

# TENNESSEE DEPARTMENT OF TRANSPORTATION

# Design-Build RFP Book 1 Instructions to Proposer (ITP)

# Interstate 40

Truck Parking and Bridges Replacement over the Caney Fork River
Smith County, Tennessee

Project Identification Number (PIN): 131552.01

State Project Number: 801040-F1-009, 801040-F2-009, 801040-F3-009

Federal Project Number: NH-I-40-5(161)

DB Contract# DB2502

August 2025

Addendum #3 November 2025

# 1.2 Project Goals

The Project is intended to achieve the following goals:

- 1. Provide a design and construction approach that minimizes inconvenience to the traveling public.
- 2. Minimize project delivery timeframes through streamlining the design and construction process to obtain final project acceptance no later than June 30, 2029.
- 3. Optimize cost efficiency through design and construction innovation to complete the Project within the allocated budget.

#### 1.3 Procurement Schedule/Submittal Deadlines

The following procurement schedule and submittal deadlines are set out below. TDOT will not consider any submittal received after the deadlines stated below.

Event/Submittal	Date/Time
Release of the Request for Proposals (RFP) Package	August 29, 2025
Confidential (One-on-One) Meetings: RFP terms and risk allocation; ATC discussions (Location: TDOT Region 3 Annex)	September 18, 2025 1 Hour Time: TBD
Confidential (One-on-One) Meetings: ATC discussions; Proposer's to present approach to construction of the I-40 bridge(s) over the Caney Fork River. (Location: TDOT Region 3 Annex)	October 9-10, 2025 2 Hour Time: TBD
Confidential (One-on-One) Meetings: ATC discussions; Proposer's to present approach to construction of the I-40 bridge(s) over the Caney Fork River. (Location: TDOT Region 3 Annex)	October 23-24, 2025 2 Hour Time: TBD
Deadline for submittal of Form QR, requests for QPL determination, organizational or Key Individual change requests, SOQ conflicts of interests update, and/or alternate technical concepts (ATCs)	October 30, 2025 4pm CST
Deadline for TDOT's last response on Form QR, requests for QPL determination, organizational changes, SOQ resubmittals, and/or alternate technical concepts (ATCs) determination  Deadline for issuance of last addendum	November 18, 2025 4pm CST
Technical and Price Proposal Due Date	<u>January 15, 2026</u> <del>December</del> <del>18, 2025</del>
Public Price Proposal opening	January <u>29</u> 15, 2026
Notice of Best Evaluated Design-Builder	January 22 February 5, 2026
Anticipated award of design-build contract (or rejection of all Proposal)	<del>January 29</del> <u>February 12</u> , 2026
Anticipated issuance of initial notice to proceed	February 26March 12, 2026

# 1.4 General Design-Builder Project Obligations

If awarded, the Design-Builder's obligations generally include the following, all of which are more specifically described in the Contract Documents.

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#### 3 PROPOSAL SUBMITTAL INSTRUCTIONS

The Proposal consists of two parts: 1) the Technical Proposal and 2) Price Proposal. By submitting a Price Proposal and executing the signature sheets contained in the RFP, the Proposer acknowledges that it understands the procurement process, submittal requirements, and evaluation criteria contained in this **RFP Book 1 (ITP)**.

#### 3.1 Submission and Format Requirements

#### 3.1.1 Technical Proposal

The Proposer is submit the Technical Proposal electronically by email and include the following:

- Recipient is the TDOT primary point of contact at the address listed in Section 1.5;
- Subject Line: "DB2502 Design Build Technical Proposal Procurement Sensitive Information"

The Department will accept FTP links provided by the Design-Builder if the link is included in the submission email and prior to the submission deadline.

Proposer's name, contact person's name, mailing address, "I-40 Truck Parking & Bridges Replacement over the Caney Fork River (DB2502). Technical proposals will remain unopened until the Technical Proposal Due Date listed in Section 1.3.

All narrative sections in the Technical Proposal are to be Arial font with a minimum font size of 11-points on letter ( $8-\frac{1}{2}$  inch x 11-inch) page. The Proposer may use smaller font sizes for charts, diagrams, graphs, and tables. The proposer may use tabloid (11-inch by 17-inch) page for CPM schedule, drawings, or sketches.

The Proposer is to organize its Technical Proposal into three volumes in the order listed in this Section 3.1.1.

- Technical Proposal: Volume I (Cover Letter, Forms, and Evidence of Authority) There is no page limit on the information required to be submitted under Volume I. The Proposer is to place the required forms after a cover page labeled "Forms."
- Technical Proposal: Volume II (Technical Approach) Responses under Volume II shall be limited to a maximum of 35 pages, not including any cover/title page. All other information submitted in Volume II is to be counted in calculating page count.
- **Technical Proposal: Volume III (Technical Proposal Appendices)** There is *no page limit* on the information required to be submitted under Volume III (Technical Approach Appendices). The Proposer is to include a cover for each major section described in Section 3.4.

The Technical Proposal should present information clearly and concisely. Text or other information that is difficult to read may be disregarded, potentially resulting in either a lowered score or rejection of the Proposal as non-responsive.

#### 3.1.2 Price Proposal

The Proposer is to submit its Price Proposal using internet bidding with an electronic bid bond. The Proposer **shall not** submit a hardcopy of its Price Proposal. The internet bid and electronic bid bond executed by the Proposer and its surety is considered a complete Price Proposal to be printed at the time of the public opening.

