ODOT

DESIGN BUILD

SCOPE OF SERVICES

PID: 77889 **State Project Number:** ~~[Insert Text]~~243006

County: HAM **Route:** 75 **Section:** 7.85

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1. PROJECT IDENTIFICATION & GENERAL INFORMATION

Table 1-1: Project Identification

PID	77889
State Project Number	~~[Insert text]~~243006
County-Route-Section	HAM-75-7.85
Local Route Name (if applicable)	N/A
Highway Functional Classification & Federal Aid System	01 Urban Interstate 02 Urban Freeway and Expressway

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1.1. Design Designation

The DBT shall use the design designations for each of the facilities below various design elements as specified within the Scope of Services.

Table 1-2: Design Designation

Location:	I-75
Current ADT (2010):	173,800
Design Year ADT (2030):	203,000
Design Hourly Volume (2030):	17,050
Directional Distribution:	53%
Trucks:	14%
Design Speed:	60
Legal Speed:	55
Design Functional Classification:	01 Urban Interstate
NHS Project:	Yes

Location:	SR-562
Current ADT (2010):	70,700
Design Year ADT (2030):	78,000
Design Hourly Volume (2030):	7,410

Directional Distribution:	53%
Trucks:	11%
Design Speed:	60
Legal Speed:	55
Design Functional Classification:	02 Urban Freeway and Expressway
NHS Project:	Yes

1.2. Existing Plans and Project Information

Available information related to the Project is available in the Document Inventory shown in Table 1-3. The Document Inventory will identify whether the document is designated as "Reference Documents" or "Contractual Appendices".

Reference Documents appendices are provided for informational purposes only. The Department makes no representation or warranty as to the accuracy, adequacy, applicability, or completeness of the Reference Documents. Except to the extent set forth to the contrary in the Contract Documents, reliance upon the Reference Documents shall be at the Proposer's risk, and the Department shall have no liability or obligation because of the inaccuracy, inadequacy, inapplicability, or incompleteness of the Reference Documents, regardless of the contents thereof.

Contractual Appendices in the Document Inventory are considered binding obligations of the DBT. The DBT shall meet requirements identified in the Contractual Appendices and shall implement the Work in accordance with these requirements.

The Offerors (i.e. prospective Design-Build Teams) shall examine the information provided in the Document Inventory to determine if the information accurately depicts existing field conditions.

The following existing plans are considered part of the Document Inventory and are available for review:

District 8 Archive Nos. provided in Appendix H:

08C1366	08C1500	08C2418
08C1394	08C1531	08C2436
08C1394	08C1532	08C2436
08C1403	08C1884	08C2487
08C1412	08C2238	08C2662

The plans identified in the Document Inventory are not as-built plans. All existing plans are considered Reference Documents.

In addition to the existing plans, appendices to the Scope of Services are listed in the Document Inventory and posted on the FTP site.

https://ftp.dot.state.oh.us/pub/Contracts/Attach/HAM-77889/Appendices/

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Table 1-3: Document Inventory

Appendix #	Appendix Title	Contractual/Reference Designation
A	HAM-75-7.85 REDUCED plan set (Railroad)	Contractual Appendix
B	HAM-75-7.85 FULL plan set 2022	Reference Document
C	HAM-75-7.85 Right of Way Plans	Contractual Appendix
D	CADD Files from PID 77889 11/16/23 sale	Reference Document
E	Norfolk Southern Railroad Agreement and Special Clauses and NS Special Provisions	Contractual Appendix
F	Design Exceptions	Contractual Appendix
G	Soil Profile Plans and Structure Foundation Explorations	Contractual Appendix
H	Existing Plans	Reference Document
I	Unauthorized Lane Use Table	Contractual Appendix
J	HAM-75-7.85 Full Plan Set 2023	Reference Document

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1.3. Railroad Coordination

The three (3) referenced ~~railroad~~

_bridges and track shall be constructed per the plans provided in Appendix A. Plan Review by Norfolk Southern Corp. (NSRR) is not required for the railroad bridges.

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All necessary PE Agreements and Construction Agreements and subsequent modifications have previously been executed between NS and ODOT, and are available in Appendix E.

The following requirements are incorporated in addition to any requirements in the rail agreements. The executed Railroad Construction Agreement is provided in Appendix E.

The DBT shall:

1. Perform ongoing coordination of construction with Norfolk Southern throughout the Project. The DBT shall not charge or submit a compensable claim against either the State for hindrance or delay due to railway traffic, any work done by the railroad, or other delay incident to or necessary for safe maintenance or normal operation of railway traffic, or for any delays due to compliance with Railroad Agreements.

   The Project will require the DBT to perform Work on and around rail lines during execution of the Work. The DBT shall coordinate demolition and construction activities with the Railroad and/or the Railroad's General Engineering Consultant to ensure there will be minimized impacts to Railroad operations, property, or right-of-way. The Department has entered into agreements with the railroad(s). The DBT's operations shall be conducted in accordance with the agreement(s) and any applicable special provisions, special clauses, construction requirements, and demolition requirements.

   Railroad Coordination, including the processing and execution of Railroad Agreements, is handled through the State Rail Coordinator at Central Office. Technical coordination is handled through the District Railroad Coordinator.

   The DBT is to include the State Rail Coordinator and the District Railroad Coordinator in all communications with the railroad(s) to verify the line(s) in question, necessary clearances for rail operations (both permanent and temporary), and/or to acquire the milepost and line identification information, etc.

2. Provide a monthly railroad coordination report to the Department including anticipated dates and milestones for the following items:
   a. Railroad Buildable Unit Plan Submittal (see Section ~~Error! Reference source not found.)~~ 18;
   b. Construction submittals requiring railroad review and approval prior to beginning construction (in accordance with the executed Railroad Construction Agreement, Special Clauses and Norfolk Southern's Special Provisions

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c. Construction start and end dates for work that may create an impact to the railroad facility/operations;
d. Anticipated dates for flaggers;
e. Anticipated dates for potential outage request; and
f. Any other milestones that may impact railroad facilities or operations.

3. Additional Railroad Information
   a. The DBT is responsible for establishing a schedule of formal RR coordination meetings commensurate with the complexity of each RR issue. RR coordination meetings will include both formal and informal meetings between the DBT, the impacted RR owner and the ODOT-D08 RR Coordinator. The DBT shall notify the ODOT-D08 RR Coordinator and Engineer at least three (3) business days in advance of all RR coordination meetings. The Department will participate as necessary. The DBT is responsible for generating meeting minutes within two (2) business days after every RR coordination meeting and submitting those meeting minutes to the ODOT-D08 RR Coordinator and Engineer.
   b. Means and Methods Planning - The DBT shall develop a detailed submission indicating the progression of work with specific times when tasks will be performed for work activities that are on or in the vicinity of the railroad property. This submission may require a walkthrough at which railroad representatives will be present. Work will not be permitted to commence until the DBT has provided the railroad with a satisfactory plan that the Project will be undertaken without scheduling, performance, or safety related issues. Provide a listing of the anticipated equipment to be used, the location of all equipment to be used and ensure a contingency plan of action is in place should a primary piece of equipment malfunction. All work in the vicinity of the railroad property that has the potential of affecting train operations must be submitted and approved by the railroad prior to work being performed. This submission will also include a detailed narrative discussing the coordination of project safety issues between DBT and the railroad Representative. The narrative shall address project level coordination and day to day, specific work operations including crane and equipment operations, erection plans and temporary works.
   c. Submit an emergency action plan indicating the location of the site, contact numbers, access to the site, instructions for emergency response and location of the nearest hospitals. This plan should cover all items required in the event of an emergency at the site including fire suppression. Coordinate the Emergency Action Plan with the safety related discussion of the Means and Methods submission discussed above. The plan should also include a method to provide this information to each project worker each day on site.

4. Norfolk Southern Construction Durations

a. 120 calendar days from completion of I-75 and Prosser bridges (Appendix A – Stage 1A) to demo the existing I-75 and Prosser Bridges (Appendix A – Stage 2A).

160 calendar days from completion of the east side of SR 562 bridge (Appendix A – Stage 1A) to beginning track removal and demolition of the west side of the SR 562 bridge.

b.

Payment

Railroad liability insurance will be paid for under the following pay item:

ITEM 100E00300 - PREMIUM ON RAILROAD'S PROTECTIVE PUBLIC LIABILITY AND PROPERTY DAMAGE LIABILITY INSURANCE,LUMP SUM

The individual pay items listed with the Track Notes in Appendix A, sheet 158, have been carried to the Proposal.

1.4. Airway/Highway Clearance

Not Applicable

2. PRE-BID MEETING

Not Applicable

3. CONTRACTOR PRE-QUALIFICATION

It is required that the Bidder be a Contractor prequalified in accordance with Section 102.01 of PN 126. The Contractor or one of the subcontractors identified in the Proposal must be prequalified for all Work Type Codes included in the Proposal.

The Bidder is also required to have engaged the services of an ODOT pre-qualified Consultant (Designer) in accordance with Section 4 of the Scope of Services to constitute the DBT.

If the Contractor, Designer, and/or the sub-consultant(s) submitted do not meet all the required qualifications, the Office of Contract Sales may reject the bid.

4. DESIGNER

Each Offeror shall name the Designer and all design sub-consultant(s) in the electronic form on the following web-page prior to Bid submittal:

http://www.dot.state.oh.us/Divisions/ContractAdmin/Contracts/Pages/Scope.aspx

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Each Offeror must list relevant prequalification categories for the Designer and each design sub-consultants to show that the prequalification requirements listed below are satisfied. All consultant names and addresses must be the same as that on file with the Department as found on the following listing:

http://www.dot.state.oh.us/Divisions/Engineering/Consultant/Consultant/prequal-engineering.pdf

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The Designer or sub-consultants of the Designer must be prequalified to perform design work associated with the following prequalification categories:

- Complex Roadway Design
- Level 2 Bridge Design
- ITS Design and Operation
- Limited Lighting Design
- Geotechnical Engineering Services
- Geotechnical Testing Laboratory
- Geotechnical Field Exploration Services
- Geotechnical Drilling Inspection Services

In accordance with Section 104.011 of PN 126, design services that require prequalification may only be performed by firms that are prequalified for those services at the time of performance of the services.

Restrictions on Participation in design-build contracts:

Any Consultant who provided services to the Department that have been directly utilized in this design-build Proposal or Scope of Services document will NOT be eligible to participate in this design-build contract for this Project, either as a prime consultant or as a sub-consultant.

The following consultants have been identified as being precluded from participation:

- EMH&T
- Gannett Fleming
- Barr
- Resource International
- Lawhon

Any consultant who has worked on PID 77889 must submit a waiver request.

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5. SCOPE OF WORK

Project Description:	Construction of three railroad bridges over each of the following roadways: I-75, SR 562, Prosser to prepare for future widening of I-75 and SR 562.
Completion Date:	~~11/1/2026~~6/30/2027

Commented [3ADD8]:

Warranties:	N/A

The approximate Project Limits for each applicable roadway are provided in Table 5-1.

Table 5-1: Approximate Project Limits

Roadway Name	Begin	End
I-75	8.5±	8.5±
SR 562	0.5±	0.6±
Prosser Ave	At NSRR bridge	

Work Limits shall be determined by the DBT.

The Consultant shall provide the engineering services, design, and preparation of detail construction plans for the construction of the proposed Project.

The railroad bridge plans found in Appendix A shall not be modified by the DBT. Any errors or omissions found in the Appendix A plan set will be corrected by the Department through the standard change order process.

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The Contractor shall provide for the furnishing of materials, construction, and completion in every detail of all the work described in the Contract Documents and approved Plans to fulfill the intent of the Contract.

Project Goals:

1. Construct railroad bridges over I-75, Prosser, and SR 562 as per the plans in Appendix A.
2. Design and permanently widen roadway on SB I-75 to permanently shift traffic, as required, around the new I-75 railroad bridge median pier, maintaining the existing lanes of traffic.
3. Maintain traffic on I-75, Prosser, and SR 562.

6. FIELD OFFICE

Field office Type C, As Per Plan as required by Construction and Material Specification Item 619, shall be available and completely functional no later than 1 week prior to the start of construction work. The field office requirements are only applicable to the Department's personnel.

~~In addition to the requirements of item 619, the contractor shall co-locate with the department staff for the duration of~~ the construction of the project. ~~The design team does~~

~~not need to co-locate.~~ The contractor shall ~~also~~ provide/lease a suitable field office with a minimum of 2000 SF of usable office space. Office to include a separate minimum 12'X36' conference room, and ten (10) separate offices with shelving units. Further items are as followed:

1. Furniture:
    a. Eleven (11) sets of desks, office chairs, and four drawer file cabinets
    b. Two (2) lockable file cabinets
    c. Ten (10) 2'X8' collapsible tables
    d. Twenty (20) folding chairs
2. Copy machine with scan/print/fax/internet hookup capabilities. The copier will print 22PPM and capable of printing sheets 8.5"X11", 8.5"X14" and 11"X17". Copier paper supplies and maintenance to be included.
3. Contractor to provide internet services with a minimum speed of 100 MBPS. The contractor shall supply the project with the IP addresses so that ODOT can attach an ODOT owned hub. ODOT's Owned hub will provide the staff with a wireless router and ODOT Firewall.
4. One (1) Separate water cooler and service.
5. Field office shall include a ~~secure~~ parking area ~~not less than 4,000 SF~~ capable of supplying ~~20~~ 10 EA all weather parking spots. "All weather" shall be defined as a hard smooth surface that will allow for snow removal.~~.~~ Gravel surface is not acceptable. 5 pParking spots ~~area~~shall ~~to~~ be surrounded by 6' high security fence with a lockable gate including keys and illuminated by security lighting, or equivalent.
6. Snow removal shall be required for parking area.
7. Bi-weekly cleaning service
8. Dumpster with necessary service.
9. Five (5) each telephones

The contractor shall obtain approval of the proposed facility from the engineer prior to use. The facility shall be available for ODOT use not more than 30 days from the award of contract.

Payment
Payment for this described work shall be paid for as follows:
619E16021 FIELD OFFICE, TYPE C, 25 Months

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7. GENERAL PROVISIONS FOR THE WORK

7.1. Governing Regulations

All services, including but not limited to survey, design, and construction work performed by the DBT and all subcontractors (including sub-consultants) shall be in compliance with all applicable ODOT Manuals and Guidelines.

It will be the responsibility of the DBT to acquire and utilize the necessary ODOT manuals that apply to the design and construction work required to complete this project.

The current edition, including updates released on or before the date of advertisement, of the following ODOT Manuals and Guidelines shall be met or exceeded in the performance of the design and construction work required to complete this project:

Aesthetic Design Guidelines
Bridge Design Manual
CADD Engineering Standards Manual
CADD Standards for MicroStation and GEOPAK and other applications
Construction and Material Specifications
Environmental Services Handbooks and Guidelines
Geotechnical Design Manual
Geotechnical: Manual for Abandoned Underground Mine - Inventory and Risk Assessment
Geotechnical: Specifications for Geotechnical Explorations
Item Master
Location and Design Manual, Volume One - Roadway Design
Location and Design Manual, Volume Three - Plan Preparation
Location and Design Manual, Volume Two - Drainage Design
Multimodal Design Guide
ODOT Analysis and Traffic Simulation (OATS) Manual
Ohio Manual of Uniform Traffic Control Devices
Pavement Design Manual
Proposal Notes for Construction and Material Specifications
Quality Standards for TTCDs & Acceptable Delineation Methods for Vehicles
Real Estate Policies and Procedures Manual: Acquisition Manual
Real Estate Policies and Procedures Manual: Appraisal
Real Estate Policies and Procedures Manual: Certification of Right of Way Control
Real Estate Policies and Procedures Manual: Property Management
Real Estate Policies and Procedures Manual: Railroad Coordination
Real Estate Policies and Procedures Manual: Relocation
Real Estate Policies and Procedures Manual: ROW Plans
Real Estate Policies and Procedures Manual: Utilities
Sign Designs & Markings Manual (SDMM)
Standard Drawings: Bridges | Plan Insert Sheets
Standard Drawings: Construction - Hydraulics | Plan Insert Sheets
Standard Drawings: Construction - Pavement | Plan Insert Sheets
Standard Drawings: Construction - Roadway and Roadside | Plan Insert Sheets
Standard Drawings: Traffic| Plan Insert Sheets
State Highway Access Management Manual
Supplemental Specifications for Construction and Material Specifications
Survey & Mapping Specifications
Traffic Engineering Manual
Waterway Permits Manual

7.2. CADD files supplied by the DBT

The DBT shall comply with ODOT's CADD Standards, and supply files in accordance with the CADD Engineering Standards Manual for OHDOT CONNECT. All data shall be provided to the

Department according to the provisions as detailed under the appropriate CADD links accessed from the Department's Division of Engineering's website. This includes, but is not limited to, the level assignments, symbols, lines and line styles that are to be used, line weights, cells, placement of text and file naming conventions.

The standards and necessary downloads can be accessed at the following URL addresses:

https://www.transportation.ohio.gov/working/engineering/cadd-mapping/cadd/ Field Code Changed

The Department will accept CADD files through electronic media.

