

Seminary Road Ramp Project

Exhibit C-7

Technical Requirements

Includes:

Section 1: Project Management

Section 2: Construction Requirements

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Attachments

- 1.0 Seminary Project Scope of Work (Plans)

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TECHNICAL REQUIREMENTS

ACRONYMS

Acronym	Definition
AASHTO	American Association of State Highway and Transportation Officials
ASTM	American Society for Testing and Materials
ATMS	Advanced Traffic Management System
BIMS	Bundled Interstate Maintenance Services
CADD	Computer Aided Drafting and Design
DBE	Disadvantaged Business Enterprise
DMS	Dynamic Message Sign
EDMS	Electronic Document Management System
ETTM	Electronic Tolling and Traffic Management
FHWA	Federal Highway Administration
HOT	High Occupancy Toll
HOV	High Occupancy Vehicle
GP	General Purpose
IIM	VDOT Instructional and Informational Memorandum
ITS	Intelligent Transportation System(s)
LCAMS	Lane Closure Advisory Management System
MOT	Maintenance of Traffic
NRO	Northern Regional Operations
PPTA	Public Private Transportation Act
PSTOC	McConnell Public Safety and Transportation Operations Center
QAM	Quality Assurance Manager
QMSP	Quality Management System Plan
SWaM	Small, Women- and Minority-owned Business Enterprise
TMS	Traffic Management System(s)
TTMS	Tolling & Traffic Management System(s)
TTC	Temporary Traffic Control
VTM	Virginia Test Method(s)

1 Project Management

1.1 Overview / Scope of Work

- A. The scope of work for the Seminary Project consists of modifications to existing roadside signage and pavement markings and modifications to the Concessionaire's back-office TTMS system to convert the existing HOV-only ramp to a HOT/Express Lane ramp. The Seminary Design Plans detailing the signage and pavement marking modifications are included as Attachment 1.0.

1.2 General Requirements

- A. The Concessionaire's management approach shall provide all components of an effective and efficient management system, including: communication and reporting; documentation of Work; supervision of Work personnel and activities; all tools, facilities, and materials; environmental protection and mitigation; safety of Work personnel; and any other management elements needed to produce and document a quality, safe, efficient, and operable Seminary Project.
- B. The Concessionaire shall deliver the Seminary Project in a manner consistent with building and maintaining effective working relationships with all stakeholders in the Seminary Project's success. The Concessionaire will serve as the sole source to the news media and community stakeholders on specific lane closures, delays, detours, and other construction-related impacts associated with the Seminary Project.
- C. The Department Representative is authorized to conduct independent inspection and oversight of all Work performed and materials furnished, in accordance with the Agreement. Inspection by the Department Representative shall not relieve the Concessionaire of any obligation to furnish acceptable materials or complete construction in accordance with the Agreement.

1.3 Project Administration

1.3.1 General Requirements

- A. The Concessionaire acknowledges that Department review, concurrence, approvals, inspections, variations, and acceptance of the Work may be subject to third-party review, concurrence, approvals, inspections, variations, and acceptance. Third-parties may include, but not be limited to FHWA and other appropriate governmental agencies.
- B. All prospective contractors, subcontractors, lower tier subcontractors, and prime contractors of joint ventures shall prequalify with the Department and shall have received a certification of qualification prior to undertaking Work on

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the Seminary Project. This restriction does not apply to consultants, manufacturers, suppliers, or haulers.

- C. Subcontracting or otherwise delegating any portion of the Work shall not relieve the Concessionaire of any responsibility for the fulfilment of the Contract. Further, delegation or subcontracting of the Concessionaire's responsibilities shall not diminish the Concessionaire's obligation to report directly to the Department, unless the Department expressly agrees to accept reports or communications from third parties.

1.3.2 Workers

- A. Each party shall notify the other party, in writing, if they believe any person employed by the Department, the Concessionaire, the Contractor, TMS Contractor, or any subcontractor:
 - 1. Is not performing his or her work in a proper or skillful manner;
 - 2. Is intemperate or disorderly; or
 - 3. Is acting in an unsafe manner.
- B. The party receiving the notice will immediately investigate the specifics of the notification and provide a response to the party initiating the notification, within 5 days, detailing a plan of action to resolve the written concerns. If the employees' actions create an unsafe environment for any party's personnel or travelling public, the notified party will immediately stop the operations to resolve safety issues in accordance with the Contract.

1.3.3 Working Drawings

- A. The Concessionaire shall furnish detailed working drawings to the extent and with the details required by the Contract unless otherwise indicated in the Contract. Working drawings shall be submitted in sufficient time to allow for review, discussion and correction prior to the beginning of the work they reference and avoid causing any delay to the Work.
- B. The Concessionaire shall provide working drawings according to the VDOT Road and Bridge Specifications, Section 105.10, Items 1-5. The working drawings shall be appropriately signed and sealed by a professional engineer licensed in the Commonwealth, as applicable. The Concessionaire shall furnish working drawings to the Department as required or requested.

1.3.4 Document Management System

- A. The Concessionaire shall establish and maintain an Electronic Document Management System (EDMS) to store and record all material documents generated on the Seminary Project, including those records required under Law.

- B. The Concessionaire shall ensure upon completion of the Seminary Project, the transfer of files such that the Department has a complete set of material project documentation in electronic format and written documentation on the contents of the data.

1.4 Schedules

1.4.1 Seminary Project Schedules

- A. Schedule Purpose, Format, and Content:
 - 1. The purpose of the Seminary Project Schedule is to ensure that adequate planning, and monitoring for Work performed or remaining.
 - 2. The Seminary Project Schedule shall consist of a Gantt chart detailing the work and timeline.
- B. The Concessionaire shall minimize any Delay Event before requesting any extension of time.

1.4.2 Weekly Reporting

During the performance of the Work, the Concessionaire shall provide a weekly report, which shall include the following:

- A. Specific design and construction schedule activities, including locations for the week concluding and the upcoming week;
- B. Rolling 3-week forward-looking inspection notice, which shall include the fabrication schedule and planned construction activities; and
- C. MOT weekly update regarding any scheduled lane closures and identification of work areas for the ensuing two weeks.

