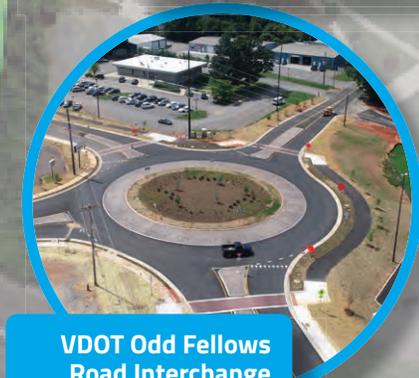


Letter of Submittal and Attachments for:

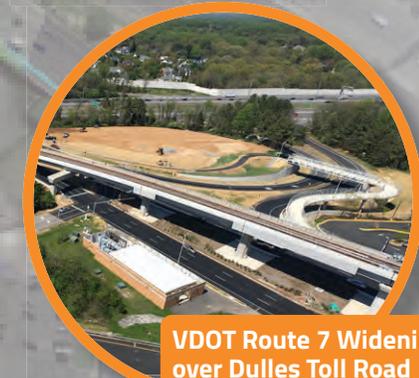
# BOUNDARY CHANNEL DRIVE AT I-395 INTERCHANGE DESIGN-BUILD PROJECT



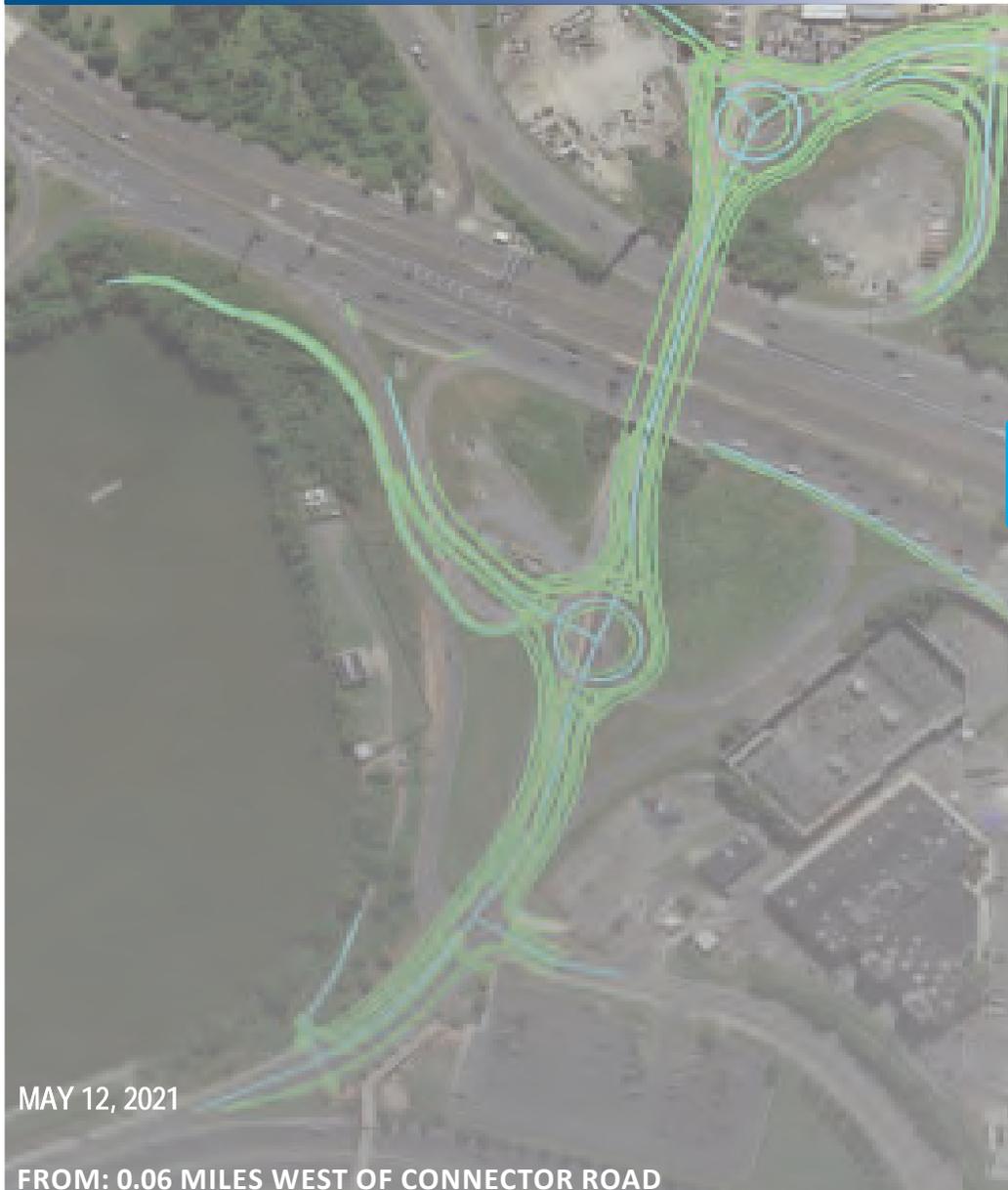
VDOT I-95 / Temple Avenue Interchange Design-Build



VDOT Odd Fellows Road Interchange Design-Build



VDOT Route 7 Widening over Dulles Toll Road Design-Build



MAY 12, 2021

FROM: 0.06 MILES WEST OF CONNECTOR ROAD  
TO: LONG BRIDGE DRIVE  
STATE PROJECT NO.: 6587-000-R89, P101, R201, C501  
FEDERAL PROJECT NO.: NHPP-5B01(120)



4.1

# LETTER OF SUBMITTAL



General Construction | Heavy Civil | Geotechnical

Wagman Heavy Civil, Inc.  
3290 N. Susquehanna Trail  
York, PA 17406-9754

May 12, 2021

Sudha Mudgade, P.E., PMP, DBIA  
Virginia Department of Transportation  
1401 East Broad Street  
Annex Building, 5th Floor  
Richmond, VA 23219

**RE: A Design-Build Project, Boundary Channel Drive at I-395 Interchange**  
Arlington County, Virginia  
State Project No.: 6587-000-R89, P101, R201, C501  
Federal Project No.: NHPP-5B01(120)  
Contract ID Number: C00116394DB109

Dear Ms. Mudgade:

**Wagman Heavy Civil, Inc. (Wagman)** is pleased to submit our Letter of Submittal, with full supporting documentation, electronically via Bid Express to the Virginia Department of Transportation (VDOT) to provide Design-Build (D-B) services for the Boundary Channel Drive at I-395 Interchange Project in Arlington County, VA. We have carefully reviewed the Request for Proposals (RFP), RFP Addendum Numbers 1, 2 and 3, and RFP Questions and Answers; attended the pre-proposal meetings and a Proprietary Meeting; and visited the site.

Wagman has assembled a strong and efficient team of highly qualified professionals with the necessary expertise to successfully meet the goals and objectives of this project. Wagman has selected Rinker Design Associates, P.C. (RDA) as our lead design firm to provide all engineering services for this project. Wagman and RDA have excellent reputations in the design and construction of similar projects, with proven experience in delivering quality D-B projects. Other members of our team include CES Consulting, LLC; DMY Engineering Consultants, Inc.; ATCS, PLC; Floura Teeter Landscape Architects, Inc.; and Dulles Geotechnical & Materials Testing Services.

**4.1.1 Offeror’s Full Legal Name and Address.** The full legal name and address of Wagman is as follows:

<b>Wagman Heavy Civil, Inc.</b> 3290 N. Susquehanna Trail, York, PA 17406-9754	Phone: 717.767.8277 Fax: 717.767.5546
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**4.1.2 Declaration of Intent.** As the Offeror, it is Wagman’s intent, if selected, to enter into a contract with VDOT for the Project in accordance with the terms of this respective RFP.

**4.1.3 120-Day Declaration.** Pursuant to RFP Part 1, Section 8.2, we declare that the offer represented by this Letter of Submittal and Attachments will remain in full force and effect for one hundred twenty (120) days after the date the Price Proposal is submitted to VDOT (May 19, 2021).

**4.1.4 Point of Contact Information.** **Mr. David L. Leber, DBIA, PMP**, Senior Project Manager, is the official point of contact for the Wagman Team for all matters associated with this Letter of Submittal and Attachments. His contact information is as follows:

**David L. Leber, Senior Project Manager**  
3290 N. Susquehanna Trail | York, PA 17406-9754

Phone: 717.600.6564, Fax: 717.767.5457  
Email: dlleber@wagman.com

**4.1.5 Principal Officer Information.** Mr. Anthony W. Bednarik, DBIA, Vice President Major Pursuits/Design-Build, will serve as the principal officer for Wagman Heavy Civil, Inc. His contact information is as follows:

**Anthony W. Bednarik, Vice President Major Pursuits/Design-Build** Phone: 717.324.3979  
3290 N. Susquehanna Trail | York, PA 17406-9754 Email: awbednarik@wagman.com

**4.1.6 Interim Milestone and Final Completion Dates.** In accordance with RFP Part I, Section 2.3.1, Wagman proposes an Interim Milestone of September 22, 2023 and a Final Completion Date of November 21, 2023.

**4.1.7 Proposal Payment Agreement.** An executed Proposal Payment Agreement (Attachment 9.3.1) can be found in the Appendix.

**4.1.8 Certification Regarding Debarment Forms.** Certification Regarding Debarment Forms for both Primary and Lower Tier Covered Transactions have been executed and included for the Offeror and all subconsultants, subcontractors, and other entities identified on the Offeror's organizational chart. These forms can be found in the Appendix.

**4.1.9 DBE Commitment (12%).** Wagman supports the Disadvantaged Business Enterprise (DBE) program and is committed to achieving the twelve percent (12%) DBE participation goal for the entire value of the contract.

Wagman and RDA each have long and successful histories of serving VDOT on numerous projects. As a single, integrated D-B Team, we will design and construct the Boundary Channel Drive at I-395 Interchange D-B Project in a manner to ensure the greatest opportunity for success. We will create a transparent working relationship with VDOT and third-party stakeholders to promote trust, confidence, and collaboration.

Respectfully,

**WAGMAN HEAVY CIVIL, INC.**



Anthony W. Bednarik, DBIA  
Vice President Major Pursuits/Design-Build

4.2

**ATTACHMENTS  
TO THE  
LETTER OF  
SUBMITTAL**

## 4.2 ATTACHMENTS TO THE LETTER OF SUBMITTAL

### 4.2.1 Organizational Chart and Key Personnel Confirmation

The Wagman Team confirms that our organizational chart (included on the following page) and key personnel contained in our SOQ submission remain true and accurate. Furthermore, all team members and non-key personnel remain unchanged from the SOQ.

#### TEAM MEMBERS

The following firms will support Wagman and RDA on this Project:

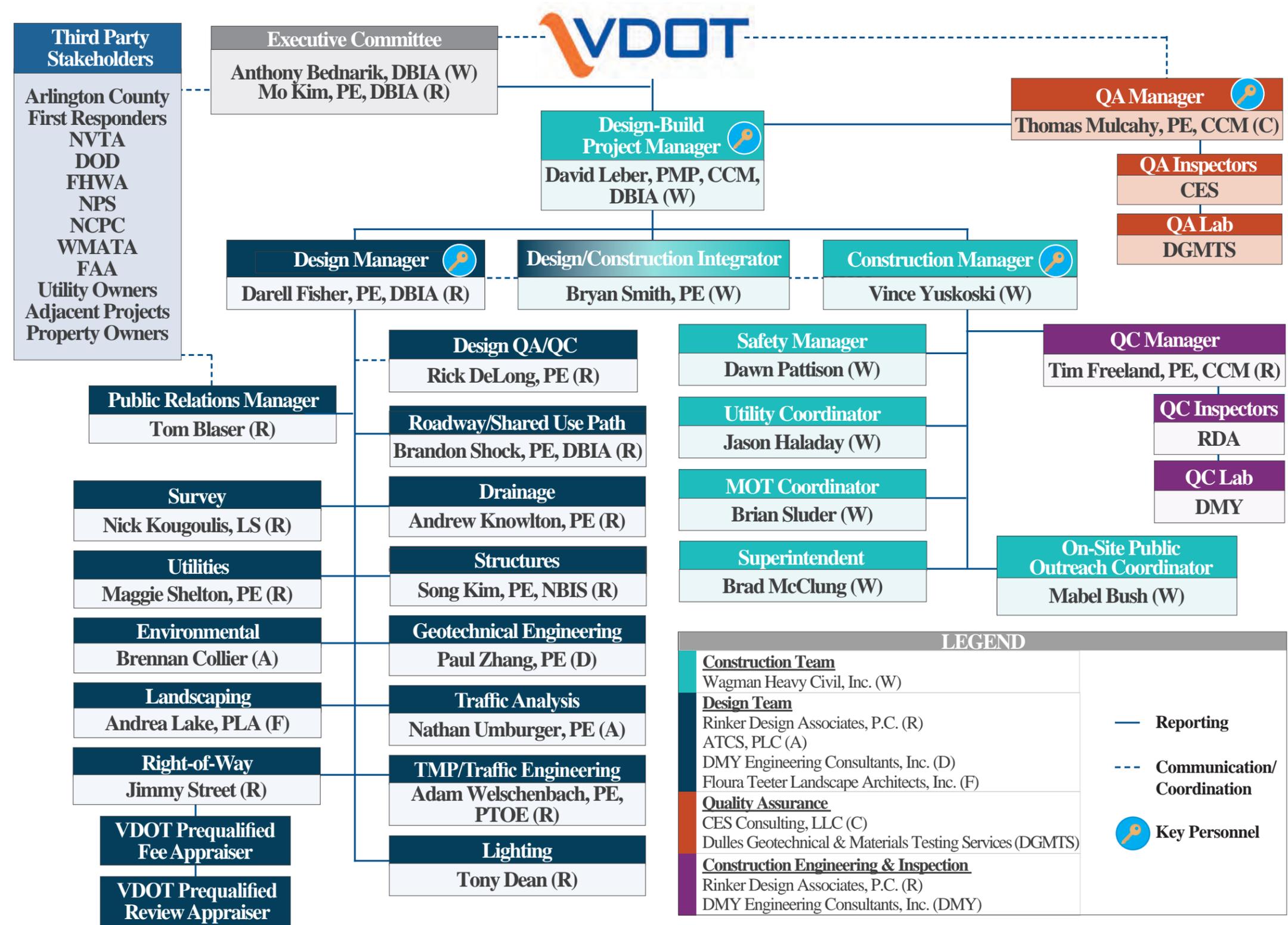
- ◆ **CES Consulting, LLC (CES)** will provide the Quality Assurance Manager, QA inspection services, and oversight of the QA laboratory (Dulles Geotechnical and Materials Testing Services, Inc.).
- ◆ **Dulles Geotechnical and Materials Testing Services, Inc. (DG-MTS)** will provide laboratory services for Construction QA services.
- ◆ **DMY Engineering Consultants, Inc. (DMY)** will provide geotechnical analysis, drilling, and laboratory services for design and Construction QC services.
- ◆ **ATCS, PLC** will provide environmental and traffic analysis.
- ◆ **Floura Teeter Landscape Architects, Inc.** will provide landscape design for the project.

Our Team’s organizational chart has not changed, nor have the functional relationships and communication amongst our team members, VDOT, or stakeholders. For VDOT’s convenience, we have reiterated our functional relationships and communication approach from our SOQ on page 5.



4.2 ATTACHMENTS TO THE LETTER OF SUBMITTAL

ORGANIZATIONAL CHART



## 4.2 ATTACHMENTS TO THE LETTER OF SUBMITTAL

**FUNCTIONAL RELATIONSHIPS AND COMMUNICATION:** The integration of our design and construction staff with VDOT and the project stakeholders throughout the duration of the Project will promote routine and open communication. VDOT’s participation in formal partnering will be requested to foster an atmosphere of trust and transparency between VDOT, the D-B team, and project stakeholders. This will encourage open dialogue when issues arise that may jeopardize the success of the Project.

The Department will coordinate directly with our DBPM as the primary contact for all aspects of design and construction oversight of the Project. Bi-weekly design and weekly construction progress meetings will include discussions on contract administration; safety; schedule updates; conflict resolution; stakeholder concerns; and progress updates for design and construction activities.

Reporting to the DBPM are five primary positions—the QAM, DM, CM, Public Relations Manager, and Design/Construction Integrator. This structure, combined with our DBPM’s maintenance of an action item log for potential issues and three-month look-ahead schedule will ensure the Project remains on-schedule and in conformance with VDOT commitments.

The QAM will report to our DBPM, with independent oversight by VDOT. Open lines of communication between the QAM and VDOT will assist with monitoring quality assurance. QA Inspectors and Labs will report through the QAM. Our QAM will also monitor the construction QC program to ensure all work and materials, testing, and sampling is performed in accordance with the contract requirements and the “approved for construction” plans and specifications.

The Public Relations Manager (PRM) will report to the DBPM and will act as a liaison between the Wagman/RDA Team, third party stakeholders, and the general public to facilitate communication and outreach efforts throughout the design and construction process, minimizing VDOT’s direct efforts associated with public outreach.

The Design/Construction Integrator will report to the DBPM and will work closely with the DM and CM to seamlessly tie together the design development and construction.

**Design:** Our DM will report to the DBPM and coordinate with the CM to develop an efficient and construct-

ible design. He will work with the CM during construction to confirm field conditions meet design assumptions and reevaluate these assumptions if necessary. The Design QA/QC Manager will report to the DM and independently monitor the design QA/QC process. ATCS, DMY, and Floura Teeter will all be subcontracted with RDA for their respective services and their individual discipline leads will report to the DM. This structure will ensure effective and efficient design management. Coordination between the design and construction staff will start during preparation of the technical proposal and continue throughout the Project to incorporate means and methods into the design. Meetings will also include design disciplinary reviews, over the shoulder reviews, and comment resolution meetings with stakeholders.

**Construction:** The CM will report to the DBPM and communicate directly with the QAM/DM/PRM and VDOT’s field personnel to provide construction progress updates and verify conformance with the contract documents. He will also communicate with the DM during both to ensure construction is consistent with the project design. Our CM will be on-site for the duration of construction operations and will personally oversee the entire construction team. Daily coordination meetings between the CM, senior inspectors, and VDOT’s representative will facilitate communication regarding construction progress. Weekly planning and schedule meetings will include the QA and QC team, VDOT representatives, and design team members as necessary. Before each shift, field supervisors will review safety and performance with their crews to establish protocols in upcoming work.

**Executive Task Force Review Committee:** The Executive Task Force Review Committee will coordinate with the DM and the CM to provide a unified and global evaluation of project challenges to ensure that the project’s goals are maintained. They will establish a resolution hierarchy to ensure that solutions are developed and coordinated at the lowest level feasible. Issues will be tracked through the use of a resolution matrix and will be reported to the DBPM for his acceptance and implementation. Our Executive Task Force Review Committee is composed of Wagman’s Vice President and RDA’s President/CEO in order to facilitate quick responses and resolutions. Additionally, they bring extensive experience on D-B and complex projects within their areas of expertise.

## 4.2 ATTACHMENTS TO THE LETTER OF SUBMITTAL

### 4.2.4 Proposal Schedule and Narrative

The Wagman Team has provided a Proposal Schedule and Proposal Schedule Narrative demonstrating our understanding of the complexities and interrelationships of the technical elements of the Project. PDF copies of the Proposal Schedule and narrative, as well as a back-up copy of the Proposal Schedule’s source document, have been submitted electronically via Bid Express.

**4.2.4.1 Proposal Schedule:** The Wagman Team has developed a Proposal Schedule which incorporates the internal plan reviews, VDOT plan reviews and approvals, environmental permitting and constraints, right of way acquisition, utility relocation, construction activities and QA/QC inspection and testing. Our proposal schedule meets the RFP requirements including the Interim Milestone and Final Completion Dates. The Wagman Team will aggressively manage the project schedule and will deliver Final Completion by November 21, 2023.

The Proposal Schedule depicts the Wagman Team’s proposed overall sequence of work and duration for each work task and deliverable required to complete the Project. The schedule is organized using a hierarchical Work Breakdown Structure (WBS) for major sections, one for design and another for construction. These both are broken down into smaller disciplines for design phases and areas for construction.

**4.2.4.2 Proposal Schedule Narrative:** In addition to the technical elements, the narrative also describes the Wagman Team’s plan to accomplish the Work including, but not limited to, the overall sequencing, a description and explanation of the Critical Path, proposed means and methods, and other key elements upon which the Proposal Schedule is based.

## SCHEDULE DEVELOPMENT

The Wagman Team has reviewed in detail the scope and schedule requirements outlined in the RFP and has developed a Proposal Schedule outlining our plan to successfully manage all phases of the Boundary Channel Drive at I-395 Interchange project to safely deliver it in an expedited manner.

### Project Milestones

Notice to Proceed	7/16/2021
CTB Approval of LACC	1/5/2022
Approval of Advanced Work Package	2/20/2022
Start of Construction	3/03/2022
Approval of Final Design Package	7/25/2022
Interim Milestone	9/22/2023
Final Completion	11/21/2023

## WORK BREAKDOWN STRUCTURE

The Team has organized the schedule into a hierarchical Work Breakdown Structure (WBS) to demonstrate the relationship and activity durations amongst the design, environmental permitting, Right of Way acquisition, utility relocation, and construction for the Boundary Channel Drive project. The following is a summary of our schedule organization followed by the complete WBS listing in Figure 4.2.4.2.2.

## 4.2 ATTACHMENTS TO THE LETTER OF SUBMITTAL

**General:** This section includes major milestones on the project.

**Design:** Includes preliminary engineering services, plan development, QA/QC reviews, submittal milestones, internal reviews, VDOT plan reviews and approvals, other regulatory agency reviews, and Approval for Construction Milestones.

**Construction:** Includes all components of roadway construction as well as Utility Relocations, MOT, lighting, and landscaping. This section is further broken down to show the Wagman Team’s 3 Phase logical progress of work and work areas.

**Figure 4.2.4.2.2: Work Breakdown Structure**

WBS Code	WBS Name	Total Activities
BOUNDARY	Boundary Channel LOS Schedule	186
BOUNDARY.1	General	5
BOUNDARY.2	Design	71
BOUNDARY.2.1	Quality	4
BOUNDARY.2.2	Scope Validation	3
BOUNDARY.2.3	Survey	5
BOUNDARY.2.4	Geotechnical	11
BOUNDARY.2.4.5	Roadway GDR	6
BOUNDARY.2.5	Enviromental	5
BOUNDARY.2.6	Utilities	12
BOUNDARY.2.6.1	Utility Coordination	6
BOUNDARY.2.6.2	Utility Design	6
BOUNDARY.2.7	Advanced Work Package	11
BOUNDARY.2.8	Limited Access Change	5
BOUNDARY.2.9	ROW Acquisition	1
BOUNDARY.2.10	ITS/Lighting/Signing/Striping	7
BOUNDARY.2.11	Final Roadway	7
BOUNDARY.3	Construction	110
BOUNDARY.3.1	Utility Relocations	5
BOUNDARY.3.2	Phase 1	62
BOUNDARY.3.2.1	Phase 1A	8
BOUNDARY.3.2.1.1	NW Quad	4
BOUNDARY.3.2.1.3	Boundary Channel	4
BOUNDARY.3.2.2	Phase 1B	51
BOUNDARY.3.2.2.1	Eastbound Boundary Channel	11
BOUNDARY.3.2.2.2	NW Quad	11
BOUNDARY.3.2.2.3	NE Quad	11
BOUNDARY.3.2.2.4	SW Quad	7
BOUNDARY.3.2.2.5	SE Quad	11
BOUNDARY.3.3	Phase 2	26
BOUNDARY.3.3.1	Phase 2A	4
BOUNDARY.3.3.1.23	Boundary Channel	4
BOUNDARY.3.3.2	Phase 2B	20
BOUNDARY.3.3.2.1	Westbound Boundary Channel	11
BOUNDARY.3.3.2.2	NW Quad	9
BOUNDARY.3.4	Phase 3	17

All Projects

WBS Elements below Project

Page 1 of 3

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## 4.2 ATTACHMENTS TO THE LETTER OF SUBMITTAL

### CALENDARS

The Wagman Team has incorporated four (4) calendars into the Project Schedule:

- ◆ **Calendar 1 – “7 Day Calendar”** This calendar holds every day as a work day. This calendar has been assigned to all administrative, design, and review activities. For example, this calendar has been assigned to VDOT’s 21 calendar day review activities.
- ◆ **Calendar 2 – “5 Day Calendar”** This calendar is based on five (5) working days per week. In addition to weekends, this calendar designates all major holidays as non-working days. This calendar includes a few arbitrary days throughout the year as weather days.
- ◆ **Calendar 3 – “5 Day Asphalt Calendar”** This calendar is based on five (5) working days per week. In addition to weekends, this calendar designates all major holidays as non-working days and includes a few arbitrary days throughout the year as weather days. The annual period from December 15th to February 28th is designated as non-working days due to anticipated winter weather. This calendar has been assigned to all roadway paving activities.
- ◆ **Calendar 4 – “5 Day Grading Calendar”** This calendar is based on five (5) working days per week. In addition to weekends, this calendar designates all major holidays as non-working days and includes a few arbitrary days throughout the year as weather days. The annual period from December 1st to February 28th is designated as non-working days due to anticipated winter weather. This calendar has been assigned to all roadway grading-related construction activities such as rough grading and installation of stone base material.

### PLAN TO ACCOMPLISH THE WORK

The narrative below describes the Wagman Team’s project delivery plan grouped by major Work Breakdown Structure (WBS) divisions.

**Design Phase:** The Wagman Team will finalize the design from the current Request for Proposal documents to obtain approval on the Approved for Construction (AFC) plan set. Design activities will include surveying, geotechnical (including borings and analysis), environmental, utilities, advanced work package, ROW / limited access change, ITS/lighting/signing/stripping, and final roadway design. The project will be delivered by completing roadway design in two phases: Advanced Work Package (AWP) / ROW Design, and Final Design/AFC.

- ◆ **AWP / ROW Design**– AWP / ROW Design submittal activities will focus on developing roadway plans including performing geometric design; preparing cross sections and defining limits of construction; completing SWM and E&S control design; preparing plans for the TMP including Ramp Detours. Required ROW limits will be evaluated and depicted on the plans, and preliminary utility relocation plans will be prepared. The goal of this submittal is to gain ROW Authorization to proceed with ROW acquisition services on the project.

The ROW, environmental coordination and approval, and utility relocation plan activities will be developed for individual submissions to VDOT and other regulatory agencies for review and approval.

- ◆ **Final Design**–Final Design Plan submittal will occur after receiving ROW design approval with the ROW authorization from VDOT. The Wagman Team will submit the final design plans and reports to VDOT for review and approval. The Wagman Team intends to develop two submittal packages for the Final Design Plans as follows:
  - ITS/Lighting/Signing/Striping
  - Final Roadway

## 4.2 ATTACHMENTS TO THE LETTER OF SUBMITTAL

- ◆ **Environmental**—Environmental Permitting activities will begin shortly after receiving NTP and will include a thorough environmental evaluation and confirmation of the information provided in the RFP documents. The Wagman Team will prepare a comprehensive environmental management plan that includes a matrix of environmental commitments and compliance requirements that; identifies milestone dates and integrates those into the project schedule; identifies the responsible party; and summarizes requirements.

Final environmental activities will begin immediately after receiving preliminary plan approval from VDOT. At this point in the design, the Wagman Team will identify the final environmental impacts required to construct the project in its entirety. The Wagman Team will strive to avoid and minimize environmental impacts during design development and construction. A Stormwater Pollution Prevention Plan (SWPPP) will be developed and the registration statement for the Virginia Stormwater Management Permit will be submitted immediately following the SWPPP development.

- ◆ **Right-of-Way Acquisition**—Preliminary ROW activities will begin after receiving NTP. The Wagman Team will begin performing the legal research for the identified parcels on the preliminary plans at the same time that our survey crew is validating the survey information provided in the RFP package.
- ◆ **Utility Relocations**—The Wagman Team’s project schedule includes activities for holding the Utility Field Investigation (UFI) meeting, followed by preparation of the Plan & Estimate (P&E) estimates by the utility owner, approval of the P&E, and construction of the relocation. Although we have already met with each individual utility company to discuss the proposed relocations and prior rights, the utility relocation schedule starts with formal UFI meetings following completion of all utility test pits. This will enable our Team to confirm and adjust our list of utility conflicts based on the field test pit data prior to holding the formal UFI meeting. We will continue this early coordination of utilities throughout the Design Phase of the Project to ensure that our Design Plans are coordinated with the utility relocation plans. The utility relocations are anticipated to be completed prior to impacting construction operations, thus avoiding potential construction delays.

### PROPOSAL SCHEDULE NARRATIVE

The Wagman Team plans to construct and manage the project in three (3) phases of construction with subphases for permanent / temporary work with a WBS for locations within the project. We will prepare an Advanced Work Package (AWP) to complete the MOT, E&S activities, temporary roadways, and waterline relocations. It is anticipated that the AWP will be approved in March 2022 with mobilization and start of construction to follow soon after. These activities are depicted in Phase 1A.

Once Phase 1A is complete and approval of Final Roadway plans, Phase 1B will begin which will be the start of permanent roadway construction on Boundary Channel Drive and ramps. It is anticipated that the ramps will be performed under temporary ramp closures with detours being implemented. Boundary Channel Drive will be constructed in halves with Eastbound being removed and reconstructed in Phase 1B.

After completion of Phase 1B, Phase 2 work will begin and Boundary Channel Drive will be temporarily widened to allow for the MOT to be implemented. Traffic will then be switched onto the newly constructed roadway and westbound Boundary Channel Drive will be removed and reconstructed.

Phase 3 work will primarily consist of constructing the roundabouts, installing curb, sidewalks, and shared use paths that were not completed in previous phases. Pavement milling, final asphalt paving, lighting, signage, and landscaping will also be completed in Phase 3.

## 4.2 ATTACHMENTS TO THE LETTER OF SUBMITTAL

### PROJECT CRITICAL PATH

The critical path will be continually analyzed throughout the project to ensure the entire team is concentrating on activities required to achieve key project milestones. The overall critical path, based on the longest path, runs through the approval of the final roadway plans which allows for the permanent roadway work on Boundary Channel and the ramps to be performed in Phase 1 and 2. Phase 3 will follow with all the project finishes and lead to interim and final completion.