1. The DBT shall submit all CADD information produced in the process of plan development. All CADD information shall be submitted in the current version of MicroStation (*.dgn) format as indicated in the CADD Engineering Standards Manual for OHDOT CONNECT. The DBT shall provide a comprehensive set of complete and accurate CADD data which is compatible with ODOT's CADD systems with no additional work or modification.
2. The DBT shall submit all information produced in the process of plan development according to L&D Volume 3, Section 1500.

The DBT shall use a separate file name for each horizontal or vertical alignment. The DBT shall provide required ASCII report content in accordance with the CADD Engineering Standards Manual.

These requirements and procedures may be updated from time to time with notification provided on the ODOT Division of Engineering website. The DBT shall use ODOT cell files and ODOT seed files consistent with the version of the requirements identified in Section 7.1 (Governing Regulations).

7.3. Pre-Award Conference

Within 7 days following Bid opening, the apparent successful DBT shall attend a mandatory pre-award conference. This confidential meeting will be held with the Office of Contract Sales in the Division of Construction Management to discuss the DBT's bid of the lump sum items. The DBT shall be prepared to discuss general items of Work included within the lump sum bid items, approximate amounts of Work included within the DBT's Bid Items, and general design approach and design concepts for the Work. Other Department representatives familiar with the Project may attend.

While not required, the DBT may prepare general engineering information to be presented to the Office of Contract Sales to help explain design concepts and quantities. This information will be used only by the Office of Contract Sales to assist in understanding the DBT's bid for award recommendation purposes.

No shared concepts, shared quantity information, discussions, comments made or shared by either party will be considered binding, a revision to the Contract Documents, or acceptance or validation of any design concept or assumed quantities of Work.

7.4. Partnering Agreement

The DBT is required to enter into a partnering agreement with the Department that is:

☐ Facilitated

☑ Self-Facilitated

A partnering agreement with the Department on this project. The objective of this agreement is the timely completion of the work and a quality product that will be a source of pride to both the Department and the DBT. Partnering will not affect the terms and conditions of the contract. The partnering agreement is a document which is solely intended to establish an environment of cooperation between the parties.

7.5. Communication

All communication during design and construction shall be with the District Project Manager and the District Project Engineer.

District's Project Manager's Name:	Stephanie Otten
Phone number:	(513)933-6584
E-mail:	Stephanie.Otten@dot.ohio.gov

District's Project Engineer's Name:	Sam Beyer
Phone number:	(513)208-5860
E-mail:	Sam.Beyer@dot.ohio.gov

At the Pre-Design Meeting, the DBT shall name a Project Manager who will act as a liaison between the DBT and the Department.

7.5.1. Task Force Design Meetings

☐ Required

☑ Not Applicable

7.6. Permits

The DBT shall ensure that the Project is constructed and maintained in accordance with all requirements, regulations, and applicable permits required for the Project. This includes the permits described herein and any additional permits not specifically identified in the Contract Documents.

Unless noted otherwise in the Contract Documents, the DBT shall obtain all necessary permits and pay all charges, fees and taxes associated with these permits (e.g., city street opening permits, street crossing/equipment moving permits, water department fees, sewer permits, rail permits and fees, etc.). The DBT shall be responsible for any fines levied by regulatory agencies because of their construction activities or non-compliance with any permit special or general conditions.

The DBT shall obtain a permit from the State or local government having jurisdiction to perform any non-construction work within the existing Right of Way and/or limited access.

7.7. Entry on Private Property

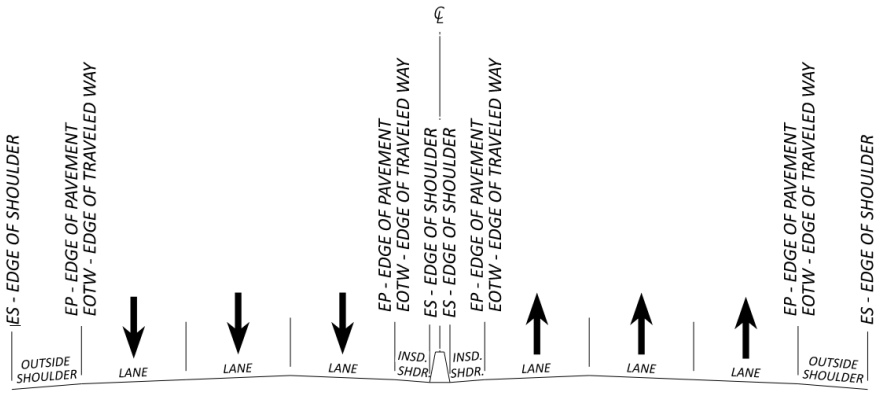
The DBT, acting as The Department's agent, may enter upon any lands within the State for the purpose of inspecting, surveying, leveling, digging, drilling, or doing any work deemed necessary in the execution of any survey authorized by the Director of Transportation in accordance with Section 5517.01 of the Ohio Revised Code and ODOT's Survey Manual. Prior to performing said survey, the DBT will send notification letters indicating the date and duration of entry to the affected property owners no less than forty-eight hours nor more than 30 days prior to the date of entry for said survey in accordance with ODOT's Survey Manual. The DBT shall forward copies of all notification letters distributed to ODOT's Project Manager.

Any subsequent claims for compensation due to damages incurred while said activities were performed will be negotiated between the DBT and the affected property owners with final approval from ODOT's Project Manager. Crop and property damage minimization and reimbursement information, together with the crop damage reimbursement formula and Special Waiver of Damage form, will be provided to the DBT by ODOT's Project Manager.

Any subsequent entries onto private property for the purpose of obtaining additional survey or soil information prior to the submission of the Bid will be made in accordance with the procedures outlined in this section.

7.8. Terminology

The figure below clarifies terminology used within the Scope of Services and various ODOT Manuals.



Notes:

- Drawing not to scale.
- Number of lanes is for example only.
- The area from the Edge of Pavement to the Edge of Pavement is considered the area of "traveled way".

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8. ENVIRONMENTAL

The DBT shall ensure that the Project is designed, constructed, and maintained in accordance with all environmental requirements, regulations, and applicable permits required for this Project.

8.1. NEPA & Environmental Commitments

The DBT shall perform all environmental commitments as described in the notes below, unless otherwise specified in the Contract Documents.

EARTH DISTURBANCE

NO VEGETATION SHALL BE REMOVED/DAMAGED OUTSIDE OF THE PHYSICAL WORK LIMITS. THE CONTRACTOR WILL BE REQUIRED TO NOTIFY THE ENGINEER IF THE VEGETATION OUTSIDE OF THE WORK LIMITS WILL BE IMPACTED PRIOR TO COMMENCING WORK.

THREATENED & ENDANGERED SPECIES

PRIOR TO BRIDGE DEMOLITION ACTIVITIES, THE UNDERSIDE OF THE BRIDGES SHALL BE CAREFULLY EXAMINED FOR THE PRESENCE OF BATS, ESPECIALLY FROM APRIL 1 TO SEPTEMBER 30. IF ANY BATS ARE FOUND ROOSTING ON THE UNDERSIDE OF THE BRIDGE, THE USFWS, ODOT OFFICE OF ENVIRONMENTAL SERVICES AND ODOT DISTRICT 8 ENVIRONMENTAL SECTION SHALL BE CONTACTED TO PROVIDE THIS INFORMATION.

ENDANGERED BAT HABITAT REMOVAL

THE PROJECT IS LOCATED WITHIN THE KNOWN HABITAT RANGES OF THE FEDERALLY LISTED AND PROTECTED INDIANA BAT AND NORTHERN LONG-EARED BAT. NO TREES SHALL BE REMOVED UNDER THIS PROJECT FROM APRIL 1 THROUGH SEPTEMBER 30. ALL NECESSARY TREE REMOVAL SHALL OCCUR FROM OCTOBER 1 THROUGH MARCH 31. THIS REQUIREMENT IS NECESSARY TO AVOID AND MINIMIZE IMPACTS TO THESE SPECIES AS REQUIRED BY THE ENDANGERED SPECIES ACT.
FOR THE PURPOSES OF THIS NOTE,
A TREE IS DEFINED AS A LIVE, DYING, OR DEAD WOODY PLANT, WITH A TRUNK THREE INCHES OR GREATER IN DIAMETER AT A HEIGHT OF 4.5 FEET ABOVE THE GROUND SURFACE, AND WITH A MINIMUM HEIGHT OF 13 FEET.

~~PARKS AND RECREATIONAL AREAS~~

~~ELMWOOD PLACE MEMORIAL PARK - THE EXISTING BALLFIELD FENCE WILL BE EXTENDED AND CONNECTED TO THE PROPOSED IR75 RETAINING WALL TO BE CONSTRUCTED IMMEDIATELY ADJACENT TO THE PARK. AS SUCH, COORDINATION WITH THE VILLAGE OF ELMWOOD PLACE WILL BE REQUIRED A MINIMUM OF FOURTEEN (14) DAYS PRIOR TO BEGINNING WORK IN THIS AREA.~~

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HAZARDOUS MATERIALS

FORMER LAIDLAW AVENUE LANDFILL - AS PER THE OCTOBER 1, 2013 RULE 3745-27-13 (RULE 513) AUTHORIZATION GRANTED BY THE OHIO ENVIRONMENTAL PROTECTION AGENCY (OEPA), ALL WORK TO BE CONDUCTED IN THE VICINITY OF THE FORMER LAIDLAW AVENUE LANDFILL MUST BE CONDUCTED IN COMPLIANCE WITH CONDITIONS OUTLINED IN THE RULE 513 AUTHORIZATION.

ASBESTOS CONTAINING MATERIALS

HIRE A LICENSED ASBESTOS HAZARD EVALUATION SPECIALIST TO DETERMINE IF REGULATED ASBESTOS IS PRESENT ON THE FOLLOWING STRUCTURES: ~~SFN 3113779, SFN 3110036, SFN 3110087, SFN 3110176, SFN 3110133,~~ SFN 3113817, SFN 3110141 AND THE HAM-75-00.00 NORFOLK SOUTHER RAILROAD OVER PROSSER AVE. THE SPECIALIST

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WILL DETERMINE IF REGULATED ASBESTOS IS PRESENT IN EXCESS OF THE ALLOWABLE REGULATORY LIMITS AND REQUIRES ABATEMENT. THE HAZARD EVALUATION SPECIALIST SHALL PREPARE AN ASBESTOS INSPECTION REPORT CONTAINING THE QUANTITIES AND LOCATIONS OF ASBESTOS CONTAINING MATERIALS. SUBMIT A COMPLETED NOTIFICATION OF DEMOLITION AND RENOVATION FORM (NDRF), APPLICABLE FEES, AND THE ASBESTOS INSPECTION REPORT TO THE OEPA AT LEAST 10 DAYS PRIOR TO ANY DEMOLITION ACTIVITY, RENOVATION ACTIVITY, OR BOTH.

ALL MATERIALS, LABOR, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THIS WORK WILL BE PAID FOR UNDER THE FOLLOWING ITEMS: ~~ITEM SPECIAL 690E71000 - ASBESTOS ABATEMENT, VARIOUS STRUCTURES - LUMP SUM~~

690E70100 - SPECIAL - ASBESTOS ABATEMENT NON-FRIABLE MATERIAL, SFN 3113817, 160 SF
690E70100 - SPECIAL - ASBESTOS ABATEMENT FRIABLE MATERIAL, SFN 3113817, 50 SF
690E70120 - SPECIAL - ASBESTOS ABATEMENT PIPE, SFN 3113817, 260 FT

690E70100 - SPECIAL - ASBESTOS ABATEMENT NON-FRIABLE MATERIAL, SFN 3110141, 160 SF
690E70100 - SPECIAL - ASBESTOS ABATEMENT FRIABLE MATERIAL, SFN 3110141, 50 SF
690E70120 - SPECIAL - ASBESTOS ABATEMENT PIPE, SFN 3110141, 260 FT

690E70100 - SPECIAL - ASBESTOS ABATEMENT NON-FRIABLE MATERIAL, PROSSER, 160 SF
690E70100 - SPECIAL - ASBESTOS ABATEMENT FRIABLE MATERIAL, PROSSER, 50 SF
690E70120 - SPECIAL - ASBESTOS ABATEMENT PIPE, PROSSER, 260 FT

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The DBT shall:

1. Monitor and document Work to demonstrate compliance with environmental commitments.
2. Provide documentation of environmental commitment compliance at request of the Department.
3. Follow Department and local regulations regarding dust control, adhering to dust control measures outlined in C&MS 616.
4. Adhere to local City ordinances for vehicle idling and all current U.S. Environmental Protection Agency (EPA) air quality regulations.

If the DBT becomes aware of any failure to perform an environmental commitment, the DBT shall notify the Department immediately.

8.2. Environmental Permits

The DBT shall:

1. Be aware of all applicable environmental permits related to the Work.

2. Coordinate with the Department and prepare applications and other relevant information necessary to obtain all environmental permits required to perform the Work.
3. Comply with all conditions imposed by environmental permits and by the Department in design and construction.
4. Notify the Department regarding any failure to comply with conditions of the environmental permits.
5. Submit any necessary permit modifications requests to the Department. Monitor Work progress and if necessary, request reauthorization of permits nearing expiration.

If the DBT modifies elements of the Conceptual Design used as the basis for obtaining a permit, the DBT accepts all responsibility for associated cost and schedule impacts resulting from the permit modification process and accepts the risk that the regulatory agency may not approve the proposed permit modification.

At no time shall the DBT coordinate environmental permitting issues directly with the regulatory agencies, unless directed to do so by the Department. The DBT shall not commence with Work covered by environmental permits until the applicable permit(s) approval(s) are obtained from the regulatory agencies.

Table 8-2 identifies work performed by the Department related to various environmental permits and the status of Department activities. Table 8-2 is not a comprehensive list of the environmental permits required to perform the Work. The DBT shall be responsible for providing or obtaining all necessary outstanding information needed for the Department to complete the environmental permitting process as described in Table 8-2.

Table 8-1: Status of Department Activities for Environmental Permits

Agency	Permit/Approval	Status
USACE	RGP A 08/14/2023	Permit obtained for impacts to Bloody Run. There do not appear to be any impacts to Waters of the US associated with the Rail Bridge project. If there are water impacts, additional permitting will be required.
OEPA	Chapter 513 04/05/2021	Laidlaw Landfill does not appear to be directly impacted by the Rail Bridge project. Should there be project activities within 300 feet of Laidlaw landfill the Chapter 513 Permit will apply from OEPA and special soil handling and disposal will be required.

ENVIRONMENTAL, CONTAMINATED SOILS

ON RULE 513 SITE #16 - LAIDLAW LANDFILL (PARCEL ID 118-0003 0004-00 WITH THE HAMILTON COUNTY AUDITOR; CURRENT STREET ADDRESS 925 LAIDLAW AVENUE, CINCINNATI, OHIO 45237) THE

SOIL EXCAVATION FOR THE ROADWAY AND STRUCTURES SHALL BE DISPOSED OF AND CONSIDERED CONTAMINATED.

THE CONTRACTOR SHALL PROPERLY TRANSPORT AND DISPOSE OF THE EXCAVATED MATERIAL IN A LICENSED (BY THE LOCAL HEALTH DEPARTMENT) AND PERMITTED (BY THE OHIO ENVIRONMENTAL PROTECTION AGENCY) SOLID WASTE FACILITY. IF REQUIRED BY THE DISPOSAL FACILITY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONDUCTING ANY ADDITIONAL SAMPLING AND ANALYSIS OF THE EXCAVATED MATERIAL.

IF EXCAVATIONS WITHIN THE AFOREMENTIONED LIMITS REQUIRE DEWATERING FOR CONSTRUCTION PURPOSES, THE CONTRACTOR SHALL DEWATER, CONTAINERIZE, AND SUBSEQUENTLY DISPOSE OF WATERS BY METHODS APPROVED BY THE ENGINEER. ALL WATER CONTAINERIZED BY THE CONTRACTOR BETWEEN THESE LIMITS SHALL BE SUBJECT TO TESTING BY AN INSPECTOR PROVIDED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER. THE INSPECTOR SELECTED BY THE CONTRACTOR, MUST BE EMPLOYED BY AN ODOT PREQUALIFIED CONSULTANT IN ENVIRONMENTAL SITE ASSESSMENT (ESA) REMEDIATION DESIGN. A LIST OF THESE ODOT PREQUALIFIED CONSULTANTS AVAILABLE FOR USE BUY THE CONTRACTOR CAN BE FOUND AT THE FOLLOWING WEB ADDRESS:

HTTP://WWW.DOT.STATE.OH.US/DIVISIONS/ENGINEERING/CONSULTANT/CONSULTANT/PREQUAL-ENVIRON.PDF

THE INSPECTOR WILL CLASSIFY THE WATER AS EITHER NON REGULATED OR REGULATED. THE METHOD FOR DISPOSING OF THE NON-REGULATED WATER SHALL BE APPROVED BY THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DISPOSAL OF THE REGULATED WATER IN ACCORDANCE WITH RECOMMENDATIONS MADE BY THE ODOT PREQUALIFIED INSPECTOR AND APPROVED BY THE ENGINEER. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND/OR AUTHORIZATIONS NEEDED TO PROPERLY HANDLE, STORE, TEST, TRANSPORT, AND DISPOSE OF WATER IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS.