TDOT posts letters recognizing RFP addenda/amendments to the electronic bidding file on the Alternative Delivery or internet bidding with electronic bid bond website. The Proposer is to acknowledge addenda by completing the Technical Proposal Signature Page (Form TPSP) and including the form in Volume I. Also,

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# TENNESSEE DEPARTMENT OF TRANSPORTATION Design-Build Book 2 Contract

# **Interstate 40**

Truck Parking and Bridges Replacement over the Caney Fork River
Smith County, Tennessee

DB Contract# DB2502

August 2025

Addendum #3 November 2025

Title	SP#
Traffic Queue Protection	712PTQ
Speed Feedback Sign Assembly	712SFS
Roadway Sweeping	719
Removal and Disposal of Litter	719A
Equal Employment Opportunity	1230
Standard Federal Equal Employment Opportunity Construction Contract Specifications (Executive Order 11246)	1231
Notice of Requirement for Affirmative Action to Ensure Equal Employment Opportunity (Executive Order 11246)	1232
Training Program Requirements	1240
Disadvantaged Business Enterprise Participation	<del>1246</del>
Required Contract Provisions (Federal-Aid Construction Contracts)	FHWA 1273
Tennessee Department of Transportation Minimum Wage Scales for Federal-Aid Construction and State Funded Construction	1320
Federal Wage Rates	AA-FED RATES
State Wage Rates	AA-ST RATES

# **APPENDIX C**

# DESIGN-BUILD CONTRACT FORMS APPENDED TO BOOK 2 (DESIGN-BUILD CONTRACT)

Form Name	Form Designation
Attestation Regarding Personnel Used in Contract Performance	Form AT
Conflict of Interest Disclosure Statement	Form COI
Contract Payment and Performance Bond	Form CP&PB
Lobbying Certificate	Form LC
Technical Proposal Signature Page	Form TPSP
Design-Builder Information	Form A
Summary of Comparable Projects	Form B
RFP Question Request	Form QR
Alternative Technical Concept	Form ATC
Receipt of Addenda/Clarifications	Form C

# **LOBBYING CERTIFICATE** EODM I C

	FURNI LC
PROJECT DESCRIPTION:	I-40 Truck Parking & Bridges Replacement
<u>DB25</u>	<u>02</u>
The undersigned certifie	s, to the best of his or her knowledge and belief, that <b>CHECK ONE</b> :
undersigned, to any of any agency, a Me of a Member of Co making of any Fed- cooperative agreem	riated funds have been paid or will be paid, by or on behalf of the person for influencing or attempting to influence an officer or employee ember of Congress, an officer or employee of Congress, or an employee ngress in connection with the awarding of ANY Federal contract, the eral grant, the making of any Federal loan, the entering into of any nent, and the extension, continuation, renewal, amendment, or Federal contract, grant, loan or cooperative agreement.
any person for making of Congress, an office in connection with undersigned shall conducted Lobbying", in according to New Restriction Language in paragra	than Federal appropriated funds have been paid or will be paid to a lobbying contacts to an officer or employee of any agency, a Member cer or employee of Congress, or an employee of a Member of Congress THIS Federal contract, grant, loan, or cooperative agreement, the emplete and submit Standard Form-LLL, "Disclosure Form to Report dance with its instructions [as amended by "Government-wide Guidance and Instructions on Lobbying," 61 Federal Regulations 1413 (1/19/96). Note: aph (2) herein has been modified in accordance with Section 10 of the exact of 1995 (P.L. 104-65, to be codified at 2 U.S.C. 1601, et seq.)].
documents for all subav	require that the language of this certification be included in the award wards at all tiers (including subcontracts, subgrants, and contracts under erative agreements) and that all subrecipients shall certify and disclose

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code (as amended by the Lobbying Disclosure Act of 1995). Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

Pursuant to 31 U.S.C. §1352(c)(1)-(2)(A), any person who makes a prohibited expenditure or fails to file or amend a required certification or disclosure form shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each expenditure or failure.]

The Design-Builder,, certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Design-Builder understands and agrees that the provisions of 31 U.S.C. §3801, et seq., apply to this certification and disclosure, if any.
Date
Company Name
Signature
Name and Title

NOTE: DESIGN-BUILDER IS REQUIRED PURSUANT TO FEDERAL LAW TO INCLUDE THE ABOVE LANGUAGE IN SUBCONTRACTS OVER \$100,000 AND TO OBTAIN THIS LOBBYING CERTIFICATE FROM EACH SUBCONTRACTOR BEING PAID \$100,000 OR MORE UNDER THIS CONTRACT.

# TECHNICAL PROPOSAL SIGNATURE PAGE FORM TPSP

DESIGN-BUILDER:	TELEPHONE No. ()	
ADDRESS:		
CONTRACTOR'S LICENSE No		
LICENSE CLASSIFICATION		
PROJECT:	& Bridges Replacement	_
DB CONTRACT No.: <b>DB2502</b>		
TO THE TENNESSEE DEPARTME	NT OF TRANSPORTATION:	
	OFFER. The Design-Builder hereby submits this its Froposals (RFP) issued,20, as amend	
Addendum No.	Dated	

to execute the Contract, consisting of the Contract Documents, as those terms are defined in the **DB Standard Guidance**, within the time period stipulated in the Contract Documents if awarded the Contract, and upon Contract execution to perform the Contract in accordance with its terms. Such Firm Offer shall remain open for a minimum of 180 Calendar Days from the original Proposal Due Date, or for such longer period to which the Design-Builder may consent. Notwithstanding the foregoing, the Design-Builder's execution of the Contract shall constitute evidence that its Firm Offer was held open to date of Contact execution.

The following portions of the Design-Builder's Technical Proposal and Price Proposal (collectively, its "Proposal") are included in this Firm Offer in accordance with the criteria established in the Design-Build Contract and all associated Contract Documents:

**Technical Proposal**: Those portions of the Proposal that meet or exceed TDOT's minimum Contract requirements, as determined by TDOT in its sole discretion, shall be incorporated into the resulting Contract as if fully set forth therein, and shall constitute additional minimum Contract requirements. Upon incorporation, such portions of the Proposal shall amend the minimum Contract requirements they exceed. Those portions of the Technical Proposal that do not meet or exceed the minimum Contract requirements established by TDOT shall **not** be

incorporated into the Contract.

**Price Proposal**: The total of prices proposed in the Price Proposal "Schedule of Items" (the "Proposal Price"), shall be incorporated into the resulting Contract as if fully set forth therein.

**EQUAL OPPORTUNITY CLAUSE.** The Design-Builder, hereby certifies that **(CHECK ONE)** it has [ ] has not [ ], participated in a previous contract or subcontract subject to the equal opportunity clause, as required by Executive Orders 11246, 10925 and 11114 as amended, and that **(CHECK ONE)** it has [ ] has not [ ], filed with the Office of Federal Contract Compliance Program all reports due under the applicable filing requirements.

