



**STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION**

Construction division
SUITE 700, JAMES K. POLK BUILDING
505 DEADERICK STREET
NASHVILLE, TN 37243
(615) 741-2414

JOHN C. SCHROER
COMMISSIONER

BILL HASLAM
GOVERNOR

September 26, 2018

ADDENDUM #2

**Re: I- 75 Interchange @I-24
Hamilton County
Contract No. DB1801**

To Whom It May Concern:

This addendum revises the RFP Contract Book 1, Book 2, and Book 3. Attached are the revised sheets.

You must acknowledge this addendum by completing the "Addendum Letter Acknowledgement form C and the Technical Proposal Signature Page (Form TPSP) within your Technical Proposal. It is the bidder's responsibility to notify all affected manufacturers, suppliers and subcontractors of this change.

Sincerely,

A handwritten signature in blue ink, appearing to read "Lisa Chaud".

Assistant Director of Construction
Construction Division

**DESIGN-BUILD
RFP CONTRACT BOOK 1
INSTRUCTIONS TO
DESIGN-BUILDERS (ITDB)
TENNESSEE DEPARTMENT OF TRANSPORTATION**

Interstate I-75 at Interstate I-24 Interchange Modification

Hamilton County- TENNESSEE

CONTRACT NUMBER: DB1801



July 27, 2018

Addendum #1 August 24, 2018

Addendum #2 September 26, 2018

Deadline for Submittal of Alternate Technical Concepts (Dependent on Completion the NEPA Document)	On or before October 5, November 12, 2018 4:00 p.m., CT.
Deadline for Response to Alternate Technical Concepts,	October 19, November 19, 2018 4:00 p.m., CT.
Deadline for Submittal of Question Requests, and Requests for QPL Determination	October 12, November 9, 2018 4:00 p.m., CT.
Anticipated Deadline for Issuance of Last Addendum	November 2, November 19, 2018 4:00 p.m., CT.
Technical Proposal and Price Proposal Due Date and Time	November 9, November 30, 2018 4:00 p.m., CT.
Public Price Proposal Opening	November 30, December 12, 2018 10:00a.m., CT.
Anticipated Award of Design-Build contract, or rejection of all proposal	On or before December 14, December 21, 2018
Anticipated Issuance of Initial Notice to Proceed	January 7, January 18, 2019

The Department will not consider any late Proposals. Proposals received after the Proposal Due Date will be returned to the unopened. The Department will not consider any Proposal modifications submitted after the Proposal Due Date. Nor will the Department acknowledge Proposal withdrawals submitted after the Proposal Due Date. Any such attempted withdrawal will be ineffective.

If the Design-Builder does not submit a Proposal by the Due Date and the Department chooses to issue a new, revised, or modified RFP, the Proposal will be considered non-responsive to the requirements set forth herein. As a result, the Design-Builder will not be eligible to respond to any additional RFP requests from the Department on this project.

6. **CONTRACT DOCUMENTS**

- Contract Book 1 (ITDB - Instructions to Design-Builders);
- Contract Book 2 (Design-Build Contract);
- Contract Book 3 (Project Specific Information);

**DESIGN-BUILD
RFP CONTRACT BOOK 2
CONTRACT**

TENNESSEE DEPARTMENT OF TRANSPORTATION

Interstate 75 at Interstate 24 Interchange Modification

Hamilton County - TENNESSEE

CONTRACT NUMBER: DB1801



July 27, 2018

Addendum #2 September 26, 2018

3. **COMPLETION DATES**

The Design-Builder shall complete all work to be done under the Contract, except for plant/vegetation establishment, by / / and not later than ~~October 30, 2022~~ August 31, 2023.

The Design-Builder shall specify the number of calendar days for completion of the project within their price proposal. The number of calendar days specified by the Design-Builder in their price proposal will be placed in the Contract above prior to execution of this Design-Build contract.