Figure 4.2.4.2.3: Critical Path

Critical Path			Boundary Channel LOS Schedule		05-10-21 13:52			
WBS Path	Activity ID	Activity Name	Original Duration	Remaining Duration	Start	Finish	Activity % Complete	Total Float
BOUNDARY Boundary Channel LOS Schedule			513	513	07-16-21	11-21-23		0
BOUNDARY.1 General			513	513	07-16-21	11-21-23		0
1	GEN-1000	NTP	0	0	07-16-21*		0%	1
1	GEN-1020	Final Punch List	12	12	10-31-23	11-21-23	0%	0
1	GEN-1025	Final Completion	0	0		11-21-23	0%	0
BOUNDARY.2 Design			375	375	07-16-21	07-25-22		6
BOUNDARY.2.3 Survey			145	145	07-16-21	12-07-21		6
2.3	DES-1005	Prepare Notification Letters	7	7	07-16-21	07-22-21	0%	6
2.3	DES-1010	Property Owner Notifications Waiting Period	30	30	07-23-21	08-21-21	0%	6
2.3	DES-1015	Supplemental Survey and Boring Stakeout	108	108	08-22-21	12-07-21	0%	6
BOUNDARY.2.7 Advanced Work Package			68	68	12-08-21	02-13-22		6
2.7	DES-6025	Submit AWP Plans	3	3	12-08-21	12-10-21	0%	6
2.7	DES-6030	VDOT Review of AWP Plans	21	21	12-11-21	12-31-21	0%	6
2.7	DES-6035	Comment Resolution / Revise AWP Plans	21	21	01-01-22	01-21-22	0%	6
2.7	DES-6040	RFC AWP Plans for Approval	2	2	01-22-22	01-23-22	0%	6
2.7	DES-6045	VDOT Review and Approval AWP	21	21	01-24-22	02-13-22	0%	6
BOUNDARY.2.11 Final Roadway			162	162	02-14-22	07-25-22		6
2.11	DES-10005	Prepare Final Roadway Plans	82	82	02-14-22	05-06-22	0%	6
2.11	DES-10010	Design QA/ QC of Final Roadway Plans	9	9	05-07-22	05-15-22	0%	6
2.11	DES-10015	Submit Final Roadway Plans	4	4	05-16-22	05-19-22	0%	6
2.11	DES-10020	VDOT Review Final Roadway Plans	21	21	05-20-22	06-09-22	0%	6
2.11	DES-10025	RFC Final Roadway Plans	18	18	06-10-22	06-27-22	0%	6
2.11	DES-10030	VDOT Review and Approve Final Roadway Plans	21	21	06-28-22	07-18-22	0%	6
2.11	DES-10035	AFC Final Roadway Plans Released	7	7	07-19-22	07-25-22	0%	6
BOUNDARY.3 Construction			276	276	07-26-22	10-31-23		0
BOUNDARY.3.2 Phase 1			85	85	07-26-22	12-14-22		0
BOUNDARY.3.2.2 Phase 1B			85	85	07-26-22	12-14-22		0
BOUNDARY.3.2.2.1 Eastbound Boundary Channel			3	3	07-26-22	07-28-22		3
3.2.2.1	A1080	Install Signage and MOT	3	3	07-26-22	07-28-22	0%	3
BOUNDARY.3.2.2.2 NW Quad			23	23	11-01-22	12-14-22		0
3.2.2.2	A1265	Install Signage and MOT	2	2	11-01-22	11-03-22	0%	0
3.2.2.2	A1270	Implement Detour of Existing Ramp	1	1	11-03-22	11-07-22	0%	0
3.2.2.2	A1275	Install E&S Controls	1	1	11-07-22	11-08-22	0%	0
3.2.2.2	A1280	Demo Existing Ramp	2	2	11-08-22	11-11-22	0%	0

The complete critical path is depicted on the Proposal Schedule in Volume II.

### SCHEDULE MANAGEMENT

The schedule is the most important tool in the construction management process and is an efficient method to communicate the intended sequence and progress of the project to the construction team as well as the project stakeholders. The schedule is an extremely useful and productive planning tool. The Wagman Team takes pride in our detailed advance planning for safe and efficient execution of the work. Our Construction Managers, Superintendents, Safety Professionals, and Craft Supervisors use this critical tool as the first step in developing Activity Hazard Analyses and Activity Work Plans. In addition to early planning, the schedule is used to monitor the project's progress and help identify potential deficiencies and problem areas before they develop into a critical impact.

## 4.2 ATTACHMENTS TO THE LETTER OF SUBMITTAL

The project management team will continually review and monitor the schedule and use the information gathered to develop mitigation strategies for any activities that are identified as potential impacts. This proactive approach will ensure that the project continues to move forward and that any potential delays are addressed immediately. A variety of different tools will be utilized to assist with this process, including but not limited to, the following:

- ◆ **Weekly schedule meetings between the engineering and construction team members during the design phase**
- ◆ **Weekly construction scheduling meetings throughout the duration of the construction process with the construction team (including management)**
- ◆ **Monthly progress meetings to include all project stakeholders, project team members, and subcontractors**
- ◆ **Three-week look ahead schedules**
- ◆ **RFI logs**
- ◆ **Submittal logs**
- ◆ **Work plans**
- ◆ **Subcontract/purchase order logs**
- ◆ **Shop drawing tracking logs**
- ◆ **Weekly manpower and equipment reviews**

All of the above referenced tools will be utilized simultaneously to provide a current and realistic picture of the progress and status at any given time. Information will be presented at meetings to all who are involved for the opportunity to discuss and address any concerns in front of all that are affected. This keeps the line of communication open and allows resolutions and recovery strategies to be developed at an early stage; therefore, preventing further conflict. The project schedule will also be critically important to the management of our QA/QC inspection, testing, and documentation efforts. By resource loading our construction activities with crews classified by construction discipline, and reviewing the associated resource histograms on a weekly basis, our team will be able to identify all current and future QA/QC hold points, and to quantify QA/QC coverage and testing resources needed to provide robust quality control in a timely and efficient manner. QA/QC Testing and hold points are incorporated in the durations for our construction activities and will be broken out on the project's baseline schedule.

### **SUBCONTRACTOR AND MATERIAL SUPPLIER SCHEDULING**

Subcontractors and material suppliers are a critical part of the project schedule. The Wagman Team will closely evaluate each subcontractor and supplier based on quality, performance, and reputation. Beginning with the initial subcontract paperwork, each subcontractor will be intimately involved with every aspect of the project schedule, and their input will be vital. Suppliers will go through a similar process. This includes progress meetings, weekly look-ahead schedules, material submittals, and recovery strategies if needed. Accountability is the key to effective subcontractor and supplier management, and it will be perfectly clear that subcontractors and suppliers will be held accountable for all aspects of their work from quality to schedule.

### **SCHEDULE RECOVERY**

Unexpected issues and unforeseen conditions are a possibility during the construction process. The Wagman Team includes many experienced and well-respected members in the D-B field with the ability to recognize and react to any issues that may arise. We will aggressively manage the project and, if needed, mitigate any issues that affect the construction schedule. If necessary, a schedule recovery strategy will be developed, immediately implemented, and closely monitored until the schedule is recovered.

### **PROPOSAL SCHEDULE IN ELECTRONIC FORMAT**

The Wagman Team has provided a copy of the Proposal Schedule and narrative in PDF format as well as a copy of the Proposal Schedule's source document in XER format.

# APPENDIX

# 4.0.1.1

## **ATTACHMENT**

### **4.0.1.1 –**

## **Letter of Submittal and Attachments Checklist**

**ATTACHMENT 4.0.1.1**

**Boundary Channel Drive at I-395 Interchange**

**LETTER OF SUBMITTAL AND ATTACHMENTS CHECKLIST**

Offerors shall furnish a copy of this Letter of Submittal Checklist, with the page references added, with the Letter of Submittal.

<b>Technical Proposal Component</b>	<b>Form (if any)</b>	<b>RFP Part 1 Cross Reference</b>	<b>Page Reference</b>
<b>Letter of Submittal and Attachments Checklist</b>	Attachment 4.0.1.1	Section 4.0.1.1	Volume I – Appendix – page 12
<b>Acknowledgement of RFP, Revisions, and/or Addenda</b>	Attachment 3.6 (Form C-78-RFP)	Sections 3.6, 4.0.1.1	Volume I – Appendix – page 15
<b>Letter of Submittal</b>	NA	Sections 4.1	
Letter of Submittal on Offeror's letterhead	NA	Section 4.1.1	Volume I – pages 1 & 2
Offeror's official representative information	NA	Section 4.1.1	Volume I – page 1
Authorized representative's original signature	NA	Section 4.1.1	Volume I – page 2
Declaration of intent	NA	Section 4.1.2	Volume I – page 1
120 day declaration	yes	Section 4.1.3	Volume I – page 1
Point of Contact information	yes	Section 4.1.4	Volume I – pages 1 & 2
Principal Officer information	NA	Section 4.1.5	Volume I – page 2
Interim Milestone and Final Completion Dates	NA	Section 4.1.6	Volume I –

**ATTACHMENT 4.0.1.1**

**Boundary Channel Drive at I-395 Interchange**

**LETTER OF SUBMITTAL AND ATTACHMENTS CHECKLIST**

<b>Technical Proposal Component</b>	<b>Form (if any)</b>	<b>RFP Part 1 Cross Reference</b>	<b>Page Reference</b>
			page 2
Proposal Payment Agreement or Waiver of Proposal Payment	Attachment 9.3.1 or 9.3.2	Section 4.1.7	Volume I – Appendix – page 17
Certification Regarding Debarment Forms	Attachment 11.8.6(a) Attachment 11.8.6(b)	Section 4.1.8	Volume I – Appendix – pages 21-27
Written statement of percent DBE participation	NA	Section 4.1.9	Volume I – page 2
<b>Attachments to the Letter of Submittal</b>	NA	Section 4.2	
Confirmation that the information provided in the SOQ submittal remains true and accurate or indicates that any requested changes were previously approved by VDOT	NA	Section 4.2.1	Volume I – page 3
Organizational chart with any updates since the SOQ submittal clearly identified	NA	Section 4.2.1	Volume I – page 4 (no updates)
Revised narrative when organizational chart includes updates since the SOQ submittal	NA	Section 4.2.1	Volume I – pages 3 & 5 (no updates)
Conceptual Roadway Plans	NA	Section 4.2.2	Volume II – pages 1-9a

**ATTACHMENT 4.0.1.1**

**Boundary Channel Drive at I-395 Interchange**

**LETTER OF SUBMITTAL AND ATTACHMENTS CHECKLIST**

<b>Technical Proposal Component</b>	<b>Form (if any)</b>	<b>RFP Part 1 Cross Reference</b>	<b>Page Reference</b>
<b>Proposal Schedule</b>	NA	Section 4.2.4	
Proposal Schedule	NA	Section 4.2.4.1	Volume II – pages 10-14
Proposal Schedule Narrative	NA	Section 4.2.4.2	Volume I – pages 6-11
Proposal Schedule in electronic format	NA	Section 4.2.4	PDF and source document uploaded to Bid Express

# 3.6, 4.0.1.1

## **ATTACHMENT**

### **3.6 –**

#### **Form C-78**

#### **Acknowledgment of RFP, Revisions, and/or Addenda**

**ATTACHMENT 3.6**

**COMMONWEALTH OF VIRGINIA  
DEPARTMENT OF TRANSPORTATION**

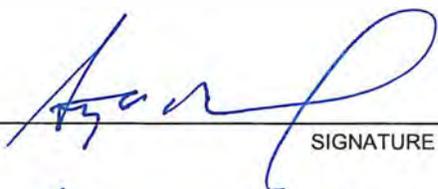
RFP NO. C00116394DB109  
PROJECT NO.: 6587-000-R89

**ACKNOWLEDGEMENT OF RFP, REVISION AND/OR ADDENDA**

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

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

1. Cover letter of RFP – February 24, 2021  
(Date)
2. Cover letter of RFP Addendum No. 1 – April 9, 2021  
(Date)
3. Cover letter of RFP Addendum No.2 – April 28, 2021  
(Date)
4. Cover letter of RFP Addendum No. 3 – May 6, 2021  
(Date)

  
\_\_\_\_\_  
SIGNATURE

05/06/2021  
\_\_\_\_\_  
DATE

Anthony W. Bernazik  
\_\_\_\_\_  
PRINTED NAME

Vice President  
\_\_\_\_\_  
TITLE

**CERTIFICATE OF SECRETARY  
OF  
WAGMAN HEAVY CIVIL, INC.**

The Undersigned, being the Secretary of Wagman Heavy Civil, Inc., hereby certifies that the following Resolutions have been previously adopted by unanimous consent of the Board of Directors:

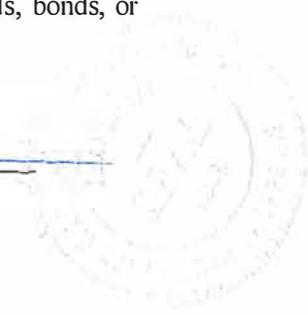
RESOLVED, that the following individuals be hereby elected to serve in the offices set forth opposite their names, until the next regularly scheduled election of officers:

Chairman of the Board	Richard E. Wagman
Chief Executive Officer	Michael B. Glezer
President/COO	Gregory M. Andricos
Sr. Vice President	Todd E. Becker
Vice President – Design-Build/Major Pursuits, Mid-Atlantic	Anthony W. Bednarik
Vice President/General Manager, Virginia Operations	Glen K. Mays
Vice President – Geotechnical Construction Services	Edward R. Laczynski
Sr. Vice President	Joseph G. Wagman
Sr. Vice President	Lisa W. Glezer
Sr. Vice President – CFO/Treasurer	John R. Coppage, IV
Vice President/General Counsel/Secretary	Kevin J. McKeon
Assistant Secretaries	Wanda S. Turner
	Jeanie P. Jones

FURTHER RESOLVED, that Richard E. Wagman, Michael B. Glezer, Gregory M. Andricos, Todd E. Becker, Anthony W. Bednarik, Glen K. Mays, and Edward R. Laczynski are each individually authorized and empowered to execute, acknowledge, and deliver such documents, instructions, and papers, and to perform such acts as may be legally, properly, or reasonably required or necessary for the purpose of procuring and executing any bids, bonds, or contracts on behalf of Wagman Heavy Civil, Inc.

Date: April 23, 2021

  
\_\_\_\_\_  
Kevin J. McKeon, Secretary



**4.1.7**

**ATTACHMENT**

**9.3.1–**

**Proposal Payment  
Agreement**

**ATTACHMENT 9.3.1**  
**PROPOSAL PAYMENT AGREEMENT**

**THIS PROPOSAL PAYMENT AGREEMENT** (this “Agreement”) is made and entered into as of this 12<sup>th</sup> day of May, 2021, by and between the Virginia Department of Transportation (“VDOT”), and Wagman Heavy Civil, Inc. (“Offeror”).

**WITNESSETH:**

**WHEREAS**, Offeror is one of the entities who submitted Statements of Qualifications (“SOQs”) pursuant to VDOT’s October 21, 2020 Request for Qualifications (“RFQ”) and was invited to submit proposals in response to a Request for Proposals (“RFP”) for the Boundary Channel Drive at I-395 Interchange, Project No. 6587-000-R89, P101, R201, C501 (“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 **Fifteen Thousand and 00/100 Dollars (\$15,000.00)** ("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: \_\_\_\_\_

Wagman Heavy Civil Inc.

By:  \_\_\_\_\_

Name: Anthony W. Bednarik

Title: Vice President

## 4.1.8

# CERTIFICATION REGARDING DEBARMENT FORMS

# **ATTACHMENT**

## **11.8.6(a) –**

### **Certification Regarding Debarment Primary Covered Transactions**

**ATTACHMENT 11.8.6(a)**  
**CERTIFICATION REGARDING DEBARMENT**  
**PRIMARY COVERED TRANSACTIONS**

Project No.: 6587-000-R89, P101, R201, C501

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.

 _____ Signature	<u>5/9/2021</u> _____ Date	<u>Vice President</u> _____ Title
<u>WAGMAN HEARN CIVIC, INC.</u> _____ Name of Firm		

# **ATTACHMENT**

## **11.8.6(b) –**

### **Certification Regarding Debarment Lower Tier Covered Transactions**

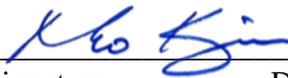
**ATTACHMENT 11.8.6(b)**  
**CERTIFICATION REGARDING DEBARMENT**  
**LOWER TIER COVERED TRANSACTIONS**

**Project No.: 6587-000-R89, P101, R201, C501**

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.

	5/12/2021	President/CEO
Signature	Date	Title

Rinker Design Associates, P.C.  
Name of Firm

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

**Project No.: 6587-000-R89, P101, R201, C501**

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.

	4/22/2021	President
_____ Signature	_____ Date	_____ Title

CES Consulting LLC  
\_\_\_\_\_  
Name of Firm

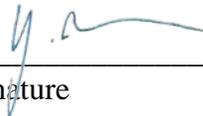
**ATTACHMENT 11.8.6(b)**  
**CERTIFICATION REGARDING DEBARMENT**  
**LOWER TIER COVERED TRANSACTIONS**

**Project No.: 6587-000-R89, P101, R201, C501**

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.

	April 22, 2021	President and CEO
Signature	Date	Title

DMY Engineering Consultants Inc.  
Name of Firm

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

**Project No.: 6587-000-R89, P101, R201, C501**

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	Date	President Title

Dulles Geotechnical and Material Testing Services, Inc.  
Name of Firm

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

**Project No.: 6587-000-R89, P101, R201, C501**

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.



April 22, 2021

Senior Vice President, Transportation

Signature

Date

Title

ATCS, PLC

Name of Firm

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

**Project No.: 6587-000-R89, P101, R201, C501**

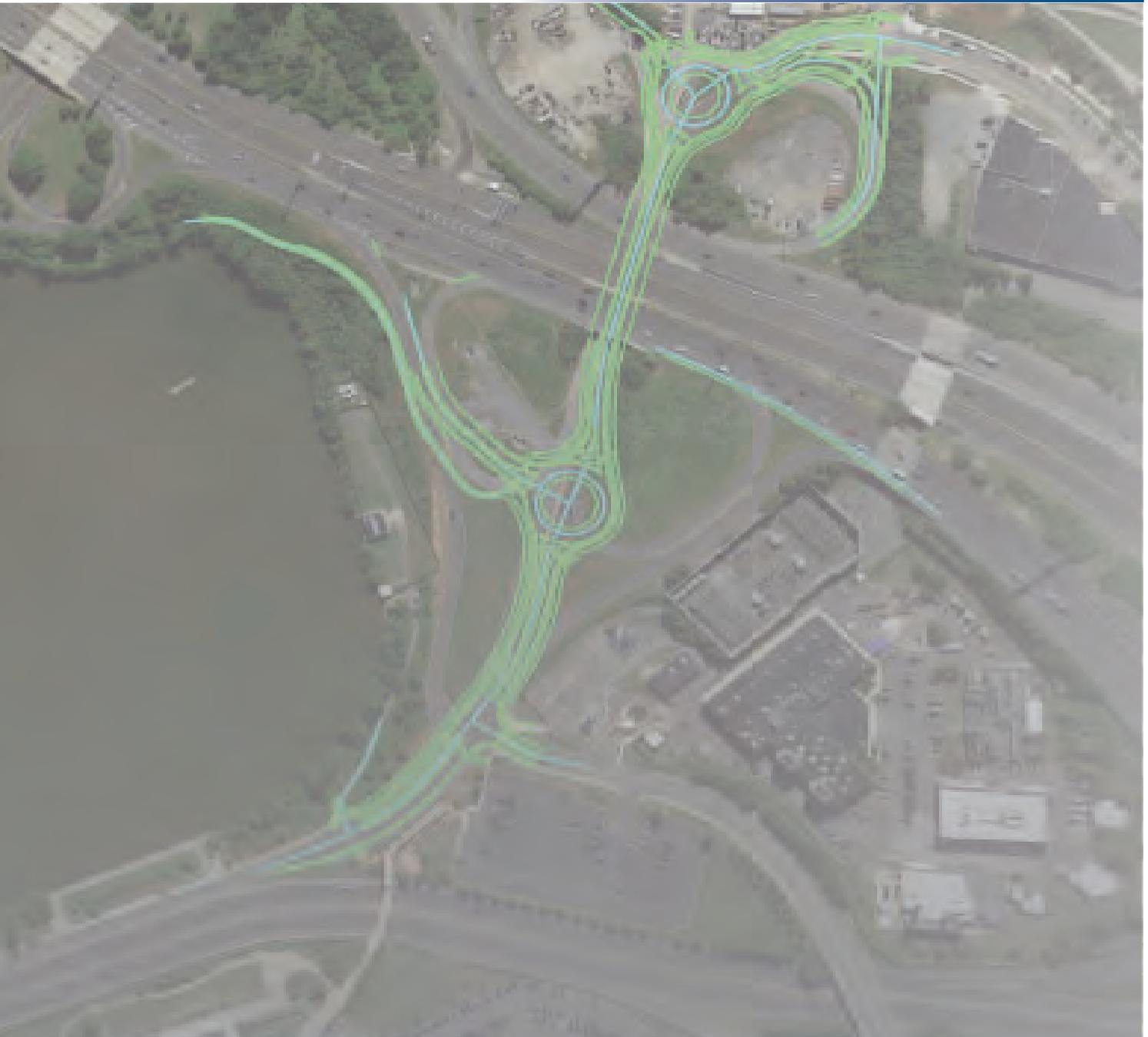
1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

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.

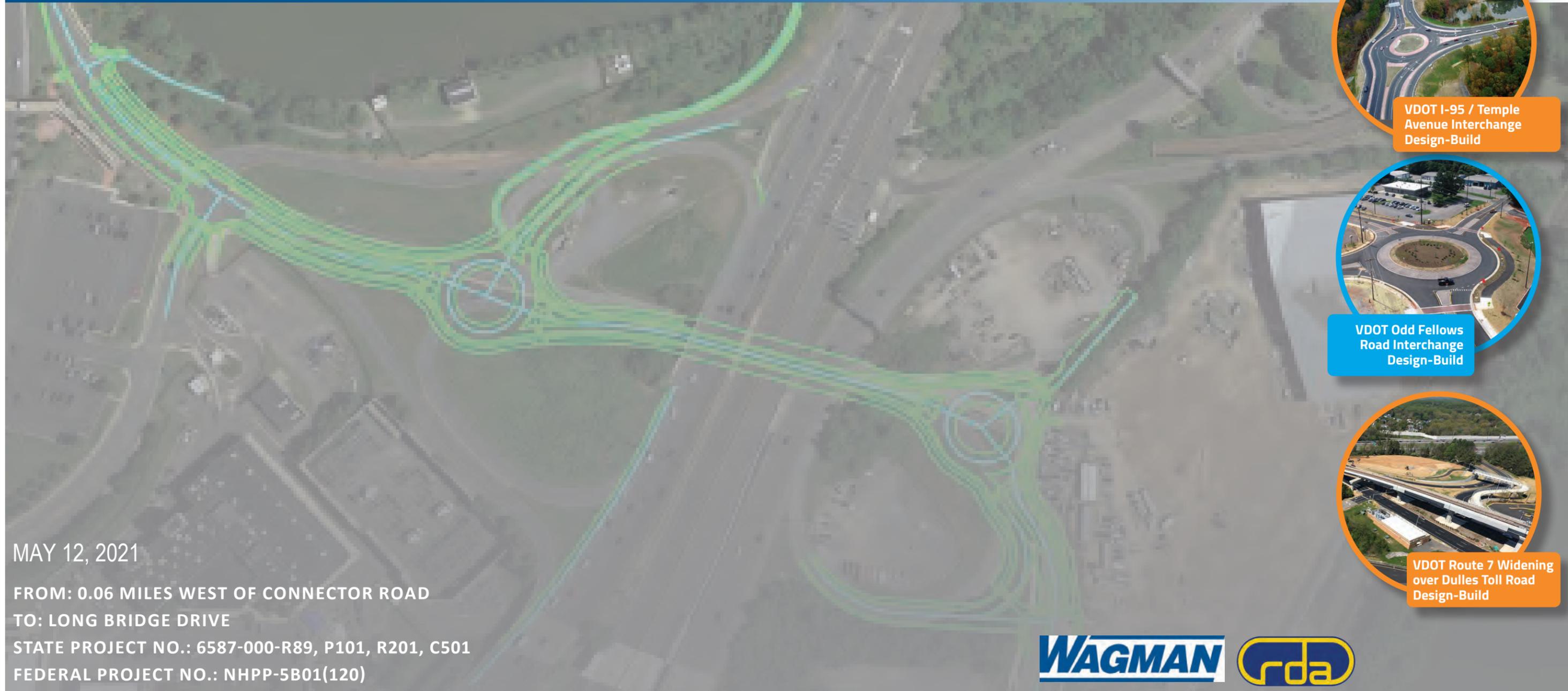
	April 22, 2021	President/Principal
Signature	Date	Title

Floura Teeter Landscape Architects, Inc.  
Name of Firm



Letter of Submittal and Attachments for:

# BOUNDARY CHANNEL DRIVE AT I-395 INTERCHANGE DESIGN-BUILD PROJECT



VDOT I-95 / Temple Avenue Interchange Design-Build



VDOT Odd Fellows Road Interchange Design-Build



VDOT Route 7 Widening over Dulles Toll Road Design-Build

MAY 12, 2021

FROM: 0.06 MILES WEST OF CONNECTOR ROAD

TO: LONG BRIDGE DRIVE

STATE PROJECT NO.: 6587-000-R89, P101, R201, C501

FEDERAL PROJECT NO.: NHPP-5B01(120)



4.2.2

**CONCEPTUAL  
ROADWAY PLANS**

FOR INDEX OF SHEETS SEE SHEET 1B



COMMONWEALTH OF VIRGINIA DEPARTMENT OF TRANSPORTATION

THIS PROJECT WAS DEVELOPED UTILIZING THE DEPARTMENT'S ENGINEERING DESIGN PACKAGE (GEOPAK). GEOPAK Computer Identification No. 116394

FHWA 534 DATA - 46104

Table with columns: STATE, FEDERAL AID PROJECT, ROUTE, STATE PROJECT, SHEET NO. Values: VA., NHPP-5B01( ), 6587, 6587-000-R89, 1

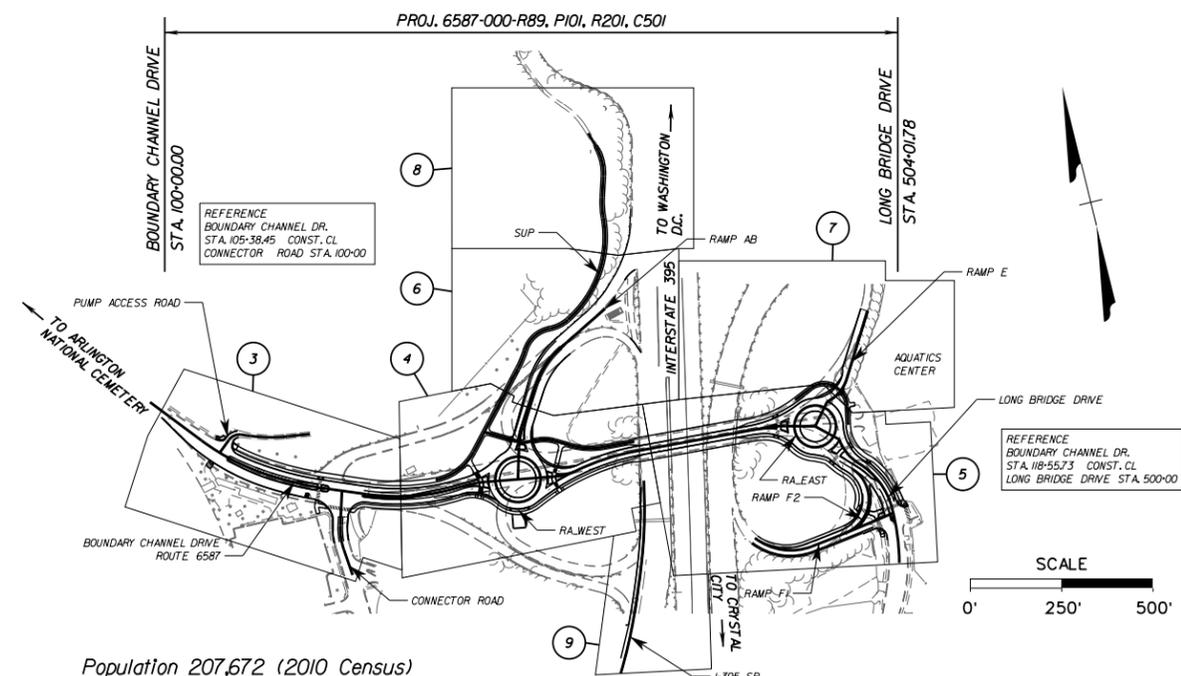
FUNCTIONAL CLASSIFICATION AND TRAFFIC DATA. BOUNDARY CHANNEL DRIVE - URBAN MINOR COLLECTOR. Fr: 0.06 MI. WEST OF CONNECTOR RD. To: LONG BRIDGE DRIVE. ADT (2020) 5900, ADT (2040) 8650, DHV 850, D (%) 64%, T (%) 3%, V (MPH) 30 MPH.

EXCEPTION TO VERTICAL CLEARANCE. LOCATION: BOUNDARY CHANNEL DR. UNDER I-395. EXISTING CLEARANCE: 13'-8". PROPOSED CLEARANCE: 14'-5". AASHTO MINIMUM VERTICAL CLEARANCE: 14'-6".

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

PLAN AND PROFILE OF PROPOSED STATE HIGHWAY COUNTY OF ARLINGTON BOUNDARY CHANNEL DRIVE (ROUTE 6587) & I-395 INTERCHANGE IMPROVEMENTS FROM: BOUNDARY CHANNEL 0.06 MI. WEST OF CONNECTOR ROAD TO: LONG BRIDGE DRIVE

CONVENTIONAL SIGNS. Table listing various signs and their symbols: 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, HEDGE, TREES, HEAVY WOODS, GROUND ELEVATION, GRADE ELEVATION.