**PROPOSAL SECURITY.** By submitting this Proposal, the undersigned Design-Builder hereby agrees to be bound by the award of the Contract and, if awarded the Contract on this Proposal, to execute the required Contract and the required Contract Payment and Performance Bond within ten (10) days after receipt of notice of the award. The undersigned Design-Builder submits herewith the required Proposal guaranty in an amount of not less than five (5%) percent of the total amount of the Price Proposal drawn to the order of the Tennessee Department of Transportation offered and agrees and consents that the Proposal guaranty shall immediately be at the disposal of the Department, not as a penalty, but as an agreed liquidated damage if the required Contract and Contract Payment and Performance Bond are not executed within ten (10) days from receipt of the notice of award.

#### **DBE PROJECT UTILIZATION GOAL** is **0%**.

**GOOD FAITH EFFORTS.** The Design-Builder will either meet the DBE utilization goals identified herein or will make good-faith efforts to meet such goals. **(CHECK ONE)** YES [] NO [] or N/A [].

**DESIGN-BUILDER DBE STATUS.** The Design-Builder affirms that the Design-Builder is certified as a DBE under Tennessee Law: **(CHECK ONE)** YES [ ] NO [ ] or N/A [ ]. The Design-Builder affirms that one or more joint-venture partners of the Design-Builder is certified as a DBE under Tennessee Law: **(CHECK ONE)** YES [ ] NO [ ] or N/A [ ].

If the Design-Builder or a joint-venture partner of the Design-Builder is a DBE, answer the following:

Indicate both type of work to be performed by the DBE Design-Builder and **percent** of total Proposal Price represented by such work

\_\_\_\_.

Identify by name each joint venture partner certified as a DBE under Tennessee Law and include both type of work to be performed by each such joint venture partner and **percent** of total Proposal Price represented by such work

#### DESIGN-BUILDER AFFIRMATIONS.

The undersigned Design-Builder, its authorized representative, acknowledges, represents, attests,

#### warrants and certifies that:

- (1) By submitting this Proposal, the Design-Builder represents that it has carefully examined the Contract, which includes Contract Book 1 (ITBD Instruction to Design-Builders), Contract Book 2 (Design-Build Contract), Contract Book 3 (Project Specific Information) and all referenced documents, the DB Standard Guidance, ;has carefully examined any Plans provided by the Department, the Standard Specifications for Road and Bridge Construction (March 1, 2006) adopted by the State of Tennessee, Department of Transportation, with subsequent revisions which are acknowledged to be a part of this Proposal, the Special Provisions, the Standard Drawings, the Proposal Form, the Form of Contract, All Contract Documents and Addenda; and thoroughly understands their stipulations, requirements, and provisions. The Design-Builder, acting through its authorized representatives, has read and understands, and agrees to be bound by and comply with all RFP instructions, terms and conditions, together with all Addenda, if any, issued.
- (2) The Design-Builder, acting through its authorized representatives, has made a proper examination of the Project Site work described herein and all work locations and has become familiar with local conditions and the character and extent of the work.
- (3) The Design-Builder, acting through its authorized representatives, has read and understands, and agrees to be bound by and comply with the terms of the Contract identified, included, or incorporated by reference into the RFP before submitting its Proposal.
- (4) The Design-Builder has determined the quality and quantity of materials required; has investigated the location and determined the sources of supply of the materials required; has investigated labor conditions; and, has arranged for the continuous prosecution of the work herein described.
- (5) By submitting this Proposal, the Design-Builder agrees to provide all necessary equipment, tools, labor, incidentals, and other means of construction, to do all the work, and furnish all the materials of the specified requirements which are necessary to complete the work in accordance with the Plans, the Specifications and all Contract Documents, and agrees to accept as payment in full therefor described in the Contract that are set forth in this Proposal. Compensation for "Extra Work" which may be required by the Department in connection with the construction and completion of the work but which was not reflected in the Proposal scope at the time of bidding, will be made in the following manner: work will be compensated in accordance with the applicable Contract Documents.
- (6) The Proposal was prepared independently from all other Design-Builders, and without collusion, fraud, or other dishonesty.
- (7) Neither the Design-Builder nor anyone representing the Design-Builder offered or gave any advantage, gratuity, bonus, discount, bribe or loan of any sort to TDOT or its agents, employees, or anyone representing TDOT, or engaged in any other type of anti-competitive conduct at any time during this procurement.
- (8) If awarded the Contract, the Design-Builder shall utilize in performance of the Contract all resources indicated in its Proposal, including Major Participants, Key Personnel, and Design Professionals, to the extent within the Design-Builder's control and through

- application of the Design-Builder's best efforts.
- (9) If awarded the Contract, the Design-Builder shall make all Personnel, including Design Professionals, identified in its Proposal available at all times and places required under the terms of the Contract, and shall ensure that such Personnel devote all efforts necessary for all periods of time necessary or required under the terms of the Contract, to timely fulfill all Contract obligations.
- (10) The Design-Builder has the power and authority to enter into and perform the Contract to be awarded, and the Contract, when executed and delivered, shall be a valid and binding obligation enforceable according to its terms.
- (11) If the Design-Builder is a joint venture or partnership, each joint venturor or partner has signed this Technical Proposal Signature Page on behalf of both itself and the Design-Builder, and each joint venturor or partner and the Design-Builder shall be jointly and severally liable for performing all of the duties and meeting all of the obligations of the Design-Builder under the terms of the RFP, Proposal and Contract to be entered into.
- (12) The Design-Builder acknowledges that TDOT has the right to modify the Contract prior to execution to (a) correct typographical errors, (b) reconcile inconsistencies within and among the Contract Documents, (c) conform terminology used throughout the Contract, (d) include omitted terms clearly contemplated by the language in the Contract, (e) add terms required under State or federal law, and (f) incorporate those portions of the Technical Proposal and Price Proposal, as set forth under, if so, as may be authorized under applicable statutes and rules.
- (13) The Design-Builder intends its Proposal Price to constitute full compensation for performance of all Contract obligations, including those additional minimum Contract requirements proposed in the Technical Proposal and incorporated in the Design-Build Contract.
- (14) The Design-Builder agrees to be bound by and will comply in all respects with the terms of the resulting Contract upon award.
- (15) TDOT will not be liable for any expenses incurred by the Design-Builder in preparing and submitting its Proposal or in participating in the Proposal evaluation/selection process.
- (16) In the event the Design-Builder has engaged in unlawful anti-competitive conduct or behavior prohibited under the terms of the RFP during this procurement or lacks power or authority or fails for any reason to execute the Contract if awarded to it within the time period specified in the RFP or agreed to by the Parties, the Design-Builder shall forfeit its Proposal Security and be disqualified from further consideration for Contract award and eligibility for receipt of a Proposal stipend.
- (17) The Design-Builder certifies that it is not under the control of any person, firm, partnership, or corporation, which has or exercises any control of any other person, firm, partnership, or corporation, which is submitting a Proposal on this Contract.