1.5 Requirements for the Work

- A. All Work shall comply with the Contract and these Technical Requirements, including all applicable Exhibits and Attachments.
- B. The Work shall be performed in accordance with the following:
 - 1. VDOT's Minimum Requirements for Quality Assurance & Quality Control on Design-Build & Public-Private Transportation Act Projects (July 2018) (VDOT QA/QC Manual)
 - 2. VDOT Traffic Engineering Division Numbered Memoranda (Traffic Engineering and Mobility Management) including announcements

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from the Northern Region of the Virginia Department of Transportation

3. VDOT Instructional & Information Memorandums (IIM) – All Divisions (as of June 30, 2022)
4. VDOT Road and Bridge Standards, Vol. 1 and Vol. 2 (2016; Revised December 2021),
5. VDOT Road and Bridge Specifications (2020) (Divisions II – VIII only)
6. VDOT Supplements to the 2020 Road and Bridge Specifications (Divisions II – VIII only)
7. VDOT Virginia Work Area Protection Manual 2011 Edition (Revision 2: September 1, 2019) (VWAPM)
8. 2009 Manual of Uniform Traffic Control Devices (MUTCD), Revisions 1 and 2 (May 2012) and 2011 Virginia Supplement to MUTCD, Revision 1 (September 2013)
9. VDOT Materials Approved Lists
10. VDOT Traffic Engineering Design Manual (2020)
11. VDOT Land Use Permit Regulations Guidance Manual (May 20, 2013)
12. VDOT Land Use Permit Regulations 24 VAC 30-151 (March 17, 2010)
13. VDOT CADD Manual (Issued April 20, 2021)
14. Virginia Occupational Safety and Health Standards
15. National Fire Protection Association NFPA 70, National Electric Code NEC, 2020 Edition
16. USDOT FHWA Standard Highway Signs, 2004 Edition and 2012 Supplement
17. Virginia Standard Highway Signs, Revision 1, March 2015
18. VDOT 2020 Road and Bridge Specifications - Special Provision Copied Notes, Special Provisions and Supplemental Specifications
 - i. Division II – Materials
 - ii. Division V – Incidental Construction

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iii. Division VII – Traffic Control Devices

19. VDOT Supplemental Specifications for Section 200 - General – August 25, 2020
20. VDOT Special Provision for Work Zone Traffic Control Management – July 12, 2016
21. VDOT Supplemental Specifications for Section 512 - Maintaining Traffic – September 22, 2020
22. VDOT Special Provision for Mast Arm Hanger Assembly STD SM-3 and SMD-2 – July 12, 2016
23. VDOT Supplemental Specifications for Section 700 – Traffic Engineering (General) - July 17, 2020
24. VDOT Supplemental Specifications for Section 701 – Traffic Signs - October 20, 2020
25. VDOT Supplemental Specifications for Section 704 – Pavement Markings and Markers - September 3, 2020
26. VDOT DBE Program, July 2016
27. Virginia Megaprojects Program Lane Closure Policy and Procedures, September 21, 2016

C. Requirements for the Work and order of precedence are as set forth below. A requirement occurring in one shall be as binding as though occurring in all. They are intended to be complementary and to describe and provide for a complete and compliant Seminary Project. In case of a discrepancy, the following order of priority will apply, with the highest governing item appearing first and the least governing item appearing last:

1. These Technical Requirements
2. Special Provision Copied Notes
3. Special Provisions
4. VDOT Road and Bridge Supplemental Specifications (Divisions II-VII only). Those present in the electronic, executed Contract will govern over those published in the annual supplemental volume.
5. VDOT Road and Bridge Specifications 2020 (Divisions II-VII only)
6. Plans

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7. VDOT Road and Bridge Standard Drawings (including all revisions issued through the date of Proposal submission)

Calculated dimensions, unless obviously incorrect, will govern over scaled dimensions.

- D. Each party shall promptly notify the other party if it discovers an obvious and plain error or omission in the text of the Technical Requirements attributable to a word processing, administrative or similar oversight. The parties will then coordinate to make such corrections as are necessary to restore the intent of the language.
- E. The standards and specifications, special provisions, and reference guides, including all supplements, errata, revisions, and interims, applicable for the Construction Period shall be the version of those documents as listed herein or those in effect as of the Proposal submission date for the Seminary Contract.

1.6 Work Restrictions

1.6.1 General Requirements

- A. The Concessionaire is responsible for the safety of the work zone. The Concessionaire shall be responsible to address traffic control requirements for the work zone in accordance with Section 1.7.
- B. The Concessionaire shall conduct all work necessary to provide safe and efficient traffic operations during construction, including provisions for the movement of people, goods, and services through and around the Seminary Project while minimizing impacts to pedestrians, bicyclists, local residents, businesses, and commuters. In no event shall sidewalks or shared use paths be closed unless first approved by the Department.
- C. The Concessionaire is responsible for lane closure coordination and notification to all stakeholders.
- D. The Concessionaire shall coordinate construction and traffic control activities that impact transit services with the impacted transit agencies.

1.6.2 Work Hours

- A. The Concessionaire is advised that its general operations may proceed seven days a week, 24 hours a day, except as may be modified herein.
- B. This is contingent upon the Concessionaire obtaining a variance or waiver of all applicable noise restrictions, as stated in the Contract.

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1.6.3 Temporary Roadway Closures

A. Anticipated and proposed temporary lane and/or shoulder closures shall be reviewed and approved by VDOT for the General Purpose lanes and other state roadways. The Concessionaire shall restore all lanes of traffic per the times specified in this section. Restoration of traffic shall mean the completion of all construction work, the removal of all temporary traffic control devices, signs, workers, materials, and equipment from the roadway. To facilitate construction and minimize inconvenience to the public, the Concessionaire is advised of the closure limitations listed in the Contract. The Department reserves the right to modify the closure limitations in the Contract, and any modification shall be handled under Section 1.6.6 – Allowance for Additional Lane Closure Restriction by the Concessionaire and/or Contractor Request for Additional Lane Closures.

B. Allowable Lane Closure Hours

INTERSTATE 395 & INTERSTATE 95					
WEEKDAY		Northbound			
		Single-Lane Closures or Shoulder	Two-Lane Closures	Multiple-Lane Closures	Complete Road Closure
Segment 1	14th St. Bridge to Springfield Interchange	10:00AM to 3:00PM	10:00PM to 5:00AM	11:00PM to 5:00AM	12:00AM to 4:00AM
		9:00PM to 5:00AM			
Segment 2	Springfield Interchange to Rt.123	9:30AM to 3:30PM	10:00PM to 5:00AM	11:00PM to 5:00AM	12:00AM to 4:00AM
		9:00PM to 5:00AM			
Segment 3	Rt.123 to Prince William / Stafford County line	9:30AM to 3:30PM	10:00PM to 4:30AM	11:00PM to 4:00AM	12:00AM to 4:00AM
		9:00PM to 5:00AM			
Segment 4	Prince William / Stafford County line to Rt.3 Exit 130	9:30AM to 3:30PM	10:00PM to 4:30AM	n/a	12:00AM to 4:00AM
		9:00PM to 4:30AM			
Segment 5	Rt.3 Exit 130 to Caroline / Hanover County line	9:00AM to 3:30PM	10:00PM to 4:30AM	n/a	12:00AM to 4:00AM
		9:00PM to 5:30AM			
All lanes open at 12:00 noon on Friday					
WEEKDAY		Southbound			
		Single-Lane Closures or Shoulder	Two-Lane Closures	Multiple-Lane Closures	Complete Road Closure
Segment 1	14th St. Bridge to Springfield Interchange	10:00AM to 2:30PM	10:00PM to 5:00AM	11:00PM to 5:00AM	12:00AM to 4:00AM
		9:30PM to 5:00AM			
Segment 2	Springfield Interchange to Rt.123	9:00AM to 2:00PM	10:00PM to 5:00AM	11:00PM to 5:00AM	12:00AM to 4:00AM
		9:30PM to 5:00AM			
Segment 3	Rt.123 to Prince William / Stafford County line	9:00AM to 2:00PM	10:00PM to 5:00AM	11:00PM to 5:00AM	12:00AM to 4:00AM
		9:30PM to 6:00AM			
Segment 4	Prince William / Stafford County line to Rt.3 Exit 130	9:00AM to 2:00PM	10:00PM to 5:30AM	n/a	12:00AM to 4:00AM
		9:30PM to 6:00AM			
Segment 5	Rt.3 Exit 130 to Caroline / Hanover County line	9:00AM to 3:00PM	10:00PM to 5:30AM	n/a	12:00AM to 4:00AM
		9:30PM to 6:00AM			
All lanes open at 11:00am on Friday					