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...

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.

Table with columns: 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. Includes data for sections PI01, R201, and C501.

Project Lengths are based on Boundary Channel Drive and Long Bridge Drive Baselines.

CONCEPTUAL ROADWAY PLANS

TIER 2 PROJECT. RECOMMENDED FOR APPROVAL FOR RIGHT OF WAY ACQUISITION. Infrastructure Investment Director, State Location and Design Engineer, Chief Financial Officer, Chief Engineer.

APPROVED FOR RIGHT OF WAY ACQUISITION. Chief of Policy.

RECOMMENDED FOR APPROVAL FOR CONSTRUCTION. Infrastructure Investment Director, State Location and Design Engineer, State Structure and Bridge Engineer, Chief Financial Officer.

APPROVED FOR CONSTRUCTION. Chief Engineer.

APPROVED. Division Administrator, Federal Highway Administration, U.S. Department of Transportation.

REVISIONS table with columns: NO., DATE, DESCRIPTION. Entry: 4/01/21.

PROJECT MANAGER Chris Barksdale, P.E., (703) 259-2768, (NOVA) SURVEYED BY, DATE DESIGN BY Rummel, Klepper, & Kahl LLP, (703) 246-0028 SUBSURFACE UTILITY BY, DATE

PROJECT MANAGER *Chris Barksdale P.E., (703) 259-2768, (NOVA)*  
 SURVEYED BY, DATE *Brian P. Fletcher L.S., (703) 259-2355, (2/20/2018), (NOVA)*  
 DESIGN BY *Bumel, Klepper, & Kohl LLP, (703) 246-0028*  
 SUBSURFACE UTILITY BY, DATE *Accumark, Inc. (703) 635-3060, (02/15/2019)*

# INDEX OF SHEETS

\*- NOT INCLUDED IN THIS PLAN SET

REVISED 4/01/21	STATE	ROUTE	STATE PROJECT	SHEET NO.
	VA.	6587	6587-000-R89, P101, R201, C501	IB

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

SHEET NO.	DESCRIPTION
1	TITLE SHEET
1A	* LOCATION MAP
1B	INDEX OF SHEETS
1C	UTILITY INFORMATION
(R) 1E	REVISION DATA SHEET
2A(1)-2A(4)	TYPICAL SECTIONS
2B	DETAILS
3	PLAN SHEET - BOUNDARY CHANNEL DRIVE STA. 100+00 TO STA. 107+00 - CONNECTOR ROAD - PUMP ACCESS ROAD
3A	PROFILE SHEET - BOUNDARY CHANNEL DRIVE STA. 100+00 TO STA. 107+00
3A(1)	PROFILE SHEET - CONNECTOR ROAD - PUMP ACCESS ROAD
4	PLAN SHEET - BOUNDARY CHANNEL DRIVE STA. 107+00 TO STA. 114+00 - RAMP AB STA. 100+00 TO STA. 102+00 - ROUNDABOUT WEST - SUP STA. 10+00 TO STA. 11+50
4A	PROFILE SHEET - BOUNDARY CHANNEL DRIVE STA. 107+00 TO STA. 114+00
4A(1)	PROFILE SHEET - RAMP AB
4A(2)	PROFILE SHEET - WEST ROUNDABOUT
4A(3)	PROFILE SHEET - SUP W1 STA. 10+00 TO STA. 13+00
4A(4)	PROFILE SHEET - SUP W2 STA. 20+00 TO STA. 24+19.42
5	PLAN SHEET - BOUNDARY CHANNEL DRIVE STA. 114+00 TO STA. 118+55.73 - LONG BRIDGE DRIVE - RAMP E STA. 402+50 TO STA. 402+78.26 - RAMP F1 - RAMP F2 - EAST ROUNDABOUT
5A	PROFILE SHEET - BOUNDARY CHANNEL DRIVE STA. 114+00 TO STA. 118+55.73
5A(1)	PROFILE SHEET - LONG BRIDGE DRIVE
5A(2)	PROFILE SHEET - RAMP F1
5A(3)	PROFILE SHEET - RAMP F2
5A(4)	PROFILE SHEET - EAST ROUNDABOUT
5A(5)	PROFILE SHEET - SUP E STA. 30+00 TO STA. 32+41.50
6	PLAN SHEET - RAMP AB STA. 102+00 TO STA. 105+49.17
6A	PROFILE SHEET - SUP STA. 13+00 TO STA. 18+25
7	PLAN SHEET - RAMP E STA. 400+00 TO STA. 402+50
7A	PROFILE SHEET - RAMP E
8	PLAN SHEET - SUP STA. 16+25 TO STA. 19+34.23
8A	PROFILE SHEET - SUP STA. 18+25 TO STA. 21+32.44
9	PLAN SHEET - I-395 SB
9A	PROFILE SHEET - I-395 SB

ROUTE	BOUNDARY CHANNEL DR.	LONG BRIDGE DR.	CONNECTOR ROAD	I-395 SB
From:	550' WEST OF CONNECTOR ROAD	BOUNDARY CHANNEL DR.	BOUNDARY CHANNEL DR.	BOUNDARY CHANNEL DR.
To:	LONG BRIDGE DRIVE	AQUATIC CENTER	PENTAGON POWER PLANT	JEFFERSON DAVIS HWY
FUNCTIONAL CLASSIFICATION	URBAN MINOR COLLECTOR	URBAN MAJOR COLLECTOR	URBAN LOCAL STREET	INTERSTATE
MIN. DESIGN SPEED	30 MPH	25 MPH	25 MPH	60 MPH
ADT (2020)	5,900	5,700	2,000	88,200
ADT (2040)	8,650	8,200	2,250	93,500
DHV (2040)	850	850	375	7,075
D (%) (design hour)	64.0%	64.0%	60.0%	1.0%
T (%) (design hour)	(R) 3.0%	3.0%	3.0%	8.0%
V (MPH)	30 MPH [1]	25 MPH	25 MPH	55 MPH
TC STD.	TC-5.11U (emax 4%)	TC-5.11ULS (emax 2%)	TC-5.11ULS (emax 2%)	TC-5.11 (emax 4%)
GEOMETRIC STD.	GS-7	GS-7	GS-8	GS-INT

[1] Roundabout V=25 MPH

ROUTE	RAMP AB (I-395 SB Off Ramp)	RAMP AB (I-395 SB On Ramp)	RAMP E	RAMP F
From:	I-395 SOUTHBOUND	BOUNDARY CHANNEL DR.	I-395 NORTHBOUND	I-395 NORTHBOUND
To:	BOUNDARY CHANNEL DR.	I-395 SOUTHBOUND	BOUNDARY CHANNEL DR.	LONG BRIDGE DR.
FUNCTIONAL CLASSIFICATION	INTERSTATE RAMP	INTERSTATE RAMP	INTERSTATE RAMP	INTERSTATE RAMP
MIN. DESIGN SPEED	30 MPH	20 MPH	20 MPH	25 MPH
ADT (2020)	2,600	1,900	1,600	3,800
ADT (2040)	3,350	2,550	2,550	4,100
DHV (2040)	530	280	150	770
D (%) (design hour)	100.0%	100.0%	100.0%	100.0%
T (%) (design hour)	3%	5%	6%	3%
V (MPH)	30 MPH	20 MPH	20 MPH	25 MPH
TC STD.	TC-5.11R (emax 8%)	TC-5.11R (emax 8%)	TC-5.11R (emax 8%)	TC-5.11R (emax 8%)
GEOMETRIC STD.	GS-R	GS-R	GS-R	GS-R

## CONCEPTUAL ROADWAY PLANS

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

PROJECT MANAGER *Chris Barksdale P.E., (703) 259-2768, (NOVA)*  
SURVEYED BY, DATE *Brian P. Fletcher L.S., (703) 259-2355, (2/20/2019) (NOVA)*  
DESIGN BY *Bumel, Klepper, & Kohl LLP, (703) 246-0028*  
SUBSURFACE UTILITY BY, DATE *Accumark, Inc. (703) 635-3060, (02/15/2019)*

# UTILITY INFORMATION

REVISED	STATE		PROJECT	SHEET NO.
	STATE	ROUTE		
	VA.	6587	6587-000-R89, P101, R201, C501	IC

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

## UTILITY LEGEND

□ EB Electric Box	□ TB Telephone Booth
■ Electric Guy Pole	● Telephone Guy Pole
⊕ Electric Ground Light	○ Telephone Guy Wire
⊙ Electric Guy Wire	⊙ Test Holes (All Utilities)
⊞ Electric Hand Hole	⊞ Telephone Cell Tower
⊞ Electric Meter	⊞ Telephone Hand Hole
⊞ Electric Manhole	⊞ Telephone Manhole
⊞ Electric Marker Post	⊞ Telephone Marker Post
⊞ Electric Pedestal	⊞ Telephone Pole
⊞ Electric Stub	⊞ Telephone Pedestal
⊞ Electric Power Pole	⊞ Telephone Riser Pole
⊞ Electric Power Riser Pole	⊞ Television Satellite Dish
⊞ Electric Light Pole	⊞ Tower Anchor
⊞ Electric Luminaire	⊞ Traffic Camera Pole
⊞ End of Information (All Utilities)	⊞ Traffic Control Hand Hole
⊞ Fire Hydrant	⊞ Traffic Control Manhole
⊞ Fiber Optic Hand Hole	⊞ Traffic Control Guy Wire
⊞ Fiber Optic Marker	⊞ Traffic Control Pedestal
⊞ Fiber Optic Manhole	⊞ Traffic Signal Guy Pole
⊞ Fiber Optic Pedestal	⊞ Traffic Signal Pole
⊞ Gas Meter	⊞ Traffic Signal Pole w/Luminaire
⊞ Gas Manhole	⊞ Telephone Stub
⊞ Gas Marker Post	⊞ Television Hand Hole
⊞ Gas Monitoring Well	⊞ Television Manhole
⊞ Gas Stub	⊞ Television Marker Post
⊞ Gas Test Station	⊞ Television Pedestal
⊞ Gas Valve	⊞ Television Stub
⊞ Gas Vent	⊞ Water Blow Off
⊞ Gas Well	⊞ Water Well
⊞ Sanitary Air Release Valve	⊞ Water Meter
⊞ Sanitary Flow Arrow	⊞ Water Manhole
⊞ Sanitary Stub	⊞ Water Marker Post
⊞ Sewer Clean Out	⊞ Water Spigot
⊞ Sanitary Force Main Valve	⊞ Water Siamese Connection
⊞ Sanitary Marker Post	⊞ Water Stub
⊞ Sanitary Manhole	⊞ Water Valve
⊞ Sewer Vent Pipe	⊞ Water Post Inspection Valve
⊞ Unknown Clean Out	⊞ Water Irrigation Valve
⊞ Unknown Hand Hole	⊞ Water Steam Manhole
⊞ Unknown Manhole	⊞ Water Steam Vent Pipe

CAFO	Fiber Optic Cable Television
CHEM	Chemical Line (above or below ground)
FO Duct	Underground Fiber Optic Duct
FUEL	Fuel Line (above or below ground)
G	Gas Line *
G Duct	Gas Line Duct
SAW	Gravity Sewer *
SFM	Sanitary Force Main *
TCFO	Traffic Control Fiber Optic
T/FO	Telephone Fiber Optic
FO	Underground Fiber Optic
Unk	Unknown Utility Line
E	Underground Power Cable
E Duct	Underground Power Cable Duct
T/Tg	Underground Telephone Cable
T/Tg Duct	Underground Telephone Cable Duct
TC	Underground Traffic Control
TC Duct	Underground Traffic Control Duct
CATV	Underground Television Cable
CATV Duct	Underground Television Cable Duct
VS	Vacuum Sewer
W	Water Line *
W Duct	Water Line Duct
Unk	⊙ Depicted According To Utility Records **
Unk	◇ Abandoned According To Utility Records **
Unk	⊞ According To Miss Utility Information **

\* Designate size (Variable from 0.75" to 54")  
\*\* Designate type (Unknown line is shown)

### Utility Owners:

#### Electric:

Dominion Virginia Power (DOM)  
701 E. Cary Street  
Richmond, VA  
Andrew J. Brooks  
(804) 771-3655

PEPCO  
3400 Benning Road NE  
Washington, DC  
Stephen J. Park, PE  
(202) 388-2222

#### Water & Sewer:

Arlington County (APW)  
Department Of Environmental Services  
2100 Clarendon Blvd., Ste. 813  
Arlington, VA  
Allison C. Smith  
(703) 228-0648

#### Telecom:

Verizon (VZN)  
9401 Peabody Street  
Manassas, VA  
William (Bill) Lacy  
(703) 369-9571

Windstream KDL (WXN)  
Jerry Richardson  
(804) 422-4258

Jones Communication (JUC)  
Robert C. Jones  
(703) 283-4064

Verizon Business (MCI)  
2400 N. Glenville Drive  
Richardson, TX  
(800) 624-9675

Zayo Communications (ZAY)  
13861 Sunrise Valley Drive, Ste. 450  
Herndon, VA  
Kris Kobylski  
(571) 220-4813

FiberLight, LLC (FBL)  
950 Herndon Parkway, Ste. 250  
Herndon, VA  
Karl Stroolman  
(410) 979-0384

Century Link, Inc./ Level 3 Communications (LTC)  
1025 El Dorado Blvd.  
Broomfield, CO  
Pat Provost  
(720) 888-4686

AT&T Corp. (ATT)  
4800 Winchester Blvd.  
Frederick, MD  
Gary Wigfield  
(301) 874-1180  
Linard Miller  
(702) 624-4956

#### Gas:

Washington Gas (WGL)  
6800 VERSAR Center, Ste. 430  
Springfield, VA  
Mike Edwards  
(703) 402-1513

### General Notes:

Date Of Preliminary Submittal: N/A  
Date Of Final Submittal: 02/15/2019

Accumark, Inc. Performed An Underground Utility Investigation Effort In January/February 2019 Within The Project Limits Specified By The Client. The Utility Designation Was Performed In Accordance With Quality Level B (Location Depicted Per Electronic Information Obtained) Standards, Or Unless Otherwise Noted Hereon As Quality Levels C Or D, Datur (Location Shown According To Utility Records), Parole Information (Verbal) And By Surface Features.

Quality Control / Quality Assurance Review Performed By Frank R. Richardson, II, L.S. - Accumark, Inc.

The Utility Sizes Shown Herein Are Based On Information Provided By The Utility Company's Owner, By Written Records, By Verbal Information Or By Observed Visual Evidence.

This Survey Is Not A Current Boundary Survey And Does Not Depict Boundary Or Right-Of-Way Information.

Surveyed Locations Of Designated Utilities May Not Represent The Exact Centerline Of The Utility. Test Holes Will Be Necessary To Identify The Exact Centerline.

### Utility Field Location Reference Notes:

All Horizontal And Vertical Survey Data Contained In Utility Mapping File "su99580.dgn" Are Referenced To Traverse Stations / Control Points As Shown In A PDF File Entitled "BW\_PDF0046-01.pdf" Provided By VDOT Via Email On 11/28/2018.

Any Duplicate Utility Structures Survey Located But Also Found Within The Base Mapping Provided Have Been Utilized By Accumark, Inc's Internal QA/QC Of The Utility Mapping. The Base Mapping Files Utilized Are Entitled "s99580.dgn" Received Via Email From VDOT On 11/28/2018.

### Utility Notes:

- U1 Area Under Construction, Crews Unable To Designate.
- U2 Designator Notes Other Conduits Were Found In This Area But Unable To Designate.
- W1 16" x 12" Reducer In Area Per Records.
- W2 Fire Hydrant Shown On Records Not Found In Field.
- W3 Water Lines Not Shown On Records Provided By Utility Owners.
- FO1 Multiple Fiber Optic Owners Shown Per Records. Designator Unable To Electronically Locate. Records Indicate Possibility Of Being Located Within WMATA Metro Tunnel.

## CONCEPTUAL ROADWAY PLANS

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

PROJECT MANAGER *Chels Barksdale P.E., (T03) 259-2768, (NOVA)*  
SURVEYED BY, DATE *Brian P. Fletcher L.S., (T03) 259-2355, (2/20/2018) (NOVA)*  
DESIGN BY *Bumel, Kapper, & Kohl LLP, (T03) 246-0028*  
SUBSURFACE UTILITY BY, DATE *Accumark, Inc., (T03) 635-3060, (02/15/2019)*

# REVISION DATA SHEET

REVISED 4/01/21 4/16/21 5/05/21	STATE	ROUTE	STATE PROJECT	SHEET NO.
	VA.	6587	6587-000-R89, P101, R201, C501	1E

State Project: 6587-000-R89, P101, R201, C501  
Federal Project: NHPP-5B01K )  
From: 0.06 MI. WEST OF CONNECTOR RD.  
To: LONG BRIDGE DRIVE  
UPC Number: 116394

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

⑥ Date: April 1, 2021 Project 6587-000-R89, P101, R201, C501  
 Sheet 1: Updated the truck traffic data percentage  
 Sheet 1B: Added Revision Data Sheet to Index, Updated the truck traffic data percentage  
 Sheet 2A11: Revised typical section to call out 10' Asphalt Shared Use Path  
 Sheet 2A2: Revised median callout to S'd, MS-1A  
 Sheet 2A4: Added typical section to show MB-7F barrier  
 Sheet 4: Curb modified to tie in to MB-7D along Ramp AB  
 Sheet 6: Curb modified to tie in to MB-7D along Ramp AB  
 Sheet 9: Paved shoulder along I-395 revised to 10' wide

⑦ Date: April 21, 2021 Project 6587-000-R89, P101, R201, C501  
 Sheet 2A11: Revised typical section to call out change in width to Boundary Channel Drive.  
 Sheet 2A2: Ramp AB typical section modified to show proposed guardrail  
 Sheet 2A4: SUP WI typical sections modified to remove MB-7F  
 Sheet 3: Mill and overlay, demolition of pavement, and full depth pavement adjusted at start of project, Westbound Boundary Channel Drive widened  
 Sheet 4: Eastbound Boundary Channel Drive widened  
 Sheets 6 and 8: Removed MB-7F along SUP WI and added guardrail along face of curb at tying into existing guardrail  
 Sheet 9: Revised limits of mill and overlay, demolition of pavement, and full depth pavement

⑧ Date: May 05, 2021 Project 6587-000-R89, P101, R201, C501  
 Sheet 2A11: Revised typical section for Boundary Channel Drive under I-395.  
 Sheet 4: Boundary Channel Drive under I-395 widened.  
 Sheet 5: Boundary Channel Drive under I-395 widened.

CONCEPTUAL ROADWAY PLANS

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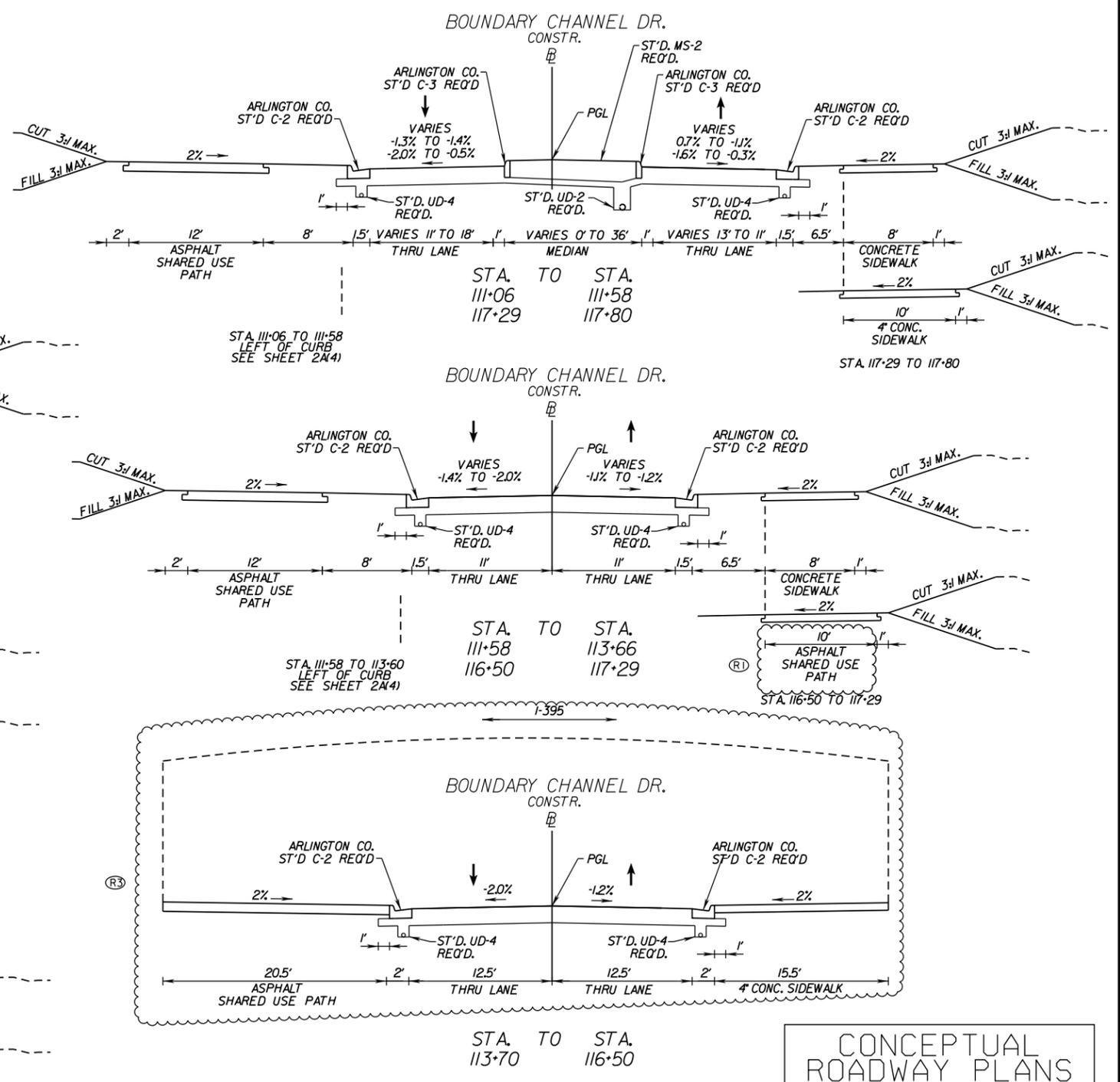
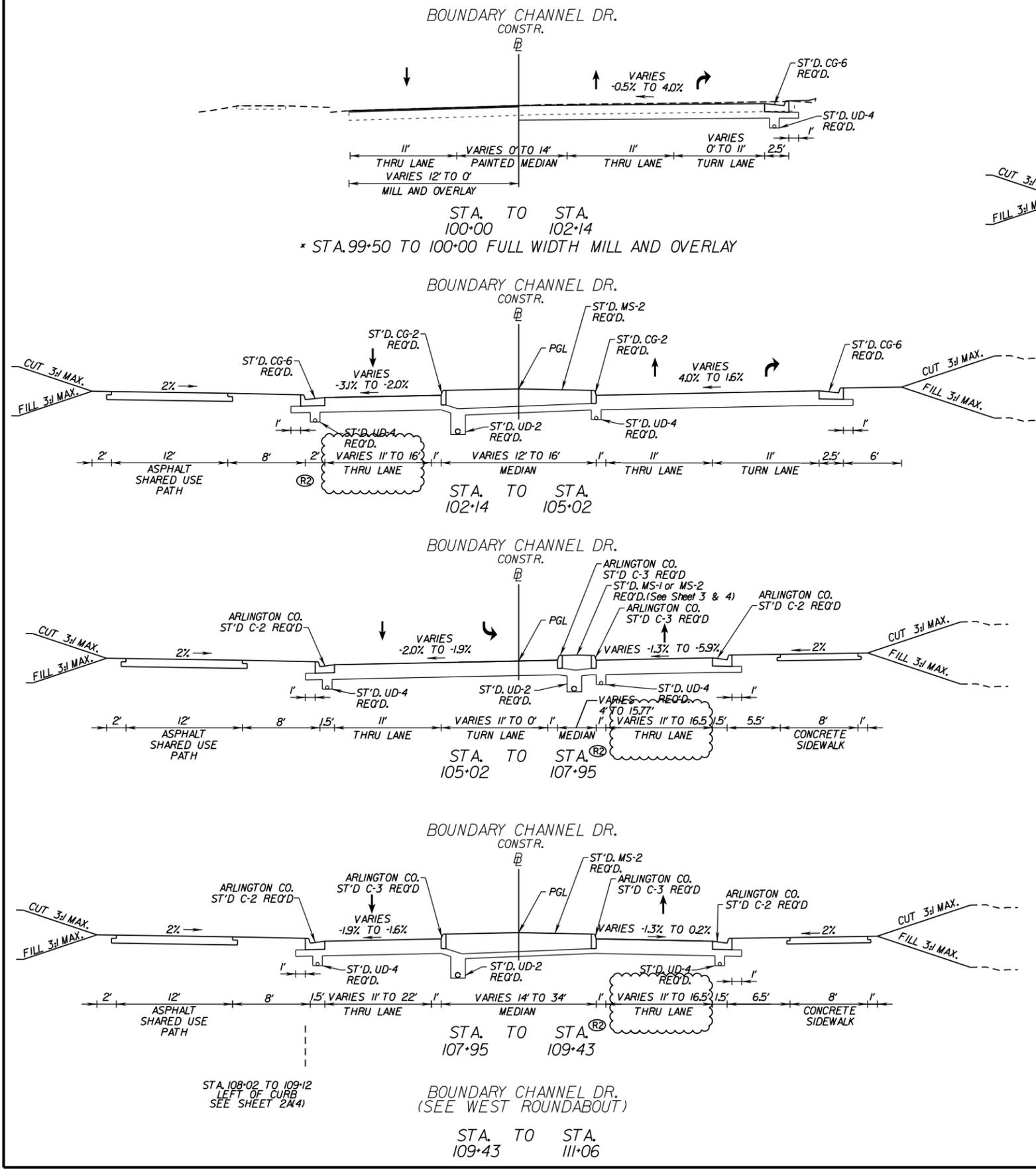
PROJECT 6587-000-R89	SHEET NO. 1E
-------------------------	-----------------

PROJECT MANAGER: Chris Barksdale, P.E., (703) 259-2768, (NOVA)  
SURVEYED BY: DATE Brian P. Fletcher, L.S., (703) 259-2355, (12/04/2018), (NOVA)  
DESIGN BY: Bummel, Klepper, & Kahl LLP, (703) 246-0028  
SUBSURFACE UTILITY BY: DATE Accumar, Inc. (703) 635-3060, (02/15/2019)

# TYPICAL SECTIONS

REVISED	STATE	ROUTE	PROJECT	SHEET NO.
4/01/21 4/21/21 5/05/21	VA.	6587	6587-000-R89, P101, R201, C501	2A(1)