# BEFORE ME APPEARING THE UNDERSIGNED AND BEING BY ME DULY SWORN, UPON HIS/HER OATH INDIVIDUALLY AND IN HIS/HER REPRESENTATIVE CAPACITY ON BEHALF OF THE DESIGN-BUILDER, DEPOSES AND STATES:

I, the undersigned, am a duly-authorized representative of the Design-Builder and have been authorized by the Design-Builder (a) to make in the name of and on behalf of the Design-Builder all acknowledgments, representations, attestations, warranties, and certifications contained herein and elsewhere in the Proposal, (b) to execute this Technical Proposal Signature Page and (c) by my signatures to bind the Design-Builder to the terms of its Proposal.

And further, that (a) the acknowledgments, representations, attestations, warranties, and certifications contained herein and elsewhere in the Proposal are true and correct, and (b) all copies of the Technical Proposal and Price Proposal submitted with the originals are true and correct copies of the originals. This is an official document that is required or authorized by law to be made under oath and is presented in an official proceeding. A person who makes a false statement in this certification is subject to the penalties of perjury.

	Sworn to and subscribed before me
Design-Builder (1)	this day of ,
Ву:	
Printed Name and Title	Notary Public
	My commission expires
	(Seal)
	Sworn to and subscribed before me
Design-Builder (2)*	this day of ,
Ву:	
Printed Name and Title	Notary Public
	My commission expires
	(Seal)

\*NOTE: The signature and information for Design-Builder (2) is to be provided when there is a joint venture.

\*\*THIS TECHNICAL PROPOSAL SIGNATURE PAGE MUST BE SIGNED IN BLUE INK. ANY ALTERATIONS, INTERLINEATIONS, OR ERASURES TO THE PROPOSAL MUST BE INITIALED ON THE ORIGINAL COPY IN INK BY THE SIGNATORY TO THIS TECHNICAL PROPOSAL COVER SHEET AND SIGNATURE PAGE.



# TENNESSEE DEPARTMENT OF TRANSPORTATION Design-Build Book 3 Project Specific Information

# **Interstate 40**

Truck Parking and Bridges Replacement over the Caney Fork River
Smith County, Tennessee

DB Contract# **DB2502** 

August 2025

Addendum #3 November 2025

#### 3 ROADWAY REQUIREMENTS

#### 3.1 Standards and References

The Design-Builder shall design and construct the work to adhere to the latest editions of the following standards in effect 30 days prior to the Proposal due date.

- TDOT Roadway Standard Drawings
- TDOT Roadway Design Guidelines and Instructional Bulletins
- TDOT Drainage Manual
- TDOT Traffic Design Manual
- TDOT Design CADD Standards
- TDOT Survey Manual
- TDOT Structural Design Guidelines
- TDOT Design Procedures for Hydraulic Structures
- The Department accepted AASHTO Policy on Geometric Design of Highways and Streets
- Manual on Uniform Traffic Control Devices (MUTCD)
- AASHTO Roadside Design Guide
- AASHTO Guide for Design of Pavement Structures
- FHWA Truck Parking Development Handbook
- TDOT Lighting Design Manual

OpenRoads Designer (ORD) shall be used in the development of 3D parametric modeling to provide model-centric design deliverables. The Design-Builder shall use ORD in accordance with requirements and quidelines provided on the Department's website.

# 3.2 Design Requirements

The Design-Builder shall design and construct the project so that the:

- Proposed lanes of traffic tie into existing width and cross slopes
- Proposed shoulders tie into existing width
- Proposed super elevation ties into the existing

The Design-Builder shall identify the need for any special roadway design details (i.e. any special drainage structures, rock embankment, retaining walls, concrete barrier designs, etc.) and shall provide special design drawings and special provisions to the Department for Review and Acceptance.

The Design-Builder will be responsible for all applicable "General and Special Notes" found in Section IX of the current edition of the TDOT Roadway Design Guidelines and TDOT Instructional Bulletins (IBs) applicable on the date the RFP is issued are adhered to during construction.

# 3.2.1 Horizontal and Vertical Alignments

The proposed horizontal and vertical alignments shall be designed to meet or exceed the following:

Required guardrail and concrete barrier locations shall conform to the Design Guidelines, TDOT Standard Drawings, and/or the AASHTO Roadside Design Guide.

#### 3.5 Pavement Markings

The Design-Builder shall prepare pavement marking plans for the Department's review and concurrence. . The design and installation of all temporary and permanent pavement markings shall be in strict accordance with the current edition of the Manual on Uniform Traffic Control Devices (MUTCD), TDOT Roadway Design Guidelines, TDOT Standard Drawings, TDOT Standard Traffic Operations Drawings, TDOT Traffic Design Manual, and the current edition of the TDOT Standard Specifications. All pavement marking removal on final surfaces shall be accomplished by water blasting or another non-marring method. Any damage to the pavement surface caused by the selected method shall be removed and replaced at the Design-Builder's expense.

Permanent pavement line markings shall be thermoplastic installed to permanent standards at the end of each day's work on all facilities that will be open to traffic. Short, unmarked sections shall not be allowed. Temporary pavement markings shall be paint or tape. On the final surface, the Design-Builder shall have the option of using temporary pavement markings installed to permanent standards at the end of each day's work and then installing the permanent markings after the paving operation is completed. All pavement markings beyond the immediate work area that are affected by the Work shall be reapplied to permanent standards.

### 3.6 Signing

The Design-Builder shall prepare signage plans for the Department's Review and Approval prior to ordering if impacted by construction activities.

In addition, the Design- Builder shall ensure all signs beyond the project limits within the project maintenance limits are consistent with new alignments and travel lanes.

The design and installation of permanent roadway signs shall be in strict accordance with the current edition of the MUTCD, TDOT Roadway Design Guidelines and TDOT Standard Drawings, the current edition of the Standard Highway Signs, the TDOT Supplement to the Standard Highway Signs, the current edition of the TDOT Standard Specifications, and TDOT Traffic Design Manual.