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INTERSTATE 395 & INTERSTATE 95			
WEEKEND	Northbound/Southbound*		
	Single-Lane Closures or Shoulder	Multiple-Lane Closures	Complete Road Closure
Friday to Saturday	10:00PM to 7:00AM	11:00PM to 6:00AM	12:00AM to 5:00AM
Saturday to Sunday	10:00PM to 7:00AM	11:00PM to 6:00AM	12:00AM to 5:00AM
Sunday to Monday	10:00PM to 5:00AM	11:00PM to 4:00AM	12:00AM to 4:00AM

* For special operations, depending on time of year, additional hours may be allowed with proper ADA/ROD approval.

REVERSIBLE LANES (HOV & EXPRESS LANES)*		
WEEKDAY	Single-Lane Closures or Shoulder	
	Complete Road Closure**	
WEEKDAY	9:30PM (Sunday to Thursday) to 4:00AM (Monday to Friday)	
WEEKEND	11:00PM (Friday to Saturday) to 9:00AM (Saturday to Sunday)	

* Direction of traffic control for all lane closures in reversible lanes will need to be adjusted as necessary to face direction of traffic.
 ** Complete Road Closure on Express Lanes limited to 30 minutes or less.

Single-Lane Closures* or Shoulder					
ARTERIAL	WEEKDAY			WEEKEND	
	Monday to Thursday	Friday	Friday to Saturday	Saturday to Sunday	Sunday to Monday
Major Arterials**	9:30AM to 3:00PM	9:30AM to 2:00 PM	10:00PM to 9:00AM	10:00PM to 8:00AM	10:00PM to 5:00AM
	10:00PM to 5:00AM				
All Other Roadways	9:00AM to 3:30PM	9:00AM to 2:00 PM	10:00PM to 9:00AM	9:00PM to 9:00AM	10:00PM to 5:00AM
	9:00PM to 5:00AM				

Multiple-Lane Closures					
ARTERIAL	WEEKDAY			WEEKEND	
	Monday to Thursday	Friday	Friday to Saturday	Saturday to Sunday	Sunday to Monday
Major Arterials**	10:00PM to 5:00AM	Not allowed until 11:00PM	11:00PM to 5:00AM	11:00PM to 6:00AM	11:00PM to 5:00AM
All Other Roadways	9:00PM to 5:00AM	Not allowed until 10:00PM	10:00PM to 6:00AM	10:00PM to 6:00AM	10:00PM to 5:00AM

*Single-lane closures only permitted for multiple-lane roadways.

**Major Arterials defined as Primary Roads, high volume Secondary Roads, and all other routes that connect directly to Interstates.

- C. The allowable hours shall be applicable to both stationary and mobile lane closures, as well as shoulder closures.
- D. Both left and right shoulders on I-395 GP lanes shall not be closed at the same time.
- E. Lane Closure Request Procedure
 - 1. Multi-lane closures of I-395 for any Work will require coordination with appropriate Governmental Authorities, stakeholders and public notice. The Concessionaire shall provide a minimum of three (3) weeks advance notice to the Department. This advance notice will allow the Department to coordinate on a public outreach campaign and/or advertising to reach affected motorists and target audiences. Alternate dates can be advertised in the event of inclement weather.
 - 2. Total closures of I-395 for any surface, overhead, or underground work will require coordination with appropriate Governmental Authorities, stakeholders and public notice. Total roadway closures shall be limited to no more than 30 minutes maximum. Closures

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beyond 30 minutes shall require approval by the Department, subject to review of any required TTC plans and/or detour plans. The Concessionaire shall provide a minimum of six (6) weeks advance notice to the Department. This advance notice will allow the Department to coordinate on a public outreach campaign and/or advertising to reach affected motorists and target audiences. Alternate dates can be advertised in the event of inclement weather.

3. The Concessionaire shall be responsible for submitting all lane and/or shoulder closures into LCAMS at least ten (10) days in advance of the proposed lane and/or shoulder closure(s) and no later than close of business Wednesday the week prior to the closure stating the location, purpose, specific lane(s) to be closed, time and duration of closure. Any conflicts generated from LCAMS shall be resolved no later than close of business Thursday the week prior to the closure to avoid cancellation of the lane closure request. The Concessionaire shall also be responsible for entering lane closure requests in VDOT systems such as VaTraffic, LCAMS, and VA511.
 4. The Concessionaire is responsible for providing advance notification via variable message and required static signing for lane and/or shoulder and complete road closures in accordance with the *Virginia Work Area Protection Manual* (VWAPM) and the *Manual on Uniform Traffic Control Devices* (MUTCD). Once a lane or shoulder closure is in place, Work shall commence immediately and shall progress on a continuous basis to completion or to a designated time.
- F. The Department reserves the right to monitor traffic conditions impacted by the Work and to make necessary restrictions as may be warranted or as emergency situations dictate. Additional restrictions for other holidays or special local events may also be necessary, however, in these situations the Department will endeavor to inform the Concessionaire of any additional restrictions as early as practicable and in no case less than forty-eight (48) hours prior to the holiday or special local event.
- G. Confirmation shall be made 24 hours before any scheduled lane closure and shall include a written reiteration of the proposed tasks and a listing of materials, labor, and major equipment to be used. Complete road closures require a 72-hour advance confirmation for coordination. The Concessionaire is responsible for providing adequate advance notification via variable message and required static signing for lane closures in accordance with the VWAPM and the MUTCD. Once a closing is in place, Work shall begin immediately and shall progress on a continuous basis to completion or to a designated time. The closure may be delayed if excessive traffic backup or queuing is already present at the scheduled start of Work and will be adjusted in accordance with the Contract.

- H. Traffic backups must dissipate before successive closings can be implemented.
- I. The minimum clear distance between two separate lane closings, that is, from the last traffic cone of the first closing to the first traffic cone of the second closing in the same roadway, shall be two miles.

1.6.4 Reversible Facilities

A. Hours of Operations

The existing reversible facility hours of operations shall remain in place during of the Construction Period, unless otherwise specified by the Department with adequate advance notice to the Concessionaire. During the Construction Period, Transurban USA Operations Inc. shall be responsible for the operation of the existing reversible facility, including gate operations and reversal of the flow of traffic. The Concessionaire shall be responsible for scheduling all Work to accommodate the reversal schedule. This shall include adjustment of all temporary traffic controls as necessary to be consistent with the direction of traffic.

