	25-Jan-23
DSGRR04080	VDOT Approves Supplemental Geotechnical Engineering Report (GER)	3	26-Jan-23	30-Jan-23
Hydraulic and Hydrologic Analysis		98	11-Jul-22	03-Jan-23
Little Rocky Run H&HA		98	11-Jul-22	03-Jan-23
DSH0001000	Obtain / Colate Available H&HA Information / Models / Files - Little Rocky Run	20	11-Jul-22	05-Aug-22
DSH0001010	Evaluate / Update Available H&HA Information - Little Rocky Run	10	08-Aug-22	19-Aug-22
DSH0001020	Develop Hydraulic Model / Hydraulic Constraints - Little Rocky Run	5	22-Aug-22	26-Aug-22
DSH0001030	Conduct H&HA Analysis / Develop Recommendations - Little Rocky Run	10	29-Aug-22	12-Sep-22
DSH0001040	Develop Draft H&HA Report - Little Rocky Run	20	13-Sep-22	10-Oct-22
DSH0001050	D-B SFC Draft H&HA Report - Little Rocky Run	3	11-Oct-22	13-Oct-22
DSH0001060	VDOT R/C Draft H&HA Report - Little Rocky Run	21	14-Oct-22	03-Nov-22
DSH0001070	Address Comments / Develop Final H&HA Report - Little Rocky Run	10	04-Nov-22	17-Nov-22
DSH0001080	D-B SFA Final H&HA Report - Little Rocky Run	3	18-Nov-22	22-Nov-22
DSH0001090	VDOT R/A Final H&HA Report - Little Rocky Run	21	23-Nov-22	13-Dec-22
DSH0001100	FEMA Concurrence on Final H&HA Report - Little Rocky Run	21	14-Dec-22	03-Jan-23
Willow Springs Branch H&HA		98	11-Jul-22	03-Jan-23
DSH0002000	Obtain / Colate Available H&HA Information / Models / Files - Willow Springs Branch	20	11-Jul-22	05-Aug-22
DSH0002010	Evaluate / Update Available H&HA Information - Willow Springs Branch	10	08-Aug-22	19-Aug-22
DSH0002020	Develop Hydraulic Model / Hydraulic Constraints - Willow Springs Branch	5	22-Aug-22	26-Aug-22
DSH0002030	Conduct H&HA Analysis / Develop Recommendations - Willow Springs Branch	10	29-Aug-22	12-Sep-22
DSH0002040	Develop Draft H&HA Report - Willow Springs Branch	20	13-Sep-22	10-Oct-22
DSH0002050	D-B SFC Draft H&HA Report - Willow Springs Branch	3	11-Oct-22	13-Oct-22
DSH0002060	VDOT R/C Draft H&HA Report - Willow Springs Branch	21	14-Oct-22	03-Nov-22
DSH0002070	Address Comments / Develop Final H&HA Report - Willow Springs Branch	10	04-Nov-22	17-Nov-22
DSH0002080	D-B SFA Final H&HA Report - Willow Springs Branch	3	18-Nov-22	22-Nov-22
DSH0002090	VDOT R/A Final H&HA Report - Willow Springs Branch	21	23-Nov-22	13-Dec-22



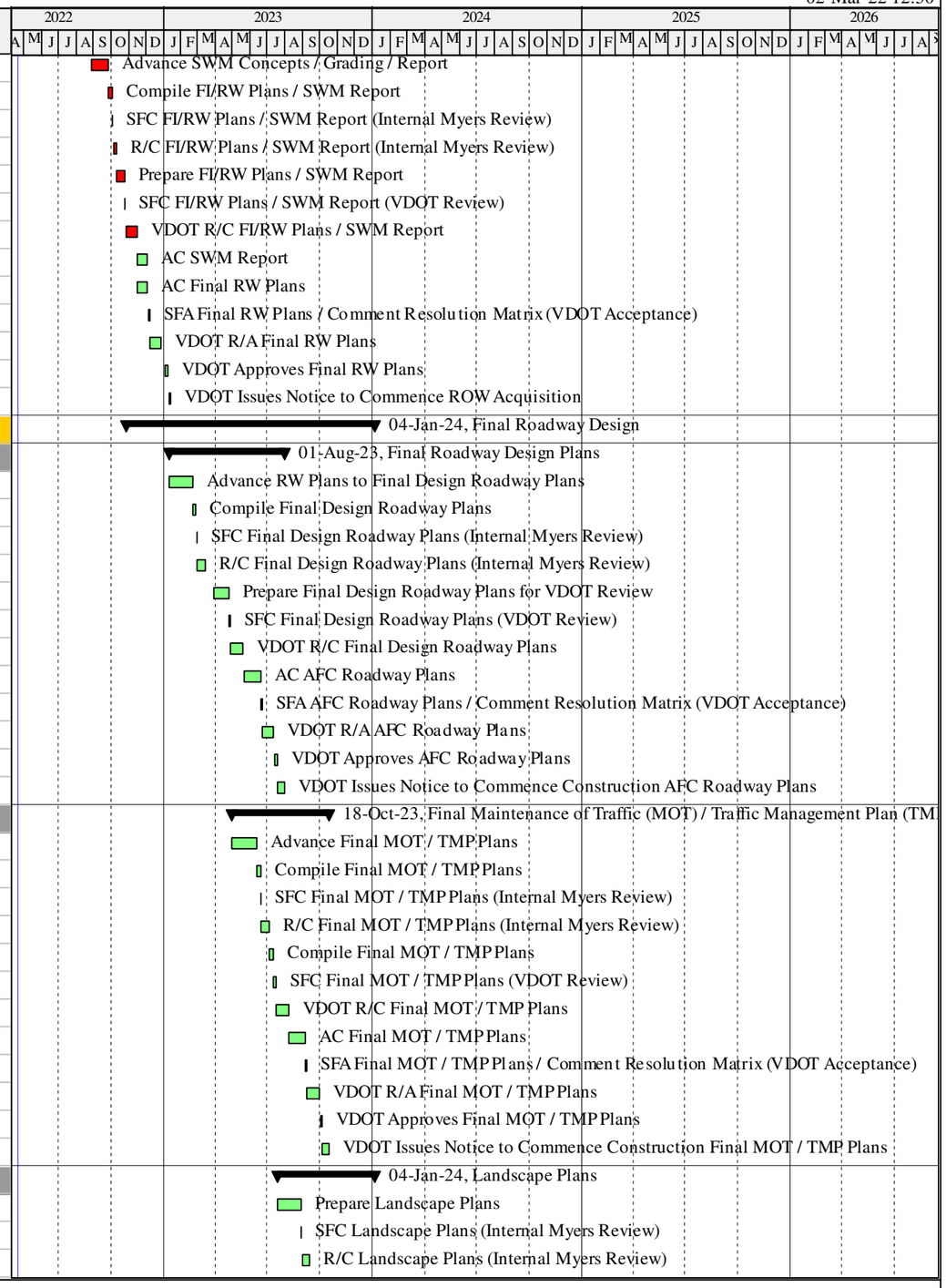
Remaining Level of Effort | Actual Work | Critical Remaining Work
Actual Level of Effort | Remaining Work | Milestone

Activity ID	Activity Name	Original Duration	Start	Finish
DSH0002100	FEMA Concurrence on Final H&HA Report - Willow Springs Branch	21	14-Dec-22	03-Jan-23
Advanced Roadway Plans		201	17-Jun-22	06-Jun-23
Phase I - Maintenance of Traffic (MOT) / Traffic Management Plan (TMP)		67	17-Nov-22	28-Mar-23
DSAC001000	Advance Design to Phase 1 - MOT Plans / Analysis Report (No Required RW Acquisition)	20	17-Nov-22	16-Dec-22
DSAC001010	Advance Design to Phase 1 - TMP / Incident Management Plan	20	17-Nov-22	16-Dec-22
DSAC001020	Compile Phase 1 - TMP / MOT Plans / Report	5	19-Dec-22	23-Dec-22
DSAC001030	SFC Phase 1 - TMP / MOT Plans / Report (Internal Myers Review)	1	03-Jan-23	03-Jan-23
DSAC001040	R/C Phase 1 - TMP / MOT Plans / Report (Internal Myers Review)	5	04-Jan-23	10-Jan-23
DSAC001050	Prepare Phase 1 - TMP / MOT Plans / Report for VDOT Review	5	11-Jan-23	17-Jan-23
DSAC001060	SFC Phase 1 - TMP / MOT Plans / Report (VDOT Review)	1	18-Jan-23	18-Jan-23
DSAC001070	VDOT R/C Phase 1 - TMP / MOT Plans / Report	21	19-Jan-23	08-Feb-23
DSAC001080	AC Phase 1 - TMP / MOT Plans / Report	10	09-Feb-23	22-Feb-23
DSAC001090	SFA AFC Phase 1 - TMP / MOT Plans / Report/Comment Resolution Matrix (VDOT Acceptance)	3	23-Feb-23	27-Feb-23
DSAC001100	VDOT R/A AFC Phase 1 - TMP / MOT Plans / Report	21	28-Feb-23	20-Mar-23
DSAC001110	VDOT Approves - AFC Phase 1 - TMP / MOT Plans / Report	3	21-Mar-23	23-Mar-23
DSAC001120	VDOT Issues Limited Notice to Commence Construction - Phase 1 - TMP / MOT Plans	3	24-Mar-23	28-Mar-23
Phase I - Clearing & Grubbing (C&G) / Erosion and Sediment Control (ESC) Plans		80	17-Nov-22	18-Apr-23
DSAD001000	Advance Design to Phase 1 - C&G / ESC Plans	30	17-Nov-22	09-Jan-23
DSAD001010	Compile Phase 1 - C&G / ESC Plans	5	10-Jan-23	16-Jan-23
DSAD001020	SFC Phase 1 - C&G / ESC Plans (Internal Myers Review)	1	17-Jan-23	17-Jan-23
DSAD001030	R/C Phase 1 - C&G / ESC Plans (Internal Myers Review)	10	18-Jan-23	31-Jan-23
DSAD001040	Prepare Phase 1 - C&G / ESC Plans for VDOT Review	5	01-Feb-23	07-Feb-23
DSAD001050	SFC Phase 1 - C&G / ESC Plans (VDOT Review)	1	08-Feb-23	08-Feb-23
DSAD001060	VDOT R/C Phase 1 - C&G / ESC Plans	21	09-Feb-23	01-Mar-23
DSAD001070	AC Phase 1 - C&G / ESC Plans	10	02-Mar-23	15-Mar-23
DSAD001080	SFA AFC Phase 1 - C&G / ESC Plans/Comment Resolution Matrix (VDOT Acceptance)	3	16-Mar-23	20-Mar-23
DSAD001090	VDOT R/A AFC Phase 1 - C&G / ESC Plans	21	21-Mar-23	10-Apr-23
DSAD001100	VDOT Approves - AFC Phase 1 - C&G / ESC Plans	3	11-Apr-23	13-Apr-23
DSAD001110	VDOT Issues Limited Notice to Commence Construction - Phase 1 - C&G / ESC Plans	3	14-Apr-23	18-Apr-23
Phase I - Grading & Drainage (G&D) / Temporary Shared Use Path (SUP) Plans		90	03-Jan-23	06-Jun-23
DSAZ001000	Advance Design to Phase 1 - G&D / Temp. SUP Plans	40	03-Jan-23	27-Feb-23
DSAZ001010	Compile Phase 1 - G&D / Temp. SUP Plans	5	28-Feb-23	06-Mar-23
DSAZ001020	SFC Phase 1 - G&D / Temp. SUP Plans (Internal Myers Review)	1	07-Mar-23	07-Mar-23
DSAZ001030	R/C Phase 1 - G&D / Temp. SUP Plans (Internal Myers Review)	10	08-Mar-23	21-Mar-23
DSAZ001040	Prepare Phase 1 - G&D / Temp. SUP Plans for VDOT Review	5	22-Mar-23	28-Mar-23
DSAZ001050	SFC Phase 1 - G&D / Temp. SUP Plans (VDOT Review)	1	29-Mar-23	29-Mar-23
DSAZ001060	VDOT R/C Phase 1 - G&D / Temp. SUP Plans	21	30-Mar-23	19-Apr-23
DSAZ001070	AC Phase 1 - G&D / Temp. SUP Plans	10	20-Apr-23	03-May-23
DSAZ001080	SFA AFC Phase 1 - G&D / Temp. SUP Plans/Comment Resolution Matrix (VDOT Acceptance)	3	04-May-23	08-May-23
DSAZ001090	VDOT R/A AFC Phase 1 - G&D / Temp. SUP Plans	21	09-May-23	29-May-23
DSAZ001100	VDOT Approves - AFC Phase 1 - G&D / Temp. SUP Plans	3	30-May-23	01-Jun-23
DSAZ001110	VDOT Issues Limited Notice to Commence Construction - Phase 1 - G&D / Temp. SUP Plans	3	02-Jun-23	06-Jun-23
Field Inspection / Right-of-Way (FI/RW) Plans		117	17-Jun-22	12-Jan-23
DSAE001000	Advance RFP Plans to FI/RW Plans	50	17-Jun-22	26-Aug-22



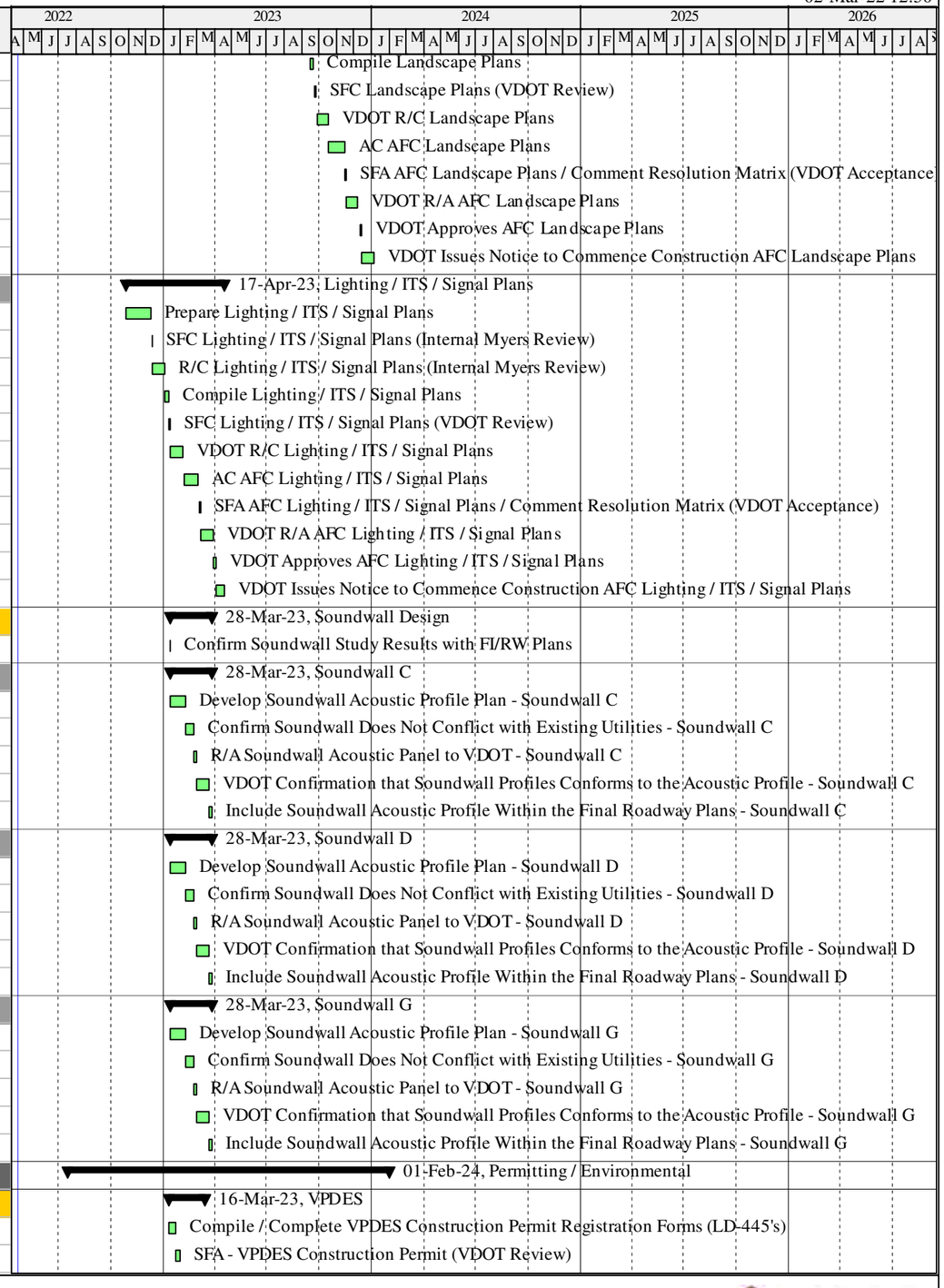
Remaining Level of Effort — Actual Work — Critical Remaining Work
Actual Level of Effort — Remaining Work — Milestone

Activity ID	Activity Name	Original Duration	Start	Finish
DSAE001010	Advance SWM Concepts / Grading / Report	20	29-Aug-22	26-Sep-22
DSAE001015	Compile FI/RW Plans / SWM Report	5	27-Sep-22	03-Oct-22
DSAE001020	SFC FI/RW Plans / SWM Report (Internal Myers Review)	1	04-Oct-22	04-Oct-22
DSAE001030	R/C FI/RW Plans / SWM Report (Internal Myers Review)	5	05-Oct-22	11-Oct-22
DSAE001040	Prepare FI/RW Plans / SWM Report	10	12-Oct-22	25-Oct-22
DSAE001050	SFC FI/RW Plans / SWM Report (VDOT Review)	1	26-Oct-22	26-Oct-22
DSAE001060	VDOT R/C FI/RW Plans / SWM Report	21	27-Oct-22	16-Nov-22
DSAE001070	AC SWM Report	10	17-Nov-22	02-Dec-22
DSAE001075	AC Final RW Plans	10	17-Nov-22	02-Dec-22
DSAE001080	SFA Final RW Plans / Comment Resolution Matrix (VDOT Acceptance)	3	05-Dec-22	07-Dec-22
DSAE001090	VDOT R/A Final RW Plans	21	08-Dec-22	28-Dec-22
DSAE001100	VDOT Approves Final RW Plans	5	03-Jan-23	09-Jan-23
DSAE001110	VDOT Issues Notice to Commence ROW Acquisition	3	10-Jan-23	12-Jan-23
Final Roadway Design		241	27-Oct-22	04-Jan-24
Final Roadway Design Plans		122	10-Jan-23	01-Aug-23
DSRA001000	Advance RW Plans to Final Design Roadway Plans	30	10-Jan-23	20-Feb-23
DSRA001010	Compile Final Design Roadway Plans	5	21-Feb-23	27-Feb-23
DSRA001020	SFC Final Design Roadway Plans (Internal Myers Review)	1	28-Feb-23	28-Feb-23
DSRA001030	R/C Final Design Roadway Plans (Internal Myers Review)	10	01-Mar-23	14-Mar-23
DSRA001040	Prepare Final Design Roadway Plans for VDOT Review	20	29-Mar-23	25-Apr-23
DSRA001050	SFC Final Design Roadway Plans (VDOT Review)	3	26-Apr-23	28-Apr-23
DSRA001060	VDOT R/C Final Design Roadway Plans	21	29-Apr-23	19-May-23
DSRA001070	AC AFC Roadway Plans	20	22-May-23	19-Jun-23
DSRA001080	SFA AFC Roadway Plans / Comment Resolution Matrix (VDOT Acceptance)	3	20-Jun-23	22-Jun-23
DSRA001090	VDOT R/A AFC Roadway Plans	21	23-Jun-23	13-Jul-23
DSRA001100	VDOT Approves AFC Roadway Plans	3	14-Jul-23	18-Jul-23
DSRA001110	VDOT Issues Notice to Commence Construction AFC Roadway Plans	10	19-Jul-23	01-Aug-23
Final Maintenance of Traffic (MOT) / Traffic Management Plan (TMP) Plans		107	01-May-23	18-Oct-23
DSRB001000	Advance Final MOT / TMP Plans	30	01-May-23	12-Jun-23
DSRB001010	Compile Final MOT / TMP Plans	5	13-Jun-23	19-Jun-23
DSRB001020	SFC Final MOT / TMP Plans (Internal Myers Review)	1	20-Jun-23	20-Jun-23
DSRB001030	R/C Final MOT / TMP Plans (Internal Myers Review)	10	21-Jun-23	05-Jul-23
DSRB001040	Compile Final MOT / TMP Plans	5	06-Jul-23	12-Jul-23
DSRB001050	SFC Final MOT / TMP Plans (VDOT Review)	3	13-Jul-23	17-Jul-23
DSRB001060	VDOT R/C Final MOT / TMP Plans	21	18-Jul-23	07-Aug-23
DSRB001070	AC Final MOT / TMP Plans	20	08-Aug-23	05-Sep-23
DSRB001080	SFA Final MOT / TMP Plans / Comment Resolution Matrix (VDOT Acceptance)	3	06-Sep-23	08-Sep-23
DSRB001090	VDOT R/A Final MOT / TMP Plans	21	09-Sep-23	29-Sep-23
DSRB001100	VDOT Approves Final MOT / TMP Plans	3	02-Oct-23	04-Oct-23
DSRB001110	VDOT Issues Notice to Commence Construction Final MOT / TMP Plans	10	05-Oct-23	18-Oct-23
Landscape Plans		94	19-Jul-23	04-Jan-24
DSRC001000	Prepare Landscape Plans	30	19-Jul-23	29-Aug-23
DSRC001010	SFC Landscape Plans (Internal Myers Review)	1	30-Aug-23	30-Aug-23
DSRC001020	R/C Landscape Plans (Internal Myers Review)	10	31-Aug-23	14-Sep-23



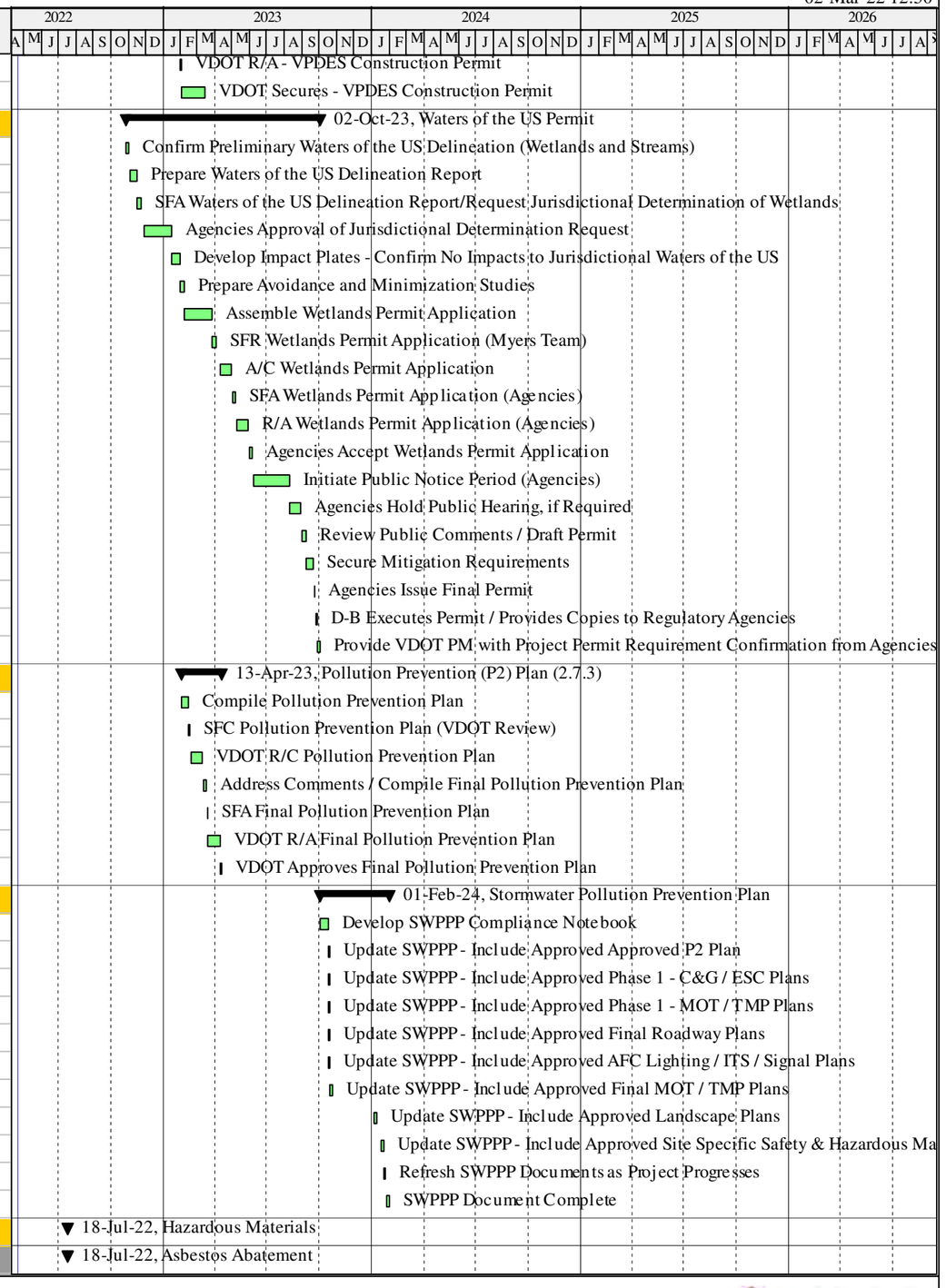
Remaining Level of Effort | Actual Work | Critical Remaining Work
Actual Level of Effort | Remaining Work | Milestone

Activity ID	Activity Name	Original Duration	Start	Finish
DSRC001030	Compile Landscape Plans	5	15-Sep-23	21-Sep-23
DSRC001040	SFC Landscape Plans (VDOT Review)	3	22-Sep-23	26-Sep-23
DSRC001050	VDOT R/C Landscape Plans	21	27-Sep-23	17-Oct-23
DSRC001060	AC AFC Landscape Plans	20	18-Oct-23	14-Nov-23
DSRC001070	SFA AFC Landscape Plans / Comment Resolution Matrix (VDOT Acceptance)	3	15-Nov-23	17-Nov-23
DSRC001080	VDOT R/A AFC Landscape Plans	21	18-Nov-23	08-Dec-23
DSRC001090	VDOT Approves AFC Landscape Plans	3	11-Dec-23	13-Dec-23
DSRC001100	VDOT Issues Notice to Commence Construction AFC Landscape Plans	10	14-Dec-23	04-Jan-24
Lighting / ITS / Signal Plans		89	27-Oct-22	17-Apr-23
DSRD001000	Prepare Lighting / ITS / Signal Plans	30	27-Oct-22	09-Dec-22
DSRD001010	SFC Lighting / ITS / Signal Plans (Internal Myers Review)	1	12-Dec-22	12-Dec-22
DSRD001020	R/C Lighting / ITS / Signal Plans (Internal Myers Review)	10	13-Dec-22	03-Jan-23
DSRD001030	Compile Lighting / ITS / Signal Plans	5	04-Jan-23	10-Jan-23
DSRD001040	SFC Lighting / ITS / Signal Plans (VDOT Review)	3	11-Jan-23	13-Jan-23
DSRD001050	VDOT R/C Lighting / ITS / Signal Plans	21	14-Jan-23	03-Feb-23
DSRD001060	AC AFC Lighting / ITS / Signal Plans	20	06-Feb-23	03-Mar-23
DSRD001070	SFA AFC Lighting / ITS / Signal Plans / Comment Resolution Matrix (VDOT Acceptance)	3	06-Mar-23	08-Mar-23
DSRD001080	VDOT R/A AFC Lighting / ITS / Signal Plans	21	09-Mar-23	29-Mar-23
DSRD001090	VDOT Approves AFC Lighting / ITS / Signal Plans	3	30-Mar-23	03-Apr-23
DSRD001100	VDOT Issues Notice to Commence Construction AFC Lighting / ITS / Signal Plans	10	04-Apr-23	17-Apr-23
Soundwall Design		41	13-Jan-23	28-Mar-23
DSW0001000	Confirm Soundwall Study Results with FI/RW Plans	0	13-Jan-23	13-Jan-23
Soundwall C		41	13-Jan-23	28-Mar-23
DSW0002000	Develop Soundwall Acoustic Profile Plan - Soundwall C	20	13-Jan-23	09-Feb-23
DSW0002010	Confirm Soundwall Does Not Conflict with Existing Utilities - Soundwall C	10	10-Feb-23	23-Feb-23
DSW0002020	R/A Soundwall Acoustic Panel to VDOT - Soundwall C	3	24-Feb-23	28-Feb-23
DSW0002030	VDOT Confirmation that Soundwall Profiles Conforms to the Acoustic Profile - Soundwall C	21	01-Mar-23	21-Mar-23
DSW0002040	Include Soundwall Acoustic Profile Within the Final Roadway Plans - Soundwall C	5	22-Mar-23	28-Mar-23
Soundwall D		41	13-Jan-23	28-Mar-23
DSW0003000	Develop Soundwall Acoustic Profile Plan - Soundwall D	20	13-Jan-23	09-Feb-23
DSW0003010	Confirm Soundwall Does Not Conflict with Existing Utilities - Soundwall D	10	10-Feb-23	23-Feb-23
DSW0003020	R/A Soundwall Acoustic Panel to VDOT - Soundwall D	3	24-Feb-23	28-Feb-23
DSW0003030	VDOT Confirmation that Soundwall Profiles Conforms to the Acoustic Profile - Soundwall D	21	01-Mar-23	21-Mar-23
DSW0003040	Include Soundwall Acoustic Profile Within the Final Roadway Plans - Soundwall D	5	22-Mar-23	28-Mar-23
Soundwall G		41	13-Jan-23	28-Mar-23
DSW0004000	Develop Soundwall Acoustic Profile Plan - Soundwall G	20	13-Jan-23	09-Feb-23
DSW0004010	Confirm Soundwall Does Not Conflict with Existing Utilities - Soundwall G	10	10-Feb-23	23-Feb-23
DSW0004020	R/A Soundwall Acoustic Panel to VDOT - Soundwall G	3	24-Feb-23	28-Feb-23
DSW0004030	VDOT Confirmation that Soundwall Profiles Conforms to the Acoustic Profile - Soundwall G	21	01-Mar-23	21-Mar-23
DSW0004040	Include Soundwall Acoustic Profile Within the Final Roadway Plans - Soundwall G	5	22-Mar-23	28-Mar-23
Permitting / Environmental		318	18-Jul-22	01-Feb-24
VPDES		48	10-Jan-23	16-Mar-23
ENV0001000	Compile / Complete VPDES Construction Permit Registration Forms (LD-445's)	10	10-Jan-23	23-Jan-23
ENV0001010	SFA - VPDES Construction Permit (VDOT Review)	5	24-Jan-23	30-Jan-23



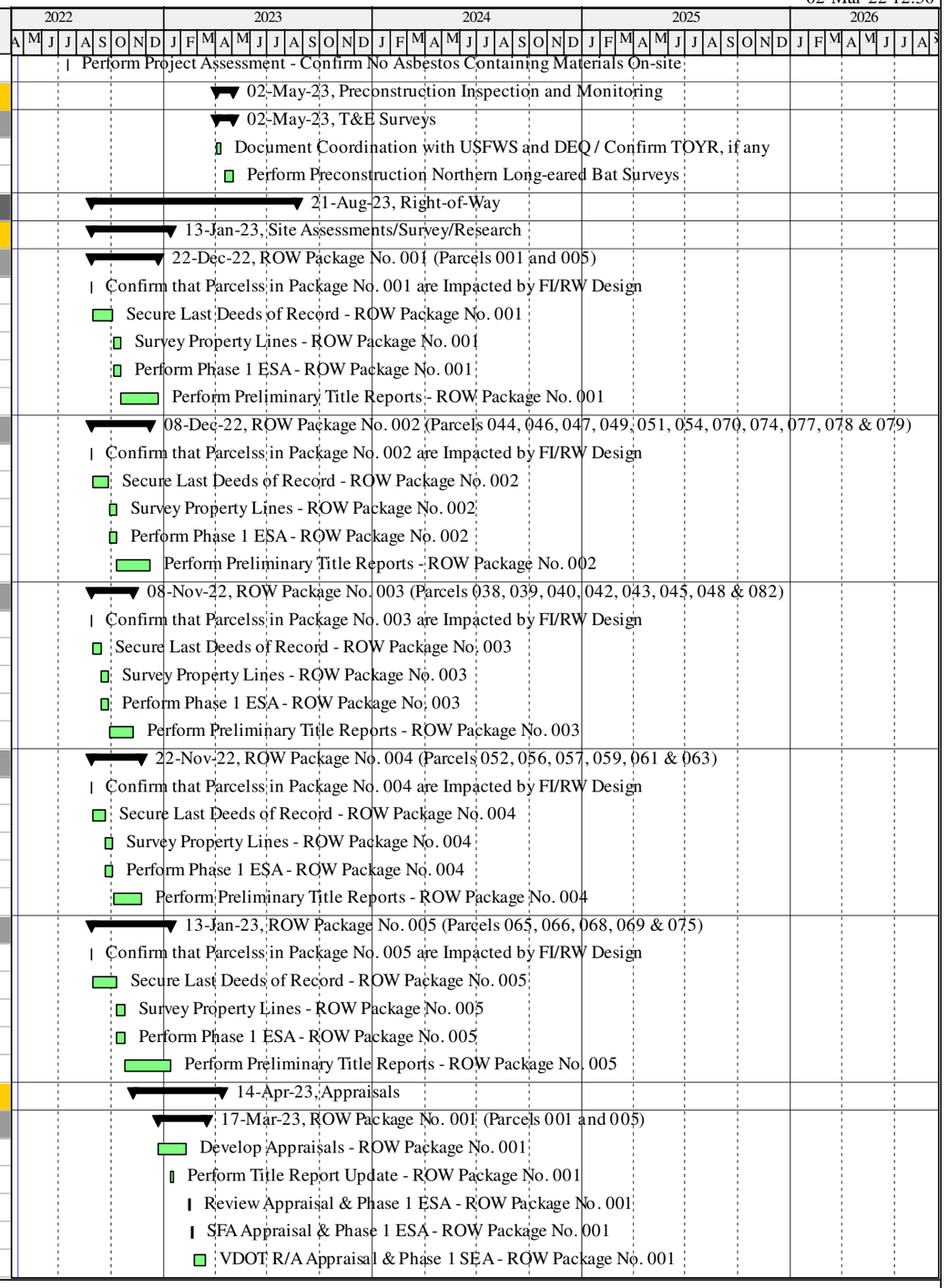
Remaining Level of Effort — Actual Work — Critical Remaining Work
Actual Level of Effort — Remaining Work — Milestone