E. **COMPENSATION**

1. **CONTRACT AMOUNT**

The Department agrees to compensate the Design-Builder for all work performed under the Contract for a fixed price of \$ the “Contract Amount”). The Contract Amount includes the entire cost of completing the Project in accordance with all Contract requirements as contemplated by the Parties under the Contract, and further includes all contingencies and the Design-Builder’s overhead and profit. The Contract Amount shall be payable in accordance with **Design-Build Standard Guidance**.

2. **PROGRESS PAYMENTS**

The Department shall make progress payments to the Design-Builder in accordance with **Design-Build Standard Guidance**. Progress payments shall be based upon the Design-Builder’s Schedule of Items submitted with the Price Proposal, which shall include the cost of all work. The Department’s payment of progress payments shall not be deemed by either Party to constitute Acceptance or Approval of any Pay Item covered by such payment, or a waiver of a claim or demand for repair of any defects therein.

3. **ADJUSTMENTS TO THE CONTRACT AMOUNT**

The Contract Amount shall only be adjusted through issuance of properly-authorized Change Orders.

4. **PAYMENTS FOR EXTRA WORK**

The Department will make payments for Extra Work in accordance with the provisions of **Design-Build Standard Guidance**.

5. **DEDUCTIONS FROM MONIES DUE**

The Department may deduct from monies due or to become due the Design-Builder, as follows:

APPENDIX B

SPECIAL PROVISIONS

TITLE	SP#
EMPLOYING AND CONTRACTING WITH ILLEGAL IMMIGRANTS	102I
SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION	102LC
BUY AMERICAN REQUIREMENTS	106A
AIR QUALITY FOR MOWING	107AQ
WATER QUALITY AND STORM WATER PERMITS	107FP
PROJECT COMPLETION AND LIQUIDATED DAMAGES	108B
PAYMENT ADJUSTMENT FOR FUEL	109A
PRICE ADJUSTMENT FOR BITUMINOUS MATERIAL	109B
MOWING PAYMENT ADJUSTMENT FOR FUEL	109MA
BITUMINOUS PLANT MIX ROADWAY DENSITY	407DEN
INTELLEAGENT COMPACTION (IC) FOR HOT MIX ASPHALT (HMA)	407IC
SECTION 411-ASPHALT CONCRETE SURFACE (HOT MIX)	411B
FULL DEPTH AND PARTIAL DEPTH CONCRETE PAVEMENT REPAIR	502A
FULL DEPTH AND PARTIAL DEPTH CONCRETE PAVEMENT REPAIR (HIGH EARLY STRENGTH)	502C
CLEANING AND RESEALING TRANSVERSE AND LONGITUDINAL JOINTS AND RANDOM CRACKS	502J
GRINDING CONCRETE PAVEMENT	503
SECTION 602 – STEEL STRUCTURES (INSPECTION COST ONLY)	602
RETAINING WALLS	624
HIGHWAY SIGNS, LUMINAIRES & TRAFFIC SIGNALS	700SIG
TRAFFIC CONTROL SUPERVISOR	712B
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TRAFFIC QUEUE PROTECTION	712PTQ
CONTRAST PAVEMENT MARKINGS	716DB
SOUND-ABSORBING NOISE BARRIERS	718NB
REMOVAL AND DISPOSAL OF LITTER	719A
ITS SPECIAL PROVISION	725
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STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY CONSTRUCTION CONTRACT SPECIFICATIONS (EXECUTIVE ORDER 11246)	1231
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B

Design-Build Project



STATE

OF

TENNESSEE

(Rev. 5-1-95)
(Rev. 12-1-01)

January 1, 2015

SPECIAL PROVISION

REGARDING

CLEANING AND RESEALING TRANSVERSE AND

LONGITUDINAL JOINTS AND RANDOM CRACKS

Description. This work shall consist of cleaning and resealing existing transverse and longitudinal joints and random cracks in portland cement concrete pavement, and joints between portland cement concrete pavement and asphaltic concrete pavement.

Materials. Material used to seal joints shall conform to the requirements of Subsection 905.05.

