

ODOT

PROGRESSIVE DESIGN BUILD

TECHNICAL REQUIREMENTS (SCOPE OF SERVICES)

PID: 110873 State Project Number: 243002

County: Jefferson Route: 7 Section: 25.67

1 PROJECT IDENTIFICATION & GENERAL INFORMATION ..... 3

1.1 Design Designation..... 3

1.2 Existing Plans and Project Information (RIDS) ..... 3

1.3 Airway/Highway Clearance..... 4

2 PRE-PROPOSAL MEETING ..... 4

Schedules of pre-proposal meetings will be per the instructions to Offerors. .... 4

3 CONTRACTOR PRE-QUALIFICATION ..... 5

4 DESIGNER ..... 6

5 SCOPE OF WORK ..... 7

6 FIELD OFFICE ..... 8

7 GENERAL PROVISIONS FOR THE WORK ..... 8

7.1 Governing Regulations ..... 8

7.2 CADD files supplied by the DBT ..... 9

7.3 reserved ..... 8

7.4 Partnering Agreement..... 10

7.5 Communication..... 10

7.5.1 Task Force Design Meetings ..... 11

7.6 Permits ..... 11

7.7 Entry on Private Property ..... 12

8 ENVIRONMENTAL ..... 12

8.1 NEPA & Environmental Commitments ..... 12

8.2 Environmental Permits..... 12

8.3 Temporary Sediment and Erosion Control ..... 13

8.4 Regulated Materials ..... 14

8.5 Noise Analysis and Noise Barriers ..... 14

9 RIGHT OF WAY (ROW) ..... 14

9.1 Temporary Easements..... 15

10 UTILITIES (OPTION A) ..... 15

10.1 Existing Utilities..... 15

10.2 Utility Coordination Responsibilities..... 16

10.3 Subsurface Utilities Engineering (SUE) ..... 16

11 MAINTENANCE OF TRAFFIC (MOT)..... 17

11.1 General ..... 17

11.2 MOT Requirements..... 17

11.3 Work Zone Speed Reduction ..... 18

11.4 Haul Routes .....18

11.5 Traffic Engineering Manual Notes .....18

12 SURVEY .....18

13 PAVEMENT .....19

14 ROADWAY .....20

15 DRAINAGE .....20

16 LANDSCAPING .....20

17 ADDITIONAL DESCRIPTION OF REQUIRED WORK AND SPECIAL PROVISIONS.....20

18 STRUCTURES.....21

18.1 Noise Barrier .....21

19 TRAFFIC CONTROL.....21

19.1 Pavement Markings and Delineators .....21

19.2 Signing .....21

19.2.1 Flat Sheet Signs .....21

19.2.2 Extrusheet Signs.....22

19.2.3 Ground Mounted Post Supports.....22

19.2.4 Ground Mounted Beam Supports .....22

19.3 Lighting .....22

19.4 Traffic Signals .....22

19.5 Intelligent Transportation Systems (ITS) .....23

20 PROJECT SCHEDULE REQUIREMENTS .....23

21 PLAN SUBMITTALS AND REVIEW REQUIREMENTS.....23

21.1 Plan Components.....23

21.2 Quality Control .....23

21.3 Buildable Units .....23

21.4 Comment Resolution Process .....24

21.5 Document Management .....24

21.6 Optional Pre-submission Meeting.....24

21.7 Optional Over-the-Shoulder Reviews .....24

21.8 Major Design Decision .....24

21.9 Interim Design Review Submission .....25

21.10 FINAL DESIGN Review Submission .....25

21.11 Released for Construction Plans .....25

21.12 Railroad Submittals.....26

21.13 Plan Distribution Addresses .....25

21.14 Plan Revisions .....25

21.15 As-Built Construction Record-Drawing Plans .....25

# 1 PROJECT IDENTIFICATION & GENERAL INFORMATION

Table 1-1: Project Identification

<b>PID</b>	110873
<b>State Project Number</b>	(24)3002
<b>County-Route-Section</b>	JEF-7-25.67
<b>Local Route Name (if applicable)</b>	
<b>Highway Functional Classification &amp; Federal Aid System</b>	

## 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

<b>Location:</b>	JEF-7-25.67
<b>Current ADT:</b>	9,200
<b>Design Year ADT:</b>	10,500
<b>Design Hourly Volume:</b>	1,200
<b>Directional Distribution:</b>	51.8%
<b>Trucks:</b>	7%
<b>Design Speed:</b>	60 mph
<b>Legal Speed:</b>	55 mph
<b>Design Functional Classification:</b>	Principal Arterial Freeway (Urban)
<b>NHS Project:</b>	Yes

## 1.2 Existing Plans and Project Information (RIDs)

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:

JEF-7-23.37 (1967) - Original Construction

JEF-7-25.75 (1977) - Highway Lighting

JEF-7-22.97 (1985) - Resurfacing

JEF-7-36.967 (1999) - Resurfacing and Median Barrier (metric)

JEF-7-22.97 (2011) - Resurfacing

JEF-7-24.09/26.02 (2013) - Highway Lighting Replacement

JEF-7-19.21 (2023) - Resurfacing

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.