THE CONTRACTOR SHALL FURNISH ALL LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO PROPERLY DEVELOP A SSHP, EXCAVATE, STORE, TEST (FOR DISPOSAL TRANSPORT) AND DISPOSE OF CONTAMINATED MATERIALS, INCLUDING ANY REQUIRED APPROVALS OR FEES WITHIN THE LIMITS DEFINED ABOVE. PAYMENT FOR THIS WORK SHALL BE MADE AT THE CONTRACT PRICES BID PER CUBIC YARD. APPLICABLE PERMITS FOR DISPOSAL OF CONTAMINATED SOIL AND WATER SHALL BE SUBMITTED TO THE DISTRICT REGULATED

WASTE PROJECT ENGINEER (RWPE) FOR SIGNATURE.

AN ESTIMATED EXCAVATION QUANTITY OF 73 CY HS BEEN ESTIMATED FOR STRUCTURE HAM-75-0823. SEE CROSS SECTIONS FOR ADDITIONAL CONTAMINATED SOIL EXCAVATION QUANTITIES. RULE 13 USES A CONVERSION FACTOR OF 1 CY = 1.55 TONS. LAND FILL WEIGHT TICKETS CAN BE CONVERTED TO CUBIC YARDS FOR PAYMENT.

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

ITEM 203 - EXCAVATION, AS PER PLAN - 73 CY

690E6502~~465020~~ ITEM SPECIAL - WORK INVOLVING REGULATED WATER - 10,000 GALLONS

Commented [8ADD17]:

690E65022 ITEM SPECIAL - WORK INVOLVING NON-REGULATED WATER 15,000 GALLONS

690E98400 ITEM SPECIAL - CONTAMINATED MATERIAL INSPECTION AND TESTING - LUMP SUM

The DBT shall acquire required noise permits and/or variances from the local jurisdiction.

The DBT shall be responsible for any fines levied by regulatory agencies because of their construction activities or non-compliance with any permit special or general conditions.

8.3. Temporary Sediment and Erosion Control

The DBT shall be responsible for designing and implementing all temporary sediment and erosion controls in accordance with SS 832

The DBT must develop a Storm Water Pollution Prevention Plan in accordance with SS832 and the NPDES Permit. The DBT shall not initiate any earth disturbing activity until the SWPPP is approved.

The DBT shall be compensated for furnishing and installing items related to temporary sediment and erosion control requirements. The Department will compensate the DBT through an encumbered amount included in the Proposal as a non-bid reference number. The Proposal specifies the unit prices for the temporary sediment and erosion control items. Payments for temporary sediment and erosion control items that exceed the encumbered amount will be made through an Extra Work Change Order using the specified unit prices. The specified unit prices are fixed for the Contract Documents and may not be negotiated or adjusted for inflation or claimed changed condition.

All temporary erosion control items shall be removed before the project is accepted. Removed materials shall become the property of the DBT and shall be disposed of in accordance with the appropriate C&MS specifications.

The preparation of the SWPPP, along with all requirements of SS832 for maintaining, inspecting, modifying, and updating the SWPPP are considered incidental to the Project. The following pay items are the Storm Water Pollution Prevention Inspections and Software required for the project.

ITEM 832E15000 STORM WATER POLLUTION PREVENTION PLAN, LUMP SUM
ITEM 832E15002 STORM WATER POLLUTION PREVENTION INSPECTIONS, LUMP SUM
ITEM 832E15010 STORM WATER POLLUTION PREVENTION INSPECTION SOFTWARE

Payment
Payment for this described work shall be paid for as follows:

ITEM 832E99100 SPECIAL – CONSTRUCTION EROSION CONTROL, 100,000 EACH

8.4. Regulated Materials

The DBT shall meet all regulatory conditions imposed with regulated materials, including hazardous materials, associated with the Project. The DBT shall characterize, collect, contain, and properly dispose of all waste generated or encountered during the Work. The DBT shall ensure that the site is properly contained during construction so that regulated materials do not migrate off-site. The DBT shall prepare and implement a spill prevention and response plan that will address the proper storage and management of all fuels, oils, and chemicals being stored and/or used on the project and the actions to be taken if a release occurs on the project including notifying reportable releases and spills to the National Response Center and Ohio EPA Spill Hotline. The DBT is to address the project's known areas of regulated materials in their health and safety plan. The DBT is to take reasonable actions to prevent the general public from accessing the regulated materials areas to prevent an exposure and/or a release of the regulated materials.

If any unknown regulated materials are discovered through work on the Project, the DBT shall notify the Department immediately and shall follow the spill prevention and response plan, as well as all appropriate regulations.

8.4.1. Asbestos

The DBT shall conduct asbestos inspections of all bridges and/or buildings subject to renovation or demolition as per Chapter 3745-20-04 of the Ohio Administrative Code (OAC) "Demolition and renovation procedures for asbestos emission control" utilizing a certified Ohio Asbestos Hazard Evaluation Specialist. Should suspect Asbestos Containing Materials (ACM) be encountered; perform bulk sampling and analysis. Prepare a letter report (1-2 pages) including a brief discussion of the inspection of and sampling methodology, mapping indicating the bridge and other structures locations and sampling locations, and analytical test results.

For all options, at least 10 working days before operations begin, the DBT shall complete an Ohio Environmental Protection Agency (OEPA) "Notification of Demolition and Renovation" form and submit this to the local air pollution control division, if delegated, or OEPA.

The DBT shall provide a copy of the completed form to the Department. Payment for all fees, labor and material needed to inspect the bridges and submit OEPA notification shall be included in the ~~appropriate Structure Remove Lump Sum~~Asbestos Inspection, EA bid item.

Commented [4ADD18]:

Should asbestos containing materials be encountered, all suspect materials shall be removed and properly disposed of by an Ohio EPA licensed Asbestos Hazard Abatement Contractor.

~~All associated costs of asbestos materials to be removed and properly disposed of, will be paid as professional and specialized work per C&MS 109.05.C.9.~~

Commented [4ADD19]:

ALL MATERIALS, LABOR, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THIS WORK WILL BE PAID FOR UNDER

ITEM 690E71050 – SPECIAL – ASBESTOS INSPECTION, VARIOUS STRUCTURES, 3 EACH

Commented [3ADD20]:

8.5. Noise Analysis and Noise Barriers

The project does not require a Noise Analysis.

9. RIGHT OF WAY (ROW)

The DBT shall perform all necessary construction work for the project within the Project Right of Way (ROW).

All necessary Right of Way has been acquired and is currently available. Right of Way plans are provided in Appendix C.

The DBT shall locate existing right of way lines based on requirements specified in Chapter 4733-37 of the Ohio Revised Administrative Code (Board Rules) governed by regulations outlined in Chapter 4733, Ohio Revised Code (Regulation Laws). The DBT shall research existing right of way information from all available sources including but not limited to ODOT records, County road records, Commissioners' Journals and records of other County offices to the extent necessary to provide an accurate basis for the establishment of the existing right of way.

The DBT will stake and flag the existing right of way in the field prior to the start of construction and will maintain stakes and flags throughout the duration of the Project.

The DBT shall identify all right of way encroachments on the construction plans with the Interim Design submission. ODOT's Project Manager will be responsible for clearing all encroachments on Federal-aid projects in accordance with standard encroachment removal.

9.1. Temporary Easements

The Department will facilitate use of certain parcels through temporary easements. The DBT shall use temporary easements solely for the purposes described within the easement in accordance with Appendix C. The DBT shall only be able to use the temporary easement for the duration established in accordance with Appendix C. The duration commences on the date when physical work commences within the temporary easement site. The DBT shall provide written notice to the Department indicating the planned date for beginning work in a

temporary easement. The DBT shall not enter temporary easement sites after the duration of the temporary easement has elapsed.

The DBT shall notify the property owner of parcel 201-T, Solvay Rare Earth Systems, 48 hours prior to entering upon or beginning work on the temporary easement. Notification shall be in writing and indicate the anticipated start date of the use of the temporary easement for access or construction. The contractor shall be required to provide a copy of this written notification to the project engineer for project recording purposes and tracking the duration of use for the parcel.

10. UTILITIES

10.1. Existing Utilities

The District Utility Coordinator, in coordination with the registered underground utility protection services, Oil and Gas Producers Underground Protection Service (OGPUPS), and other utility owners that are non-members of any utility protection services, has determined that the utilities identified in Table 10-1 are located in the area of the Project. There are no known utility conflicts with the proposed work in this scope.

List all known utilities on the Project site in Table 10-1.

Table 10-1: Utility Contacts and Status

Utility Owner	Utility Contact	Relocation Status
Duke Energy (GAS) 139 EAST 4TH ST., ROOM 460A CINCINNATI, OH 45202	OH/KYHOUSEBILL@DUKE-ENERGY.COM	No Relocations
BP PIPELINES (NORTH AMERICA) INC 30 SOUTH WACKER DRIVE SUITE 900 CHICAGO, IL 60606	KEITH BOYLE 312-358-0711 KEITH.BOYLE@BP.COM BPPIPELINESROW@BP.COM	Relocation and casing completed for I75 crossing south of Murray Road as of 12/27/23
DUKE ENERGY - ELECTRIC (DISTRIBUTION) 2010 DANA AVE CINCINNATI, OH 45207	AARON WRIGHT 513-514-8211 AARON.WRIGHT@DUKE-ENERGY.COM	Duke Distribution has relocated their aerial line over the railroad bridge at Prosser Road. This work has been completed
DUKE ELECTRIC - TRANSMISSION 139 EAST 4TH STREET, 552A CINCINNATI, OH 45202	TIM MEYER 513-287-1266	No relocations
CHARTER COMMUNICATIONS 10920 KENWOOD ROAD BLUE ASH, OHIO 45242	KENT RIEGER DL-SOUTHERN-OHIO-OUTSIDE-PLANT@CHARTER.COM 513-386-5499 KENT.REIGER@CHARTER.COM	Charter has relocated their aerial line over the railroad bridge at Prosser Road. This work has been completed.
ALTAFIBER - AERIAL & PLACING 221 E. 4TH STREET	ROB STROCHINSKY 513-565-6014 ROBERT.STROCHINSKY@ALTAFIBER.COM	AltaFiber has relocated their aerial line at the railroad bridge at Prosser Road. This

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BLDG. 121-900 CINCINNATI, OH 45201	ROADPROJECTS@ALTAFIBER.COM	work has been completed.
ALTAFIBER - UNDERGROUND STRUCTURES 221 E. 4TH STREET BLDG. 121-900 CINCINNATI, OH 45201	BRECK COWAN 513-565-7187 - OFFICE BRECK.COWAN@ALTAFIBER.COM	No relocations
MCI/VERIZON 120 RAVINE STREET AKRON, OH 44303	BRUCE TURKIEWICZ 254-721-8977	No relocations
SPRINT NEXTEL **11370 ENTERPRISE PARK DRIVE** **SHARONVILLE, OH 45251**	STEVE HUGHES 513-459-5796 STEVEN.HUGHES@SPRINT.COM	No relocations
LUMEN/BRIGHTSPEED 20 N MECHANIC STREET **LEBANON, OH 45036**	RICHARD PATTERSON 513-850-1521 RELOCATIONS@BRIGHTSPEED.COM RICHARD.T.PATTERSON@BRIGHTSPEED.COM	Brightspeed has relocated their aerial line at the railroad bridge at Prosser Road. This work has been completed.
CINCINNATI METROPOLITAN SEWER DISTRICT 1600 GEST STREET CINCINNATI, OH 45204	ROBERT FRANKLIN 513-577-7188 MSDUTILITYREVIEW@CINCINNATI-OH.GOV ROB.FRANKLIN@CINCINNATI-OH.GOV	No relocations
GREATER CINCINNATI WATER WORKS 3845 EASTERN AVENUE **CINCINNATI, OH 45226**	DAN LOUIS 513-352-3723 DANIEL.LOUIS@GCWW.CINCINNATI-OH.GOV	No relocations
SOUTHWESTERN OHIO WATER COMPANY 600 W. LOVELAND AVENUE, SUITE 3 LOVELAND, OH 45140	MIKE FLAVIN 513-489-4844	No relocations
CINCINNATI STORMWATER MANAGEMENT UTILITY 4747 SPRING GROVE AVENUE CINCINNATI, OHIO 45232	NICK CHRISTOPFEL513-591-7783 NICK.CHRISTOPFEL@CINCINNATI-OH.GOV SMUPLANREVIEW@CINCINNATI-OH.GOV	No relocations
GIVAUDAN FLAVORS CORPORATION 1199 EDISON DRIVE CINCINNATI, OH 45216	FRED WILSON PHONE: 513.948.4284 MOBILE: 847.226.3863 FAX: 513.482.8535	No relocations
CENTRAL OFFICE ODOT ITS 1606 WEST BROAD STREET COLUMBUS, OH 43223	614.387.4113 CEN.ITS.LAB@DOT.OHIO.GOV	No relocations

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10.2. Utility Coordination Responsibilities

Not Applicable

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~~*The DBT shall coordinate all utility adjustments for construction activities on the Project.*~~

~~*As soon as it is feasible, the DBT shall stake the existing ROW (and new ROW, if additional ROW has been acquired) in the field and shall perform clearing and grubbing within that ROW in accordance with the Contract Documents to facilitate utility relocation. The DBT*~~

shall maintain and update ROW stakes as needed throughout the Project Limits for the duration of the Project.

The DBT shall design the project and perform construction work in a manner that minimizes the scope and extent of utility conflicts and adjustments. The DBT shall not design or construct the Work in a way that precludes legal occupancy of the highway right-of-way by the adjusted utility. The DBT shall minimize potential delays and coordinate efficient adjustments of utilities.

The DBT shall copy the ODOT Project Manager and the District Utility Coordinator on all correspondence or phone calls between the DBT and each utility. This shall include the submittal of plans to each utility. A meeting at or near the Interim Design submission shall be held between the DBT, the District Utility Coordinator and the utility owners to determine if any significant utility relocations can be eliminated or mitigated.

Any betterment to the utility's facility and ineligible, or unnecessary, work shall not be included in the Project without Department approval. The Department will not compensate for betterments or other ineligible utility work. The DBT shall coordinate determination of eligibility through the District Utility Coordinator.

Payment

Payment for all utility coordination shall be bid as follows:

ITEM 107E99000 SPECIAL - UTILITY COORDINATION, LUMP SUM

Commented [1ADD21]:

10.3. Subsurface Utilities Engineering (SUE)

Subsurface Utility Engineering Required: ☐ Yes ☑ No

11. MAINTENANCE OF TRAFFIC (MOT)

11.1. General

The DBT shall be responsible for designing, providing, and maintaining safe and effective traffic control 24 hours a day for the duration of the Project. The DBT shall furnish, install, maintain, and remove all traffic control devices. The DBT shall implement Maintenance of Traffic (MOT) in a manner that minimizes both construction duration and impact to the traveling public.

The DBT shall provide written notice to the Department fourteen (14) days in advance of modifications in MOT or traffic patterns, including modifications to the following:

1. MOT configuration
2. Access
3. Detours
4. Schedule
5. Duration

The DBT shall furnish temporary MOT devices compliant with the National Cooperative Highway Research Program (NCHRP) 350 Hardware Report or the AASHTO Manual for Assessing Safety Hardware (MASH), as applicable.

All detour routes will be provided by the Department and shall be signed by the DBT. The detour routes are described in Section 11.2.2.

11.2. MOT Requirements

The DBT shall design and implement the MOT in accordance with the requirements referenced as follows.

All existing lanes of traffic in each direction shall be maintained at all times, except lane closures and complete closures are permitted in accordance with the MOT Requirements sections 11.2.1 through 11.2.3.

On I-75 and on SR-562:

- Minimum lane width: 11'**
- Minimum shoulder width: 2' *
- Item 615 Pavement for Maintaining Traffic: See 11.2.13

Commented [1ADD22]:

On Prosser Avenue:

- Minimum lane width: 10'
- Minimum shoulder width: 2' *
- Item 615 Pavement for Maintaining Traffic: Class B

*The minimum shoulder width (shoulder offset to barrier) offset may be reduced to 1 foot, when necessary, in spot locations. Spot locations include bridge decks, approach slabs, and between bridge piers only. Standard taper rates shall apply in the shoulder transition from 2 foot to 1 foot; and vice-versa.

** The minimum lane width may be reduced to 10 feet under the existing railroad structure. When used in conjunction with 1 foot barrier offsets (traffic side and work zone side), any excess width shall be applied to one or more of the travel lanes.

Commented [1ADD23]:

11.2.1. Interim Completion Requirements

This project has an interim completion date of ~~November 1, 2025~~July 1, 2026. On or before the interim completion date, the existing structure HAM-75-0834 shall be removed and I-75 shall be open to traffic in final configuration with work zone pavement markings and work zone RPMs installed.

Commented [4ADD24]:

The DBT shall be assessed a daily disincentive per the Disincentive Contract Table below for failure to complete all the required work and associated incidentals related to the work.