Equipment. All equipment necessary for the satisfactory performance of this construction shall be on the job and approved by the Engineer before work will be permitted to begin.

Joint Sealants shall be placed with equipment recommended by the sealant manufacturer. The equipment shall be capable of maintaining a uniform, homogeneous, mixture throughout the sealing operation.

Construction Requirements. Unless otherwise specified on the Plans, the longitudinal joints between Portland cement pavement and asphaltic pavement shall be prepared by sawing, or other approved method, so that an opening one inch wide by one inch deep measured from the lowest elevation is formed. Shoulder joints shall be filled full depth.

Pavement joints shall be re-sawed to the dimensions shown on the plans or as directed by the Engineer. Both sides of the joint shall be sawed in order to be thoroughly cleaned of all oil, grease, old sealant and all other foreign material. The faces of all sawed joints shall be sandblasted so that the sealant will adhere to the side of the joint. The sand shall be clean, sharp and have 100 percent passing the 2.0 millimeter (No. 10) sieve. The nozzle pressure shall be such that the joints will be cleaned out and the edges will have etched surfaces. Sandblasting and cleaning shall be done immediately prior to sealing, to assure proper preparation. Joints shall be dry before sealing.

Random Cracks shall be routed or chipped to the dimensions shown on the plans or as directed by the Engineer and shall be cleaned of all foreign material as specified above for joints.

The sealant shall be applied so that it flows into the joint without overlapping onto the concrete pavement. All sealant which overlaps onto the concrete pavement shall be removed by the contractor at his expense.

Hot poured sealant applied at other than the shoulder joint shall be placed to a depth as shown on plans after the bond breaker media has been placed to provide the proper shape factor. The sealant shall be applied in accordance with the manufacturer's recommendations and a primer shall be furnished and applied prior to sealing if so indicated in the recommendation. Any sealant spilled on the concrete shall be promptly removed.

The silicone sealant and backer rod shall be applied as shown on the plans and in accordance with the manufacturer's recommendations except as modified hereafter. The thickness of the silicone material measured from the highest point of the backer rod to the lowest point in the trough formed by the silicone material shall be as dimensioned on the plans within a tolerance of plus or minus 2 millimeters (1/16 inch). The application of primer shall be required if it is included in the manufacturer's recommendations.

Method of Measurement. Resealing Joints and Resealing Random Cracks will be measured by the meter (linear foot) along the surface of the joint or crack. No measurement of width or depth will be made.

Basis of Payment. Payment for Resealing Joints and Resealing Cracks shall be full compensation for the item complete in place, including sawing, cleaning, furnishing and installing all materials and all incidentals of the work. No additional payment will be made for irregular joint and crack widths or depths.

STATE

OF

TENNESSEE

REV. 10-22-01

January 1, 2015

SPECIAL PROVISION

REGARDING

GRINDING CONCRETE PAVEMENT

Description. The work shall consist of grinding Portland Cement Concrete Pavement to substantially eliminate joint faulting and/or to restore proper drainage, riding characteristics and skid resistance to the pavement surface. The work shall be accomplished in accordance with these Specifications and in reasonably close conformity to the details on the Plans.

Equipment. The grinding equipment shall be a power driven, self-propelled machine that is specifically designed to smooth and texture Portland Cement Concrete Pavement with diamond blades. The effective wheel base of the machine shall not be less than 12.0 feet. It shall have a set of pivoting tandem bogey wheels at the front of the machine and the rear wheels shall be arranged to travel in the track of the fresh cut pavement. The center of the grinding head shall be no further than 3.0 feet forward from the center of the back wheels.

The equipment shall be of a size that will cut or plane at least 3.0 feet wide. It shall also be of a shape and dimension that does not encroach on traffic movement outside of the Work area. The equipment shall be capable of grinding the surface without causing spalls at cracks, joints, or other locations.

Equipment other than that specified above may be used when permission to do so is requested by the Contractor and granted by the Engineer in accordance with Subsection 105.17.

Construction. The Plans will designate the areas of pavement surfaces to be ground. Grinding of bridge decks and roadway shoulders will not be required unless indicated on the Plans or required to improve drainage.