After the permanent sign locations have been staked, but prior to ordering any material for supports, there shall be a field review and acceptance by the Department or its representatives.

All existing sign footings shall be removed six inches (6") below ground line.

The Design-Builder shall verify all support lengths at the site prior to erection.

All sign sheeting shall be Type 3 Prismatic or better. All existing signs within the project maintenance limits that do not meet the retro-reflectivity requirements shall be replaced. All yellow reflective warning signs shall be fluorescent yellow.

All permanent signing plans: signing layouts, sign schedules, & miscellaneous detail sheets shall be reviewed by the Department prior to ordering and construction/installation.

511 Signs shall be installed during the installation of the construction signage, as per Traffic memorandum No. 2509.

## 3.7 Ground Survey

The ground survey including survey control is provided by the Department (see Project website) as a Reference Document only. The Design-Builder shall verify the ground survey and survey control and make any additions, adjustments, or corrections as needed before utilizing in the design of the Project. In addition, the Design-Builder shall be responsible for field surveys and support activities, such as, but not limited to, geotechnical investigations, ROW stakeout, construction stakeout, etc. If the Design-Builder's design footprint extends beyond the limits of the survey provided by the Department, the Design-Builder shall be responsible for securing the necessary additional survey. All field survey activities shall be performed in accordance with the latest version of the TDOT Survey Manual and any other applicable design standards previously referenced

#### 3.8 Pavement Design

The proposed Pavement Design Schedule for this Project has been developed in the Simplified Functional Plans for the areas as defined in Appendix A.

Interstate 40 and <u>Interstate</u> Ramps Full Depth Pavement

Item Number	Description		Thickness (in.)
411-03.23	ACS Mix (PG76-22) OGFC		1.25
307-03.12	AC Mix (PG76-22) Grading "CM"		1.50
307-03.01	AC Mix (PG76-22) Grading "A"		3.50 <u>4.00</u>
307-03.01	AC Mix (PG76-22) Grading "A"		4.00
307-01.22	AC Mix (PG76-22) Grading "A-S"		3.00
303-01	Mineral Aggregate, Type "A" Base, Grading "D"		12.00
		Total	25. <mark>27</mark> 5

Interstate 40 and Interstate Ramps Overlay Pavement

Item Number	Description	Th	ickness
			(in.)
411-03.23	ACS Mix (PG76-22) OGFC		1.25
307-03.12	AC Mix (PG76-22) Grading "CM"		1.50
	•	Total	2.75

Interstate 40 and Interstate Ramps Full Depth Pavement (within 100' of bridge ends)

Item Number	<u>Description</u>		<b>Thickness</b>
			<u>(in.)</u>
411-03.10	ACS Mix (PG76-22) Grading "D"		<u>1.25</u>
307-03.08	AC Mix (PG76-22) Grading "BM-2"		2.00
307-03.01	AC Mix (PG76-22) Grading "A"		3.50
307-03.01	AC Mix (PG76-22) Grading "A"		4.00
307-01.22	AC Mix (PG76-22) Grading "A-S"		3.00
303-01	Mineral Aggregate, Type "A" Base, Grading "D"		12.00
		Total	25.75

#### Rest Area Full Depth Pavement

Item Number	<u>Description</u>	<u>Thickness</u>
		<u>(in.)</u>
411-02.10	ACS Mix (PG70-22) Grading "D"	<u>1.25</u>
307-02.08	AC Mix (PG70-22) Grading "B-M2"	<u>2.00</u>
307-02.01	AC Mix (PG70-22) Grading "A"	<u>3.00</u>
307-02.01	AC Mix (PG70-22) Grading "A"	<u>3.00</u>
<u>303-01</u>	Mineral Aggregate, Type "A" Base, Grading "D"	<u>10.00</u>

**Total** 

19.25

		<u>Total</u>	<u>19.25</u>
<ul> <li>Rest Area</li> </ul>	Overlay Pavement		
Item Number	<u>Description</u>		<u>Thickness</u> (in.)
411-02.10	ACS Mix (PG70-22) Grading "D"		1.25
307-02.08	AC Mix (PG70-22) Grading "B-M2"		2.00
		<u>Total</u>	<u>3.25</u>
<ul> <li>Parking Are</li> </ul>	ea Concrete Pavement		
Item Number	Description		Thickness (in.)
501-01.01	Portland Cement Concrete Pavement (Plain)		8.00
313-03	Treated Permeable Base		4.00
303-01	Mineral Aggregate, Type "A" Base, Grading "D"		4.00
		Total	16.00
<ul> <li>Interstate 4</li> </ul>	10 Full Depth Temporary Pavement		
Item Number	<u>Description</u>		<b>Thickness</b>
			<u>(in.)</u>
411-03.10	ACS Mix (PG76-22) Grading "D"		1.25
307-03.08	AC Mix (PG76-22) Grading "B-M2"		2.00
<u>307-03.01</u>	AC Mix (PG76-22) Grading "A"		<u>4.00</u>
<u>303-01</u>	Mineral Aggregate, Type "A" Base, Grading "D"		<u>12.00</u>

The Design-Builder may propose an ATC for pavement design that must meet or exceed the above requirements.

The Design-Builder shall verify that all subgrade is suitable for required pavement design specified above.

The Design-Builder shall verify that all necessary deck drains and/or underdrains are designed per TDOT Design Guidelines and Standard Drawings.

#### 4 LIGHTING REQUIREMENTS

The Design-Builder shall provide a complete lighting design for the truck parking area as defined in Appendix A.

The Design-Builder shall submit lighting photometrics for proposed truck parking area to the Department for concurrence prior to ordering materials or beginning construction/installation.

All lighting shall be 4000k LED lighting. The Design-Builder shall prepare lighting designs/plans in accordance with TDOT Standard Specifications for Road and Bridge Construction, TDOT Standard Drawings, TDOT Lighting Design Manual, TDOT Standard Traffic Operations Drawings, TDOT Traffic Design Manual, Chapter 15, and the latest edition to the National Electric Code, National Fire Protection Association (NFPA) 70.

The Design-Builder shall not allow light pollution/light hindrance into residential areas during construction.

The maximum distance between offset or mast arm light poles shall not exceed 250 feet.

The distance between light poles and bridges must be a minimum of 50 feet.

All wiring shall be concealed underground in 2-inch schedule 40 PVC rigid conduit. The conduit shall be installed a minimum depth of 26 inches as measured from finished subgrade.