1.6.5 Lane Closure Types

A. All lane closures shall be identified as one of the following types:

1. Type 1 – A lane closure resulting in a significant impact on traffic, such as stopping traffic completely, closing two or more lanes, any lane closures in the existing reversible facility, closing an exit or entrance ramp at freeway interchanges or changing traffic patterns. This type of closure would require extensive media and stakeholder notification and coordination among various local and state agencies.
2. Type 2 – A lane closure resulting in minor or no impact on the flow of traffic, such as closing one lane on a four-lane roadway during off-peak traffic hours.
3. Type 3 – A lane closure that would close a shoulder (right or left) on a roadway or ramp.

1.6.6 Allowance for Additional Lane Closure Restriction by the Concessionaire and/or Contractor Request for Additional Lane Closures

- A. At the Department’s reasonable discretion and approval, the Concessionaire may submit a request to Work outside the stated lane closure hours by providing adequate justification (including traffic analysis) demonstrating the viability of the request.

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- B. Closures of longer durations than those specified in the Contract will require a review of plans, implementation of detours, and public outreach.
- C. The Department reserves the right to monitor traffic conditions affected by the Work and to make additional restrictions as may be necessary, such as terminating a lane closure early or adjusting the Seminary Project's allowable lane closure hours.
- D. General Requirements:
 - 1. The Department will track any additional lane closure time granted outside of time allowed in the Contract.
 - 2. Any additional time granted must comply with all the requirements set forth in the Contract.
 - 3. The Concessionaire acknowledges that there will be instances where the Concessionaire may not be allowed to implement an approved lane closure during events that are beyond the Department's control.
 - 4. The Department will track all instances where the Concessionaire is directed by the Department not to implement any lane closures for special events such as, but not limited to, the following list:
 - i. Presidential motorcades traveling through project limits
 - ii. Special events with regional impacts
 - iii. Special sport events with regional impacts
 - iv. Major accidents/Incidents with regional impacts
 - v. Seasonal traffic patterns
- E. Calculating Hours:
 - 1. Additional time (lane closures) – Any additional time requested by the Concessionaire and granted by the Department beyond the approved hours within the Contract will be added for every instance and every location at 15 minute intervals.
 - 2. Additional Time (complete closures) – If a full closure of roadway not specified in the Contract is implemented in lieu of 30 minute total temporary closure, hours will be calculated in the same manner as the hours that were requested/approved for the specific closure.
 - 3. Time Deducted – When the Concessionaire is not allowed by the Department to implement a lane closure during the approved hours

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within the Contract, the hours during which such lane closure is not allowed will be deducted from the total hours accumulated.

F. Documentation:

1. Within the first 60 days, the Department and Concessionaire will develop and agree on a format of documenting this information. The form should at least contain date, hours allowed, hours disallowed, impacted time and other agreed upon elements.
2. By the 10th of each month, the Department and Concessionaire will reconsolidate and agree on the resultant amount of hours allowed/disallowed.

G. Allowance:

1. At the end of the Seminary Project, the Department and the Concessionaire will reconcile the resultant impacted time or additional granted time by subtracting the additional time granted by the Department from the time Concessionaire was disallowed to implement the lane closures. The Department and Concessionaire will endeavor to maintain a neutral balance of resultant impacted and additional granted time throughout the duration of the Seminary Project.
2. Any lane closures affected by inclement weather, snow and snow removal process, Emergency VDOT maintenance repairs, safety shutdowns and major accidents are not subject to above allowance and are excluded from the calculations and compensations.

H. General

Notwithstanding anything to the contrary, it is agreed that:

1. The Department will provide the Concessionaire with as much notice as is possible with respect to any lane closure request by the Concessionaire which is not approved by the Department.
2. The Concessionaire will provide the Department with as much notice as is possible with respect to any inability of the Concessionaire to implement lane closures which are otherwise allowed within the Contract.
3. At the end of the Seminary Project, the Department and the Concessionaire will reconcile the impacted time by subtracting the additional time granted by the Department from the time the Concessionaire was disallowed per the technical requirements to implement the lane closures. If the Department disapproves requests

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for lane closures from Concessionaire, or otherwise prevents Concessionaire from implementing lane closures which are otherwise permitted by the Contract, and the impact of such actions by the Department is more than 120 cumulative hours, such actions shall result in a Work Order.

1.6.7 Night Work

- A. In areas where Work is to be performed during the hours of dusk or darkness, the Concessionaire shall furnish, place, and maintain lighting facilities capable of providing light of sufficient intensity to facilitate good workmanship and proper inspection at all times. The lights shall be arranged so as not to interfere with or impede traffic approaching the work site(s) from either direction or produce undue glare to property owners.
- B. Lighting of work site(s) may be accomplished using any combination of portable floodlights, standard equipment lights, existing street lights, and temporary street lights that will provide the proper illumination.
- C. The Concessionaire shall furnish and place warning signs to alert approaching motorists of lighted construction area(s). These warning signs shall be four feet (1200 mm) x four feet (1200 mm). The Concessionaire's vehicles used on the Seminary Project shall be provided with amber flashing lights that shall be in operation while in the work area. The Concessionaire's equipment shall be provided with a minimum of three square feet of reflective sheeting that is visible to approaching motorists. The Concessionaire shall provide his personnel with proper Personal Protective Equipment (PPE), which shall be worn at all times while the workers are within the work area. The Concessionaire shall provide a light meter to demonstrate that the minimum light intensity is being maintained.
- D. The Concessionaire shall provide sufficient fuel, spare lamps, generators, and other necessary equipment to maintain the lighting of the work site. The Concessionaire shall utilize padding or shielding or locate mechanical and electrical equipment to minimize noise generated by lighting operations as directed by the Department. Noise generated by portable generators shall comply with all Law.
- E. For nighttime work zones involving I-395 travel lanes and ramps (including 395 Express Lanes and ramps), the Concessionaire shall provide a Virginia State Police officer with a law enforcement vehicle equipped with a blue flashing light within the work zone in accordance with the VWAPM. For all other roadways and daytime applications, the use of law enforcement shall comply with minimum VWAPM requirements. In the event the Virginia State Police have been given reasonable advance notice of such request but are unable to provide coverage, the Concessionaire may utilize other law enforcement agencies

1.6.8 Law Enforcement Utilization

- A. The Concessionaire shall be responsible for all costs and for coordinating directly with the Virginia State Police service during temporary traffic control operations involving lane closures and/or rolling lane closures, and any other operation as covered in Appendix C of the VWAPM.

1.6.9 395 Express Lanes

- A. For any Work within the 395 Express Lanes, access must be approved by Transurban USA Operations in advance through the Transurban Authority to Access (ATA) process.

1.6.10 Holidays

- A. Moving/mobile, short duration, short-term stationary, or intermediate-term stationary temporary traffic control zone lane closures on mainline lanes, shoulders, or ramps shall not be performed during the following Holiday time periods without the written permission of the Department. Additionally, a long-term stationary temporary traffic control zone shall not be initially put in place, adjusted, or removed during the following Holiday time periods without the written permission of the Department:

- **January 1:** From noon on the preceding day until noon on the following day, except as indicated in Section 1.6.10.B below.
- **Inauguration Day:** From noon on the preceding day until noon on the following day.
- **Martin Luther King, Jr. Day:** From noon on the preceding Friday to noon on the following Tuesday.
- **Presidents Day:** From noon on the preceding Friday to noon on the following Tuesday.
- **Easter:** From noon on the preceding Friday to noon on the following Monday.
- **Memorial Day:** From noon on the preceding Friday to noon on the following Tuesday.
- **Juneteenth:** From noon on the preceding day until noon on the following day, except as indicated in Section 1.6.10.B below.
- **July 4:** From noon on the preceding day until noon on the following day, except as indicated in Section 1.6.10.B below.