The construction operation shall be scheduled and proceed in a manner that produces a uniform finished surface. Grinding will be accomplished in a manner that eliminates joint or crack faults while providing positive lateral drainage by maintaining a constant cross-slope between grinding extremities in each lane. Auxiliary or ramp lane grinding shall transition as required from the mainline edge to provide positive drainage and acceptable riding surface. The entire area designated on the Plans shall be ground until the pavement surfaces of adjacent sides of transverse joints and cracks are in the same plane. The operation shall result in pavement that conforms to the typical cross-section and requirements specified herein. It is the intention of this Specification that the faulting at joints and cracks be eliminated, that the overall riding

characteristics be within the limits specified, and that substantially all of the pavement surface be textured except that extra depth grinding to eliminate minor depressions in order to provide texturing for 100 percent of the pavement surface will not be required.

The Contractor shall establish positive means for removal of grinding and/or grooving residue. Solid residue shall be removed from pavement surfaces before being blown by traffic action or wind. Residue shall not be permitted to flow across lanes used by public traffic or into gutters or drainage facilities. Residue shall be disposed of in a manner that will prevent residue, whether in solid or slurry form, from reaching any waterway in a concentrated state.

Residue may be continuously discharged on adjacent roadway slopes or ditches if the Engineer determines that there is sufficient vegetative cover to adequately filter the residue. However, if the Engineer determines that there is not sufficient vegetative cover on the adjacent roadway slopes and ditches to adequately filter the residue, then the residue shall be collected in approved storage tanks and deposited in settling basins, spread over flat vegetated areas, or filtered by other means approved by the Engineer.

Final Surface Finish. The grinding process shall produce a pavement surface that is true to grade and uniform in appearance with a longitudinal line type texture. The line type texture shall contain parallel longitudinal corrugations that present a narrow ridge corduroy type appearance. The peaks of the ridges shall be approximately 1/16 inch higher than the bottoms of the grooves with approximately 50 to 52 evenly spaced grooves per foot for pavements constructed with limestone coarse aggregate and 53 to 57 evenly spaced grooves for pavements constructed with aggregate other than limestone. Grinding chip thickness shall be a minimum of 0.100 inches thick for pavements constructed with limestone coarse aggregate and a minimum of 0.080 inches thick for pavements constructed with coarse aggregate other than limestone.

The finished pavement surface shall be measured for riding quality. The grinding shall produce a riding surface, which does not exceed the specified requirements indicated below.

Ground pavement surfaces on mainline traffic lanes, auxiliary lanes, ramps, acceleration lanes and deceleration lanes shall be tested with the Rainhart Profilograph using a 2.5 millimeter (0.1 inch) blanking band.

Any area 0.1 mile in length with a Rainhart Profilometer roughness index value in excess of the applicable values specified below shall be reground for profile with equipment approved by the Engineer:

1. Mainline traffic lanes and auxiliary lanes more than one half mile in length - 0.7 inch.
2. Auxiliary lanes one half mile in length or less, ramps, acceleration lanes and deceleration lanes - 1 inch.

Grinding along the inside edge of the existing pavement shall conform to the straightedge requirements.

Transverse joints and random cracks shall be visually inspected to insure that adjacent surfaces are in the same plane. Misalignment of the planes of the surfaces on adjacent sides of the joints or cracks which is in excess of 1/16 shall be ground until the surfaces are flush.

The transverse slope of the pavement shall be uniform to a degree that no depressions or misalignment of slope greater than 1/4 inch in 12 feet are present when tested with a straightedge placed perpendicular to the centerline. Straightedge requirements do not apply across longitudinal joints or outside of areas ground.

Measurement. Grinding Concrete Pavements will be measured by the square yard. The quantity of pavement grinding will be determined by multiplying the finished ground width by the total length ground.

Basis of Payment. The Contract Price per square yard for grinding concrete pavement shall be full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all work involved in grinding the existing surface, removing residue and cleaning the pavement in accordance with these Specifications and as shown on the Plans.