The ground wire shall be run inside conduit within structures, shall be colored green and have THW insulation.

All new proposed lighting shall utilize an independent power source and controller system, separate from the existing Welcome Center Facilities.

All proposed roadway light standards shall be designed in accordance with the requirements of the 1<sup>st</sup> Edition (2015) of the LRFD Specifications for Structural Support for Highway Signs, Luminaires and Traffic Signals published by the American Association of State Highway and Transportation Officials. If high mast lighting is proposed by the Design-Builder, foundation calculations (signed and sealed by a Professional Engineer licensed in the State of Tennessee) shall be submitted to the Department.

Underpass connections and bridge lighting connections, if needed for the bridge over Interstate 40, shall be embedded in the bridge structure.

#### 5 UTILITY REQUIREMENTS

#### 5.1 Utility Investigations

The Design-Builder shall be responsible for contacting Tennessee 811 (one-call), identifying any utility conflicts, coordinating with the utilities in the design of the relocated facilities, preparing construction plans for the relocation of the utility facilities as required to accommodate the proposed Project design, and acquiring the necessary environmental permits required for utility relocation. Exact locations shall be determined in the field by contacting the utility companies involved and additional SUE investigations as necessary. Notification by calling the Tennessee One Call System, Inc., at 1-800-351-1111as required by TCA 65-31-106 will be required.

The Design-Builder shall make all reasonable efforts to design the Project to avoid conflicts with utilities, and minimize impacts where conflicts cannot be avoided.

The Design-Builder shall at all times be responsible for verifying all information related to the survey information as to the location (both vertical and horizontal of the Utilities). The providing of information by the Department shall not relieve the Deign-Builder of this obligation, nor transfer any of that responsibility to the Department.

# 5.2 General Requirements

The Design-Builder shall be familiar with 1680-6-1 Rules and Regulations for Accommodating Utilities within Highway Rights-of-Way, Tennessee Code Annotated (TCA) Part 8 Relocation of Utilities 54-5-801 through 54-5-856, and 23 CFR Part 645 "Utilities". Adherence to the above referenced regulations and procedures are mandatory.

Utility facility relocations will require the proposed plans to be submitted to the Department as an Application and Utility Use and Occupancy Agreement for review and issuance of permits for the accommodation of utilities within highway right-of-way. The Design Builder with the consent of the utility, can make that submittal on behalf of the utility after the review and approval by the utility of the utility relocation plans.

The Design-Builder must utilize a firm which is prequalified with the Department to perform utility coordination services, and the Design Builder must adhere to TDOT policy #301-01 "Standard Procurement of Engineering and Technical Services".

Immediately after submittal of the accepted final Definitive Design Plans, the Design-Builder will use the "Local Government Guidelines for the Management of Federal and State-Funded Transportation Projects", issued by the Program Development and Administration Division Chapter 6.2 as a guide to utility coordination. In compliance with the statute (TCA 54-5-854) which requires a minimum of 120 calendar days for relocation plans, cost estimate, and schedule; and 45 calendar days for revisions. These tasks shall be included in the Critical Path Method Schedule for Utility Investigation.

The Design-Builder shall utilize a single dedicated person responsible for managing all utility coordination and required concurrence with the TDOT Utility Office. The <u>Utilities Design Engineering/Coordination</u>

<u>Coordinator Utility Coordination Manager</u>-shall have the following knowledge, skills, and abilities:

- A minimum of 4 years of experience performing utility coordination in accordance with TDOT standards, policies, and procedures.
- Knowledge of the Department plans production process and utility coordination practices.
- Knowledge of aforementioned rules, regulations, and codes.

### 5.3 Coordination Responsibilities

Prior to submitting the bid, the Design-Builder will be solely responsible for contacting owners of all affected utilities in order to determine the extent to which utility relocations and/or adjustments will have upon the schedule of work for the Project. While some work may be required in the vicinity of utility facilities that will remain in place, other utility facilities may need to be adjusted concurrently with the Design-Builder's operations.

The Design-Builder shall be responsible for confirming the utility locations, confirming the type of facilities, identifying the utility owners and determining the cost responsibilities in order to coordinate the relocation of any utilities in conflict with the Project with respect to the "General Requirements" section.

The Design-Builder shall notify each individual utility owner of their plan of operation in the area of the utilities. Prior to commencing work, the Design-Builder shall contact the utility owners and request them to properly locate their respective utility on the ground. This notification shall be given at least three (3) business days prior to commencement of operations around the utility in accordance with TCA 65-31-106.

The Design-Builder shall coordinate the relocation or adjustment of the utilities in accordance with the RFP. The Department will process and certify all compensable utilities. The Design-Builder shall process and certify all non-compensable utilities for potential conflict and/or relocations. The Department will be the approving authority for all utility permits, compensable agreements and acceptance of utility relocation plans.

The following Utilities have been identified by the Department as having facilities within the Project corridor for which the Department contemplates an adjustment, protection, or relocation is possible.

Utility	Owner	Contact	Phone Number
Telephone	AT&T	Lee Kornegay	615-848-2082
	DTC Communications	Kent Greenwell	615-464-2801
	North Central Telephone	Troy Davis	615-888-6058
Electric	Upper Cumberland Electric	Richard McClanahan	615-735-2940

convey at least 500 cubic feet per second for the design storm. All aspects of the drainage design must meet all criteria listed in the latest edition of the TDOT Design Procedures for Hydraulic Structures, the Department's Drainage Manual, and any environmental commitments identified in the NEPA Document. The Design-Builder shall meet the FEMA No-Rise Certification for all proposed work being performed under this contract.

All structures must include a hydraulic model from Hydraulic Engineering Center – River Analysis System, Volume 6 or later. The hydraulic model should include "existing", "proposed", and "no project" conditions.