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## CONCEPTUAL ROADWAY PLANS

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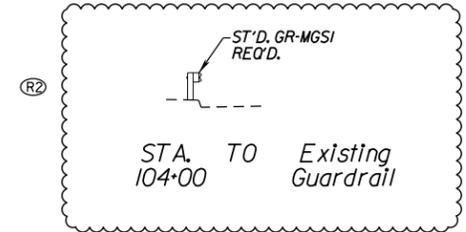
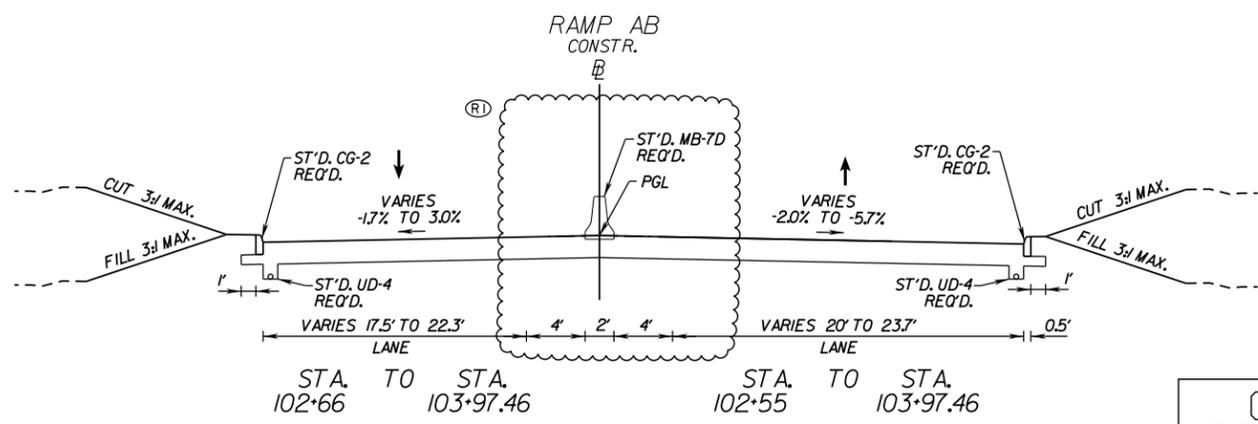
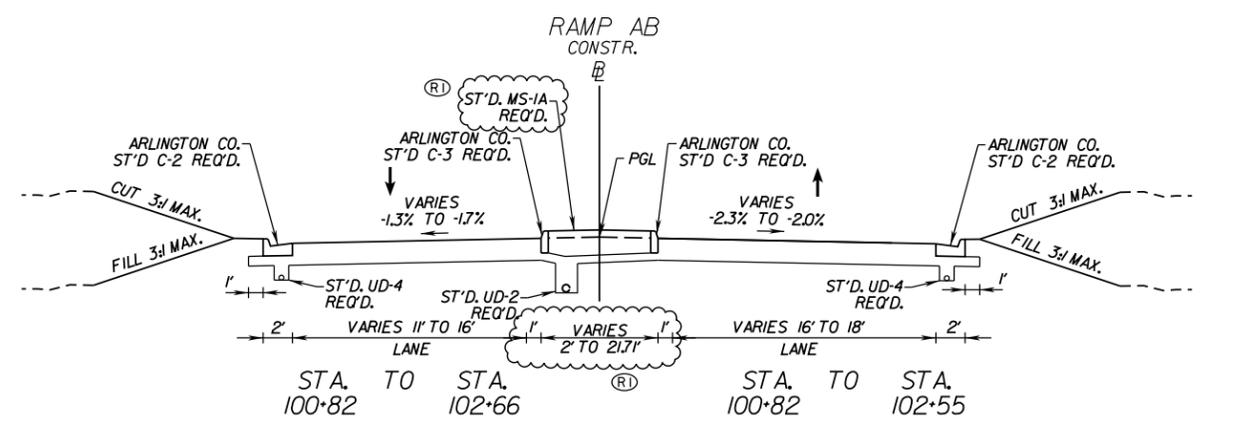
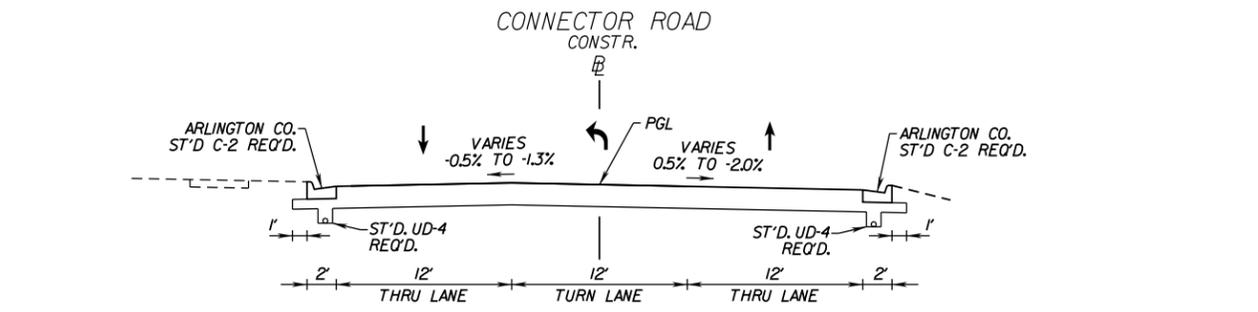
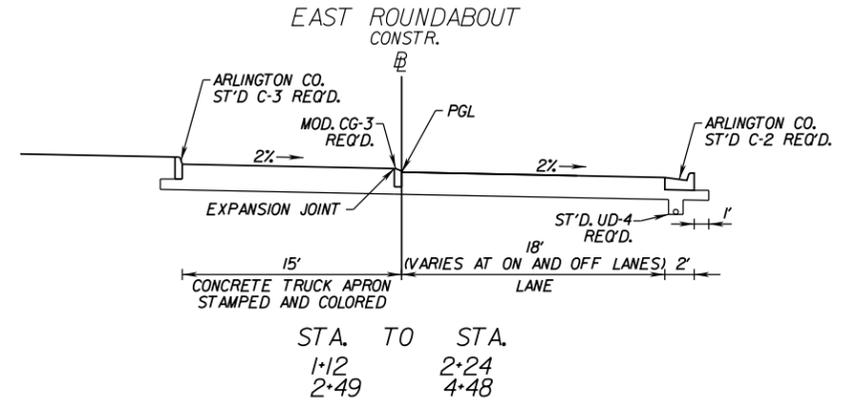
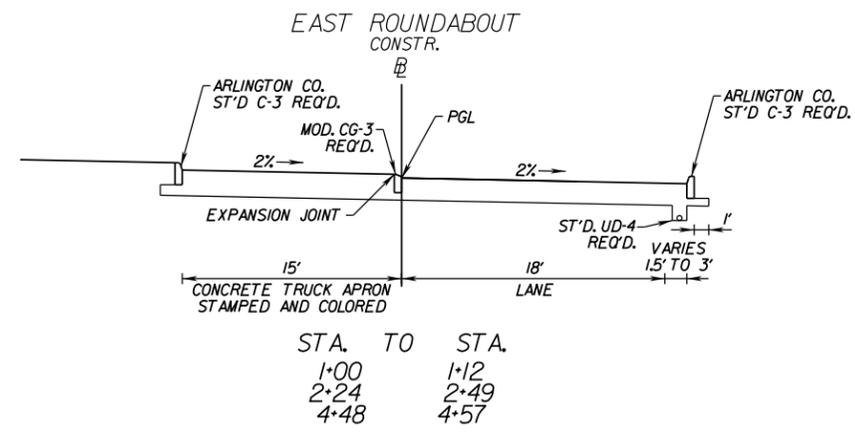
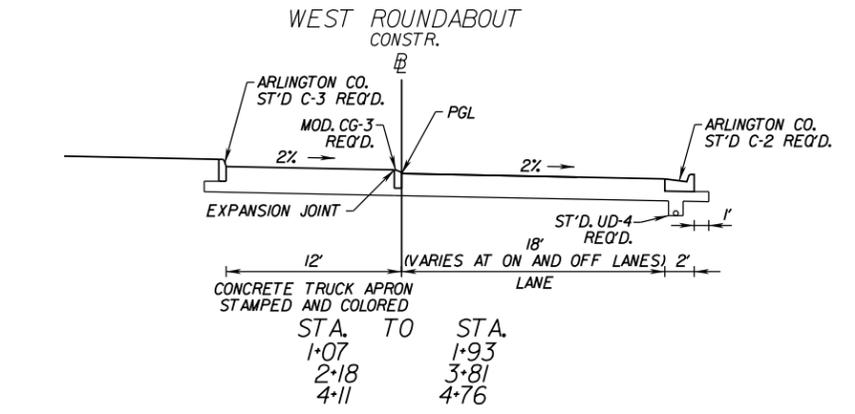
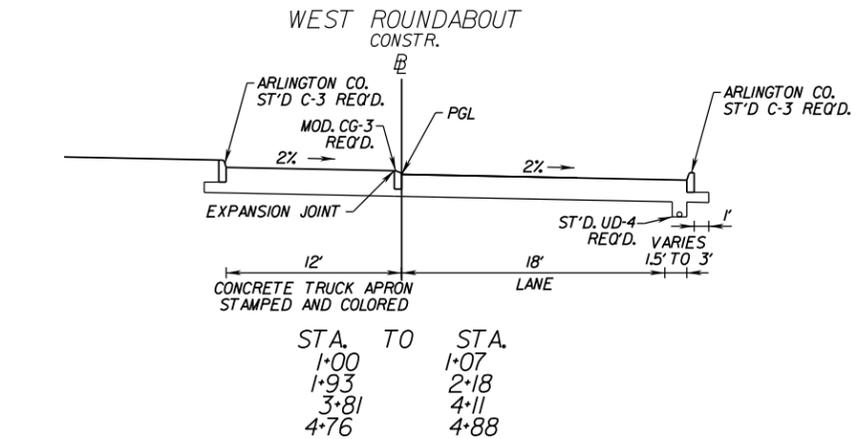
PROJECT	SHEET NO.
6587-000-R89	2A(1)

PROJECT MANAGER *Chris Barksdale P.E., (703) 259-2768, (NOVA)*  
SURVEYED BY, DATE *Brian P. Fletcher L.S., (703) 259-2355, (2/20/2018), (NOVA)*  
DESIGN BY *Bumel, Klepper, & Kohl LLP, (703) 246-0028*  
SUBSURFACE UTILITY BY, DATE *Accumark, Inc. (703) 635-3060, (02/15/2019)*

# TYPICAL SECTIONS

REVISED 4/01/21 4/16/21	STATE VA.	ROUTE 6587	STATE PROJECT 6587-000-R89, P101, R201, C501	SHEET NO. 2A(2)
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DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT



## CONCEPTUAL ROADWAY PLANS

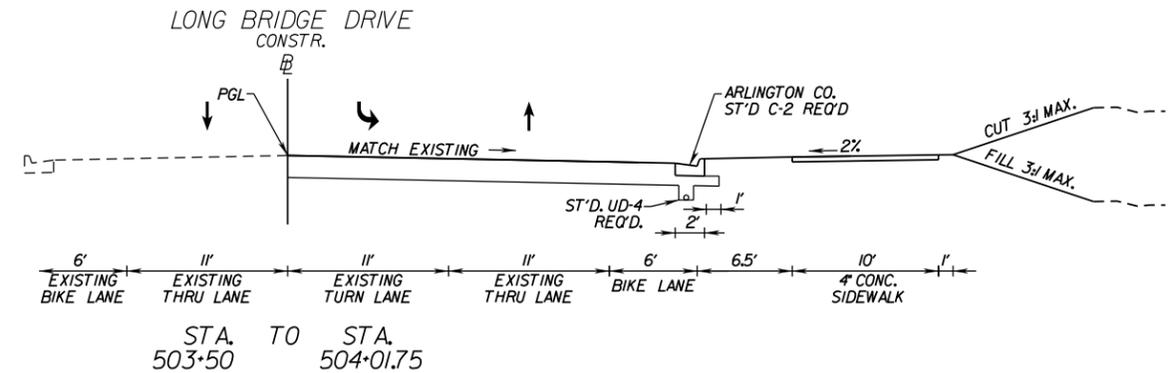
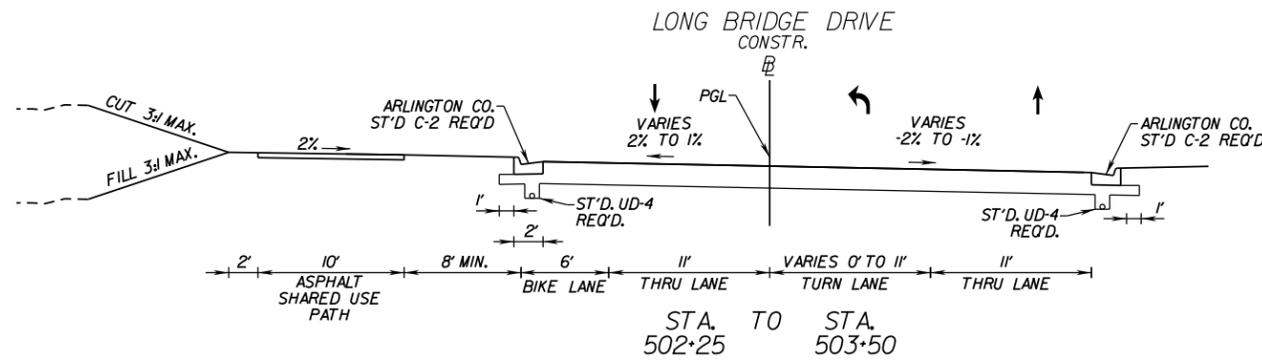
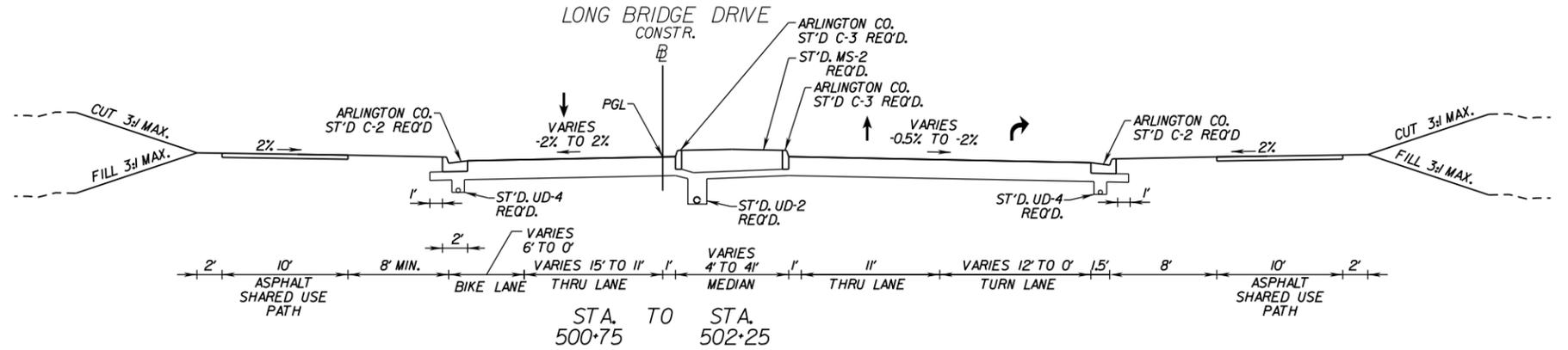
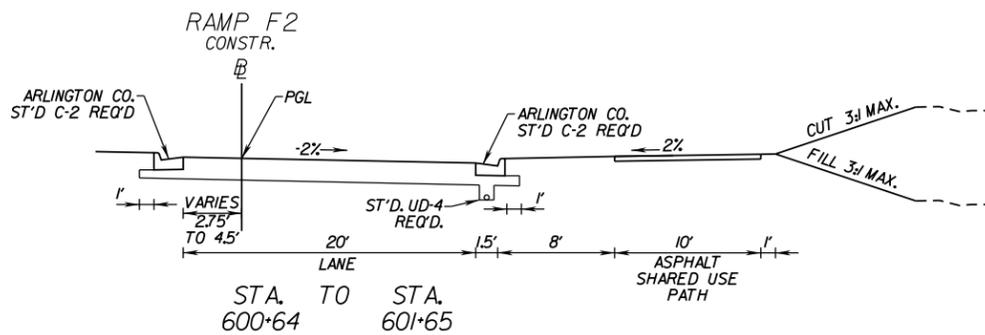
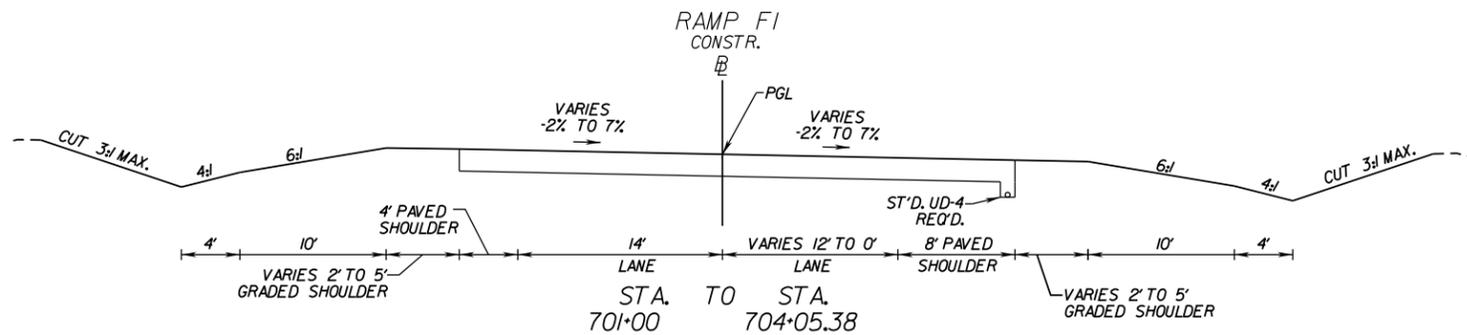
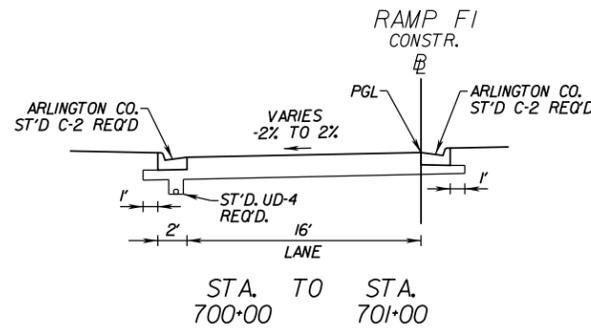
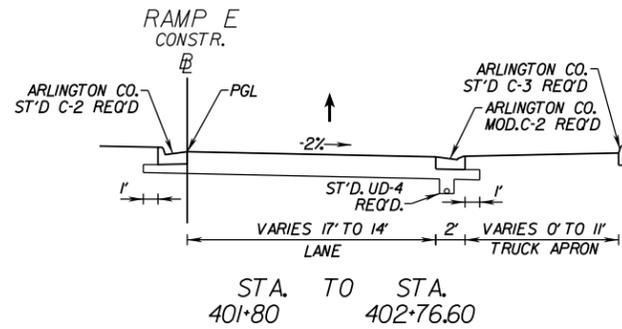
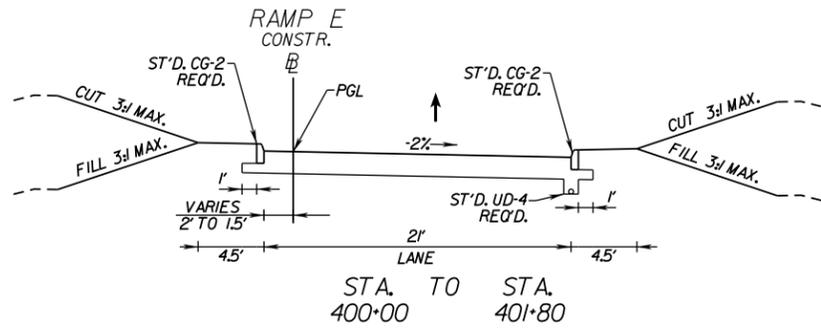
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PROJECT MANAGER Chrs. Barksdale P.E. (703) 259-2768 (NOVA)  
SURVEYED BY, DATE Brian P. Fletcher L.S. (703) 259-2355 (12/04/2018) (NOVA)  
DESIGN BY Bummel, Klepper, & Kahl LLP (703) 246-0028  
SUBSURFACE UTILITY BY, DATE Accurmark, Inc. (703) 635-3060 (02/15/2019)

# TYPICAL SECTIONS

REVISED	STATE	ROUTE	STATE PROJECT	SHEET NO.
	VA.	6587	6587-000-R89, P101, R201, C501	

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



## CONCEPTUAL ROADWAY PLANS

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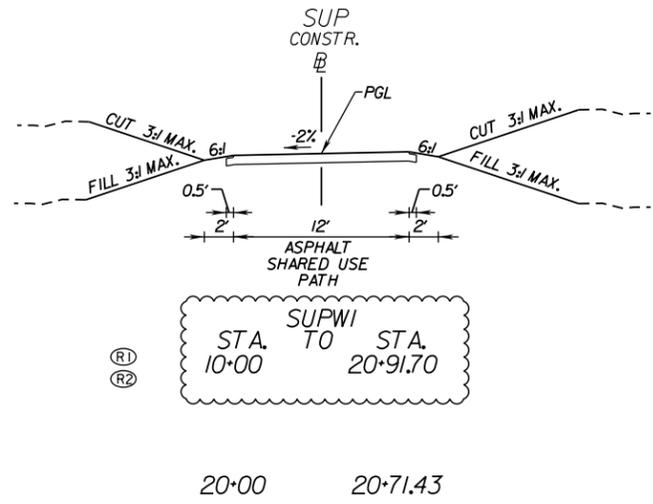
PROJECT MANAGER: Chris Barksdale, P.E., (703) 259-2768, (NOVA)  
 SURVEYED BY, DATE: Brian P. Fletcher, L.S., (703) 259-2355, (12/04/2018), (NOVA)  
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 SUBSURFACE UTILITY BY, DATE: Accurmark, Inc., (703) 635-3060, (02/15/2019)

REVISED	STATE		PROJECT	SHEET NO.
	DATE	ROUTE		
4/01/21 4/16/21	VA.	6587	6587-000-R89, P101, R201, C501	2A(4)

# TYPICAL SECTIONS

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

MINIMUM PAVEMENT SECTIONS SHALL BE IN ACCORDANCE WITH RFP PART II SECTION 2.6.1 AND AS GENERALLY SUMMARIZED HEREIN:



## Boundary Channel Drive, Ramps, Long Bridge Drive and Connector Road

Surface: 2" Asphalt Concrete, Type SM-9.5D  
 Intermediate: 2" Asphalt Concrete, Type IM-19.0A  
 Base: 6" Asphalt Concrete, Type BM-25.0A  
 Subbase: 10" Aggregate Base Material, Type I, Size No. 21B connected to a standard UD-4 edgedrain. For widening on the high side of the existing pavement cross-slope, use 6<sup>3</sup>/<sub>2</sub> Cement Treated Aggregate per the VDOT Special Provision for Cement Treated Aggregate in lieu of the 21B.

## Roundabout Truck Apron

Surface: 10" Plain Jointed Hydraulic Cement Concrete pavement per standard PR-2. A joint layout plan shall be provided for the concrete pavement showing contraction joints, expansion joints, and isolation joints as necessary. The maximum slab dimension for unreinforced concrete pavement shall be no greater than 1.25 times the smaller slab dimension.

Paved shoulders - use the full depth pavement as specified above.

Subbase: 14" Aggregate Base Material, Type I, Size No. 21B connected to a standard UD-4 edgedrain. The subgrade for the aggregate subbase (21B) for the truck apron and the roundabout pavement shall be continuous with the subbase for the adjacent pavement to provide continuous subbase drainage.

## I-395 Widening and Paved Shoulder

Surface: 2" Asphalt Concrete, Type SM-12.5E  
 Intermediate: 2" Asphalt Concrete, Type IM-19.0D  
 Base: 11<sup>3</sup>/<sub>2</sub> Asphalt Concrete, Type BM-25.0A  
 Subbase: 10" Aggregate Base Material, Type I, Size No. 21B connected to a standard UD-4 edgedrain. For widening on the high side of the existing pavement cross-slope, use 6<sup>3</sup>/<sub>2</sub> Cement Treated Aggregate per the VDOT Special Provision for Cement Treated Aggregate in lieu of the 21B.

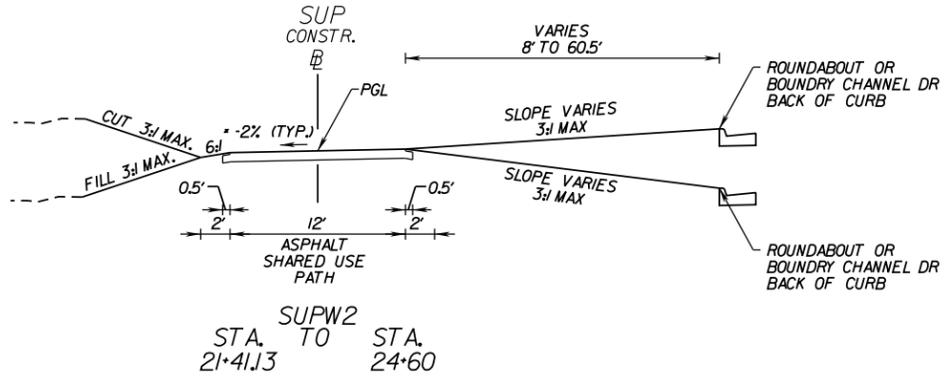
## Shared Use Path

Surface: 2" Asphalt Concrete, Type SM-9.5A estimated at 240 lbs./sy  
 Subbase: 6" Aggregate Base Material, Type I, Size No. 21B extended 6" beyond the edge of the surface material.

Paved shoulders - use the full depth pavement as specified above.

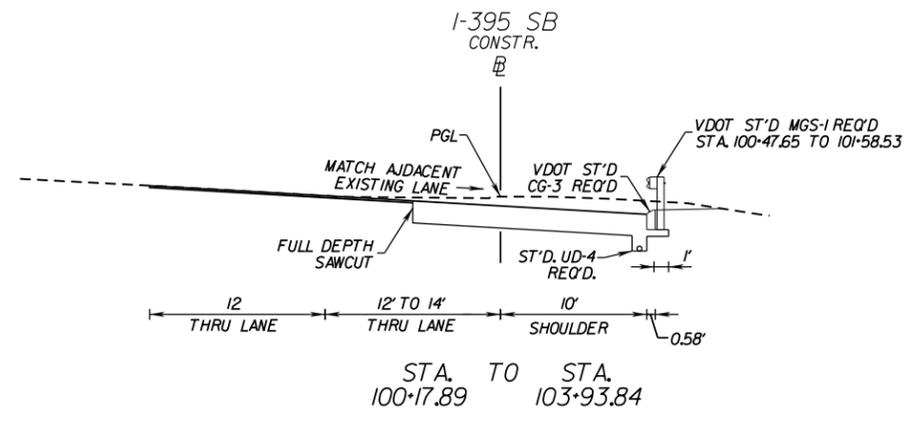
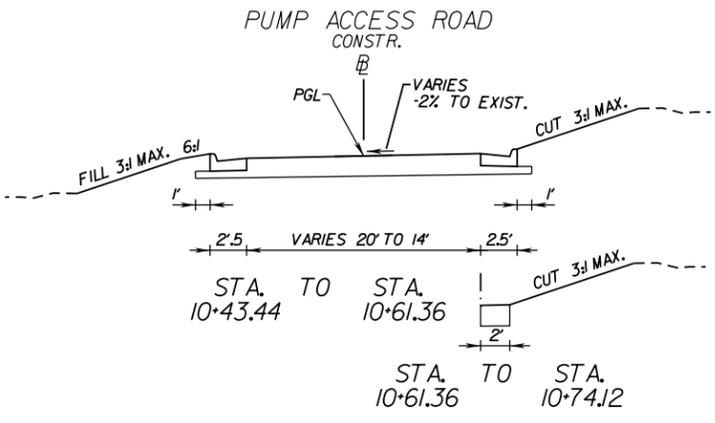
## Sidewalk

Surface: 4" Hydraulic Cement Concrete, Class A3  
 Subbase: 4" Aggregate Base Material, Type I, Size No. 21B extended 4" beyond the edge of the surface material.



BOUNDARY CHANNEL DR  
 STA. 108+02 TO STA. 109+12  
 STA. 111+06 TO STA. 113+60

\*SLOPE VARIES - SEE PROFILES



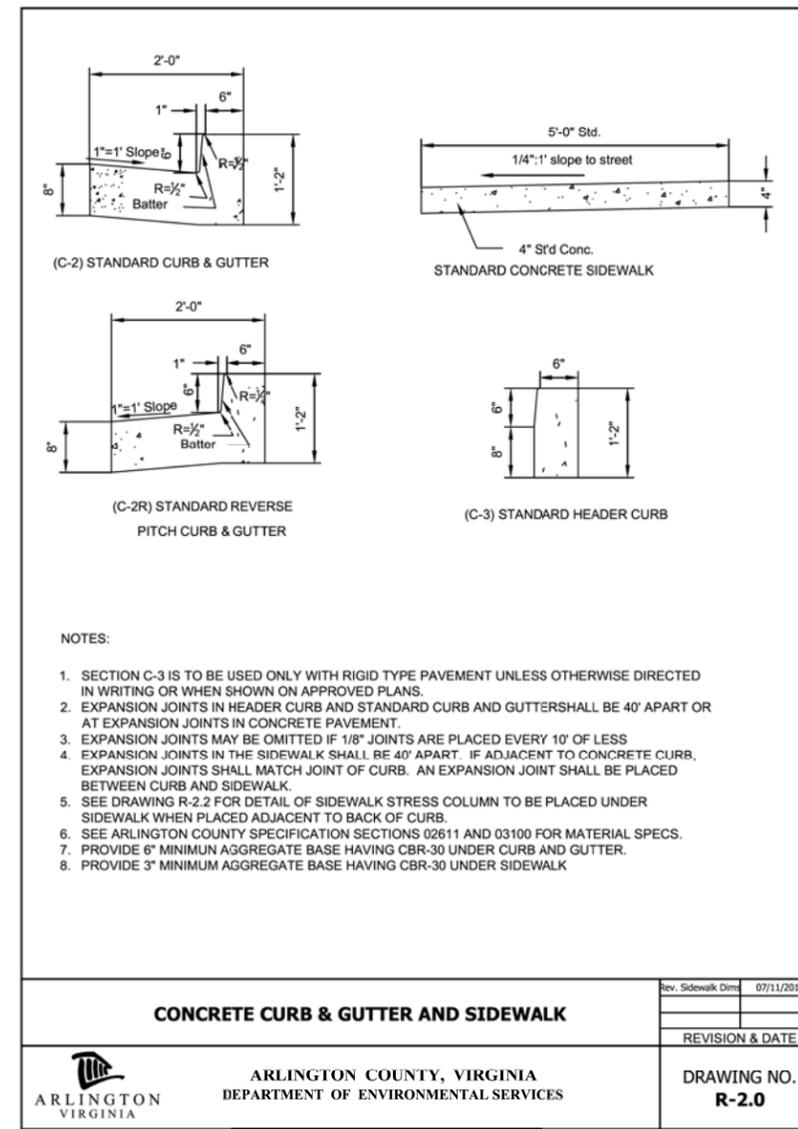
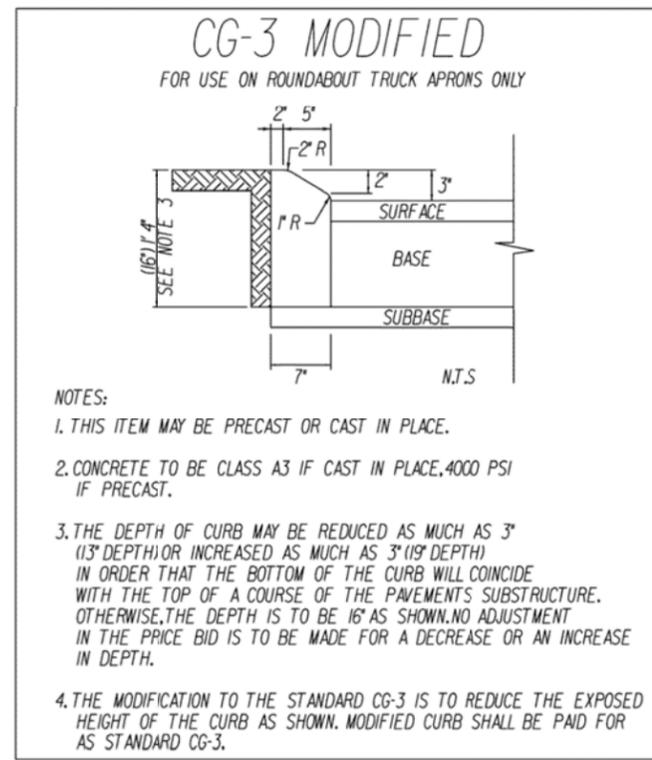
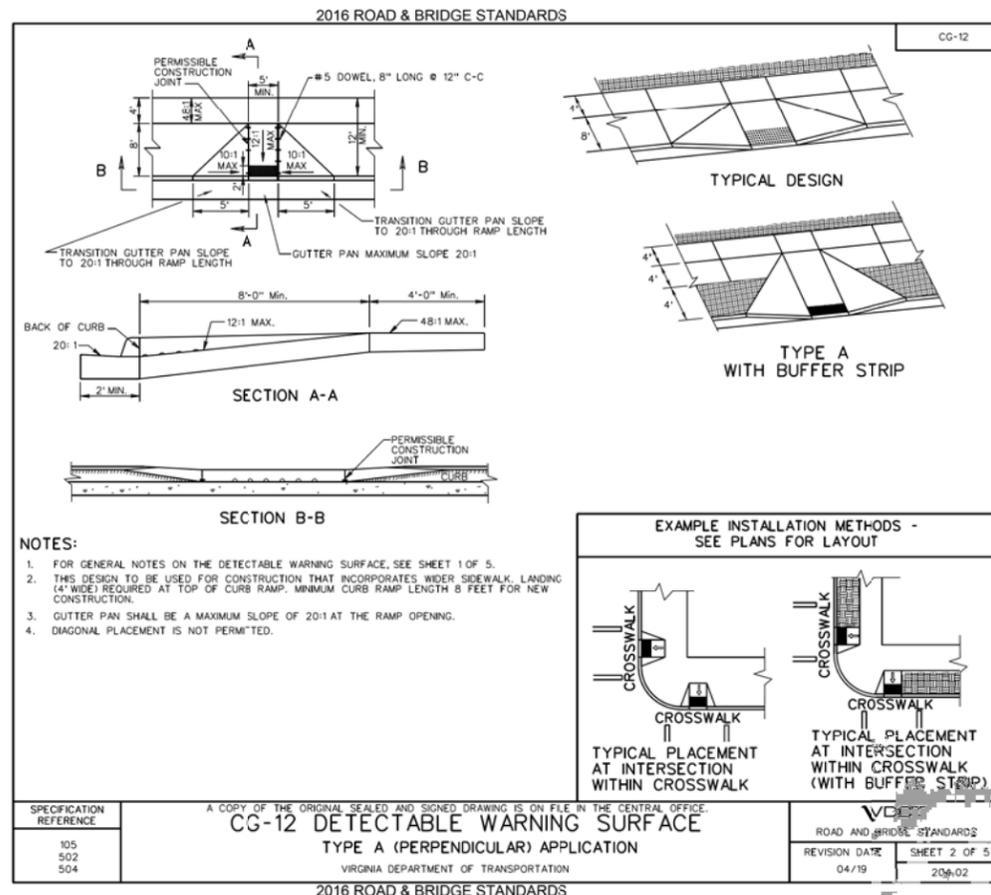
## CONCEPTUAL ROADWAY PLANS