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 910%.

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:

DESIGN-BUILD
RFP CONTRACT BOOK 3
PROJECT SPECIFIC INFORMATION

TENNESSEE DEPARTMENT OF TRANSPORTATION

Interstate 75 at Interstate 24 Interchange Modification
Hamilton County- TENNESSEE

CONTRACT NUMBER: DB1801



July 27, 2018

Addendum #1 August 24, 2018

Addendum #2 September 26, 2018

The Design-Builder's general responsibilities with respect to the scope of work for the Project shall include without limitation the following, as more particularly described within this **Contract Book 3 (Project-Specific Information)**:

- Replacing the existing median barrier with a 51-inch high median barrier from the Georgia State Line to south of Spring Creek;
- Replacing the storm sewer system on I-75 from the Georgia State Line to south of Spring Creek;
- Adding an additional lane on I-75 as shown on the Functional Plans;
- ~~Providing~~ Meet or exceed a minimum 60-50-mph design speed for all ~~system~~ interchange ~~ramps~~;
- Widening I-75 to add an additional lane from S. Chickamauga Creek to a point south of the CSX Railroad as shown on the Functional Plans using concrete pavement with asphalt shoulders.
- Rehabilitating the existing concrete pavement from S. Chickamauga Creek to a point south of the CSX Railroad as shown on the Functional Plans;
- Constructing new bridges and widening the existing bridge over S. Chickamauga Creek;
- Widening the I-75 southbound to I-24 westbound interstate-to-interstate ramp and I-24 eastbound to I-75 northbound interstate-to-interstate ramp from two to three lanes;
- Realigning and widening the I-75 northbound to I-24 westbound interstate-to-interstate ramp and the I-24 eastbound to I-75 southbound interstate-to-interstate ramp from two to three lanes;
- Adding sidewalk and curb and gutter along both sides of Spring Creek Road;
- Adding new noise walls;
- Removing and replacing all guardrail. Installing new guardrail in locations shown on the Functional Plans;
- Resurfacing all existing asphalt pavement within the project limits;
- Modifying existing drainage structures and installing proposed drainage improvements; including replacing the storm sewer system on I-75 from the Georgia State Line to south of Spring Creek;
- Replacing all lighting within the project limits;
- Relocating utilities;
- Relocating and improving ITS facilities;
- Installing new overhead signs and sign structures as shown in the roll plots; and
- Replacing control access fence at locations detailed in this RFP.

○ **PROJECT GOALS**

The Project's primary purposes are to provide present and future congestion relief, reduce high crash rates and address deficiencies of the existing interchange. The following goals have been established for the Project (not listed in any specific order):

- Minimize inconvenience to the public during construction.
- Provide a management system or approach that ensures the requirements of the Project will be met or exceeded.
- Provide a high-quality project that minimizes future maintenance.
- Provide a solution consistent with the Department's Roadway Design Standards.
- Adhere to local, state, and federal environmental regulations and/or permits required in executing and/or completing the Project.
- Incorporate Best Management Practices (BMPs) to control sediment, storm water runoff/discharge, or other environmental parameters established for the Project.
- Implement innovative solutions to maximize the return on taxpayer investment by reducing costs or improving quality of the transportation system.
- Complete construction as quickly as possible and not later than ~~October 30, 2022~~ August 31, 2023.
- Incorporate safety into all aspects of design and construction with the goal of zero incidents and accidents.
- Provide a visually pleasing finished product.

○ **DEPARTMENT-PROVIDED MATERIALS**

The Functional Plans and Department-supplied materials are listed in **Appendix B**.

All documents have been published on the Department's project website:

<https://www.tn.gov/tdot/tdot-construction-division/transportation-construction-alternative-contracting/transportation-construction-division-alternative-contracting-design-build-i.html>

The Design-Builder shall acknowledge that materials furnished by the Department are preliminary and provided solely to assist the Design-Builder in the development of the project design. The Design-Builder shall be fully responsible for the accuracy and completeness of all work performed under this contract. The Design-Builder shall be fully liable and hold the Department harmless for any additional costs and all claims against the Department which may arise due to errors, omissions and negligence of the Design-Builder in performing the work required by this contract.