The HDF Report shall include detailed calculations with electronic copies of the computer software input and output files, as well as a discussion about hydrologic and hydraulic analyses and reasons for the design recommendations. At a minimum, for each bridge-class crossing or structure conveying more than 500 cubic feet per second for the design storm, the HDF Report shall include:

- Correspondence in chronological order.
- Maps that depict a portion of the county map or city map, 7.5-minute USGS quadrangle (preferably color), and FEMA NFIP map.
- Hydraulic report summary.
- Photographs per the requirements of TDOT Hydraulic Manual, Chapter 10. Include aerial photographs if available.
- Analysis:
  - Discharge calculations
  - Frequency discharge relationship
  - Stage discharge relationship
  - Supporting hydraulic information (previous flood studies, gauge data, etc.)
  - Existing structure analysis with cross sections plotted (if applicable)
  - Natural water surface model with no bridge or road fill
  - Proposed structure analysis, with cross sections plotted and any alternatives
  - Existing, proposed, and no-bridge output tables
  - Scour analysis, if applicable
  - Deck drainage analysis
  - On-site inspection report
  - Other information

Where multiple structures occur on a single project, the correspondence section should not be repeated. The cover of the design file should include the project description, PIN, and/or project number as indicated in Department schedules. Also, each stream crossing station, stream name, and associated bridge identification number (if available) should be indicated on the cover. Survey data should be included in the file for future reference.

Design-Builder shall submit the HDF for Review and Approval.

#### 7 ENVIRONMENTAL REQUIREMENTS

The Department has obtained a Categorical Exclusion ("NEPA Document") for this project. The NEPA Document is located on the Project website. Project Environmental Commitments are included in the NEPA Document and should be adhered to prior to and throughout the total duration of construction. Any design change or construction methodology that does not adhere to the Environmental Commitments would need to be submitted as an ATC for TDOT review and approval and may require re-coordination with USFWS and the potential for a NEPA re-evaluation. Project avoidance areas as shown in the Conceptual Functional Plans and NEPA documentation shall be strictly adhered to prior to and throughout the total duration of construction.

The Design-Builder shall refer to the NEPA Document for a complete description of the limits of the Project. If the Design-Builder's design footprint or construction limits extend beyond the limits described therein and as shown in the Simplified Functional Plans, including permanent and/or temporary easements, the Design-Builder shall be responsible for the reevaluation of the required environmental documents. No additional time will be allotted to the Project schedule for the Design-Builder's reevaluation and/or preparation of revised environmental documents, TDOT Environmental Division staff's Review and Approval of any additional environmental documents, agency coordination, and subsequent FHWA approval, as required.

To ensure compliance with the Categorical Exclusion (CE) obtained for this project, any deviations from the horizontal alignment as shown on the Simplified Functional Plans will require an ATC with Department approval.

### 7.1 National Environmental Policy Act (NEPA)

The Design-Builder shall review and adhere to the approved NEPA Document and technical reports—specifically, any environmental commitments listed on the "Green Sheet" of the approved NEPA Document. The Design-Builder shall account for these commitments throughout the Project's design and construction process. All commitments listed are to be fulfilled during construction Work or prior to Project completion.

If the Design-Builder's design footprint or construction limits extend beyond the environmental technical study area (ETSA), including for use of permanent and/or temporary interests, and results in changes to impacts to identified resources, the Design-Builder shall be responsible for the additional environmental technical studies and re-evaluation of the NEPA Document. The re-evaluation(s) may take place at any time during the development of the Project. Depending on the magnitude of the design changes required, the re-evaluation may require review and approval by FHWA; however, any minor changes may be documented, reviewed, and concurred with by the Department's Environmental Division.

The Design-Builder shall bear all cost and time associated with the:

- Design-Builder's preparation of the NEPA Document re-evaluation(s),
- TDOT Environmental Division staff's Review and Approval of the NEPA Document re-evaluation(s), and
- All agency coordination and subsequent FHWA approval, as required, of the NEPA Document reevaluation(s).

Additionally, if the Design-Builder's changes result in changes to impacts of the environmental features, the Design-Builder shall bear all cost and time to incorporate additional compensatory mitigation documented in the updated EBR or for additional features identified prior to and during construction Work.

The Design-Builder shall provide TDOT Environmental with a notification and copy of the revised Plans.

#### 11 GEOTECHNICAL REQUIREMENTS

#### 11.1 Standards and References

The geotechnical exploration investigations shall be performed in accordance with the current TDOT *Geotechnical Guidelines* located on the Geotechnical Engineering Section's webpage on the Department's website:

https://www.tn.gov/content/dam/tn/tdot/hq-materials-tests/geotech/2023-10-GeotechGuidelines.pdf

#### 11.2 General Requirements

The Design-Builder has been provided the geotechnical field data in the reference information documents, as information only, but will be allowed to perform additional investigations and analysis to determine appropriate recommendations. The Design-Builder shall determine the amount and level of the geotechnical investigations to cover geological risks, including karst terrain and features, associated with this Project that meet the current TDOT Geotechnical Guidelines.

The Design-Builder shall perform a slope analysis for all proposed slopes. <u>The Department will require the following factors of safety for slope stability to be met per AASHTO LRFD 11.6.2.3:</u>

<u>1.5 – Slopes that support or contain structural elements – such as retaining walls, bridges, bridge abutments, culverts etc. including non TDOT structures.</u>

1.3 – Slopes that do not contain or support structural elements.

#### <u>1.1 – Seismic.</u>

The Design-Builder shall verify that all subgrade is suitable for required pavement design specified in Section 3.8.

The Design-Builder shall be responsible for obtaining the borings for all structural support and foundation locations where subsurface information is not sufficient or is warranted by variability in the geology. All borings shall be deep enough to show a complete soil and rock profile to the depth of the foundation-supporting layer. Refer to Chapter 3: Structural Foundation Deliveries, of the current TDOT *Geotechnical Guidelines*.

The Design-Builder shall collect appropriate field data and samples for geotechnical evaluation of embankments, subgrade, soil and rock cuts, culverts, bridge and retaining wall structures, storm water management structures and ponds, minor structures, including drainage pipes, and any other earth supported structures or elements of highway design and construction relevant to the Project. Refer to Chapter 2: Roadway Design Support, of the current TDOT *Geotechnical Guidelines*.

The Design-Builder shall perform all subsurface investigation and laboratory testing in accordance with the current TDOT *Geotechnical Guidelines*.

# 11.3 Notification Requirements

Any required lane or shoulder closures to perform geotechnical investigations must be approved a minimum of seven (7) calendar days in advance by the Department.

The Department may limit when drilling activities or other geotechnical work can be performed, including lane or shoulder closures.

The Department may require the Design-Builder to immediately halt drilling activities or other geotechnical work underway, if in their judgement the Design-Builder's work causes a potential threat to the public safety or welfare.