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- **Labor Day:** From noon on the preceding Friday to noon on the following Tuesday
 - **September 11:** No daytime closures.
 - **Indigenous Peoples' Day:** From noon on the preceding Friday to noon on the following Tuesday.
 - **Election Day** (the Tuesday following the first Monday in November): No daytime closures.
 - **Veterans Day:** From noon on the preceding day until noon on the following day, except as indicated in Section 1.6.10.B below.
 - **Thanksgiving Day:** From noon on the Wednesday preceding Thanksgiving Day until noon on the following Monday.
 - **Christmas Day:** From noon on the preceding day until noon on the following day, except as indicated in Section 1.6.10.B below.
- B. If the Holiday occurs on a Friday or Saturday, closures shall not be performed from noon on the preceding Thursday to noon on the following Monday. If the Holiday occurs on a Sunday or Monday, closures shall not be performed from noon on the preceding Friday to noon on the following Tuesday.

1.7 Maintenance of Traffic/Traffic Control

1.7.1 General Requirements

- A. Work zone information shall be shared with VDOT's Northern Region Operations Advanced Traffic Management System (ATMS) and any other regional ATMS and shall be approved by the Department.
- B. Concessionaire shall have at least one person on the Project site during all work operations who is currently verified either by VDOT's Intermediate Work Zone Traffic Control training or by the American Traffic Safety Services Association (ATSSA) Virginia Intermediate Traffic Control Supervisor (TCS) training by a Department approved training provider. This person must have their verification card with them while on the Project site. This person shall be responsible for the oversight of Work zone traffic control within the Project limits in compliance with the Contract requirements, the VWAPM, and the MUTCD. This person's duties shall include the supervision of the installation, adjustment (if necessary), inspection, maintenance, and removal when no longer required, of all Work zone traffic control devices on the Project .
- C. If none of Concessionaire's on-site personnel responsible for the supervision of such work have the required verification with them or if they have an outdated verification card showing they are not currently verified as a Traffic Control

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Supervisor (TCS) either by Department in Intermediate Work Zone Traffic Control, or by the ATSSA, Department will suspend all work on the Project until the Work is appropriately supervised in accordance with the requirements herein.

1.7.2 Maintenance of Traffic during Construction

- A. The construction activities will be completed in accordance with with the requirements of the Contract and the Seminary Design Plans.
- B. The Concessionaire shall conduct daily and weekly MOT/traffic control inspections to ensure all in-place traffic devices and traffic patterns are in compliance with the VWAPM and MUTCD standards. If requested by the Department, provide a weekly MOT report to the Department to include the following:
 - 1. Date discrepancy was identified
 - 2. Description of discrepancy
 - 3. Corrective action required
 - 4. Date corrective action should be taken
 - 5. Date corrective action was completed
- C. The Concessionaire will be required to provide a uniformed law enforcement officer with a marked law enforcement vehicle equipped with a blue flashing light during set-up and take-down of all daytime intersection closures involving two or more lanes of traffic.
- D. Concessionaire shall prosecute the Work so as to avoid obstructions to traffic to the greatest extent practicable. Concessionaire shall provide for the safety and convenience of the general public and residents along the roadway, and for the protection of persons and property.
- E. Highways closed to traffic shall be protected by barricades and other warning devices as required by the Contract, the VWAPM, and the MUTCD. Barricades and warning devices shall be illuminated where required during periods of darkness and low visibility. Concessionaire shall erect warning devices in advance of a location on the Project where operations or obstructions may interfere with the use of the road by traffic and at all intermediate points where the new work crosses or coincides with an existing roadway. Concessionaire shall maintain sign faces and reflective surfaces of warning devices in a clean and visible condition. Concessionaire shall cover or remove signs when the messages thereon are not applicable. Barricades, warning signs, lights, temporary signals, and other protective devices shall conform to Section 512 of the Road and Bridge Specifications.

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- F. Two-way traffic shall be maintained at all times unless the Contract or Department permits one-way traffic. Concessionaire shall not stop traffic without Department's permission. If one-way traffic is permitted, Concessionaire shall provide certified flaggers to direct the traffic. Certified flaggers shall be provided in sufficient number and locations as necessary for control and protection of vehicular and pedestrian traffic in accordance with the requirements of the VWAPM. Flaggers shall be able to communicate to the traveling public in English while performing the job duty as a flagger at the flagger station. Flaggers shall use sign paddles to regulate traffic in accordance with the requirements of the VWAPM. Flagger certification cards shall be carried by flaggers while performing flagging duties. Flaggers found not to be in possession of their certification card shall be removed from the flagging site and operations requiring flagging will be suspended. Further, flaggers performing duties improperly will have their certifications revoked.
- G. Restrictions on lane closures are defined in the Contract.
- H. Connections with roads and public and private entrances shall be kept in a reasonably smooth condition at all times. Stabilization or surfacing material shall be applied to connections and entrances.
- I. The Concessionaire shall schedule construction operations so that approved continuous access is provided for all roads and properties. Connections or entrances shall not be disturbed by the Concessionaire until necessary. Once connections or entrances have been disturbed, they shall be maintained and completed as follows:
 - 1. Connections that had an original paved surface shall be brought to a grade that will smoothly and safely accommodate vehicular traffic through the intersection, using pavement. Connections that had an original unpaved surface shall be brought to a grade that will smoothly and safely accommodate vehicular traffic through the intersection, using either the required material or a temporary aggregate stabilization course that shall be placed as soon as practicable after connections are disturbed.
 - 2. Mainline connections shall have all lanes open during construction. If there are delays in prosecution of work for other connections, connections that were originally paved shall have at least two lanes maintained with a temporary paved surface. Those that were not originally paved shall be maintained with a temporary aggregate stabilization course.
 - 3. Mainline access/egress connections shall have all lanes open during construction unless otherwise agreed with the Department. Other entrances shall be graded concurrently with the roadway with which they intersect. Once an entrance has been disturbed, it shall be

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completed as soon as is practicable, including placing the required base and surface course or stabilization. If the entrance must be constructed in stages, such as when there is a substantial change in the elevation of the roadway with which it intersects, the surface shall be covered with a temporary aggregate stabilization course or other suitable salvaged material until the entrance can be completed and the required base and surface or stabilization course can be placed.

- J. All stages and phases of construction, including installation and testing of the Electronic Toll and Traffic Management (ETTM) system, shall be covered by an approved TTC plan.
- K. If any sidewalk or shared use path is requested to be closed, the alternative routes considered shall be covered by a TTC plan and/or detour plan and approved by the Department.