The Design-Builder is responsible for verifying all information provided by the Department.

3. ROADWAY

The roadway shall be designed to adhere to the latest editions of all appropriate 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 and the Department accepted AASHTO *Policy on Geometric Design of Highways and Streets*, and *Manual on Uniform Traffic Control Devices (MUTCD)*.

Microstation and Geopak shall be used in the preparation of CADD and design files.

○ **GENERAL**

The Project shall consist of the following I-75 Segments:

Segment 1 (from the Georgia state line to just north of Ringgold Road – approx. 1,710 LF total) will consist of removing the existing median barrier wall and the inside shoulder pavement, modifying or reconstructing existing cross drains, installing new storm drainage system along the shoulders, installing new 51-inch-tall single slope median barrier wall, milling and overlaying existing asphalt pavement, signing and pavement marking.

Segment 2 (from just north of Ringgold Road to approx. 1,130' north of the existing Welcome Center off ramp – approx. 3,340 LF total) will consist of removing the existing median barrier wall and the inside shoulder pavement, modifying or reconstructing existing cross drains, installing new storm drainage system along the shoulders, installing new 51-inch-tall single slope median barrier wall, milling and overlaying existing asphalt pavement, widening with full depth asphalt pavement, signs and pavement markings.

Segment 3 (from approx. 1130' north of the existing Welcome Center off ramp to approx. 112' west of S. Chickamauga Creek bridge – approx. 5,260 LF total) (Includes I-75 Interchange @ I-24 to a point just west of the I-24/Spring Creek Road bridges) will consist of constructing proposed roadway on a new alignment with new full depth pavement, drainage systems, 51-inch-tall single slope median barrier wall, bridges, retaining walls, guardrail, signing and pavement marking.

Segment 4 (from approx. 112' west of S. Chickamauga Creek bridge to 455' west of the CSX Railroad bridge – approx. 3,725 LF total) will consist of widening the existing roadway with concrete pavement and outside asphalt shoulders, rehabilitating the existing concrete pavement, extending existing cross drain culverts, widening the Chickamauga Creek bridge, and constructing retaining walls, guardrail, signs and pavement markings. **The following concrete repair quantities are anticipated:**

Concrete Repair (Partial Depth): 20 S.Y.

Concrete Repair (Full Depth): 900 C.Y.

Concrete repairs shall be performed in accordance with Special Provision SP502A and Standard Drawing RP-J-23.

All existing concrete pavement on I-75 shall be ground and the joints sawed, cleaned, and sealed in accordance with Special Provisions SP502J and SP503.

Payment for Select Quantity Overruns

The following table is provided to cover select quantities that are above those anticipated in the scope. Additional repair areas/quantities shall be pre-approved (in writing) by the Department prior to commencing work or no payment will be received, see Design Build Standard Guidance section 2.11.2 for additional details. No payment will be provided for repairs required due to work being performed by the Design-Builder. When the Design-Builder utilizes any item in the table below, he must provide the Department with an invoice detailing the location, purpose, and quantity used, for tracking purposes. Failure to provide invoices throughout the progress of the project may result in non-payment for overrun quantities.

ITEM	TYPE	UNIT	UNIT PRICE	QUANTITY
Uniformed Police Officer	As specified by Special Provision	HOUR	\$50	Hours exceeding 2,500
Temporary Traffic Control	Changeable Message Sign Unit	EACH	\$6,500	Signs exceeding 15
Concrete Repairs	FULL DEPTH PCC PAVEMENT REPAIR	C.Y.	\$475	Quantity that exceeds 900 C.Y.
	PARTIAL DEPTH PCC PAVEMENT REPAIR	S.Y.	\$200	Quantity that exceeds 20 S.Y.