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

PROJECT MANAGER *Chris Barksdale P.E., (703) 259-2768, (NOVA)*  
 SURVEYED BY, DATE *Brian P. Fletcher L.S., (703) 259-2355, (2/20/2019), (NOVA)*  
 DESIGN BY *Bumel, Klepper, & Kohl LLP, (703) 246-0028*  
 SUBSURFACE UTILITY BY, DATE *Accumark, Inc., (703) 635-3060, (02/15/2019)*

REVISED	STATE		PROJECT	SHEET NO.
	STATE	ROUTE		
	VA.	6587	6587-000-R89, P101, R201, C501	2B

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



- NOTES:
- SECTION C-3 IS TO BE USED ONLY WITH RIGID TYPE PAVEMENT UNLESS OTHERWISE DIRECTED IN WRITING OR WHEN SHOWN ON APPROVED PLANS.
  - EXPANSION JOINTS IN HEADER CURB AND STANDARD CURB AND GUTTERS SHALL BE 40' APART OR AT EXPANSION JOINTS IN CONCRETE PAVEMENT.
  - EXPANSION JOINTS MAY BE OMITTED IF 1/8" JOINTS ARE PLACED EVERY 10' OF LESS.
  - EXPANSION JOINTS IN THE SIDEWALK SHALL BE 40' APART. IF ADJACENT TO CONCRETE CURB, EXPANSION JOINTS SHALL MATCH JOINT OF CURB. AN EXPANSION JOINT SHALL BE PLACED BETWEEN CURB AND SIDEWALK.
  - SEE DRAWING R-2.2 FOR DETAIL OF SIDEWALK STRESS COLUMN TO BE PLACED UNDER SIDEWALK WHEN PLACED ADJACENT TO BACK OF CURB.
  - SEE ARLINGTON COUNTY SPECIFICATION SECTIONS 02611 AND 03100 FOR MATERIAL SPECS.
  - PROVIDE 6" MINIMUM AGGREGATE BASE HAVING CBR-30 UNDER CURB AND GUTTER.
  - PROVIDE 3" MINIMUM AGGREGATE BASE HAVING CBR-30 UNDER SIDEWALK.

CONCEPTUAL  
ROADWAY PLANS

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PROJECT MANAGER *Chris Barksdale P.E., (703) 259-2768, (NOVA)*  
SURVEYED BY, DATE *Brian P. Fletcher L.S., (703) 259-2355, (2/20/2018), (NOVA)*  
DESIGN BY *Bummel, Klepper, & Kahl LLP, (703) 246-0028*  
SUBSURFACE UTILITY BY, DATE *Accumark, Inc. (703) 635-3060, (02/15/2019)*

# CONCEPTUAL ROADWAY PLANS

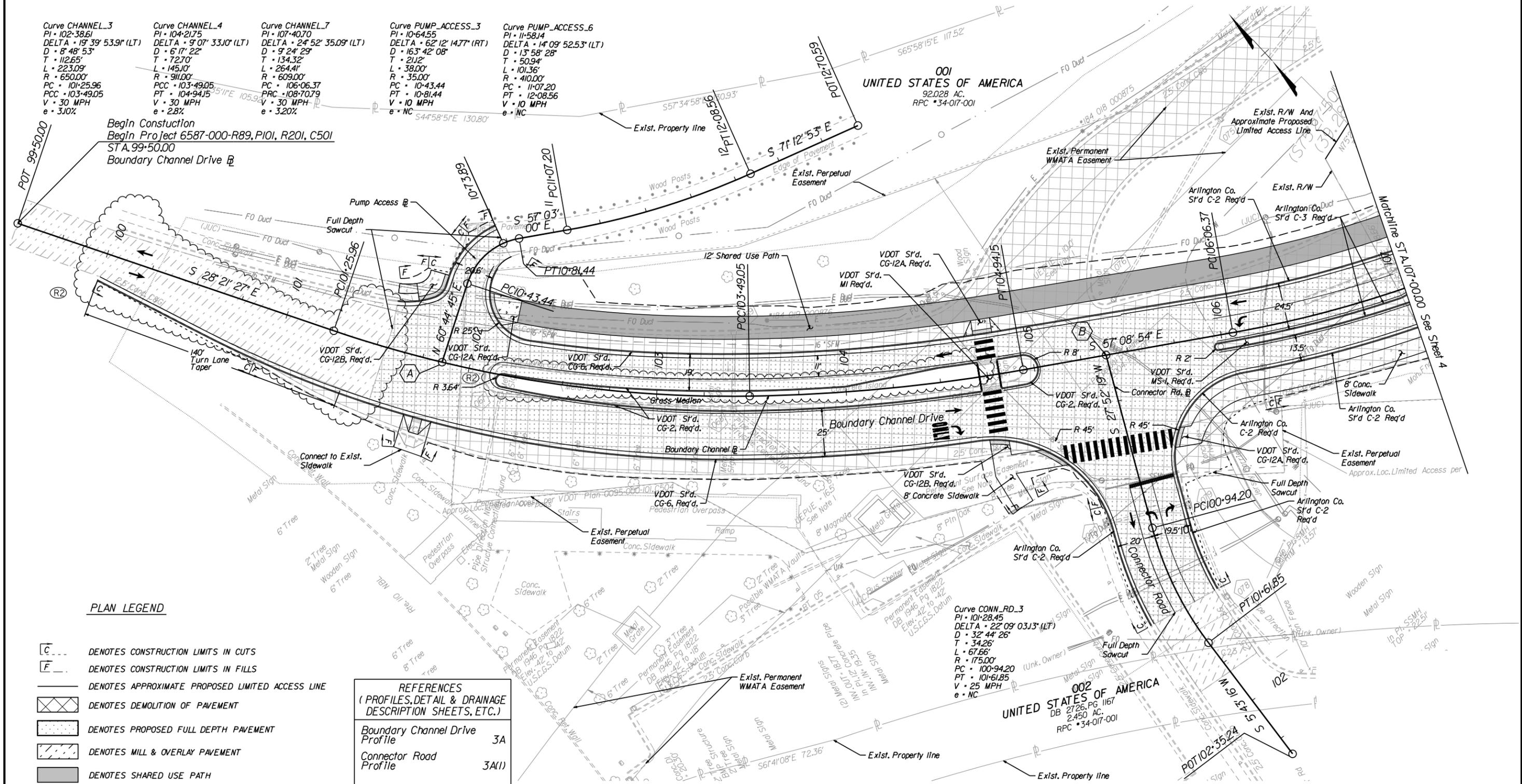
THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.

REVISED 4/16/21	STATE VA.	ROUTE 6587	STATE PROJECT 6587-000-R89, P101, R201, C501	SHEET NO. 3
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DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

- A** STA 101+85.45 Boundary Channel Drive @ -  
STA 10+00.00 Pump Access @  
Δ = 85°38'29" (RT)
- B** POT Sta.105+38.45 Boundary Channel Drive @ -  
POT Sta.100+00 Connector Road @  
Δ = 94°58'47" (RT)

- |   |   |  |   |   |
|---|---|--|---|---|
| <b>Curve CHANNEL_3</b><br>PI • 102+38.61<br>DELTA • 19°39' 53.9" (LT)<br>D • 8' 48' 5.3"<br>T • 112.65'<br>L • 223.09'<br>R • 650.00'<br>PC • 101+25.96<br>PCC • 103+49.05<br>V • 30 MPH<br>e • 3.10% | <b>Curve CHANNEL_4</b><br>PI • 104+21.75<br>DELTA • 9°07' 33.10" (LT)<br>D • 6' 17' 2.2"<br>T • 72.70'<br>L • 145.10'<br>R • 911.00'<br>PCC • 103+49.05<br>PT • 104+94.15<br>V • 30 MPH<br>e • 2.8% | <b>Curve CHANNEL_7</b><br>PI • 107+40.70<br>DELTA • 24°52' 35.09" (LT)<br>D • 9' 24' 2.9"<br>T • 134.32'<br>L • 264.41'<br>R • 609.00'<br>PC • 106+06.37<br>PRC • 108+70.79<br>V • 30 MPH<br>e • 3.20% | <b>Curve PUMP_ACCESS_3</b><br>PI • 10+64.55<br>DELTA • 62°12' 14.7" (RT)<br>D • 163' 42' 0.8"<br>T • 211.2'<br>L • 38.00'<br>R • 35.00'<br>PC • 10+43.44<br>PT • 10+81.44<br>V • 10 MPH<br>e • NC | <b>Curve PUMP_ACCESS_6</b><br>PI • 11+58.14<br>DELTA • 14°09' 52.53" (LT)<br>D • 13' 58' 2.8"<br>T • 50.94'<br>L • 101.36'<br>R • 410.00'<br>PC • 11+07.20<br>PT • 12+08.56<br>V • 10 MPH<br>e • NC |
|---|---|--|---|---|



### PLAN LEGEND

- DENOTES CONSTRUCTION LIMITS IN CUTS
- DENOTES CONSTRUCTION LIMITS IN FILLS
- DENOTES APPROXIMATE PROPOSED LIMITED ACCESS LINE
- DENOTES DEMOLITION OF PAVEMENT
- DENOTES PROPOSED FULL DEPTH PAVEMENT
- DENOTES MILL & OVERLAY PAVEMENT
- DENOTES SHARED USE PATH
- DENOTES CONCRETE SIDEWALK

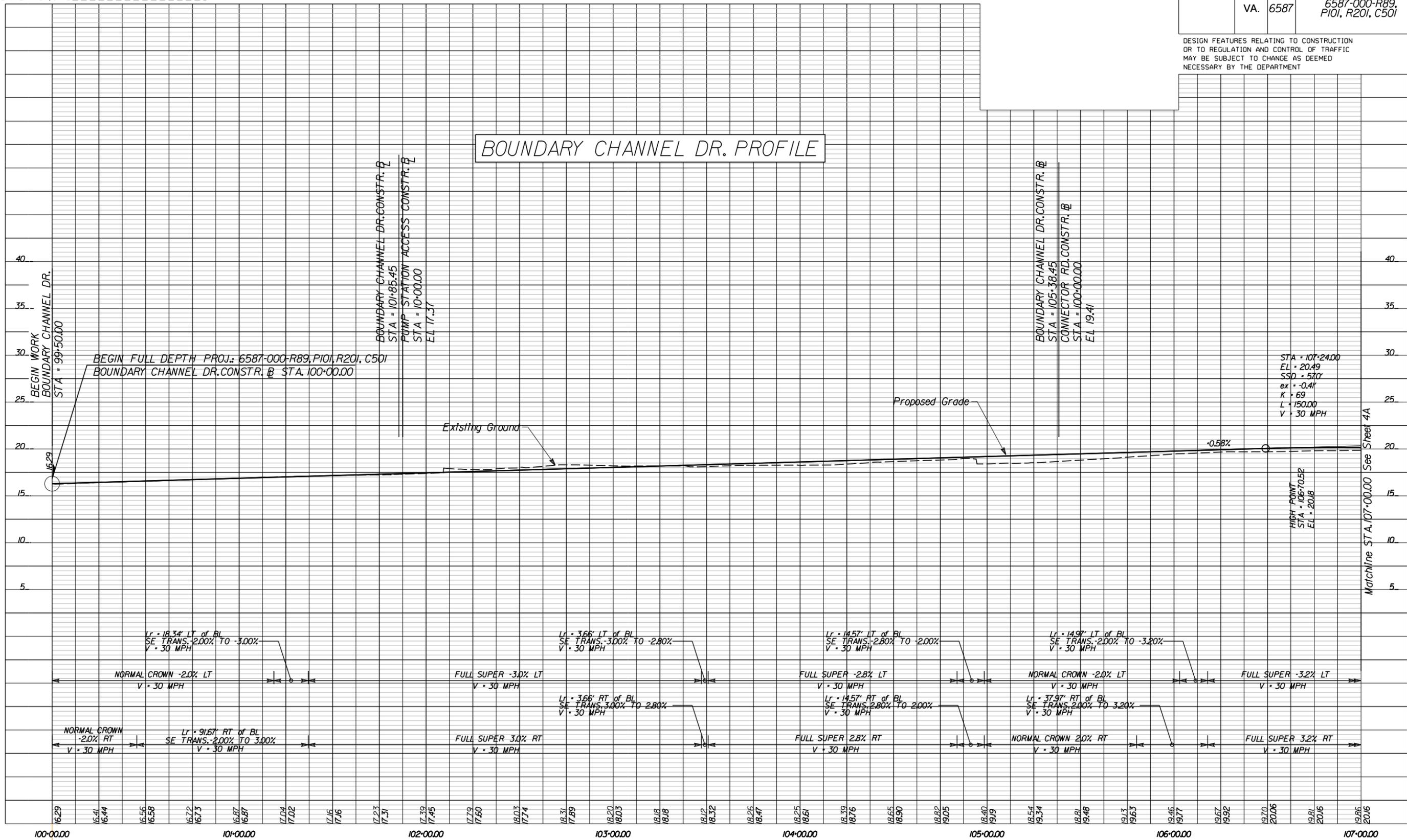
REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)	
Boundary Channel Drive Profile	3A
Connector Road Profile	3A(1)
Pump Access Profile	3A(1)

- Curve CONN\_RD\_3**  
 PI • 101+28.45  
 DELTA • 22°09' 03.13" (LT)  
 D • 32' 44' 2.6"  
 T • 34.26'  
 L • 67.66'  
 R • 175.00'  
 PC • 100+94.20  
 PT • 101+61.85  
 V • 25 MPH  
 e • NC



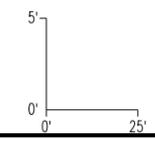
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### BOUNDARY CHANNEL DR. PROFILE



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

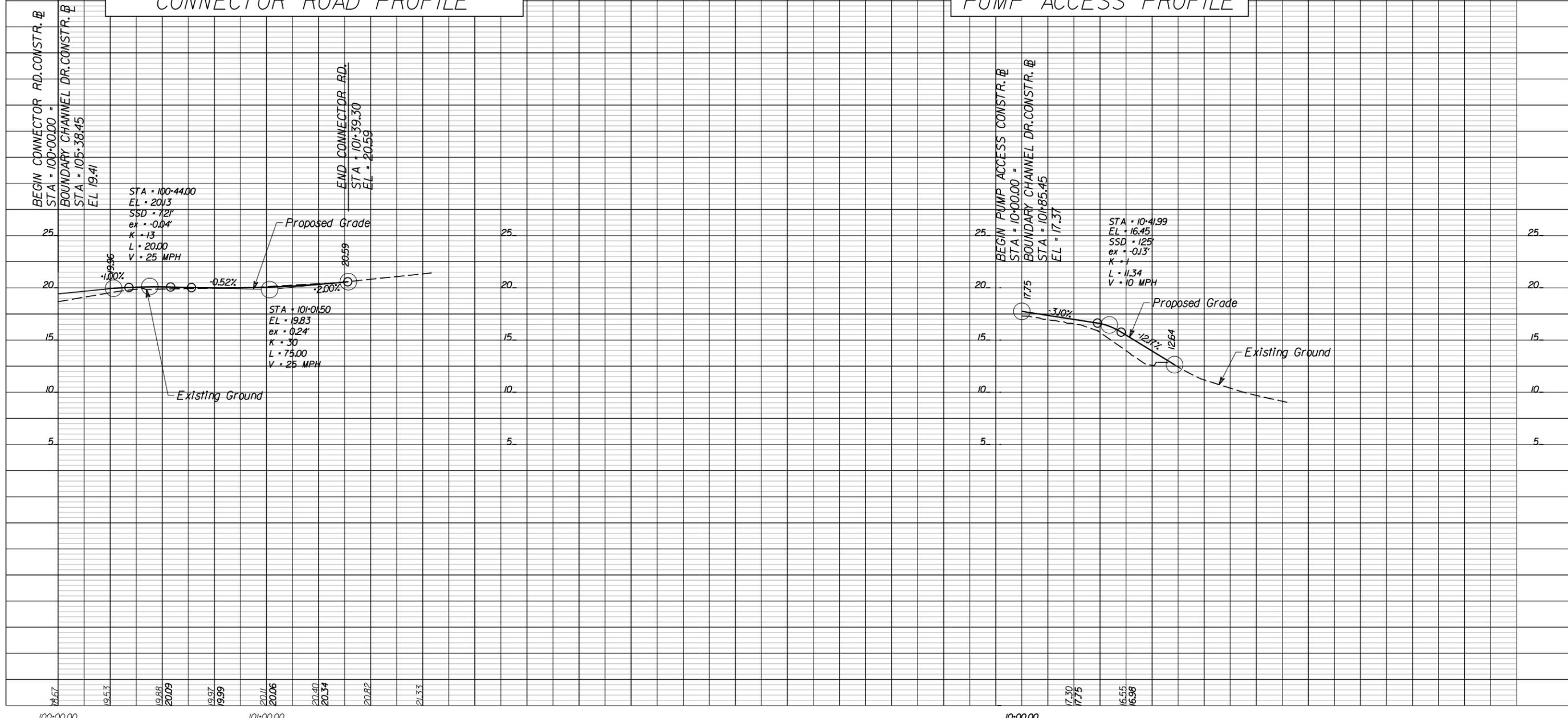
CONCEPTUAL ROADWAY PLANS



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

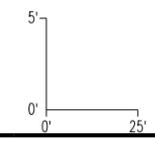
### CONNECTOR ROAD PROFILE

### PUMP ACCESS PROFILE



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### CONCEPTUAL ROADWAY PLANS



PROJECT MANAGER Chels Barksdale P.E. (703) 259-2768 (NOVA)  
SURVEYED BY DATE Brian P. Fletcher L.S. (703) 259-2355 (12/04/2018) (NOVA)  
DESIGN BY Bummel, Klepper, & Kahl LLP (703) 246-0028  
SUBSURFACE UTILITY BY DATE Accumar, Inc. (703) 635-3060 (10/21/2019)

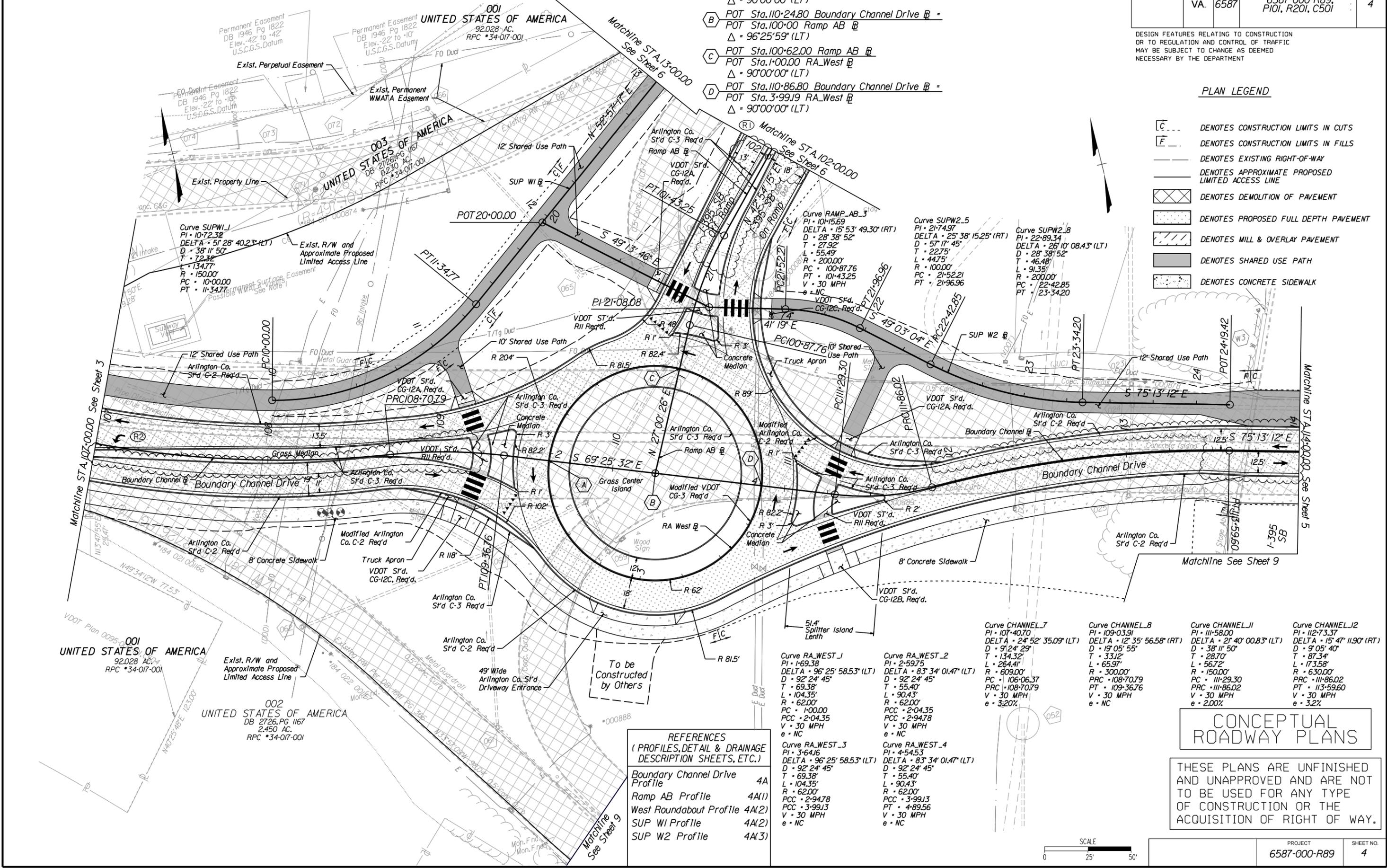
REVISED	STATE	ROUTE	PROJECT	SHEET NO.
4/01/21 4/16/21 5/05/21	VA.	6587	6587-000-R89, P101, R201, C501	4

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

PLAN LEGEND

- DENOTES CONSTRUCTION LIMITS IN CUTS
- DENOTES CONSTRUCTION LIMITS IN FILLS
- DENOTES EXISTING RIGHT-OF-WAY
- DENOTES APPROXIMATE PROPOSED LIMITED ACCESS LINE
- DENOTES DEMOLITION OF PAVEMENT
- DENOTES PROPOSED FULL DEPTH PAVEMENT
- DENOTES MILL & OVERLAY PAVEMENT
- DENOTES SHARED USE PATH
- DENOTES CONCRETE SIDEWALK

- A POT Sta.109+62.80 Boundary Channel Drive B -  
POT Sta.2+04.35 RA\_West B  
Δ = 90°00'00" (LT)
- B POT Sta.110+24.80 Boundary Channel Drive B -  
POT Sta.100+00 Ramp AB B  
Δ = 96°25'59" (LT)
- C POT Sta.100+62.00 Ramp AB B  
POT Sta.1+00.00 RA\_West B  
Δ = 90°00'00" (LT)
- D POT Sta.110+86.80 Boundary Channel Drive B -  
POT Sta.3+99.19 RA\_West B  
Δ = 90°00'00" (LT)



REFERENCES  
(PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)

Boundary Channel Drive Profile	4A
Ramp AB Profile	4A(1)
West Roundabout Profile	4A(2)
SUP W1 Profile	4A(2)
SUP W2 Profile	4A(3)

- Curve CHANNEL\_7  
PI • 107+40.70  
DELTA • 24° 52' 35.09" (LT)  
D • 9' 24' 29"  
T • 134.32'  
L • 264.41'  
R • 609.00'  
PC • 106+06.37  
PRC • 108+70.79  
V • 30 MPH  
e • 3.20%
- Curve CHANNEL\_8  
PI • 109+03.91  
DELTA • 12° 35' 56.58" (RT)  
D • 9' 05' 55"  
T • 33.12'  
L • 65.97'  
R • 300.00'  
PC • 108+70.79  
PRC • 109+36.76  
V • 30 MPH  
e • NC
- Curve CHANNEL\_11  
PI • 111+58.00  
DELTA • 21° 40' 00.83" (LT)  
D • 38' 11" 50"  
T • 28.70'  
L • 56.72'  
R • 150.00'  
PC • 111+29.30  
PRC • 111+86.02  
V • 30 MPH  
e • 2.00%
- Curve CHANNEL\_12  
PI • 112+73.37  
DELTA • 15° 47' 11.90" (RT)  
D • 9' 05' 40"  
T • 87.34'  
L • 173.58'  
R • 630.00'  
PC • 111+86.02  
PRC • 113+59.60  
V • 30 MPH  
e • 3.2%

CONCEPTUAL ROADWAY PLANS

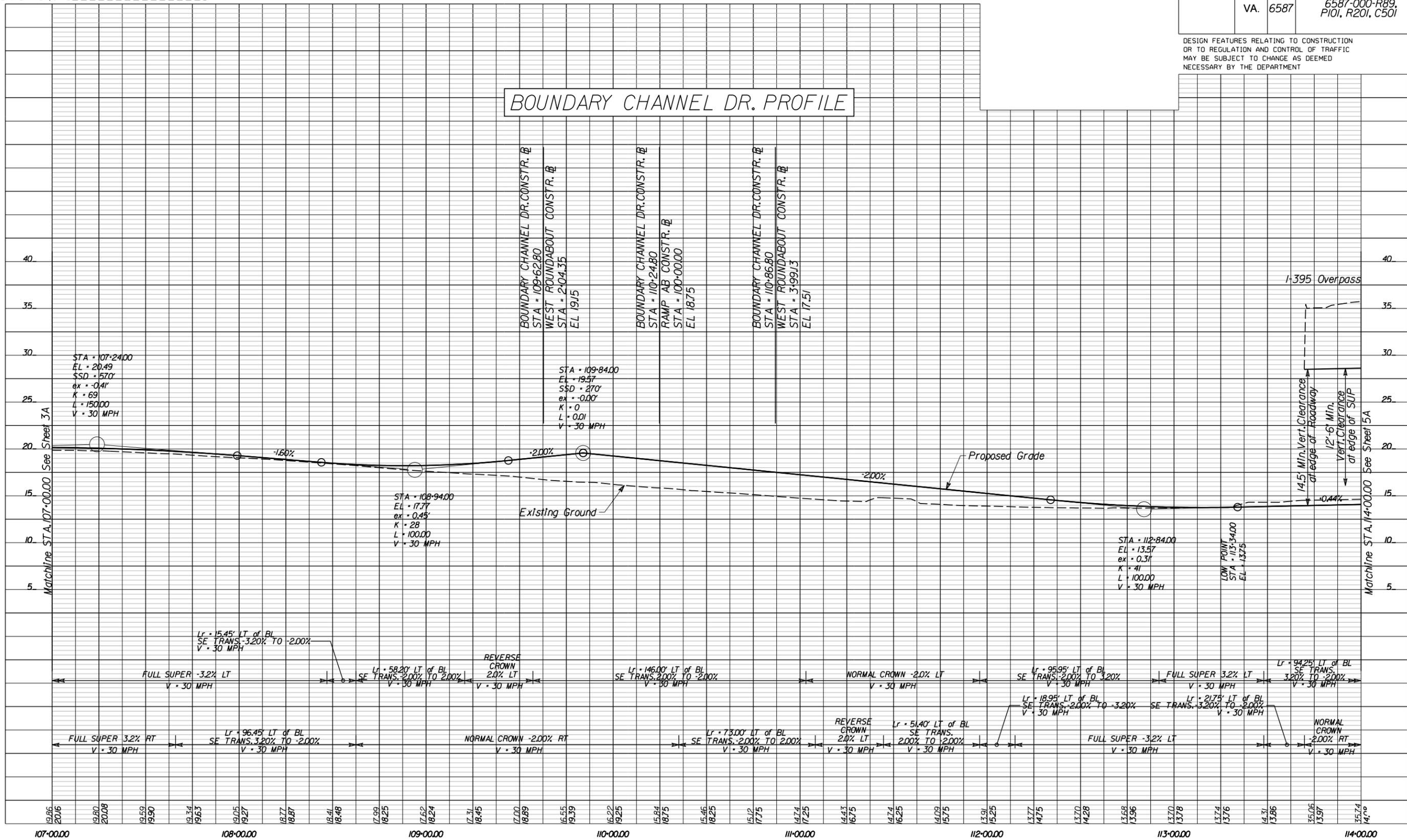
THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.