Activity ID	Activity Name	Original Duration	Start	Finish
ENV0001020	VDOT R/A - VPDES Construction Permit	3	31-Jan-23	02-Feb-23
ENV0001030	VDOT Secures - VPDES Construction Permit	30	03-Feb-23	16-Mar-23
Waters of the US Permit		232	27-Oct-22	02-Oct-23
ENP0001000	Confirm Preliminary Waters of the US Delineation (Wetlands and Streams)	5	27-Oct-22	02-Nov-22
ENP0001010	Prepare Waters of the US Delineation Report	10	03-Nov-22	16-Nov-22
ENP0001020	SFA Waters of the US Delineation Report/Request Jurisdictional Determination of Wetlands	5	17-Nov-22	23-Nov-22
ENP0001030	Agencies Approval of Jurisdictional Determination Request	30	28-Nov-22	16-Jan-23
ENP0001040	Develop Impact Plates - Confirm No Impacts to Jurisdictional Waters of the US	10	17-Jan-23	30-Jan-23
ENP0001050	Prepare Avoidance and Minimization Studies	5	31-Jan-23	06-Feb-23
ENP0001060	Assemble Wetlands Permit Application	35	07-Feb-23	27-Mar-23
ENP0001070	SFR Wetlands Permit Application (Myers Team)	5	28-Mar-23	03-Apr-23
ENP0001080	A/C Wetlands Permit Application	15	11-Apr-23	01-May-23
ENP0001090	SFA Wetlands Permit Application (Agencies)	5	02-May-23	08-May-23
ENP0001100	R/A Wetlands Permit Application (Agencies)	15	09-May-23	30-May-23
ENP0001110	Agencies Accept Wetlands Permit Application	5	31-May-23	06-Jun-23
ENP0001120	Initiate Public Notice Period (Agencies)	45	07-Jun-23	09-Aug-23
ENP0001130	Agencies Hold Public Hearing, if Required	15	10-Aug-23	30-Aug-23
ENP0001140	Review Public Comments / Draft Permit	5	31-Aug-23	07-Sep-23
ENP0001150	Secure Mitigation Requirements	10	08-Sep-23	21-Sep-23
ENP0001160	Agencies Issue Final Permit	1	22-Sep-23	22-Sep-23
ENP0001170	D-B Executes Permit / Provides Copies to Regulatory Agencies	3	25-Sep-23	27-Sep-23
ENP0001180	Provide VDOT PM with Project Permit Requirement Confirmation from Agencies (HOLD POINT)	3	28-Sep-23	02-Oct-23
Pollution Prevention (P2) Plan (2.7.3)		43	01-Feb-23	13-Apr-23
ENL0001000	Compile Pollution Prevention Plan	10	01-Feb-23	14-Feb-23
ENL0001010	SFC Pollution Prevention Plan (VDOT Review)	3	15-Feb-23	17-Feb-23
ENL0001020	VDOT R/C Pollution Prevention Plan	21	18-Feb-23	10-Mar-23
ENL0001030	Address Comments / Compile Final Pollution Prevention Plan	5	13-Mar-23	17-Mar-23
ENL0001040	SFA Final Pollution Prevention Plan	1	20-Mar-23	20-Mar-23
ENL0001050	VDOT R/A Final Pollution Prevention Plan	21	21-Mar-23	10-Apr-23
ENL0001060	VDOT Approves Final Pollution Prevention Plan	3	11-Apr-23	13-Apr-23
Stormwater Pollution Prevention Plan		80	03-Oct-23	01-Feb-24
ENS0001000	Develop SWPPP Compliance Notebook	10	03-Oct-23	16-Oct-23
ENS0001020	Update SWPPP - Include Approved Approved P2 Plan	3	17-Oct-23	19-Oct-23
ENS0001030	Update SWPPP - Include Approved Phase 1 - C&G / ESC Plans	3	17-Oct-23	19-Oct-23
ENS0001040	Update SWPPP - Include Approved Phase 1 - MOT / TMP Plans	3	17-Oct-23	19-Oct-23
ENS0001050	Update SWPPP - Include Approved Final Roadway Plans	3	17-Oct-23	19-Oct-23
ENS0001080	Update SWPPP - Include Approved AFC Lighting / ITS / Signal Plans	3	17-Oct-23	19-Oct-23
ENS0001060	Update SWPPP - Include Approved Final MOT / TMP Plans	3	19-Oct-23	23-Oct-23
ENS0001090	Update SWPPP - Include Approved Landscape Plans	3	05-Jan-24	09-Jan-24
ENS0001010	Update SWPPP - Include Approved Site Specific Safety & Hazardous Materials Management Plan	3	18-Jan-24	22-Jan-24
ENS0001100	Refresh SWPPP Documents as Project Progresses	3	23-Jan-24	25-Jan-24
ENS0001110	SWPPP Document Complete	5	26-Jan-24	01-Feb-24
Hazardous Materials		1	18-Jul-22	18-Jul-22
Asbestos Abatement		1	18-Jul-22	18-Jul-22



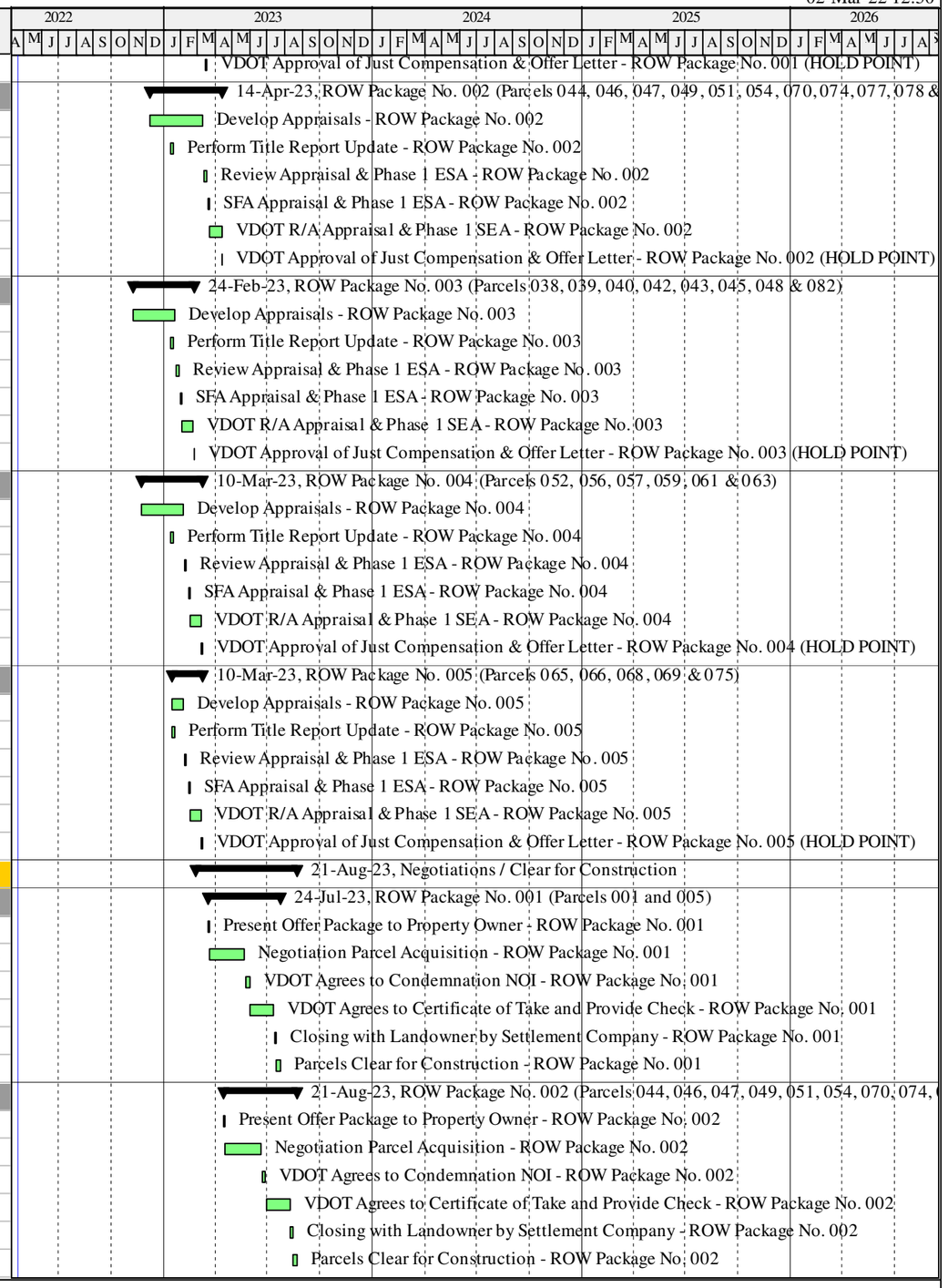
Remaining Level of Effort — Actual Work — Critical Remaining Work
Actual Level of Effort — Remaining Work — Milestone

Activity ID	Activity Name	Original Duration	Start	Finish
ENHAA01000	Perform Project Assessment - Confirm No Asbestos Containing Materials On-site	1	18-Jul-22	18-Jul-22
Preconstruction Inspection and Monitoring		21	04-Apr-23	02-May-23
T&E Surveys		21	04-Apr-23	02-May-23
ENCTE01010	Document Coordination with USFWS and DEQ / Confirm TOYR, if any	5	04-Apr-23	10-Apr-23
ENCTE01000	Perform Preconstruction Northern Long-eared Bat Surveys	10	19-Apr-23	02-May-23
Right-of-Way		205	29-Aug-22	21-Aug-23
Site Assessments/Survey/Research		91	29-Aug-22	13-Jan-23
ROW Package No. 001 (Parcels 001 and 005)		81	29-Aug-22	22-Dec-22
RWSA001000	Confirm that Parcelss in Package No. 001 are Impacted by FI/RW Design	1	29-Aug-22	29-Aug-22
RWSA001010	Secure Last Deeds of Record - ROW Package No. 001	25	30-Aug-22	04-Oct-22
RWSA001020	Survey Property Lines - ROW Package No. 001	10	05-Oct-22	18-Oct-22
RWSA001030	Perform Phase 1 ESA - ROW Package No. 001	10	05-Oct-22	18-Oct-22
RWSA001040	Perform Preliminary Title Reports - ROW Package No. 001	45	19-Oct-22	22-Dec-22
ROW Package No. 002 (Parcels 044, 046, 047, 049, 051, 054, 070, 074, 077, 078 & 079)		71	29-Aug-22	08-Dec-22
RWSB001000	Confirm that Parcelss in Package No. 002 are Impacted by FI/RW Design	1	29-Aug-22	29-Aug-22
RWSB001010	Secure Last Deeds of Record - ROW Package No. 002	20	30-Aug-22	27-Sep-22
RWSB001020	Survey Property Lines - ROW Package No. 002	10	28-Sep-22	11-Oct-22
RWSB001030	Perform Phase 1 ESA - ROW Package No. 002	10	28-Sep-22	11-Oct-22
RWSB001040	Perform Preliminary Title Reports - ROW Package No. 002	40	12-Oct-22	08-Dec-22
ROW Package No. 003 (Parcels 038, 039, 040, 042, 043, 045, 048 & 082)		51	29-Aug-22	08-Nov-22
RWSC001000	Confirm that Parcelss in Package No. 003 are Impacted by FI/RW Design	1	29-Aug-22	29-Aug-22
RWSC001010	Secure Last Deeds of Record - ROW Package No. 003	10	30-Aug-22	13-Sep-22
RWSC001020	Survey Property Lines - ROW Package No. 003	10	14-Sep-22	27-Sep-22
RWSC001030	Perform Phase 1 ESA - ROW Package No. 003	10	14-Sep-22	27-Sep-22
RWSC001040	Perform Preliminary Title Reports - ROW Package No. 003	30	28-Sep-22	08-Nov-22
ROW Package No. 004 (Parcels 052, 056, 057, 059, 061 & 063)		61	29-Aug-22	22-Nov-22
RWSD001000	Confirm that Parcelss in Package No. 004 are Impacted by FI/RW Design	1	29-Aug-22	29-Aug-22
RWSD001010	Secure Last Deeds of Record - ROW Package No. 004	15	30-Aug-22	20-Sep-22
RWSD001020	Survey Property Lines - ROW Package No. 004	10	21-Sep-22	04-Oct-22
RWSD001030	Perform Phase 1 ESA - ROW Package No. 004	10	21-Sep-22	04-Oct-22
RWSD001040	Perform Preliminary Title Reports - ROW Package No. 004	35	05-Oct-22	22-Nov-22
ROW Package No. 005 (Parcels 065, 066, 068, 069 & 075)		91	29-Aug-22	13-Jan-23
RWSE001000	Confirm that Parcelss in Package No. 005 are Impacted by FI/RW Design	1	29-Aug-22	29-Aug-22
RWSE001010	Secure Last Deeds of Record - ROW Package No. 005	30	30-Aug-22	11-Oct-22
RWSE001020	Survey Property Lines - ROW Package No. 005	10	12-Oct-22	25-Oct-22
RWSE001030	Perform Phase 1 ESA - ROW Package No. 005	10	12-Oct-22	25-Oct-22
RWSE001040	Perform Preliminary Title Reports - ROW Package No. 005	50	26-Oct-22	13-Jan-23
Appraisals		82	09-Nov-22	14-Apr-23
ROW Package No. 001 (Parcels 001 and 005)		41	23-Dec-22	17-Mar-23
RWAA001000	Develop Appraisals - ROW Package No. 001	30	23-Dec-22	10-Feb-23
RWAA001010	Perform Title Report Update - ROW Package No. 001	5	13-Jan-23	19-Jan-23
RWAA001020	Review Appraisal & Phase 1 ESA - ROW Package No. 001	5	13-Feb-23	17-Feb-23
RWAA001030	SFA Appraisal & Phase 1 ESA - ROW Package No. 001	3	20-Feb-23	22-Feb-23
RWAA001040	VDOT R/A Appraisal & Phase 1 SEA - ROW Package No. 001	21	23-Feb-23	15-Mar-23



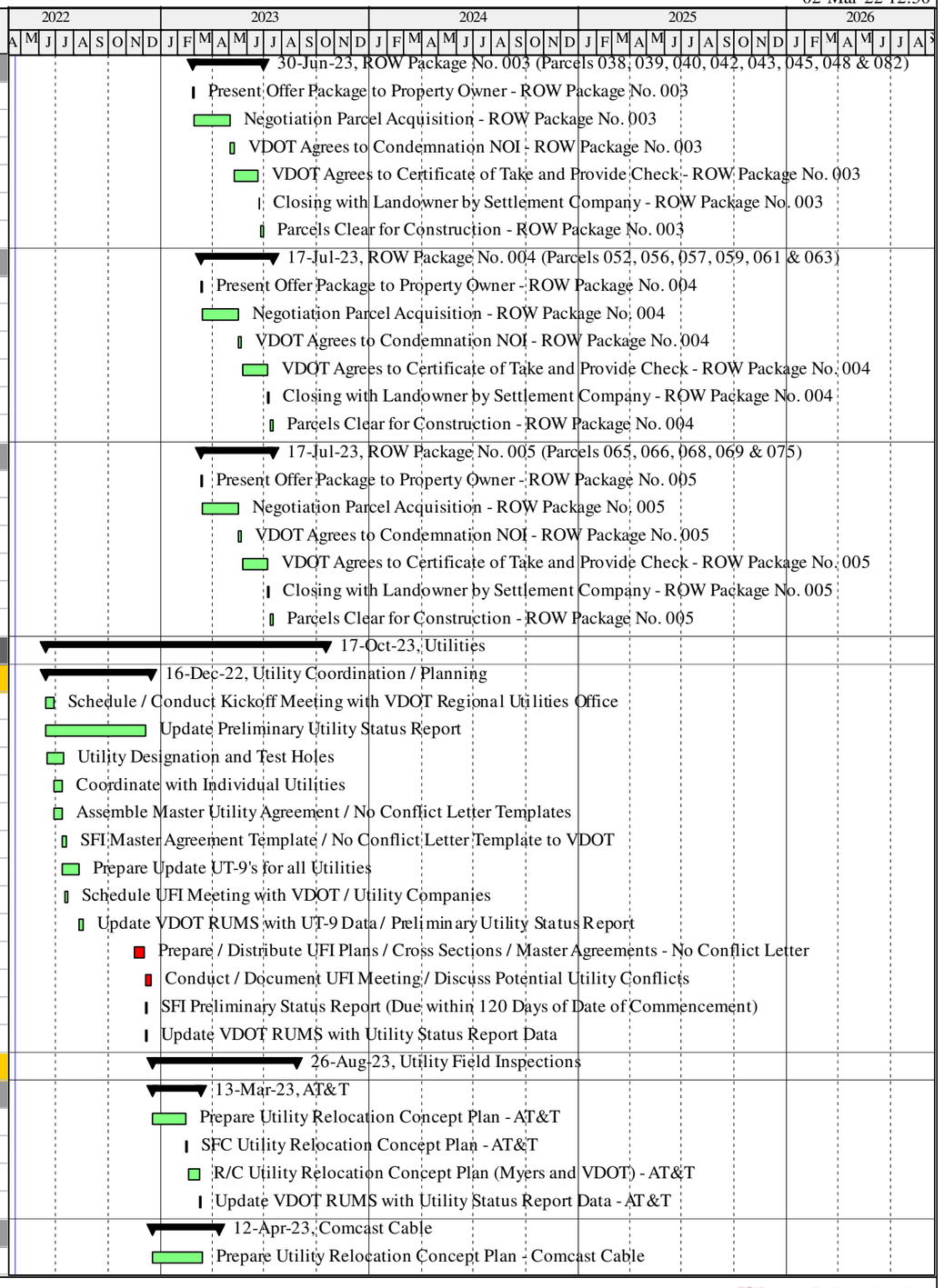
Remaining Level of Effort — Actual Work — Critical Remaining Work
Actual Level of Effort — Remaining Work — Milestone

Activity ID	Activity Name	Original Duration	Start	Finish
RWAA001050	VDOT Approval of Just Compensation & Offer Letter - ROW Package No. 001 (HOLD POINT)	2	16-Mar-23	17-Mar-23
ROW Package No. 002 (Parcels 044, 046, 047, 049, 051, 054, 070, 074, 077, 078 & 079)		66	09-Dec-22	14-Apr-23
RWAB001000	Develop Appraisals - ROW Package No. 002	60	09-Dec-22	10-Mar-23
RWAB001010	Perform Title Report Update - ROW Package No. 002	5	13-Jan-23	19-Jan-23
RWAB001020	Review Appraisal & Phase 1 ESA - ROW Package No. 002	5	13-Mar-23	17-Mar-23
RWAB001030	SFA Appraisal & Phase 1 ESA - ROW Package No. 002	3	20-Mar-23	22-Mar-23
RWAB001040	VDOT R/A Appraisal & Phase 1 SEA - ROW Package No. 002	21	23-Mar-23	12-Apr-23
RWAB001050	VDOT Approval of Just Compensation & Offer Letter - ROW Package No. 002 (HOLD POINT)	2	13-Apr-23	14-Apr-23
ROW Package No. 003 (Parcels 038, 039, 040, 042, 043, 045, 048 & 082)		53	09-Nov-22	24-Feb-23
RWAC001000	Develop Appraisals - ROW Package No. 003	45	09-Nov-22	20-Jan-23
RWAC001010	Perform Title Report Update - ROW Package No. 003	5	13-Jan-23	19-Jan-23
RWAC001020	Review Appraisal & Phase 1 ESA - ROW Package No. 003	5	23-Jan-23	27-Jan-23
RWAC001030	SFA Appraisal & Phase 1 ESA - ROW Package No. 003	3	30-Jan-23	01-Feb-23
RWAC001040	VDOT R/A Appraisal & Phase 1 SEA - ROW Package No. 003	21	02-Feb-23	22-Feb-23
RWAC001050	VDOT Approval of Just Compensation & Offer Letter - ROW Package No. 003 (HOLD POINT)	2	23-Feb-23	24-Feb-23
ROW Package No. 004 (Parcels 052, 056, 057, 059, 061 & 063)		54	23-Nov-22	10-Mar-23
RWAD001000	Develop Appraisals - ROW Package No. 004	45	23-Nov-22	03-Feb-23
RWAD001010	Perform Title Report Update - ROW Package No. 004	5	13-Jan-23	19-Jan-23
RWAD001020	Review Appraisal & Phase 1 ESA - ROW Package No. 004	5	06-Feb-23	10-Feb-23
RWAD001030	SFA Appraisal & Phase 1 ESA - ROW Package No. 004	3	13-Feb-23	15-Feb-23
RWAD001040	VDOT R/A Appraisal & Phase 1 SEA - ROW Package No. 004	21	16-Feb-23	08-Mar-23
RWAD001050	VDOT Approval of Just Compensation & Offer Letter - ROW Package No. 004 (HOLD POINT)	2	09-Mar-23	10-Mar-23
ROW Package No. 005 (Parcels 065, 066, 068, 069 & 075)		31	16-Jan-23	10-Mar-23
RWAE001000	Develop Appraisals - ROW Package No. 005	15	16-Jan-23	03-Feb-23
RWAE001010	Perform Title Report Update - ROW Package No. 005	5	16-Jan-23	20-Jan-23
RWAE001020	Review Appraisal & Phase 1 ESA - ROW Package No. 005	5	06-Feb-23	10-Feb-23
RWAE001030	SFA Appraisal & Phase 1 ESA - ROW Package No. 005	3	13-Feb-23	15-Feb-23
RWAE001040	VDOT R/A Appraisal & Phase 1 SEA - ROW Package No. 005	21	16-Feb-23	08-Mar-23
RWAE001050	VDOT Approval of Just Compensation & Offer Letter - ROW Package No. 005 (HOLD POINT)	2	09-Mar-23	10-Mar-23
Negotiations / Clear for Construction		124	27-Feb-23	21-Aug-23
ROW Package No. 001 (Parcels 001 and 005)		89	20-Mar-23	24-Jul-23
RWNA001000	Present Offer Package to Property Owner - ROW Package No. 001	2	20-Mar-23	21-Mar-23
RWNA001010	Negotiation Parcel Acquisition - ROW Package No. 001	45	22-Mar-23	23-May-23
RWNA001020	VDOT Agrees to Condemnation NOI - ROW Package No. 001	5	24-May-23	31-May-23
RWNA001030	VDOT Agrees to Certificate of Take and Provide Check - ROW Package No. 001	30	01-Jun-23	13-Jul-23
RWNA001040	Closing with Landowner by Settlement Company - ROW Package No. 001	2	14-Jul-23	17-Jul-23
RWNA001050	Parcels Clear for Construction - ROW Package No. 001	5	18-Jul-23	24-Jul-23
ROW Package No. 002 (Parcels 044, 046, 047, 049, 051, 054, 070, 074, 077, 078 & 079)		89	17-Apr-23	21-Aug-23
RWNB001000	Present Offer Package to Property Owner - ROW Package No. 002	2	17-Apr-23	18-Apr-23
RWNB001010	Negotiation Parcel Acquisition - ROW Package No. 002	45	19-Apr-23	21-Jun-23
RWNB001020	VDOT Agrees to Condemnation NOI - ROW Package No. 002	5	22-Jun-23	28-Jun-23
RWNB001030	VDOT Agrees to Certificate of Take and Provide Check - ROW Package No. 002	30	29-Jun-23	10-Aug-23
RWNB001040	Closing with Landowner by Settlement Company - ROW Package No. 002	2	11-Aug-23	14-Aug-23
RWNB001050	Parcels Clear for Construction - ROW Package No. 002	5	15-Aug-23	21-Aug-23



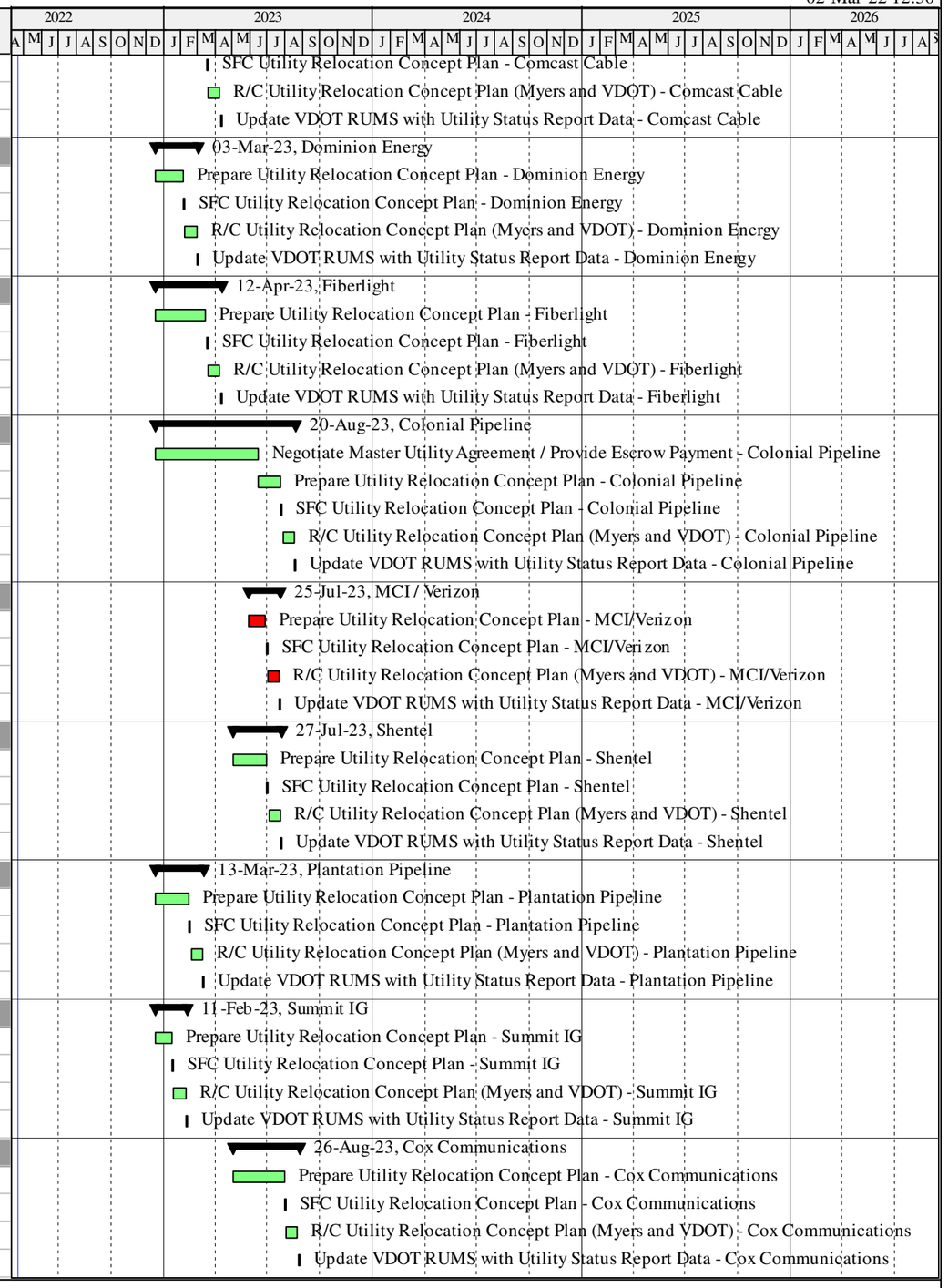
Remaining Level of Effort — Actual Work — Critical Remaining Work
Actual Level of Effort — Remaining Work — Milestone

Activity ID	Activity Name	Original Duration	Start	Finish
ROW Package No. 003 (Parcels 038, 039, 040, 042, 043, 045, 048 & 082)		89	27-Feb-23	30-Jun-23
RWNC001000	Present Offer Package to Property Owner - ROW Package No. 003	2	27-Feb-23	28-Feb-23
RWNC001010	Negotiation Parcel Acquisition - ROW Package No. 003	45	01-Mar-23	02-May-23
RWNC001020	VDOT Agrees to Condemnation NOI - ROW Package No. 003	5	03-May-23	09-May-23
RWNC001030	VDOT Agrees to Certificate of Take and Provide Check - ROW Package No. 003	30	10-May-23	21-Jun-23
RWNC001040	Closing with Landowner by Settlement Company - ROW Package No. 003	2	22-Jun-23	23-Jun-23
RWNC001050	Parcels Clear for Construction - ROW Package No. 003	5	26-Jun-23	30-Jun-23
ROW Package No. 004 (Parcels 052, 056, 057, 059, 061 & 063)		89	13-Mar-23	17-Jul-23
RWND001000	Present Offer Package to Property Owner - ROW Package No. 004	2	13-Mar-23	14-Mar-23
RWND001010	Negotiation Parcel Acquisition - ROW Package No. 004	45	15-Mar-23	16-May-23
RWND001020	VDOT Agrees to Condemnation NOI - ROW Package No. 004	5	17-May-23	23-May-23
RWND001030	VDOT Agrees to Certificate of Take and Provide Check - ROW Package No. 004	30	24-May-23	06-Jul-23
RWND001040	Closing with Landowner by Settlement Company - ROW Package No. 004	2	07-Jul-23	10-Jul-23
RWND001050	Parcels Clear for Construction - ROW Package No. 004	5	11-Jul-23	17-Jul-23
ROW Package No. 005 (Parcels 065, 066, 068, 069 & 075)		89	13-Mar-23	17-Jul-23
RWNE001000	Present Offer Package to Property Owner - ROW Package No. 005	2	13-Mar-23	14-Mar-23
RWNE001010	Negotiation Parcel Acquisition - ROW Package No. 005	45	15-Mar-23	16-May-23
RWNE001020	VDOT Agrees to Condemnation NOI - ROW Package No. 005	5	17-May-23	23-May-23
RWNE001030	VDOT Agrees to Certificate of Take and Provide Check - ROW Package No. 005	30	24-May-23	06-Jul-23
RWNE001040	Closing with Landowner by Settlement Company - ROW Package No. 005	2	07-Jul-23	10-Jul-23
RWNE001050	Parcels Clear for Construction - ROW Package No. 005	5	11-Jul-23	17-Jul-23
Utilities		286	15-Jun-22	17-Oct-23
Utility Coordination / Planning		129	15-Jun-22	16-Dec-22
UTC0001000	Schedule / Conduct Kickoff Meeting with VDOT Regional Utilities Office	10	15-Jun-22	28-Jun-22
UTC0001090	Update Preliminary Utility Status Report	120	15-Jun-22	05-Dec-22
UTC0001120	Utility Designation and Test Holes	20	17-Jun-22	15-Jul-22
UTC0001010	Coordinate with Individual Utilities	10	29-Jun-22	13-Jul-22
UTC0001020	Assemble Master Utility Agreement / No Conflict Letter Templates	10	29-Jun-22	13-Jul-22
UTC0001030	SFI Master Agreement Template / No Conflict Letter Template to VDOT	5	14-Jul-22	20-Jul-22
UTC0001040	Prepare Update UT-9's for all Utilities	20	14-Jul-22	10-Aug-22
UTC0001060	Schedule UFI Meeting with VDOT / Utility Companies	5	18-Jul-22	22-Jul-22
UTC0001050	Update VDOT RUMS with UT-9 Data / Preliminary Utility Status Report	5	11-Aug-22	17-Aug-22
UTC0001070	Prepare / Distribute UFI Plans / Cross Sections / Master Agreements - No Conflict Letter	10	17-Nov-22	02-Dec-22
UTC0001080	Conduct / Document UFI Meeting / Discuss Potential Utility Conflicts	10	05-Dec-22	16-Dec-22
UTC0001100	SFI Preliminary Status Report (Due within 120 Days of Date of Commencement)	3	06-Dec-22	08-Dec-22
UTC0001110	Update VDOT RUMS with Utility Status Report Data	3	06-Dec-22	08-Dec-22
Utility Field Inspections		253	17-Dec-22	26-Aug-23
AT&T		87	17-Dec-22	13-Mar-23
UTFA001000	Prepare Utility Relocation Concept Plan - AT&T	60	17-Dec-22	14-Feb-23
UTFA001010	SFC Utility Relocation Concept Plan - AT&T	3	15-Feb-23	17-Feb-23
UTFA001020	R/C Utility Relocation Concept Plan (Myers and VDOT) - AT&T	21	18-Feb-23	10-Mar-23
UTFA001030	Update VDOT RUMS with Utility Status Report Data - AT&T	3	11-Mar-23	13-Mar-23
Comcast Cable		117	17-Dec-22	12-Apr-23
UTFC001000	Prepare Utility Relocation Concept Plan - Comcast Cable	90	17-Dec-22	16-Mar-23



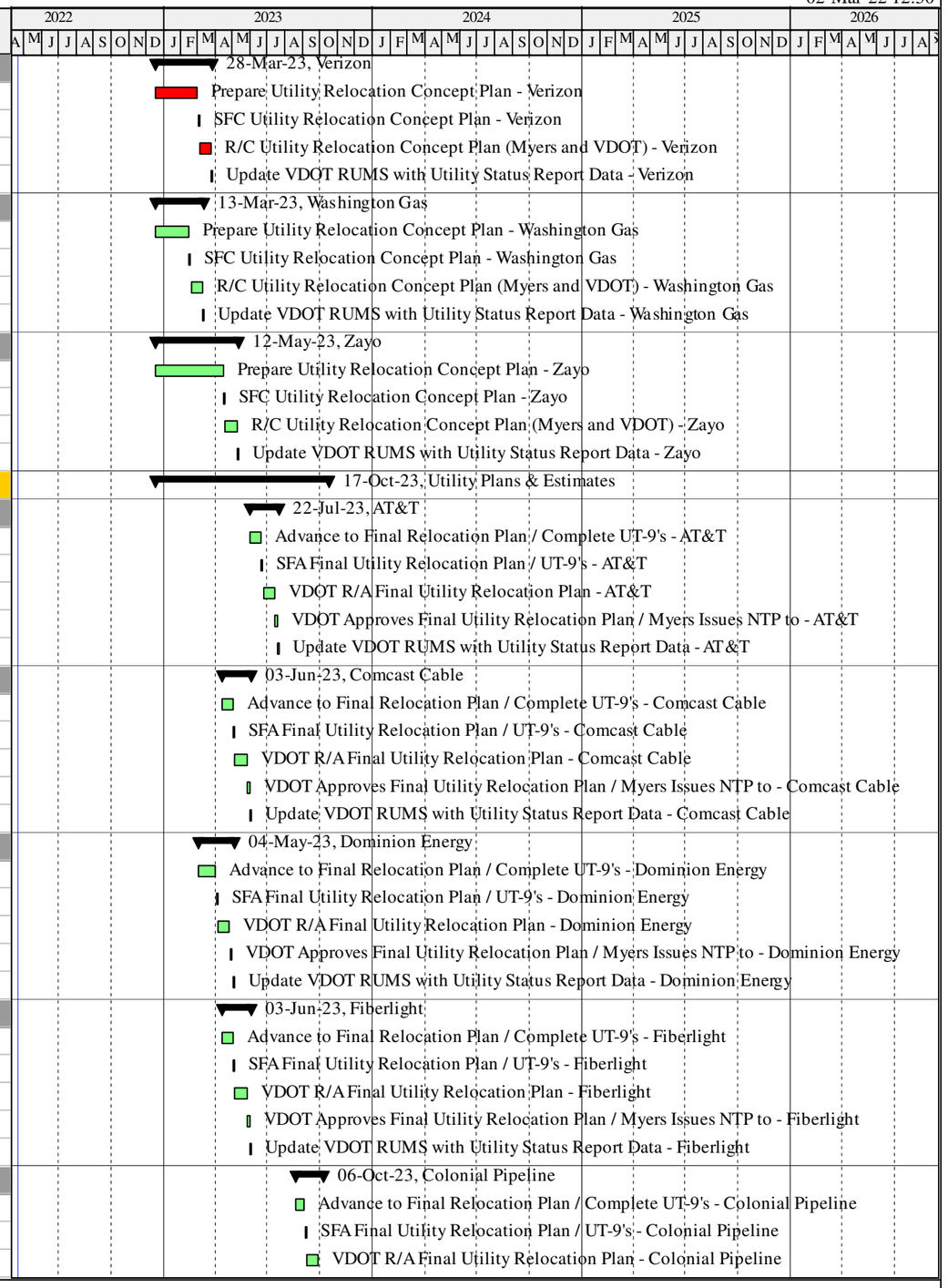
Remaining Level of Effort | Actual Work | Critical Remaining Work
Actual Level of Effort | Remaining Work | Milestone

Activity ID	Activity Name	Original Duration	Start	Finish
UTFC001010	SFC Utility Relocation Concept Plan - Comcast Cable	3	17-Mar-23	19-Mar-23
UTFC001020	R/C Utility Relocation Concept Plan (Myers and VDOT) - Comcast Cable	21	20-Mar-23	09-Apr-23
UTFC001030	Update VDOT RUMS with Utility Status Report Data - Comcast Cable	3	10-Apr-23	12-Apr-23
Dominion Energy		77	17-Dec-22	03-Mar-23
UTFD001000	Prepare Utility Relocation Concept Plan - Dominion Energy	50	17-Dec-22	04-Feb-23
UTFD001010	SFC Utility Relocation Concept Plan - Dominion Energy	3	05-Feb-23	07-Feb-23
UTFD001020	R/C Utility Relocation Concept Plan (Myers and VDOT) - Dominion Energy	21	08-Feb-23	28-Feb-23
UTFD001030	Update VDOT RUMS with Utility Status Report Data - Dominion Energy	3	01-Mar-23	03-Mar-23
Fiberlight		117	17-Dec-22	12-Apr-23
UTFF001000	Prepare Utility Relocation Concept Plan - Fiberlight	90	17-Dec-22	16-Mar-23
UTFF001010	SFC Utility Relocation Concept Plan - Fiberlight	3	17-Mar-23	19-Mar-23
UTFF001020	R/C Utility Relocation Concept Plan (Myers and VDOT) - Fiberlight	21	20-Mar-23	09-Apr-23
UTFF001030	Update VDOT RUMS with Utility Status Report Data - Fiberlight	3	10-Apr-23	12-Apr-23
Colonial Pipeline		247	17-Dec-22	20-Aug-23
UTFL001000	Negotiate Master Utility Agreement / Provide Escrow Payment - Colonial Pipeline	180	17-Dec-22	14-Jun-23
UTFL001005	Prepare Utility Relocation Concept Plan - Colonial Pipeline	40	15-Jun-23	24-Jul-23
UTFL001010	SFC Utility Relocation Concept Plan - Colonial Pipeline	3	25-Jul-23	27-Jul-23
UTFL001020	R/C Utility Relocation Concept Plan (Myers and VDOT) - Colonial Pipeline	21	28-Jul-23	17-Aug-23
UTFL001030	Update VDOT RUMS with Utility Status Report Data - Colonial Pipeline	3	18-Aug-23	20-Aug-23
MCI / Verizon		57	30-May-23	25-Jul-23
UTFM001000	Prepare Utility Relocation Concept Plan - MCI/Verizon	30	30-May-23	28-Jun-23
UTFM001010	SFC Utility Relocation Concept Plan - MCI/Verizon	3	29-Jun-23	01-Jul-23
UTFM001020	R/C Utility Relocation Concept Plan (Myers and VDOT) - MCI/Verizon	21	02-Jul-23	22-Jul-23
UTFM001030	Update VDOT RUMS with Utility Status Report Data - MCI/Verizon	3	23-Jul-23	25-Jul-23
Shentel		87	02-May-23	27-Jul-23
UTFN001000	Prepare Utility Relocation Concept Plan - Shentel	60	02-May-23	30-Jun-23
UTFN001010	SFC Utility Relocation Concept Plan - Shentel	3	01-Jul-23	03-Jul-23
UTFN001020	R/C Utility Relocation Concept Plan (Myers and VDOT) - Shentel	21	04-Jul-23	24-Jul-23
UTFN001030	Update VDOT RUMS with Utility Status Report Data - Shentel	3	25-Jul-23	27-Jul-23
Plantation Pipeline		87	17-Dec-22	13-Mar-23
UTFP001000	Prepare Utility Relocation Concept Plan - Plantation Pipeline	60	17-Dec-22	14-Feb-23
UTFP001010	SFC Utility Relocation Concept Plan - Plantation Pipeline	3	15-Feb-23	17-Feb-23
UTFP001020	R/C Utility Relocation Concept Plan (Myers and VDOT) - Plantation Pipeline	21	18-Feb-23	10-Mar-23
UTFP001030	Update VDOT RUMS with Utility Status Report Data - Plantation Pipeline	3	11-Mar-23	13-Mar-23
Summit IG		57	17-Dec-22	11-Feb-23
UTFS001000	Prepare Utility Relocation Concept Plan - Summit IG	30	17-Dec-22	15-Jan-23
UTFS001010	SFC Utility Relocation Concept Plan - Summit IG	3	16-Jan-23	18-Jan-23
UTFS001020	R/C Utility Relocation Concept Plan (Myers and VDOT) - Summit IG	21	19-Jan-23	08-Feb-23
UTFS001030	Update VDOT RUMS with Utility Status Report Data - Summit IG	3	09-Feb-23	11-Feb-23
Cox Communications		117	02-May-23	26-Aug-23
UTFT001000	Prepare Utility Relocation Concept Plan - Cox Communications	90	02-May-23	30-Jul-23
UTFT001010	SFC Utility Relocation Concept Plan - Cox Communications	3	31-Jul-23	02-Aug-23
UTFT001020	R/C Utility Relocation Concept Plan (Myers and VDOT) - Cox Communications	21	03-Aug-23	23-Aug-23
UTFT001030	Update VDOT RUMS with Utility Status Report Data - Cox Communications	3	24-Aug-23	26-Aug-23