<ftp.dot.state.oh.us> - /pub/Construction/JEF7MineGroutPDB/

### **1.3 Airway/Highway Clearance**

FAA coordination analysis required due to proximity of Eddie Dew Memorial Airport (1.2 miles west of project).

## **2 MEETINGS**

### **2.1 Pre-Proposal Meeting**

Schedules of pre-proposal meetings will be per the Instructions to Offerors.

This meeting is to discuss and clarify all issues that the project may have. Offeror attendance at the pre-proposal meeting is mandatory.

Location: District 11 or Central Office  
Date: February 21, 2024  
Time: TBD

## 2.2 Phase 1 Meetings

The meetings described below are currently anticipated to occur during Phase 1. The meetings and their frequency, duration, and attendees are subject to modification based on discussions with the selected Contractor. This is not an exhaustive list of anticipated meetings, nor does this list intend to relieve the Contractor of any other PDBC-required meetings.

### 2.2.1 Pre-Sub-Phase 1A Meetings

- A. Immediately after PDBC Execution, the Contractor Project Manager, Contractor Geotechnical Design Engineer, and Contractor Geotechnical Construction Manager shall attend weekly meetings with the Department to finalize the Sub-Phase 1A Project Scope.

### 2.2.2 Risk Management Meetings

- A. The Contractor shall participate in and attend risk management meetings with the Department monthly together with a kick-off risk management meeting within 30 Days of the Sub-Phase 1B NTP.
- B. The agenda for the kick-off risk management meeting will be set by the Department and will include a presentation of the then current Risk Register. The agenda for subsequent risk management meetings will be set by the Department in consultation with the Contractor.
- C. Each of the Parties shall ensure that each risk management meeting is attended by team members that:
  1. Are consistent across all risk management meetings (as practicable);
  2. Include the Department's Project Manager, ODOT Construction Leads, and ODOT Design Leads;
  3. Include the Contractor's Project Manager, the Contractor Geotechnical Design Engineer, and Contractor Geotechnical Construction Manager; and any other Key Personnel requested by the Department (see Section 10 (Authorized Representative and Key Personnel));
  4. Include the Contractor's Scheduler as defined in Exhibit T (Critical Path Method Progress Schedule) and the person within the Contractor's organization responsible for generating the Cost Model and Opinions of Probable Cost;

5. Have specialist knowledge to effectively consider key Project risks and complex matters relating to the Work;
  6. Are authorized to discuss key Project matters on behalf of their organization; and
  7. If requested by the Department, or if requested by the Contractor and with the Department's approval, include representatives of a Subcontractor.
- D. Following the risk management meetings, the Contractor shall summarize the discussed risk and memorialize the Meeting's results.

### **2.2.3 Approach to Cost Model Meeting**

- A. No later than 30 Days after the Sub-Phase 1B NTP, the Contractor shall convene, attend, and actively participate in a meeting to discuss and develop an initial approach to costing the Project with the Department. The purpose of this meeting is to establish the baseline Cost Model for the development of OPCs and GMP Price Proposals, including design and construction cost and Project Schedule estimates. This initial meeting will also establish the plan to communicate changes in scope, quantity, risk, and other information required to affirm a consistent foundation for cost and schedule estimation.

### **2.2.4 Design Progress Meetings**

- A. No later than 14 Days after the Sub-Phase 1B NTP, the Contractor shall convene, attend, and actively participate in meetings to discuss design approaches, anticipated submissions, and status of design submissions being reviewed by the Department.

### **2.2.5 [RESERVED FOR ADDITIONAL MEETINGS]**

## **3 CONTRACTOR PRE-QUALIFICATION**

The Design Build Team 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**

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

Non-Complex Roadway Design

Geotechnical Engineering Services

Geotechnical Testing Laboratory

Geotechnical Field Exploration Services

Geotechnical Drilling Inspection Services

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:

**5 SCOPE OF WORK**

<b>Project Description:</b>	<i>The Project includes mine remediation by grouting portions of “The Little Giant Mine” by the Toronto Fire Clay Co. The extent of the remediation shall be limited to sta. 1379+00 to sta. 1382+50 along S.R. 7 and from the ditch line to the toe of embankment. At a minimum, all mine voids shall be grouted as dimensioned on the plan view. All grout shall be contained within existing R/W. In addition to the mine cavity grouting, the soft overburden encountered in B-001-1-19, which has subsided in recent years, shall be improved.</i>  <i>Work shall also include pavement resurfacing for all areas of the roadway within the project footprint, assumed to be sta. 1379+00 to sta. 1382+50 and all applicable maintenance of traffic work. The Substantial Completion Deadline for the Project is May 31, 2026.</i>
<b>Completion Date:</b>	<i>Sub-Phase 1A (Proof-of-Concept) Proposal NTP: 10-11-24</i> <i>Sub-Phase 1B (Project Development) Proposal NTP: 11-08-24</i> <i>Phase 2 (Engineering &amp; Construction) Proposal NTP: 3-7-25</i> <i>Substantial Construction Completion Deadline: 5-31-26</i>
<b>Warranties:</b>	<i>None</i>

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

Table 5-1: Approximate Project Limits

Roadway Name	Begin	End
State Route 7	Sta 1379+00	1382+50

Work Limits shall be determined by the DBT.

The Consultant shall provide for the engineering services, design, and preparation of detail construction digital model for the construction of the proposed project.

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

## **6 FIELD OFFICE**

Field office Type B 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.

## **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 original RFP release, 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:

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  
Lighting Design Reference Packet (LDRP)  
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)  
Signal Design Reference Packet  
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

The above required design requirements shall be modified, as agreed, through the iterative model development process in Phase 1 of the PDBC.

## 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/>

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 [RESERVED]

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. The costs associated with the partnering process will be in accordance with *Section 108.02 of PN 126*.

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:	Cody Notz, P.E.
Phone number:	330-308-6936
E-mail:	cody.notz@dot.ohio.gov

District’s Project Engineer’s Name:	The District Project Engineer will be named at the Pre-Design Meeting.
Phone number:	[Insert Text - if known]
E-mail:	[Insert Text - if known]

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

The DBT shall conduct Task Force Design meetings. These meetings will be held to discuss specific DB solutions, resolve issues with the design and update the Department with the status of the design. These meetings shall be ongoing during the Phase 1 portion of the Contract.

At a minimum, these meetings shall include the Designer (and specifically the design element lead engineer or representative) and the Contractor. The DBT shall invite the Department to each Task Force Design meeting. The Task Force Design meetings shall be held every other week for the duration of the design or until mutually agreed by the Department and the DBT.

The Task Force Design meetings shall be integrated multi-discipline design meetings, led by the DBT, focusing on integrating design elements into a single, comprehensive, and buildable design. The Department will participate, but the Department's participation will be limited to general opinions and suggestions which shall not be deemed to be direction. The DBT shall maintain its responsibility to ensure adherence to the contract, including design requirements and schedule.

During the design process, these meetings shall occur at a location agreeable and accessible to all parties. If the co-located field offices are utilized and operational, these meetings should be held at the Department's or DBT's Field Office. The DBT shall provide an agenda two days prior to the meeting.

The DBT shall be responsible to notify any interested or affected third-parties at least two days prior to the meeting. "On-line" meetings (i.e. Skype, WebEx) may be acceptable, if approved by the Department.

### 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 be responsible for completing and obtaining any injection permits necessary for injecting fly ash into the abandoned underground mine voids, if determined necessary for the project.**

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.

## 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

NEPA Status to be finalized.

### 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 in design and construction.
4. Notify the Department regarding any failure to comply with conditions of the environmental permits.

5. Maintain and update environmental permits to ensure they are in effect during the Work.
6. Coordinate with the Department and submit any documents regarding updates required for environmental approvals to the Department for coordination with the regulatory agency.

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 permits approval 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. Unless otherwise noted, the DBT shall be responsible to obtain all necessary environmental permits and pay all charges, fees and taxes associated with these permits.

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

Agency	Permit/Approval	Status

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 and the Ohio NPDES general permit for storm water discharges from construction activities (NPDES Permit). For information about OEPA's NPDES Permit requirements, see:

[https://epa.ohio.gov/dsw/permits/GP\\_ConstructionSiteStormWater](https://epa.ohio.gov/dsw/permits/GP_ConstructionSiteStormWater).

The DBT shall submit information to the Department for development of the Notice of Intent for the NPDES Permit, including the total acreage of earth disturbing activities for both off project and on project work. The DBT shall assume that approval from OEPA will require a minimum of 31 days following submittal to the ODOT Project Manager. Earth disturbing activity is not permitted prior to approval of coverage under the NPDES Permit.

For projects that require an NOI, 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.

#### **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.

#### **8.5 Noise Analysis and Noise Barriers**

Not Applicable

### **9 RIGHT OF WAY (ROW)**

The DBT shall perform all necessary construction work for the project within the Project Right of Way (ROW). The Department desires the ROW Plans to be complete as early in Phase 1B as possible.