1.8 Safety

- A. The Department and the Concessionaire recognize that in every circumstance, activity, and decision related to the Seminary Project, safety of the public, Concessionaire personnel, and Department personnel is the primary concern. Ensuring and maintaining safety on the Seminary Project shall supersede any and all other objectives.
- B. Compliance with construction safety and health standards is a condition of the Agreement, and shall be made a condition of each subcontract entered into pursuant to the Agreement. The Concessionaire and any Contractor shall not require any worker employed in performance of the Agreement to work in surroundings or under working conditions that are unsanitary, hazardous, or dangerous to their health or safety, as determined under construction safety and health standards promulgated by the U.S. Secretary of Labor in accordance with the requirements of Section 107 of the Contract Work Hours and Safety Standards Act.
- C. The Concessionaire shall comply with the Virginia Occupational Safety and Health Standards adopted under the Code of Virginia and the duties imposed under the Code. Any violation of the requirements or duties that is brought to the attention of the Concessionaire by the Department or any other person shall be immediately abated.

1.9 Quality

1.9.1 General Requirements

- A. The Concessionaire is responsible for developing, implementing, and maintaining a quality management system that complies with the VDOT QA/QC Manual.

1.9.2 Materials Supply and Quality Requirements

- A. Unless otherwise specified in the Contract, materials, equipment, and components that are to be incorporated into the finished Work shall be new. The Concessionaire shall submit statements of the known origin, composition, and manufacture of all materials to be used in the Work, including optional or alternate items, using VDOT's Form C-25.
- B. All materials or equipment (excluding the equipment maintained and operated by the Concessionaire) physically installed, which will become part of the completed Work, whether it is permanent or temporary, must conform to the requirements of the Contract, and shall be furnished with valid test data required to document the quality of the material or equipment at least two (2) weeks prior to delivery. The Concessionaire shall change the source of supply and furnish material or equipment from other approved sources, if the requirements are not met, and shall notify the Department of this change, and provide the same identifying information noted in this section, at least two (2) weeks prior to delivery.

1.9.3 Inspection of Work

- A. The responsibility for quality control, quality assurance, and ensuring compliance with applicable specifications and testing requirements lies with the Concessionaire in accordance with the VDOT QA/QC Manual. All stages, materials, and details of the Work, including machines and plant equipment used in processing or placing materials, are subject to independent inspection by the Department in accordance with the Contract. The Department, at its discretion, may conduct testing and audits in its performance of oversight services.
- B. Unless reference is made to a specific dated specification or special provision, references in the Contract to AASHTO, ASTM, VTM, and other standard test methods and materials requirements shall refer to either the test specifications that have been formally adopted or the latest interim or tentative specifications that have been published by the appropriate committee of such organizations as of the date of the Price Proposal.
- C. If an inspection reveals that Work has not been properly performed, the Concessionaire shall promptly inform the Department of the schedule for correcting such Work and the time when an inspection of the corrected Work can be made.

1.10 Third Parties and Permitting

1.10.1 Permitting

- A. The Concessionaire shall obtain permits, approvals, and coordinate with any relevant Governmental Authorities and other entities necessary to complete the

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Seminary Project, with assistance from the Department as reasonably requested. All Governmental Approvals applicable to construction Work will be the responsibility of the Concessionaire, with the exception of those Governmental Approvals for which the Department is responsible per the Contract. The Concessionaire shall provide copies of all permits and permit modifications to the Department upon receipt.

- B. The Concessionaire shall obtain any required waiver or variance from each applicable local government regarding a local noise ordinance, as needed to prosecute the Work. The Department will make reasonable efforts to assist the Concessionaire in obtaining any such waiver or variance. The Concessionaire shall adhere to the requirements of the noise waiver in planning and performing any construction. If the local government identifies a violation all costs associated with any delays or corrective action is the responsibility of the Concessionaire.
- C. The Concessionaire will be responsible for all costs associated with compliance with any ordinance and Law or any violations of Law attributed to the activities of the Concessionaire in accordance with the Contract.

1.10.2 Third Parties

- A. If any portion of the Seminary Project is located within the limits of a municipality or locality, military installation, or other federally owned property, the Concessionaire shall cooperate with the appropriate officials and agents in the prosecution of the Work to the same extent as with the Department.
- B. The Concessionaire shall coordinate its activities with municipalities and localities, and other contractors working in the area. As provided in the Contract, the Concessionaire's work program and schedule shall consider and coordinate with the work of other contractors involved with adjacent work, including maintenance, in the corridor.
- C. If other separate contracts are awarded by the Department or by other Governmental Authorities, including projects under the PPTA, that affect the Concessionaire's work, including work related to abutting roadways and connectors and work associated with a BIMS contract, the Concessionaire will coordinate its work with the work being performed by the other contractors. The Department will contractually require its separate contractors to cooperate with, and coordinate their activities with, the Concessionaire.
- D. The Concessionaire shall be responsible for contacting other contractors regarding their anticipated schedules to complete the associated projects or key milestones of the associated projects they are/will be working on.
- E. The Concessionaire shall not impede the access or progress of such work by other contractors, but shall cooperate and coordinate with other contractors for the timely completion of all construction activities. This shall include

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attendance at coordination meetings deemed necessary or advantageous by the Department or its contractors.

1.10.3 Fire Hydrants

- A. No Work shall be undertaken around fire hydrants until provisions for continued service have been approved by the local fire authority.
- B. When the Concessionaire's Work requires the disconnection of "in service" fire hydrants, the Concessionaire shall notify the locality's fire department or communications center at least 24 hours prior to disconnection. In addition, the Concessionaire shall notify the locality's fire department or communications center no later than 24 hours after reconnection of such hydrants.

1.11 Emergency Services

1.11.1 Liaison

The Concessionaire shall comply with the Department requirements for participation in industry and statutory initiatives regarding Emergency management, where applicable.

1.11.2 Emergencies and Extraordinary Circumstances

- A. Subject to the Contract, the Concessionaire's response to Emergencies and extraordinary circumstances as part of the Seminary Project will be in accordance with the Contract and not inconsistent with the Department's Emergency evacuation plan and shall ensure that:
 - 1. safety of motorists, pedestrians and workforce personnel shall be the primary objective for all decisions and actions;
 - 2. clearance of a travel lane for Emergency response vehicles shall be by the most expedient route whether GP Lanes or HOT Lanes (in such circumstances, the decision of the Department or the Emergency services in charge shall govern);
 - 3. military vehicles acting in an Emergency response capacity or in defense of the sovereign homeland of the United States of America shall be given free and unrestricted access to the HOT Lanes;
 - 4. if the U.S. Secret Service (USSS), in coordination with the Virginia State Police (VSP), determines movements of the President of the United States require use of the HOT Lanes, the Concessionaire shall cooperate and comply fully with USSS and VSP instructions with respect to Work activities, lane closures and traffic management;

5. Department reserves the right, by direction of the Northern Virginia District Administrators or the NRO Director, to assume and exercise control of the HOT Lanes in part and/or in their entirety, including all applicable systems and field devices via available interfaces, pursuant to the Contract; and
 6. the Concessionaire will, as needed, participate in Emergency exercises conducted by Governmental Authorities.
- B. During special events that have significant impact on traffic flow, the Concessionaire shall designate a responsible party in charge to work with the Department's NRO Special Events and Incident Management Coordinator to develop traffic management plans for the event.
 - C. Should the Concessionaire fail to respond to an Emergency or extraordinary circumstance in a timely manner in accordance with the requirements of the Contract, the Department shall have the right to take necessary and appropriate action to handle such Emergency or extraordinary circumstance.