Daily disincentives are applicable to the work required to the interim completion date only. The DBT is still subject to liquidated damages as outlined in CMS 108.07 for the remainder of the contract.

The DBT's schedule for work at HAM-75-0834 includes work being performed by Norfolk Southern Corporation (~~-~~NSRR)~~the Railroad~~. The DBT shall include in the CPM schedule the number of calendar days specified in Section 1.3.4 for work to be performed by NSRR. ~~assume the Railroad work will take 100 calendar days on the CPM schedule.~~ If NSRR ~~the Railroad~~ completes within this time, the resulting time will become project float relative to the interim completion date. If ~~the Railroad~~ NSRR takes longer to complete, the interim completion date will be extended by the difference.

Commented [1ADD25]:

Commented [3ADD26]:

Disincentive Contract Table

Description or Location of Critical Work	Completion Date	Time Period	Disincentive $ per time period
Removal of existing bridge HAM-75-0834 and IR 75 placed in final configuration.	~~11/01/2025~~7/1/2026	1 Day	$6,250

Commented [3ADD27]:

11.2.2. Permitted Lane Closure Times

Short-term lane closures shall only be implemented when work is being continuously performed in the lane. The closure shall be removed as soon as possible after the work has stopped. Lane closures shall only be allowed during the times specified in the Unauthorized Lane Use Table, see Appendix I. These times shall not be revised without prior approval from the District 8 Work Zone Traffic Engineer.

11.2.3. Approved Maintenance of Traffic Policy Exceptions

The following Maintenance of Traffic Policy Exceptions (MOTPE) have been approved per the Traffic Management in Work Zones Policy and Standard Procedure. In addition to any notifications required by TEM notes 642-8 or 642-58, the DBT shall notify the Project Engineer and the District Work Zone Traffic Manager at least 3 business days in advance of implementation of the approved MOTPE.

A maintenance of traffic meeting shall be held a minimum of 30 workdays prior to implementation of each MOTPE. This meeting may be held in conjunction with a regularly scheduled progress meeting. The meeting shall include the District Work Zone Traffic Manager, the Contractor, Worksite Traffic Supervisor, and any subcontractors involved with temporary traffic control.

The DBT shall include each MOTPE closure occurrence as an activity in the CPM schedule.

Any MOTPE road restriction or road closure shall be in accordance with the holiday and event restrictions specified in the Unauthorized Lane Use Table, see Section 11.2.1, unless otherwise permitted by the Department.

MOTPE #1A

The DBT is permitted to close southbound I-75 overnight from 11 pm to 5 am to install and remove beams at HAM-75-0834. This closure may occur a maximum of 3 4 times. The MOTPE 1A and MOTPE 1B closures may occur simultaneously or separately. A disincentive shall be assessed in the amount specified in the Unauthorized Lane Use Table, section 11.2.1, for each time period that the road remains closed to traffic beyond the specified time limit.

Commented [6ADD28]:

The DBT shall provide detour signage for the closure. The detour for southbound I-75 is eastbound I-275 to southbound I-71 to westbound SR-562. A secondary detour that shall be signed is southbound Paddock Road to westbound SR-562. The detour signage shall be removed or covered when the road is reopened, except if the next closure occurs within 3 days.

The left lane of southbound I-75 approaching I-275 shall be closed to encourage diversion along the primary detour route. The complete closure point is the Paddock Road interchange and includes the Paddock Road entrance ramp to southbound I-75. MT-95.50 signage using a 3-mile cluster shall be provided as part of the TTC for southbound I-75 at Paddock Road. 2 PCMS shall be used for advance notification and 3 PCMS shall be used for detour information during the closure.

MOTPE #1B

The DBT is permitted to close northbound I-75 overnight from 11 pm to 5 am to install and remove beams at HAM-75-0834. This closure may occur a maximum of 3 4 times. The MOTPE 1A and MOTPE 1B closures may occur simultaneously or separately. A disincentive shall be assessed in the amount specified in the Unauthorized Lane Use Table, section 11.2.1, for each time period that the road remains closed to traffic beyond the specified time limit.

Commented [6ADD29]:

The DBT shall provide detour signage for the closure. The detour for northbound I-75 is eastbound SR-562 to northbound I-71 to ~~eastbound SR-562~~ westbound I-275. The detour signage shall be removed or covered when the road is reopened, except if the next closure occurs within 3 days. 2 PCMS shall be used for advance notification and 3 PCMS shall be used for detour information during the closure.

Commented [1ADD30]:

The ramp from westbound SR-562 to northbound I-75 shall be closed during this time; a posted detour is not required.

MOTPE #2A

The DBT is permitted to close eastbound SR-562 overnight from 11 pm to 5 am to install and remove beams at HAM-562-0026. To close eastbound SR-562 it is necessary to close both the northbound and southbound I-75 exit ramps to SR-562. This closure may occur a maximum of 10 times (5 times per phase). The MOTPE 2A and MOTPE 2B closures may occur simultaneously or separately. A disincentive shall be assessed in the amount specified in the

Unauthorized Lane Use Table, section 11.2.1, for each time period that the road remains closed to traffic beyond the specified time limit.

The DBT shall provide detour signage for the closure. The detour for both closed ramps use I-75 exit 9 to south on Paddock Road to SR 562. The detour signage shall be removed or covered when the road is reopened, except if the next closure occurs within 3 days. 2 PCMS shall be used for advance notification.

MOTPE #2B

The DBT is permitted to close westbound SR-562 overnight from 11 pm to 5 am to install and remove beams at HAM-562-0026. This closure may occur a maximum of 10 times (5 times per phase). The MOTPE 2A and MOTPE 2B closures may occur simultaneously or separately. A disincentive shall be assessed in the amount specified in the Unauthorized Lane Use Table, section 11.2.1, for each time period that the road remains closed to traffic beyond the specified time limit.

The DBT shall provide detour signage for the closure. The detour for westbound SR-562 is north on Paddock Road to the I-75 interchange. The detour signage shall be removed or covered when the road is reopened, except if the next closure occurs within 3 days. 2 PCMS shall be used for advance notification.

The ramp from Paddock Road to westbound SR-562 to northbound I-75 shall be closed during this time and follows the above-mentioned detour.

11.2.4. Local Roads

~~The DBT shall obtain a "No Cost" General Permit from the City of Cincinnati DOTE for work inside the City of Cincinnati right of ways before beginning work. City issued permits may require major event work restrictions; a list of known major events at the following website: http://cincinnati-oh.gov/police/special-events-regulations-auctions/event-permits/~~

Commented [1ADD31]:

Maintain 1 lane in each direction on Prosser Avenue. Maintain pedestrian traffic by posted detour when the existing sidewalk cannot be maintained; the pedestrian detour uses Towne Street to Paddock Road to Laidlaw Avenue, in both directions.

Prosser Road may be closed to traffic during the girder installation and again during removal. Each closure shall be limited to the time needed to set up/tear down the crane and lift the girders. A posted detour shall be provided for closures exceeding 24 hours; the detour route is Towne Street to Paddock Road to Laidlaw Avenue, in each direction.

11.2.5. Vertical Clearance

Any work (falsework, traffic protection, containment, etc.) over live traffic by the DBT that reduces the existing vertical clearance is prohibited unless 45 days advanced notice is provided with new proposed vertical clearances. The DBT shall provide field measurements before allowing traffic underneath. If any work is to occur below 14'-6", then signs on the structure and advance warning signs shall be installed a minimum of 2 weeks prior to performing such work. Signing shall be in accordance with the "Ohio Manual of Uniform Traffic Control Devices" (OMUTCD) and the Ohio "Traffic Engineering Manual" (TEM). No work over

traffic shall occur with a vertical clearance less than 14'-0". Lowering the vertical clearance during construction is considered the Contractor's Means and Methods of accomplishing the work, and therefore the State is not responsible for any damage from vehicular impacts that may result as per 107.10."

11.2.6. Maintenance of Major Guide Signs

The DBT shall maintain the same number of guide signs as currently exist for each freeway exit/entrance that is to remain open during each phase of construction to allow motorists to find their destinations safely.

In instances where a temporary overlay is used atop an existing or proposed freeway guide sign, the entire sign shall be overlaid.

In the event a contra flow traffic scheme is used, and the contra flow lane bypasses any freeway exit ramp, temporary guide signs shall follow standard construction drawing MT-95.73. All bypassed destinations (city and/or route) are to be included on the temporary KEEP RIGHT guide sign. All exit guide signs for bypassed destinations within the 3-mile advance warning area shall be modified; KEEP RIGHT is to replace the distance message.

11.2.7. Work Zone Impact Attenuators

All work zone impact attenuators located in gore areas, including exit ramp gores and contra flow gores, shall be ODOT Type 3 impact attenuators.

11.2.8. Slotted Drain for Maintaining Traffic

Any temporary slotted drain located within the traveled lane is to be constructed according to DM-1.3, except that the fillet weld at each side of the grate shall include every corrugation resulting in a weld along the entire length of slotted drain.

11.2.9. Work Zone Pavement Markings

Work zone pavement markings using spray thermoplastic may be used per ODOT Specification 614.11 and ODOT Specification 648 with the exception ODOT Specification 648.05 shall be modified to allow placement of the material at a temperature of not less than 35 degrees Fahrenheit.

The DBT shall provide work zone pavement markings as follows:

- Item 807 wet reflective liquid applied pavement markings for work zone pavement markings place during the construction season (April 1 to October 1).
- Item 648 spray thermoplastic for work zone pavement markings placed late in the construction season (after October 1) or when the pavement marking will be in place over winter.

The Design Build Team (DBT) shall select a pavement marking that has the appropriate service life based on the duration to be in place based on the DBT's design. The reference to CMS 614.11.A is not applicable on a design build contract due to the fact the DBT controls the type of pavement marking selected as well as the duration for which that pavement marking

is to be in place. Touch up striping comes at no additional cost to the Department and is considered incidental to the lump sum item referenced.~~The Department will compensate under Item 614E99000 Special -Maintaining Traffic, Lump Sum for work zone pavement markings for the ordered replacement of worn markings after 120 calendar days under traffic.~~

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11.2.10. Asphalt Concrete for Maintaining Traffic

The DBT shall maintain the roadway so that it is smooth, free from potholes, ruts, ridges, bumps and other pavement deficiencies as required by C&MS 614. When asphalt plants are open during the construction season, pavement repairs shall be performed according to Item 253 – Partial Depth Pavement repair. When asphalt plants are closed during the winter season, pavement repairs shall be performed using cold patch materials.

Existing deteriorated asphalt shall be removed to a minimum depth of 4 inches or as directed by the engineer and replaced with Item 301, Asphalt Concrete Base. The 301 shall be compacted as per 401.15 and in approximately equal layers – if required due to the depth of repair. The location and size of the repairs shall be determined by the engineer.

11.2.11. Construction Access Points

The DBT shall clearly show and define the construction access (both ingress and egress) points on all submittals. If construction access points are revised, a resubmittal is required.

- Access will need to be designed within the construction limits.
- On IR 75 ~~A~~access ~~will need to~~shall be designed to SCD MT-103.10
- On SR 562, the DBT shall design contractor access per MT-103.10 to the extent possible considering the available roadway width and the adjacent ramps. Short-term lane closures may be necessary for access depending on the size of vehicles entering/exiting the work zone. Provide 1 PCMS in advance of each access point that does not meet MT-103.10 requirements.
- Cost for railroad flagging for accessing the project from outside of right-of-way will be incidental to the lump sum Maintenance of Traffic item.

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11.2.12. Maintenance of Highway Lighting Systems

Highway lighting shall be maintained at all times through the use of the existing lighting, temporary lighting, or the completed lighting. Any lighting outage shall be repaired and restored within 24 hours of notification. A disincentive shall be assessed in the amount of $1000 for each day highway lighting has not been restored beyond the specified limit.

11.2.13. Item 615 Pavement for Maintaining Traffic

On SR 562[1,2]: The DBT shall provide temporary pavement in all locations where traffic is shifted onto the shoulder[1] including the entire length of the shift taper. The existing pavement shall be milled 1½" deep the full width of the shoulder including the existing edge line. The full width of the shoulder shall be paved with 1½" of Item 4421 ~~Type 2 or~~ Type 1 Intermediate Course.

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On IR 75 ~~Inside Shoulders~~[1,2]: The DBT shall provide temporary pavement in all locations where traffic is shifted onto the ~~inside~~ shoulders including the entire length of the shift taper. The existing pavement shall be milled 2" deep the full width of the shoulder including the existing edge line. The full width of the shoulder shall be paved with 2" of Item 442 Type 1 Intermediate Course. ~~The DBT shall provide temporary pavement in all locations where traffic is shifted onto the existing inside shoulder[1] including the entire length of the shift taper. The existing pavement shall be removed including the existing edge line. The full width of the shoulder shall be rebuilt using Item 615 Pavement for Maintaining Traffic, Class A, and paid for with ITEM 690E98400 PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, I-75 INSIDE SHOULDER, LUMP SUM.~~

~~On IR 75 Outside Shoulders[1,2,3]: The DBT shall provide temporary pavement in all locations where traffic is shifted onto the existing outside shoulder including the entire length of the shift taper. The existing pavement shall be removed including the existing edge line. The full width of the shoulder shall be rebuilt using Item 615 Pavement for Maintaining Traffic, Class A, and paid for with ITEM 690E98400 PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, I-75 OUTSIDE SHOULDER, LUMP SUM.~~

1. Gore areas between 2 ramps or between mainline and a ramp shall be considered shoulder areas.
2. Temporary pavement placed beyond the existing edge of paved shoulder shall consist of Item 615 Pavement for Maintaining Traffic, Class A and may remain in place. ~~.~~
2. ~~Temporary pavement may remain in place if it is located in the final proposed shoulder and constructed with 6" of 304 aggregate base.~~

11.2.14. MOT Scar Resurfacing

The DBT shall resurface all pavement used to maintain traffic extending from the first transition area through the last transition area. In preparation for resurfacing, the existing pavement shall be planed and resurfaced per the depths described in Section 13.B.~~removed to a depth necessary of 2 inches to reach the level of the intermediate course of the proposed or existing pavement.~~ The resurfacing of all transition areas shall also include the tangent area extending beyond the proposed work limits, shown in MT-99.30. The resurfacing shall include the entire width of the roadway, including shoulders regardless of where the pavement impacts are located.

11.3. Work Zone Speed Reduction

The DBT shall evaluate if a work zone speed reduction is warranted based on the final MOT scheme. The evaluation requirements are listed in Section 600 of the Traffic Engineering Manual.

If a work zone speed reduction is warranted, the DBT shall design and implement signing in accordance with the requirements of the Traffic Engineering Manual. The work zone speed limit revision number is WZ-45099 and the signing strategy shall use DSL sign assemblies.

11.4. Haul Routes

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In addition to the requirements of C&MS 105.13, the Progress Schedule shall account for 30 Days for the Department to secure approval for haul routes.

11.5. Traffic Engineering Manual Notes

The DBT shall design and implement the MOT in accordance with the following TEM notes:

642-6, 642-7, 642-8, 642-12, 642-13, 642-14, 642-15, 642-19, 642-21, 642-24, 642-27, 642-29, 642-30, 642-35, 642-41, 642-44, 642-45, 642-48, 642-49, 642-51, 642-52, 642-55, 642-57 (WZQDWS), and 642-58

642-41: The DBT shall provide a PCMS for roadside notification of each phase switch beginning 2 weeks before and ending 2 weeks after each traffic switch.

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642-44: The disincentive portion of TEM 642-44 is modified as follows:

The Department will deduct:

A. A disincentive in the amount of $1,000 for any day that the WTS fails to perform the duties set forth above [in TEM note 642-44].
B. A disincentive in the amount of $5,000 for any day that a failure to perform WTS duties reoccurs or a TTC issue is identified in the field and is not corrected in the given timeframe per the Engineer. Deduction B shall not apply to situations covered by Deduction C.
C. A disincentive in the amount of $5,000 for any day that a lane or ramp is blocked (fully or partially) without TTC, as determined by the Engineer. This deduction shall be in addition to any other disincentives established for unauthorized lane use.

642-57: The DBT shall include WZQDWS consisting of 4 class I sensors and 1 PCMS on I-75 in each direction and on SR 562 in the westbound direction (12~~8~~ class I sensors and 3~~2~~ PCMS total). The WZQDWS shall be located based on long-term MOT phasing ~~and shall be installed/operational for all pre-phase and post-phase work~~. The WZQDWS shall be installed and in operation at the beginning of work on each roadway. The WZQDWS may be removed after installing the final pavement markings and RPMs on each roadway.

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642-58: Include the following additional contacts

- Chris Kelly, City of Cincinnati; chris.kelly@cincinnati-oh.gov
- Sheila Dornbusch, Village of Elmwood Place; sdornbusch@elmwoodplace-oh.gov
- Ronald Spears, Village of Elmwood Place; rspears@elmwoodplace-oh.gov

Field Code Changed

Field Code Changed

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Payment
All labor, materials, equipment, and incidentals to complete all items described shall be paid as follows:

ITEM 614E99000 SPECIAL – MAINTAINING TRAFFIC, LUMP SUM
ITEM 614E12420 – DETOUR SIGNING, LUMP SUM

ITEM 614E13000 - ASPHALT CONCRETE FOR MAINTAINING TRAFFIC - 200CY

~~ITEM 690E98400 PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, I-75 INSIDE SHOULDER, LUMP SUM~~

~~ITEM 690E98400 PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, I-75 OUTSIDE SHOULDER, LUMP SUM~~

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12. SURVEY

A. ODOT Survey Responsibilities

The following information is provided in Appendix D.