PROJECT	SHEET NO.
6587-000-R89	4

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

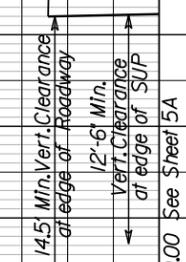
### BOUNDARY CHANNEL DR. PROFILE



1-395 Overpass

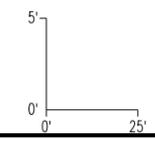
Matchline STA. 107+00.00 See Sheet 3A

Matchline STA. 114+00.00 See Sheet 5A



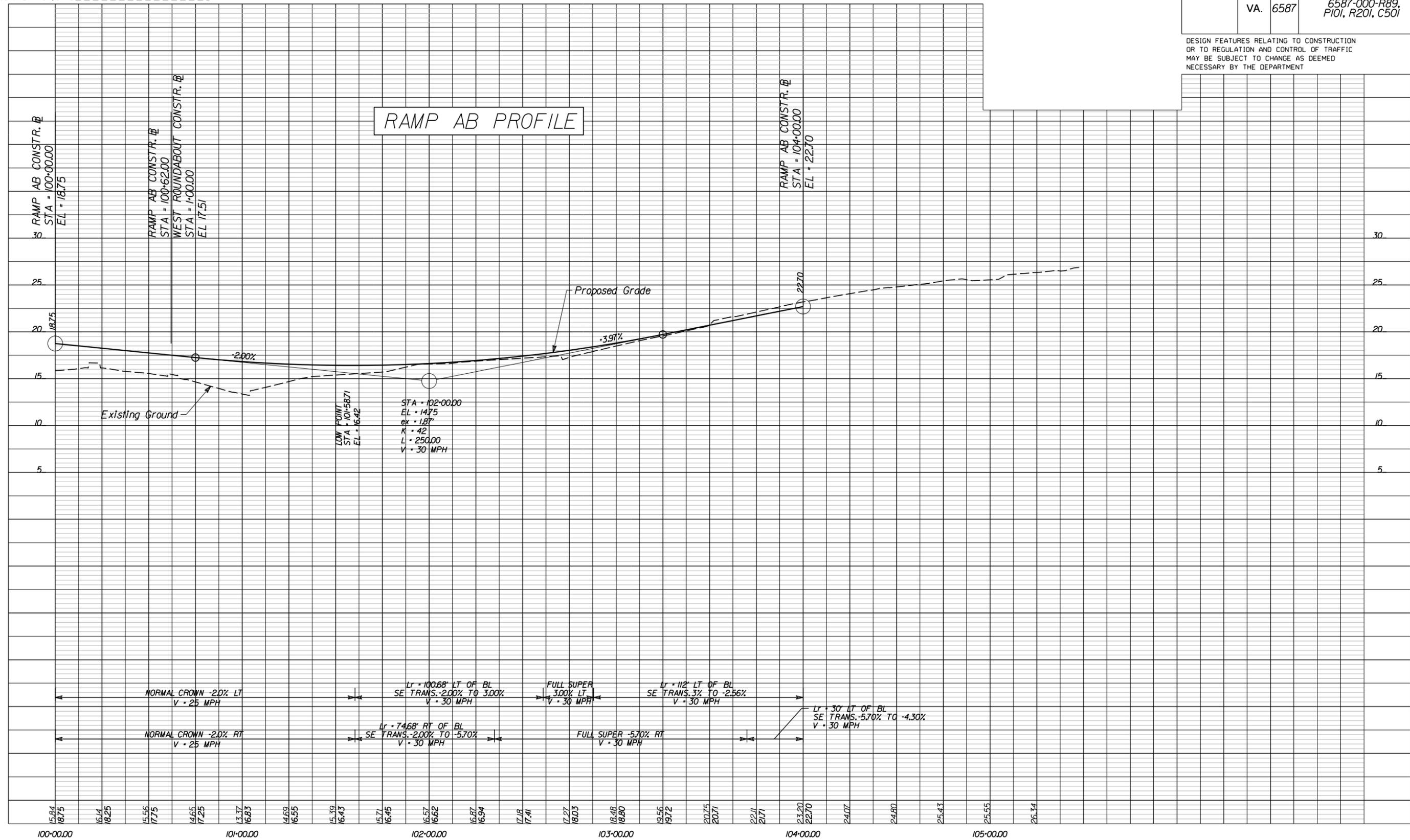
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### CONCEPTUAL ROADWAY PLANS



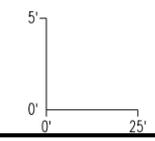
REVISED	STATE	ROUTE	STATE PROJECT	SHEET NO.
	VA.	6587	6587-000-R89, P101, R201, C501	4A(1)

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



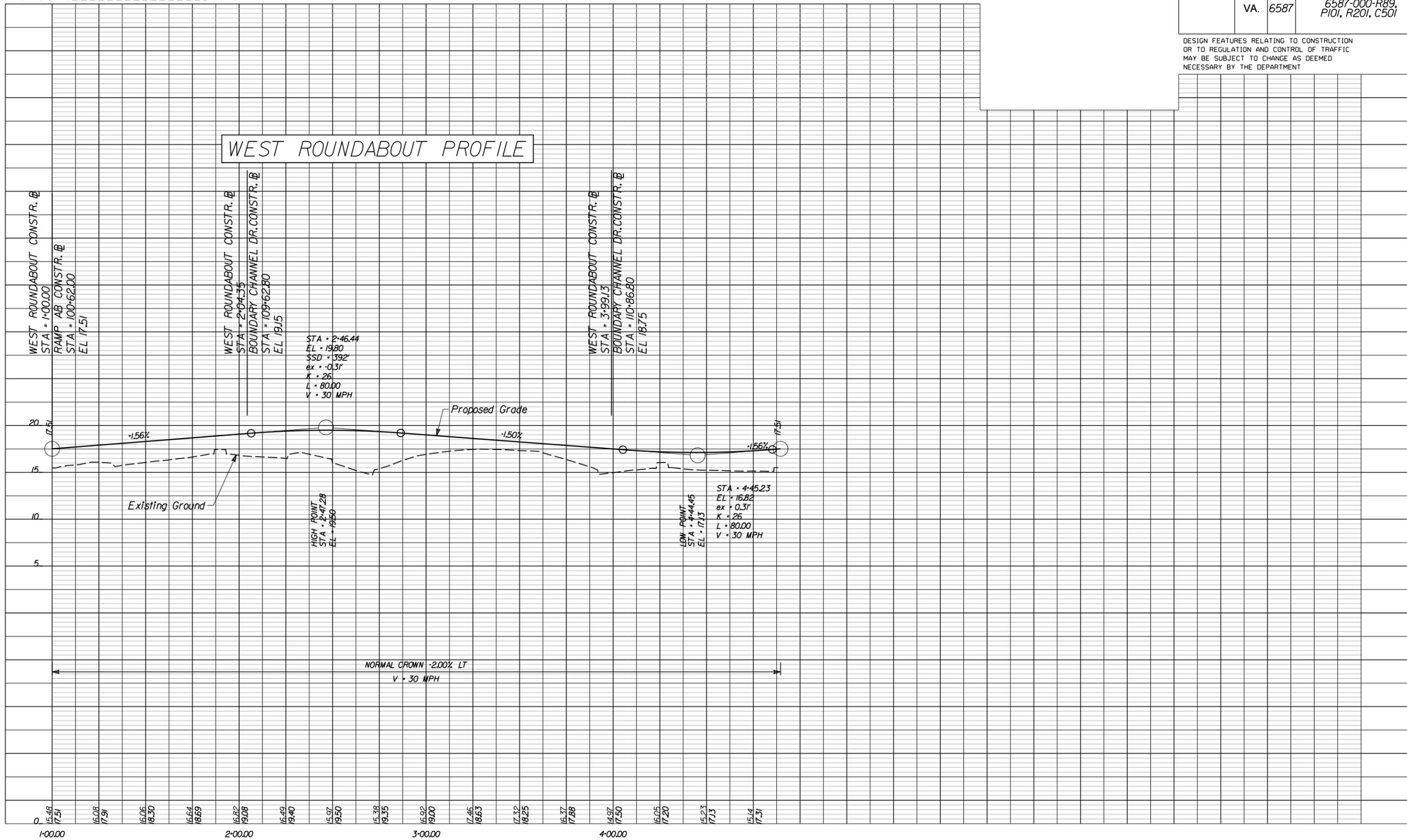
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CONCEPTUAL ROADWAY PLANS



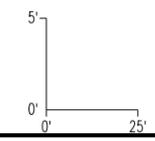
DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

### WEST ROUNDABOUT PROFILE



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

### CONCEPTUAL ROADWAY PLANS

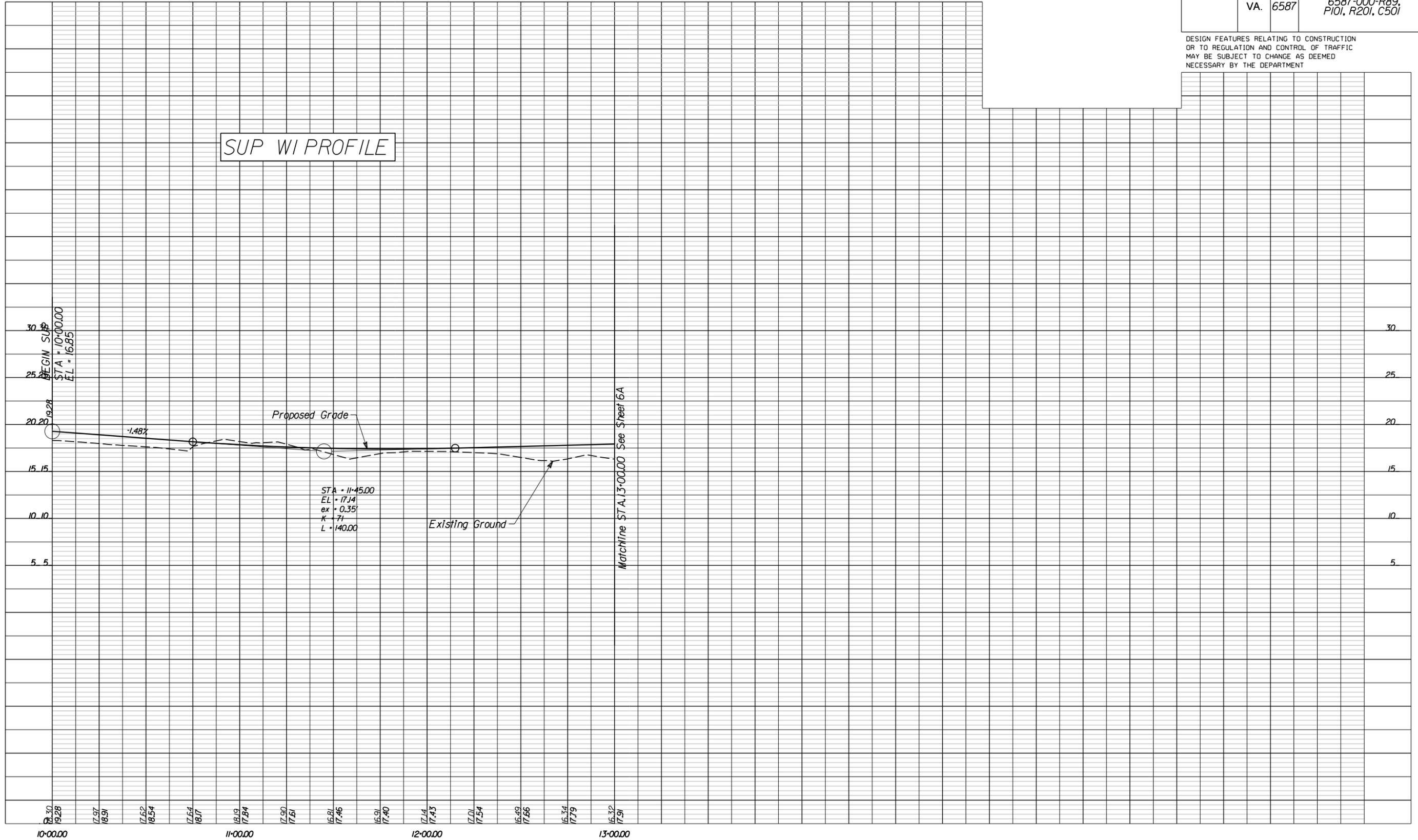


PROJECT MANAGER Chris Barksdale P.E., (703) 259-2768 (INVA)  
 SURVEYED BY, DATE \_\_\_\_\_  
 DESIGN BY Rummel, Klepper & Kahl LLP, (703) 246-0028  
 SUBSURFACE UTILITY BY, DATE \_\_\_\_\_

REVISED	STATE	ROUTE	STATE PROJECT	SHEET NO.
	VA.	6587	6587-000-R89, P101, R201, C501	4A(3)

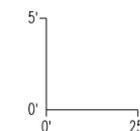
DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

SUP WI PROFILE



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CONCEPTUAL ROADWAY PLANS



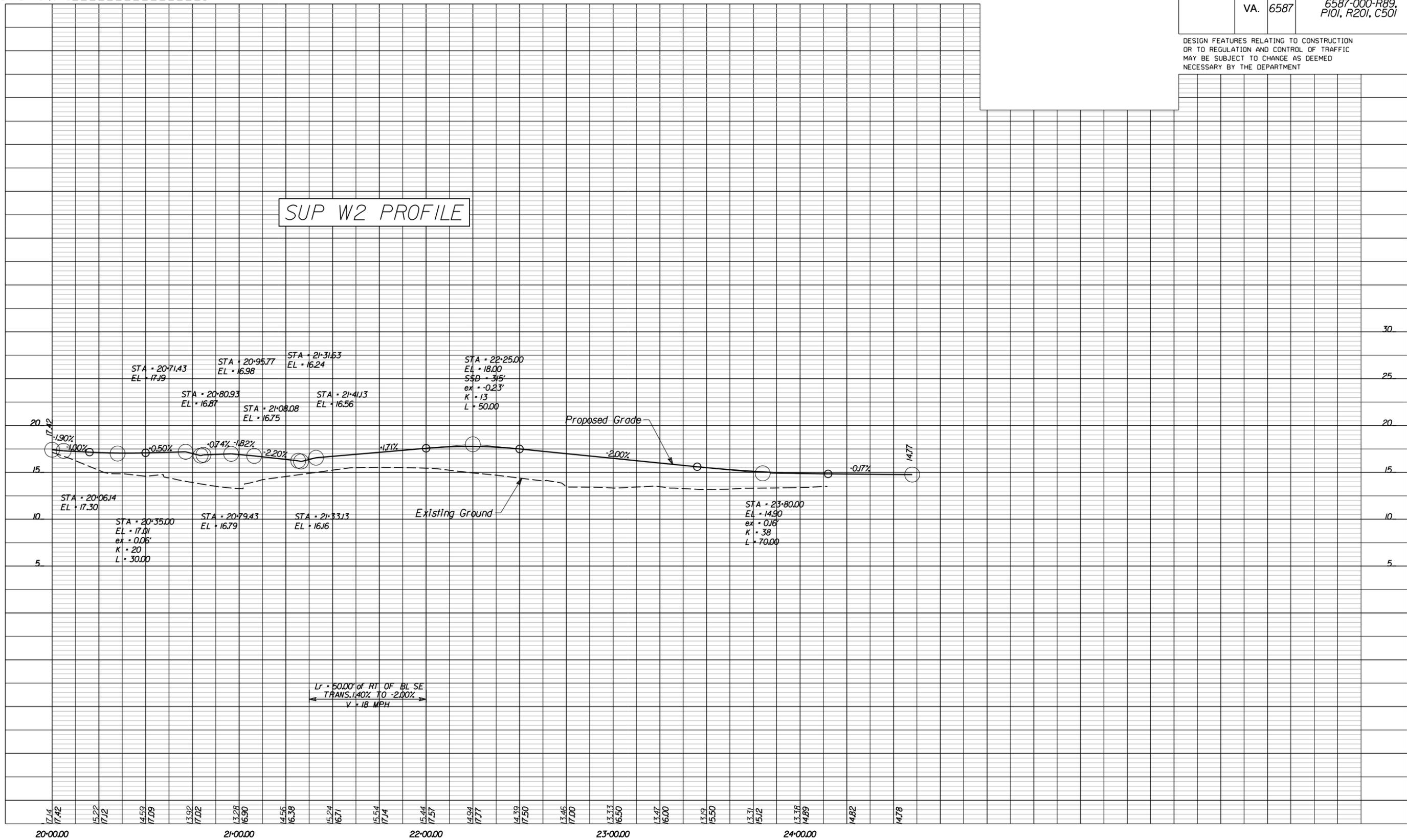
PROJECT	SHEET NO.
6587-000-R89	4A(3)

PROJECT MANAGER Chris Barksdale P.E., (703) 259-2768 (NQA)  
 SURVEYED BY, DATE \_\_\_\_\_  
 DESIGN BY Rummel, Klepper & Kahl LLP, (703) 246-0028  
 SUBSURFACE UTILITY BY, DATE \_\_\_\_\_

REVISED	STATE	ROUTE	STATE PROJECT	SHEET NO.
	VA.	6587	6587-000-R89, P101, R201, C501	4A(4)

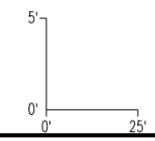
DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

SUP W2 PROFILE



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CONCEPTUAL ROADWAY PLANS

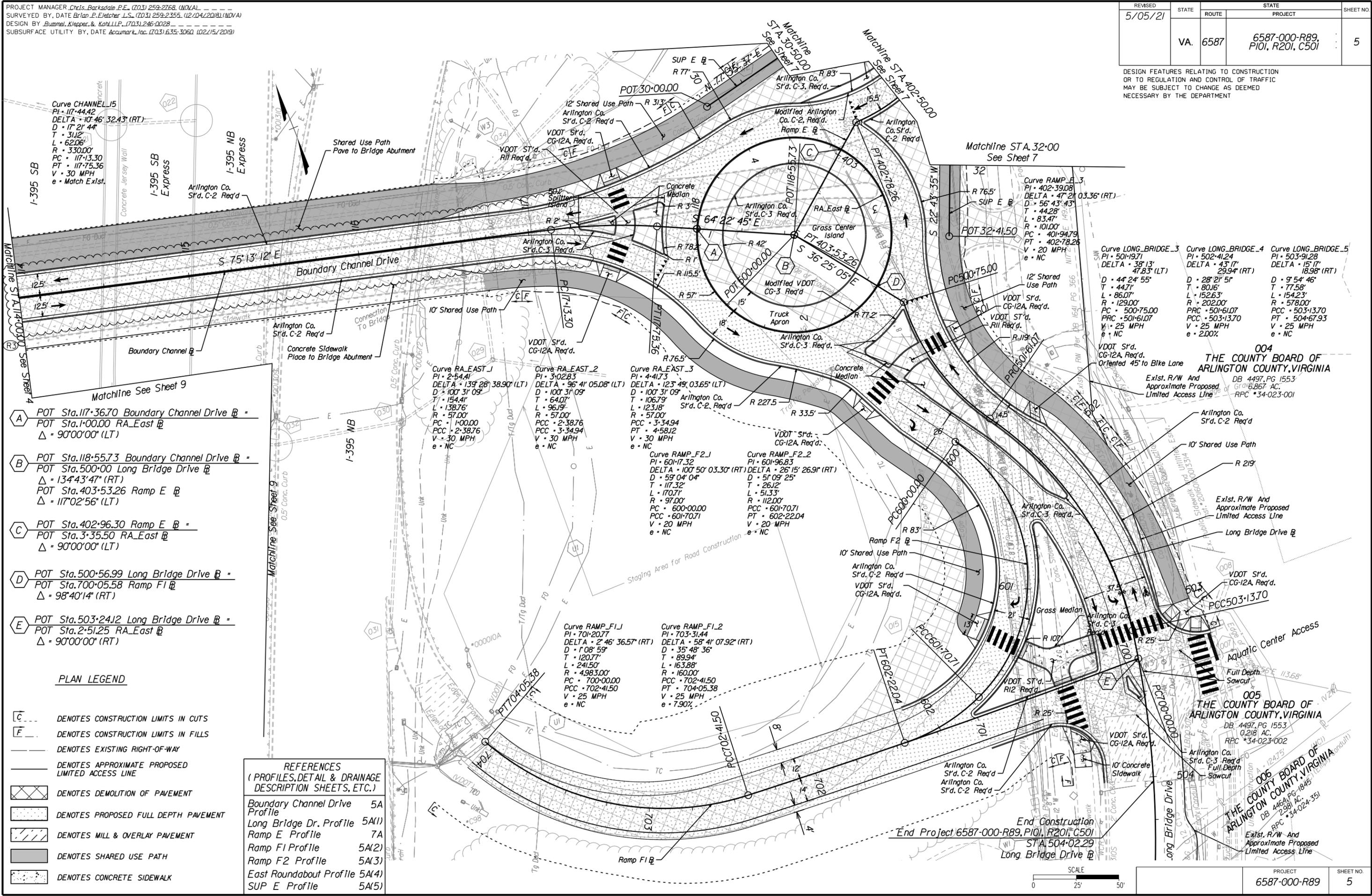


PROJECT	SHEET NO.
6587-000-R89	4A(4)

PROJECT MANAGER Chels Barksdale P.E. (703) 259-2768 (NOVA)  
SURVEYED BY DATE Brian P. Fletcher L.S. (703) 259-2355 (12/04/2018) (NOVA)  
DESIGN BY Bummel, Klepper, & Kahl LLP (703) 246-0028  
SUBSURFACE UTILITY BY DATE Accumar, Inc. (703) 635-3060 (02/15/2019)

REVISED	STATE	ROUTE	PROJECT	SHEET NO.
5/05/21	VA.	6587	6587-000-R89, P101, R201, C501	5

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



- A** POT Sta. 117+36.70 Boundary Channel Drive B =  
POT Sta. 1+00.00 RA\_East B  
Δ = 90°00'00" (LT)
- B** POT Sta. 118+55.73 Boundary Channel Drive B =  
POT Sta. 500+00 Long Bridge Drive B  
Δ = 134°43'47" (RT)  
POT Sta. 403+53.26 Ramp E B  
Δ = 117°02'56" (LT)
- C** POT Sta. 402+96.30 Ramp E B =  
POT Sta. 3+35.50 RA\_East B  
Δ = 90°00'00" (LT)
- D** POT Sta. 500+56.99 Long Bridge Drive B =  
POT Sta. 700+05.58 Ramp F1 B  
Δ = 98°40'14" (RT)
- E** POT Sta. 503+24.12 Long Bridge Drive B =  
POT Sta. 2+51.25 RA\_East B  
Δ = 90°00'00" (RT)

PLAN LEGEND

- C** DENOTES CONSTRUCTION LIMITS IN CUTS
- F** DENOTES CONSTRUCTION LIMITS IN FILLS
- DENOTES EXISTING RIGHT-OF-WAY
- - - DENOTES APPROXIMATE PROPOSED LIMITED ACCESS LINE
- DENOTES DEMOLITION OF PAVEMENT
- DENOTES PROPOSED FULL DEPTH PAVEMENT
- DENOTES MILL & OVERLAY PAVEMENT
- DENOTES SHARED USE PATH
- DENOTES CONCRETE SIDEWALK

REFERENCES  
(PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)

Boundary Channel Drive Profile	5A
Long Bridge Dr. Profile	5A(1)
Ramp E Profile	7A
Ramp F1 Profile	5A(2)
Ramp F2 Profile	5A(3)
East Roundabout Profile	5A(4)
SUP E Profile	5A(5)

**004**  
THE COUNTY BOARD OF ARLINGTON COUNTY, VIRGINIA  
Oriented 45° to Bike Lane  
Exist. R/W And Approximate Proposed Limited Access Line  
DB 4497, PG 1553  
G10 6,867 AC.  
RPC \*34-023-001

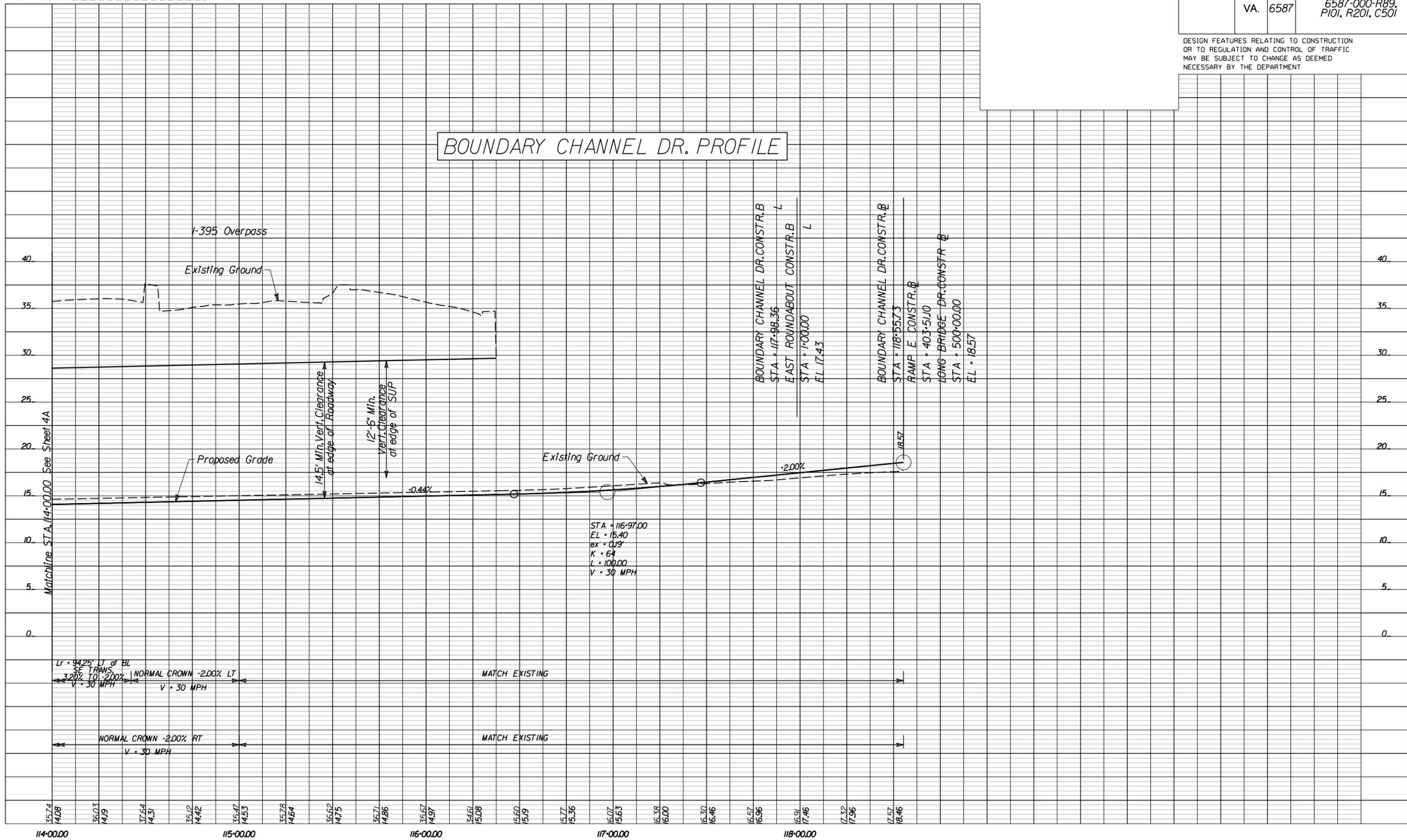
**005**  
THE COUNTY BOARD OF ARLINGTON COUNTY, VIRGINIA  
DB 4497, PG 1553  
0,218 AC.  
RPC \*34-023-002

**006**  
THE COUNTY BOARD OF ARLINGTON COUNTY, VIRGINIA  
DB 4497, PG 1845  
2,961 AC.  
RPC \*34-024-351



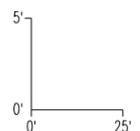
DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

### BOUNDARY CHANNEL DR. PROFILE



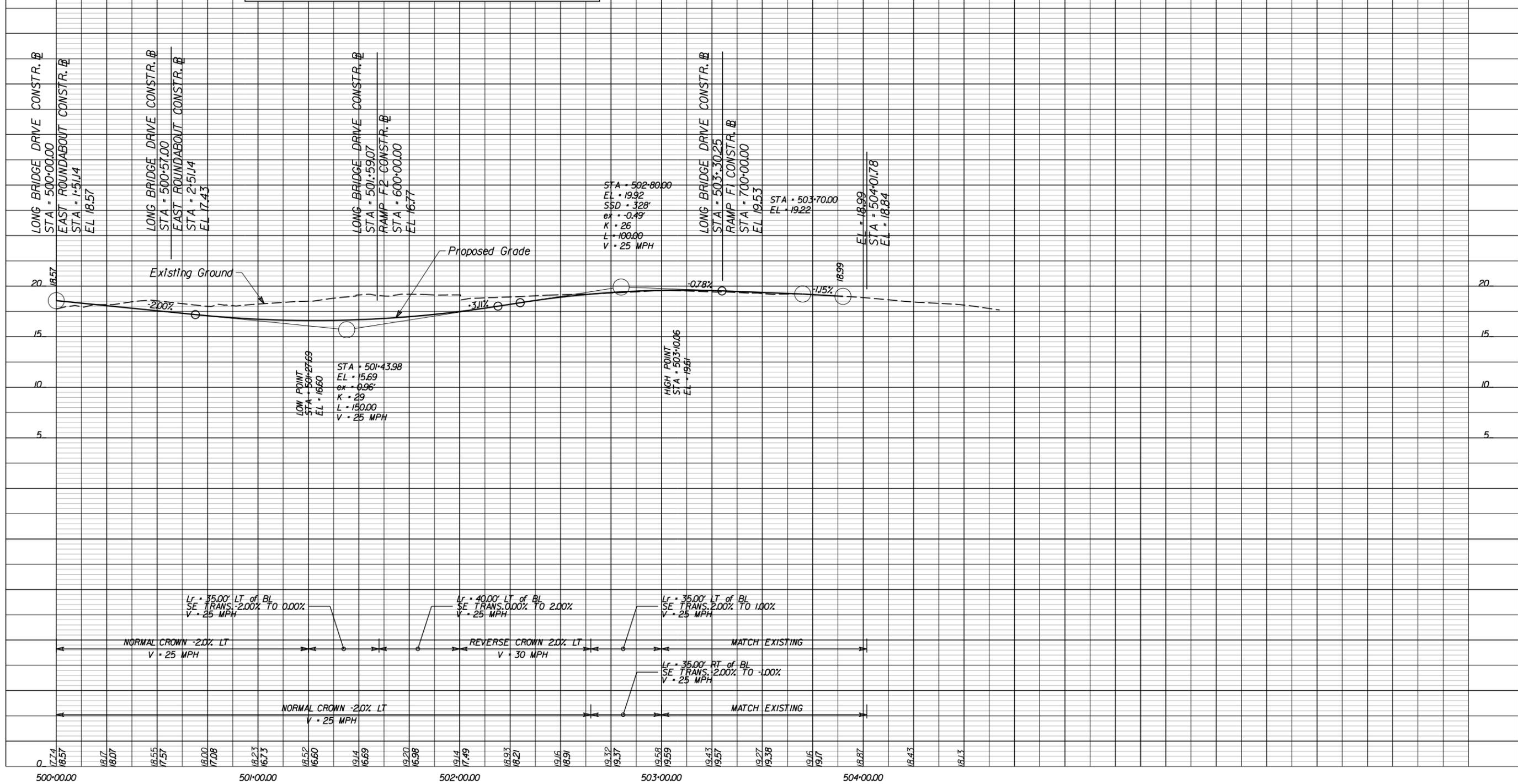
THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.