1.12 Public Communications

- A. The Contractor shall deliver the Seminary Project in a manner consistent with building and maintaining effective working relationships with all stakeholders in the Seminary Project's success. The Concessionaire will serve as the sole source to the news media and community stakeholders on specific lane closures, delays, detours, and other construction-related impacts associated with the Seminary Project.
- B. The Concessionaire shall collaborate with the Department in the development of all communications strategies to ensure they are consistent with both parties' values, needs, and goals. The Concessionaire shall provide the Department with advance copies of project communications materials for review and comment prior to dissemination

2 Construction Requirements

2.1 General Requirements

- A. The Seminary Project shall be constructed pursuant to Contract requirements.
- B. Plans consisting of general drawings and showing such details as are necessary to give a comprehensive understanding of the work specified will be furnished by the Concessionaire. Except as otherwise shown on the plans, dimensions shown on the plans are measured in the respective horizontal or vertical planes. Dimensions that are affected by gradients or vertical curvatures shall be adjusted as necessary by the Concessionaire to accommodate actual field conditions and shall be specifically denoted as "field adjusted" on the working

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drawings. Failure on the part of the Concessionaire to so denote field adjustments on the working drawings shall not relieve the Concessionaire of the responsibility to accommodate and incorporate such existing conditions into the finished work.

- C. All materials used in the Work shall conform to the qualities, technical requirements, values or range of values specified in the Contract. Less than complete conformity may be permitted if obtaining exact or complete conformity would not be feasible and if authorized by the Department. If permissible tolerances are exceeded or if consistent deviations from the plans or abrupt changes in grade occur, even though within the tolerances, the affected areas shall be reconstructed to conform to the specified tolerance such that the Work is fit for its intended purpose. When the Contract requires the finished surface to tie into any structural item whose elevation is fixed, the elevation of the finished surface must coincide with the elevation of the structural item.
- D. The Concessionaire shall take all reasonable efforts to preserve property and improvements along the boundary lines of and adjacent to the Work unless the removal or destruction is absolutely required and consistent with the Construction Documentation. The Concessionaire shall use suitable precautions to prevent damage to such property. If property is damaged, the Concessionaire shall restore property to a condition similar or equal to that existing before such damage was done by repairing, rebuilding, or restoring, or making settlement with the property owner. Where property of third parties has been damaged and repaired by the Concessionaire, the Concessionaire shall secure from the owner a release from any claim against the Department. A copy of this release shall be furnished to the Department.

2.2 Environmental

2.2.1 Water Pollution

- A. The Concessionaire shall exercise every reasonable precaution to prevent pollution of rivers, streams, and impoundments. Pollutants such as chemicals, fuels, lubricants, bitumens, raw sewage, paints, sedimentation, and other harmful material shall not be discharged into or alongside rivers, streams, or impoundments or into channels leading to them.
- B. If the Concessionaire dumps, discharges, or spills any oil or chemical that reaches or has the potential to reach a waterway, it shall immediately notify all appropriate jurisdictional state and federal agencies and shall take immediate actions to contain, remove, and properly dispose of the oil or chemical in accordance with the local, State and federal requirements.

2.2.2 Noise Mitigation

- A. Construction Noise

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1. The Concessionaire's operations shall be performed so that exterior noise levels measured during a noise-sensitive activity shall be not more than 80 decibels. Noise-sensitive activity is any activity for which lowered noise levels are essential if the activity is to serve its intended purpose. Such activities include those associated with residences, hospitals, nursing homes, churches, schools, libraries, parks, and recreational areas.
2. Concessionaire shall monitor its construction-related noise if requested by local agencies, the Department or neighboring property owners. If construction noise levels exceed 80 decibels during noise-sensitive activities, the Concessionaire shall take corrective action before proceeding with operations.
3. The Concessionaire shall be responsible for abatement of construction noise.
4. The Concessionaire is responsible for obtaining any necessary local noise ordinance variances prior to the scheduling of night time operations
5. Concessionaire shall determine whether certain portions of the Seminary Project that produce objectionable noise should be restricted or prohibited between 10 PM and 6 AM. If other hours are established by local ordinance, the local ordinance shall govern.
6. Equipment shall in no way be altered so as to result in noise levels that are greater than those produced by the original equipment. When feasible, the Concessionaire shall establish haul routes that direct his vehicles away from developed areas and ensure that noise from hauling operations is kept to a minimum.
7. These requirements are not applicable if the noise produced by sources other than the Concessionaire's operation at the point of reception is greater than the noise from the Concessionaire's operation at the same point.

2.3 Materials

2.3.1 Material Delivery

The Concessionaire shall advise the Department at least two weeks prior to the delivery of any material from a commercial source. Upon delivery of any such material to the Seminary Project, the Concessionaire shall confirm that the material meets the requirements of the Contract and, if so, shall provide the Department with one copy of all invoices (prices are not required). Materials shall not contain Hazardous Waste or be furnished from a source containing toxic, hazardous or regulated solid wastes.

2.3.2 Storing Materials

- A. Materials shall be stored in a manner so as to ensure the preservation of their quality and fitness for the Work. When considered necessary by the QAM or the Department, materials shall be stored in weatherproof buildings on wooden platforms or other hard, clean surfaces that will keep the material off the ground. Materials shall be covered when directed by the Department. Stored material shall be located so as to facilitate its prompt inspection. Portions of the Seminary Project Right of Way approved by the Department may be used for storage of material and equipment and for plant operations. However, equipment and materials shall not be stored within the clear zone of the travel lanes open to traffic.
- B. Additional required storage space shall be provided by the Concessionaire. Private property shall not be used for storage purposes without the written permission of the owner. Copies of the written permission shall be furnished to the Department. Upon completion of the use of the property, the Concessionaire shall furnish to the Department a release signed by the property owner indicating that the property has been satisfactorily restored.
- C. Chemicals, fuels, lubricants, bitumens, paints, raw sewage, and other harmful materials as determined by the QAM or the Department shall not be stored within any floodplain unless no other location is available and only then shall the materials be stored in a secondary containment structure(s) with an impervious liner. Also, any storage of these materials in proximity to natural or man-made drainage conveyances or otherwise where the materials could potentially reach a waterway if released under adverse weather conditions, must be stored in bermed or diked area or inside a container capable of preventing a release. Double-walled storage tanks shall meet the berm/dike containment requirement except for storage within flood plains. Any spills, leaks, or releases of such materials shall be addressed in accordance with the Contract. Accumulated rain water may also be pumped out of the impoundment area into approved dewatering devices.

2.3.3 Handling Materials

Materials shall be handled in a manner that will preserve their quality and fitness for the Work. Aggregates shall be transported from storage to the Work in vehicles constructed to prevent loss or segregation of materials.