The Design-Builder shall be required to provide traffic control for all drilling activities occurring within the Department's ROW including, but not limited to, lanes or shoulder closures.

#### 11.4 Geotechnical Reports

The Design-Builder shall provide geotechnical reports, design and construction summaries that contain pertinent subsurface investigations, tests, and engineering evaluations.

Prior to any geotechnical design submittal, as outlined in the TDOT *Geotechnical Guidelines*, the foundation design recommendation reports shall be sealed and signed by a Professional Engineer registered in the State of Tennessee who has completed a minimum of three geotechnical design projects of scope and complexity similar to that anticipated for this Project using the LRFD method and in accordance with the latest edition of the AASHTO LRFD *Bridge Design Specifications*.

#### 12 PROJECT MAINTENANCE

The Design-Builder shall prepare a maintenance plan for Department Review and Acceptance that meets the requirements herein.

The Design-Builder is responsible for the maintenance of the Project in accordance with the approved maintenance plan until Project Acceptance has been achieved by the Department.

The Design-Builder shall maintain the Project from the date of the Design-Builder's first NTP for Construction until Project Acceptance by the Department, in a manner that provides a safe and reliable transportation system.

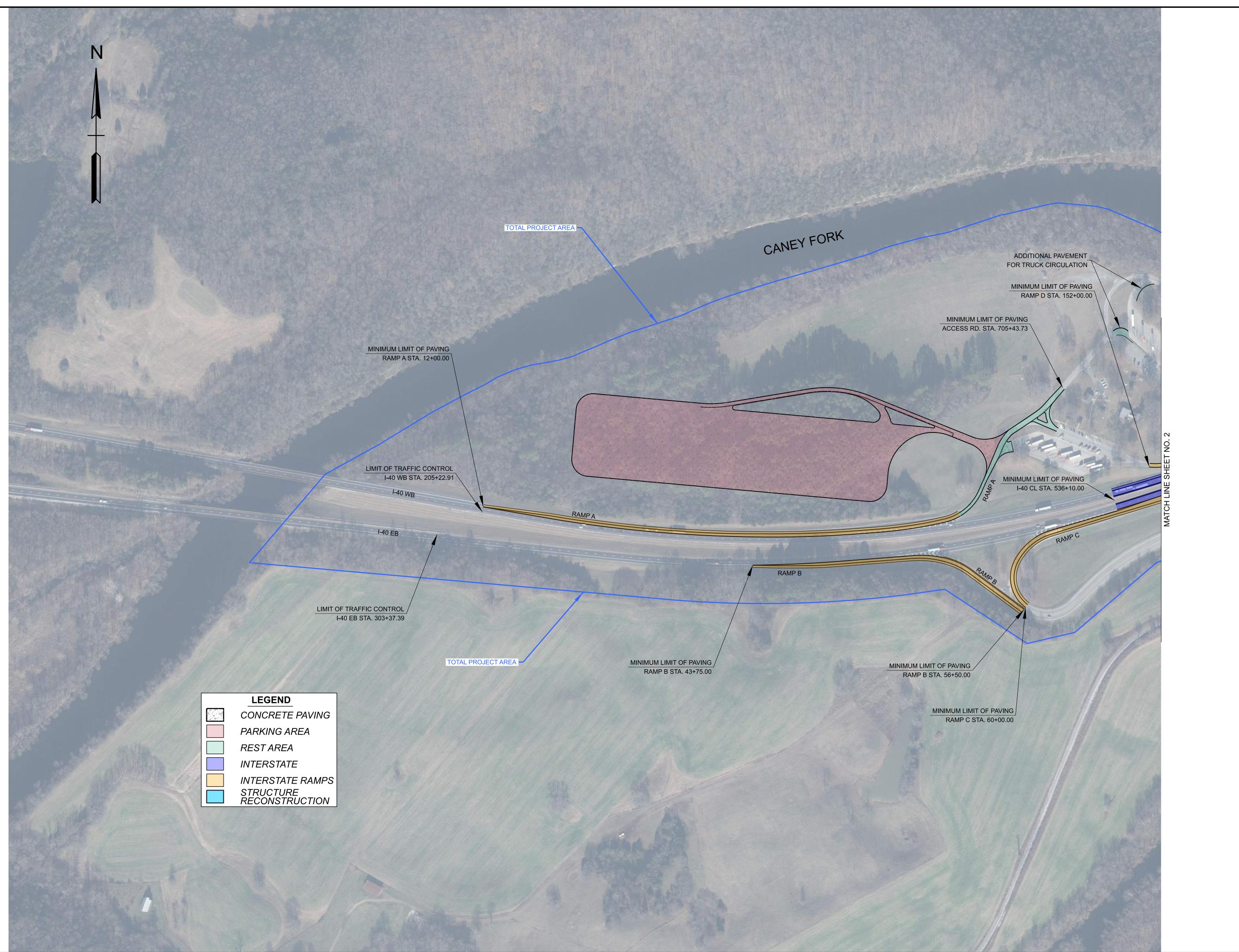
The maintenance limits for the project are defined as the total project area, including limits of proposed traffic control. The leach field and Welcome Center buildings shall not be impacted and will not be included in the maintenance limits. Refer to Appendix B: General Maintenance Exclusion Areas for all areas to be excluded from the maintenance limits.

For maintenance activities related to existing and proposed ditches, existing and proposed culverts, existing and proposed storm sewer systems, and any other drainage maintenance activities that occur within the area of responsibility, the Design-Builder shall be responsible for maintaining those drainage features to the point of natural outfall.

At the conclusion of construction activities with the stream, the stream shall be returned to its natural preconstruction condition.

The Design-Builder shall be fully responsible for maintenance as required by the Department's Standard Specification for Road and Bridge Construction, latest edition, Section 104.05 Maintenance During Construction. The Design-Builder shall be responsible for all components of the transportation system within construction limits until final project acceptance of the Project by the Department. For all facilities within the maintenance area of responsibility, the Design-Builder shall maintain the facilities in-kind for the duration of the maintenance timeframe.

# Appendix A Project Paving Limits



 TYPE
 YEAR
 PROJECT NO.
 SHEET NO.

 FUNC.
 2025
 80I040-S1-009
 1

SEALED BY

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00006 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 18.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROJECT PAVING LIMITS

SCALE: 1" = 400'