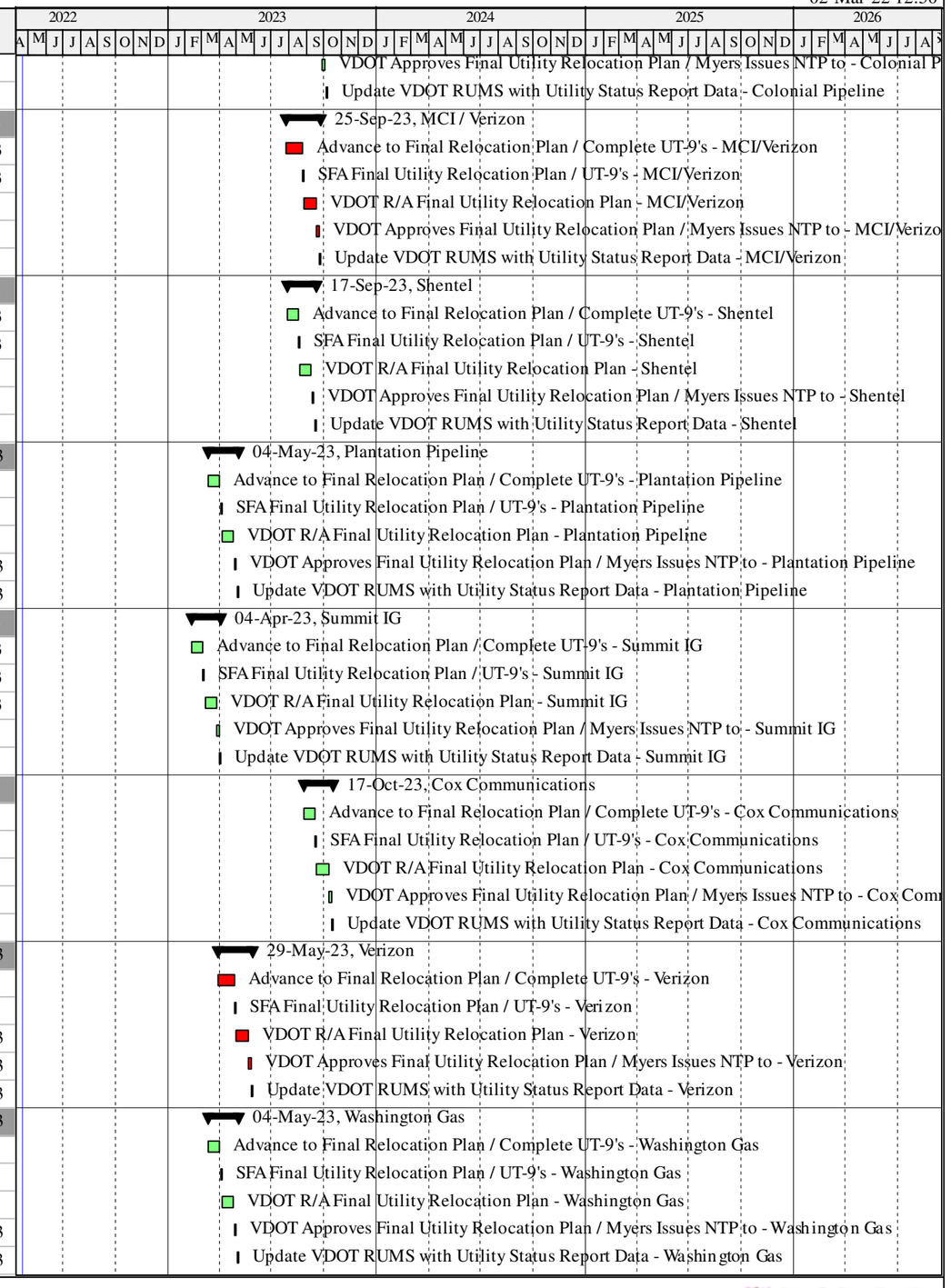
Remaining Level of Effort | Actual Work | Critical Remaining Work
Actual Level of Effort | Remaining Work | Milestone

Activity ID	Activity Name	Original Duration	Start	Finish
Verizon		102	17-Dec-22	28-Mar-23
UTFV001000	Prepare Utility Relocation Concept Plan - Verizon	75	17-Dec-22	01-Mar-23
UTFV001010	SFC Utility Relocation Concept Plan - Verizon	3	02-Mar-23	04-Mar-23
UTFV001020	R/C Utility Relocation Concept Plan (Myers and VDOT) - Verizon	21	05-Mar-23	25-Mar-23
UTFV001030	Update VDOT RUMS with Utility Status Report Data - Verizon	3	26-Mar-23	28-Mar-23
Washington Gas		87	17-Dec-22	13-Mar-23
UTFW001000	Prepare Utility Relocation Concept Plan - Washington Gas	60	17-Dec-22	14-Feb-23
UTFW001010	SFC Utility Relocation Concept Plan - Washington Gas	3	15-Feb-23	17-Feb-23
UTFW001020	R/C Utility Relocation Concept Plan (Myers and VDOT) - Washington Gas	21	18-Feb-23	10-Mar-23
UTFW001030	Update VDOT RUMS with Utility Status Report Data - Washington Gas	3	11-Mar-23	13-Mar-23
Zayo		147	17-Dec-22	12-May-23
UTFZ001000	Prepare Utility Relocation Concept Plan - Zayo	120	17-Dec-22	15-Apr-23
UTFZ001010	SFC Utility Relocation Concept Plan - Zayo	3	16-Apr-23	18-Apr-23
UTFZ001020	R/C Utility Relocation Concept Plan (Myers and VDOT) - Zayo	21	19-Apr-23	09-May-23
UTFZ001030	Update VDOT RUMS with Utility Status Report Data - Zayo	3	10-May-23	12-May-23
Utility Plans & Estimates		305	17-Dec-22	17-Oct-23
AT&T		52	01-Jun-23	22-Jul-23
UTPA001000	Advance to Final Relocation Plan / Complete UT-9's - AT&T	20	01-Jun-23	20-Jun-23
UTPA001010	SFA Final Utility Relocation Plan / UT-9's - AT&T	3	21-Jun-23	23-Jun-23
UTPA001020	VDOT R/A Final Utility Relocation Plan - AT&T	21	24-Jun-23	14-Jul-23
UTPA001030	VDOT Approves Final Utility Relocation Plan / Myers Issues NTP to - AT&T	5	15-Jul-23	19-Jul-23
UTPA001040	Update VDOT RUMS with Utility Status Report Data - AT&T	3	20-Jul-23	22-Jul-23
Comcast Cable		52	13-Apr-23	03-Jun-23
UTPC001000	Advance to Final Relocation Plan / Complete UT-9's - Comcast Cable	20	13-Apr-23	02-May-23
UTPC001010	SFA Final Utility Relocation Plan / UT-9's - Comcast Cable	3	03-May-23	05-May-23
UTPC001020	VDOT R/A Final Utility Relocation Plan - Comcast Cable	21	06-May-23	26-May-23
UTPC001030	VDOT Approves Final Utility Relocation Plan / Myers Issues NTP to - Comcast Cable	5	27-May-23	31-May-23
UTPC001040	Update VDOT RUMS with Utility Status Report Data - Comcast Cable	3	01-Jun-23	03-Jun-23
Dominion Energy		62	04-Mar-23	04-May-23
UTPD001000	Advance to Final Relocation Plan / Complete UT-9's - Dominion Energy	30	04-Mar-23	02-Apr-23
UTPD001010	SFA Final Utility Relocation Plan / UT-9's - Dominion Energy	3	03-Apr-23	05-Apr-23
UTPD001020	VDOT R/A Final Utility Relocation Plan - Dominion Energy	21	06-Apr-23	26-Apr-23
UTPD001030	VDOT Approves Final Utility Relocation Plan / Myers Issues NTP to - Dominion Energy	5	27-Apr-23	01-May-23
UTPD001040	Update VDOT RUMS with Utility Status Report Data - Dominion Energy	3	02-May-23	04-May-23
Fiberlight		52	13-Apr-23	03-Jun-23
UTPF001000	Advance to Final Relocation Plan / Complete UT-9's - Fiberlight	20	13-Apr-23	02-May-23
UTPF001010	SFA Final Utility Relocation Plan / UT-9's - Fiberlight	3	03-May-23	05-May-23
UTPF001020	VDOT R/A Final Utility Relocation Plan - Fiberlight	21	06-May-23	26-May-23
UTPF001030	VDOT Approves Final Utility Relocation Plan / Myers Issues NTP to - Fiberlight	5	27-May-23	31-May-23
UTPF001040	Update VDOT RUMS with Utility Status Report Data - Fiberlight	3	01-Jun-23	03-Jun-23
Colonial Pipeline		47	21-Aug-23	06-Oct-23
UTPL001000	Advance to Final Relocation Plan / Complete UT-9's - Colonial Pipeline	15	21-Aug-23	04-Sep-23
UTPL001010	SFA Final Utility Relocation Plan / UT-9's - Colonial Pipeline	3	05-Sep-23	07-Sep-23
UTPL001020	VDOT R/A Final Utility Relocation Plan - Colonial Pipeline	21	08-Sep-23	28-Sep-23



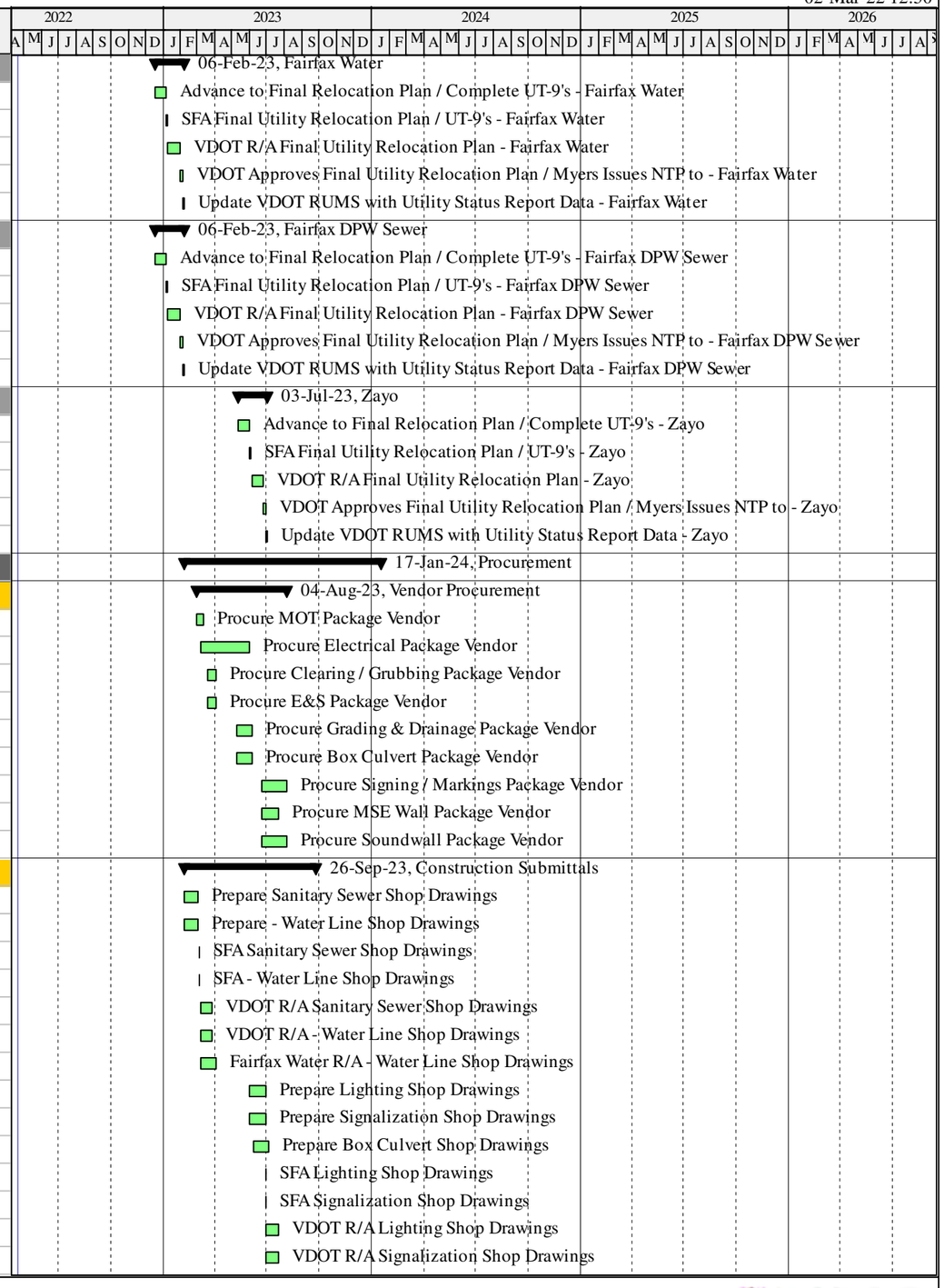
Remaining Level of Effort | Actual Work | Critical Remaining Work
Actual Level of Effort | Remaining Work | Milestone

Activity ID	Activity Name	Original Duration	Start	Finish
UTPL001030	VDOT Approves Final Utility Relocation Plan / Myers Issues NTP to - Colonial Pipeline	5	29-Sep-23	03-Oct-23
UTPL001040	Update VDOT RUMS with Utility Status Report Data - Colonial Pipeline	3	04-Oct-23	06-Oct-23
MCI / Verizon		62	26-Jul-23	25-Sep-23
UTPM001000	Advance to Final Relocation Plan / Complete UT-9's - MCI/Verizon	30	26-Jul-23	24-Aug-23
UTPM001010	SFA Final Utility Relocation Plan / UT-9's - MCI/Verizon	3	25-Aug-23	27-Aug-23
UTPM001020	VDOT R/A Final Utility Relocation Plan - MCI/Verizon	21	28-Aug-23	17-Sep-23
UTPM001030	VDOT Approves Final Utility Relocation Plan / Myers Issues NTP to - MCI/Verizon	5	18-Sep-23	22-Sep-23
UTPM001040	Update VDOT RUMS with Utility Status Report Data - MCI/Verizon	3	23-Sep-23	25-Sep-23
Shentel		52	28-Jul-23	17-Sep-23
UTPN001000	Advance to Final Relocation Plan / Complete UT-9's - Shentel	20	28-Jul-23	16-Aug-23
UTPN001010	SFA Final Utility Relocation Plan / UT-9's - Shentel	3	17-Aug-23	19-Aug-23
UTPN001020	VDOT R/A Final Utility Relocation Plan - Shentel	21	20-Aug-23	09-Sep-23
UTPN001030	VDOT Approves Final Utility Relocation Plan / Myers Issues NTP to - Shentel	5	10-Sep-23	14-Sep-23
UTPN001040	Update VDOT RUMS with Utility Status Report Data - Shentel	3	15-Sep-23	17-Sep-23
Plantation Pipeline		52	14-Mar-23	04-May-23
UTPP001000	Advance to Final Relocation Plan / Complete UT-9's - Plantation Pipeline	20	14-Mar-23	02-Apr-23
UTPP001010	SFA Final Utility Relocation Plan / UT-9's - Plantation Pipeline	3	03-Apr-23	05-Apr-23
UTPP001020	VDOT R/A Final Utility Relocation Plan - Plantation Pipeline	21	06-Apr-23	26-Apr-23
UTPP001030	VDOT Approves Final Utility Relocation Plan / Myers Issues NTP to - Plantation Pipeline	5	27-Apr-23	01-May-23
UTPP001040	Update VDOT RUMS with Utility Status Report Data - Plantation Pipeline	3	02-May-23	04-May-23
Summit IG		52	12-Feb-23	04-Apr-23
UTPS001000	Advance to Final Relocation Plan / Complete UT-9's - Summit IG	20	12-Feb-23	03-Mar-23
UTPS001010	SFA Final Utility Relocation Plan / UT-9's - Summit IG	3	04-Mar-23	06-Mar-23
UTPS001020	VDOT R/A Final Utility Relocation Plan - Summit IG	21	07-Mar-23	27-Mar-23
UTPS001030	VDOT Approves Final Utility Relocation Plan / Myers Issues NTP to - Summit IG	5	28-Mar-23	01-Apr-23
UTPS001040	Update VDOT RUMS with Utility Status Report Data - Summit IG	3	02-Apr-23	04-Apr-23
Cox Communications		52	27-Aug-23	17-Oct-23
UTPT001000	Advance to Final Relocation Plan / Complete UT-9's - Cox Communications	20	27-Aug-23	15-Sep-23
UTPT001010	SFA Final Utility Relocation Plan / UT-9's - Cox Communications	3	16-Sep-23	18-Sep-23
UTPT001020	VDOT R/A Final Utility Relocation Plan - Cox Communications	21	19-Sep-23	09-Oct-23
UTPT001030	VDOT Approves Final Utility Relocation Plan / Myers Issues NTP to - Cox Communications	5	10-Oct-23	14-Oct-23
UTPT001040	Update VDOT RUMS with Utility Status Report Data - Cox Communications	3	15-Oct-23	17-Oct-23
Verizon		62	29-Mar-23	29-May-23
UTPV001000	Advance to Final Relocation Plan / Complete UT-9's - Verizon	30	29-Mar-23	27-Apr-23
UTPV001010	SFA Final Utility Relocation Plan / UT-9's - Verizon	3	28-Apr-23	30-Apr-23
UTPV001020	VDOT R/A Final Utility Relocation Plan - Verizon	21	01-May-23	21-May-23
UTPV001030	VDOT Approves Final Utility Relocation Plan / Myers Issues NTP to - Verizon	5	22-May-23	26-May-23
UTPV001040	Update VDOT RUMS with Utility Status Report Data - Verizon	3	27-May-23	29-May-23
Washington Gas		52	14-Mar-23	04-May-23
UTPW001000	Advance to Final Relocation Plan / Complete UT-9's - Washington Gas	20	14-Mar-23	02-Apr-23
UTPW001010	SFA Final Utility Relocation Plan / UT-9's - Washington Gas	3	03-Apr-23	05-Apr-23
UTPW001020	VDOT R/A Final Utility Relocation Plan - Washington Gas	21	06-Apr-23	26-Apr-23
UTPW001030	VDOT Approves Final Utility Relocation Plan / Myers Issues NTP to - Washington Gas	5	27-Apr-23	01-May-23
UTPW001040	Update VDOT RUMS with Utility Status Report Data - Washington Gas	3	02-May-23	04-May-23



Remaining Level of Effort | Actual Work | Critical Remaining Work
Actual Level of Effort | Remaining Work | Milestone

Activity ID	Activity Name	Original Duration	Start	Finish
Fairfax Water		52	17-Dec-22	06-Feb-23
UTPX001000	Advance to Final Relocation Plan / Complete UT-9's - Fairfax Water	20	17-Dec-22	05-Jan-23
UTPX001010	SFA Final Utility Relocation Plan / UT-9's - Fairfax Water	3	06-Jan-23	08-Jan-23
UTPX001020	VDOT R/A Final Utility Relocation Plan - Fairfax Water	21	09-Jan-23	29-Jan-23
UTPX001030	VDOT Approves Final Utility Relocation Plan / Myers Issues NTP to - Fairfax Water	5	30-Jan-23	03-Feb-23
UTPX001040	Update VDOT RUMS with Utility Status Report Data - Fairfax Water	3	04-Feb-23	06-Feb-23
Fairfax DPW Sewer		52	17-Dec-22	06-Feb-23
UTPY001000	Advance to Final Relocation Plan / Complete UT-9's - Fairfax DPW Sewer	20	17-Dec-22	05-Jan-23
UTPY001010	SFA Final Utility Relocation Plan / UT-9's - Fairfax DPW Sewer	3	06-Jan-23	08-Jan-23
UTPY001020	VDOT R/A Final Utility Relocation Plan - Fairfax DPW Sewer	21	09-Jan-23	29-Jan-23
UTPY001030	VDOT Approves Final Utility Relocation Plan / Myers Issues NTP to - Fairfax DPW Sewer	5	30-Jan-23	03-Feb-23
UTPY001040	Update VDOT RUMS with Utility Status Report Data - Fairfax DPW Sewer	3	04-Feb-23	06-Feb-23
Zayo		52	13-May-23	03-Jul-23
UTPZ001000	Advance to Final Relocation Plan / Complete UT-9's - Zayo	20	13-May-23	01-Jun-23
UTPZ001010	SFA Final Utility Relocation Plan / UT-9's - Zayo	3	02-Jun-23	04-Jun-23
UTPZ001020	VDOT R/A Final Utility Relocation Plan - Zayo	21	05-Jun-23	25-Jun-23
UTPZ001030	VDOT Approves Final Utility Relocation Plan / Myers Issues NTP to - Zayo	5	26-Jun-23	30-Jun-23
UTPZ001040	Update VDOT RUMS with Utility Status Report Data - Zayo	3	01-Jul-23	03-Jul-23
Procurement		200	06-Feb-23	17-Jan-24
Vendor Procurement		112	28-Feb-23	04-Aug-23
PCVP001020	Procure MOT Package Vendor	10	28-Feb-23	13-Mar-23
PCVP001080	Procure Electrical Package Vendor	60	09-Mar-23	01-Jun-23
PCVP001000	Procure Clearing / Grubbing Package Vendor	10	21-Mar-23	03-Apr-23
PCVP001010	Procure E&S Package Vendor	10	21-Mar-23	03-Apr-23
PCVP001030	Procure Grading & Drainage Package Vendor	20	09-May-23	06-Jun-23
PCVP001070	Procure Box Culvert Package Vendor	20	09-May-23	06-Jun-23
PCVP001040	Procure Signing / Markings Package Vendor	30	23-Jun-23	04-Aug-23
PCVP001050	Procure MSE Wall Package Vendor	20	23-Jun-23	21-Jul-23
PCVP001060	Procure Soundwall Package Vendor	30	23-Jun-23	04-Aug-23
Construction Submittals		144	06-Feb-23	26-Sep-23
PCCS005000	Prepare Sanitary Sewer Shop Drawings	20	06-Feb-23	03-Mar-23
PCCS006000	Prepare - Water Line Shop Drawings	20	06-Feb-23	03-Mar-23
PCCS005010	SFA Sanitary Sewer Shop Drawings	1	06-Mar-23	06-Mar-23
PCCS006010	SFA - Water Line Shop Drawings	1	06-Mar-23	06-Mar-23
PCCS005020	VDOT R/A Sanitary Sewer Shop Drawings	21	07-Mar-23	27-Mar-23
PCCS006020	VDOT R/A - Water Line Shop Drawings	21	07-Mar-23	27-Mar-23
PCCS006030	Fairfax Water R/A - Water Line Shop Drawings	20	07-Mar-23	03-Apr-23
PCCS007000	Prepare Lighting Shop Drawings	20	02-Jun-23	29-Jun-23
PCCS009000	Prepare Signalization Shop Drawings	20	02-Jun-23	29-Jun-23
PCCS003000	Prepare Box Culvert Shop Drawings	20	07-Jun-23	05-Jul-23
PCCS007010	SFA Lighting Shop Drawings	1	30-Jun-23	30-Jun-23
PCCS009010	SFA Signalization Shop Drawings	1	30-Jun-23	30-Jun-23
PCCS007020	VDOT R/A Lighting Shop Drawings	21	01-Jul-23	21-Jul-23
PCCS009020	VDOT R/A Signalization Shop Drawings	21	01-Jul-23	21-Jul-23

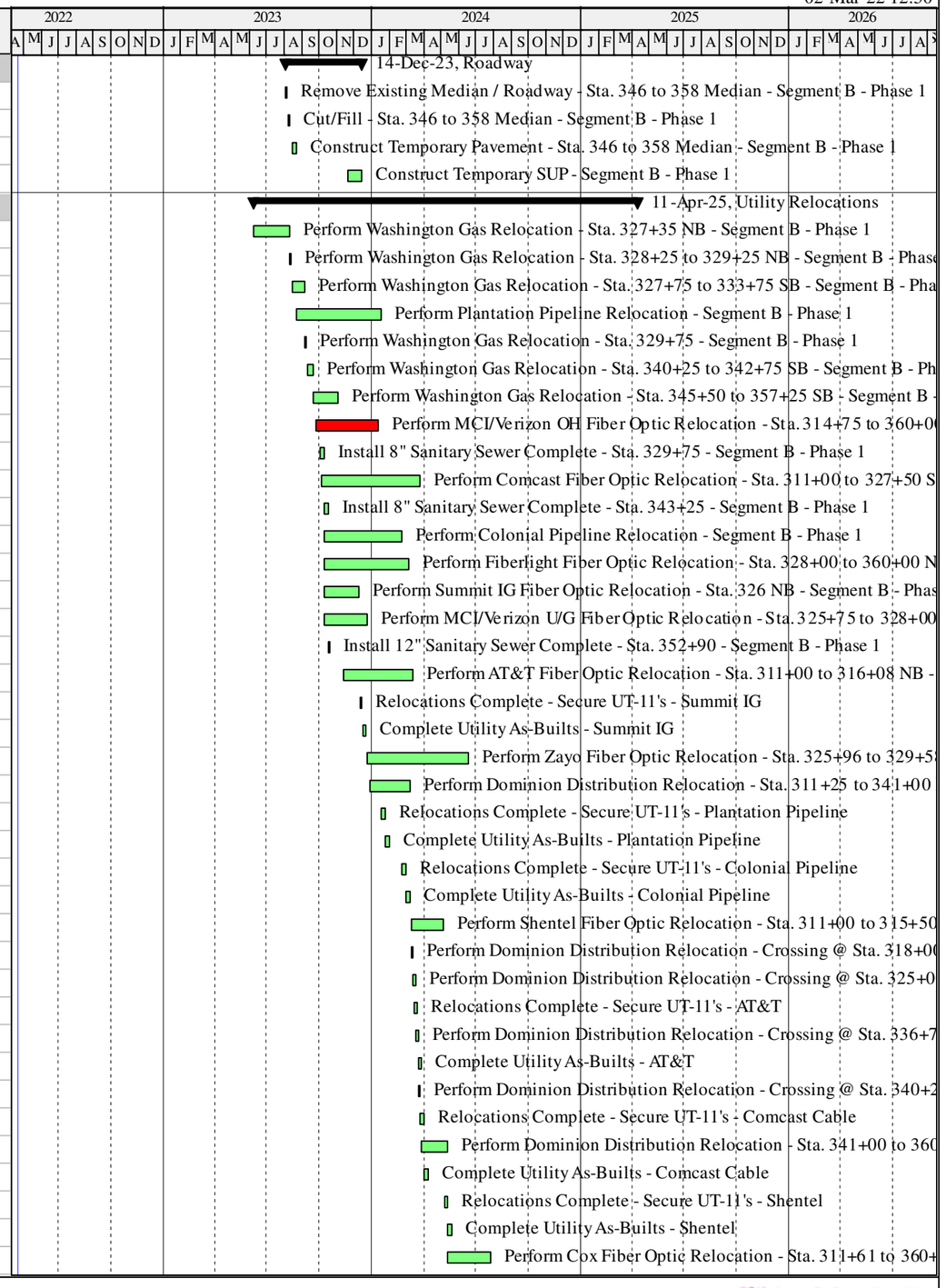


Remaining Level of Effort | Actual Work | Critical Remaining Work
Actual Level of Effort | Remaining Work | Milestone

Activity ID	Activity Name	Original Duration	Start	Finish
PCCS003010	SFA Box Culvert Shop Drawings	1	06-Jul-23	06-Jul-23
PCCS003020	VDOT R/A Box Culvert Shop Drawings	21	07-Jul-23	27-Jul-23
PCCS001000	Prepare MSE Wall Structures Shop Drawings	20	24-Jul-23	18-Aug-23
PCCS002000	Prepare Soundwall Structures Shop Drawings	20	07-Aug-23	01-Sep-23
PCCS004000	Prepare Combination Wall Shop Drawings	20	07-Aug-23	01-Sep-23
PCCS008000	Prepare Signage Shop Drawings	20	07-Aug-23	01-Sep-23
PCCS001010	SFA MSE Wall Structures Shop Drawings	1	21-Aug-23	21-Aug-23
PCCS001020	VDOT R/A MSE Wall Structures Shop Drawings	21	22-Aug-23	11-Sep-23
PCCS002010	SFA Soundwall Structures Shop Drawings	1	05-Sep-23	05-Sep-23
PCCS004010	SFA Combination Wall Shop Drawings	1	05-Sep-23	05-Sep-23
PCCS008010	SFA Signage Shop Drawings	1	05-Sep-23	05-Sep-23
PCCS002020	VDOT R/A Soundwall Structures Shop Drawings	21	06-Sep-23	26-Sep-23
PCCS004020	VDOT R/A Combination Wall Shop Drawings	21	06-Sep-23	26-Sep-23
PCCS008020	VDOT R/A Signage Shop Drawings	21	06-Sep-23	26-Sep-23
Fabrication		180	22-Jul-23	17-Jan-24
PCFB007000	Fab & Deliver - Lighting Materials	90	22-Jul-23	19-Oct-23
PCFB009000	Fab & Deliver - Signalization Materials	180	22-Jul-23	17-Jan-24
PCFB003000	Fab & Deliver - Box Culvert Materials	120	28-Jul-23	24-Nov-23
PCFB001000	Fab & Deliver - MSE Wall Materials	90	12-Sep-23	10-Dec-23
PCFB002000	Fab & Deliver - Soundwall Materials	90	27-Sep-23	25-Dec-23
PCFB004000	Fab & Deliver - Combination Wall Materials	90	27-Sep-23	25-Dec-23
PCFB008000	Fab & Deliver - Signs	30	27-Sep-23	26-Oct-23
Construction		697	12-Apr-23	30-Jul-26
Phase 1		418	12-Apr-23	11-Apr-25
Traffic Control Measures		10	12-Apr-23	27-Apr-23
CN1T001000	Install Traffic Control Measures - Phase 1	10	12-Apr-23	27-Apr-23
Segment A		160	28-Apr-23	05-Feb-24
Erosion Control Measures		103	28-Apr-23	10-Oct-23
CN1AM01000	Install Erosion Control Measures - Segment A - Phase 1	10	28-Apr-23	12-May-23
CN1AM02010	Clear & Grub - Segment A LT - Phase 1	2	25-Jul-23	26-Jul-23
CN1AM02000	Clear & Grub - Segment A RT - Phase 1	3	05-Oct-23	10-Oct-23
Roadway		5	11-Oct-23	18-Oct-23
CN1ARS1000	Construct Temporary SUP - Segment A - Phase 1	5	11-Oct-23	18-Oct-23
Utility Relocations		196	25-Jul-23	05-Feb-24
CN1AUC1000	Perform Comcast Fiber Optic Relocation - Sta. 305+75 to 311+00 SB - Segment A - Phase 1	72	25-Jul-23	04-Oct-23
CN1AUD1000	Perform Dominion Distribution Relocation - Sta. 301+28 to 311+00 NB - Segment A - Phase 1	80	05-Oct-23	23-Dec-23
CN1AUA1000	Perform AT&T Fiber Optic Relocation - Sta. 301+60 to 311+00 NB - Segment A - Phase 1	39	05-Oct-23	12-Nov-23
CN1AUN1000	Perform Shentel Fiber Optic Relocation - Sta. 301+28 to 311+00 NB - Segment A - Phase 1	44	24-Dec-23	05-Feb-24
CN1AUD2000	Perform Dominion Distribution Relocation - Crossing @ Sta. 311+25 - Segment A - Phase 1	4	24-Dec-23	27-Dec-23
Segment B		398	15-May-23	11-Apr-25
Erosion Control Measures		113	15-May-23	16-Nov-23
CN1BM01000	Install Erosion Control Measures - Segment B - Phase 1	10	15-May-23	30-May-23
CN1BM02010	Clear & Grub - Segment B LT - Phase 1	25	22-Aug-23	02-Oct-23
CN1BM02000	Clear & Grub - Segment B RT - Phase 1	20	11-Oct-23	16-Nov-23

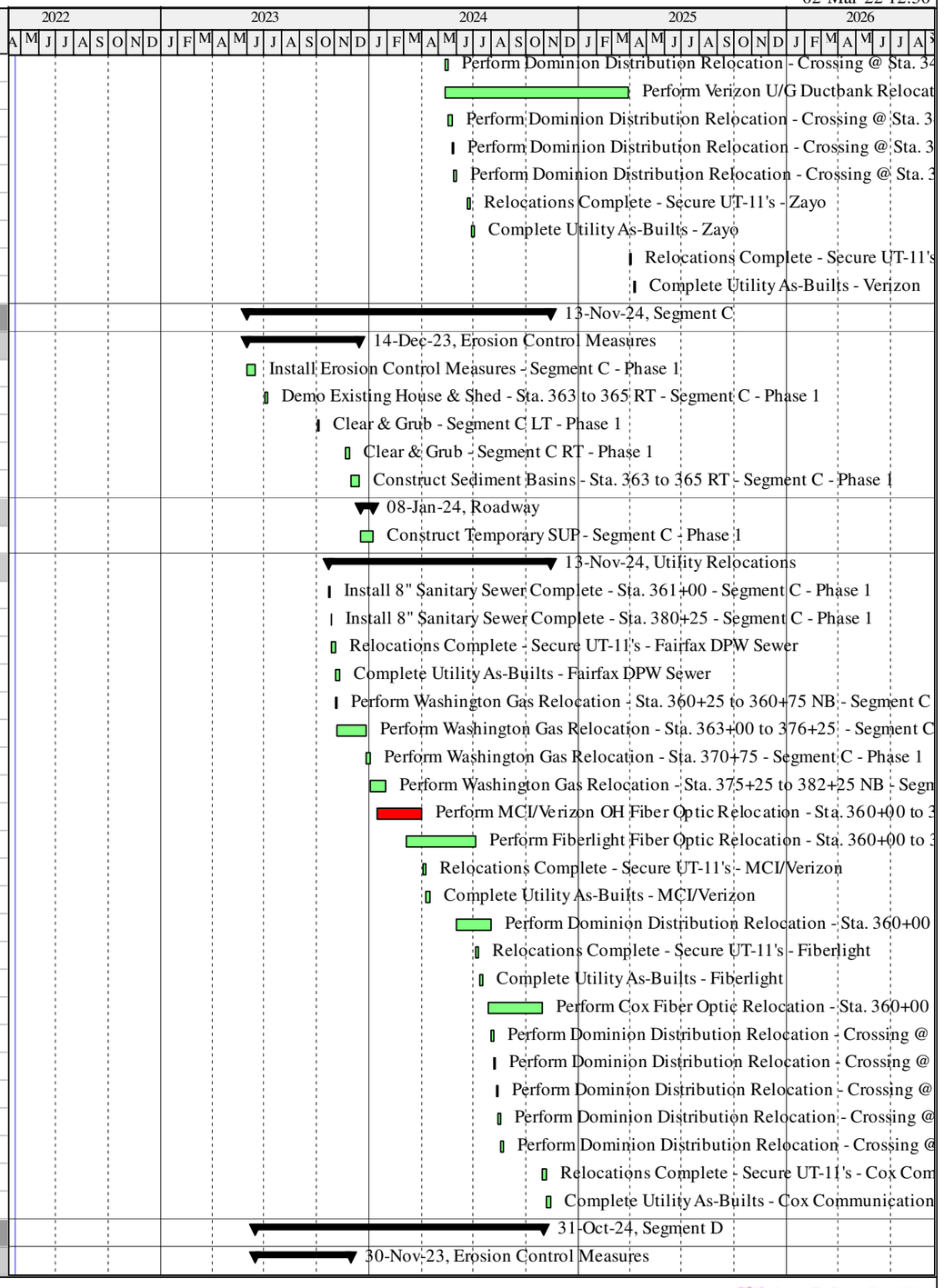
Remaining Level of Effort · Actual Work · Critical Remaining Work
Actual Level of Effort · Remaining Work · Milestone