Reference DB Standard Guidance: §9.2.6, 9.2.7 & 2.11.2

Design Requirements

The proposed horizontal and vertical alignments of I-75 and the interstate-to-interstate ramps shall be designed and constructed to **meet or exceed** a minimum ~~60~~50-mph design speed for a rolling urban freeway.

All other proposed ramps shall be designed and constructed to match the design speeds shown on the Functional Plans.

Traffic lanes on I-75, interstate-to-interstate ramps, and ramps with 2 or more lanes shall be 12 ft. wide. One-lane ramps shall be 16 ft. wide.

Interstate-to-interstate ramps: Inside and outside shoulders shall be 12 ft. wide (10 ft. stabilized).

I-75 (station 303+42 to station 325+00): Existing 16.5 ft. +/- inside shoulder (stabilized) to be reconstructed. Outside shoulder shall be 12 ft. wide (10 ft. stabilized).

I-75 (station 327+00 to station 352+54.04): Existing 14.0 ft. +/- inside shoulder (stabilized) to be reconstructed. Outside shoulder shall be 12 ft. wide (10-ft. stabilized).

I-75 (station 352+54.04 to station 404+50): Inside shoulder shall be 14 ft. (14-ft. stabilized). Outside shoulder shall be 12 ft. wide (10-ft. stabilized).

I-75 (station 406+50 to station 443+85): Existing 11 ft. inside shoulder (stabilized) to remain. Outside shoulder shall be 12 ft. wide (10-ft. stabilized).

The geometric configurations of all roadway components shall be designed to provide adequate drainage and prevent hydroplaning (during construction and when complete). Cross slopes shall be in accordance with the requirements of the roadway typical section as shown in the Functional Plans. Design-Builder to provide hydraulic calculations (including spread calculations) to the Department.

All proposed slopes associated with the roadway shall be sodded.

All existing access-control fence located within the following limits will be replaced with the exception of that which is within a wetland area as designated on the survey provided by the Department.

- I-75 Northbound from Spring Creek to South Chickamauga Creek
- I-75 Southbound from South Chickamauga Creek to I-24 Westbound at Spring Creek Rd.

All permanent and temporary safety appurtenances (sign supports, guardrail, barrier rail, impact attenuators, etc.) shall meet current TDOT standards and shall have all required Department certification documents.

Portions of the City of Chattanooga are protected from flooding by a system that includes levees, walls, pumps and other earthworks. The area along the northern boundary of this project that stretches from South Chickamauga Creek to west of Spring Creek Road is in close proximity or contains several of these flood control measures. The pump station at Cornelison Road and the pump station at Spring Creek Road along with all required piping must remain fully functional at all times during and after this project. No modification or excavation of the levee will be allowed. Portions of the ramp from I-75 South to I-24 West also serve as part of the flood control system. Therefore, any work on this ramp must result in a finished grade elevation equal to, or higher than, the existing. Earthworks along right of way between Spring Creek Road and Eastgate Loop that are part of the flood control system are not to be disturbed. The Design-Builder shall not impact the existing Brainerd Levee Pump Station System located within the existing right-of-way. Any impacts to the facility shall be the responsibility of the Design-Builder. For clarification or questions concerning the flood control features or their function in this area, please contact Mr. Bill Payne, City Engineer at (423) 643-6160.

Deviations and Exceptions

The functional design of the project is based upon an approved Interstate Access Request (IAR). Any deviations from the approved IAR including ingress and egress points will require coordination the Federal Highway Administration (FHWA) and may require a revision and approval from the Federal Highway Administration to the IAR.

The Design-Builder shall be responsible for any IAR modifications and approvals. All proposed modifications will require an Alternative Technical Concept (ATC) subject to Department approval.

To insure connectivity to future construction phases at the I-75 north project limits and I-24 project limits, any deviations from the Functional Plans and IAR shall require an ATC and approval from the Department. Deviations from horizontal (greater than 5.0 feet) ~~and vertical alignment (any change)~~ as shown on the Functional Plans will require an Alternative Technical Concept (ATC) with Department approval. The Design-Builder is responsible for any impacts result from deviations from the Functional Plans or IAR.