2.3.4 Unacceptable Materials

Materials that do not conform to the requirements of the Contract shall be considered unacceptable. Such materials, whether in place or not, will be rejected and shall be removed from the site of the Work. If it is not practical for the Concessionaire to remove rejected material immediately, the Concessionaire will mark the material for identification. Rejected material whose defects have been corrected shall not be used until approval has been given by the Department in accordance with the QMSP.

2.3.5 Materials Disposal

- A. Concessionaire shall remove, in accordance with the plans, fences, buildings, structures, or encumbrances within the construction limits. Materials so removed, including existing drains or pipe culverts, shall become the property of Concessionaire, with the exception of those materials to be stored or delivered to Department or others as designated in the Contract.
- B. Unsuitable or surplus material for disposal shall be disposed of by the Concessionaire off the Seminary Project Right of Way. The Concessionaire shall obtain the necessary rights to property to be used as an approved disposal area. An approved disposal area is defined as that which is owned privately, not operated under a local or State permit and has been approved by the Department for use in disposing unsuitable or surplus material.
- C. The Concessionaire shall furnish the Department a statement signed by the property owner in which the owner agrees to the use of their property for the deposit of material from the Seminary Project. The property owner will hold harmless the Department, their officers, their agents, and their employees. Upon completion of the use of the property as an approved disposal area, the Concessionaire shall furnish the Department a release signed by the property owner indicating that the property has been satisfactorily restored. This requirement will be waived for commercial sources and sources owned by the Concessionaire.

2.4 Traffic Engineering

2.4.1 Pavement Markings

- A. The Concessionaire shall provide and maintain pavement markings and reflective pavement markers meeting the applicable standards and specifications set forth in the Contract.
- B. Permanent pavement markings (lane division lines, edge lines, ramp and gore markings) on the 395 Express Lanes and ramps and the I-395 General Purpose lanes and ramps shall be Type B, Class VI, patterned pre-formed tape. All other pavement markings shall conform to the Road and Bridge Specifications.
- C. High-Contrast Pavement Markings shall be used on all bridge decks and concrete pavements.
- D. The use of thermoplastic pavement markings and pavement marking tape shall conform to the applicable standards and specifications in the Contract.

2.4.2 Static Signs

- A. The Concessionaire shall relocate all signs within the construction limits that conflict with construction work. Signs that are not needed for the safe and

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orderly control of traffic during construction may be removed and stored in a manner that will preclude damage and reinstalled in their permanent locations prior to Service Commencement.

- B. The Concessionaire shall maintain all existing signs during construction, unless they are to be removed permanently or have been replaced as required by the Seminary Project. For any existing signs that require relocation due to construction, the Concessionaire shall present pertinent details, such as sign designs, mounting details, locations, and existing condition, for the Department's review and comment, prior to relocation.

2.5 Maintenance During Construction

- A. The Concessionaire shall prosecute the Work so as to avoid obstructions to traffic to the greatest extent practicable. The Concessionaire shall provide for the safety and convenience of the general public and residents along the roadway and the protection of persons and property.
- B. The Concessionaire shall maintain the Work from the beginning of construction operations until Final Completion.
- C. The Concessionaire shall keep the portions of the road being used by the public free from irregularities and obstructions that could present a hazard or annoyance to traffic.
- D. Existing Department Traffic Management System (TMS) devices in the general purpose lanes shall remain operational during construction unless otherwise approved by the Department. These TMS devices include, but are not limited to: (i) closed-circuit television (CCTV) cameras; (ii) dynamic message signs (DMS); (iii) ramp metering; (iv) detection; (v) mile markers; (vi) the reversible gate system; (vii) roadway lighting; and (viii) weather stations.
- E. The Department will maintain all roadways and structures used by public, pedestrian and vehicular traffic at its expense, until such time as the paved surface and roadside appurtenances in the active construction work area are significantly impacted by the Concessionaire's construction activities. (Significant impacts include pavement marking eradication, traffic lane shifts, surface paving, placement of temporary traffic barrier service, or similar activities). The highway trucks hauling material on the paved surface are not considered significant impacts. Once the Concessionaire significantly impacts the active construction work area, the Concessionaire shall be responsible for that active construction work area until its Final Completion. The Concessionaire shall be responsible for all maintenance in significant impacted active construction work areas including repairs to the roadway surfaces (fixing holes in the hard surface, patching the potholes and providing smooth surface).
- F. The Concessionaire shall be responsible for the maintenance of the significant impacted assets in accordance with standard Department maintenance

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requirements. Significant impacted assets for which the owning authority is other than the Department shall be maintained by the Concessionaire until such time as they are no longer impacted by construction and accepted back by the owning authority.

- G. Where traffic will operate on surfaces other than final surface or final alignment, the Concessionaire shall be responsible for maintenance of these roadways, including repair of any damage caused by its operations or use by public traffic.
- H. At no time shall the lights in GP Lanes and other roadways be put out of service, unless mutually agreed between the Parties for the purposes of cutover, testing or integration into the ETTM System or NRO PSTOC ATMS.
- I. The existing signal, lighting, and ITS systems will be maintained by the Department until the Concessionaire or any of the Concessionaire's subcontractors begin impacting these assets, at which time impacted signal, lighting and impacted ITS assets within the Seminary Project limits will become the Concessionaire's responsibility. If there is an existing asset the Concessionaire desires to tie in or connect to, but is prevented from doing so because of physical damage to such existing asset the Concessionaire may perform the repair work at its sole cost and expense. Once the Concessionaire has completed the work, and the work is accepted by the Department, the maintenance activities will revert to the Department's responsibility.
- J. VDOT will perform snow and ice removal on all travel ways.
- K. The Concessionaire's maintenance of the active construction work area shall be to the level of quality condition existing in the relevant active construction work area at the time Concessionaire takes control of the active construction work area.

2.6 As-Built Documents

- A. As a condition to Final Completion, the Concessionaire shall provide to the Department, the record drawings and documents (as-built plans) of the Seminary Project in accordance with the standards and specifications set forth in the VDOT CADD Manual, VDOT Road Design Manual, and the VDOT Post Construction Manual.
- B. The As-Built Plans shall be prepared by a Professional Engineer licensed in the Commonwealth. A certification statement (with signature and date) shall be provided by the Professional Engineer on all applicable sheets indicating that to the best of his/her knowledge, the As-Built Plans show all adjustments and revisions to the approved construction plans made during construction and serve as a permanent record of the actual location of all constructed elements.

2.7 Security

- A. Subject to the requirements of the Contract, the Concessionaire shall adhere to the intent of the Department's policy on critical infrastructure information and sensitive security information (CII/SSI) to the extent such information is directly related to the Concessionaire's performance of its obligations under the Contract. The Concessionaire shall ensure that relevant CII/SSI is protected and not disclosed to unauthorized persons. The Concessionaire shall ensure that all personnel having access to CII/SSI for the Concessionaire and all subcontractors have met the requirements of IIM-LD-236 Critical Infrastructure (CII) / Sensitive Security Information (SSI).
- B. The Department may request fingerprint-based criminal history background checks on contractors working on specific structures or functions.
- C. The Concessionaire shall review with the Department any information that should be designated as CII/SSI as specific design details become available. Any requirements for security review or other inspections will be mutually agreed to with the Department.