Activity ID	Activity Name	Original Duration	Start	Finish
Roadway		78	02-Aug-23	14-Dec-23
CN1BRR1000	Remove Existing Median / Roadway - Sta. 346 to 358 Median - Segment B - Phase 1	3	02-Aug-23	04-Aug-23
CN1BRR1010	Cut/Fill - Sta. 346 to 358 Median - Segment B - Phase 1	4	07-Aug-23	10-Aug-23
CN1BRR1020	Construct Temporary Pavement - Sta. 346 to 358 Median - Segment B - Phase 1	7	14-Aug-23	22-Aug-23
CN1BRS1000	Construct Temporary SUP - Segment B - Phase 1	15	20-Nov-23	14-Dec-23
Utility Relocations		384	07-Jun-23	11-Apr-25
CN1BUW1000	Perform Washington Gas Relocation - Sta. 327+35 NB - Segment B - Phase 1	64	07-Jun-23	09-Aug-23
CN1BUW2000	Perform Washington Gas Relocation - Sta. 328+25 to 329+25 NB - Segment B - Phase 1	4	10-Aug-23	13-Aug-23
CN1BUW3000	Perform Washington Gas Relocation - Sta. 327+75 to 333+75 SB - Segment B - Phase 1	23	14-Aug-23	05-Sep-23
CN1BUP1000	Perform Plantation Pipeline Relocation - Segment B - Phase 1	149	22-Aug-23	17-Jan-24
CN1BUW4000	Perform Washington Gas Relocation - Sta. 329+75 - Segment B - Phase 1	4	06-Sep-23	09-Sep-23
CN1BUW5000	Perform Washington Gas Relocation - Sta. 340+25 to 342+75 SB - Segment B - Phase 1	10	10-Sep-23	19-Sep-23
CN1BUW6000	Perform Washington Gas Relocation - Sta. 345+50 to 357+25 SB - Segment B - Phase 1	45	20-Sep-23	03-Nov-23
CN1BUM1000	Perform MCI/Verizon OH Fiber Optic Relocation - Sta. 314+75 to 360+00 SB - Segment B - Phas	110	26-Sep-23	13-Jan-24
CN1BUY1000	Install 8" Sanitary Sewer Complete - Sta. 329+75 - Segment B - Phase 1	5	03-Oct-23	10-Oct-23
CN1BUC1000	Perform Comcast Fiber Optic Relocation - Sta. 311+00 to 327+50 SB - Segment B - Phase 1	173	05-Oct-23	25-Mar-24
CN1BUY2000	Install 8" Sanitary Sewer Complete - Sta. 343+25 - Segment B - Phase 1	3	11-Oct-23	16-Oct-23
CN1BUL1000	Perform Colonial Pipeline Relocation - Segment B - Phase 1	135	11-Oct-23	22-Feb-24
CN1BUF1000	Perform Fiberlight Fiber Optic Relocation - Sta. 328+00 to 360+00 NB - Segment B - Phase 1	147	11-Oct-23	05-Mar-24
CN1BUS1000	Perform Summit IG Fiber Optic Relocation - Sta. 326 NB - Segment B - Phase 1	60	11-Oct-23	09-Dec-23
CN1BUM2000	Perform MCI/Verizon U/G Fiber Optic Relocation - Sta. 325+75 to 328+00 NB - Segment B - Pha	75	11-Oct-23	24-Dec-23
CN1BUY3000	Install 12" Sanitary Sewer Complete - Sta. 352+90 - Segment B - Phase 1	3	17-Oct-23	19-Oct-23
CN1BUA1000	Perform AT&T Fiber Optic Relocation - Sta. 311+00 to 316+08 NB - Segment B - Phase 1	123	13-Nov-23	14-Mar-24
UTUS001010	Relocations Complete - Secure UT-11's - Summit IG	5	11-Dec-23	15-Dec-23
UTUS001020	Complete Utility As-Builts - Summit IG	5	18-Dec-23	22-Dec-23
CN1BUZ1000	Perform Zayo Fiber Optic Relocation - Sta. 325+96 to 329+58 NB - Segment B - Phase 1	178	25-Dec-23	19-Jun-24
CN1BUD1000	Perform Dominion Distribution Relocation - Sta. 311+25 to 341+00 NB - Segment B - Phase 1	73	28-Dec-23	09-Mar-24
UTUP001010	Relocations Complete - Secure UT-11's - Plantation Pipeline	5	18-Jan-24	24-Jan-24
UTUP001020	Complete Utility As-Builts - Plantation Pipeline	5	25-Jan-24	31-Jan-24
UTUL001010	Relocations Complete - Secure UT-11's - Colonial Pipeline	5	23-Feb-24	29-Feb-24
UTUL001020	Complete Utility As-Builts - Colonial Pipeline	5	01-Mar-24	07-Mar-24
CN1BUN1000	Perform Shentel Fiber Optic Relocation - Sta. 311+00 to 315+50 NB - Segment B - Phase 1	58	10-Mar-24	06-May-24
CN1BUD2000	Perform Dominion Distribution Relocation - Crossing @ Sta. 318+00 - Segment B - Phase 1	4	10-Mar-24	13-Mar-24
CN1BUD2010	Perform Dominion Distribution Relocation - Crossing @ Sta. 325+00 - Segment B - Phase 1	4	14-Mar-24	17-Mar-24
UTUA001010	Relocations Complete - Secure UT-11's - AT&T	5	15-Mar-24	21-Mar-24
CN1BUD2020	Perform Dominion Distribution Relocation - Crossing @ Sta. 336+75 - Segment B - Phase 1	5	18-Mar-24	22-Mar-24
UTUA001020	Complete Utility As-Builts - AT&T	5	22-Mar-24	28-Mar-24
CN1BUD2030	Perform Dominion Distribution Relocation - Crossing @ Sta. 340+25 - Segment B - Phase 1	4	23-Mar-24	26-Mar-24
UTUC001010	Relocations Complete - Secure UT-11's - Comcast Cable	5	26-Mar-24	01-Apr-24
CN1BUD1010	Perform Dominion Distribution Relocation - Sta. 341+00 to 360+00 NB - Segment B - Phase 1	48	27-Mar-24	13-May-24
UTUC001020	Complete Utility As-Builts - Comcast Cable	5	02-Apr-24	08-Apr-24
UTUN001010	Relocations Complete - Secure UT-11's - Shentel	5	07-May-24	13-May-24
UTUN001020	Complete Utility As-Builts - Shentel	5	14-May-24	20-May-24
CN1BUT1000	Perform Cox Fiber Optic Relocation - Sta. 311+61 to 360+00 - Segment B - Phase 1	74	14-May-24	26-Jul-24



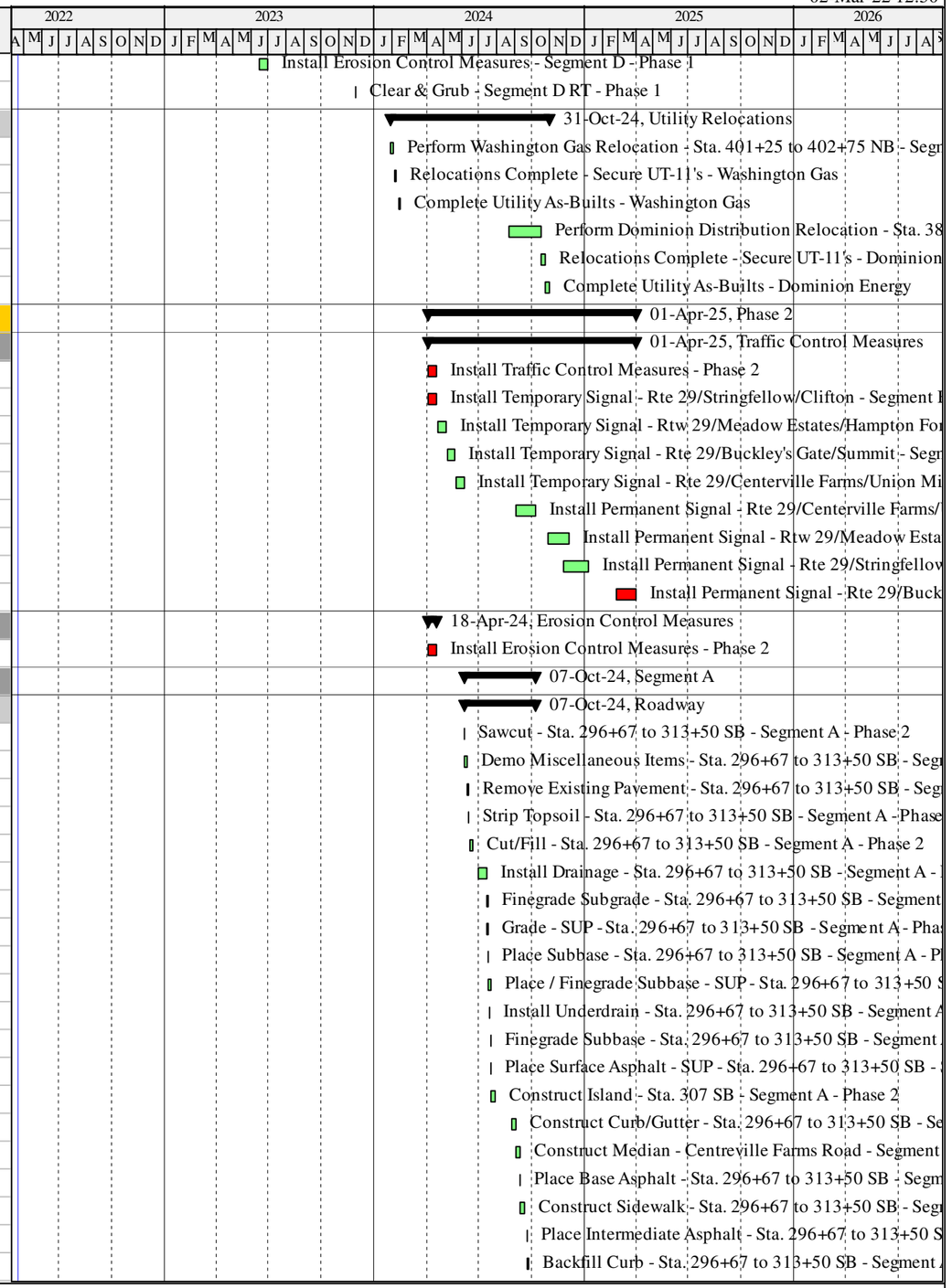
Remaining Level of Effort | Actual Work | Critical Remaining Work
Actual Level of Effort | Remaining Work | Milestone

Activity ID	Activity Name	Original Duration	Start	Finish
CN1BUD2040	Perform Dominion Distribution Relocation - Crossing @ Sta. 342+50 - Segment B - Phase 1	5	14-May-24	18-May-24
CN1BUV1000	Perform Verizon U/G Ductbank Relocation - Sta. 326+75 to 355+50 NB - Segment B - Phase 1	321	14-May-24	30-Mar-25
CN1BUD2050	Perform Dominion Distribution Relocation - Crossing @ Sta. 346+25 - Segment B - Phase 1	6	19-May-24	24-May-24
CN1BUD2060	Perform Dominion Distribution Relocation - Crossing @ Sta. 352+50 - Segment B - Phase 1	3	25-May-24	27-May-24
CN1BUD2070	Perform Dominion Distribution Relocation - Crossing @ Sta. 356+00 - Segment B - Phase 1	5	28-May-24	01-Jun-24
UTUZ001010	Relocations Complete - Secure UT-11's - Zayo	5	20-Jun-24	26-Jun-24
UTUZ001020	Complete Utility As-Builts - Zayo	5	27-Jun-24	03-Jul-24
UTUV001010	Relocations Complete - Secure UT-11's - Verizon	5	31-Mar-25	04-Apr-25
UTUV001020	Complete Utility As-Builts - Verizon	5	07-Apr-25	11-Apr-25
Segment C		311	31-May-23	13-Nov-24
Erosion Control Measures		118	31-May-23	14-Dec-23
CN1CM01000	Install Erosion Control Measures - Segment C - Phase 1	10	31-May-23	14-Jun-23
CN1CM03000	Demo Existing House & Shed - Sta. 363 to 365 RT - Segment C - Phase 1	3	03-Jul-23	06-Jul-23
CN1CM02010	Clear & Grub - Segment C LT - Phase 1	2	03-Oct-23	04-Oct-23
CN1CM02000	Clear & Grub - Segment C RT - Phase 1	5	20-Nov-23	28-Nov-23
CN1CM03010	Construct Sediment Basins - Sta. 363 to 365 RT - Segment C - Phase 1	10	29-Nov-23	14-Dec-23
Roadway		8	18-Dec-23	08-Jan-24
CN1CRS1000	Construct Temporary SUP - Segment C - Phase 1	8	18-Dec-23	08-Jan-24
Utility Relocations		222	23-Oct-23	13-Nov-24
CN1CUY1000	Install 8" Sanitary Sewer Complete - Sta. 361+00 - Segment C - Phase 1	3	23-Oct-23	25-Oct-23
CN1CUY2000	Install 8" Sanitary Sewer Complete - Sta. 380+25 - Segment C - Phase 1	1	26-Oct-23	26-Oct-23
UTUY001010	Relocations Complete - Secure UT-11's - Fairfax DPW Sewer	5	27-Oct-23	02-Nov-23
UTUY001020	Complete Utility As-Builts - Fairfax DPW Sewer	5	03-Nov-23	09-Nov-23
CN1CUW1000	Perform Washington Gas Relocation - Sta. 360+25 to 360+75 NB - Segment C - Phase 1	2	04-Nov-23	05-Nov-23
CN1CUW2000	Perform Washington Gas Relocation - Sta. 363+00 to 376+25 - Segment C - Phase 1	51	06-Nov-23	26-Dec-23
CN1CUW3000	Perform Washington Gas Relocation - Sta. 370+75 - Segment C - Phase 1	7	27-Dec-23	02-Jan-24
CN1CUW4000	Perform Washington Gas Relocation - Sta. 375+25 to 382+25 NB - Segment C - Phase 1	27	03-Jan-24	29-Jan-24
CN1CUM1000	Perform MCI/Verizon OH Fiber Optic Relocation - Sta. 360+00 to 368+50 SB - Segment C - Phas	80	14-Jan-24	02-Apr-24
CN1CUF1000	Perform Fiberlight Fiber Optic Relocation - Sta. 360+00 to 379+00 NB - Segment C - Phase 1	121	06-Mar-24	04-Jul-24
UTUM001010	Relocations Complete - Secure UT-11's - MCI/Verizon	5	03-Apr-24	09-Apr-24
UTUM001020	Complete Utility As-Builts - MCI/Verizon	5	10-Apr-24	16-Apr-24
CN1CUD1000	Perform Dominion Distribution Relocation - Sta. 360+00 to 386+00 NB - Segment C - Phase 1	61	02-Jun-24	01-Aug-24
UTUF001010	Relocations Complete - Secure UT-11's - Fiberlight	5	05-Jul-24	11-Jul-24
UTUF001020	Complete Utility As-Builts - Fiberlight	5	12-Jul-24	18-Jul-24
CN1CUT1000	Perform Cox Fiber Optic Relocation - Sta. 360+00 to 361+40 - Segment C - Phase 1	96	27-Jul-24	30-Oct-24
CN1CUD2000	Perform Dominion Distribution Relocation - Crossing @ Sta. 362+50 - Segment C - Phase 1	4	02-Aug-24	05-Aug-24
CN1CUD2010	Perform Dominion Distribution Relocation - Crossing @ Sta. 364+50 - Segment C - Phase 1	4	06-Aug-24	09-Aug-24
CN1CUD2020	Perform Dominion Distribution Relocation - Crossing @ Sta. 367+50 - Segment C - Phase 1	4	10-Aug-24	13-Aug-24
CN1CUD2030	Perform Dominion Distribution Relocation - Crossing @ Sta. 370+50 - Segment C - Phase 1	4	14-Aug-24	17-Aug-24
CN1CUD2040	Perform Dominion Distribution Relocation - Crossing @ Sta. 381+75 - Segment C - Phase 1	5	18-Aug-24	22-Aug-24
UTUT001010	Relocations Complete - Secure UT-11's - Cox Communications	5	31-Oct-24	06-Nov-24
UTUT001020	Complete Utility As-Builts - Cox Communications	5	07-Nov-24	13-Nov-24
Segment D		295	15-Jun-23	31-Oct-24
Erosion Control Measures		100	15-Jun-23	30-Nov-23



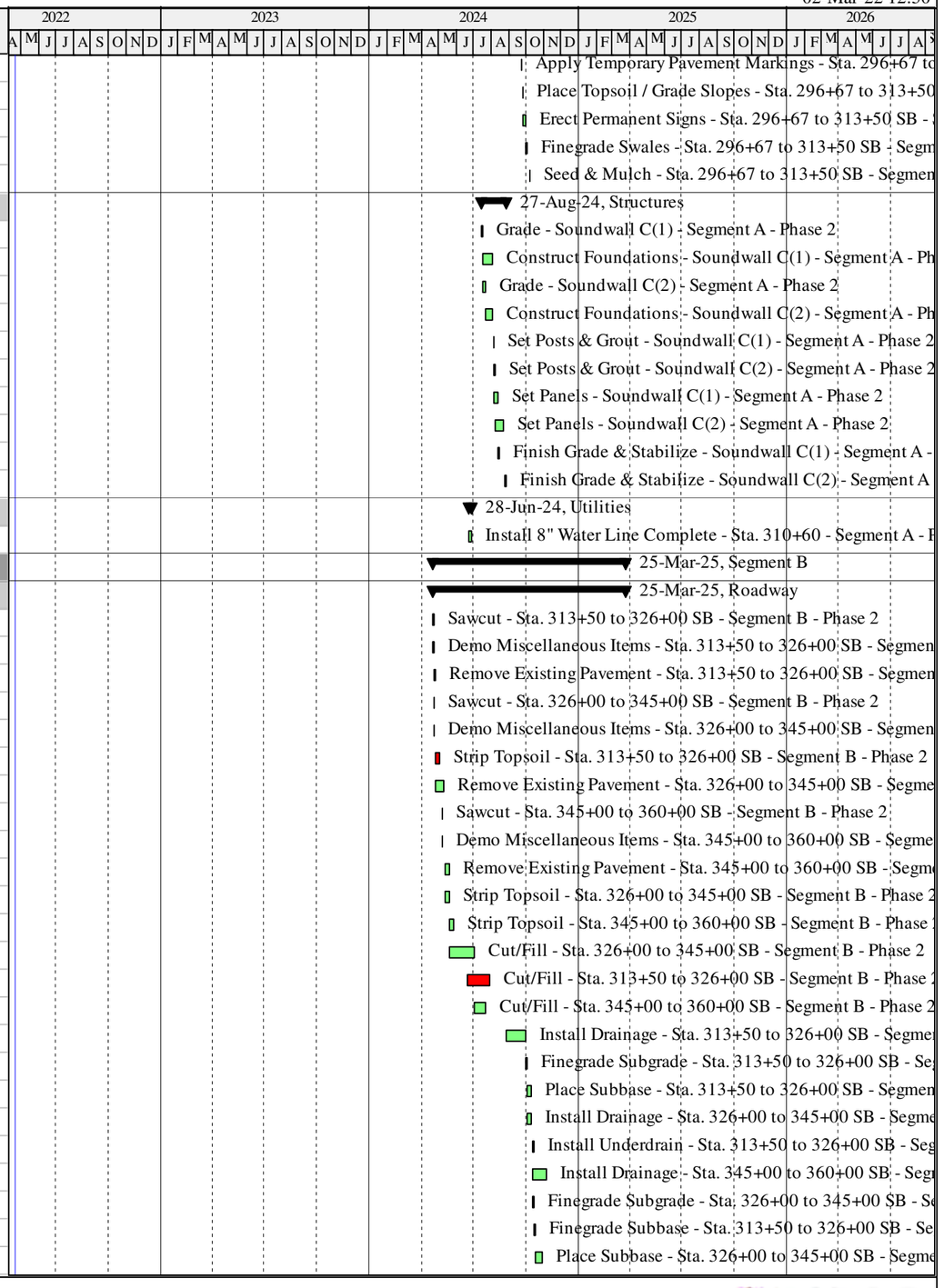
Remaining Level of Effort | Actual Work | Critical Remaining Work
Actual Level of Effort | Remaining Work | Milestone

Activity ID	Activity Name	Original Duration	Start	Finish
CN1DM01000	Install Erosion Control Measures - Segment D - Phase 1	10	15-Jun-23	29-Jun-23
CN1DM02000	Clear & Grub - Segment D RT - Phase 1	2	29-Nov-23	30-Nov-23
Utility Relocations		169	30-Jan-24	31-Oct-24
CN1DUW1000	Perform Washington Gas Relocation - Sta. 401+25 to 402+75 NB - Segment D - Phase 1	6	30-Jan-24	04-Feb-24
UTUW001010	Relocations Complete - Secure UT-11's - Washington Gas	5	05-Feb-24	09-Feb-24
UTUW001020	Complete Utility As-Builts - Washington Gas	5	12-Feb-24	16-Feb-24
CN1DUD1000	Perform Dominion Distribution Relocation - Sta. 386+00 to 409+30 NB - Segment D - Phase 1	56	23-Aug-24	17-Oct-24
UTUD001010	Relocations Complete - Secure UT-11's - Dominion Energy	5	18-Oct-24	24-Oct-24
UTUD001020	Complete Utility As-Builts - Dominion Energy	5	25-Oct-24	31-Oct-24
Phase 2		208	03-Apr-24	01-Apr-25
Traffic Control Measures		208	03-Apr-24	01-Apr-25
CN2T001000	Install Traffic Control Measures - Phase 2	10	03-Apr-24	18-Apr-24
CN2TB00000	Install Temporary Signal - Rte 29/Stringfellow/Clifton - Segment B - Phase 2	10	03-Apr-24	18-Apr-24
CN2TB00010	Install Temporary Signal - Rtw 29/Meadow Estates/Hampton Forest - Segment B - Phase 2	10	22-Apr-24	06-May-24
CN2TC00000	Install Temporary Signal - Rte 29/Buckley's Gate/Summit - Segment C - Phase 2	10	07-May-24	21-May-24
CN2TA00000	Install Temporary Signal - Rte 29/Centerville Farms/Union Mill - Segment A - Phase 2	10	22-May-24	05-Jun-24
CN2TA01000	Install Permanent Signal - Rte 29/Centerville Farms/Union Mill - Segment A - Phase 2	20	04-Sep-24	07-Oct-24
CN2TB01010	Install Permanent Signal - Rtw 29/Meadow Estates/Hampton Forest - Segment B - Phase 2	20	30-Oct-24	05-Dec-24
CN2TB01000	Install Permanent Signal - Rte 29/Stringfellow/Clifton - Segment B - Phase 2	20	25-Nov-24	08-Jan-25
CN2TC01000	Install Permanent Signal - Rte 29/Buckley's Gate/Summit - Segment C - Phase 2	20	26-Feb-25	01-Apr-25
Erosion Control Measures		10	03-Apr-24	18-Apr-24
CN2M001000	Install Erosion Control Measures - Phase 2	10	03-Apr-24	18-Apr-24
Segment A		76	06-Jun-24	07-Oct-24
Roadway		76	06-Jun-24	07-Oct-24
CN2ARR1000	Sawcut - Sta. 296+67 to 313+50 SB - Segment A - Phase 2	1	06-Jun-24	06-Jun-24
CN2ARR1005	Demo Miscellaneous Items - Sta. 296+67 to 313+50 SB - Segment A - Phase 2	2	06-Jun-24	10-Jun-24
CN2ARR1010	Remove Existing Pavement - Sta. 296+67 to 313+50 SB - Segment A - Phase 2	4	10-Jun-24	13-Jun-24
CN2ARR1020	Strip Topsoil - Sta. 296+67 to 313+50 SB - Segment A - Phase 2	1	14-Jun-24	14-Jun-24
CN2ARR1030	Cut/Fill - Sta. 296+67 to 313+50 SB - Segment A - Phase 2	4	17-Jun-24	20-Jun-24
CN2ARR1040	Install Drainage - Sta. 296+67 to 313+50 SB - Segment A - Phase 2	9	01-Jul-24	15-Jul-24
CN2ARR1050	Finegrade Subgrade - Sta. 296+67 to 313+50 SB - Segment A - Phase 2	1	16-Jul-24	16-Jul-24
CN2ARS1000	Grade - SUP - Sta. 296+67 to 313+50 SB - Segment A - Phase 2	2	16-Jul-24	17-Jul-24
CN2ARR1070	Place Subbase - Sta. 296+67 to 313+50 SB - Segment A - Phase 2	2	17-Jul-24	18-Jul-24
CN2ARS1010	Place / Finegrade Subbase - SUP - Sta. 296+67 to 313+50 SB - Segment A - Phase 2	3	18-Jul-24	22-Jul-24
CN2ARR1080	Install Underdrain - Sta. 296+67 to 313+50 SB - Segment A - Phase 2	1	19-Jul-24	19-Jul-24
CN2ARR1090	Finegrade Subbase - Sta. 296+67 to 313+50 SB - Segment A - Phase 2	1	22-Jul-24	22-Jul-24
CN2ARS1020	Place Surface Asphalt - SUP - Sta. 296+67 to 313+50 SB - Segment A - Phase 2	1	23-Jul-24	23-Jul-24
CN2ARR1310	Construct Island - Sta. 307 SB - Segment A - Phase 2	5	23-Jul-24	30-Jul-24
CN2ARR1100	Construct Curb/Gutter - Sta. 296+67 to 313+50 SB - Segment A - Phase 2	3	28-Aug-24	03-Sep-24
CN2ARR1300	Construct Median - Centreville Farms Road - Segment A - Phase 2	5	04-Sep-24	10-Sep-24
CN2ARR1120	Place Base Asphalt - Sta. 296+67 to 313+50 SB - Segment A - Phase 2	1	11-Sep-24	11-Sep-24
CN2ARR1110	Construct Sidewalk - Sta. 296+67 to 313+50 SB - Segment A - Phase 2	5	12-Sep-24	19-Sep-24
CN2ARR1130	Place Intermediate Asphalt - Sta. 296+67 to 313+50 SB - Segment A - Phase 2	1	23-Sep-24	23-Sep-24
CN2ARR1140	Backfill Curb - Sta. 296+67 to 313+50 SB - Segment A - Phase 2	2	24-Sep-24	25-Sep-24



Remaining Level of Effort — Actual Work — Critical Remaining Work
Actual Level of Effort — Remaining Work — Milestone

Activity ID	Activity Name	Original Duration	Start	Finish
CN2ARR1150	Apply Temporary Pavement Markings - Sta. 296+67 to 313+50 SB - Segment A - Phase 2	1	24-Sep-24	24-Sep-24
CN2ARR1160	Place Topsoil / Grade Slopes - Sta. 296+67 to 313+50 SB - Segment A - Phase 2	1	26-Sep-24	26-Sep-24
CN2ARR1170	Erect Permanent Signs - Sta. 296+67 to 313+50 SB - Segment A - Phase 2	2	26-Sep-24	30-Sep-24
CN2ARR1180	Finegrade Swales - Sta. 296+67 to 313+50 SB - Segment A - Phase 2	4	30-Sep-24	03-Oct-24
CN2ARR1190	Seed & Mulch - Sta. 296+67 to 313+50 SB - Segment A - Phase 2	1	07-Oct-24	07-Oct-24
Structures		29	16-Jul-24	27-Aug-24
CN2ASA1000	Grade - Soundwall C(1) - Segment A - Phase 2	2	16-Jul-24	17-Jul-24
CN2ASA1010	Construct Foundations - Soundwall C(1) - Segment A - Phase 2	11	18-Jul-24	02-Aug-24
CN2ASB1000	Grade - Soundwall C(2) - Segment A - Phase 2	3	18-Jul-24	22-Jul-24
CN2ASB1010	Construct Foundations - Soundwall C(2) - Segment A - Phase 2	8	23-Jul-24	02-Aug-24
CN2ASA1020	Set Posts & Grout - Soundwall C(1) - Segment A - Phase 2	2	05-Aug-24	06-Aug-24
CN2ASB1020	Set Posts & Grout - Soundwall C(2) - Segment A - Phase 2	3	05-Aug-24	07-Aug-24
CN2ASA1030	Set Panels - Soundwall C(1) - Segment A - Phase 2	5	07-Aug-24	13-Aug-24
CN2ASB1030	Set Panels - Soundwall C(2) - Segment A - Phase 2	11	08-Aug-24	23-Aug-24
CN2ASA1050	Finish Grade & Stabilize - Soundwall C(1) - Segment A - Phase 2	2	14-Aug-24	15-Aug-24
CN2ASB1050	Finish Grade & Stabilize - Soundwall C(2) - Segment A - Phase 2	2	26-Aug-24	27-Aug-24
Utilities		5	24-Jun-24	28-Jun-24
CN1AUX1000	Install 8" Water Line Complete - Sta. 310+60 - Segment A - Phase 2	5	24-Jun-24	28-Jun-24
Segment B		194	22-Apr-24	25-Mar-25
Roadway		194	22-Apr-24	25-Mar-25
CN2BRR1000	Sawcut - Sta. 313+50 to 326+00 SB - Segment B - Phase 2	1	22-Apr-24	22-Apr-24
CN2BRR1005	Demo Miscellaneous Items - Sta. 313+50 to 326+00 SB - Segment B - Phase 2	1	22-Apr-24	22-Apr-24
CN2BRR1010	Remove Existing Pavement - Sta. 313+50 to 326+00 SB - Segment B - Phase 2	3	23-Apr-24	25-Apr-24
CN2BRR2000	Sawcut - Sta. 326+00 to 345+00 SB - Segment B - Phase 2	1	23-Apr-24	23-Apr-24
CN2BRR2005	Demo Miscellaneous Items - Sta. 326+00 to 345+00 SB - Segment B - Phase 2	1	23-Apr-24	23-Apr-24
CN2BRR1020	Strip Topsoil - Sta. 313+50 to 326+00 SB - Segment B - Phase 2	5	26-Apr-24	02-May-24
CN2BRR2010	Remove Existing Pavement - Sta. 326+00 to 345+00 SB - Segment B - Phase 2	10	26-Apr-24	10-May-24
CN2BRR5000	Sawcut - Sta. 345+00 to 360+00 SB - Segment B - Phase 2	1	07-May-24	07-May-24
CN2BRR5005	Demo Miscellaneous Items - Sta. 345+00 to 360+00 SB - Segment B - Phase 2	1	07-May-24	07-May-24
CN2BRR5010	Remove Existing Pavement - Sta. 345+00 to 360+00 SB - Segment B - Phase 2	5	13-May-24	20-May-24
CN2BRR2020	Strip Topsoil - Sta. 326+00 to 345+00 SB - Segment B - Phase 2	5	13-May-24	20-May-24
CN2BRR5020	Strip Topsoil - Sta. 345+00 to 360+00 SB - Segment B - Phase 2	5	21-May-24	28-May-24
CN2BRR2030	Cut/Fill - Sta. 326+00 to 345+00 SB - Segment B - Phase 2	28	21-May-24	02-Jul-24
CN2BRR1030	Cut/Fill - Sta. 313+50 to 326+00 SB - Segment B - Phase 2	25	20-Jun-24	30-Jul-24
CN2BRR5030	Cut/Fill - Sta. 345+00 to 360+00 SB - Segment B - Phase 2	13	03-Jul-24	23-Jul-24
CN2BRR1040	Install Drainage - Sta. 313+50 to 326+00 SB - Segment B - Phase 2	18	29-Aug-24	30-Sep-24
CN2BRR1050	Finegrade Subgrade - Sta. 313+50 to 326+00 SB - Segment B - Phase 2	2	01-Oct-24	02-Oct-24
CN2BRR1070	Place Subbase - Sta. 313+50 to 326+00 SB - Segment B - Phase 2	5	03-Oct-24	10-Oct-24
CN2BRR2040	Install Drainage - Sta. 326+00 to 345+00 SB - Segment B - Phase 2	5	03-Oct-24	10-Oct-24
CN2BRR1080	Install Underdrain - Sta. 313+50 to 326+00 SB - Segment B - Phase 2	2	14-Oct-24	15-Oct-24
CN2BRR5040	Install Drainage - Sta. 345+00 to 360+00 SB - Segment B - Phase 2	14	14-Oct-24	05-Nov-24
CN2BRR2050	Finegrade Subgrade - Sta. 326+00 to 345+00 SB - Segment B - Phase 2	3	14-Oct-24	16-Oct-24
CN2BRR1090	Finegrade Subbase - Sta. 313+50 to 326+00 SB - Segment B - Phase 2	2	16-Oct-24	17-Oct-24
CN2BRR2070	Place Subbase - Sta. 326+00 to 345+00 SB - Segment B - Phase 2	8	17-Oct-24	30-Oct-24