Pull boxes for fiber optic trunk line shall be placed every 1200 feet. Pull boxes must meet all requirements set forth in the TDOT Fiber Optic Standard Drawings. The ITS system redundancy shall be tested with TDOT TMC IT prior to fiber and power relocation.

CCTV

The Design-Builder shall maintain the existing CCTV cameras to the greatest extent possible.

If relocation of CCTV cameras is required, then CCTV cameras within the project limits shall be removed and replaced with proposed CCTV cameras meeting the requirements of Special Provision 725.

All CCTV camera poles located in the median shall be removed unless otherwise directed by the Department. All proposed CCTV camera poles shall be located outside of clear zone unless guardrail or barrier is present. Proposed CCTV camera poles shall not be placed in the median.

Dynamic Message Signs (DMS)

~~The Design-Builder shall reuse the existing DMS support structures to the greatest extent possible.~~

~~If new DMS support structures are required,~~ Design-Builder shall remove and replace the existing structures with proposed DMS support structures meeting the requirements of Special Provision 725.

All proposed DMS signs and supporting equipment shown on the ITS Roll Plot shall be new. All existing DMS signs and supporting equipment shall be removed and returned to the Department at a location to be determined.

Radar Detection System (RDS)

The Design-Builder shall remove and replace the existing RDS detection devices and support structures with all new RDS detection devices and support structures that meet the requirements of Special Provision 725. All the existing RDS devices and support structures shall be returned to the Department.

If an existing light standard is utilized as a RDS support structure, the Design-Builder shall not remove the light standard, only the RDS equipment

When appropriate and possible, co-locate RDS detection devices with CCTV cameras or with DMS to reduce the number of support structures to be replaced. The Design-Builder shall ensure desired detection accuracy irrespective of the installation type. If co-locating with CCTV support structure, Design-Builder shall coordinate with TDOT Region 2 to ensure location is easily accessible for maintenance of RDS and does not interfere with lowering device. If co-locating with DMS structure, Design-Builder shall coordinate with TDOT Region 2 to ensure location is easily accessible for maintenance of RDS.

The proposed RDS system design should maximize the use of RDS installations that detect traffic in both directions of travel. All new RDS support structures shall be located outside of clear zone unless guardrail or barrier is present.

APPENDIX A - PAVEMENT DESIGN

Required Structural Number = 6.26

DATE: 06/07/18 FULL DEPTH DESIGN FOR I-75 ROUTE: I-75/I-24

COUNTY: HAMILTON PROJ NO: 33005-0176-44 FED PROJ IM/NH-75-1(131)

DESCRIPTION: I-75 INTERCHANGE MODIFICATION @ I-24

PAVEMENT DESIGN SECTION A

ROADWAY & INSIDE SHOULDER DESIGN

DESCRIPTION	THICKNESS
411-03.10 ACS (PG76-22) GR "D"	1.25
307-03.08 AC MIX (PG76-22) GR "B-M2"	2.00
307-03.01 AC MIX (PG76-22) GR "A"	7.00
307-01.22 PERF AC (PG76-22) GR "A-S"	3.25
303-01 MINERAL AGG BASE GRADING "D"	12.00
TOTALS	25.50

OUTSIDE SHOULDER DESIGN

DESCRIPTION	THICKNESS
411-01.07 ACS (PG64-22) GR "E"	1.25
307-01.08 AC MIX (PG64-22) GR "B-M2"	2.00
303-01 MINERAL AGG BASE GRA "D"	22.25
TOTALS	25.50

REMARKS: 1) 7" OF PERF. "A-MIX" TO BE APPLIED AT TWO EQUAL LIFTS
 2) SUBSURFACE DRAINAGE - AGGREGATE UNDERDRAIN W/PIPE
 3) MILL 1.25 FROM THE EXISTING PAVEMENT AND OVERLAY WITH
 1.25' OF "D" MIX AND 2.0" OF "B-M2" MIX WHERE NEEDED.