1. Centerline control and benchmarks
2. Beginning and ending centerline points for the project
3. At least two benchmarks for the project (the datum used was that which the project was originally laid out by)
4. Critical points such as P.C., P.I., P.T., T.S., C.S.
5. Vertical clearances for the overhead structures, to serve as a check for the existing vertical clearances

B. DBT Survey Responsibilities

The DBT shall submit all survey data using ODOT's standard field codes and ODOT's standard mapping codes. Reduced point data, in comma delimited ASCII text format, will be provided for all surveyed points. This data will include: point number, North (y) coordinate, East (x) coordinate, elevation and point ID.

The DBT shall not disturb existing monumentation. If the DBT disturbs the monumentation, then the DBT shall replace the monument, in-kind, using a Registered Surveyor, with current registration, recognized by the Ohio State Board of Registration for Professional Engineers and Surveyors. Costs associated with monument replacement caused by DBT disturbance shall be borne by the DBT. The DBT shall provide copies of all monumentation changes to the District Real Estate Administrator.

The DBT shall include all control points, provided by the Department, in the ASCII file supplied by the DBT to the Department. They should retain the original point numbers and coordinate values as assigned by the Department.

The DBT shall provide the following items prior to final acceptance of the Record-Drawing plans:

1. Copies of all field notes (written or electronic) which shall include the following information:
   a. Date
   b. Crew members
   c. Weather conditions, including temperature, barometric pressure, etc.

d. Instrument(s) used (Serial Number)
e. Raw observation field data
f. Other notes as needed

2. Listing of all found monumentation (Horizontal and Vertical).
3. Listing of all monumentation set as part of the project (Horizontal and Vertical) including reference ties for recovery.
4. All monumentation shall be located utilizing NAD 83 (Horizontal Data), NAVD 88 (Vertical Data).
5. Short report indicating adjustment factors and methods, signed, and certified by a Registered Surveyor (State of Ohio). The Registered Surveyor (State of Ohio) shall include in the report the datum used and all associated adjustments used.

13. PAVEMENT

A. ~~A.~~ New Pavement

I-75 New Full Depth Pavement

The DBT shall design and construct full depth pavement to widen southbound I-75 at the Norfolk Southern bridge crossing. Full depth pavement widening shall begin at the edge of traveled way. The existing shoulder shall be removed.

All Item 615 Class A Temporary Pavement located within the permanent traveled way shall be replaced with full depth pavement composition as provided in the table below.

~~All Item 615 Class A Temporary Pavement, constructed without 6" of Item 304 Aggregate Base, located within the permanent shoulders, shall be replaced with full depth pavement composition as provided in the table below.~~

The DBT shall saw cut at the existing EOTW line, remove existing shoulder, and replace with new full depth pavement and shoulder. The following pavement composition shall be used:

2~~1.5~~"	Item 442 – Asphalt Concrete Surface Course, 12.5mm, Type A (446)
	Item 407 – Non-Tracking Tack Coat
1.75"	Item 442 – Asphalt Concrete Intermediate Course, 12.5mm, Type A (446)
	Item 407 – Non-Tracking Tack Coat
13"	Item ~~302~~ 301 – Asphalt Concrete Base (2-6.5" lifts)
6"	Item 304 – Aggregate Base
	Item 204 – Proof Rolling
	Item 204 – Excavation of Subgrade, 12" Deep

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	Item 204 - Granular Material, Type C

SR 562 New Full Depth Pavement

Pavement impacted by the bridge pier construction shall be replaced.~~, and by removal of existing shoulders for maintenance of traffic shall be replaced. Where the existing shoulder is impacted, the entire width of the shoulder shall be replaced.~~ The following pavement composition shall be used:

1.5"	Item 442 - Asphalt Concrete Surface Course, 12.5mm, Type A (446)
	Item 407 - Non-Tracking Tack Coat
1.75"	Item 442 - Asphalt Concrete Intermediate Course, 12.5mm, Type A (446)
	Item 407 - Non-Tracking Tack Coat
13"	Item 30~~2~~1 - Asphalt Concrete Base (2-6.5" lifts)
6"	Item 304 - Aggregate Base
	Item 204 - Proof Rolling
	Item 204 - Excavation of Subgrade, 12" Deep
	Item 204 - Granular Material, Type C

B. Existing Pavement

I-75 Resurfacing - MOT Scar Resurfacing

Resurface the existing full width pavement, including shoulders, within the project limits and within the limits impacted by MOT striping and permanent striping changes. This is in addition to any requirements within Section 11.2.15.

The following pavement composition shall be used for resurfacing:

~~1.5~~2"	Item 442 - Asphalt Concrete Surface Course, 12.5mm, Type A (446)
	Item 407 - Non-Tracking Tack Coat
~~2~~1.5"	Item 254 - Pavement Planing, Asphalt Concrete

I-75 Resurfacing - Crown Shift

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The crown of southbound I-75 shall be relocated to the proposed inside lane line per L&D Vol. 1 Figure 301-6 for Divided (raised median) 6-lane section.

For the transition of the pavement crown south of the railroad bridge (from the proposed railroad bridge pier to the approach slab to the Laidlaw bridge), the crown may encroach into the inside travel lane, not following the striped pavement marking. The intent is to tie the crown into the existing crown of the Laidlaw bridge approach slab to avoiding shifting the crown on the bridge.

The following pavement composition shall be used for Crown Shift resurfacing:

2”	Item 442 – Asphalt Concrete Surface Course, 12.5mm, Type A (446)
	Item 407 – Non-Tracking Tack Coat
0”- 4”max	Item 442 – Asphalt Concrete Intermediate Course, 12.5mm, Type A (449)
	Item 407 – Non-Tracking Tack Coat
0” or 3”	Item 301 – Asphalt Concrete Base (449) PG64-22
1.5”-4”max	Item 254 – Pavement Planing, Asphalt Concrete

SR-562 Resurfacing

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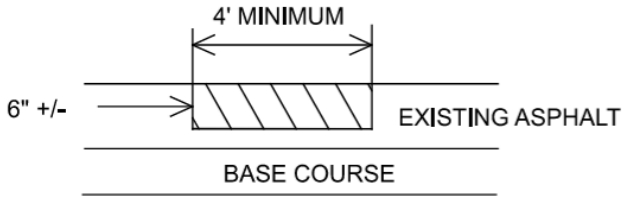
Resurface the existing full width pavement, including shoulders, within the project limits and within the limits impacted by MOT striping and permanent striping changes. This is in addition to any requirements within Section 11.2.15.

The following pavement composition shall be used for resurfacing:

1.5”	Item 442 – Asphalt Concrete Surface Course, 12.5mm, Type A (446)
	Item 407 – Non-Tracking Tack Coat
1.5”	Item 254 – Pavement Planing, Asphalt Concrete

Item 253 – Pavement Repair

An estimated quantity of 400 CY of Item 253-Pavement repair has been carried to the general summary to be used as directed by the engineer. This operation shall be performed before pavement planning of roadway.



Existing deteriorated asphalt shall be removed to a maximum depth of 6 inches or as directed by the engineer and replace with Item 301, Asphalt Concrete Base, shall be compacted as per 401.15 and in approximately equal layers. The locations and size of the repairs shall be determined by the engineer.

Item 690E98000 - Lane Closure for Pavement Repair, APP
The following item shall be used for lane closures to perform Section 13 Pavement Item 253 pavement repairs on the project, as well as winter pothole patching and Item 253 pavement repairs as described in Section 11.2.10. Any and all lane closure types are included such as single, double, ramp closures, etc. This item will also include all equipment, material, and labor to perform the lane closure included but not limited to LEOs, TMAs, etc.

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The cost for all material, labor, equipment, and incidentals to complete all work described in this section shall be paid for under:

ITEM 253E02000 PAVEMENT REPAIR, 400 CY
ITEM 400E99000 SPECIAL - FLEXIBLE PAVEMENT, LUMP SUM
ITEM 690E98000 - Lane Closures for Pavement Repair, APP, ~~10~~30 EA

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14. ROADWAY

Roadway work necessary for the construction of the railroad bridges at Prosser, I-75 and SR 562 is to be designed and constructed with the Project. No other roadway improvements will be required. This includes all necessary items not listed as required per applicable design and construction standards.

Bridge over SR 562

The pavement shall be restored to original lane width, shoulder width, grade, superelevation, and cross slope.

Construct median concrete barrier to replace impacted concrete barrier.

The designer shall evaluate if barrier protection is needed to protect the abutment walls.

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Bridge over Prosser

The existing pavement shall not be disturbed. Any impacted sidewalk and curb shall be replaced in kind. The driveway and drive apron located at Prosser Sta. 7+25 shall be removed within the limits shown on the Bridge Site plan in Appendix A. Sidewalk shall be constructed where the drive apron is removed.

Bridge over I-75

The proposed median pier is located approximately 10' west of the existing median barrier. Taper the Southbound I-75 pavement through widening and provide a ~~4'~~ 5' inside shoulder, 3 - 12' lanes, and an 8' outside shoulder. The narrow shoulder widths apply to the limits of tapering (including tangent section between) only. The DBT is to assume a design exception will be granted for the 5' and 8' shoulders.

To provide the width needed to taper the lanes to the existing configuration, keeping within the limits of the IR 75 mainline bridge over Laidlaw Avenue, the deceleration length for the SB IR 75 ramp to EB SR 562 (Ramp J) may be decreased by no more than 280', resulting in a shorter deceleration length and moving the diverging taper south.

Design and relocate the SB I-75 pavement crown to align with the inside lane per L&D Vol. 1 Figure 301-6 for Divided (raised median) 6-lane section, ~~line~~ and~~,~~ in line with the existing condition. The pavement shift and all striping shall be designed to the Design Speed. The pavement crown south of the railroad bridge may encroach into the inside travel lane tapering from the lane line at the proposed railroad bridge pier to the existing crown at the approach slab of the Laidlaw bridge, not following the proposed permanent striped lane line. The intent is to tie the crown into the existing crown of the Laidlaw bridge approach slab to avoid shifting the crown on the bridge. The pavement crown adjacent to the pier and north of the railroad bridge shall align with the lane line marking. See Section 13 Pavement for additional details.

Pavement cross slope for lanes shall be 1.56%, and cross slopes for shoulders shall be 4%.

Design and construct a median concrete barrier transitioning the barrier over to the face of barrier on the new pier providing tapers per Location and Design Manual, Volume 1, Figure 602-1.

The designer shall evaluate if barrier protection is needed to protect the forward abutment wall.

Safety grading shall be used for widening of SB I-75.

Cross sections shall be provided every 50' and at critical locations.

Payment
The cost for all material, labor, equipment, and incidentals to complete all work described in this section for items for the entire project including, but not limited to removals, guardrail, concrete barrier, impact attenuators, ~~,~~ embankment, excavation, clearing/grubbing, fencing, etc., shall be paid for under:

ITEM 690E20240 SPECIAL - ROADWAY, LUMP SUM

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14.1. Design Exceptions

The Department has obtained approval for the following design exceptions for the Full Plan set of HAM-75-7.85 referenced in Appendix B :

- shoulder width - approved on 3/2/2015
- Stopping Sight Distance - approved on 2/20/2013

For the widening required by the design build project, the DBT shall submit documentation for a design exception for shoulder width on I-75 near the railroad bridge. Inside shoulder shall match the existing width of 5' and outside shoulder shall match the existing width of 8' to provide continuity. ~~The DBT shall assume this design exception will be approved.~~This design exception for 5' inside shoulder and 8' outside shoulder on I-75 will be approved by ODOT.

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The DBT shall submit documentation for a design exception for vertical clearance for the SR 562 railroad bridge (SFN 3113818). The vertical clearance from the existing SR 562 pavement to the proposed bridge is 14'-11 ½" EB and 15'-0" WB as shown in Appendix A. This design exception for these vertical clearances will be approved by ODOT.

Design exceptions are not required on the following bridges:

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- HAM-75-0834 (SFN 3110141)
  - Proposed clearances to existing I-75 pavement: NB – 18'-11 7/16", SB – 18'-6 7/16"
  - Required minimum vertical clearance: 16'-6"
- Railroad Bridge over Prosser
  - Proposed clearance to existing Prosser pavement: 20'-9 ¾"

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The DBT shall notify ODOT regarding any design features that are believed to not meet the minimum design criteria and require a design exception.

14.2. Interchange Modification/Justifications Studies

Not Applicable

15. DRAINAGE

1. ODOT preliminary reviews have determined all the anticipated Project Earth Disturbed Area will drain to a combined sewer; coverage under the Ohio EPA Permit #OHC000006 is not required and an NOI would also not be needed. The DBT shall verify this assumption during design. If found that an NOI is required during detailed design, then the DBT will be required to obtain coverage for this project under the Ohio EPA NPDES General Permit for Storm Water Discharge from Small and Large Construction Activities (OEPA Permit #OHC000006). Any changes to the contract would be recognized as an Excusable-Compensable delay per CMS 108.06.

Note: Disturbed areas that drain into a combined sewer do not require coverage under Ohio EPA's construction general permit, and therefore are not included towards meeting the Total EDA threshold of one acre. If a project has some disturbed area that drains to a combined sewer system and some disturbed area that drains to a storm water system, only disturbed areas that drain to a storm water system are considered EDA when determining the need for coverage under the construction general permit or the need for a post-construction BMP.

2. Supplement Specification 832 applies to this project.
3. A Storm Water Pollution Prevention Plan, SWPPP Inspections, and SWPPP Software are required on this project.
4. The drainage design shall follow the current revision of the Location and Design Manual, Volume 2, Drainage Design. Provide all drainage calculations to the Department concurrent with the review of the associated buildable unit(s). The following calculations will be required, however additional calculations may be necessary to demonstrate an acceptable design.
    a. Inlet spacing calculations for all temporary barrier. Inlet spacing calculations for all temporary barrier that does not have drainage slots.
    b. Inlet spacing calculations for all permanent barrier.
    c. Storm sewer calculations for all proposed conduits and existing conduits to remain in service. When tying into the existing system, the calculations shall include confirming the capacity of the existing conduit downstream of all proposed conduits.
    d. Ditch capacity calculations and the permanent erosion control requirements for the proposed ditches.
5. If an existing conduit is to be extended:
    i. The proposed extension shall match the size, type, and material of the existing conduit.
    ii. The existing conduit shall be removed to a manufactured joint so the bell and spigot ends of the existing and proposed conduits connect per CMS 611.08.
    iii. A masonry collar per DM-1.1 is required at the joint between the existing and the proposed.
6. Do not disturb the inlet in the median near STA 437+57; the structure outlets directly to the Combined Sewer.
7. The existing inlets in the median of I-75 should remain in place and in service.
8. Design and construct any necessary additional inlets in the median of I-75.

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a. Tie the proposed inlets into the existing conduit that runs along the median. The tie in between the proposed inlet and the existing system must occur at a structure. The structure may be existing or proposed.

b. Place permanent inlets at the same locations as shown in the original design plans in Appendix B, if the flowline elevations will work out between existing, proposed, and future conditions.

~~9. Manholes cannot remain in service if the proposed roadway alignment results in the existing manhole being located in the asphalt.~~

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~~10.~~9. The following are required to verify the structural integrity of the existing conduits:

a. Provide profiles along the sewer alignments showing existing and proposed finished grades for existing storm sewers that will remain in place and in service. Provide these profiles with all submissions, including the Stage 1 submission of applicable buildable unit.

b. Preconstruction and Post Construction video inspections are required to be submitted to the Engineer for the sewers that are to remain in place and in service. Refer to CMS 611.12 standards for video inspection and format requirements.

~~11.~~10. Within the R/W, all exposed soils not covered by hardened surfaces or other landscaping shall be seeded and mulched, or sodded, at or before the completion of the project. Water, lime, commercial fertilizer, repair seeding and mulching, and inter-seeding, shall be provided to promote the growth and care of permanent seeded areas. Water, lime, and commercial fertilizer shall be provided to promote growth and care of permanent sodded areas. Soil analysis testing per ODOT CMS 659.02A is not required. Soil analysis testing per 659.02B is required.

~~12.~~11. Underdrain design

Follow the Pavement Design Manual, Section 205, except as noted:

a. Proposed underdrains shall be 6” in diameter and provided at the locations required per Pavement Design Manual, Section 205, wherever full depth pavement is proposed.

b. If there is an undercut, the underdrain should be placed 6” below the undercut, if this is not possible, then place the underdrain at the bottom of the undercut.

c. In locations with planing and resurfacing, existing underdrains may remain in place.,

d. Underdrains are to be designed and constructed on both sides of proposed Type B, B1, C, or C1 median concrete barrier.

e. Per L&D Volume 2, Appendix B, Sample Plan Note D123, provide unobstructed outlets for all existing underdrains encountered during construction.

f. Pipe Underdrains shall be provided. Prefabricated Edge Drains and Aggregate Drains shall not be used.

g. Underdrains which outlet to a slope shall be provided with an outlet per SCD DM-1.1.

h. A fabric filter wrap shall be used when existing soils consist of a sandy or sandy-silt composition.