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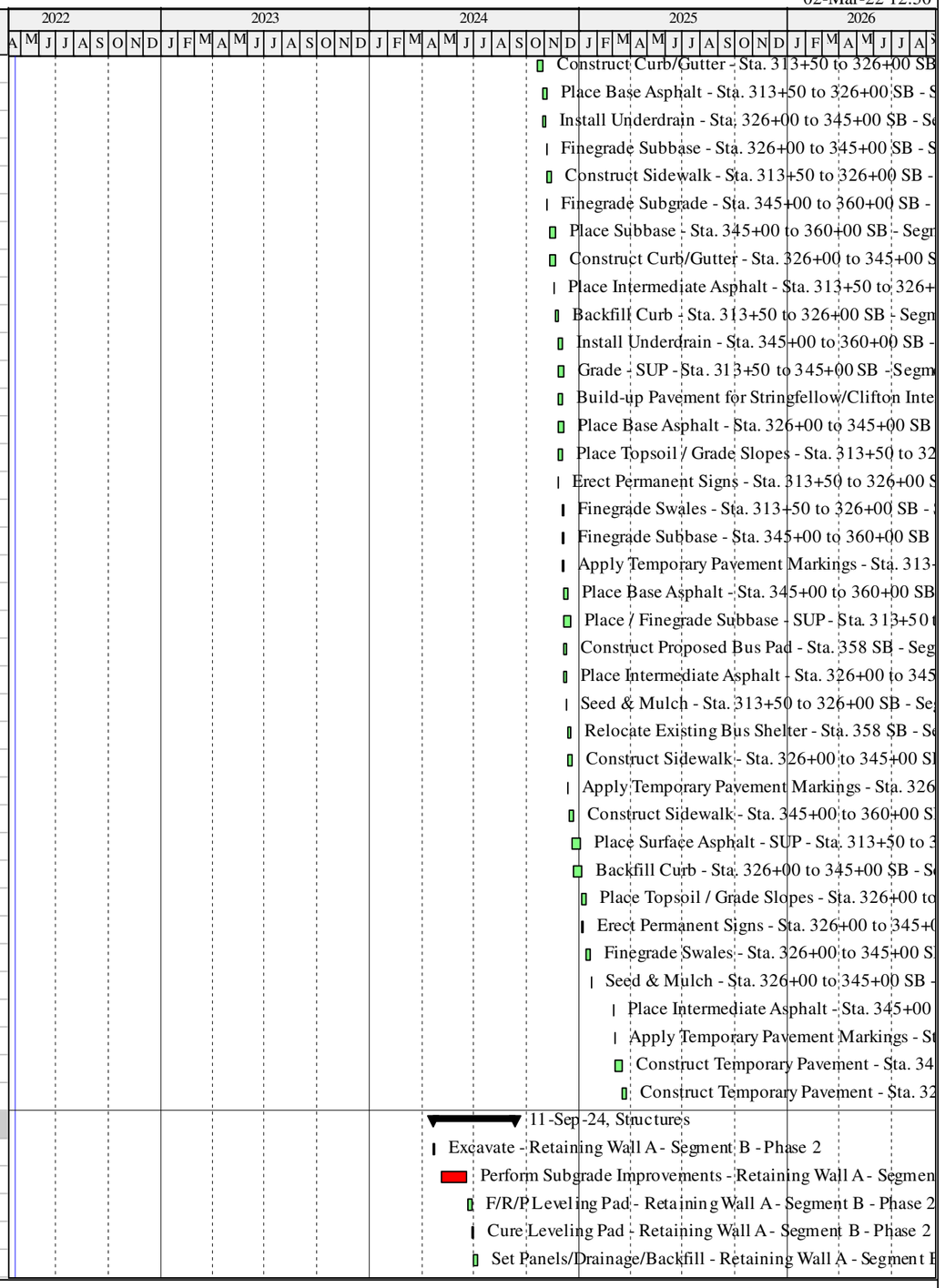
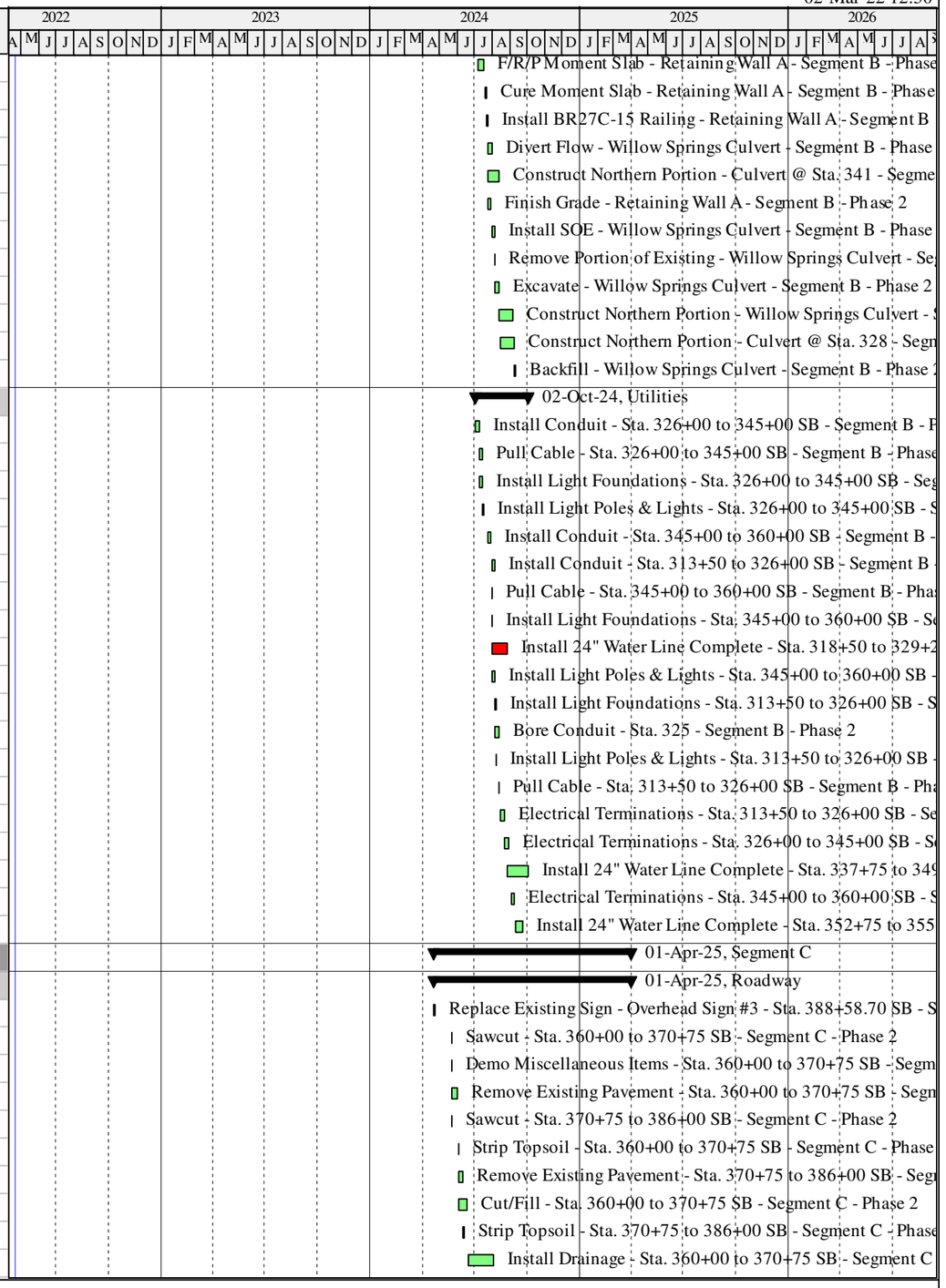
Actual Level of Effort | Remaining Work | Milestone

Activity ID	Activity Name	Original Duration	Start	Finish
CN2BRR1100	Construct Curb/Gutter - Sta. 313+50 to 326+00 SB - Segment B - Phase 2	6	21-Oct-24	29-Oct-24
CN2BRR1120	Place Base Asphalt - Sta. 313+50 to 326+00 SB - Segment B - Phase 2	4	30-Oct-24	05-Nov-24
CN2BRR2080	Install Underdrain - Sta. 326+00 to 345+00 SB - Segment B - Phase 2	2	31-Oct-24	04-Nov-24
CN2BRR2090	Finegrade Subbase - Sta. 326+00 to 345+00 SB - Segment B - Phase 2	3	05-Nov-24	07-Nov-24
CN2BRR1110	Construct Sidewalk - Sta. 313+50 to 326+00 SB - Segment B - Phase 2	5	06-Nov-24	14-Nov-24
CN2BRR5050	Finegrade Subgrade - Sta. 345+00 to 360+00 SB - Segment B - Phase 2	2	06-Nov-24	07-Nov-24
CN2BRR5070	Place Subbase - Sta. 345+00 to 360+00 SB - Segment B - Phase 2	7	11-Nov-24	21-Nov-24
CN2BRR2100	Construct Curb/Gutter - Sta. 326+00 to 345+00 SB - Segment B - Phase 2	7	11-Nov-24	21-Nov-24
CN2BRR1130	Place Intermediate Asphalt - Sta. 313+50 to 326+00 SB - Segment B - Phase 2	2	18-Nov-24	19-Nov-24
CN2BRR1140	Backfill Curb - Sta. 313+50 to 326+00 SB - Segment B - Phase 2	3	20-Nov-24	25-Nov-24
CN2BRR5080	Install Underdrain - Sta. 345+00 to 360+00 SB - Segment B - Phase 2	4	25-Nov-24	02-Dec-24
CN2BRS1000	Grade - SUP - Sta. 313+50 to 345+00 SB - Segment B - Phase 2	6	25-Nov-24	04-Dec-24
CN2BRR7000	Build-up Pavement for Stringfellow/Clifton Intersection - Segment A - Phase 2	5	25-Nov-24	03-Dec-24
CN2BRR2120	Place Base Asphalt - Sta. 326+00 to 345+00 SB - Segment B - Phase 2	6	25-Nov-24	04-Dec-24
CN2BRR1160	Place Topsoil / Grade Slopes - Sta. 313+50 to 326+00 SB - Segment B - Phase 2	3	26-Nov-24	02-Dec-24
CN2BRR1170	Erect Permanent Signs - Sta. 313+50 to 326+00 SB - Segment B - Phase 2	1	26-Nov-24	26-Nov-24
CN2BRR1180	Finegrade Swales - Sta. 313+50 to 326+00 SB - Segment B - Phase 2	3	03-Dec-24	05-Dec-24
CN2BRR5090	Finegrade Subbase - Sta. 345+00 to 360+00 SB - Segment B - Phase 2	2	03-Dec-24	04-Dec-24
CN2BRR1150	Apply Temporary Pavement Markings - Sta. 313+50 to 326+00 SB - Segment B - Phase 2	1	04-Dec-24	04-Dec-24
CN2BRR5120	Place Base Asphalt - Sta. 345+00 to 360+00 SB - Segment B - Phase 2	4	05-Dec-24	12-Dec-24
CN2BRS1010	Place / Finegrade Subbase - SUP - Sta. 313+50 to 345+00 SB - Segment B - Phase 2	7	05-Dec-24	18-Dec-24
CN2BRR5500	Construct Proposed Bus Pad - Sta. 358 SB - Segment B - Phase 2	3	05-Dec-24	10-Dec-24
CN2BRR2130	Place Intermediate Asphalt - Sta. 326+00 to 345+00 SB - Segment B - Phase 2	3	05-Dec-24	10-Dec-24
CN2BRR1190	Seed & Mulch - Sta. 313+50 to 326+00 SB - Segment B - Phase 2	1	09-Dec-24	09-Dec-24
CN2BRR5510	Relocate Existing Bus Shelter - Sta. 358 SB - Segment B - Phase 2	2	12-Dec-24	16-Dec-24
CN2BRR2110	Construct Sidewalk - Sta. 326+00 to 345+00 SB - Segment B - Phase 2	5	12-Dec-24	19-Dec-24
CN2BRR2150	Apply Temporary Pavement Markings - Sta. 326+00 to 345+00 SB - Segment B - Phase 2	1	12-Dec-24	12-Dec-24
CN2BRR5110	Construct Sidewalk - Sta. 345+00 to 360+00 SB - Segment B - Phase 2	5	16-Dec-24	23-Dec-24
CN2BRS1020	Place Surface Asphalt - SUP - Sta. 313+50 to 345+00 SB - Segment B - Phase 2	4	19-Dec-24	02-Jan-25
CN2BRR2140	Backfill Curb - Sta. 326+00 to 345+00 SB - Segment B - Phase 2	4	23-Dec-24	06-Jan-25
CN2BRR2160	Place Topsoil / Grade Slopes - Sta. 326+00 to 345+00 SB - Segment B - Phase 2	4	07-Jan-25	13-Jan-25
CN2BRR2170	Erect Permanent Signs - Sta. 326+00 to 345+00 SB - Segment B - Phase 2	2	07-Jan-25	08-Jan-25
CN2BRR2180	Finegrade Swales - Sta. 326+00 to 345+00 SB - Segment B - Phase 2	4	14-Jan-25	21-Jan-25
CN2BRR2190	Seed & Mulch - Sta. 326+00 to 345+00 SB - Segment B - Phase 2	1	22-Jan-25	22-Jan-25
CN2BRR5130	Place Intermediate Asphalt - Sta. 345+00 to 360+00 SB - Segment B - Phase 2	1	03-Mar-25	03-Mar-25
CN2BRR5150	Apply Temporary Pavement Markings - Sta. 345+00 to 360+00 SB - Segment B - Phase 2	1	04-Mar-25	04-Mar-25
CN2BRR9000	Construct Temporary Pavement - Sta. 345+00 to 358+00 LT - Segment B - Phase 2	7	05-Mar-25	17-Mar-25
CN2BRR9010	Construct Temporary Pavement - Sta. 327 to 341 NB - Segment B - Phase 2	5	18-Mar-25	25-Mar-25
Structures		92	22-Apr-24	11-Sep-24
CN2BSA1000	Excavate - Retaining Wall A - Segment B - Phase 2	3	22-Apr-24	24-Apr-24
CN2BSA1010	Perform Subgrade Improvements - Retaining Wall A - Segment B - Phase 2	30	06-May-24	19-Jun-24
CN2BSA1020	F/R/P Leveling Pad - Retaining Wall A - Segment B - Phase 2	5	20-Jun-24	27-Jun-24
CN2BSA1030	Cure Leveling Pad - Retaining Wall A - Segment B - Phase 2	3	28-Jun-24	30-Jun-24
CN2BSA1040	Set Panels/Drainage/Backfill - Retaining Wall A - Segment B - Phase 2	5	01-Jul-24	08-Jul-24



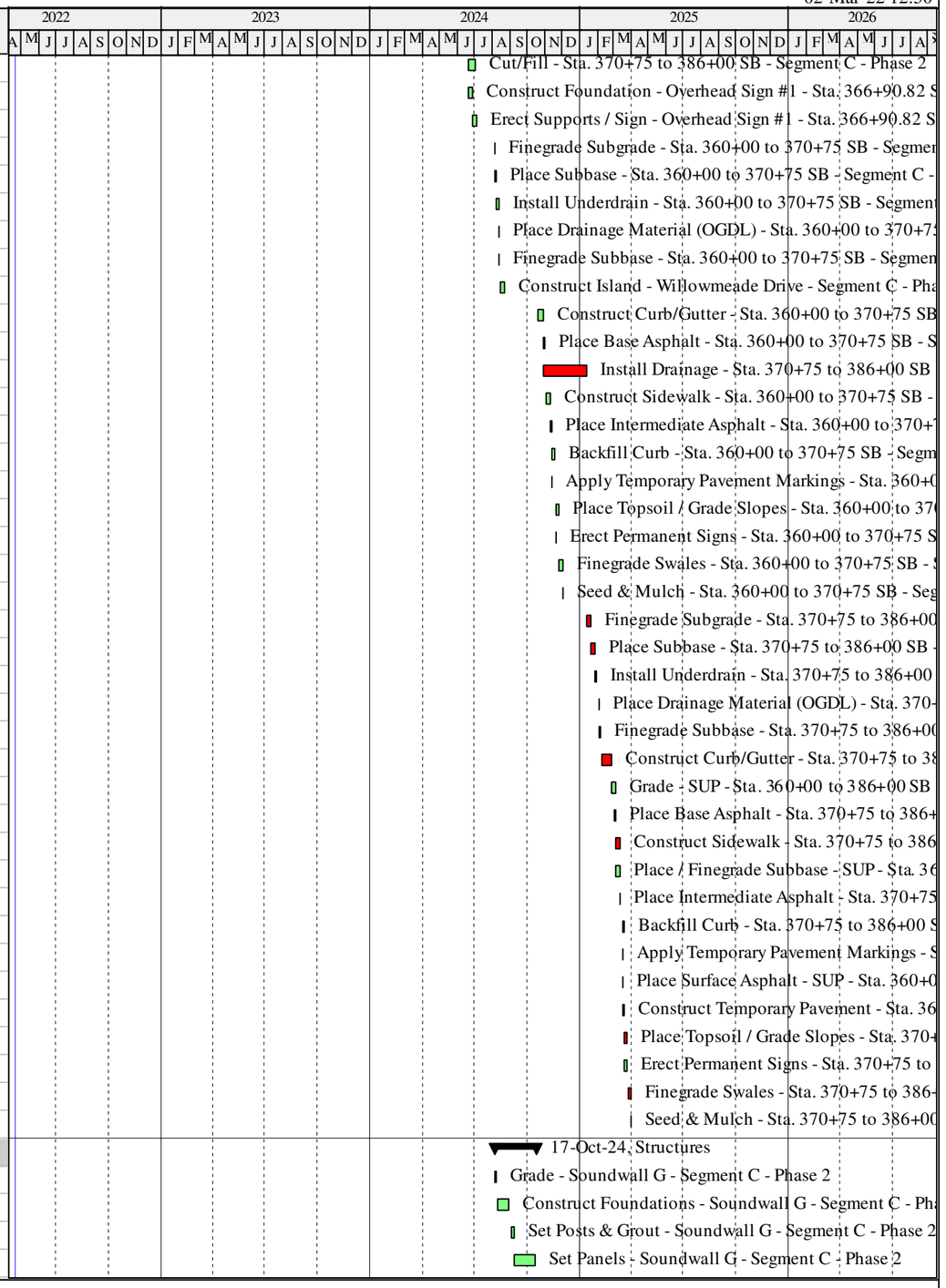
Remaining Level of Effort · Actual Work · Critical Remaining Work
Actual Level of Effort · Remaining Work · Milestone

Activity ID	Activity Name	Original Duration	Start	Finish
CN2BSA1050	F/R/P Moment Slab - Retaining Wall A - Segment B - Phase 2	7	09-Jul-24	18-Jul-24
CN2BSA1060	Cure Moment Slab - Retaining Wall A - Segment B - Phase 2	3	19-Jul-24	21-Jul-24
CN2BSA1070	Install BR27C-15 Railing - Retaining Wall A - Segment B - Phase 2	3	22-Jul-24	24-Jul-24
CN2BSW1000	Divert Flow - Willow Springs Culvert - Segment B - Phase 2	5	24-Jul-24	31-Jul-24
CN2BSY1000	Construct Northern Portion - Culvert @ Sta. 341 - Segment B - Phase 2	15	24-Jul-24	14-Aug-24
CN2BSA1080	Finish Grade - Retaining Wall A - Segment B - Phase 2	3	25-Jul-24	30-Jul-24
CN2BSW1010	Install SOE - Willow Springs Culvert - Segment B - Phase 2	3	01-Aug-24	05-Aug-24
CN2BSW1020	Remove Portion of Existing - Willow Springs Culvert - Segment B - Phase 2	1	06-Aug-24	06-Aug-24
CN2BSW1030	Excavate - Willow Springs Culvert - Segment B - Phase 2	5	07-Aug-24	13-Aug-24
CN2BSW1040	Construct Northern Portion - Willow Springs Culvert - Segment B - Phase 2	15	14-Aug-24	06-Sep-24
CN2BSX1000	Construct Northern Portion - Culvert @ Sta. 328 - Segment B - Phase 2	15	15-Aug-24	09-Sep-24
CN2BSW1050	Backfill - Willow Springs Culvert - Segment B - Phase 2	3	09-Sep-24	11-Sep-24
Utilities		57	03-Jul-24	02-Oct-24
CN2BUL2000	Install Conduit - Sta. 326+00 to 345+00 SB - Segment B - Phase 2	5	03-Jul-24	10-Jul-24
CN2BUL2010	Pull Cable - Sta. 326+00 to 345+00 SB - Segment B - Phase 2	2	11-Jul-24	15-Jul-24
CN2BUL2020	Install Light Foundations - Sta. 326+00 to 345+00 SB - Segment B - Phase 2	2	11-Jul-24	15-Jul-24
CN2BUL2030	Install Light Poles & Lights - Sta. 326+00 to 345+00 SB - Segment B - Phase 2	2	16-Jul-24	17-Jul-24
CN2BUL5000	Install Conduit - Sta. 345+00 to 360+00 SB - Segment B - Phase 2	4	24-Jul-24	30-Jul-24
CN2BUL1000	Install Conduit - Sta. 313+50 to 326+00 SB - Segment B - Phase 2	4	31-Jul-24	05-Aug-24
CN2BUL5010	Pull Cable - Sta. 345+00 to 360+00 SB - Segment B - Phase 2	2	31-Jul-24	01-Aug-24
CN2BUL5020	Install Light Foundations - Sta. 345+00 to 360+00 SB - Segment B - Phase 2	2	31-Jul-24	01-Aug-24
CN1BUX1000	Install 24" Water Line Complete - Sta. 318+50 to 329+25 - Segment B - Phase 2	20	31-Jul-24	28-Aug-24
CN2BUL5030	Install Light Poles & Lights - Sta. 345+00 to 360+00 SB - Segment B - Phase 2	2	02-Aug-24	05-Aug-24
CN2BUL1020	Install Light Foundations - Sta. 313+50 to 326+00 SB - Segment B - Phase 2	2	06-Aug-24	07-Aug-24
CN2BUL1005	Bore Conduit - Sta. 325 - Segment B - Phase 2	5	06-Aug-24	12-Aug-24
CN2BUL1030	Install Light Poles & Lights - Sta. 313+50 to 326+00 SB - Segment B - Phase 2	2	08-Aug-24	09-Aug-24
CN2BUL1010	Pull Cable - Sta. 313+50 to 326+00 SB - Segment B - Phase 2	2	13-Aug-24	14-Aug-24
CN2BUL1040	Electrical Terminations - Sta. 313+50 to 326+00 SB - Segment B - Phase 2	5	15-Aug-24	22-Aug-24
CN2BUL2040	Electrical Terminations - Sta. 326+00 to 345+00 SB - Segment B - Phase 2	5	23-Aug-24	29-Aug-24
CN1BUX2000	Install 24" Water Line Complete - Sta. 337+75 to 349+00 - Segment B - Phase 2	20	29-Aug-24	02-Oct-24
CN2BUL5040	Electrical Terminations - Sta. 345+00 to 360+00 SB - Segment B - Phase 2	5	03-Sep-24	09-Sep-24
CN2BUW1000	Install 24" Water Line Complete - Sta. 352+75 to 355+50 - Segment B - Phase 2	7	12-Sep-24	24-Sep-24
Segment C		198	22-Apr-24	01-Apr-25
Roadway		198	22-Apr-24	01-Apr-25
CN2CRR5500	Replace Existing Sign - Overhead Sign #3 - Sta. 388+58.70 SB - Segment C - Phase 2	3	22-Apr-24	24-Apr-24
CN2CRR1000	Sawcut - Sta. 360+00 to 370+75 SB - Segment C - Phase 2	1	22-May-24	22-May-24
CN2CRR1005	Demo Miscellaneous Items - Sta. 360+00 to 370+75 SB - Segment C - Phase 2	1	22-May-24	22-May-24
CN2CRR1010	Remove Existing Pavement - Sta. 360+00 to 370+75 SB - Segment C - Phase 2	6	23-May-24	31-May-24
CN2CRR5000	Sawcut - Sta. 370+75 to 386+00 SB - Segment C - Phase 2	1	23-May-24	23-May-24
CN2CRR1020	Strip Topsoil - Sta. 360+00 to 370+75 SB - Segment C - Phase 2	2	03-Jun-24	04-Jun-24
CN2CRR5010	Remove Existing Pavement - Sta. 370+75 to 386+00 SB - Segment C - Phase 2	6	03-Jun-24	11-Jun-24
CN2CRR1030	Cut/Fill - Sta. 360+00 to 370+75 SB - Segment C - Phase 2	10	05-Jun-24	19-Jun-24
CN2CRR5020	Strip Topsoil - Sta. 370+75 to 386+00 SB - Segment C - Phase 2	2	12-Jun-24	13-Jun-24
CN2CRR1040	Install Drainage - Sta. 360+00 to 370+75 SB - Segment C - Phase 2	28	20-Jun-24	02-Aug-24



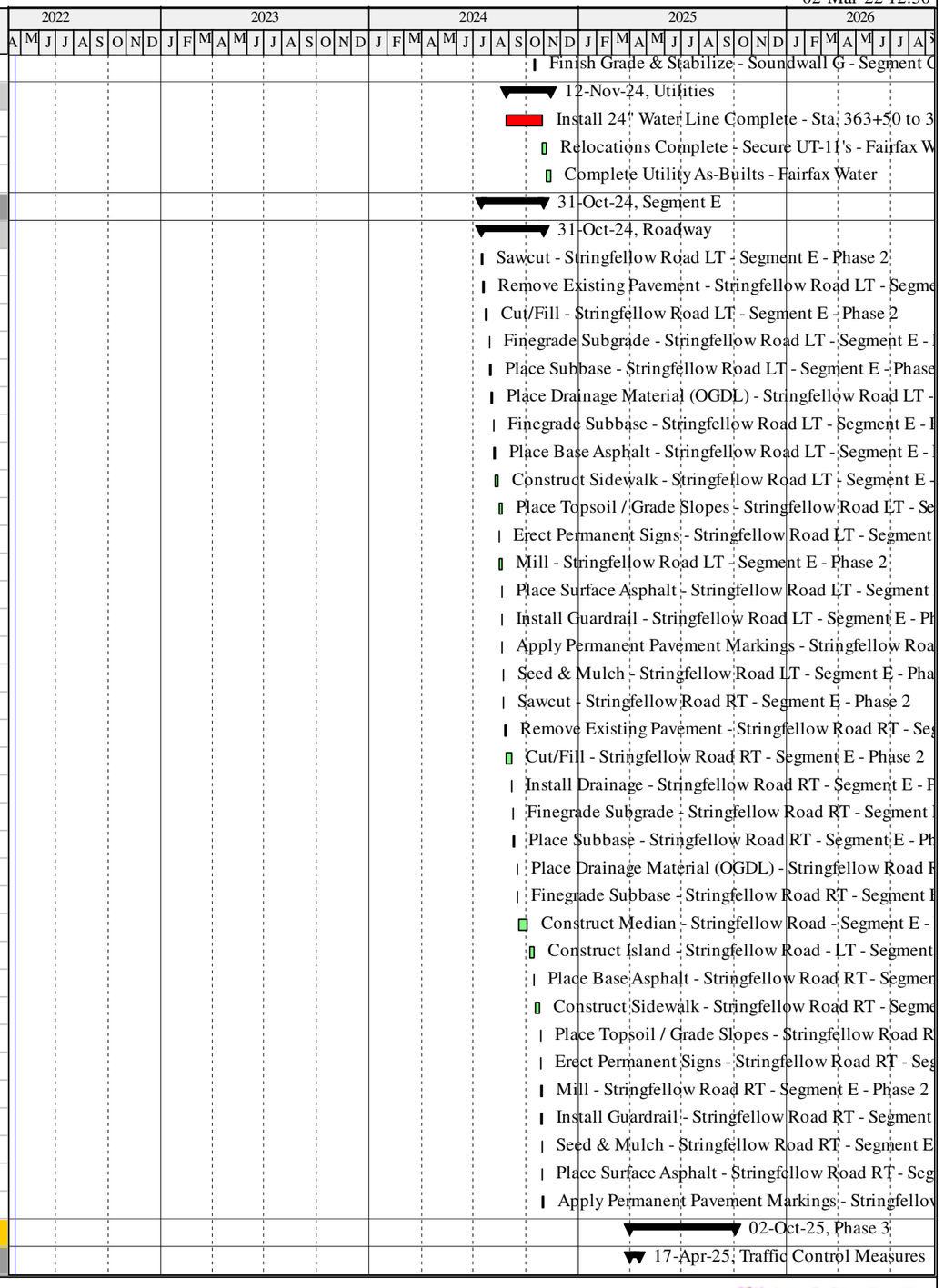
Remaining Level of Effort | Actual Work | Critical Remaining Work
Actual Level of Effort | Remaining Work | Milestone

Activity ID	Activity Name	Original Duration	Start	Finish
CN2CRR5030	Cut/Fill - Sta. 370+75 to 386+00 SB - Segment C - Phase 2	8	20-Jun-24	02-Jul-24
CN2CRR1500	Construct Foundation - Overhead Sign #1 - Sta. 366+90.82 SB - Segment C - Phase 2	5	20-Jun-24	27-Jun-24
CN2CRR1510	Erect Supports / Sign - Overhead Sign #1 - Sta. 366+90.82 SB - Segment C - Phase 2	5	28-Jun-24	05-Jul-24
CN2CRR1050	Finegrade Subgrade - Sta. 360+00 to 370+75 SB - Segment C - Phase 2	1	05-Aug-24	05-Aug-24
CN2CRR1065	Place Subbase - Sta. 360+00 to 370+75 SB - Segment C - Phase 2	2	06-Aug-24	07-Aug-24
CN2CRR1070	Install Underdrain - Sta. 360+00 to 370+75 SB - Segment C - Phase 2	3	08-Aug-24	12-Aug-24
CN2CRR1080	Place Drainage Material (OGDL) - Sta. 360+00 to 370+75 SB - Segment C - Phase 2	1	13-Aug-24	13-Aug-24
CN2CRR1090	Finegrade Subbase - Sta. 360+00 to 370+75 SB - Segment C - Phase 2	1	14-Aug-24	14-Aug-24
CN2CRR1300	Construct Island - Willowmeade Drive - Segment C - Phase 2	5	15-Aug-24	22-Aug-24
CN2CRR1100	Construct Curb/Gutter - Sta. 360+00 to 370+75 SB - Segment C - Phase 2	6	21-Oct-24	29-Oct-24
CN2CRR1120	Place Base Asphalt - Sta. 360+00 to 370+75 SB - Segment C - Phase 2	2	30-Oct-24	31-Oct-24
CN2CRR5040	Install Drainage - Sta. 370+75 to 386+00 SB - Segment C - Phase 2	35	30-Oct-24	13-Jan-25
CN2CRR1110	Construct Sidewalk - Sta. 360+00 to 370+75 SB - Segment C - Phase 2	5	04-Nov-24	11-Nov-24
CN2CRR1130	Place Intermediate Asphalt - Sta. 360+00 to 370+75 SB - Segment C - Phase 2	1	12-Nov-24	12-Nov-24
CN2CRR1140	Backfill Curb - Sta. 360+00 to 370+75 SB - Segment C - Phase 2	3	14-Nov-24	19-Nov-24
CN2CRR1150	Apply Temporary Pavement Markings - Sta. 360+00 to 370+75 SB - Segment C - Phase 2	1	14-Nov-24	14-Nov-24
CN2CRR1160	Place Topsoil / Grade Slopes - Sta. 360+00 to 370+75 SB - Segment C - Phase 2	3	20-Nov-24	25-Nov-24
CN2CRR1170	Erect Permanent Signs - Sta. 360+00 to 370+75 SB - Segment C - Phase 2	1	20-Nov-24	20-Nov-24
CN2CRR1180	Finegrade Swales - Sta. 360+00 to 370+75 SB - Segment C - Phase 2	3	26-Nov-24	02-Dec-24
CN2CRR1190	Seed & Mulch - Sta. 360+00 to 370+75 SB - Segment C - Phase 2	1	03-Dec-24	03-Dec-24
CN2CRR5050	Finegrade Subgrade - Sta. 370+75 to 386+00 SB - Segment C - Phase 2	3	14-Jan-25	20-Jan-25
CN2CRR5060	Place Subbase - Sta. 370+75 to 386+00 SB - Segment C - Phase 2	4	21-Jan-25	27-Jan-25
CN2CRR5070	Install Underdrain - Sta. 370+75 to 386+00 SB - Segment C - Phase 2	3	28-Jan-25	30-Jan-25
CN2CRR5080	Place Drainage Material (OGDL) - Sta. 370+75 to 386+00 SB - Segment C - Phase 2	1	03-Feb-25	03-Feb-25
CN2CRR5090	Finegrade Subbase - Sta. 370+75 to 386+00 SB - Segment C - Phase 2	3	04-Feb-25	06-Feb-25
CN2CRR5100	Construct Curb/Gutter - Sta. 370+75 to 386+00 SB - Segment C - Phase 2	10	10-Feb-25	25-Feb-25
CN2CRS1000	Grade - SUP - Sta. 360+00 to 386+00 SB - Segment C - Phase 2	5	26-Feb-25	05-Mar-25
CN2CRR5120	Place Base Asphalt - Sta. 370+75 to 386+00 SB - Segment C - Phase 2	2	03-Mar-25	04-Mar-25
CN2CRR5110	Construct Sidewalk - Sta. 370+75 to 386+00 SB - Segment C - Phase 2	5	05-Mar-25	12-Mar-25
CN2CRS1010	Place / Finegrade Subbase - SUP - Sta. 360+00 to 386+00 SB - Segment C - Phase 2	5	06-Mar-25	13-Mar-25
CN2CRR5130	Place Intermediate Asphalt - Sta. 370+75 to 386+00 SB - Segment C - Phase 2	1	13-Mar-25	13-Mar-25
CN2CRR5140	Backfill Curb - Sta. 370+75 to 386+00 SB - Segment C - Phase 2	3	17-Mar-25	19-Mar-25
CN2CRR5150	Apply Temporary Pavement Markings - Sta. 370+75 to 386+00 SB - Segment C - Phase 2	1	17-Mar-25	17-Mar-25
CN2CRS1020	Place Surface Asphalt - SUP - Sta. 360+00 to 386+00 SB - Segment C - Phase 2	2	17-Mar-25	18-Mar-25
CN2CRR9000	Construct Temporary Pavement - Sta. 360 to 374 NB - Segment C - Phase 2	3	18-Mar-25	20-Mar-25
CN2CRR5160	Place Topsoil / Grade Slopes - Sta. 370+75 to 386+00 SB - Segment C - Phase 2	3	20-Mar-25	25-Mar-25
CN2CRR5170	Erect Permanent Signs - Sta. 370+75 to 386+00 SB - Segment C - Phase 2	2	20-Mar-25	24-Mar-25
CN2CRR5180	Finegrade Swales - Sta. 370+75 to 386+00 SB - Segment C - Phase 2	3	26-Mar-25	31-Mar-25
CN2CRR5190	Seed & Mulch - Sta. 370+75 to 386+00 SB - Segment C - Phase 2	1	01-Apr-25	01-Apr-25
Structures		46	05-Aug-24	17-Oct-24
CN2CSG1000	Grade - Soundwall G - Segment C - Phase 2	5	05-Aug-24	09-Aug-24
CN2CSG1010	Construct Foundations - Soundwall G - Segment C - Phase 2	13	12-Aug-24	29-Aug-24
CN2CSG1020	Set Posts & Grout - Soundwall G - Segment C - Phase 2	5	03-Sep-24	09-Sep-24
CN2CSG1030	Set Panels - Soundwall G - Segment C - Phase 2	20	10-Sep-24	14-Oct-24



Remaining Level of Effort · Actual Work · Critical Remaining Work
Actual Level of Effort · Remaining Work · Milestone

Activity ID	Activity Name	Original Duration	Start	Finish
CN2CSG1050	Finish Grade & Stabilize - Soundwall G - Segment C - Phase 2	3	15-Oct-24	17-Oct-24
Utilities		43	29-Aug-24	12-Nov-24
CN1CUX1000	Install 24" Water Line Complete - Sta. 363+50 to 376+50 - Segment C - Phase 2	35	29-Aug-24	29-Oct-24
UTUX001010	Relocations Complete - Secure UT-11's - Fairfax Water	5	30-Oct-24	05-Nov-24
UTUX001020	Complete Utility As-Builts - Fairfax Water	5	06-Nov-24	12-Nov-24
Segment E		67	16-Jul-24	31-Oct-24
Roadway		67	16-Jul-24	31-Oct-24
CN2ERT1000	Sawcut - Stringfellow Road LT - Segment E - Phase 2	1	16-Jul-24	16-Jul-24
CN2ERT1010	Remove Existing Pavement - Stringfellow Road LT - Segment E - Phase 2	3	17-Jul-24	19-Jul-24
CN2ERT1020	Cut/Fill - Stringfellow Road LT - Segment E - Phase 2	4	22-Jul-24	25-Jul-24
CN2ERT1040	Finegrade Subgrade - Stringfellow Road LT - Segment E - Phase 2	1	29-Jul-24	29-Jul-24
CN2ERT1050	Place Subbase - Stringfellow Road LT - Segment E - Phase 2	3	30-Jul-24	01-Aug-24
CN2ERT1070	Place Drainage Material (OGDL) - Stringfellow Road LT - Segment E - Phase 2	1	02-Aug-24	02-Aug-24
CN2ERT1080	Finegrade Subbase - Stringfellow Road LT - Segment E - Phase 2	1	05-Aug-24	05-Aug-24
CN2ERT1110	Place Base Asphalt - Stringfellow Road LT - Segment E - Phase 2	2	06-Aug-24	07-Aug-24
CN2ERT1100	Construct Sidewalk - Stringfellow Road LT - Segment E - Phase 2	5	08-Aug-24	14-Aug-24
CN2ERT1170	Place Topsoil / Grade Slopes - Stringfellow Road LT - Segment E - Phase 2	2	15-Aug-24	19-Aug-24
CN2ERT1180	Erect Permanent Signs - Stringfellow Road LT - Segment E - Phase 2	1	15-Aug-24	15-Aug-24
CN2ERT1140	Mill - Stringfellow Road LT - Segment E - Phase 2	2	15-Aug-24	19-Aug-24
CN2ERT1150	Place Surface Asphalt - Stringfellow Road LT - Segment E - Phase 2	1	20-Aug-24	20-Aug-24
CN2ERT1200	Install Guardrail - Stringfellow Road LT - Segment E - Phase 2	2	20-Aug-24	21-Aug-24
CN2ERT1160	Apply Permanent Pavement Markings - Stringfellow Road LT - Segment E - Phase 2	1	21-Aug-24	21-Aug-24
CN2ERT1190	Seed & Mulch - Stringfellow Road LT - Segment E - Phase 2	1	22-Aug-24	22-Aug-24
CN2ERT5000	Sawcut - Stringfellow Road RT - Segment E - Phase 2	1	23-Aug-24	23-Aug-24
CN2ERT5010	Remove Existing Pavement - Stringfellow Road RT - Segment E - Phase 2	3	26-Aug-24	28-Aug-24
CN2ERT5020	Cut/Fill - Stringfellow Road RT - Segment E - Phase 2	4	29-Aug-24	05-Sep-24
CN2ERT5030	Install Drainage - Stringfellow Road RT - Segment E - Phase 2	1	06-Sep-24	06-Sep-24
CN2ERT5040	Finegrade Subgrade - Stringfellow Road RT - Segment E - Phase 2	1	09-Sep-24	09-Sep-24
CN2ERT5050	Place Subbase - Stringfellow Road RT - Segment E - Phase 2	3	10-Sep-24	12-Sep-24
CN2ERT5070	Place Drainage Material (OGDL) - Stringfellow Road RT - Segment E - Phase 2	1	16-Sep-24	16-Sep-24
CN2ERT5080	Finegrade Subbase - Stringfellow Road RT - Segment E - Phase 2	1	17-Sep-24	17-Sep-24
CN2ERT9000	Construct Median - Stringfellow Road - Segment E - Phase 2	10	18-Sep-24	03-Oct-24
CN2ERT9010	Construct Island - Stringfellow Road - LT - Segment E - Phase 2	5	07-Oct-24	14-Oct-24
CN2ERT5110	Place Base Asphalt - Stringfellow Road RT - Segment E - Phase 2	2	15-Oct-24	16-Oct-24
CN2ERT5100	Construct Sidewalk - Stringfellow Road RT - Segment E - Phase 2	5	17-Oct-24	24-Oct-24
CN2ERT5170	Place Topsoil / Grade Slopes - Stringfellow Road RT - Segment E - Phase 2	0	28-Oct-24	28-Oct-24
CN2ERT5180	Erect Permanent Signs - Stringfellow Road RT - Segment E - Phase 2	1	28-Oct-24	28-Oct-24
CN2ERT5140	Mill - Stringfellow Road RT - Segment E - Phase 2	2	28-Oct-24	29-Oct-24
CN2ERT5200	Install Guardrail - Stringfellow Road RT - Segment E - Phase 2	2	28-Oct-24	29-Oct-24
CN2ERT5190	Seed & Mulch - Stringfellow Road RT - Segment E - Phase 2	1	30-Oct-24	30-Oct-24
CN2ERT5150	Place Surface Asphalt - Stringfellow Road RT - Segment E - Phase 2	1	30-Oct-24	30-Oct-24
CN2ERT5160	Apply Permanent Pavement Markings - Stringfellow Road RT - Segment E - Phase 2	1	31-Oct-24	31-Oct-24
Phase 3		115	02-Apr-25	02-Oct-25
Traffic Control Measures		10	02-Apr-25	17-Apr-25