### CONCEPTUAL ROADWAY PLANS



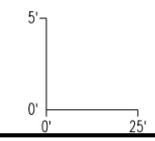
DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

### LONG BRIDGE DRIVE PROFILE

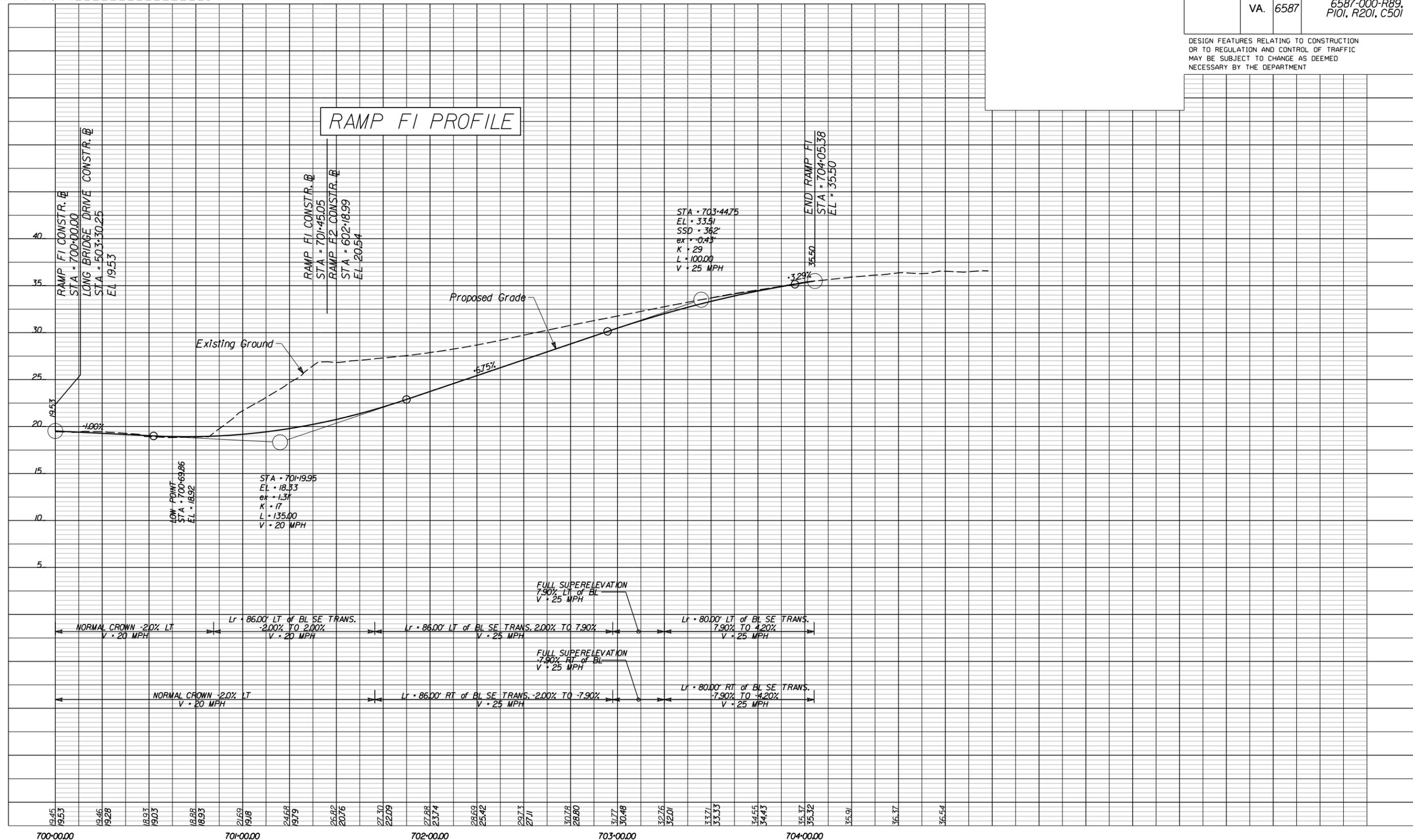


THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.

### CONCEPTUAL ROADWAY PLANS

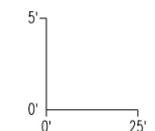


DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT



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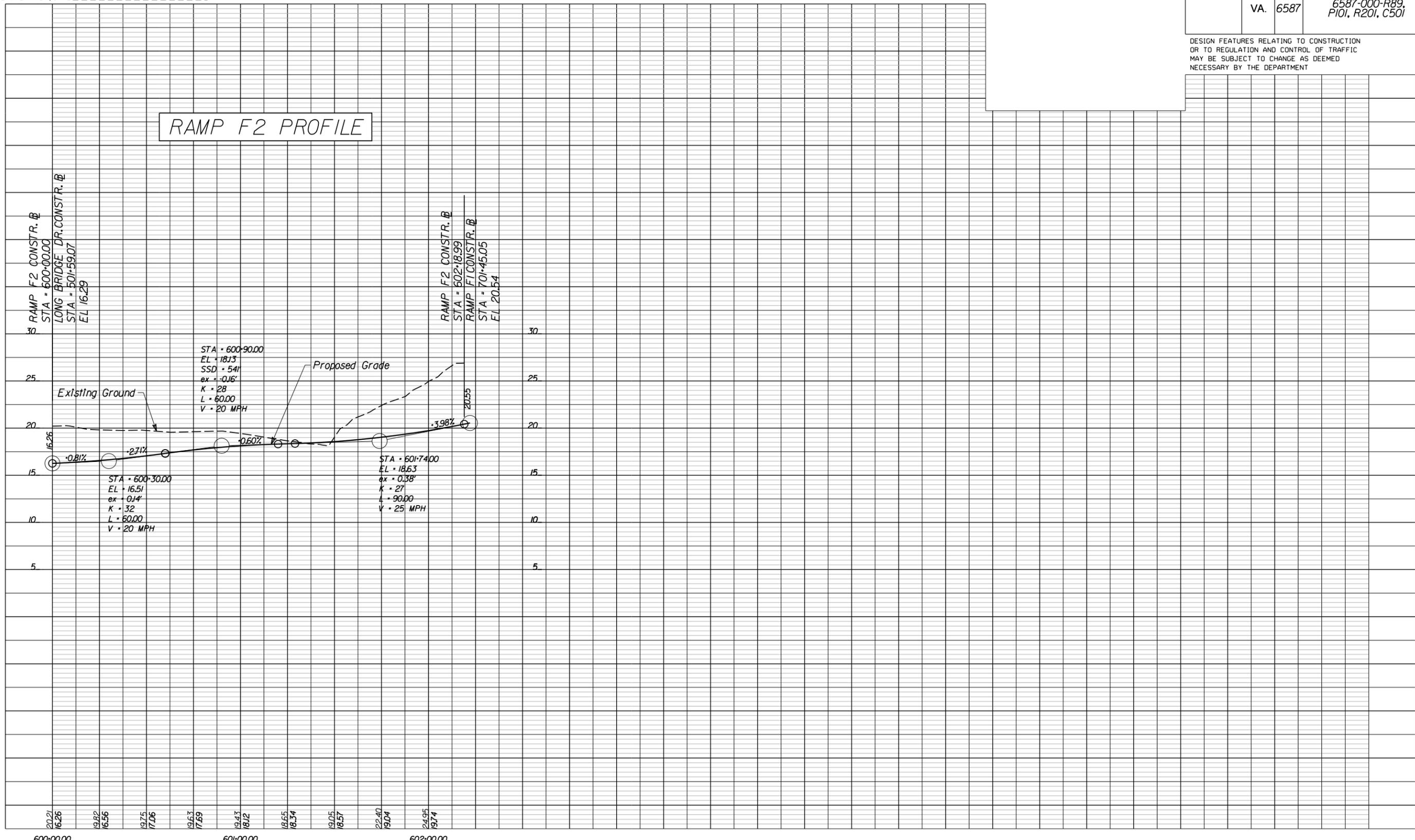
CONCEPTUAL ROADWAY PLANS



REVISED	STATE	ROUTE	STATE PROJECT	SHEET NO.
	VA.	6587	6587-000-R89, P101, R201, C501	5A(3)

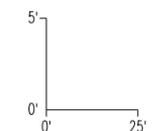
DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

### RAMP F2 PROFILE



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

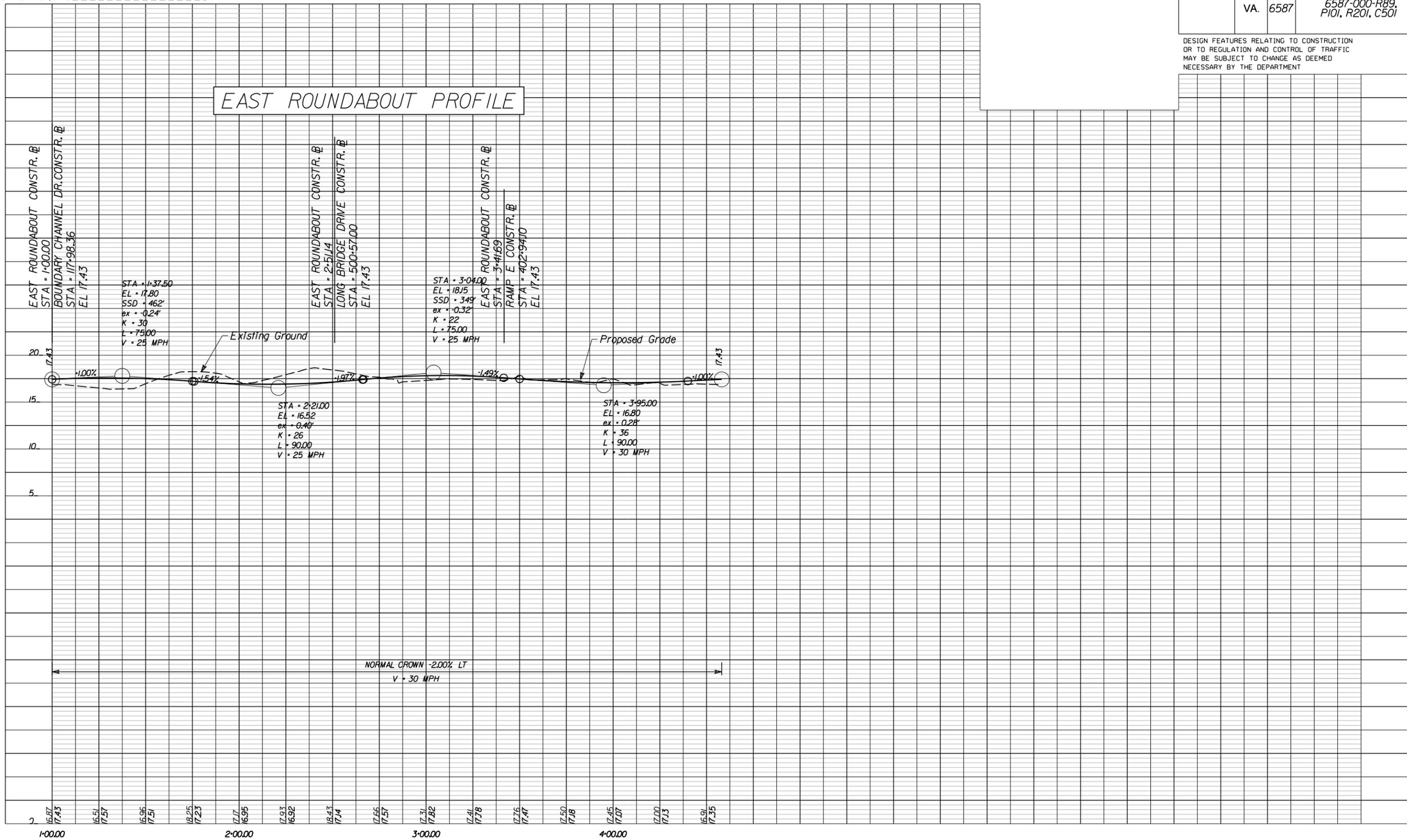
### CONCEPTUAL ROADWAY PLANS



REVISED	STATE	ROUTE	STATE PROJECT	SHEET NO.
	VA.	6587	6587-000-R89, P101, R201, C501	5A(4)

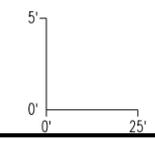
DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

### EAST ROUNDABOUT PROFILE



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

### CONCEPTUAL ROADWAY PLANS

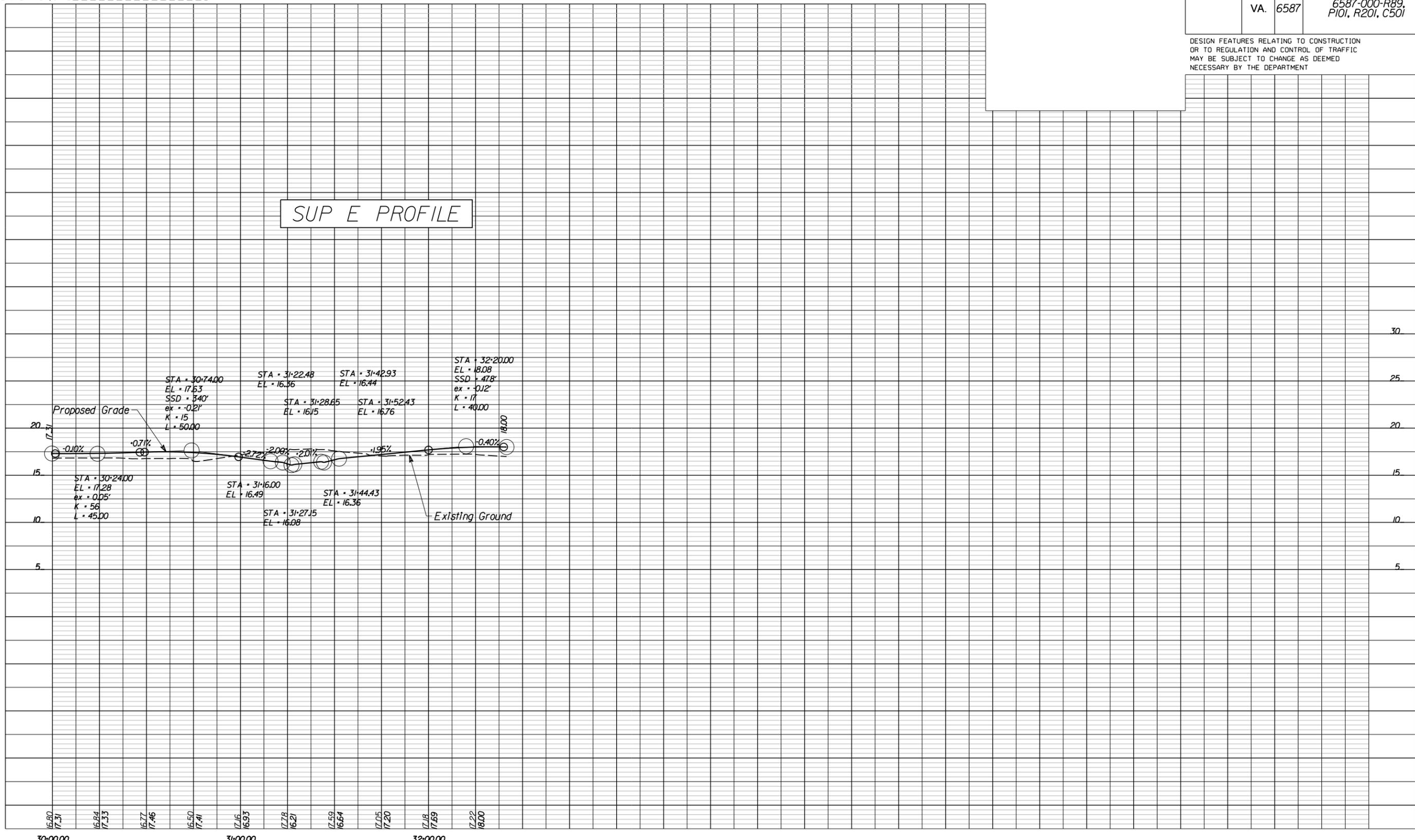


PROJECT MANAGER Chris Barksdale P.E., (703) 259-2768 (INVA)  
 SURVEYED BY, DATE \_\_\_\_\_  
 DESIGN BY Rummel, Klepper & Kahl LLP, (703) 246-0028  
 SUBSURFACE UTILITY BY, DATE \_\_\_\_\_

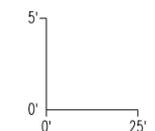
REVISED	STATE	ROUTE	STATE PROJECT	SHEET NO.
	VA.	6587	6587-000-R89, P101, R201, C501	5A(5)

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

SUP E PROFILE



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CONCEPTUAL ROADWAY PLANS

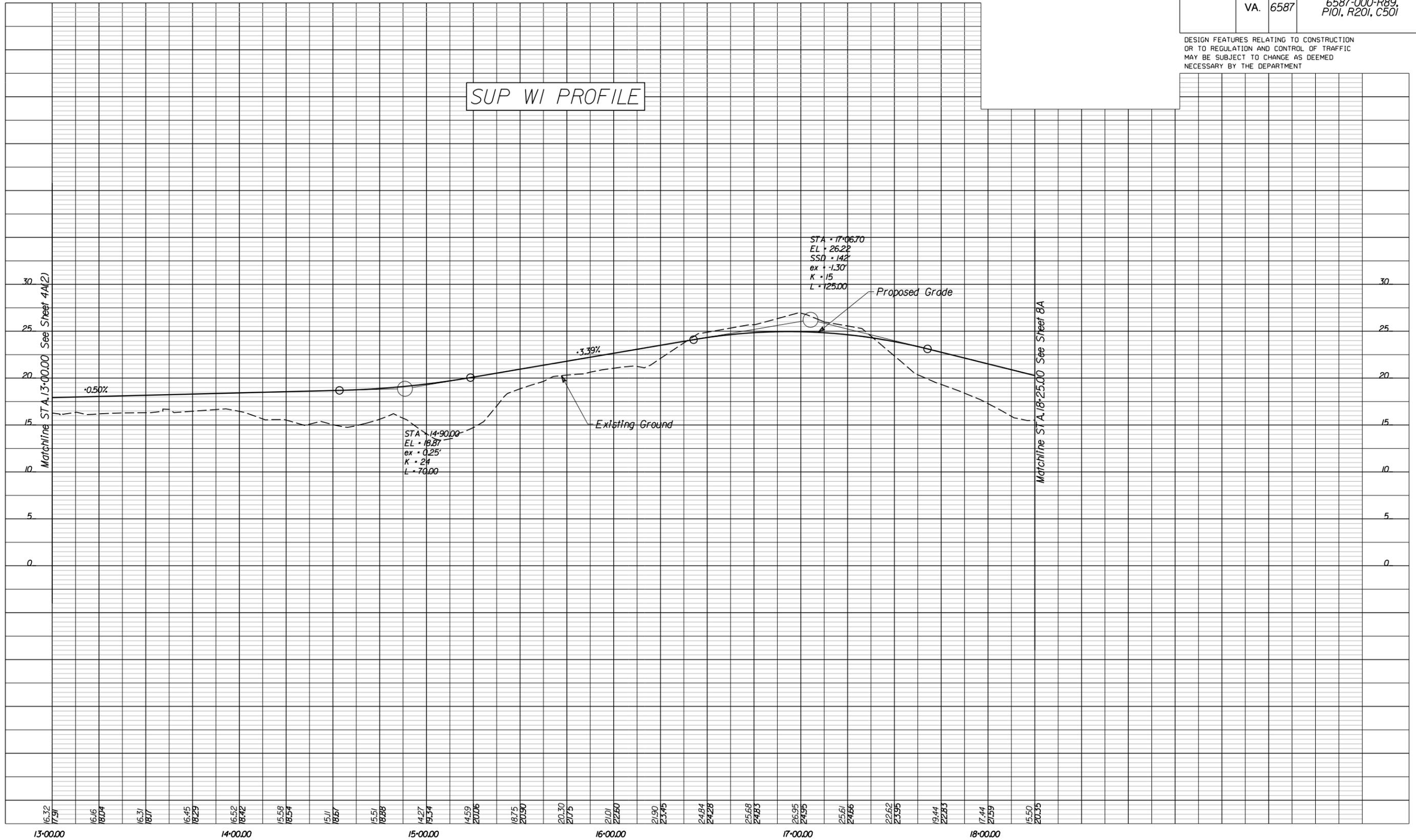


PROJECT MANAGER Chris Barksdale P.E., (703) 259-2768 (INVA)  
 SURVEYED BY, DATE \_\_\_\_\_  
 DESIGN BY Rumel Klepper & Kahl LLP, (703) 246-0028  
 SUBSURFACE UTILITY BY, DATE \_\_\_\_\_

REVISED	STATE	ROUTE	STATE PROJECT	SHEET NO.
	VA.	6587	6587-000-R89, P101, R201, C501	6A

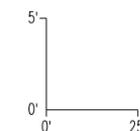
DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

SUP WI PROFILE



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

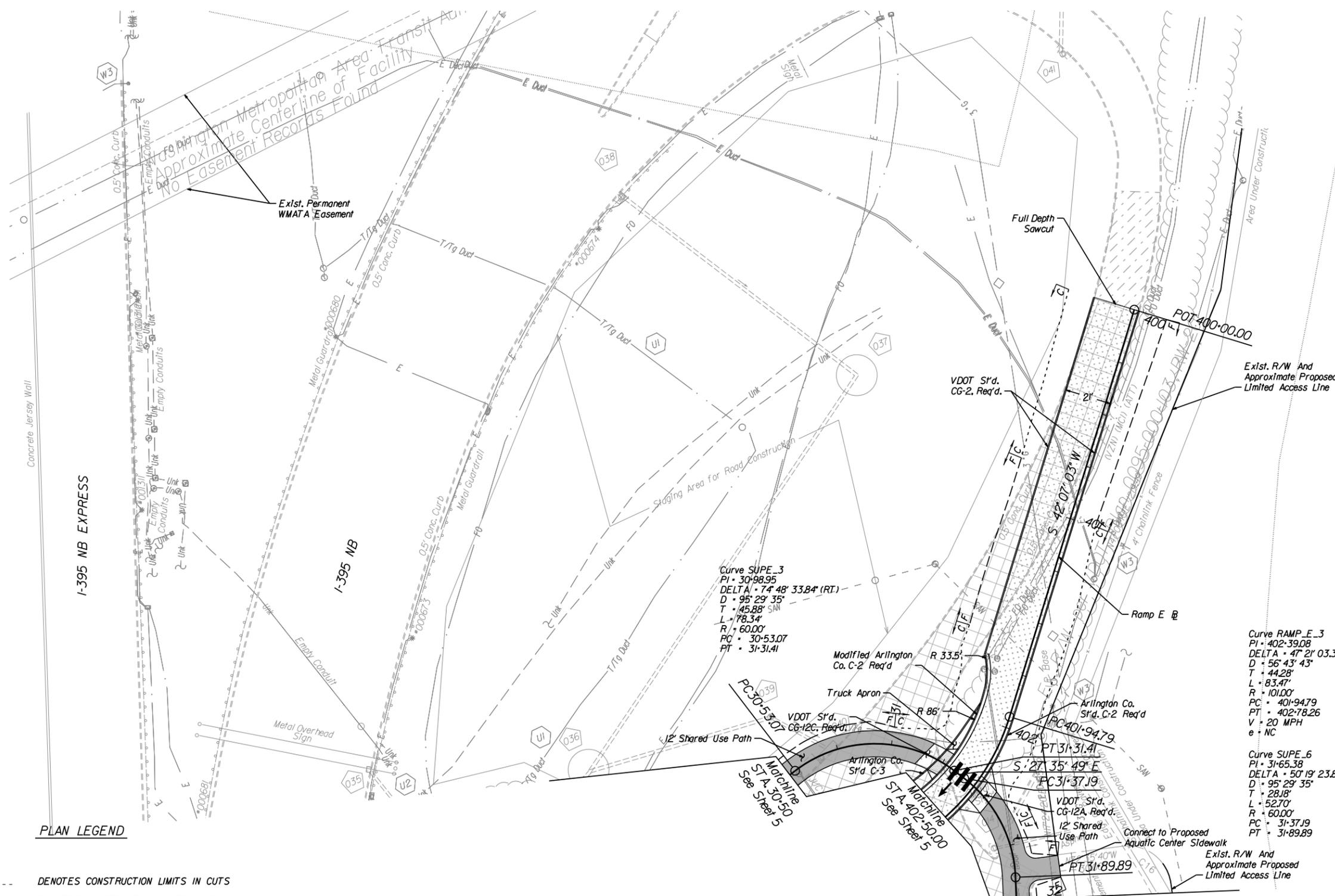
CONCEPTUAL ROADWAY PLANS



PROJECT MANAGER *Chris Barksdale P.E., (703) 259-2768, (NOVA)*  
SURVEYED BY, DATE *Brian P. Fletcher L.S., (703) 259-2355, (2/20/2018) (NOVA)*  
DESIGN BY *Bumel, Klepper, & Kohl LLP, (703) 246-0028*  
SUBSURFACE UTILITY BY, DATE *Accumark, Inc. (703) 635-3060, (02/15/2019)*

REVISED	STATE		PROJECT	SHEET NO.
	STATE	ROUTE		
	VA.	6587	6587-000-R89, P101, R201, C501	7

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



004  
**THE COUNTY BOARD OF**  
**ARLINGTON COUNTY, VIRGINIA**  
 DB 4497, PG 1553  
 6.867 AC.  
 RPC \*34-023-001

**PLAN LEGEND**

- DENOTES CONSTRUCTION LIMITS IN CUTS
- DENOTES CONSTRUCTION LIMITS IN FILLS
- DENOTES APPROXIMATE PROPOSED LIMITED ACCESS LINE
- DENOTES DEMOLITION OF PAVEMENT
- DENOTES PROPOSED FULL DEPTH PAVEMENT
- DENOTES MILL & OVERLAY PAVEMENT
- DENOTES SHARED USE PATH
- DENOTES CONCRETE SIDEWALK

REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)	
Ramp E Profile	7A
SUP E Profile	5A(5)

Curve SUPE\_3  
 PI = 30+98.95  
 DELTA = 74° 48' 33.84" (RT)  
 D = 95° 29' 35"  
 T = 45.88'  
 L = 78.34'  
 R = 60.00'  
 PC = 30+53.07  
 PT = 31+31.41

Curve RAMP\_E\_3  
 PI = 402+39.08  
 DELTA = 47° 21' 03.36" (RT)  
 D = 56° 43' 43"  
 T = 44.28'  
 L = 83.47'  
 R = 101.00'  
 PC = 401+94.79  
 PT = 402+78.26  
 V = 20 MPH  
 e = NC

Curve SUPE\_6  
 PI = 31+65.38  
 DELTA = 50° 19' 23.84" (RT)  
 D = 95° 29' 35"  
 T = 28.18'  
 L = 52.70'  
 R = 60.00'  
 PC = 31+37.19  
 PT = 31+89.89

**CONCEPTUAL ROADWAY PLANS**

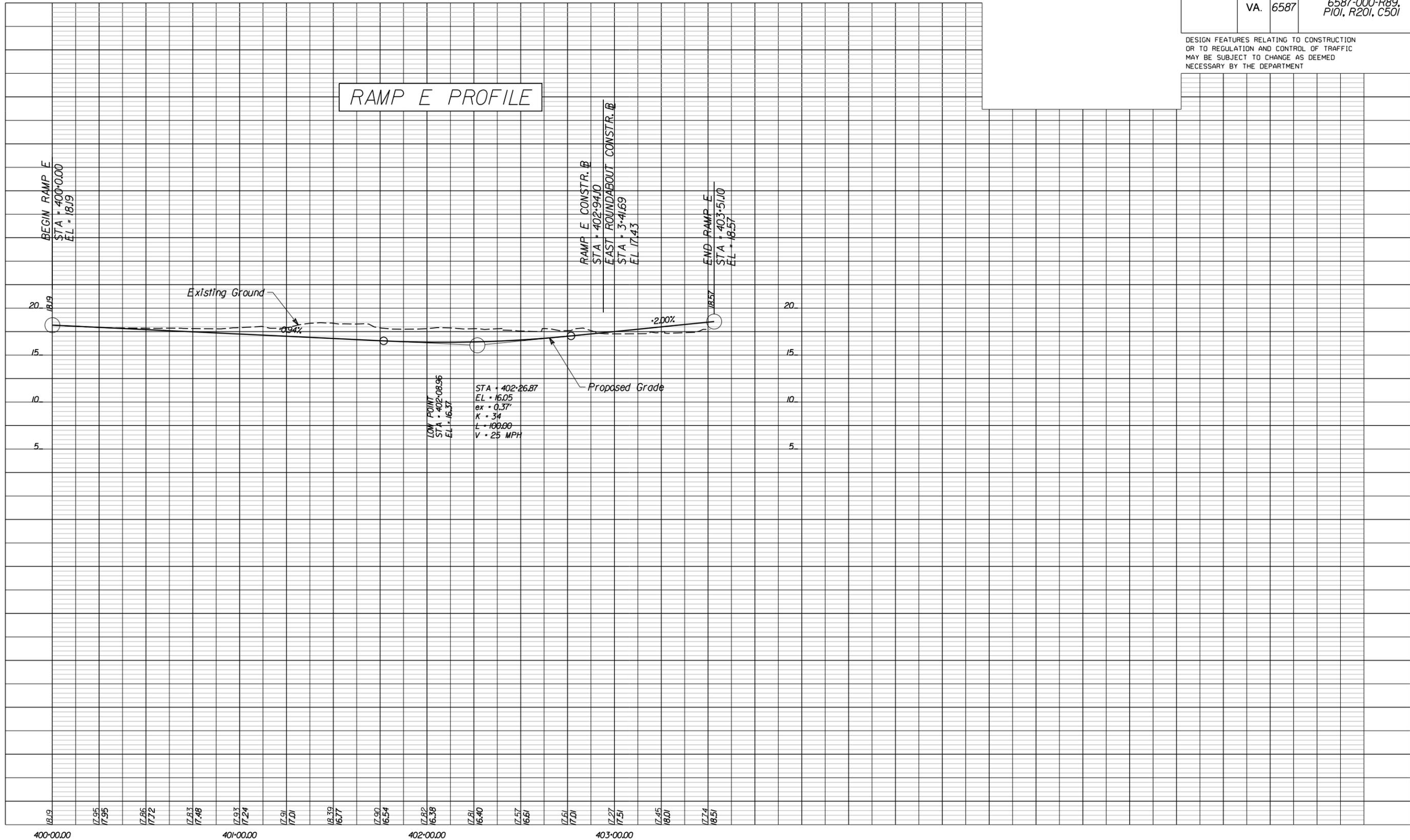
THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.