~~13.~~12. No proposed manholes shall be placed in the asphalt.

~~14.~~13. Remove sediments, debris or other blockages from the existing drainage systems as directed by the Engineer. All material removed shall be disposed of per 105.16 and 105.17. Clean out all conduits, catch basins and manholes to the satisfaction of the Engineer.

~~15.~~14. Evaluate all offsite drainage ditches and swales entering the construction limits. Design and construct any necessary ditch lining per L&D Volume 2, Section 1102.3.

~~16.~~15. Slotted drains shall not be permitted. Trench drains shall be used per Section 1103.9.

Payment

The cost for all material, labor and equipment to complete the removal of sediment per section 15.14 shall be paid for under

ITEM 690E98600 – SPECIAL – PIPE CLEANOUT OF EXISTING STORM SEWER SYSTEM, 10 HOURS

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The cost for all material, labor and equipment to complete all other work described in Section 1~~54.5~~ for drainage for the entire project including, but not limited to, BMP, storm sewer conduits, manholes, inlets, catch basins, underdrains, paved gutters, headwalls, detention systems, pipes removed, manholes removed, catch basins removed, inlets removed, etc. shall be paid for under

ITEM 611E97800 SPECIAL – DRAINAGE, LUMP SUM

14.5.2 Erosion control:

All permanent erosion control for the entire project including, but not limited to, soil analyses, topsoil, commercial fertilizer, lime, water, seeding and mulching, repair seeding and mulching, inter-seeding, sodding, mowing, etc. required to complete the work specified in this scope shall be paid for under

ITEM 659E99000 SPECIAL – PERMANENT EROSION CONTROL, LUMP SUM

16. GEOTECHNICAL

In addition to the manuals and specifications outlined in Section 7, the following FHWA manuals shall be utilized for various aspects of the project design. Utilize the most current edition as of the date of project letting. ODOT specifications and manuals control when a design conflict is identified.

Geotechnical Engineering Circular No. 4 – Ground Anchors and Anchored Systems

Geotechnical Engineering Circular No. 7– Soil Nail Walls

Geotechnical Engineering Circular No. 11 – Design and Construction of Mechanically Stabilized Earth Wall and Reinforced Soil Slopes, Vol. I and Vol. II.

~~1.~~ Subsurface Investigation -

Not Applicable ~~The mainline roadway project and structures have been studied extensively from a geotechnical perspective. The DBT shall thoroughly review all available geotechnical information in final plan development for the project. Provide additional test borings, laboratory testing and geotechnical analyses as necessary to supplement the existing geotechnical data for the new proposed work to meet the requirements of the Specifications for Geotechnical Exploration and all Geotechnical Bulletins. Incorporate archive geotechnical borings available from the ODOT TIMS database into the final design as well as all Soil Profile and Structure Foundation Exploration drawings.~~

~~A complete geotechnical evaluation is required as part of the final design activities for any deviations from the Railroad Plans in Appendix A. Individual geotechnical reports or design memos are to be prepared for each deviation. Any additional geotechnical data is to be added to the existing structure foundation exploration sheets and included in the interim design submission for review. Each report shall be submitted in a text searchable PDF format with appropriate table of content links. The reports are to include all design calculations supporting the recommendations.~~

~~The District will review any new reports and geotechnical drawings with the Interim Design submission. A corrected reported and geotechnical drawings are to be submitted with the Final Design submission. Submit a disposition of the Interim Design comments with the Final Design submission. The final geotechnical report, Soil Profile and Structure Foundation Exploration sheets shall be included in the Final Record Drawings submitted to the District. Additionally, post the final geotechnical report and Structure Foundation Exploration sheets to the ODOT Geotechnical Data Management System (GeoMS) as outlined in Section 700 of the Specifications for Geotechnical Exploration.~~

~~Payment for above work is as follows:~~

~~ITEM 690E20080 SPECIAL-SUBSURFACE INVESTIGATIONS, LUMP SUM~~

~~1.~~

2. Inspection and Compaction Testing of Unbound Materials

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Perform inspection and compaction testing of all unbound materials according to Supplemental Specification 878 – Inspection and Compaction Testing of Unbound Materials. All inspection and compaction testing of unbound materials shall be paid for under

ITEM 878E25000 INSPECTION AND COMPACTION TESTING OF UNBOUND MATERIALS, LUMP SUM.

17. LANDSCAPING

Landscaping Required: ☐ Yes ☑ No

Note: Regardless of other Landscaping requirements, the DBT shall permanently grade and seed all impacted areas.

18. ADDITIONAL DESCRIPTION OF REQUIRED WORK AND SPECIAL PROVISIONS

ITEM SPECIAL - CONSULTANT FOR CONCRETE QUALITY CONTROL INCLUDING TESTING AND INSPECTION

ALL CONCRETE SHALL BE TESTED. All testing, inspection and quality control for concrete, not included under QC/QA pay items, shall be the responsibility of the contractor. The contractor shall provide a concrete testing consultant with previous experience and familiarity in ODOT procedures, concrete testing requirements and concrete testing documentation. At least 30 days prior to concrete placement, submit to the Engineer for approval, the proposed concrete testing consultant along with the resumes of the proposed testing personnel.

Testing concrete for structures and Portland cement concrete pavement shall be performed as outlined in CMS specifications 455 respectively.

Through the contractor, the consultant shall be responsible for ensuring that all concrete placed is in accordance with the specifications. Such work shall be in accordance with the applicable Construction and Material Specifications and the ODOT construction inspection manual of Procedures for Concrete. The concrete consultant shall provide the necessary trained technician(s), all equipment, and shall furnish the project engineer with two (2) copies of all test results within 24 hours after completion of concrete placement.

The technician shall be ACI Level 1 certified and will be required to demonstrate his/her competence and experience levels to the engineer prior to beginning work. The engineer will order the contractor to replace any technician that is not versed in the required testing procedure.

The technician shall verbally notify the ODOT project engineer of any failing test and shall submit follow-up written notification to the project engineer of remedial action(s) taken. Tests shall be taken as specified within the Construction and Material Specifications, Concrete

Manual or appropriate Supplemental Specification as listed in the proposal governing the project. It shall be the sole responsibility of the contractor to make ***immediate*** corrections or adjustments to the concrete mix via direct communication with the concrete supplier's plant personnel to maintain uninterrupted compliance with the specifications upon notification of concrete mix non-compliance by the consultant technician. The project engineer may require more frequent testing as conditions warrant.

Upon completion of daily concrete placement(s), the concrete consultant shall provide the project engineer with daily test reports, TE-45's, Inspectors Daily Report and supporting documentation for each item of concrete work performed separated by mix design. Subsequently, upon completion of an entire concrete specification item, the concrete consultant shall also provide the project engineer with two (2) copies of an additional inspection report by a Registered Professional Engineer, State of Ohio, which contains the testing-results summary for each item by contract reference number and the consultant's conclusions relative to specification compliance for all concrete-testing work.

The ODOT project engineer reserves the right to make unannounced quality-control tests to verify procedures used and results being obtained by the contractor.

The concrete technician shall work under the direction of a Registered Professional Engineer, State of Ohio, who will monitor the concrete test results. The final inspection reports for each completed item shall be signed by a Registered Professional Engineer, State of Ohio, certifying that all concrete tests provided by the contractor met applicable contract requirements. A final report issued by the consulting firm shall contain a Certified Statement of Compliance with ODOT Specifications and any other conclusions regarding the concrete materials incorporated into the project. Such Statement shall be signed by a Registered Professional Engineer, State of Ohio. And, the concrete consultant shall be required to attend monthly progress meetings as required by the project engineer.

Additionally, the contractor shall be required to keep a posted list of beam and cylinder identification numbers for the purpose of identifying the corresponding placement location and concrete specification item.

Payment shall be bid as lump sum for item special MISC.: CONSULTANT FOR CONCRETE QUALITY CONTROL INCLUDING TESTING AND INSPECTION. The item will be paid for as follows:

Upon approval of consultant 20%

Progressive Equivalent Payments 50%

Upon submission of final report . . . . . 30%.

The technician shall have the full effect and authority of an ODOT project inspector in determining acceptability of material and concrete placement practices.

Payment
Payment for this described work shall be paid for as follows:
690E98400 Special - Consultant for Concrete Quality Control including Testing and Inspection, Lump Sum

19. STRUCTURES

19.1. Existing Structures Identification

19.1.1. Existing Structure: SFN 3113817

Structure Identification: *HAM-562-0026*
Feature Intersection: *Norfolk Southern Railroad over S.R. 562*

☐ No Work ☐ Rehabilitate ☑ Replace ☐ Remove

Existing Structure Data:

Overall Length:	97'-7" +/-
Width o/o:	74'-0'
Design Loading:	Cooper E-72
Type:	Two simple-span steel deck girders (33 KSI) with steel deck on concrete abutments and pier
Spans:	44'-6" +/-, 44'6" +/- C/C bearings
Date Built:	1960

19.1.2. Existing Structure: SFN 3110141

Structure Identification: HAM-75-0834
Feature Intersection: Norfolk Southern Railroad over I.R. 75

☐ No Work ☐ Rehabilitate ☑ Replace ☐ Remove

Existing Structure Data:

Overall Length:	124'-7.5" +/-
Width o/o:	12'-2" +/-(span 1) & 12'-6" +/- (span 2) C/C girders with 3'-9" +/- walkway overhangs (each side)
Design Loading:	Cooper E-72
Type:	Two simple-span steel thru-girders (33 KSI) with concrete deck on concrete abutments and pier
Spans:	59'-3"±, 58'-0"± C/C Brgs (measured along ref chords)
Date Built:	1958

19.1.3. Existing Structure: (SFN -None) Prosser

Structure Identification: HAM-75-Prosser
Feature Intersection: Norfolk Southern Railroad over Prosser Avenue

☐ No Work ☐ Rehabilitate ☑ Replace ☐ Remove

Existing Structure Data:

Overall Length:	76'-6" +/-
Width o/o:	16'-6" +/- C/C girders
Design Loading:	Cooper E-65
Type:	Simple-span steel thru girder (unknown steel) with open deck on concrete and masonry abutments

Spans:	69'-6" +/- C/C Bearings
Date Built:	1924

19.2. General Requirements

All Shop Drawings shall comply with Item 501.

Foundation investigation is be provided by the Department in Appendix G.

The DBT shall determine the need for additional subsurface investigations necessary to complete the Project. Geotechnical explorations shall be performed and documented in accordance with the Specifications for Geotechnical Explorations.

1. The following shall be included in relative Buildable Units:
    a. Erection Schedule and Construction Sequence
    b. Shoring tower loads and locations
2. Modify Appendix A, sheet 9/286, note, "Item 511- Concrete for Railroad Bridges". The Department recognizes the difficulties in meeting the permeability mix requirements listed in CMS Table 499.03-01 without the use of slag or fly ash as stated in the Concrete for Railroad Bridges note. As such, the permeability requirements listed in this table are being waived.
3. Modify Appendix A, sheets 83/286 and 121/286, by revising the requirements of pay items 511 - Class QC4 Mass Concrete, Substructure with QC/QA, As Per Plan and Item Class QC4 Concrete, Misc.: Footing Mass Concrete with QC/QA by removing the associated CMS 511.05 Thermal Control Plan (TCP) costs and including them in the Lump Sum, Item 511 - Concrete Misc.: Mass Concrete Thermal Control Plan

    Item 511 - Concrete Misc.: Mass Concrete Thermal Control Plan, Lump Sum

    ~~b.~~ The cost for the contractor's Thermal Control Plan (TCP) that would normally be included in the two Item 511 Class QC4 Mass Concrete pay items will be combined and included in this lump sum pay item Class Misc.: Mass Concrete Thermal Control Plan on each structure that have mass concrete.

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19.3. Design and Construction Requirements of Structure

19.3.1. Proposed Structure: SFN 3113818

Structure Identification: *HAM-562-0026*
Feature Intersection: *Norfolk Southern Railroad over S.R. 562*

Alignment & Profile
Alignment: ☐ Follow Existing
☐ Relocated: ☑ Per ODOT ☐ Per DBT

Profile: ☐ Follow Existing
☐ Relocate: ☑ Per ODOT ☐ Per DBT
☐ Feathered (Adjustment): ☐ Per ODOT ☐ Per DBT

Span Configuration: ☐ Per Original
Span Lengths: ☑ Per ODOT ☐ Per DBT
☐ Variable

Spans: Per included Norfolk Southern approved plans in Appendix A.

Transverse Sections

Railing:	☑ Yes ☐ No	Per Details in the provided plans in Appendix A.
Fence:	☑ Yes ☐ No	Per Details in the provided plans in Appendix A.
Sidewalks:	☐ Yes ☑ No	Width:

Investigate the need for Prefabricated Structure: ☐ Yes ☑ No
Investigate the need for Retaining Walls: ☐ Yes ☑ No

Required Work:

- The bridge and track plans that are included in Appendix A have been fully vetted and reviewed by Norfolk Southern. The DBT shall construct this bridge per the plans in Appendix A. **No revisions to the bridge design or rail design will be permitted by the DBT.** Any errors or omissions found in the Appendix A plan set will be corrected by the Department through the standard change order process. The individual pay items listed with the structure in Appendix A, sheet 24, have been carried to the Proposal.

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19.3.2. Proposed Structure: SFN 30110142

Structure Identification: *HAM-75-0834*
Feature Intersection: *Norfolk Southern Railroad over I.R. 75*
Alignment & Profile
Alignment: ☐ Follow Existing
☐ Relocated: ☑ Per ODOT ☐ Per DBT

Profile: ☐ Follow Existing
☐ Relocate: ☑ Per ODOT ☐ Per DBT
☐ Feathered (Adjustment): ☐ Per ODOT ☐ Per DBT

Span Configuration: ☐ Per Original
Span Lengths: ☑ Per ODOT ☐ Per DBT
☐ Variable

Spans: Per included Norfolk Southern approved plans in Appendix A.

Transverse Sections

Railing:	☑ Yes	☐ No	Per Details in the provided plans in Appendix A.
Fence:	☑ Yes	☐ No	Per Details in the provided plans in Appendix A.
Sidewalks:	☐ Yes	☑ No	Width:

Investigate the need for Prefabricated Structure: ☐ Yes ☑ No
Investigate the need for Retaining Walls: ☐ Yes ☑ No
Required Work:

- The bridge and track plans that are included in Appendix A have been fully vetted and reviewed by Norfolk Southern. The DBT shall construct this bridge per the plans in Appendix A. **No revisions to the bridge design or rail design will be permitted by the DBT.** Any errors or omissions found in the Appendix A plan set will be corrected by the Department through the standard change order process. The individual pay items listed with the structure in Appendix A, sheet 83, have been carried to the Proposal.

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19.3.3. Proposed Structure: SFN 3160007

Structure Identification: *HAM-75-Prosser*
Feature Intersection: *Norfolk Southern Railroad over Prosser Avenue*
Alignment & Profile
Alignment: ☐ Follow Existing
☐ Relocated: ☑ Per ODOT ☐ Per DBT

Profile: ☐ Follow Existing
☐ Relocate: ☑ Per ODOT ☐ Per DBT
☐ Feathered (Adjustment): ☐ Per ODOT ☐ Per DBT

Span Configuration: ☐ Per Original
Span Lengths: ☑ Per ODOT ☐ Per DBT
☐ Variable

Spans: Per included Norfolk Southern approved plans in Appendix A.

Transverse Sections

Railing:	☑ Yes	☐ No	Per Details in the provided plans in Appendix A.
Fence:	☑ Yes	☐ No	Per Details in the provided plans in Appendix A.
Sidewalks:	☐ Yes	☑ No	Width:

Investigate the need for Prefabricated Structure: ☐ Yes ☑ No

Investigate the need for Retaining Walls: ☐ Yes ☑ No

Required Work:

- The bridge and track plans that are included in Appendix A have been fully vetted and reviewed by Norfolk Southern. The DBT shall construct this bridge per the plans in Appendix A. **No revisions to the bridge design or rail design will be permitted by the DBT.** Any errors or omissions found in the Appendix A plan set will be corrected by the Department through the standard change order process. The individual pay items listed with the structure in Appendix A, sheet 121, have been carried to the Proposal.

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19.4. Noise Barrier

Noise Barrier Construction Required: ☐ Yes ☑ No

20. TRAFFIC CONTROL

20.1. Pavement Markings and Delineators

The DBT shall perform Work related to pavement markings and delineators in accordance with Section 7.1 and the following sections.

A. Pavement Marking Requirements and Locations
All pavement markings to be 644 thermoplastic.

B. Raised Pavement Markers: ☑ Yes ☐ No.

Requirements and Locations: Paving limits

C. Delineators: ☐ Yes ☑ No.

D. Barrier Reflectors: ☑ Yes ☐ No.

All barrier reflectors shall confirm to Item 626 and shall be placed on bridge parapets, concrete barrier walls, retaining walls and guardrail, in accordance with current design standards. Guardrail blockout reflectors shall be installed on the side of the blockout away from traffic.