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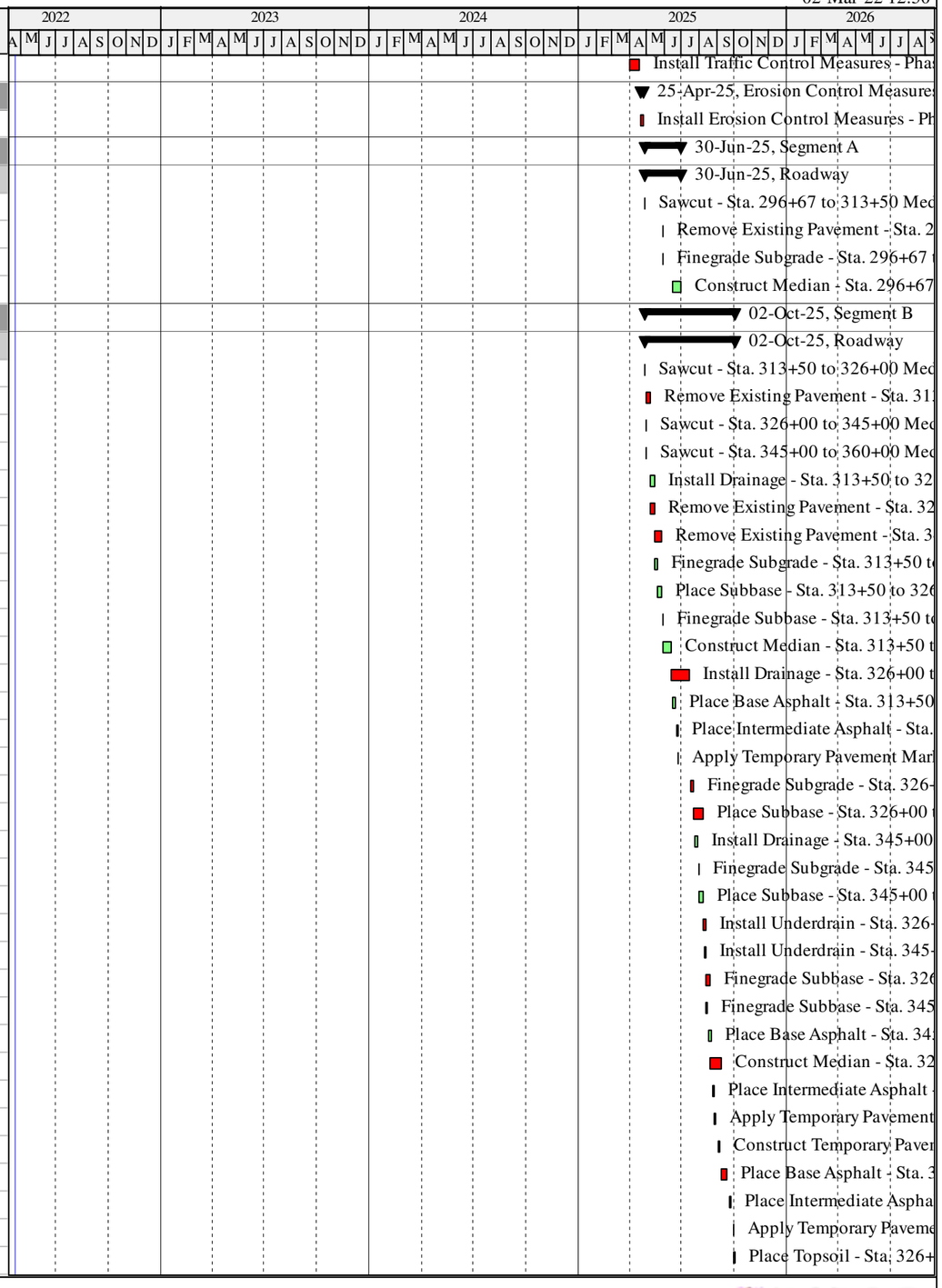
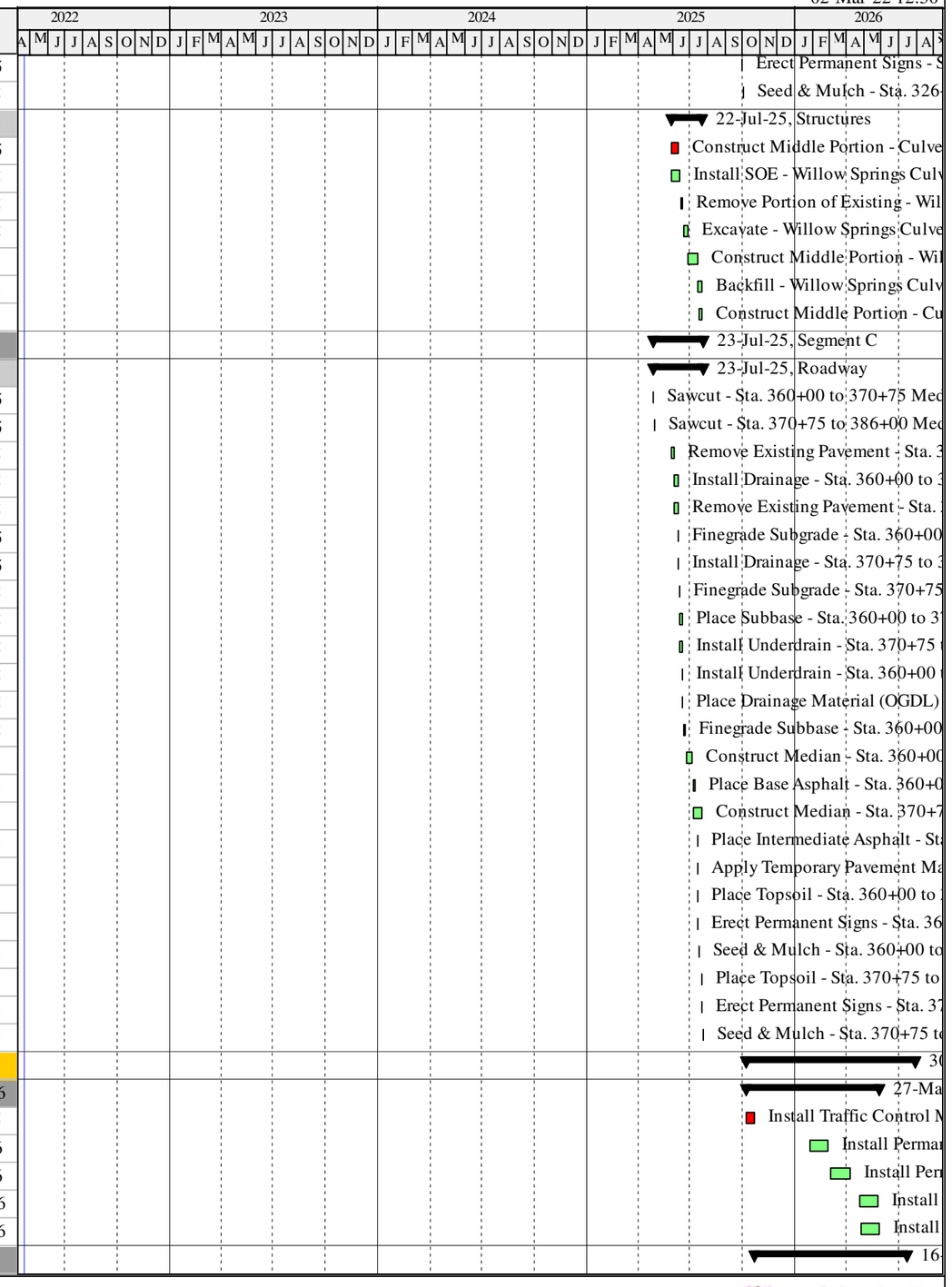
Activity ID	Activity Name	Original Duration	Start	Finish
CN3T001000	Install Traffic Control Measures - Phase 3	10	02-Apr-25	17-Apr-25
Erosion Control Measures		5	21-Apr-25	25-Apr-25
CN3M001000	Install Erosion Control Measures - Phase 3	5	21-Apr-25	25-Apr-25
Segment A		41	28-Apr-25	30-Jun-25
Roadway		41	28-Apr-25	30-Jun-25
CN3ARR1000	Sawcut - Sta. 296+67 to 313+50 Median - Segment A - Phase 3	1	28-Apr-25	28-Apr-25
CN3ARR1010	Remove Existing Pavement - Sta. 296+67 to 313+50 Median - Segment A - Phase 3	1	28-May-25	28-May-25
CN3ARR1050	Finegrade Subgrade - Sta. 296+67 to 313+50 Median - Segment A - Phase 3	1	29-May-25	29-May-25
CN3ARR1100	Construct Median - Sta. 296+67 to 313+50 Median - Segment A - Phase 3	10	16-Jun-25	30-Jun-25
Segment B		100	28-Apr-25	02-Oct-25
Roadway		100	28-Apr-25	02-Oct-25
CN3BRR1000	Sawcut - Sta. 313+50 to 326+00 Median - Segment B - Phase 3	1	28-Apr-25	28-Apr-25
CN3BRR1010	Remove Existing Pavement - Sta. 313+50 to 326+00 Median - Segment B - Phase 3	6	29-Apr-25	07-May-25
CN3BRR5000	Sawcut - Sta. 326+00 to 345+00 Median - Segment B - Phase 3	1	29-Apr-25	29-Apr-25
CN3BRR7000	Sawcut - Sta. 345+00 to 360+00 Median - Segment B - Phase 3	1	30-Apr-25	30-Apr-25
CN3BRR1040	Install Drainage - Sta. 313+50 to 326+00 Median - Segment B - Phase 3	5	08-May-25	14-May-25
CN3BRR5010	Remove Existing Pavement - Sta. 326+00 to 345+00 Median - Segment B - Phase 3	4	08-May-25	13-May-25
CN3BRR7010	Remove Existing Pavement - Sta. 345+00 to 360+00 Median - Segment B - Phase 3	8	14-May-25	27-May-25
CN3BRR1050	Finegrade Subgrade - Sta. 313+50 to 326+00 Median - Segment B - Phase 3	2	15-May-25	19-May-25
CN3BRR1070	Place Subbase - Sta. 313+50 to 326+00 Median - Segment B - Phase 3	5	20-May-25	27-May-25
CN3BRR1090	Finegrade Subbase - Sta. 313+50 to 326+00 Median - Segment B - Phase 3	2	28-May-25	29-May-25
CN3BRR1100	Construct Median - Sta. 313+50 to 326+00 Median - Segment B - Phase 3	10	30-May-25	13-Jun-25
CN3BRR5040	Install Drainage - Sta. 326+00 to 345+00 Median - Segment B - Phase 3	21	12-Jun-25	15-Jul-25
CN3BRR1120	Place Base Asphalt - Sta. 313+50 to 326+00 Median - Segment B - Phase 3	4	16-Jun-25	19-Jun-25
CN3BRR1130	Place Intermediate Asphalt - Sta. 313+50 to 326+00 Median - Segment B - Phase 3	2	23-Jun-25	24-Jun-25
CN3BRR1150	Apply Temporary Pavement Markings - Sta. 313+50 to 326+00 Median - Segment B - Phase 3	1	25-Jun-25	25-Jun-25
CN3BRR5050	Finegrade Subgrade - Sta. 326+00 to 345+00 Median - Segment B - Phase 3	4	16-Jul-25	21-Jul-25
CN3BRR5070	Place Subbase - Sta. 326+00 to 345+00 Median - Segment B - Phase 3	11	22-Jul-25	06-Aug-25
CN3BRR7040	Install Drainage - Sta. 345+00 to 360+00 Median - Segment B - Phase 3	4	23-Jul-25	29-Jul-25
CN3BRR7050	Finegrade Subgrade - Sta. 345+00 to 360+00 Median - Segment B - Phase 3	2	30-Jul-25	31-Jul-25
CN3BRR7070	Place Subbase - Sta. 345+00 to 360+00 Median - Segment B - Phase 3	6	01-Aug-25	08-Aug-25
CN3BRR5080	Install Underdrain - Sta. 326+00 to 345+00 Median - Segment B - Phase 3	4	07-Aug-25	12-Aug-25
CN3BRR7080	Install Underdrain - Sta. 345+00 to 360+00 Median - Segment B - Phase 3	2	11-Aug-25	12-Aug-25
CN3BRR5090	Finegrade Subbase - Sta. 326+00 to 345+00 Median - Segment B - Phase 3	4	13-Aug-25	19-Aug-25
CN3BRR7090	Finegrade Subbase - Sta. 345+00 to 360+00 Median - Segment B - Phase 3	2	13-Aug-25	14-Aug-25
CN3BRR7120	Place Base Asphalt - Sta. 345+00 to 360+00 Median - Segment B - Phase 3	5	18-Aug-25	22-Aug-25
CN3BRR5100	Construct Median - Sta. 326+00 to 345+00 Median - Segment B - Phase 3	12	20-Aug-25	08-Sep-25
CN3BRR7130	Place Intermediate Asphalt - Sta. 345+00 to 360+00 Median - Segment B - Phase 3	3	25-Aug-25	27-Aug-25
CN3BRR7150	Apply Temporary Pavement Markings - Sta. 345+00 to 360+00 Median - Segment B - Phase 3	1	28-Aug-25	28-Aug-25
CN3BRR9000	Construct Temporary Pavement - Sta. 346 to 358 Median - Segment B - Phase 3	4	02-Sep-25	05-Sep-25
CN3BRR5120	Place Base Asphalt - Sta. 326+00 to 345+00 Median - Segment B - Phase 3	7	09-Sep-25	18-Sep-25
CN3BRR5130	Place Intermediate Asphalt - Sta. 326+00 to 345+00 Median - Segment B - Phase 3	4	22-Sep-25	25-Sep-25
CN3BRR5150	Apply Temporary Pavement Markings - Sta. 326+00 to 345+00 Median - Segment B - Phase 3	1	29-Sep-25	29-Sep-25
CN3BRR5160	Place Topsoil - Sta. 326+00 to 345+00 Median - Segment B - Phase 3	3	29-Sep-25	01-Oct-25



Remaining Level of Effort | Actual Work | Critical Remaining Work
Actual Level of Effort | Remaining Work | Milestone

Activity ID	Activity Name	Original Duration	Start	Finish
CN3BRR5170	Erect Permanent Signs - Sta. 326+00 to 345+00 Median - Segment B - Phase 3	1	29-Sep-25	29-Sep-25
CN3BRR5190	Seed & Mulch - Sta. 326+00 to 345+00 Median - Segment B - Phase 3	1	02-Oct-25	02-Oct-25
Structures		36	28-May-25	22-Jul-25
CN3BSX1000	Construct Middle Portion - Culvert @ Sta. 328 - Segment B - Phase 3	10	28-May-25	11-Jun-25
CN3BSW1000	Install SOE - Willow Springs Culvert - Segment B - Phase 3	12	28-May-25	13-Jun-25
CN3BSW1010	Remove Portion of Existing - Willow Springs Culvert - Segment B - Phase 3	3	16-Jun-25	18-Jun-25
CN3BSW1020	Excavate - Willow Springs Culvert - Segment B - Phase 3	5	19-Jun-25	26-Jun-25
CN3BSW1030	Construct Middle Portion - Willow Springs Culvert - Segment B - Phase 3	10	27-Jun-25	14-Jul-25
CN3BSW1040	Backfill - Willow Springs Culvert - Segment B - Phase 3	5	15-Jul-25	21-Jul-25
CN3BSY1000	Construct Middle Portion - Culvert @ Sta. 341 - Segment B - Phase 3	5	16-Jul-25	22-Jul-25
Segment C		56	28-Apr-25	23-Jul-25
Roadway		56	28-Apr-25	23-Jul-25
CN3CRR1000	Sawcut - Sta. 360+00 to 370+75 Median - Segment C - Phase 3	1	28-Apr-25	28-Apr-25
CN3CRR5000	Sawcut - Sta. 370+75 to 386+00 Median - Segment C - Phase 3	1	29-Apr-25	29-Apr-25
CN3CRR1010	Remove Existing Pavement - Sta. 360+00 to 370+75 Median - Segment C - Phase 3	5	28-May-25	03-Jun-25
CN3CRR1040	Install Drainage - Sta. 360+00 to 370+75 Median - Segment C - Phase 3	3	04-Jun-25	09-Jun-25
CN3CRR5010	Remove Existing Pavement - Sta. 370+75 to 386+00 Median - Segment C - Phase 3	3	04-Jun-25	09-Jun-25
CN3CRR1050	Finegrade Subgrade - Sta. 360+00 to 370+75 Median - Segment C - Phase 3	2	10-Jun-25	11-Jun-25
CN3CRR5040	Install Drainage - Sta. 370+75 to 386+00 Median - Segment C - Phase 3	2	10-Jun-25	11-Jun-25
CN3CRR5050	Finegrade Subgrade - Sta. 370+75 to 386+00 Median - Segment C - Phase 3	1	12-Jun-25	12-Jun-25
CN3CRR1065	Place Subbase - Sta. 360+00 to 370+75 Median - Segment C - Phase 3	3	12-Jun-25	16-Jun-25
CN3CRR5070	Install Underdrain - Sta. 370+75 to 386+00 Median - Segment C - Phase 3	2	13-Jun-25	16-Jun-25
CN3CRR1070	Install Underdrain - Sta. 360+00 to 370+75 Median - Segment C - Phase 3	1	17-Jun-25	17-Jun-25
CN3CRR1080	Place Drainage Material (OGDL) - Sta. 360+00 to 370+75 Median - Segment C - Phase 3	1	18-Jun-25	18-Jun-25
CN3CRR1090	Finegrade Subbase - Sta. 360+00 to 370+75 Median - Segment C - Phase 3	2	19-Jun-25	23-Jun-25
CN3CRR1100	Construct Median - Sta. 360+00 to 370+75 Median - Segment C - Phase 3	8	24-Jun-25	03-Jul-25
CN3CRR1120	Place Base Asphalt - Sta. 360+00 to 370+75 Median - Segment C - Phase 3	4	07-Jul-25	10-Jul-25
CN3CRR5100	Construct Median - Sta. 370+75 to 386+00 Median - Segment C - Phase 3	10	07-Jul-25	21-Jul-25
CN3CRR1130	Place Intermediate Asphalt - Sta. 360+00 to 370+75 Median - Segment C - Phase 3	1	14-Jul-25	14-Jul-25
CN3CRR1150	Apply Temporary Pavement Markings - Sta. 360+00 to 370+75 Median - Segment C - Phase 3	1	15-Jul-25	15-Jul-25
CN3CRR1160	Place Topsoil - Sta. 360+00 to 370+75 Median - Segment C - Phase 3	1	15-Jul-25	15-Jul-25
CN3CRR1170	Erect Permanent Signs - Sta. 360+00 to 370+75 Median - Segment C - Phase 3	1	15-Jul-25	15-Jul-25
CN3CRR1190	Seed & Mulch - Sta. 360+00 to 370+75 Median - Segment C - Phase 3	1	16-Jul-25	16-Jul-25
CN3CRR5160	Place Topsoil - Sta. 370+75 to 386+00 Median - Segment C - Phase 3	1	22-Jul-25	22-Jul-25
CN3CRR5170	Erect Permanent Signs - Sta. 370+75 to 386+00 Median - Segment C - Phase 3	1	22-Jul-25	22-Jul-25
CN3CRR5190	Seed & Mulch - Sta. 370+75 to 386+00 Median - Segment C - Phase 3	1	23-Jul-25	23-Jul-25
Phase 4		170	06-Oct-25	30-Jul-26
Traffic Control Measures		128	06-Oct-25	27-May-26
CN4T001000	Install Traffic Control Measures - Phase 4	10	06-Oct-25	21-Oct-25
CN4TA01000	Install Permanent Signal - Rte 29/Centerville Farms/Union Mill - Segment A - Phase 4	20	26-Jan-26	26-Feb-26
CN4TB01010	Install Permanent Signal - Rtw 29/Meadow Estates/Hampton Forest - Segment B - Phase 4	20	04-Mar-26	07-Apr-26
CN4TB01000	Install Permanent Signal - Rte 29/Stringfellow/Clifton - Segment B - Phase 4	20	24-Apr-26	26-May-26
CN4TC01000	Install Permanent Signal - Rte 29/Buckley's Gate/Summit - Segment C - Phase 4	20	27-Apr-26	27-May-26
Erosion Control Measures		151	22-Oct-25	16-Jul-26



Remaining Level of Effort | Actual Work | Critical Remaining Work
Actual Level of Effort | Remaining Work | Milestone

Activity ID	Activity Name	Original Duration	Start	Finish
CN4M001000	Install Erosion Control Measures - Phase 4	10	22-Oct-25	06-Nov-25
CN4MA01000	Remove Erosion Control Measures - Segment A - Phase 4	2	15-Jun-26	16-Jun-26
CN4MC01010	Convert Sediment Basins to SWM Ponds - Segment C - Phase 4	10	24-Jun-26	08-Jul-26
CN4MD01000	Remove Erosion Control Measures - Segment D - Phase 4	2	01-Jul-26	02-Jul-26
CN4MB01000	Remove Erosion Control Measures - Segment B - Phase 4	3	02-Jul-26	07-Jul-26
CN4MC01020	Erect Fence Around SWM Ponds - Segment C - Phase 4	3	09-Jul-26	13-Jul-26
CN4MC01000	Remove Erosion Control Measures - Segment C - Phase 4	3	14-Jul-26	16-Jul-26
Segment A		146	10-Nov-25	24-Jul-26
Roadway		146	10-Nov-25	24-Jul-26
CN4ARR1000	Sawcut - Sta. 296+67 to 311+00 NB - Segment A - Phase 4	1	10-Nov-25	10-Nov-25
CN4ARR1005	Demo Miscellaneous Items - Sta. 296+67 to 311+00 NB - Segment A - Phase 4	2	10-Nov-25	11-Nov-25
CN4ARR1010	Remove Existing Pavement - Sta. 296+67 to 311+00 NB - Segment A - Phase 4	5	01-Dec-25	08-Dec-25
CN4ARR1020	Strip Topsoil - Sta. 296+67 to 311+00 NB - Segment A - Phase 4	1	09-Dec-25	09-Dec-25
CN4ARR1030	Cut/Fill - Sta. 296+67 to 311+00 NB - Segment A - Phase 4	7	11-Dec-25	23-Dec-25
CN4ARR1040	Install Drainage - Sta. 296+67 to 311+00 NB - Segment A - Phase 4	12	24-Dec-25	22-Jan-26
CN4ARR1050	Finegrade Subgrade - Sta. 296+67 to 311+00 NB - Segment A - Phase 4	1	26-Jan-26	26-Jan-26
CN4ARX1000	Sawcut - Service Road #1 - Segment A - Phase 4	1	26-Jan-26	26-Jan-26
CN4ARR1070	Place Subbase - Sta. 296+67 to 311+00 NB - Segment A - Phase 4	3	27-Jan-26	29-Jan-26
CN4ARX1010	Remove Existing Pavement - Service Road #1 - Segment A - Phase 4	2	27-Jan-26	28-Jan-26
CN4ARX1020	Cut/Fill - Service Road #1 - Segment A - Phase 4	2	29-Jan-26	02-Feb-26
CN4ARR1080	Install Underdrain - Sta. 296+67 to 311+00 NB - Segment A - Phase 4	2	02-Feb-26	03-Feb-26
CN4ARX1040	Finegrade Subgrade - Service Road #1 - Segment A - Phase 4	1	03-Feb-26	03-Feb-26
CN4ARR1090	Finegrade Subbase - Sta. 296+67 to 311+00 NB - Segment A - Phase 4	1	04-Feb-26	04-Feb-26
CN4ARX1050	Place Subbase - Service Road #1 - Segment A - Phase 4	2	04-Feb-26	05-Feb-26
CN4ARR1100	Construct Curb/Gutter - Sta. 296+67 to 311+00 NB - Segment A - Phase 4	3	05-Feb-26	10-Feb-26
CN4ARR1300	Construct Island - Sta. 306 NB - Segment A - Phase 4	5	05-Feb-26	12-Feb-26
CN4ARX1070	Finegrade Subbase - Service Road #1 - Segment A - Phase 4	1	09-Feb-26	09-Feb-26
CN4ARX1090	Place Base Asphalt - Service Road #1 - Segment A - Phase 4	1	10-Feb-26	10-Feb-26
CN4ARS1000	Grade - SUP - Sta. 296+67 to 311+00 NB - Segment A - Phase 4	2	11-Feb-26	12-Feb-26
CN4ARR9000	Mill - Segment A NB - Phase 4	2	11-Feb-26	12-Feb-26
CN4ARX1110	Place Surface Asphalt - Service Road #1 - Segment A - Phase 4	1	11-Feb-26	11-Feb-26
CN4ARX1130	Place Topsoil / Grade Slopes - Service Road #1 - Segment A - Phase 4	1	11-Feb-26	11-Feb-26
CN4ARX1120	Apply Permanent Pavement Markings - Service Road #1 - Segment A - Phase 4	1	12-Feb-26	12-Feb-26
CN4ARX1140	Seed & Mulch - Service Road #1 - Segment A - Phase 4	1	12-Feb-26	12-Feb-26
CN4ARS1010	Place / Finegrade Subbase - SUP - Sta. 296+67 to 311+00 NB - Segment A - Phase 4	3	16-Feb-26	18-Feb-26
CN4ARR1320	Construct Island - Clifton Road - Segment A - Phase 4	5	16-Feb-26	23-Feb-26
CN4ARS1020	Place Surface Asphalt - SUP - Sta. 296+67 to 311+00 NB - Segment A - Phase 4	1	19-Feb-26	19-Feb-26
CN4ARR1120	Place Base Asphalt - Sta. 296+67 to 311+00 NB - Segment A - Phase 4	2	02-Mar-26	03-Mar-26
CN4ARR1110	Construct Sidewalk - Sta. 296+67 to 311+00 NB - Segment A - Phase 4	5	04-Mar-26	11-Mar-26
CN4ARR1130	Place Intermediate Asphalt - Sta. 296+67 to 311+00 NB - Segment A - Phase 4	1	12-Mar-26	12-Mar-26
CN4ARR1140	Backfill Curb - Sta. 296+67 to 311+00 NB - Segment A - Phase 4	2	16-Mar-26	17-Mar-26
CN4ARR9010	Place Surface Asphalt - Segment A NB - Phase 4	2	16-Mar-26	17-Mar-26
CN4ARR1170	Erect Permanent Signs - Sta. 296+67 to 311+00 NB - Segment A - Phase 4	2	18-Mar-26	19-Mar-26
CN4ARR9020	Apply Permanent Pavement Markings - Segment A NB - Phase 4	1	18-Mar-26	18-Mar-26

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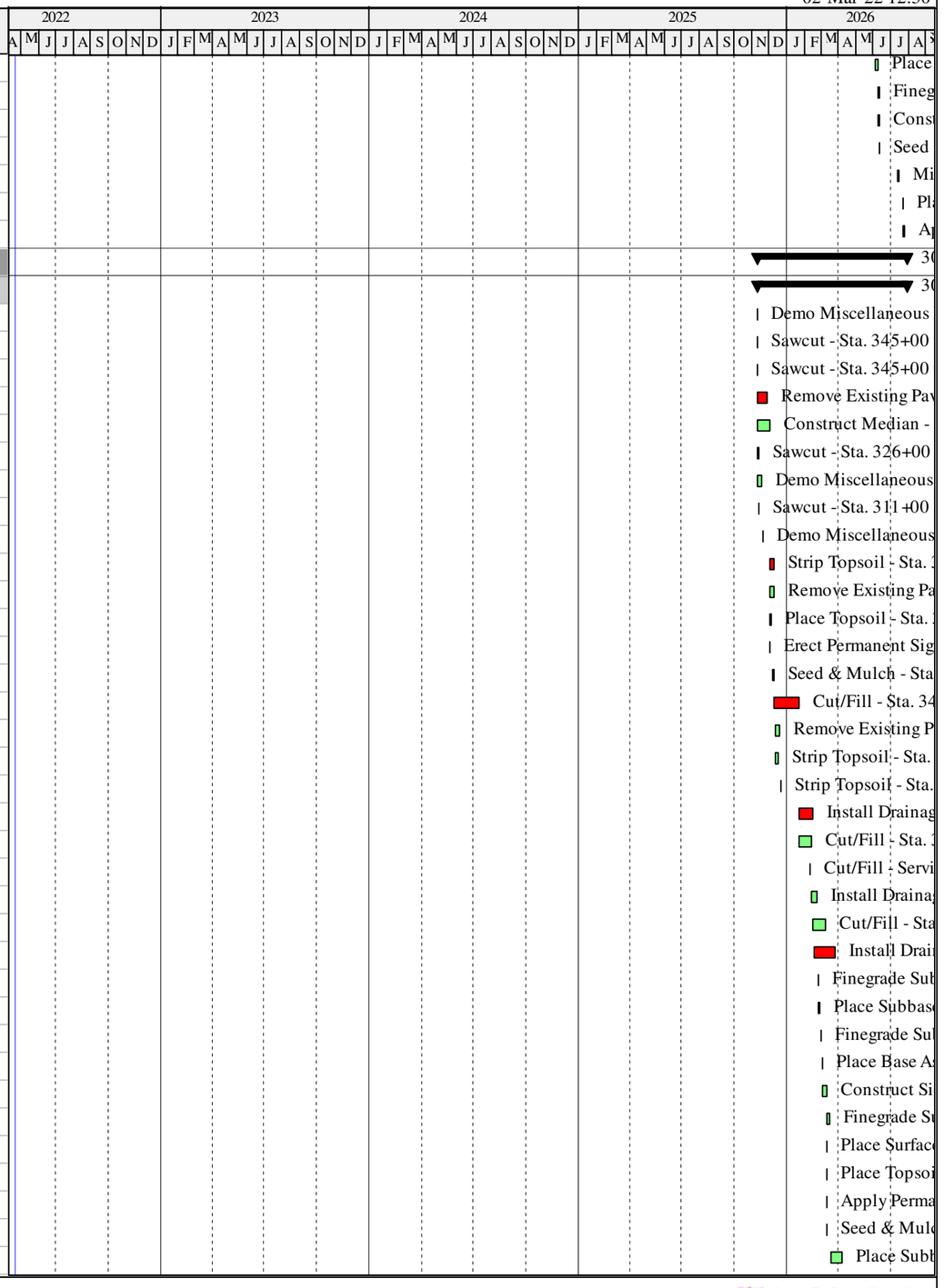
Activity ID	Activity Name	Original Duration	Start	Finish
CN4ARR1160	Place Topsoil / Grade Slopes - Sta. 296+67 to 311+00 NB - Segment A - Phase 4	2	04-Jun-26	08-Jun-26
CN4ARR1180	Finegrade Swales - Sta. 296+67 to 311+00 NB - Segment A - Phase 4	3	09-Jun-26	11-Jun-26
CN4ARR1310	Construct Paved Ditch - Sta. 313+70 to 319+50 - Segment A - Phase 4	3	09-Jun-26	11-Jun-26
CN4ARR1190	Seed & Mulch - Sta. 296+67 to 311+00 NB - Segment A - Phase 4	1	12-Jun-26	12-Jun-26
CN4ARR9100	Mill - Segment A SB - Phase 4	2	14-Jul-26	15-Jul-26
CN4ARR9110	Place Surface Asphalt - Segment A SB - Phase 4	2	22-Jul-26	23-Jul-26
CN4ARR9120	Apply Permanent Pavement Markings - Segment A SB - Phase 4	1	24-Jul-26	24-Jul-26
Segment B		150	10-Nov-25	30-Jul-26
Roadway		150	10-Nov-25	30-Jul-26
CN4BRR1005	Demo Miscellaneous Items - Sta. 311+00 to 326+00 NB - Segment B - Phase 4	1	10-Nov-25	10-Nov-25
CN4BRR5000	Sawcut - Sta. 345+00 to 360+00 NB - Segment B - Phase 4	1	10-Nov-25	10-Nov-25
CN4BRR7000	Sawcut - Sta. 345+00 to 360+00 Median - Segment B - Phase 4	1	10-Nov-25	10-Nov-25
CN4BRR5010	Remove Existing Pavement - Sta. 345+00 to 360+00 NB - Segment B - Phase 4	9	11-Nov-25	26-Nov-25
CN4BRR7100	Construct Median - Sta. 345+00 to 360+00 Median - Segment B - Phase 4	10	11-Nov-25	01-Dec-25
CN4BRR2000	Sawcut - Sta. 326+00 to 345+00 NB - Segment B - Phase 4	1	11-Nov-25	11-Nov-25
CN4BRR2005	Demo Miscellaneous Items - Sta. 326+00 to 345+00 NB - Segment B - Phase 4	5	11-Nov-25	18-Nov-25
CN4BRR1000	Sawcut - Sta. 311+00 to 326+00 NB - Segment B - Phase 4	1	12-Nov-25	12-Nov-25
CN4BRR5005	Demo Miscellaneous Items - Sta. 345+00 to 360+00 NB - Segment B - Phase 4	1	20-Nov-25	20-Nov-25
CN4BRR5020	Strip Topsoil - Sta. 345+00 to 360+00 NB - Segment B - Phase 4	5	01-Dec-25	08-Dec-25
CN4BRR2010	Remove Existing Pavement - Sta. 326+00 to 345+00 NB - Segment B - Phase 4	6	01-Dec-25	09-Dec-25
CN4BRR7160	Place Topsoil - Sta. 345+00 to 360+00 Median - Segment B - Phase 4	3	02-Dec-25	04-Dec-25
CN4BRR7170	Erect Permanent Signs - Sta. 345+00 to 360+00 Median - Segment B - Phase 4	1	02-Dec-25	02-Dec-25
CN4BRR7190	Seed & Mulch - Sta. 345+00 to 360+00 Median - Segment B - Phase 4	1	08-Dec-25	08-Dec-25
CN4BRR5030	Cut/Fill - Sta. 345+00 to 360+00 NB - Segment B - Phase 4	19	09-Dec-25	21-Jan-26
CN4BRR1010	Remove Existing Pavement - Sta. 311+00 to 326+00 NB - Segment B - Phase 4	5	11-Dec-25	18-Dec-25
CN4BRR2020	Strip Topsoil - Sta. 326+00 to 345+00 NB - Segment B - Phase 4	3	11-Dec-25	16-Dec-25
CN4BRR1020	Strip Topsoil - Sta. 311+00 to 326+00 NB - Segment B - Phase 4	1	22-Dec-25	22-Dec-25
CN4BRR5040	Install Drainage - Sta. 345+00 to 360+00 NB - Segment B - Phase 4	14	22-Jan-26	16-Feb-26
CN4BRR2030	Cut/Fill - Sta. 326+00 to 345+00 NB - Segment B - Phase 4	13	22-Jan-26	12-Feb-26
CN4BRY1020	Cut/Fill - Service Road #2 - Segment B - Phase 4	2	10-Feb-26	11-Feb-26
CN4BRY1030	Install Drainage - Service Road #2 - Segment B - Phase 4	6	12-Feb-26	23-Feb-26
CN4BRR1030	Cut/Fill - Sta. 311+00 to 326+00 NB - Segment B - Phase 4	13	16-Feb-26	09-Mar-26
CN4BRR2040	Install Drainage - Sta. 326+00 to 345+00 NB - Segment B - Phase 4	22	17-Feb-26	25-Mar-26
CN4BRY1040	Finegrade Subgrade - Service Road #2 - Segment B - Phase 4	1	24-Feb-26	24-Feb-26
CN4BRY1050	Place Subbase - Service Road #2 - Segment B - Phase 4	2	25-Feb-26	26-Feb-26
CN4BRY1070	Finegrade Subbase - Service Road #2 - Segment B - Phase 4	1	02-Mar-26	02-Mar-26
CN4BRY1090	Place Base Asphalt - Service Road #2 - Segment B - Phase 4	1	03-Mar-26	03-Mar-26
CN4BRY1085	Construct Sidewalk - Service Road #2 - Segment B - Phase 4	5	03-Mar-26	10-Mar-26
CN4BRR5050	Finegrade Subgrade - Sta. 345+00 to 360+00 NB - Segment B - Phase 4	4	11-Mar-26	17-Mar-26
CN4BRY1110	Place Surface Asphalt - Service Road #2 - Segment B - Phase 4	1	11-Mar-26	11-Mar-26
CN4BRY1130	Place Topsoil / Grade Slopes - Service Road #2 - Segment B - Phase 4	1	11-Mar-26	11-Mar-26
CN4BRY1120	Apply Permanent Pavement Markings - Service Road #2 - Segment B - Phase 4	1	12-Mar-26	12-Mar-26
CN4BRY1140	Seed & Mulch - Service Road #2 - Segment B - Phase 4	1	12-Mar-26	12-Mar-26
CN4BRR5070	Place Subbase - Sta. 345+00 to 360+00 NB - Segment B - Phase 4	11	18-Mar-26	06-Apr-26