PROJECT	SHEET NO.
6587-000-R89	7

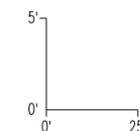
DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

### RAMP E PROFILE



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

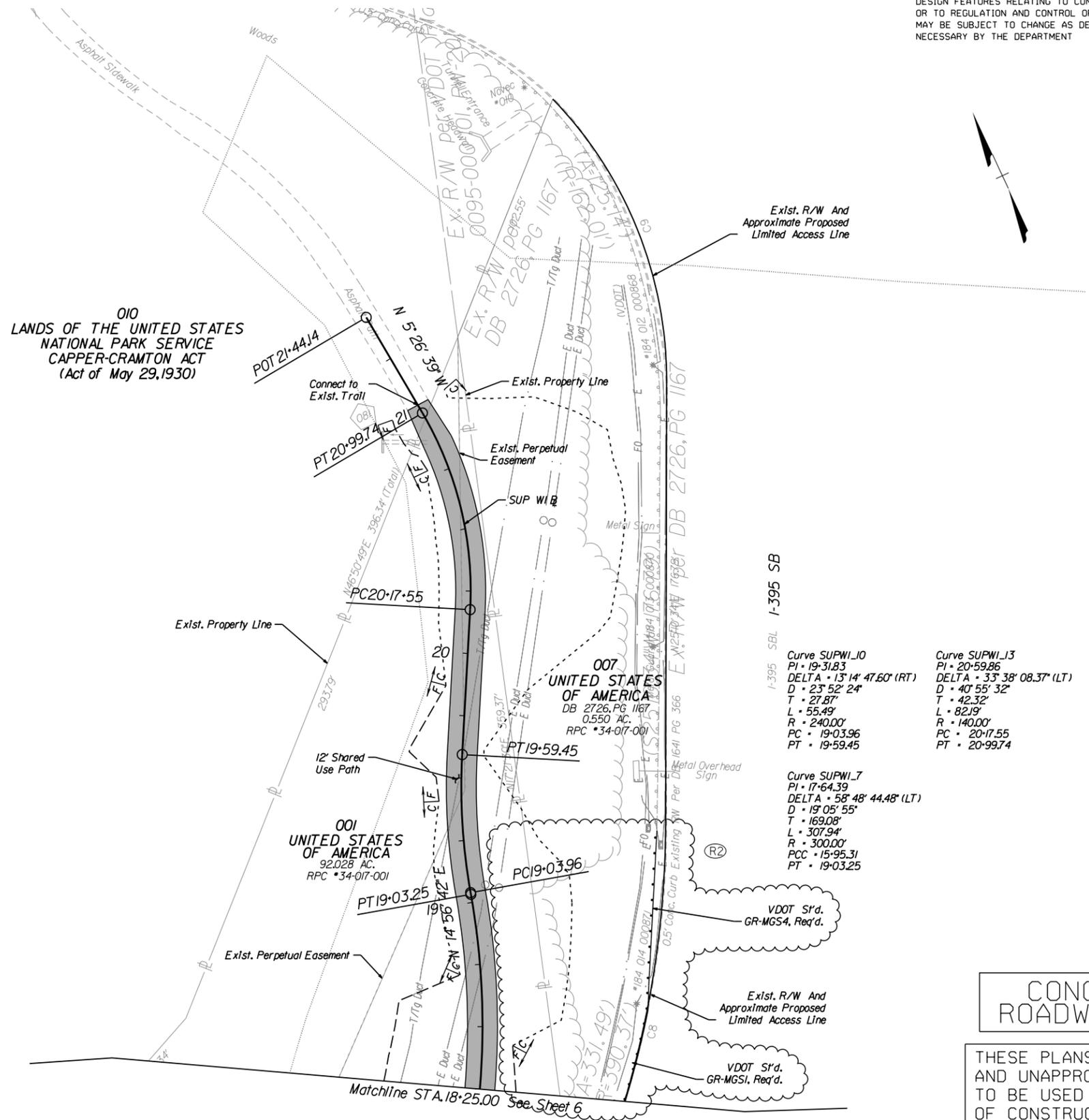
### CONCEPTUAL ROADWAY PLANS



PROJECT MANAGER *Chris Barksdale P.E., (703) 259-2768, (NOVA)*  
SURVEYED BY, DATE *Brian P. Fletcher L.S., (703) 259-2355, (2/04/2018), (NOVA)*  
DESIGN BY *Bumel, Klepper, & Kohl LLP, (703) 246-0028*  
SUBSURFACE UTILITY BY, DATE *Accumark, Inc. (703) 635-3060, (02/15/2019)*

REVISED	STATE		PROJECT	SHEET NO.
	DATE	ROUTE		
4/16/21	VA.	6587	6587-000-R89, P101, R201, C501	8

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



PLAN LEGEND

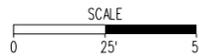
- DENOTES CONSTRUCTION LIMITS IN CUTS
- DENOTES CONSTRUCTION LIMITS IN FILLS
- DENOTES EXISTING RIGHT-OF-WAY
- DENOTES APPROXIMATE PROPOSED LIMITED ACCESS LINE
- DENOTES DEMOLITION OF PAVEMENT
- DENOTES PROPOSED FULL DEPTH PAVEMENT
- DENOTES MILL & OVERLAY PAVEMENT
- DENOTES SHARED USE PATH
- DENOTES CONCRETE SIDEWALK

REFERENCES  
(PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)

SUP Profile 8A

CONCEPTUAL ROADWAY PLANS

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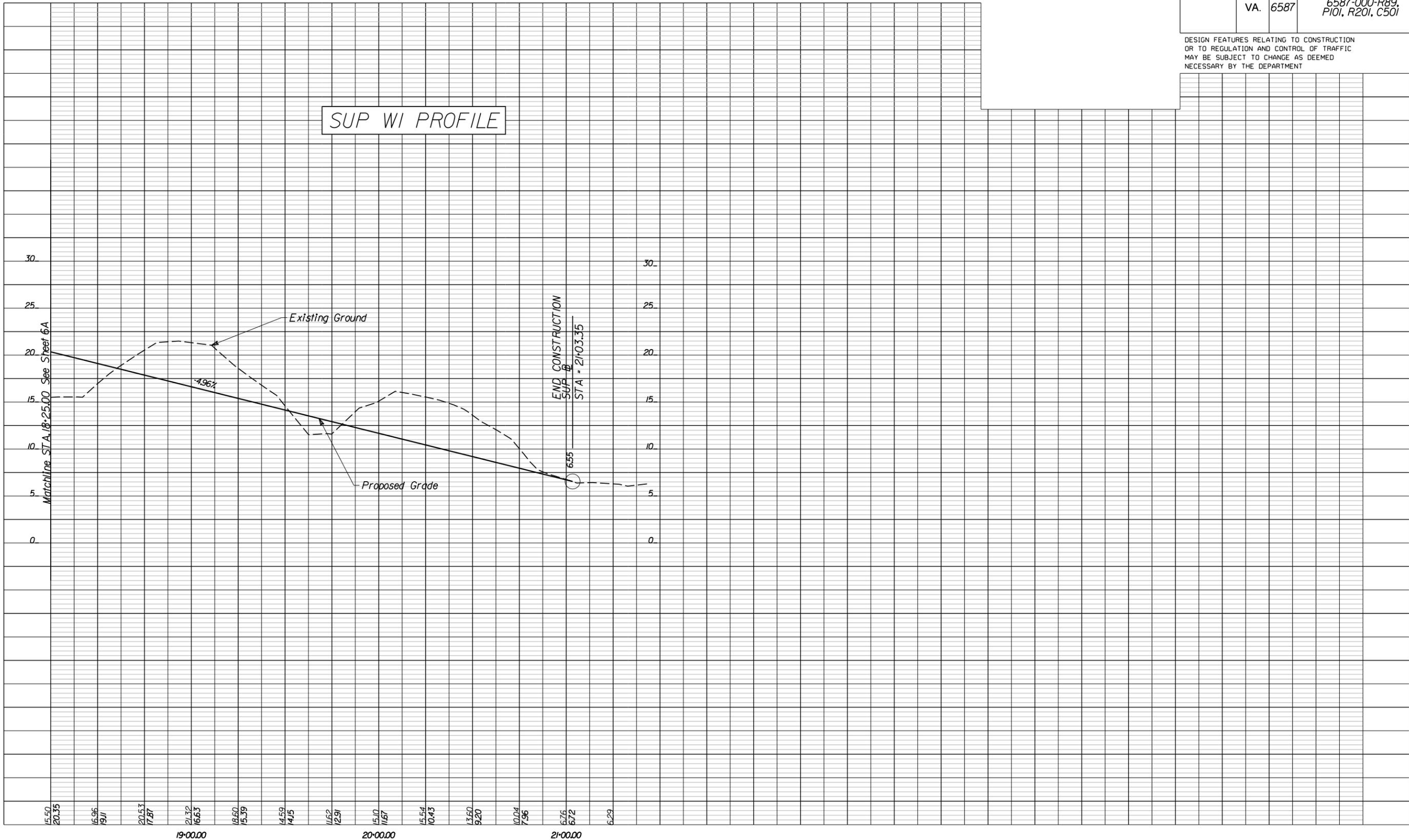
PROJECT	SHEET NO.
6587-000-R89	8

PROJECT MANAGER *Chris Barksdale P.E., (703) 259-2768 (INVA)*  
 SURVEYED BY, DATE \_\_\_\_\_  
 DESIGN BY *Rummel, Klepper & Kahl LLP, (703) 246-0028*  
 SUBSURFACE UTILITY BY, DATE \_\_\_\_\_

REVISED	STATE	ROUTE	STATE PROJECT	SHEET NO.
	VA.	6587	6587-000-R89, P101, R201, C501	8A

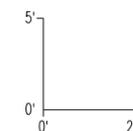
DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

SUP WI PROFILE



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CONCEPTUAL ROADWAY PLANS

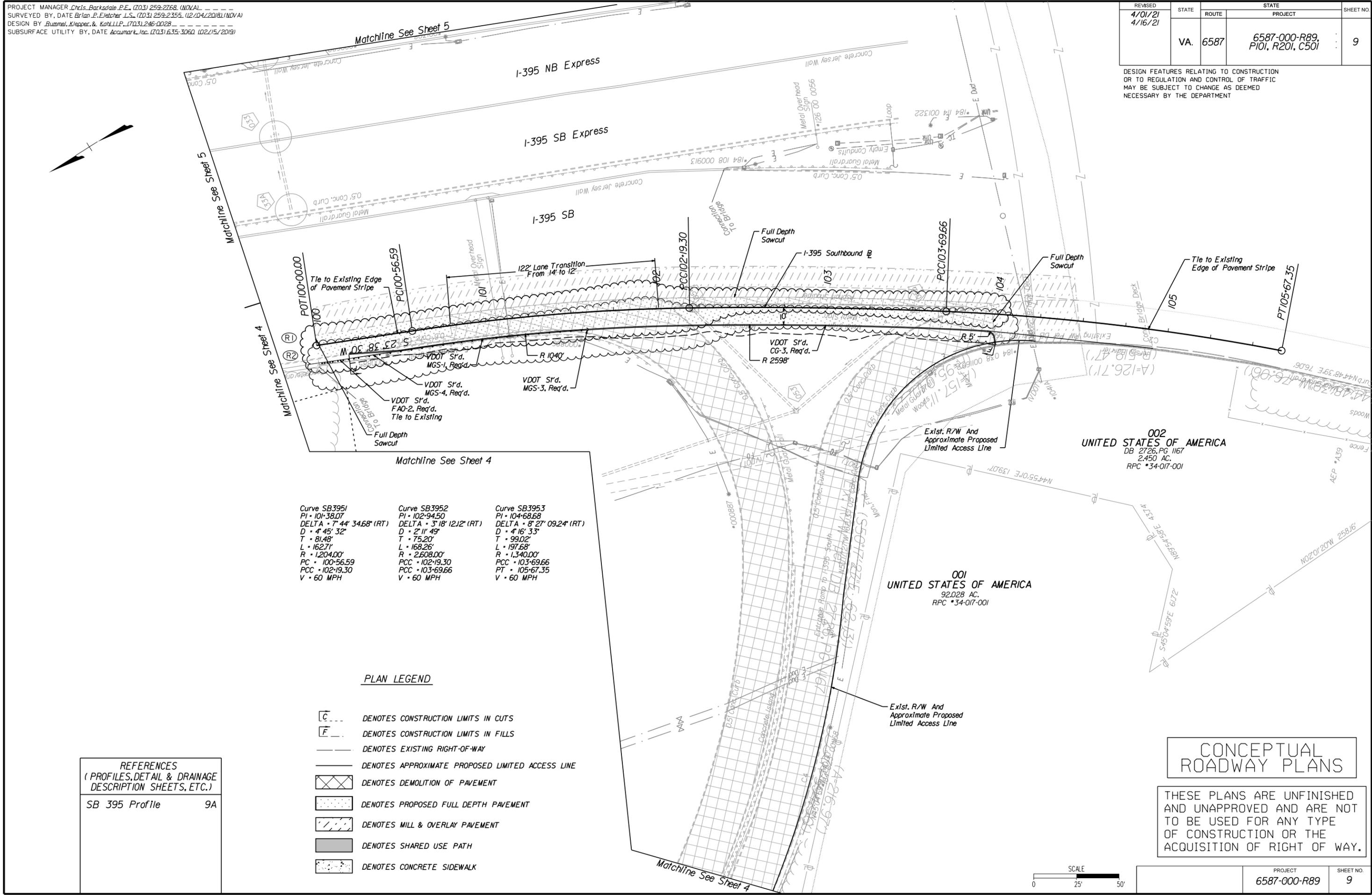


PROJECT	SHEET NO.
6587-000-R89	8A

PROJECT MANAGER: Chris Barksdale, P.E., (703) 259-2768, (NOVA)  
SURVEYED BY: DATE Brian P. Fletcher, L.S., (703) 259-2355, (2/20/2018), (NOVA)  
DESIGN BY: Bummel, Klepper, & Kahl LLP, (703) 246-0028  
SUBSURFACE UTILITY BY: DATE Accumar, Inc., (703) 635-3060, (02/15/2019)

REVISED	STATE	ROUTE	STATE PROJECT	SHEET NO.
4/01/21 4/16/21	VA.	6587	6587-000-R89, P101, R201, C501	9

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



Curve SB3951 PI • 101+38.07 DELTA • 7° 44' 34.68" (RT) D • 4' 45' 32" T • 81.48' L • 162.71' R • 1,204.00' PC • 100+56.59 PCC • 102+19.30 V • 60 MPH	Curve SB3952 PI • 102+94.50 DELTA • 3° 18' 12.12" (RT) D • 2° 11' 49" T • 75.20' L • 168.26' R • 2,608.00' PCC • 102+19.30 PCC • 103+69.66 V • 60 MPH	Curve SB3953 PI • 104+68.68 DELTA • 8° 27' 09.24" (RT) D • 4' 16' 33" T • 99.02' L • 197.68' R • 1,340.00' PCC • 103+69.66 PT • 105+67.35 V • 60 MPH
---	--	---

PLAN LEGEND

- [C] --- DENOTES CONSTRUCTION LIMITS IN CUTS
- [F] --- DENOTES CONSTRUCTION LIMITS IN FILLS
- DENOTES EXISTING RIGHT-OF-WAY
- DENOTES APPROXIMATE PROPOSED LIMITED ACCESS LINE
- [X] DENOTES DEMOLITION OF PAVEMENT
- [.] DENOTES PROPOSED FULL DEPTH PAVEMENT
- [/] DENOTES MILL & OVERLAY PAVEMENT
- [■] DENOTES SHARED USE PATH
- [■] DENOTES CONCRETE SIDEWALK

REFERENCES  
(PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)

SB 395 Profile	9A
----------------	----

002  
UNITED STATES OF AMERICA  
DB 2726, PG 1167  
2.450 AC.  
RPC \* 34-107-001

001  
UNITED STATES OF AMERICA  
92.028 AC.  
RPC \* 34-017-001

CONCEPTUAL ROADWAY PLANS

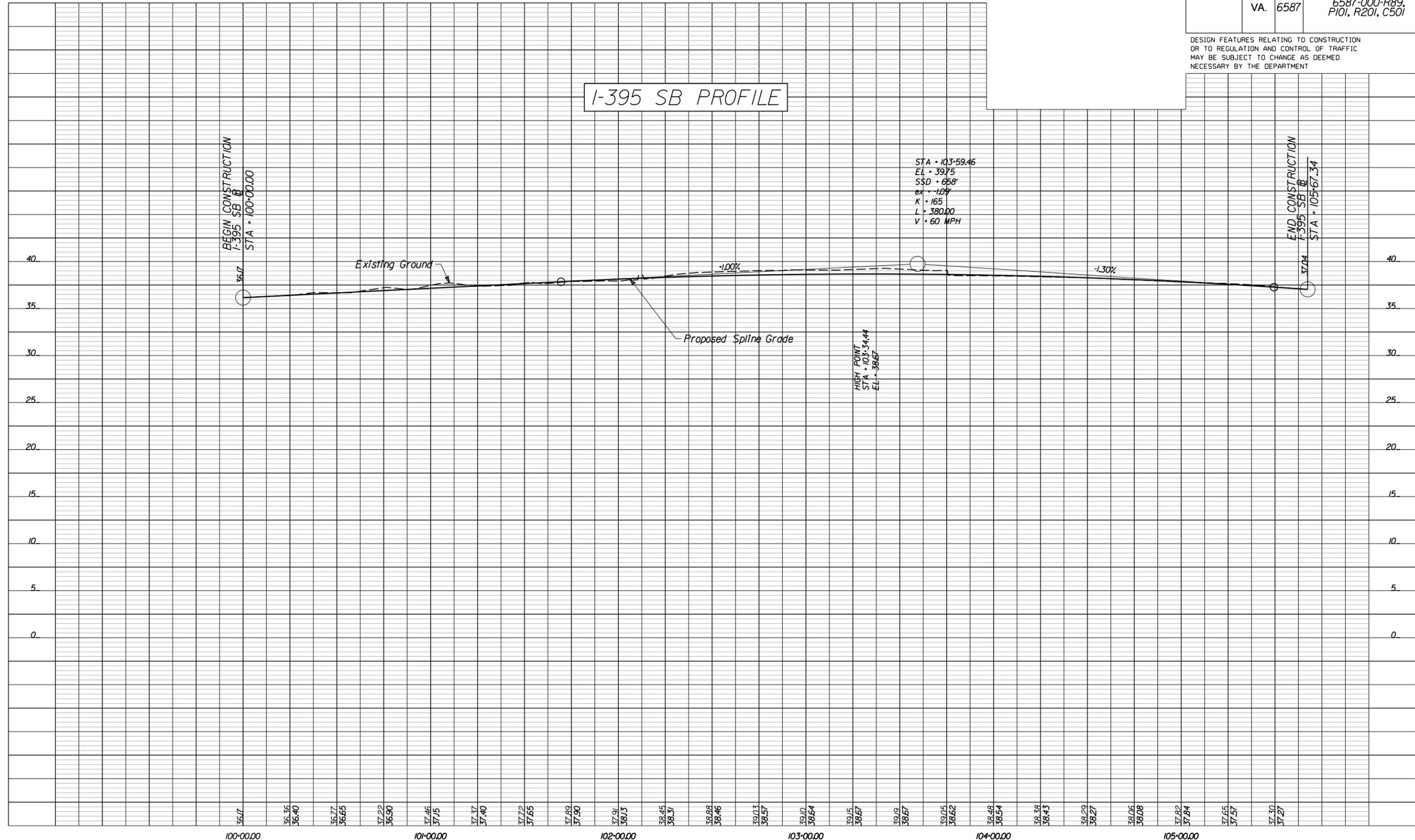
THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.



PROJECT	SHEET NO.
6587-000-R89	9

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

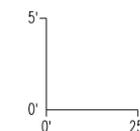
### I-395 SB PROFILE



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

Note: Spline Grade Derived From Projected Slope of Mill and Overlay Lane.

### CONCEPTUAL ROADWAY PLANS



4.2.4.1

# PROPOSAL SCHEDULE

WBS Path	Activity ID	Activity Name	Original Duration	Remaining Duration	Start	Finish	Total Float	2022												2023																				
								Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov				
<b>BOUNDARY Boundary Channel LOS Schedule</b>								513	513	07-16-21	11-21-23	0																												
<b>BOUNDARY.1 General</b>								513	513	07-16-21	11-21-23	0																												
1	GEN-1000	NTP	0	0	07-16-21*		1	NTP																																
1	GEN-1010	Submit Scope Validation	0	0		11-12-21*	1	◆ Submit Scope Validation																																
1	GEN-1005	Interim Milestone	0	0		09-22-23	39	◆ Interim Miles																																
1	GEN-1020	Final Punch List	12	12	10-31-23	11-21-23	0																																	
1	GEN-1025	Final Completion	0	0		11-21-23	0																																	
<b>BOUNDARY.2 Design</b>								377	377	07-16-21	07-27-22	321																												
<b>BOUNDARY.2.1 Quality</b>								48	48	07-16-21	09-01-21	103																												
2.1	DES-0005	Prepare and Submit QA/QC Plan	21	21	07-16-21	08-05-21	103	Prepare and Submit QA/QC Plan																																
2.1	DES-0010	Kickoff Meeting and Present QA/QC Plan	1	1	08-06-21	08-06-21	103	Kickoff Meeting and Present QA/QC Plan																																
2.1	DES-0015	VDOT Review QA/QC Plan	21	21	08-07-21	08-27-21	103	VDOT Review QA/QC Plan																																
2.1	DES-0020	QA/QC Plan Approved	5	5	08-28-21	09-01-21	103	QA/QC Plan Approved																																
<b>BOUNDARY.2.2 Scope Validation</b>								120	120	07-16-21	11-12-21	1																												
2.2	DES-0050	Scope Validation Field Investigation	96	96	07-16-21	10-19-21	1	Scope Validation Field Investigation																																
2.2	DES-0055	Scope Validation Evaluation	21	21	10-20-21	11-09-21	1	Scope Validation Evaluation																																
2.2	DES-0060	Scope Validation Submission of Supporting Documentation	3	3	11-10-21	11-12-21	1	Scope Validation Submission of Supporting Documentation																																
<b>BOUNDARY.2.3 Survey</b>								145	145	07-16-21	12-07-21	100																												
2.3	DES-1005	Prepare Notification Letters	7	7	07-16-21	07-22-21	6	Prepare Notification Letters																																
2.3	DES-1020	Prepare Utility Test Hole Plan	56	56	07-16-21	09-09-21	147	Prepare Utility Test Hole Plan																																
2.3	DES-1010	Property Owner Notifications Waiting Period	30	30	07-23-21	08-21-21	6	Property Owner Notifications Waiting Period																																
2.3	DES-1015	Supplemental Survey and Boring Stakeout	108	108	08-22-21	12-07-21	6	Supplemental Survey and Boring Stakeout																																
2.3	DES-1025	Obtain Test Hole Data and Updated Designations	42	42	09-10-21	10-21-21	147	Obtain Test Hole Data and Updated Designations																																
<b>BOUNDARY.2.4 Geotechnical</b>								266	266	07-16-21	04-07-22	44																												
2.4	DES-2005	Prepare and Submit Boring Plan	7	7	07-16-21	07-22-21	9	Prepare and Submit Boring Plan																																
2.4	DES-2010	VDOT Review Geotechnical Boring Plan	21	21	07-23-21	08-12-21	9	VDOT Review Geotechnical Boring Plan																																
2.4	DES-2015	Secure Permits and Clear Utilities as Required	29	29	07-23-21	08-20-21	9	Secure Permits and Clear Utilities as Required																																
2.4	DES-2020	Field Investigations, Boring Logs and Lab Analysis for Scope Validation	68	68	08-22-21	10-28-21	8	Field Investigations, Boring Logs and Lab Analysis for Scope Validation																																
2.4	DES-2025	Scope Validation Letter to Contractor	5	5	10-29-21	11-02-21	8	Scope Validation Letter to Contractor																																
<b>BOUNDARY.2.4.5 Roadway GDR</b>								229	229	08-22-21	04-07-22	44																												
2.4.5	DES-3005	Perform Soil Borings and Lab Work	125	125	08-22-21	12-24-21	9	Perform Soil Borings and Lab Work																																
2.4.5	DES-3010	Prepare Geotech Report and Recommendations	44	44	12-25-21	02-06-22	9	Prepare Geotech Report and Recommendations																																
2.4.5	DES-3015	QA/QC and Submit GDR	9	9	02-07-22	02-15-22	9	QA/QC and Submit GDR																																
2.4.5	DES-3020	VDOT Review GDR	21	21	02-16-22	03-08-22	44	VDOT Review GDR																																
2.4.5	DES-3025	Revise and Resubmit GDR	9	9	03-09-22	03-17-22	44	Revise and Resubmit GDR																																
2.4.5	DES-3030	VDOT Review and Approval of Revised GDR	21	21	03-18-22	04-07-22	44	VDOT Review and Approval of Revised GDR																																
<b>BOUNDARY.2.5 Environmental</b>								230	230	07-16-21	03-02-22	306																												
2.5	DES-4025	NPS / DOD Permit Coordination	230	230	07-16-21	03-02-22	8	NPS / DOD Permit Coordination																																
2.5	DES-4005	Wetland Delineation	30	30	08-22-21	09-20-21	111	Wetland Delineation																																
2.5	DES-4010	Phase 1 and 2 ESA	30	30	08-22-21	09-20-21	111	Phase 1 and 2 ESA																																
2.5	DES-4015	Phase 1 and 2 ESA (HOLD POINT)	21	21	09-21-21	10-11-21	448	Phase 1 and 2 ESA (HOLD POINT)																																
2.5	DES-4020	Water Quality Permit Coordination	60	60	10-08-21	12-06-21	94	Water Quality Permit Coordination																																
<b>BOUNDARY.2.6 Utilities</b>								201	201	07-16-21	02-01-22	65																												
<b>BOUNDARY.2.6.1 Utility Coordination</b>								201	201	07-16-21	02-01-22	65																												
2.6.1	DES-5010	Develop and Submit Utility Status Report	120	120	07-16-21	11-12-21	83	Develop and Submit Utility Status Report																																
2.6.1	DES-5005	Mail UFI Plans	1	1	09-14-21	09-14-21	65	Mail UFI Plans																																
2.6.1	DES-5015	Utility Field Inspections	1	1	10-19-21	10-19-21	65	Utility Field Inspections																																
2.6.1	DES-5020	Finalize Easements	42	42	10-20-21	11-30-21	65	Finalize Easements																																
2.6.1	DES-5025	Develop P&E's	42	42	12-01-21	01-11-22	65	Develop P&E's																																
2.6.1	DES-5030	P&E VDOT Review and Approvals	21	21	01-12-22	02-01-22	65	P&E VDOT Review and Approvals																																
<b>BOUNDARY.2.6.2 Utility Design</b>								92	92	07-16-21	10-15-21	174																												
2.6.2	DES-5050	In Plan Utility Design	21	21	07-16-21	08-05-21	174	In Plan Utility Design																																
2.6.2	DES-5055	VDOT Review	21	21	08-06-21	08-26-21	183	VDOT Review																																
2.6.2	DES-5060	Arlington County Review	30	30	08-06-21	09-04-21	174	Arlington County Review																																
2.6.2	DES-5065	RFC Utility Design	10	10	09-05-21	09-14-21	174	RFC Utility Design																																

█ Remaining Level of Effort   
 █ Actual Work   
 █ Critical Remaining ...  
█ Actual Level of Effort   
 █ Remaining Work   
 ◆ Milestone