E. Object Markers: ☐ Yes ☑ No.

F. Rumble Strips: ☑ Yes ☐ No.

Requirements and Locations: Paving limits

Payment

The cost for all material, labor, equipment, and incidentals to complete all work described in this section shall be paid for under:

ITEM 640E99000 SPECIAL – PAVEMENT MARKING, LUMP SUM

20.2. Signing

The DBT shall perform Work related to signs in accordance with Section 7.1 and the following sections.

Existing signs in conflict with the work shall be removed and re-erected on new supports.

Low clearance warning signs (14'-3") on northbound I-75 near the SR 562 interchange shall be removed and disposed at the completion of the project, as they will no longer be applicable.

The existing Hazardous Materials Sign is currently on wood beams and shall be permanently placed on steel beams in the final condition.

20.2.1. Flat Sheet Signs

A. Flat Sheet Sign work required: ☑ Yes ☐ No.

20.2.2. Extrusheet Signs

1. Extrusheet Sign Work Required: ☐ Yes ☑ No.
2. Tourist-Oriented Directional Signs (TODS) and logo signs: ☐ Yes ☑ No.

20.2.3. Ground Mounted Post Supports

A. Replace: ☑ Yes ☐ No.
   1. Redesign and replace all existing ground mounted post supports with new No. 3 supports. No reuse of existing ground mounted supports shall be allowed.
   2. Removed ground mounted supports shall become the property of the Contractor.

20.2.4. Ground Mounted Beam Supports

A. Ground Mounted Beam required: ☑ Yes ☐ No.
   1. Design and replace wood beam supports with appropriately sized steel beam supports for the Hazardous Materials sign. Breakaway connections shall be used.
   2. Removed ground mounted beam supports shall become the property of the Contractor. Remove all existing foundations.

B. Overhead Supports: ☐ Yes ☑ No.

Payment

The cost for all material, labor, equipment, and incidentals to complete all work described in this section shall be paid for under:

ITEM 630E99000 SPECIAL – SIGNS AND SUPPORTS, LUMP SUM

20.3. Lighting

The DBT shall perform Work related to lighting in accordance with Section 7.1 and the following sections.

Any light poles (and luminaires) in conflict with the Work shall be removed, stored, and protected from damage. The remaining impacted circuit shall be maintained and remain in service throughout construction. The light poles (and luminaires) shall be re-erected on new foundations at the same station and relative offset as the existing. All work and materials to disconnect/reconnect circuit and return to working order shall be incidental to the lighting lump sum.

Payment

The cost for all material, labor, equipment, and incidentals to complete all work described in this section shall be paid for under:

ITEM 625E99000 SPECIAL – LIGHTING, LUMP SUM

20.4. Traffic Signals

Not Applicable

20.5. Intelligent Transportation Systems (ITS)

A. ITS Work Required: ☑ Yes ☐ No

1. Reference the following for ITS requirements:

ODOT Traffic Engineering Manual (TEM).

ODOT Supplemental Specifications 804, 809, 904, and 909.

ODOT ITS Series of Standard Construction Drawings

ODOT Plan Insert Sheets for Traffic. Specifically, but not limited to, PIS 206012 and 206015 for aerial fiber optic installs.

This project will fall under the Statewide ITS Architecture and standard ODOT requirements for Maintaining ITS During Construction.

1. Coordinate with the ODOT Office of Traffic Operations, ITS Section, in Central Office for all ITS work. Other ITS Requirements:

a.1. SR 562

i. Construct median junction boxes at Sta. 15+38, 2' LT and Sta. 18+00, 0' LT. Between median junction boxes and inside the concrete barrier, construct (1)-2" HDPE conduit and (1)-4" HDPE Multicell conduit, both of which will remain empty for future use.

ii. These junction boxes shall be able to have conduit connected into them with the future project which will perform barrier wall work on the other side of the junction box. The exact location may change a little to make this possible for the future project to provide a complete conduit pathway through the barrier wall and through the junction boxes.

b.a. I-75

i. Construct median junction boxes at Sta. 439+00, 0' RT, and at a location north of the bridge, prior to transitioning the median barrier back to existing. Between median junction boxes and inside the concrete barrier, construct (1)-2" HDPEconduit and (1)-4" HDPE Multicell conduit, both of which will remain empty for future use. These junction boxes shall be able to have conduit connected into them with the future project which will perform barrier wall work on the other side of the junction box. The exact location may change a little to make this possible for the future project to provide a complete conduit pathway through the barrier wall and through the junction boxes.

ii.i. The existing fiber optic line west of I-75 shall be maintained throughout the duration of the project and shall be relocated as necessary to accommodate minor widening of SB I-75 as needed for the bridge pier construction and lane shifts. Pull boxes shall be relocated outside of the proposed pavement. The Fiber Optic cable may be maintained by installing new fiber optic cable underground or aerial on poles. If installed aerially on poles, this shall be temporary during the project only and shall be the responsibility of the contractor for any maintenance needed. The permanent fiber at the end of the project shall be underground or in concrete barrier wall. Poles must be placed outside of the clear zone or protected by barrier. The new fiber optic cable must be spliced into the existing fiber optic cable to account for all existing strands and the splice enclosure must be located in a pull box underground. The existing fiber optic cable shall be cut in the middle and pulled to the nearest existing pull boxes to the north and south which are unaffected by roadway work, and the underground splice enclosures shall be located on each end in these pull boxes, providing as much slack as possible to the existing fiber optic cable. Coordinate and schedule all fiber optic cutovers from existing to new fiber with ODOT Office of Traffic Operations, ITS Section, in Central Office and

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adhere to outage downtime requirements per Supplemental Specification 809.

Payment

The cost for all material, labor, equipment, and incidentals to complete all work described in this section shall be paid for under:

ITEM 809E99000 SPECIAL – ITS, LUMP SUM

21. PROJECT SCHEDULE REQUIREMENTS

The DBT shall develop and maintain a project schedule in accordance with the selected note:

☐ CM&S 108.03 A. Progress Schedule

☐ Proposal Note 105 - Critical Path Method Progress Schedule for Single Season Projects

☐ Proposal Note 107 - Critical Path Method Progress Schedule for Multi-Season Projects

☑ Proposal Note 132 - Critical Path Method Progress Schedule for Design/Build Multi-Season Projects including updates released on or before the prebid meeting date, shall be met or exceeded. **All bid documents shall be escrowed per PN 110.**

21.1. Railroad Specific Project Schedule Requirement Additions

In addition to PN 132, the DBT shall also incorporate the following schedule requirements:

General:

The Contractor must provide, as discreet task dependent activities, provisions for notices and lead times for any/all activities which may require a Railroad Flagger. Specifications provided below must be incorporated into the provisions of PN132 and/or other applicable provisions of the Contract.

The Schedule shall clearly include a detailed construction sequences clearly indicating the time periods while working on and around railroad right-of-way. Schedule activities demonstrating work on or around railroad right-of-way shall be easily identified so a schedule filter may be applied to clearly demonstrate such activities to the railroad when requested.

Activities:

Level 3 Data – During the development of the Level 3 data, the Contractor must determine the discrete operations of work as Level 3 activities. Each discrete Level 3 activity requiring railroad coordination, or within the vicinity of rail lines, must have an "Execute Railroad Notice & Lead" finish-to-start predecessor of no less than 42 calendar days (6 weeks) to account for coordination and notices. Additionally, the contractor must estimate any additional durations needed for Railroad Notices and Lead and incorporate said durations into the duration of the Level 3 operation activity.

Level 4 Data – During the development of the schedule through Buildable Unit Submissions, the Contractor must convert the previously determined Level 3 activities into Level 4 activities as per PN132. After identifying all activities requiring a railroad flagger, the Level 3 "Execute Railroad Notice & Lead" activity must be replaced in the Level 4 data, as per Table-1, or provisions outlined in the railroad agreement (whichever is more stringent), with the specified Notice and Lead times. The contractor must provide two discreet activities for "Railroad Notice" and "Railroad Lead Time", tied together with a finish-to-start relationship, in the Level 4 data as the finish-to-start predecessors to the first activity in any/all sequences of activities in the Level 4 data requiring Railroad Coordination. This activity sequence must be repeated in the schedule to resume RR flagging services in any/all foreseeable instances where RR flagging may be suspended due to inactivity between operations that require flagging service. All "Railroad Notice" and "Railroad Lead Time" activity durations must comply with the more stringent of Table-1 or the Railroad Agreement excepting the Level 3 activity which shall consist of 42 calendar days.

Activity Codes – During the baseline Development, the Contractor must provide an additional Project Level Activity Code described as "Railroad Notices and Lead". All Level 3 and Level 4 Notice and Lead Time activities must be assigned to the "Railroad Notices and Lead" activity code in addition to any/all other codes required via PN132 and/or other provisions of the contract.

Calendars – All Railroad Notice and Lead Time activities, both Level 3 and Level 4, must be on a separate calendar. Said calendar must be a 7 day / week calendar with no exceptions/non-working days.

22. PLAN SUBMITTALS AND REVIEW REQUIREMENTS

22.1. Plan Components

All plans format submitted by the DBT shall be in conformance with the following ODOT manuals:

1. Real Estate Policies and Procedures Manual Section 3100.
   Note: The DBT shall also identify all topographic features within the existing and proposed Right-Of-Way limits, including underground utilities.

2. Bridge Design Manual.
   Note: Bridge subsummaries are required.

3. Location and Design Manual, Volume 3:
   The following sections of the Location and Design Manual, Volume 3 are NOT required:

1302.13	Plan Signatures
1307.2	General summary sheet
1307.4	Quantity Calculations

1310.3 Earthwork and Seeding Quantities

Units of measure are **NOT** required.

Simplified plans (section 1301.2) are **NOT** allowed.

22.2. Quality Control

The DBT is responsible for the professional quality, technical accuracy and adherence to the Governing Regulations listed in Section 7.1 (Governing Regulations) of this document, for all plan submittals required under this contract.

The DBT shall immediately notify the Department of any apparent discrepancy between the various design and construction manuals and the Contract Documents.

The Department shall have the discretion to dictate the level of Design review. The Department's acceptance of the design or failure to identify improper design does not, in any way, relieve the DBT of the responsibility for the quality, accuracy, or feasibility of the Design.

In the event the Department determines that any required submission is incomplete, contains inaccuracies which preclude a meaningful review, or does not adhere to the Governing Regulations listed in Section 7.1 (Governing Regulations) of this document, the Department will advise the DBT of the shortcomings and direct the DBT to revise and resubmit the plan. No time extension will be granted because of such action. The Department will schedule a review meeting or issue review comments as appropriate.

22.3. Buildable Units

Buildable Units (BUs) are portions of the projects which can be designed, reviewed, and built with only limited controls and assumptions coming from the design of other portions of the project. Often a Buildable Unit will be defined by a geographic area within the plan, but it may also be defined by types of work or construction stages which may require or permit similar, nearby work to be divided into separate Buildable Units. All Buildable Units shall summarize the materials required to construct that portion of the project. The summary shall include the Construction and Material Specifications Item Number, and a description of the materials to be used.

For the Interim (Section 22.9), Final (Section 22.10), Released for Construction Plans (Section 22.11) Design submittals, the DBT may break the project work into two or more separate BU which can be progressed through design and construction with minimal or known effect on each other and/or which can be dealt with sequentially such that sufficient data is available for design and review of each BU. In order that the design and construction of one BU may proceed without significant approved information from an associated BU, the DBT may develop and propose assumptions which will allow for the first BU to proceed through design and/or construction. These assumptions shall be submitted for review and comment but their accuracy and effort upon the final design are the sole responsibility of the DBT.

Field Code Changed

Field Code Changed

Field Code Changed

Should error in these assumptions result in additional work, remedial work, or other changes to assure an acceptable design or should they result in the need to remove work and substitute additional work, the Contractor shall be responsible for all such costs including, removal of unacceptable materials from the site, modification, additional work, repairs, etc. as necessary to produce an acceptable result.

If the DBT elects to develop Buildable Units, the DBT shall prepare, for review by the Department, a table of Buildable Units for the project with each BU described in detail. If the table is approved, the DBT shall modify the Progress Schedule to show a separate group of activities for BU and these activities shall encompass all the design and construction work in each BU. The Progress Schedule for design review shall be developed such that information from other dependent BUs is available at the time of submission of the BU at hand. Work activities shall be further separated in the Progress Schedule to show a meaningful completion status (i.e. separate activities comprising the placement of a bridge deck on steel beams shall describe; shoring, form building, steel placement, placement of conduit & joints, pouring concrete, forming parapets, pouring or slip forming parapets, provision of membranes, provision of wearing surfaces, curing, repair, form removal, cleaning, etc.).

The Final Review Submission and Construction Plans shall specifically be identified by the Buildable Unit code. If the design of a BU requires input information from an adjacent or related BU, the source for that information in previously approved plans shall be cited or the DBT shall provide an estimated value of the data. The input data shall also be carefully identified. In the same way any assumption, calculations or results from the stage and BU which are used as input to another BU shall be similarly identified, and where appropriate, compared back to that BU to verify previous assumptions. Should assumptions not match values calculated later, the DBT shall re-analyze all affected components and determine appropriate changes. Should those elements have already been constructed, the DBT shall recommend repairs, adjustments, modifications, or replacement of the existing work as necessary to comply with the Scope of Work. All costs for re-design, re-submissions, modifications, removals, disposal of materials and new work needed to remedy the project and bring it to compliance shall be borne by the Contractor and no time extensions shall be approved.

The Norfolk Southern Railroad Bridges and track plan set in Appendix A, which includes plans for HAM-562-0026, HAM-75-0834, and HAM-PROSR-00.00, is considered a released for construction Buildable Unit.

Commented [3ADD106]:

22.4. Comment Resolution Process

This section establishes transmittal processes and interaction between the Department and the DBT during submittal reviews in addition to the requirements found within the Scope of Services and other Contract Documents. The process can be modified upon mutual agreement between the DBT and the Department with the intention of meeting the requirements of the Contract or specific submission needs. This process may be revised by mutual agreement of both parties.

Specific identified procedures may be amended, revised, eliminated, or added to address project specific needs or mutual party understanding.

This process shall utilize electronic transmittals for all design submissions unless otherwise specified in the Scope of Services. Plan and design submissions shall be in PDF format, Microsoft Excel, Microsoft Word, or other document types as mutually agreed and appropriate to and for the submission.

Submissions should generally conform to the Scope of Service and other specification included in the Contract Documents, as appropriate, with variations as mutually agreed.

The Department shall establish a file transfer website (typically, an ODOT Project SharePoint, ProjectWise site, or other appropriate file transfer and storage site), with controlled and controllable access, for uploading design submissions and subsequent transmittal of design review comments.

Project specific process details shall be discussed at the Pre-Design Meeting. These details include the responsible contacts (Department and DBT), file server location/IP address, known required persons needing access, and login requirements.

A. Procedure

The Department will grant access to an identified DBT representative who will have authority and responsibility to create Buildable Unit Submission (BUS) folders and other folders within the transfer website. Each folder shall be logically named. Within each BUS folder, additional folders representing each stage of review (i.e. Interim/Final/Construction) will be created. If mutually agreeable, the DBT may perform this role if management by the DBT facilitates submissions.

With each Buildable Unit with each Design Submission, the DBT shall include a transmittal sheet describing the BUS, the BUS stage (Interim/Final/Construction), the contractual review response date (from the Department as well as any other third-party reviewer, if applicable), critical assumptions made for the BUS impacting subsequent BUS submissions, and any information which could facilitate review.

The DBT shall develop and utilize a Comment Resolution Spreadsheet (CRS) for each Buildable Unit with each Design Submission (Interim, Final, Construction) for use in logging and tracking review comments. At the department's discretion the CRS may be initiated by the Department utilizing Bluebeam Revu. The DBT shall provide a blank CRS to the Department and other third-party reviewers at Interim Design Submission. The Department and applicable reviewing agencies shall review for Contract requirements. The Department will utilize the CRS document to centralize all Department employee Buildable Unit Design Submission comments.

Department review comments will primarily focus on compliancy with the Contract Documents. The Department will refrain from making excessive preferential and formatting comments. Reviewer preferential comments shall be marked "Preference" within the CRS. While formatting comments do not need responded to, the Department reserves it's right to reject a submission which, in its judgement, is not reasonably following required ODOT CADD standards.

An updated copy of the CRS shall be provided to all reviewers at the Final Submission. With the Final Submission on the transmittal page, the DBT shall identify major design revisions

and design approaches made between Interim and Final Submission being outside the course of typical design progression and were not made to address Interim Review comments.

The updated copy shall include all comments received at Interim submittal along with the DBT's written disposition of all Non-Compliant comments made during formal Interim design submittals. The Department and other appropriate third-party reviewing agencies will review the DBT's formal disposition to Interim Submittal review comments as well as revised plans to respond to previous comments. The Department will include any additional comments based on the Final Design Submittal review within the CRS.