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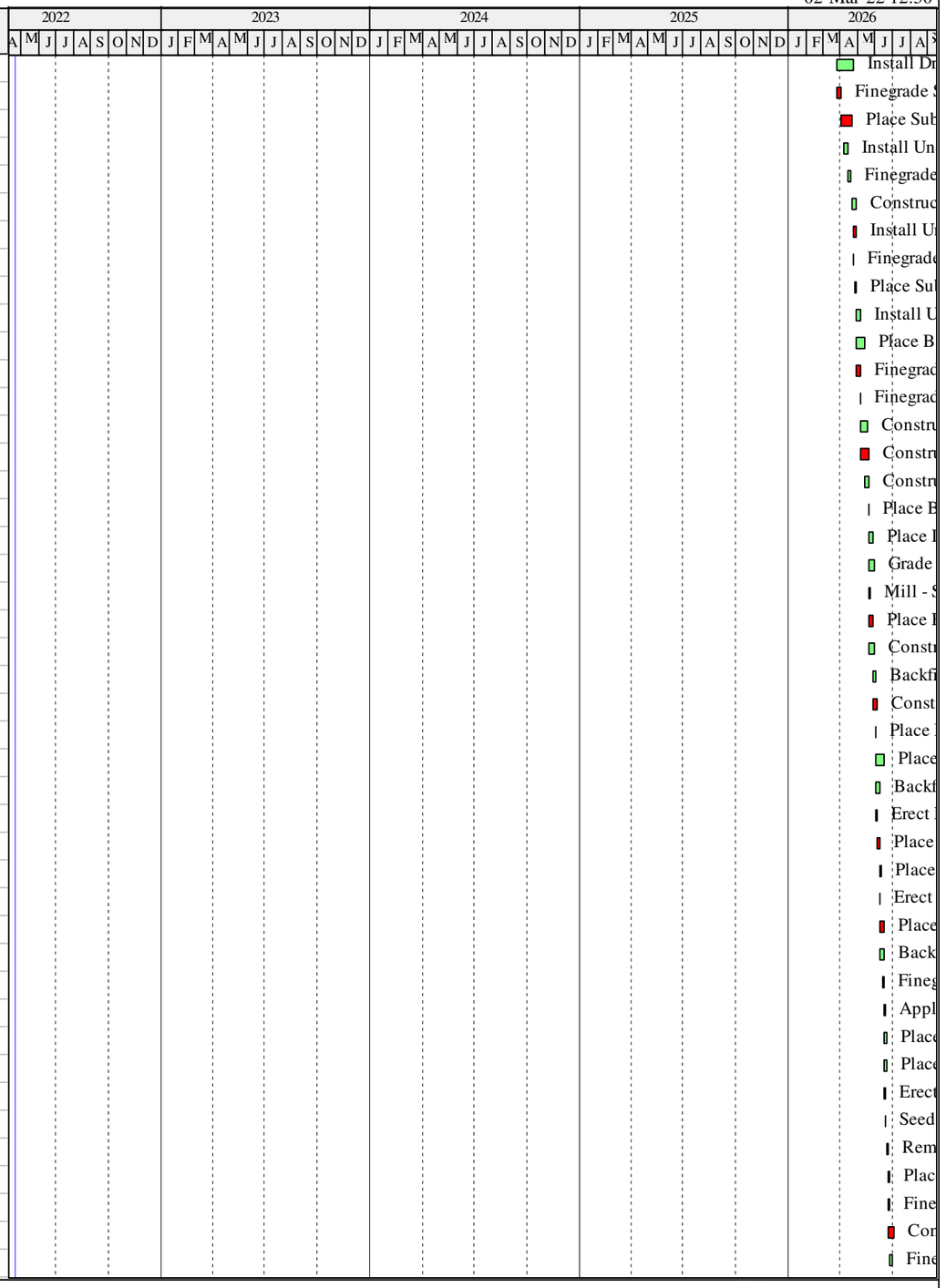
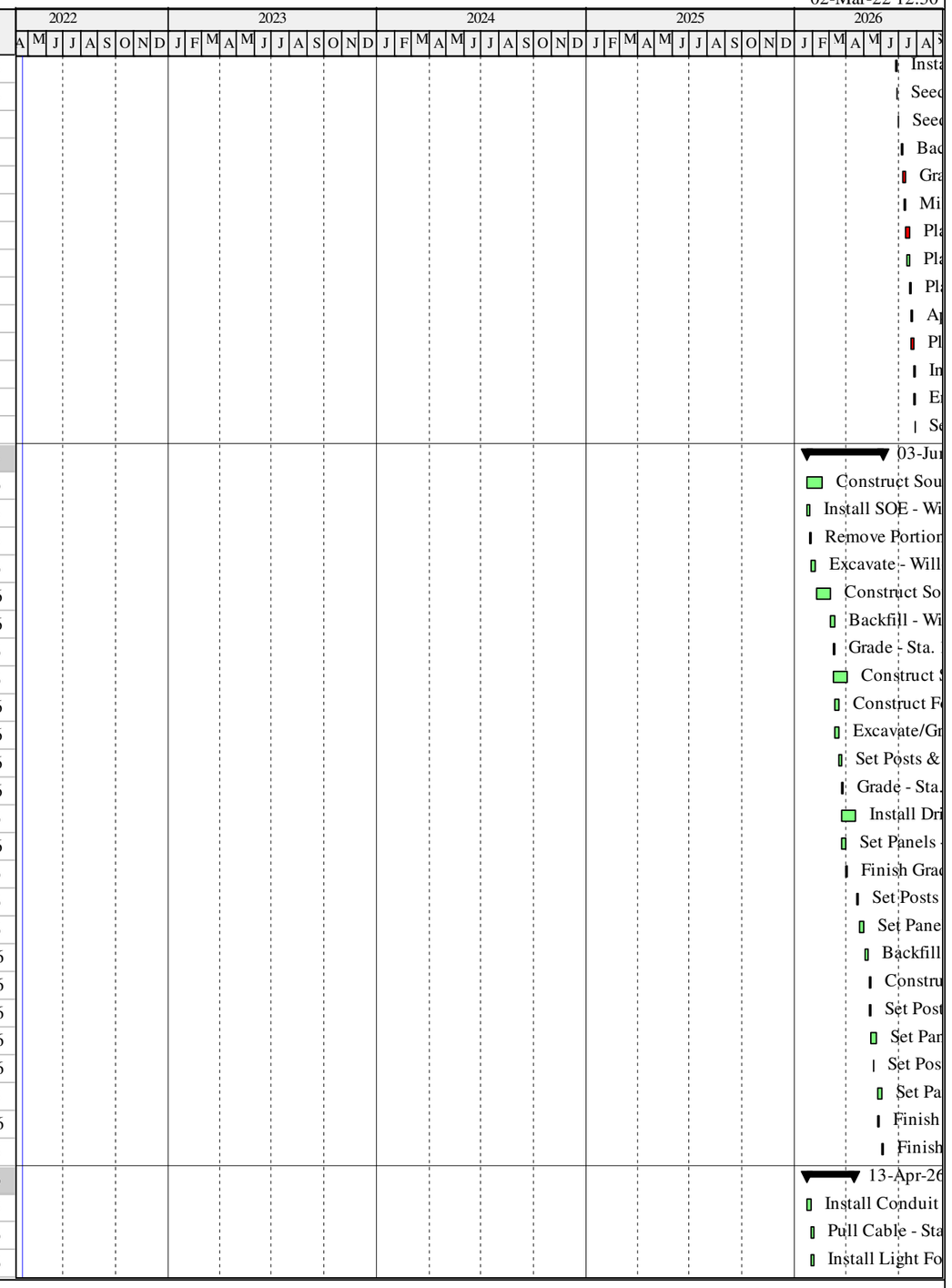
Activity ID	Activity Name	Original Duration	Start	Finish
CN4BRR1040	Install Drainage - Sta. 311+00 to 326+00 NB - Segment B - Phase 4	17	26-Mar-26	23-Apr-26
CN4BRR2050	Finegrade Subgrade - Sta. 326+00 to 345+00 NB - Segment B - Phase 4	4	26-Mar-26	01-Apr-26
CN4BRR2070	Place Subbase - Sta. 326+00 to 345+00 NB - Segment B - Phase 4	12	02-Apr-26	22-Apr-26
CN4BRR5080	Install Underdrain - Sta. 345+00 to 360+00 NB - Segment B - Phase 4	4	07-Apr-26	13-Apr-26
CN4BRR5090	Finegrade Subbase - Sta. 345+00 to 360+00 NB - Segment B - Phase 4	4	14-Apr-26	20-Apr-26
CN4BRR5100	Construct Curb/Gutter - Sta. 345+00 to 360+00 NB - Segment B - Phase 4	7	21-Apr-26	29-Apr-26
CN4BRR2080	Install Underdrain - Sta. 326+00 to 345+00 NB - Segment B - Phase 4	5	23-Apr-26	29-Apr-26
CN4BRR1050	Finegrade Subgrade - Sta. 311+00 to 326+00 NB - Segment B - Phase 4	1	24-Apr-26	24-Apr-26
CN4BRR1070	Place Subbase - Sta. 311+00 to 326+00 NB - Segment B - Phase 4	3	27-Apr-26	29-Apr-26
CN4BRR1080	Install Underdrain - Sta. 311+00 to 326+00 NB - Segment B - Phase 4	3	30-Apr-26	05-May-26
CN4BRR5120	Place Base Asphalt - Sta. 345+00 to 360+00 NB - Segment B - Phase 4	8	30-Apr-26	12-May-26
CN4BRR2090	Finegrade Subbase - Sta. 326+00 to 345+00 NB - Segment B - Phase 4	4	30-Apr-26	06-May-26
CN4BRR1090	Finegrade Subbase - Sta. 311+00 to 326+00 NB - Segment B - Phase 4	1	06-May-26	06-May-26
CN4BRR1100	Construct Curb/Gutter - Sta. 311+00 to 326+00 NB - Segment B - Phase 4	8	07-May-26	19-May-26
CN4BRR2100	Construct Curb/Gutter - Sta. 326+00 to 345+00 NB - Segment B - Phase 4	9	07-May-26	20-May-26
CN4BRR5110	Construct Sidewalk - Sta. 345+00 to 360+00 NB - Segment B - Phase 4	5	13-May-26	20-May-26
CN4BRR1120	Place Base Asphalt - Sta. 311+00 to 326+00 NB - Segment B - Phase 4	2	20-May-26	21-May-26
CN4BRR5130	Place Intermediate Asphalt - Sta. 345+00 to 360+00 NB - Segment B - Phase 4	4	21-May-26	27-May-26
CN4BRS1000	Grade - SUP - Sta. 311+00 to 360+00 NB - Segment B - Phase 4	6	21-May-26	29-May-26
CN4BRR9000	Mill - Segment B NB - Phase 4	2	21-May-26	22-May-26
CN4BRR2120	Place Base Asphalt - Sta. 326+00 to 345+00 NB - Segment B - Phase 4	4	21-May-26	27-May-26
CN4BRR1110	Construct Sidewalk - Sta. 311+00 to 326+00 NB - Segment B - Phase 4	5	22-May-26	29-May-26
CN4BRR5140	Backfill Curb - Sta. 345+00 to 360+00 NB - Segment B - Phase 4	3	28-May-26	01-Jun-26
CN4BRR2110	Construct Sidewalk - Sta. 326+00 to 345+00 NB - Segment B - Phase 4	5	28-May-26	03-Jun-26
CN4BRR1130	Place Intermediate Asphalt - Sta. 311+00 to 326+00 NB - Segment B - Phase 4	1	01-Jun-26	01-Jun-26
CN4BRS1010	Place / Finegrade Subbase - SUP - Sta. 311+00 to 360+00 NB - Segment B - Phase 4	11	01-Jun-26	16-Jun-26
CN4BRR1140	Backfill Curb - Sta. 311+00 to 326+00 NB - Segment B - Phase 4	5	02-Jun-26	09-Jun-26
CN4BRR5170	Erect Permanent Signs - Sta. 345+00 to 360+00 NB - Segment B - Phase 4	2	02-Jun-26	03-Jun-26
CN4BRR2130	Place Intermediate Asphalt - Sta. 326+00 to 345+00 NB - Segment B - Phase 4	3	04-Jun-26	09-Jun-26
CN4BRR1160	Place Topsoil / Grade Slopes - Sta. 311+00 to 326+00 NB - Segment B - Phase 4	3	10-Jun-26	12-Jun-26
CN4BRR1170	Erect Permanent Signs - Sta. 311+00 to 326+00 NB - Segment B - Phase 4	1	10-Jun-26	10-Jun-26
CN4BRR9010	Place Surface Asphalt - Segment B NB - Phase 4	4	10-Jun-26	15-Jun-26
CN4BRR2140	Backfill Curb - Sta. 326+00 to 345+00 NB - Segment B - Phase 4	5	10-Jun-26	16-Jun-26
CN4BRR1180	Finegrade Swales - Sta. 311+00 to 326+00 NB - Segment B - Phase 4	3	15-Jun-26	17-Jun-26
CN4BRR9020	Apply Permanent Pavement Markings - Segment B NB - Phase 4	3	16-Jun-26	18-Jun-26
CN4BRS1020	Place Surface Asphalt - SUP - Sta. 311+00 to 360+00 NB - Segment B - Phase 4	3	17-Jun-26	22-Jun-26
CN4BRR2160	Place Topsoil / Grade Slopes - Sta. 326+00 to 345+00 NB - Segment B - Phase 4	3	17-Jun-26	22-Jun-26
CN4BRR2170	Erect Permanent Signs - Sta. 326+00 to 345+00 NB - Segment B - Phase 4	2	17-Jun-26	18-Jun-26
CN4BRR1190	Seed & Mulch - Sta. 311+00 to 326+00 NB - Segment B - Phase 4	1	18-Jun-26	18-Jun-26
CN4BRR8000	Remove Temporary Pavement - Sta. 345+00 to 358+00 SB - Segment B - Phase 4	3	22-Jun-26	24-Jun-26
CN4BRR5160	Place Topsoil / Grade Slopes - Sta. 345+00 to 360+00 NB - Segment B - Phase 4	3	23-Jun-26	25-Jun-26
CN4BRR2180	Finegrade Swales - Sta. 326+00 to 345+00 NB - Segment B - Phase 4	4	23-Jun-26	26-Jun-26
CN4BRR8100	Construct Curb/Gutter - Sta. 345+00 to 358+00 SB - Segment B - Phase 4	6	25-Jun-26	02-Jul-26
CN4BRR5180	Finegrade Swales - Sta. 345+00 to 360+00 NB - Segment B - Phase 4	3	26-Jun-26	30-Jun-26



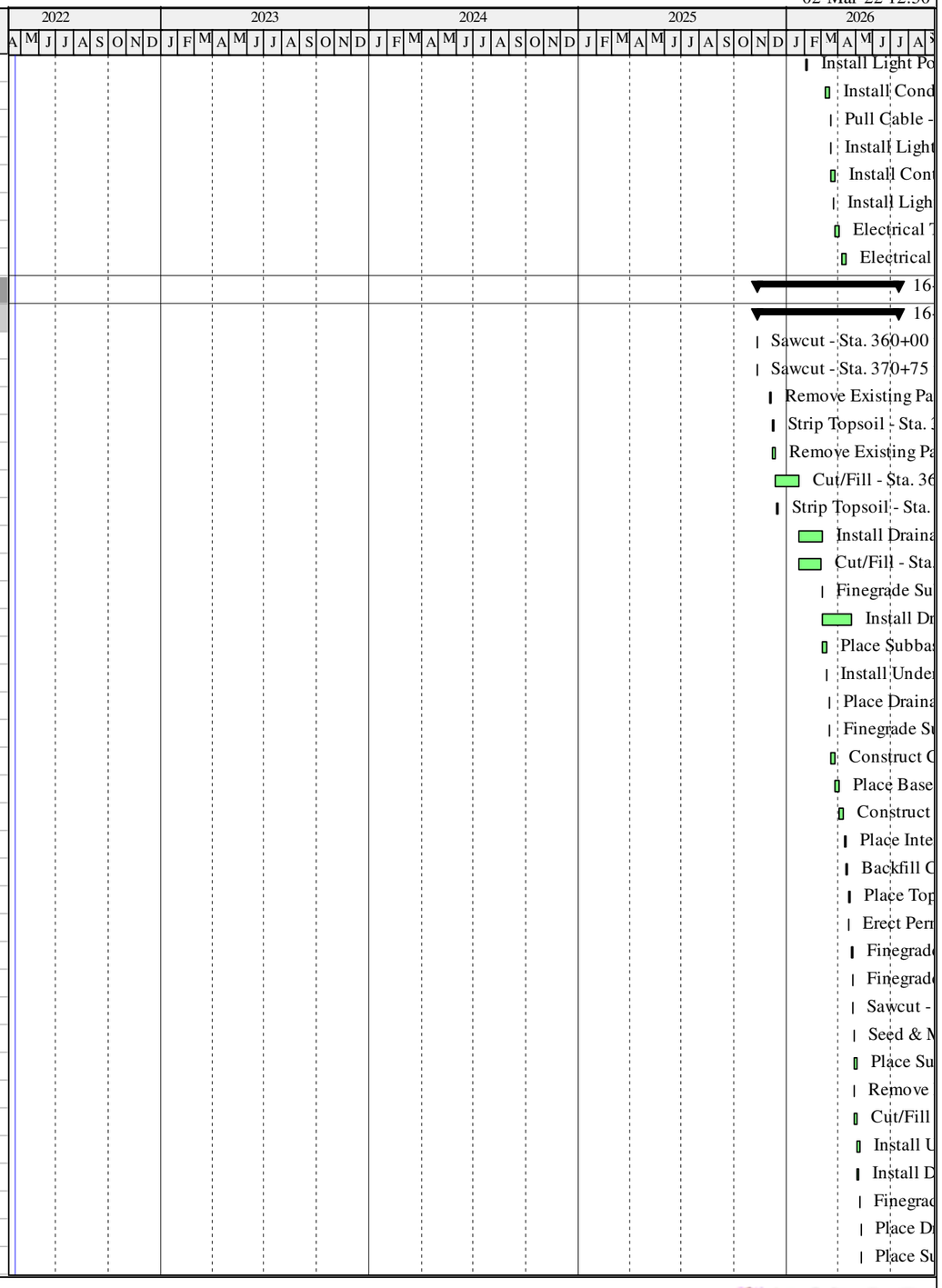
Remaining Level of Effort | Actual Work | Critical Remaining Work
Actual Level of Effort | Remaining Work | Milestone

Activity ID	Activity Name	Original Duration	Start	Finish
CN4BRR5200	Install Guardrail - Sta. 350 to 355 NB - Segment B - Phase 4	2	26-Jun-26	29-Jun-26
CN4BRR2190	Seed & Mulch - Sta. 326+00 to 345+00 NB - Segment B - Phase 4	1	29-Jun-26	29-Jun-26
CN4BRR5190	Seed & Mulch - Sta. 345+00 to 360+00 NB - Segment B - Phase 4	1	01-Jul-26	01-Jul-26
CN4BRR8140	Backfill Curb - Sta. 345+00 to 358+00 SB - Segment B - Phase 4	3	06-Jul-26	08-Jul-26
CN4BRS5000	Grade - SUP - Sta. 345+00 to 360+00 SB - Segment B - Phase 4	3	09-Jul-26	13-Jul-26
CN4BRR9100	Mill - Segment B SB - Phase 4	2	10-Jul-26	13-Jul-26
CN4BRS5010	Place / Finegrade Subbase - SUP - Sta. 345+00 to 360+00 SB - Segment B - Phase 4	4	14-Jul-26	20-Jul-26
CN4BRR9110	Place Surface Asphalt - Segment B SB - Phase 4	4	15-Jul-26	21-Jul-26
CN4BRS5020	Place Surface Asphalt - SUP - Sta. 345+00 to 360+00 SB - Segment B - Phase 4	2	21-Jul-26	22-Jul-26
CN4BRR9120	Apply Permanent Pavement Markings - Segment B SB - Phase 4	3	22-Jul-26	24-Jul-26
CN4BRR8160	Place Topsoil / Grade Slopes - Sta. 345+00 to 358+00 SB - Segment B - Phase 4	3	23-Jul-26	27-Jul-26
CN4BRR8200	Install Guardrail - Sta. 352 to 355 SB - Segment B - Phase 4	2	28-Jul-26	29-Jul-26
CN4BRR8170	Erect Permanent Signs - Sta. 345+00 to 358+00 SB - Segment B - Phase 4	2	28-Jul-26	29-Jul-26
CN4BRR8190	Seed & Mulch - Sta. 345+00 to 358+00 SB - Segment B - Phase 4	1	30-Jul-26	30-Jul-26
Structures		79	22-Jan-26	03-Jun-26
CN4BSX1000	Construct Southern Portion - Culvert @ Sta. 328 - Segment B - Phase 4	15	22-Jan-26	17-Feb-26
CN4BSW1000	Install SOE - Willow Springs Culvert - Segment B - Phase 4	2	22-Jan-26	26-Jan-26
CN4BSW1010	Remove Portion of Existing - Willow Springs Culvert - Segment B - Phase 4	2	27-Jan-26	28-Jan-26
CN4BSW1020	Excavate - Willow Springs Culvert - Segment B - Phase 4	5	29-Jan-26	05-Feb-26
CN4BSW1030	Construct Southern Portion - Willow Springs Culvert - Segment B - Phase 4	15	09-Feb-26	04-Mar-26
CN4BSW1040	Backfill - Willow Springs Culvert - Segment B - Phase 4	3	05-Mar-26	10-Mar-26
CN4BSD1000	Grade - Sta. 10+00 to 12+48 - Soundwall D - Segment B - Phase 4	2	10-Mar-26	11-Mar-26
CN4BSY1000	Construct Southern Portion - Culvert @ Sta. 341 - Segment B - Phase 4	15	10-Mar-26	02-Apr-26
CN4BSD1010	Construct Foundations - Sta. 10+00 to 12+48 - Soundwall D - Segment B - Phase 4	4	12-Mar-26	18-Mar-26
CN4BSC1000	Excavate/Grade - Combination Wall - Segment B - Phase 4	5	12-Mar-26	19-Mar-26
CN4BSD1020	Set Posts & Grout - Sta. 10+00 to 12+48 - Soundwall D - Segment B - Phase 4	2	19-Mar-26	23-Mar-26
CN4BSD5000	Grade - Sta. 18+25 to 21+22 - Soundwall D - Segment B - Phase 4	3	23-Mar-26	25-Mar-26
CN4BSC1010	Install Drilled Shafts - Combination Wall - Segment B - Phase 4	16	23-Mar-26	16-Apr-26
CN4BSD1030	Set Panels - Sta. 10+00 to 12+48 - Soundwall D - Segment B - Phase 4	4	24-Mar-26	30-Mar-26
CN4BSD1050	Finish Grade & Stabilize - Sta. 10+00 to 12+48 - Soundwall D - Segment B - Phase 4	2	31-Mar-26	01-Apr-26
CN4BSC1020	Set Posts - Combination Wall - Segment B - Phase 4	3	20-Apr-26	22-Apr-26
CN4BSC1030	Set Panels - Combination Wall - Segment B - Phase 4	6	23-Apr-26	30-Apr-26
CN4BSC1040	Backfill / Drainage - Combination Wall - Segment B - Phase 4	5	04-May-26	08-May-26
CN4BSD5010	Construct Foundations - Sta. 18+25 to 21+22 - Soundwall D - Segment B - Phase 4	4	11-May-26	14-May-26
CN4BSC2020	Set Posts - Sta. 12+48 to 18+25 - Soundwall D - Segment B - Phase 4	3	11-May-26	13-May-26
CN4BSC2030	Set Panels - Sta. 12+48 to 18+25 - Soundwall D - Segment B - Phase 4	6	14-May-26	22-May-26
CN4BSD5020	Set Posts & Grout - Sta. 18+25 to 21+22 - Soundwall D - Segment B - Phase 4	2	18-May-26	19-May-26
CN4BSD5030	Set Panels - Sta. 18+25 to 21+22 - Soundwall D - Segment B - Phase 4	5	26-May-26	01-Jun-26
CN4BSC2050	Finish Grade & Stabilize - Combination Wall - Segment B - Phase 4	3	26-May-26	28-May-26
CN4BSD5050	Finish Grade & Stabilize - Sta. 18+25 to 21+22 - Soundwall D - Segment B - Phase 4	2	02-Jun-26	03-Jun-26
Utilities		46	22-Jan-26	13-Apr-26
CN4BUL5000	Install Conduit - Sta. 345+00 to 360+00 NB - Segment B - Phase 4	4	22-Jan-26	28-Jan-26
CN4BUL5010	Pull Cable - Sta. 345+00 to 360+00 NB - Segment B - Phase 4	2	29-Jan-26	02-Feb-26
CN4BUL5020	Install Light Foundations - Sta. 345+00 to 360+00 NB - Segment B - Phase 4	2	29-Jan-26	02-Feb-26



Remaining Level of Effort · Actual Work · Critical Remaining Work
Actual Level of Effort · Remaining Work · Milestone

Activity ID	Activity Name	Original Duration	Start	Finish
CN4BUL5030	Install Light Poles & Lights - Sta. 345+00 to 360+00 NB - Segment B - Phase 4	2	03-Feb-26	04-Feb-26
CN4BUL1000	Install Conduit - Sta. 326+00 to 345+00 NB - Segment B - Phase 4	5	10-Mar-26	17-Mar-26
CN4BUL1010	Pull Cable - Sta. 326+00 to 345+00 NB - Segment B - Phase 4	2	18-Mar-26	19-Mar-26
CN4BUL1020	Install Light Foundations - Sta. 326+00 to 345+00 NB - Segment B - Phase 4	2	18-Mar-26	19-Mar-26
CN4BUL1060	Install Control Center - Sta. 325 NB - Segment B - Phase 4	5	18-Mar-26	25-Mar-26
CN4BUL1030	Install Light Poles & Lights - Sta. 326+00 to 345+00 NB - Segment B - Phase 4	2	23-Mar-26	24-Mar-26
CN4BUL1040	Electrical Terminations - Sta. 326+00 to 345+00 NB - Segment B - Phase 4	5	26-Mar-26	02-Apr-26
CN4BUL5040	Electrical Terminations - Sta. 345+00 to 360+00 NB - Segment B - Phase 4	5	06-Apr-26	13-Apr-26
Segment C		141	10-Nov-25	16-Jul-26
Roadway		141	10-Nov-25	16-Jul-26
CN4CRR1000	Sawcut - Sta. 360+00 to 370+75 NB - Segment C - Phase 4	1	10-Nov-25	10-Nov-25
CN4CRR5000	Sawcut - Sta. 370+75 to 386+00 NB - Segment C - Phase 4	1	10-Nov-25	10-Nov-25
CN4CRR1010	Remove Existing Pavement - Sta. 360+00 to 370+75 NB - Segment C - Phase 4	4	01-Dec-25	04-Dec-25
CN4CRR1020	Strip Topsoil - Sta. 360+00 to 370+75 NB - Segment C - Phase 4	2	08-Dec-25	09-Dec-25
CN4CRR5010	Remove Existing Pavement - Sta. 370+75 to 386+00 NB - Segment C - Phase 4	3	08-Dec-25	11-Dec-25
CN4CRR1030	Cut/Fill - Sta. 360+00 to 370+75 NB - Segment C - Phase 4	18	11-Dec-25	21-Jan-26
CN4CRR5020	Strip Topsoil - Sta. 370+75 to 386+00 NB - Segment C - Phase 4	2	15-Dec-25	16-Dec-25
CN4CRR1040	Install Drainage - Sta. 360+00 to 370+75 NB - Segment C - Phase 4	23	22-Jan-26	03-Mar-26
CN4CRR5030	Cut/Fill - Sta. 370+75 to 386+00 NB - Segment C - Phase 4	22	22-Jan-26	02-Mar-26
CN4CRR1050	Finegrade Subgrade - Sta. 360+00 to 370+75 NB - Segment C - Phase 4	1	04-Mar-26	04-Mar-26
CN4CRR5040	Install Drainage - Sta. 370+75 to 386+00 NB - Segment C - Phase 4	31	04-Mar-26	24-Apr-26
CN4CRR1065	Place Subbase - Sta. 360+00 to 370+75 NB - Segment C - Phase 4	3	05-Mar-26	10-Mar-26
CN4CRR1070	Install Underdrain - Sta. 360+00 to 370+75 NB - Segment C - Phase 4	2	11-Mar-26	12-Mar-26
CN4CRR1080	Place Drainage Material (OGDL) - Sta. 360+00 to 370+75 NB - Segment C - Phase 4	1	16-Mar-26	16-Mar-26
CN4CRR1090	Finegrade Subbase - Sta. 360+00 to 370+75 NB - Segment C - Phase 4	1	17-Mar-26	17-Mar-26
CN4CRR1100	Construct Curb/Gutter - Sta. 360+00 to 370+75 NB - Segment C - Phase 4	5	18-Mar-26	25-Mar-26
CN4CRR1120	Place Base Asphalt - Sta. 360+00 to 370+75 NB - Segment C - Phase 4	4	26-Mar-26	01-Apr-26
CN4CRR1110	Construct Sidewalk - Sta. 360+00 to 370+75 NB - Segment C - Phase 4	5	02-Apr-26	09-Apr-26
CN4CRR1130	Place Intermediate Asphalt - Sta. 360+00 to 370+75 NB - Segment C - Phase 4	1	13-Apr-26	13-Apr-26
CN4CRR1140	Backfill Curb - Sta. 360+00 to 370+75 NB - Segment C - Phase 4	3	14-Apr-26	16-Apr-26
CN4CRR1160	Place Topsoil / Grade Slopes - Sta. 360+00 to 370+75 NB - Segment C - Phase 4	3	20-Apr-26	22-Apr-26
CN4CRR1170	Erect Permanent Signs - Sta. 360+00 to 370+75 NB - Segment C - Phase 4	1	20-Apr-26	20-Apr-26
CN4CRR1180	Finegrade Swales - Sta. 360+00 to 370+75 NB - Segment C - Phase 4	3	23-Apr-26	27-Apr-26
CN4CRR5050	Finegrade Subgrade - Sta. 370+75 to 386+00 NB - Segment C - Phase 4	1	27-Apr-26	27-Apr-26
CN4CRZ1000	Sawcut - Service Road #3 - Segment C - Phase 4	1	27-Apr-26	27-Apr-26
CN4CRR1190	Seed & Mulch - Sta. 360+00 to 370+75 NB - Segment C - Phase 4	1	28-Apr-26	28-Apr-26
CN4CRR5060	Place Subbase - Sta. 370+75 to 386+00 NB - Segment C - Phase 4	4	28-Apr-26	04-May-26
CN4CRZ1010	Remove Existing Pavement - Service Road #3 - Segment C - Phase 4	2	28-Apr-26	29-Apr-26
CN4CRZ1020	Cut/Fill - Service Road #3 - Segment C - Phase 4	2	30-Apr-26	04-May-26
CN4CRR5070	Install Underdrain - Sta. 370+75 to 386+00 NB - Segment C - Phase 4	4	05-May-26	08-May-26
CN4CRZ1030	Install Drainage - Service Road #3 - Segment C - Phase 4	3	05-May-26	07-May-26
CN4CRZ1040	Finegrade Subgrade - Service Road #3 - Segment C - Phase 4	1	08-May-26	08-May-26
CN4CRR5080	Place Drainage Material (OGDL) - Sta. 370+75 to 386+00 NB - Segment C - Phase 4	1	11-May-26	11-May-26
CN4CRZ1050	Place Subbase - Service Road #3 - Segment C - Phase 4	1	11-May-26	11-May-26



Remaining Level of Effort | Actual Work | Critical Remaining Work
Actual Level of Effort | Remaining Work | Milestone

Activity ID	Activity Name	Original Duration	Start	Finish
CN4CRR5090	Finegrade Subbase - Sta. 370+75 to 386+00 NB - Segment C - Phase 4	1	12-May-26	12-May-26
CN4CRZ1070	Finegrade Subbase - Service Road #3 - Segment C - Phase 4	1	12-May-26	12-May-26
CN4CRR5100	Construct Curb/Gutter - Sta. 370+75 to 386+00 NB - Segment C - Phase 4	7	13-May-26	22-May-26
CN4CRZ1080	Construct Curb/Gutter - Service Road #3 - Segment C - Phase 4	3	13-May-26	18-May-26
CN4CRZ1090	Place Base Asphalt - Service Road #3 - Segment C - Phase 4	1	19-May-26	19-May-26
CN4CRZ1100	Backfill Curb - Service Road #3 - Segment C - Phase 4	1	20-May-26	20-May-26
CN4CRZ1110	Place Surface Asphalt - Service Road #3 - Segment C - Phase 4	1	21-May-26	21-May-26
CN4CRZ1130	Place Topsoil / Grade Slopes - Service Road #3 - Segment C - Phase 4	1	21-May-26	21-May-26
CN4CRZ1120	Apply Permanent Pavement Markings - Service Road #3 - Segment C - Phase 4	1	22-May-26	22-May-26
CN4CRZ1140	Seed & Mulch - Service Road #3 - Segment C - Phase 4	1	22-May-26	22-May-26
CN4CRR5120	Place Base Asphalt - Sta. 370+75 to 386+00 NB - Segment C - Phase 4	2	26-May-26	27-May-26
CN4CRS1000	Grade - SUP - Sta. 360+00 to 386+00 NB - Segment C - Phase 4	5	26-May-26	01-Jun-26
CN4CRR9000	Mill - Segment C NB - Phase 4	3	26-May-26	28-May-26
CN4CRR5110	Construct Sidewalk - Sta. 370+75 to 386+00 NB - Segment C - Phase 4	5	28-May-26	03-Jun-26
CN4CRS1010	Place / Finegrade Subbase - SUP - Sta. 360+00 to 386+00 NB - Segment C - Phase 4	5	02-Jun-26	09-Jun-26
CN4CRR5130	Place Intermediate Asphalt - Sta. 370+75 to 386+00 NB - Segment C - Phase 4	1	04-Jun-26	04-Jun-26
CN4CRR5140	Backfill Curb - Sta. 370+75 to 386+00 NB - Segment C - Phase 4	4	08-Jun-26	11-Jun-26
CN4CRS1020	Place Surface Asphalt - SUP - Sta. 360+00 to 386+00 NB - Segment C - Phase 4	2	10-Jun-26	11-Jun-26
CN4CRR5160	Place Topsoil / Grade Slopes - Sta. 370+75 to 386+00 NB - Segment C - Phase 4	3	12-Jun-26	16-Jun-26
CN4CRR5170	Erect Permanent Signs - Sta. 370+75 to 386+00 NB - Segment C - Phase 4	2	12-Jun-26	15-Jun-26
CN4CRR9010	Place Surface Asphalt - Segment C NB - Phase 4	3	16-Jun-26	18-Jun-26
CN4CRR5180	Finegrade Swales - Sta. 370+75 to 386+00 NB - Segment C - Phase 4	3	17-Jun-26	22-Jun-26
CN4CRR9020	Apply Permanent Pavement Markings - Segment C NB - Phase 4	2	22-Jun-26	23-Jun-26
CN4CRR5190	Seed & Mulch - Sta. 370+75 to 386+00 NB - Segment C - Phase 4	1	23-Jun-26	23-Jun-26
CN4CRR9100	Mill - Segment C SB - Phase 4	3	07-Jul-26	09-Jul-26
CN4CRR9110	Place Surface Asphalt - Segment C SB - Phase 4	3	10-Jul-26	14-Jul-26
CN4CRR9120	Apply Permanent Pavement Markings - Segment C SB - Phase 4	2	15-Jul-26	16-Jul-26
Segment D		136	10-Nov-25	09-Jul-26
Roadway		136	10-Nov-25	09-Jul-26
CN4DRR1000	Remove Existing Guardrail - Sta. 386+00 to 395+00 NB - Segment D - Phase 4	1	10-Nov-25	10-Nov-25
CN4DRA1000	Remove Existing Guardrail - Ramp A - Segment D - Phase 4	1	11-Nov-25	11-Nov-25
CN4DRR1010	Sawcut - Sta. 386+00 to 395+00 NB - Segment D - Phase 4	1	11-Nov-25	11-Nov-25
CN4DRA1010	Sawcut - Ramp A - Segment D - Phase 4	1	12-Nov-25	12-Nov-25
CN4DRA1020	Demo Miscellaneous Items - Ramp A - Segment D - Phase 4	4	13-Nov-25	20-Nov-25
CN4DRA1030	Cut/Fill - Ramp A - Segment D - Phase 4	2	13-Nov-25	17-Nov-25
CN4DRS0000	Remove Existing Pavement - SUP - Segment D - Phase 4	7	24-Nov-25	04-Dec-25
CN4DRR1030	Cut/Fill - Sta. 386+00 to 395+00 NB - Segment D - Phase 4	7	03-Mar-26	12-Mar-26
CN4DRR1040	Install Drainage - Sta. 386+00 to 395+00 NB - Segment D - Phase 4	11	16-Mar-26	01-Apr-26
CN4DRA1040	Install Drainage - Ramp A - Segment D - Phase 4	14	02-Apr-26	24-Apr-26
CN4DRR1050	Place Subbase - Sta. 386+00 to 395+00 NB - Segment D - Phase 4	2	02-Apr-26	06-Apr-26
CN4DRR1060	Install Underdrain - Sta. 386+00 to 395+00 NB - Segment D - Phase 4	3	07-Apr-26	09-Apr-26
CN4DRR1070	Place Drainage Material (OGDL) - Sta. 386+00 to 395+00 NB - Segment D - Phase 4	1	13-Apr-26	13-Apr-26
CN4DRR1080	Finegrade Subbase - Sta. 386+00 to 395+00 NB - Segment D - Phase 4	1	14-Apr-26	14-Apr-26
CN4DRR1090	Construct Curb/Gutter - Sta. 386+00 to 395+00 NB - Segment D - Phase 4	1	15-Apr-26	15-Apr-26

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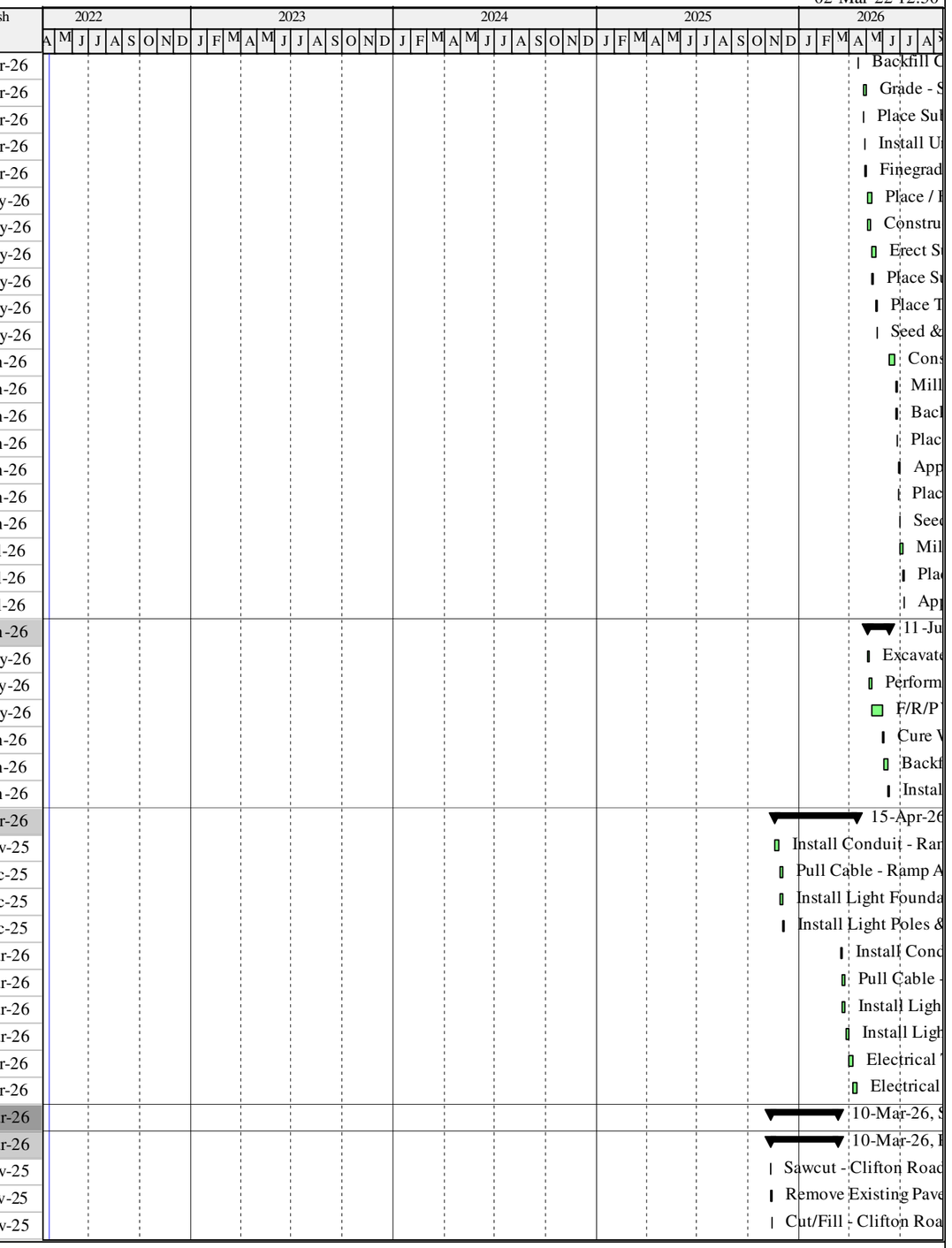
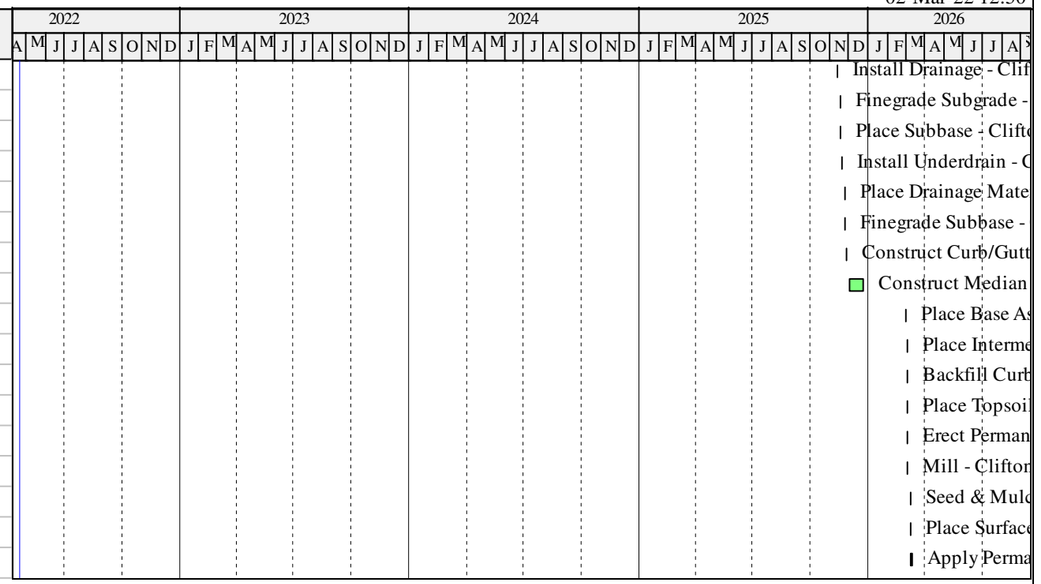
Activity ID	Activity Name	Original Duration	Start	Finish
CN4DRR1100	Backfill Curb - Sta. 386+00 to 395+00 NB - Segment D - Phase 4	1	16-Apr-26	16-Apr-26
CN4DRS1000	Grade - SUP - Segment D - Phase 4	4	27-Apr-26	30-Apr-26
CN4DRA1050	Place Subbase - Ramp A - Segment D - Phase 4	1	27-Apr-26	27-Apr-26
CN4DRA1060	Install Underdrain - Ramp A - Segment D - Phase 4	2	28-Apr-26	29-Apr-26
CN4DRA1080	Finegrade Subbase - Ramp A - Segment D - Phase 4	1	30-Apr-26	30-Apr-26
CN4DRS1010	Place / Finegrade Subbase - SUP - Segment D - Phase 4	6	04-May-26	11-May-26
CN4DRA1500	Construct Foundation - Overhead Sign #2 - Sta. 102+25 RT - Segment D - Phase 4	5	04-May-26	08-May-26
CN4DRA1510	Erect Supports / Sign - Overhead Sign #2 - Sta. 102+25 RT - Segment D - Phase 4	5	11-May-26	18-May-26
CN4DRS1020	Place Surface Asphalt - SUP - Segment D - Phase 4	3	12-May-26	14-May-26
CN4DRR1110	Place Topsoil - Sta. 386+00 to 395+00 NB - Segment D - Phase 4	3	18-May-26	20-May-26
CN4DRR1120	Seed & Mulch - Sta. 386+00 to 395+00 NB - Segment D - Phase 4	1	21-May-26	21-May-26
CN4DRA1090	Construct Curb/Gutter - Ramp A - Segment D - Phase 4	6	12-Jun-26	22-Jun-26
CN4DRR9000	Mill - Segment D NB - Phase 4	3	23-Jun-26	25-Jun-26
CN4DRA1100	Backfill Curb - Ramp A - Segment D - Phase 4	4	23-Jun-26	26-Jun-26
CN4DRR9010	Place Surface Asphalt - Segment D NB - Phase 4	1	26-Jun-26	26-Jun-26
CN4DRR9020	Apply Permanent Pavement Markings - Segment D NB - Phase 4	2	29-Jun-26	30-Jun-26
CN4DRA1110	Place Topsoil - Ramp A - Segment D - Phase 4	1	29-Jun-26	29-Jun-26
CN4DRA1120	Seed & Mulch - Ramp A - Segment D - Phase 4	1	30-Jun-26	30-Jun-26
CN4DRR9100	Mill - Segment D SB - Phase 4	3	01-Jul-26	06-Jul-26
CN4DRR9110	Place Surface Asphalt - Segment D SB - Phase 4	1	07-Jul-26	07-Jul-26
CN4DRR9120	Apply Permanent Pavement Markings - Segment D SB - Phase 4	2	08-Jul-26	09-Jul-26
Structures		26	04-May-26	11-Jun-26
CN4DSE1000	Excavate - Retaining Wall E - Segment D - Phase 4	3	04-May-26	06-May-26
CN4DSE1010	Perform Subgrade Improvements - Retaining Wall E - Segment D - Phase 4	3	07-May-26	11-May-26
CN4DSE1020	F/R/P Wall - Retaining Wall E - Segment D - Phase 4	12	12-May-26	29-May-26
CN4DSE1030	Cure Wall - Retaining Wall E - Segment D - Phase 4	3	30-May-26	01-Jun-26
CN4DSE1040	Backfill - Retaining Wall E - Segment D - Phase 4	5	02-Jun-26	09-Jun-26
CN4DSE1050	Install Handrail - Retaining Wall E - Segment D - Phase 4	2	10-Jun-26	11-Jun-26
Utilities		77	18-Nov-25	15-Apr-26
CN4DUL5000	Install Conduit - Ramp A - Segment D - Phase 4	4	18-Nov-25	25-Nov-25
CN4DUL5010	Pull Cable - Ramp A - Segment D - Phase 4	3	26-Nov-25	02-Dec-25
CN4DUL5020	Install Light Foundations - Ramp A - Segment D - Phase 4	2	26-Nov-25	01-Dec-25
CN4DUL5030	Install Light Poles & Lights - Ramp A - Segment D - Phase 4	2	02-Dec-25	03-Dec-25
CN4DUL1000	Install Conduit - Sta. 386+00 to 395+00 NB - Segment D - Phase 4	3	16-Mar-26	18-Mar-26
CN4DUL1010	Pull Cable - Sta. 386+00 to 395+00 NB - Segment D - Phase 4	2	19-Mar-26	23-Mar-26
CN4DUL1020	Install Light Foundations - Sta. 386+00 to 395+00 NB - Segment D - Phase 4	3	19-Mar-26	24-Mar-26
CN4DUL1030	Install Light Poles & Lights - Sta. 386+00 to 395+00 NB - Segment D - Phase 4	3	25-Mar-26	30-Mar-26
CN4DUL1040	Electrical Terminations - Sta. 386+00 to 395+00 NB - Segment D - Phase 4	5	31-Mar-26	07-Apr-26
CN4DUL5040	Electrical Terminations - Ramp A - Segment D - Phase 4	5	08-Apr-26	15-Apr-26
Segment F		61	10-Nov-25	10-Mar-26
Roadway		61	10-Nov-25	10-Mar-26
CN4FRC1000	Sawcut - Clifton Road - Segment F - Phase 4	1	10-Nov-25	10-Nov-25
CN4FRC1010	Remove Existing Pavement - Clifton Road - Segment F - Phase 4	1	11-Nov-25	11-Nov-25
CN4FRC1020	Cut/Fill - Clifton Road - Segment F - Phase 4	1	12-Nov-25	12-Nov-25



Remaining Level of Effort
Actual Level of Effort
Actual Work
Remaining Work
Critical Remaining Work
Milestone

Activity ID	Activity Name	Original Duration	Start	Finish
CN4FRC1030	Install Drainage - Clifton Road - Segment F - Phase 4	1	13-Nov-25	13-Nov-25
CN4FRC1040	Finegrade Subgrade - Clifton Road - Segment F - Phase 4	1	17-Nov-25	17-Nov-25
CN4FRC1050	Place Subbase - Clifton Road - Segment F - Phase 4	1	18-Nov-25	18-Nov-25
CN4FRC1060	Install Underdrain - Clifton Road - Segment F - Phase 4	1	20-Nov-25	20-Nov-25
CN4FRC1070	Place Drainage Material (OGDL) - Clifton Road - Segment F - Phase 4	1	24-Nov-25	24-Nov-25
CN4FRC1080	Finegrade Subbase - Clifton Road - Segment F - Phase 4	1	25-Nov-25	25-Nov-25
CN4FRC1090	Construct Curb/Gutter - Clifton Road - Segment F - Phase 4	1	26-Nov-25	26-Nov-25
CN4FRC1200	Construct Median - Clifton Road - Segment F - Phase 4	13	01-Dec-25	23-Dec-25
CN4FRC1110	Place Base Asphalt - Clifton Road - Segment F - Phase 4	1	02-Mar-26	02-Mar-26
CN4FRC1120	Place Intermediate Asphalt - Clifton Road - Segment F - Phase 4	1	03-Mar-26	03-Mar-26
CN4FRC1130	Backfill Curb - Clifton Road - Segment F - Phase 4	1	04-Mar-26	04-Mar-26
CN4FRC1170	Place Topsoil / Grade Slopes - Clifton Road - Segment F - Phase 4	1	05-Mar-26	05-Mar-26
CN4FRC1180	Erect Permanent Signs - Clifton Road - Segment F - Phase 4	1	05-Mar-26	05-Mar-26
CN4FRC1140	Mill - Clifton Road - Segment F - Phase 4	1	05-Mar-26	05-Mar-26
CN4FRC1190	Seed & Mulch - Clifton Road - Segment F - Phase 4	1	09-Mar-26	09-Mar-26
CN4FRC1150	Place Surface Asphalt - Clifton Road - Segment F - Phase 4	1	09-Mar-26	09-Mar-26
CN4FRC1160	Apply Permanent Pavement Markings - Clifton Road - Segment F - Phase 4	1	10-Mar-26	10-Mar-26



Remaining Level of Effort
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Activity ID	Activity Name	Original Duration	Start	Finish
Route 29 Widening Phase II		883	17-Jun-22	31-Aug-26
MS00001030	Notice to Proceed (17-June-2022)	0	17-Jun-22*	
DSAE001000	Advance RFP Plans to FI/RW Plans	50	17-Jun-22	26-Aug-22
DSAE001010	Advance SWM Concepts / Grading / Report	20	29-Aug-22	26-Sep-22
DSAE001015	Compile FI/RW Plans / SWM Report	5	27-Sep-22	03-Oct-22
DSAE001020	SFC FI/RW Plans / SWM Report (Internal Myers Review)	1	04-Oct-22	04-Oct-22
DSAE001030	R/C FI/RW Plans / SWM Report (Internal Myers Review)	5	05-Oct-22	11-Oct-22
DSAE001040	Prepare FI/RW Plans / SWM Report	10	12-Oct-22	25-Oct-22
DSAE001050	SFC FI/RW Plans / SWM Report (VDOT Review)	1	26-Oct-22	26-Oct-22
DSAE001060	VDOT R/C FI/RW Plans / SWM Report	21	27-Oct-22	16-Nov-22
UTC0001070	Prepare / Distribute UFI Plans / Cross Sections / Master Agreements - No Conflict Letter	10	17-Nov-22	02-Dec-22
UTC0001080	Conduct / Document UFI Meeting / Discuss Potential Utility Conflicts	10	05-Dec-22	16-Dec-22
UTFV001000	Prepare Utility Relocation Concept Plan - Verizon	75	17-Dec-22	01-Mar-23
UTFV001010	SFC Utility Relocation Concept Plan - Verizon	3	02-Mar-23	04-Mar-23
UTFV001020	R/C Utility Relocation Concept Plan (Myers and VDOT) - Verizon	21	05-Mar-23	25-Mar-23
UTFV001030	Update VDOT R UMS with Utility Status Report Data - Verizon	3	26-Mar-23	28-Mar-23
UTPV001000	Advance to Final Relocation Plan / Complete UT-9's - Verizon	30	29-Mar-23	27-Apr-23
UTPV001010	SFA Final Utility Relocation Plan / UT-9's - Verizon	3	28-Apr-23	30-Apr-23
UTPV001020	VDOT R/A Final Utility Relocation Plan - Verizon	21	01-May-23	21-May-23
UTPV001030	VDOT Approves Final Utility Relocation Plan / Myers Issues NTP to - Verizon	5	22-May-23	26-May-23
UTPV001040	Update VDOT R UMS with Utility Status Report Data - Verizon	3	27-May-23	29-May-23
UTFM001000	Prepare Utility Relocation Concept Plan - MCI/Verizon	30	30-May-23	28-Jun-23
UTFM001010	SFC Utility Relocation Concept Plan - MCI/Verizon	3	29-Jun-23	01-Jul-23
UTFM001020	R/C Utility Relocation Concept Plan (Myers and VDOT) - MCI/Verizon	21	02-Jul-23	22-Jul-23
UTFM001030	Update VDOT R UMS with Utility Status Report Data - MCI/Verizon	3	23-Jul-23	25-Jul-23
UTPM001000	Advance to Final Relocation Plan / Complete UT-9's - MCI/Verizon	30	26-Jul-23	24-Aug-23
UTPM001010	SFA Final Utility Relocation Plan / UT-9's - MCI/Verizon	3	25-Aug-23	27-Aug-23
UTPM001020	VDOT R/A Final Utility Relocation Plan - MCI/Verizon	21	28-Aug-23	17-Sep-23
UTPM001030	VDOT Approves Final Utility Relocation Plan / Myers Issues NTP to - MCI/Verizon	5	18-Sep-23	22-Sep-23
UTPM001040	Update VDOT R UMS with Utility Status Report Data - MCI/Verizon	3	23-Sep-23	25-Sep-23
CN1BUM1000	Perform MCI/Verizon OH Fiber Optic Relocation - Sta. 314+75 to 360+00 SB - Segment	110	26-Sep-23	13-Jan-24
CN1CUM1000	Perform MCI/Verizon OH Fiber Optic Relocation - Sta. 360+00 to 368+50 SB - Segment	80	14-Jan-24	02-Apr-24
MS00005010	Phase 1 Completion	0		02-Apr-24
CN2T001000	Install Traffic Control Measures - Phase 2	10	03-Apr-24	18-Apr-24
CN2M001000	Install Erosion Control Measures - Phase 2	10	03-Apr-24	18-Apr-24
CN2TB00000	Install Temporary Signal - Rte 29/Stringfellow/Clifton - Segment B - Phase 2	10	03-Apr-24	18-Apr-24
CN2BRR1000	Sawcut - Sta. 313+50 to 326+00 SB - Segment B - Phase 2	1	22-Apr-24	22-Apr-24
CN2BRR1010	Remove Existing Pavement - Sta. 313+50 to 326+00 SB - Segment B - Phase 2	3	23-Apr-24	25-Apr-24
CN2BRR1020	Strip Topsoil - Sta. 313+50 to 326+00 SB - Segment B - Phase 2	5	26-Apr-24	02-May-24
CN2BSA1010	Perform Subgrade Improvements - Retaining Wall A - Segment B - Phase 2	30	06-May-24	19-Jun-24
CN2BRR1030	Cut/Fill - Sta. 313+50 to 326+00 SB - Segment B - Phase 2	25	20-Jun-24	30-Jul-24
CN1BUX1000	Install 24" Water Line Complete - Sta. 318+50 to 329+25 - Segment B - Phase 2	20	31-Jul-24	28-Aug-24
CN1CUX1000	Install 24" Water Line Complete - Sta. 363+50 to 376+50 - Segment C - Phase 2	35	29-Aug-24	29-Oct-24
CN2CRR5040	Install Drainage - Sta. 370+75 to 386+00 SB - Segment C - Phase 2	35	30-Oct-24	13-Jan-25

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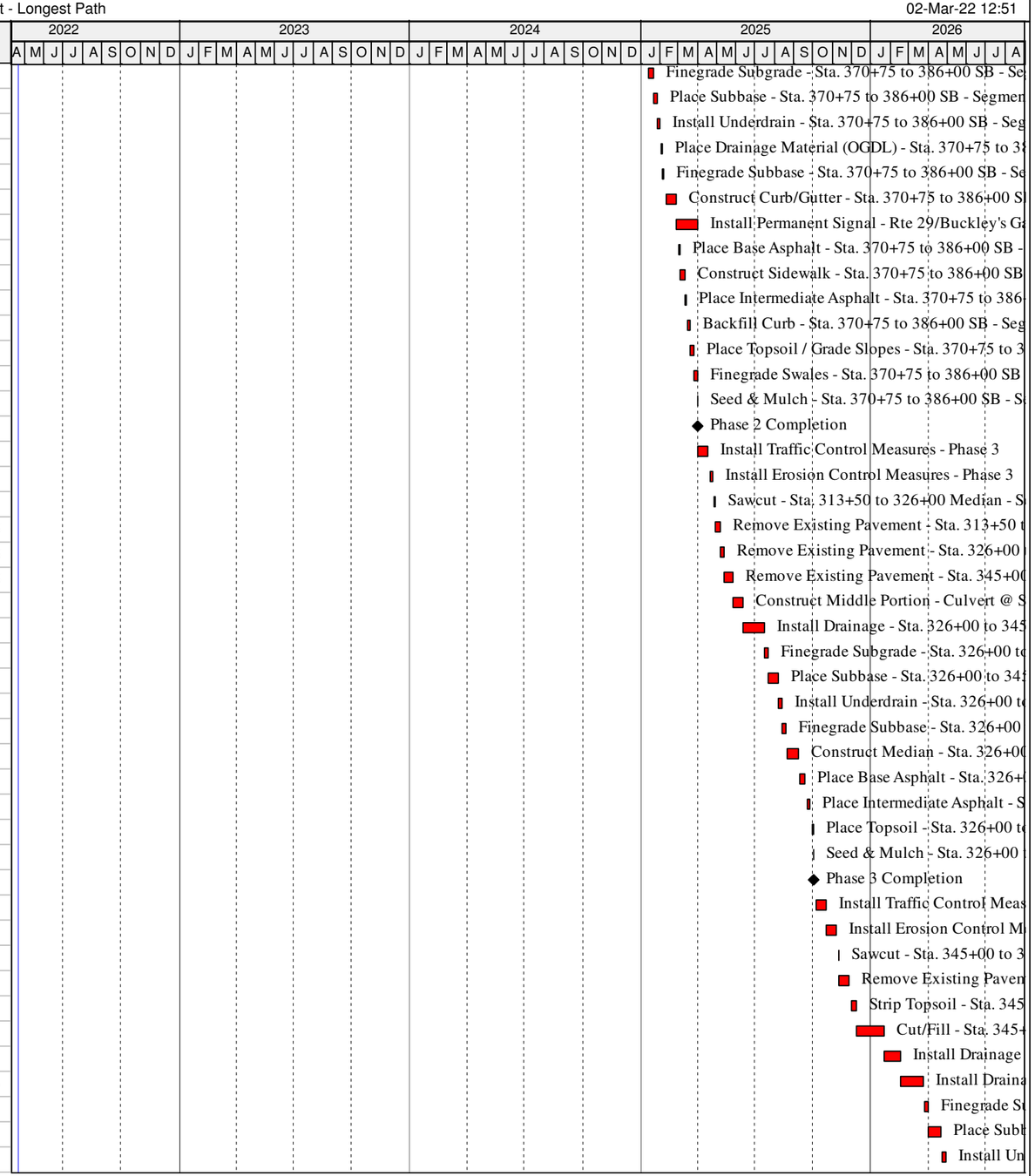
Activity ID	Activity Name	Original Duration	Start	Finish
CN2CRR5050	Finegrade Subgrade - Sta. 370+75 to 386+00 SB - Segment C - Phase 2	3	14-Jan-25	20-Jan-25
CN2CRR5060	Place Subbase - Sta. 370+75 to 386+00 SB - Segment C - Phase 2	4	21-Jan-25	27-Jan-25
CN2CRR5070	Install Underdrain - Sta. 370+75 to 386+00 SB - Segment C - Phase 2	3	28-Jan-25	30-Jan-25
CN2CRR5080	Place Drainage Material (OGDL) - Sta. 370+75 to 386+00 SB - Segment C - Phase 2	1	03-Feb-25	03-Feb-25
CN2CRR5090	Finegrade Subbase - Sta. 370+75 to 386+00 SB - Segment C - Phase 2	3	04-Feb-25	06-Feb-25
CN2CRR5100	Construct Curb/Gutter - Sta. 370+75 to 386+00 SB - Segment C - Phase 2	10	10-Feb-25	25-Feb-25
CN2TC01000	Install Permanent Signal - Rte 29/Buckley's Gate/Summit - Segment C - Phase 2	20	26-Feb-25	01-Apr-25
CN2CRR5120	Place Base Asphalt - Sta. 370+75 to 386+00 SB - Segment C - Phase 2	2	03-Mar-25	04-Mar-25
CN2CRR5110	Construct Sidewalk - Sta. 370+75 to 386+00 SB - Segment C - Phase 2	5	05-Mar-25	12-Mar-25
CN2CRR5130	Place Intermediate Asphalt - Sta. 370+75 to 386+00 SB - Segment C - Phase 2	1	13-Mar-25	13-Mar-25
CN2CRR5140	Backfill Curb - Sta. 370+75 to 386+00 SB - Segment C - Phase 2	3	17-Mar-25	19-Mar-25
CN2CRR5160	Place Topsoil / Grade Slopes - Sta. 370+75 to 386+00 SB - Segment C - Phase 2	3	20-Mar-25	25-Mar-25
CN2CRR5180	Finegrade Swales - Sta. 370+75 to 386+00 SB - Segment C - Phase 2	3	26-Mar-25	31-Mar-25
CN2CRR5190	Seed & Mulch - Sta. 370+75 to 386+00 SB - Segment C - Phase 2	1	01-Apr-25	01-Apr-25
MS00005020	Phase 2 Completion	0		01-Apr-25
CN3T001000	Install Traffic Control Measures - Phase 3	10	02-Apr-25	17-Apr-25
CN3M001000	Install Erosion Control Measures - Phase 3	5	21-Apr-25	25-Apr-25
CN3BRR1000	Sawcut - Sta. 313+50 to 326+00 Median - Segment B - Phase 3	1	28-Apr-25	28-Apr-25
CN3BRR1010	Remove Existing Pavement - Sta. 313+50 to 326+00 Median - Segment B - Phase 3	6	29-Apr-25	07-May-25
CN3BRR5010	Remove Existing Pavement - Sta. 326+00 to 345+00 Median - Segment B - Phase 3	4	08-May-25	13-May-25
CN3BRR7010	Remove Existing Pavement - Sta. 345+00 to 360+00 Median - Segment B - Phase 3	8	14-May-25	27-May-25
CN3BSX1000	Construct Middle Portion - Culvert @ Sta. 328 - Segment B - Phase 3	10	28-May-25	11-Jun-25
CN3BRR5040	Install Drainage - Sta. 326+00 to 345+00 Median - Segment B - Phase 3	21	12-Jun-25	15-Jul-25
CN3BRR5050	Finegrade Subgrade - Sta. 326+00 to 345+00 Median - Segment B - Phase 3	4	16-Jul-25	21-Jul-25
CN3BRR5070	Place Subbase - Sta. 326+00 to 345+00 Median - Segment B - Phase 3	11	22-Jul-25	06-Aug-25
CN3BRR5080	Install Underdrain - Sta. 326+00 to 345+00 Median - Segment B - Phase 3	4	07-Aug-25	12-Aug-25
CN3BRR5090	Finegrade Subbase - Sta. 326+00 to 345+00 Median - Segment B - Phase 3	4	13-Aug-25	19-Aug-25
CN3BRR5100	Construct Median - Sta. 326+00 to 345+00 Median - Segment B - Phase 3	12	20-Aug-25	08-Sep-25
CN3BRR5120	Place Base Asphalt - Sta. 326+00 to 345+00 Median - Segment B - Phase 3	7	09-Sep-25	18-Sep-25
CN3BRR5130	Place Intermediate Asphalt - Sta. 326+00 to 345+00 Median - Segment B - Phase 3	4	22-Sep-25	25-Sep-25
CN3BRR5160	Place Topsoil - Sta. 326+00 to 345+00 Median - Segment B - Phase 3	3	29-Sep-25	01-Oct-25
CN3BRR5190	Seed & Mulch - Sta. 326+00 to 345+00 Median - Segment B - Phase 3	1	02-Oct-25	02-Oct-25
MS00005030	Phase 3 Completion	0		02-Oct-25
CN4T001000	Install Traffic Control Measures - Phase 4	10	06-Oct-25	21-Oct-25
CN4M001000	Install Erosion Control Measures - Phase 4	10	22-Oct-25	06-Nov-25
CN4BRR5000	Sawcut - Sta. 345+00 to 360+00 NB - Segment B - Phase 4	1	10-Nov-25	10-Nov-25
CN4BRR5010	Remove Existing Pavement - Sta. 345+00 to 360+00 NB - Segment B - Phase 4	9	11-Nov-25	26-Nov-25
CN4BRR5020	Strip Topsoil - Sta. 345+00 to 360+00 NB - Segment B - Phase 4	5	01-Dec-25	08-Dec-25
CN4BRR5030	Cut/Fill - Sta. 345+00 to 360+00 NB - Segment B - Phase 4	19	09-Dec-25	21-Jan-26
CN4BRR5040	Install Drainage - Sta. 345+00 to 360+00 NB - Segment B - Phase 4	14	22-Jan-26	16-Feb-26
CN4BRR2040	Install Drainage - Sta. 326+00 to 345+00 NB - Segment B - Phase 4	22	17-Feb-26	25-Mar-26
CN4BRR2050	Finegrade Subgrade - Sta. 326+00 to 345+00 NB - Segment B - Phase 4	4	26-Mar-26	01-Apr-26
CN4BRR2070	Place Subbase - Sta. 326+00 to 345+00 NB - Segment B - Phase 4	12	02-Apr-26	22-Apr-26
CN4BRR2080	Install Underdrain - Sta. 326+00 to 345+00 NB - Segment B - Phase 4	5	23-Apr-26	29-Apr-26



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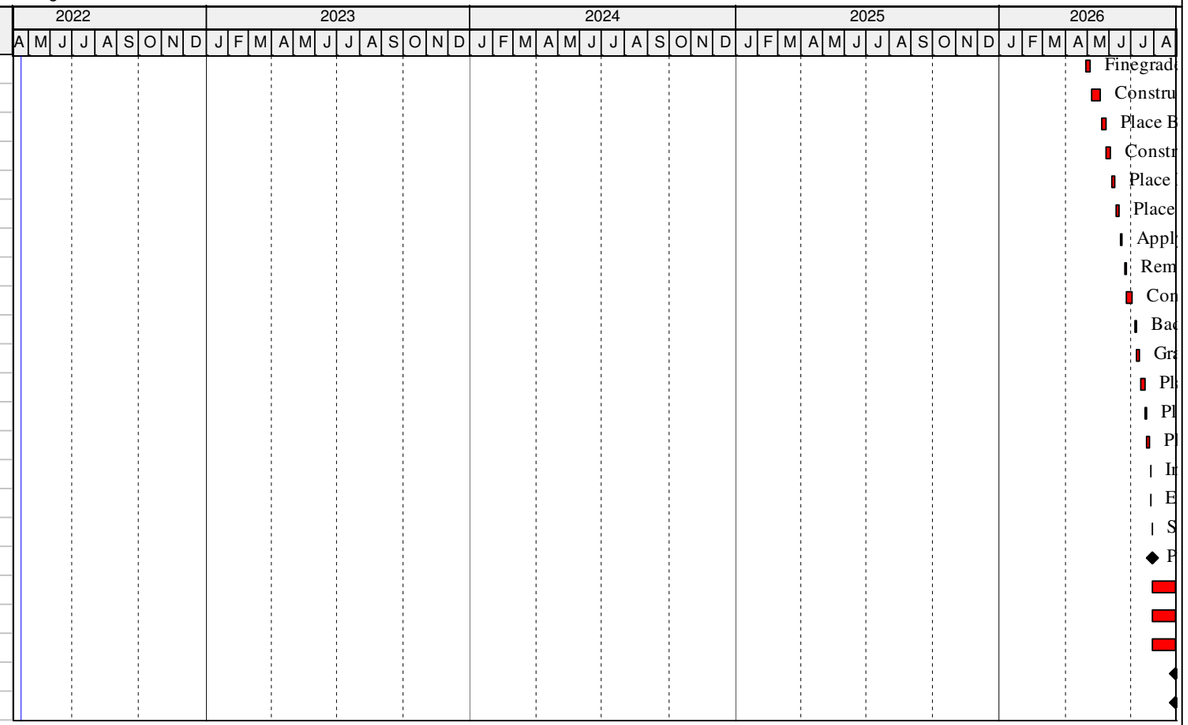
Actual Level of Effort | Remaining Work | Milestone

Activity ID	Activity Name	Original Duration	Start	Finish
CN4BRR2090	Finegrade Subbase - Sta. 326+00 to 345+00 NB - Segment B - Phase 4	4	30-Apr-26	06-May-26
CN4BRR2100	Construct Curb/Gutter - Sta. 326+00 to 345+00 NB - Segment B - Phase 4	9	07-May-26	20-May-26
CN4BRR2120	Place Base Asphalt - Sta. 326+00 to 345+00 NB - Segment B - Phase 4	4	21-May-26	27-May-26
CN4BRR2110	Construct Sidewalk - Sta. 326+00 to 345+00 NB - Segment B - Phase 4	5	28-May-26	03-Jun-26
CN4BRR2130	Place Intermediate Asphalt - Sta. 326+00 to 345+00 NB - Segment B - Phase 4	3	04-Jun-26	09-Jun-26
CN4BRR9010	Place Surface Asphalt - Segment B NB - Phase 4	4	10-Jun-26	15-Jun-26
CN4BRR9020	Apply Permanent Pavement Markings - Segment B NB - Phase 4	3	16-Jun-26	18-Jun-26
CN4BRR8000	Remove Temporary Pavement - Sta. 345+00 to 358+00 SB - Segment B - Phase 4	3	22-Jun-26	24-Jun-26
CN4BRR8100	Construct Curb/Gutter - Sta. 345+00 to 358+00 SB - Segment B - Phase 4	6	25-Jun-26	02-Jul-26
CN4BRR8140	Backfill Curb - Sta. 345+00 to 358+00 SB - Segment B - Phase 4	3	06-Jul-26	08-Jul-26
CN4BRS5000	Grade - SUP - Sta. 345+00 to 360+00 SB - Segment B - Phase 4	3	09-Jul-26	13-Jul-26
CN4BRS5010	Place / Finegrade Subbase - SUP - Sta. 345+00 to 360+00 SB - Segment B - Phase 4	4	14-Jul-26	20-Jul-26
CN4BRS5020	Place Surface Asphalt - SUP - Sta. 345+00 to 360+00 SB - Segment B - Phase 4	2	21-Jul-26	22-Jul-26
CN4BRR8160	Place Topsoil / Grade Slopes - Sta. 345+00 to 358+00 SB - Segment B - Phase 4	3	23-Jul-26	27-Jul-26
CN4BRR8200	Install Guardrail - Sta. 352 to 355 SB - Segment B - Phase 4	2	28-Jul-26	29-Jul-26
CN4BRR8170	Erect Permanent Signs - Sta. 345+00 to 358+00 SB - Segment B - Phase 4	2	28-Jul-26	29-Jul-26
CN4BRR8190	Seed & Mulch - Sta. 345+00 to 358+00 SB - Segment B - Phase 4	1	30-Jul-26	30-Jul-26
MS00005040	Phase 4 Completion	0		30-Jul-26
MS99999920	VDOT/Myers Complete Project Closeout	32	31-Jul-26	31-Aug-26
PAP0009010	Final Punchlist / VDOT Issues Completed C-5	32	31-Jul-26	31-Aug-26
PAP0009020	Project Closeout / As-Built Drawings	32	31-Jul-26	31-Aug-26
MS99999910	Final Completion - VDOT Issues C-5	0		31-Aug-26
MS99999930	Project Closeout Complete	0		31-Aug-26



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