The DBT shall clearly identify if an ODOT Interim review comment responded with an "Accept" by the DBT is not being corrected within a Final submission. If an "Accept" comment is not being addressed, the DBT shall clearly describe the intended resolution for the RFC submission. The Department may require additional information before the Construction Plan submission, or may request a Comment Resolution meeting (or phone call if appropriate) to understand the DBT's design direction. The DBT shall memorialize the time of the Comment Resolution Meeting within the CRS submitted with the Construction Plans.

In the event the DBT believes that any review comment, or direction issued by the Department or other third-party review, require a change to a Contract, the DBT shall first contact the Department for clarification and shall, within 10 days of receipt of the comments or direction, provide written notice to the District Project Manager and Project Engineer concerning the reasons why the DBT believes the scope has been changed.

The DBT is not required to comment nor respond to ODOT identified Preference comments.

For comments considered substantial to the Department or the DBT, the DBT shall schedule a Comment Resolution Meeting with the Department to discuss.

1. The Department shall notify the DBT, either within the CRS or other notice, if the Department requires a Comment Resolution Meeting.
2. The DBT shall notify the Department within seven days of any "Non-Compliant" comments they intend to "Dismiss" or "Resolve". The DBT shall schedule a Comment Resolution Meeting prior to the next stage submittal.
3. For less substantial comments and as agreed by the Department and the DBT, a comment resolution conference call may be sufficient.

The DBT shall obtain Department concurrence with the "Non-Compliant" comment dismissal and this concurrence shall be documented on the CRS.

The DBT shall resolve all outstanding issues and comments from the Final Submittal (or other outstanding comments) and prepare a full set of Design Documents stamped "Checked and Ready for Released for Construction" (RFC). The Department's expectation is that no revisions shall be made except for those required to address Final review comments. If other revisions are required unrelated to review comments, the DBT shall notify the Department and coordinate revisions for concurrence.

The Department shall review to ensure all comments from final reviews have been resolved or "Closed" to the satisfaction of the Department. There is no formal review period for Construction submission.

The DBT has the responsibility for ensuring the RFC meets all contract requirements. If upon Department review it is determined that it is questionable as to whether comments received from the Department or other agencies have been resolved or addressed appropriately, the DBT shall stop construction of the portion of the Buildable Unit in question, consult with the commenter to resolve such comments. The DBT shall document resolution of the comment within the CRS.

The DBT continues to be liable for design accuracy regardless of ODOT review.

B. General Third-Party Requirements

A "Third-Party", regarding the Design-Build Comment Resolution process, is any overseeing agency with oversight and design approval authority of relevant portions of the design as identified in the Contract.

Other third-party reviewers may not utilize the CRS.

It is the DBT's responsibility to reasonably add all third-party markups and comments received; the DBT shall consolidate third-party comments into the CRS corresponding to each Buildable Unit and save on the ODOT Project SharePoint site. Any plan markups shall also be scanned by the DBT and included on SharePoint within the appropriate BUS folder.

The DBT shall address all third-party review comments. All third-party review comments shall be, initially, considered as a "Non-compliant" comment type, as identified below.

With ODOT's concurrence, the DBT may subsequently identify comments as potentially a "Preference" or "Recommendation". The DBT shall obtain Department concurrence with the "Non-Compliant" comment dismissal and this concurrence shall be documented on the CRS.

C. Comment Resolution Spreadsheet

Minimum requirements of the CRS along with information on content is included below. The DBT may modify format or include additional information with Department concurrence.

Reviewer	
Comment ID No	Consecutive listing
Document	Submittals may include multiple components including plans, reports, calculations, etc. This column will list which item the comment is on.
Page	Page reference/location comment refers to

Comment type	Either “Non-compliant”, “Preference”, or “Recommendation”. Non-compliant – elements that do not meet requirements of the Contract. Preference – elements which depict the owner’s preferred design method or result but are not required by the Contract. Recommendation – a general noted item intended to make the designer aware of potential troublesome design methods.
Contract Section	If Comment Type is Non-compliant to the Contract, the reviewer shall include the Contract Document of the requirement that is non-compliant (for example, Scope Section 8.2, L&D Volume 1, BDM, etc.)
Reviewer Note	A Reviewer Note is optional but is recommended to ensure the designer understands the intent to the comment made. Reviewer shall note if a Comment Resolution Meeting or discussion is desired.
Reviewer Agency	Representing Agency
Reviewer Name	Name of reviewer
DBT Response	
Resolution Code (Approve, Dismiss, or Resolve)	Accept – DBT agrees with the comment and addressed the comments Dismiss – DBT disagrees with the comment based on comment no longer applying because the design has changed, reviewer error, or other reasons. Resolve – DBT needs additional clarification and/or coordination to address the comment accordingly. Comment may also reflect a change to the Contract Documents which will require additional discussion and direction by the Department due to the financial/schedule impacts.
DBT Comment/Disposition	The DBT shall provide a more detailed response to the comment as necessary. Response shall note if a Comment Resolution Meeting or discussion is desired.
Reviewer Response	

Status	Open – the submittal did not address the original comment made. Closed – the submittal or disposition addresses the original comment. The DBT shall schedule a comment resolution meeting with the Department to discuss any comments from previous submittals that remain "Open" according to the reviewer. The DBT and the Department will also discuss whether review comments are in conformance with the Contract Document requirements or preferential comments. For less substantial comments and as agreed by the Department and the DBT, a comment resolution conference call may be sufficient.
Reviewer Name	Name of reviewer
Date Closed	Date that the reviewer responded to the comment.
Comments	Provide a more detailed response clarifying why comment remains "Open" or other information

22.5. Document Management

The DBT shall create and maintain a BUS Log sheet to facilitate submission tracking. The BUS Log shall identify the name of the Buildable Unit, brief description of the BUS, Interim Design submission date, Interim Submission review comments transmittal date, Final Submission date, Final Submission comments transmittal date, Released for Construction date, and a BUS Comments field. The BUS Comments field shall note any necessary resubmissions, dates of Comment Resolution meetings with noted submission stages, Over-the-Shoulder meeting dates resulting in design adjustments, or any other needed summarized data to help understand the BUS process. The BUS Log Sheet may be modified as necessary to facilitate review. The BUS Log shall be maintained in the master project folder, or in a location mutual agreeable and accessible to the DBT and the Department.

The DBT shall create a folder for each BU on the Department's Project SharePoint Site. Each BU folder shall have an "Interim", "Final", and "RFC" folder. All Design Documents (plans, calculations, reports, etc.) submitted at each phase (Final, Interim, RFC) shall be uploaded by the DBT to the Project SharePoint Site. An updated CRS at each submittal shall be included in each folder with the latest including all comments "closed". Meeting minutes from comment resolution meetings or over-the-shoulder reviews shall be prepared by the DBT and saved to SharePoint.

22.6. Optional Pre-submission Meeting

The DBT may request a Pre-submission Meeting to be held prior to, or concurrent with, the submission of a Buildable Unit. The intention of the Pre-submission meeting is an opportunity for the DBT to explain design intent to facilitate owner review. Formal assembly and submittal of drawings or other documents will not be required, but the DBT is encouraged to provide informal submittals to facilitate reviews.

22.7. Optional Over-the-Shoulder Reviews

The DBT or the Department may request "Over-The-Shoulder" (OTS) review of designs at any time in the design process. The OTS is an informal review of a partial design during development. This may include in-progress drawings, calculations, sketches, design concepts, proposed specifications, or any other document used or created during the design. They are to facilitate communication and the design process. These can be in the form of a phone call, meeting, correspondence, or any other means of information sharing between the DBT and the Department.

An Over-the-Shoulder review may be necessary to discuss direction on potential design changes. An OTS may be requested during any period in the design development. Appropriate third-party agencies, as well as the DBT and Department, may also participate in these meetings. The DBT or the Department may include the decision or direction given in an OTS within the applicable CRS submission.

The OTS reviews shall not replace the formal Interim and Final Review. Likewise, the Department may also request an OTS review during any stage of design to facilitate review or design development.

22.8. Major Design Decision

Separate submittals for concurrence with major design decisions are required. The submittals may be required during any phase of Design. Major design decisions involve significant utility relocation, unforeseen acquisition of ROW by the Department, traffic operation or geometric decisions that involve two or more viable solutions, designs not typical nor standards not ordinarily exercised by members of the engineering profession practicing under similar conditions at the same time and locality, and any other decision that impacts the public, operation of the facility or designs which require future long term excessive maintenance. The level of development of the submittal is dependent upon the level of detail necessary to accurately depict the major design decision.

When the DBT becomes aware of additional decisions during the design, they must advise the District Project Manager in writing.

22.9. Interim Design Review Submission

For each Buildable Unit, the DBT shall submit the Interim Design submission for review by the Department and other third-party agencies as appropriate.

Interim Design Submission is defined as followed:

A. Maintenance of traffic, traffic signals, lighting, utilities (water, power, sanitary, etc.), and landscaping shall be developed to Stage 2 level of detail as defined the ODOT Location & Design, Volume 3.

B. Full signing plans are not required at Interim, however, all overhead signage and major ground mounted signage shall be shown on plan sheets (may be shown on pavement marking plans if signing plans are not submitted).
C. All other plan components and supplemental submittal requirements as defined as Stage 1 per the ODOT Location & Design, Volume 3.

Unless indicated below, the Department will have 10 Work Days from receipt to review complete submissions. The following are excluded as Work Days: State Holidays, Federal Holidays, Saturdays, Sundays, the Friday after Thanksgiving, Christmas Eve, and the days between Christmas and New Year's Day. This review time must be shown on the required Progress Schedule.

Submittal	Adjusted Review Time
Each affected utility	20

Following this review, the DBT shall correct any errors, incorporate modifications, perform required investigations and make related changes to the plans and supporting documents prior to submitting the plans for Final Design review.

Plan Review Distribution Table**:** The DBT shall supply an electronic version (in PDF format) simultaneously to the parties indicated below, except that **each affected utility company shall receive one full size (22"x34") plans.**

	Number of half size Sets
ODOT District Engineering	1
ODOT District Construction	1
Each affected utility	1

Note: Interim Design Reviews are not required to be sent to Norfolk Southern Railroad.

If acceptable to all reviewers, electronic submissions are acceptable. Coordinate the anticipated media type prior to advertisement.

22.10. FINAL DESIGN Review Submission

For each Buildable Unit the DBT shall submit the Final Design submission for review by the Department and other third-party agencies as appropriate.

The Final Design submission shall include submittal requirements as defined as Stage 3 per the ODOT Location & Design, Volume 3, however, subsummary and general summary sheets are not required. Quantity summaries shall be provided in electronic format (Excel and PDF) prior to construction for the Department's use in establishing testing requirements.

The Department shall have 10 Work Days from receipt to review complete submissions. The following are excluded as Work Days: State Holidays, Federal Holidays, Saturdays, Sundays, the Friday after Thanksgiving, Christmas Eve, and the days between Christmas and New Year's Day. This review time must be shown on the required Progress Schedule.

Submittal	Adjusted Review Time
Each affected utility	20

Following the review, the Department will return to the DBT marked plans noted 'ACCEPTED', 'ACCEPTED AS NOTED' or 'NOT ACCEPTED' as described in section 105.02 of the Construction and Material Specifications. The DBT shall correct errors, incorporate changes, perform investigations and make related changes to the plans and supporting documents prior to submitting construction plans.

Plan Review Distribution Table: The DBT shall supply an electronic version (in PDF format) along with half size (11" x 17") paper prints simultaneously to the parties indicated below except that each affected utility company shall receive one full size (22"x34") plans:

	Number of half size Sets
ODOT District Engineering	1
ODOT District Construction	1
Each affected utility	1

Note: Final Design Reviews are not required to be sent to Norfolk Southern Railroad.

22.11. Released for Construction Plans

After the review comments for the Final Design review submission have been complied with, and following approval of the design documentation, the DBT shall prepare plan sets for use during construction. All review comments shall be resolved in writing by the DBT to the satisfaction of the Department and appropriate third-party agencies before the DBT submits the construction plans. No revisions shall be made except for those revisions needed to address Final Design review comments.

Each plan sheet shall have its last revised date noted on the sheet and clearly marked 'Released for Construction'. The 'Released for Construction' plan set shall be signed, dated and sealed by a Professional Engineer. Physical construction shall not begin until the plans marked 'Released for Construction' are delivered to each party on the Plan Distribution Table below.

No time extensions will be approved by the District Construction Engineer if the plan distribution is not completed and project delays occur as a result.

Plans Distribution Table: The DBT shall supply an electronic version (in PDF format) along with full size (22" x 34") and/or half size (11" x 17") paper prints of the each plan submission simultaneously to the parties indicated below:

	# of Full Sets	# of Half Sets
ODOT District Production		1
ODOT District Construction		1
Each Affected Utility	1	

Note: Released for Construction plans are not required to be sent to Norfolk Southern Railroad.

22.12. Railroad Submittals

A. Design Submittals to Railroads

Design Submittals are not required to be sent to Norfolk Southern Railroad.

B. Construction Submittals to Railroads

Construction Submittals are required as indicated in the Appendix E, Norfolk Southern Special Provisions.

22.13. Plan Distribution Addresses

Ohio Department of Transportation, District 8
505 South S.R. 741
Lebanon, OH 45439

Utility Companies
(As shown in section 12)

22.14. Plan Revisions

Plan Revisions are DBT requested, ODOT directed, or condition necessary changes to the Released for Construction plans which materially modifies the design intent, materially revises the Plan to an extent which would require revised design calculations, materially revises plan dimensions or plan depictions, or otherwise would modify the Released for Construction plans in a manner which a competent engineer would identify as a necessary design re-evaluation.

Plan Revisions are required to follow Interim, Final, and Released for Construction review processes. Plan Revision review timeframes and review breadth shall be dependent and commensurable on the identifiable impacts of the Plan Revision as agreed by ODOT.

22.15. As-Built Construction Record-Drawing Plans

Red-line and as-built plan sets as described in the subsequent paragraphs are to be provided for all plans that the DBT generates. The DBT is not responsible for preparing red-line or as-built plan sets for the plan set provided in Appendix A.

Commented [3ADD107]:

At the completion of the construction work for each respective Buildable Unit, the DBT shall provide a "Red-Line" set of drawings that clearly identify all changes made to the Released for Construction Plans. They may be noted by hand markup of the revisions, utilizing the Clouding command in MicroStation (or other CAD software) or the Clouding command in PDF editing software. The red-lined drawings shall have a Contractor signed verification on the title sheet indicating all field changes are being incorporated into the red-lined drawings.

Prior to Final Acceptance of the Work, the DBT shall furnish the Department formal As-Built Construction Record-Drawing plans. The DBT shall provide a general summary within the final As-Built Construction Record-Drawing plans. The formal As-Built Construction Record-Drawing shall include all red-lined changes. Red-line changes shall be denoted utilizing the Clouding command in MicroStation (or other CAD software) or the Clouding command in PDF editing software. The As-Built Construction Record-Drawing shall have a signed verification on the title sheet from the Designer and the Contractor indicating that all red-lined and field changes have been incorporated into the As-Built Construction Record-Drawing.

> Note: The Contractor's verification statement indicates all known field modifications made after the RFC plans were sealed by the Designer have been included in the formal Record-Drawing. The Contractor's verification statement shall be signed by the Contractor's Project Manager (or acceptable representative).
>
> Note: The Designer's verification indicates the Designer's acknowledgement of the red-line and field changes, the presented field changes have been included within the As-Built Construction Record-Drawing and is the Designer's concurrence that these changes meet the design intent of the Contract. The Designer's verification statement shall be signed by the Lead Designer's representative.

The DBT may choose to omit the "Red-Line" submission and submit only formal As-Built Construction Record-Drawing.

As-Built Construction Record-Drawing plans shall be submitted using the following method:

PDF Images created according to the documentation on the Office of Contracts website

http://www.dot.state.oh.us/DIVISIONS/CONTRACTADMIN/CONTRACTS/Pages/TIFF.aspx

Field Code Changed

In addition to the information shown on the construction plans, the Record-Drawing plans shall show the following:

1. All deviations from the original approved construction plans which result in a change of location, material, type or size of work.
2. Any utilities, pipes, wellheads, abandoned pavements, foundations, or other major obstructions discovered and remaining in place which are not shown, or do not conform to locations or depths shown in the plans. Underground features shall be shown and labeled on the Record-Drawing plan in terms of station, offset and elevation.
3. The final option and specification number selected for those items which allow several material options under the specification (e.g., conduit).
4. Additional plan sheets may be needed if necessary to show work not included in the construction plans.

Notation shall also be made of locations and the extent of use of materials, other than soil, for embankment construction (rock, broken concrete without reinforcing steel, etc.).

The Plan index shall show the plan sheets which have changes appearing on them.

One PDF copy of the As-Built Construction Record-Drawing plans shall be delivered to the Project Engineer for approval upon completion of the physical work but prior to the request for final payment. After the Department has approved the As-Built Construction Record-Drawings, the associated electronic files shall be delivered to the District Capital Programs Administrator and to Norfolk Southern. Acceptance of these plans by ODOT and delivery of the associated electronic files is required prior to the work being accepted and the final estimate approved.

The plans shall be prepared in conformance with the Location and Design Manual, Volume 3, Section 1200 - Plan Preparation.