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. (Necessary?)

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 digital model 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**

N/A

**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.

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
<b>AEP Ohio Power Company</b>	Clarke Saunders 777 Hopewell Drive Heath, Ohio 43056 614-460-4794 <a href="mailto:cmsaunders@aep.com">cmsaunders@aep.com</a>	Utility conflicts to be determined
<b>Columbia Gas of Ohio</b>	Nicole Geary 300 Luray Drive Wintersville, Ohio 43953 740-317-5329 <a href="mailto:ngeary@nisource.com">ngeary@nisource.com</a>	Utility conflicts to be determined
<b>AT&amp;T Ohio, Inc.</b>	Barrett Tamasovich 160 North 6 <sup>th</sup> Street Zanesville, Ohio 43701 740-454-3552 <a href="mailto:bt2178@att.com">bt2178@att.com</a>	Utility conflicts to be determined
<b>City of Toronto Water Department</b>	Gary Daugherty 416 Clark Street Toronto, Ohio 43964 740-317-9636 <a href="mailto:torontowaterdept@brdband.com">torontowaterdept@brdband.com</a>	Utility conflicts to be determined

City of Toronto Sewer Department	Joe Adamovich 1400 South River Ave. Toronto, Ohio 43964740-537-2792 <a href="mailto:torontowastewater@outlook.com">torontowastewater@outlook.com</a>	Utility conflicts to be determined
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## 10.2 Utility Coordination Responsibilities

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 first OPC 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.

The Ohio Department of Transportation has utility facilities (highway lighting and/or traffic signals) within the limits of this project. In addition to the information outlined in this contract, the contractor shall take the following action to protect ODOT's facilities during construction: highway lighting and/or traffic signals: even though ODOT's is listed as a member of the Ohio utilities protection service (OUPS), the contractor is required to contact ODOT directly so that the ODOT utilities located within this project are marked. The contractor shall notify the ODOT project engineer/project supervisor, fourteen (14) calendar days in advance of any work, for the need to mark ODOT owned utilities. The above requirements are in addition to section 105.07 & 107.16 of the construction and material specifications. The contractor shall notify other utilities through OUPS or directly a minimum of forty-eight hours in advance of any work.

## 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 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 designated local detour will be provided by the Department.

Final requirements to be determined during Phase 1 of the Contract.

### 11.2 MOT Requirements

The DBT shall design and implement the MOT in accordance with the requirements referenced in Table 11-1.

Table 11-1: MOT Requirements

Requirement	Detailed Requirement Information	
<b>ROUTE</b>	SR-7	4 <sup>th</sup> St. Interchange: northbound off-ramp and southbound on-ramp
<b>Minimum number of lanes open during construction</b>	1 lane southbound and 1 lane northbound	0
<b>Minimum lane width</b>	12'	12'
<b>Maximum duration of lane closure</b>	TBD during Phase 1	Duration of ramp closures TBD during Phase 1
<b>Restrictions on lane closures during</b>	None	None

special events (sports events, fairs, concerts, etc.)		
Restriction related to hospitals, fire and police, schools, etc.	None	None

Final Requirements to be determined during Phase 1 of the Contract.

### 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.

### 11.4 Haul Routes

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:

Final Requirements to be determined during Phase 1 of the Contract.

## 12 SURVEY

#### A. ODOT Survey Responsibilities

The Department survey crews have provided the following survey information, listed below:

1. Topographic survey of the anticipated project footprint completed in early 2022.
2. Centerline control and benchmarks
3. Beginning and ending centerline points for the project
4. At least two benchmarks for the project (the datum used was that which the project was originally laid out by)
5. Critical points such as P.C., P.I., P.T., T.S., C.S.

#### B. DBT Survey Responsibilities

If the DBT requires additional survey, 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 digital model:

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. Copies of all Deeds, Plats, Maps and other written evidence used to establish points related to the project including summaries of all parole evidence acquired as a part of the survey operation.
3. Listing of all found monumentation (Horizontal and Vertical).
4. Listing of all monumentation set as part of the project (Horizontal and Vertical) including reference ties for recovery.
5. All monumentation shall be located utilizing NAD 83 (Horizontal Data), NAVD 88 (Vertical Data).
6. 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**

Full depth pavement replacement shall occur within the limits of the overburden improvements. Pavement buildup shall be provided by the DBT utilizing the Pavement Design Manual. Surface asphalt resurfacing shall occur within the remainder of the project limits.

Soil restoration data shall be provided by the DBT. The DBT will analyze the subgrade according to the Geotechnical Bulletin 1 (GB1): Plan subgrades. Collection of additional soils information if needed, should be performed by the DBT. Provide type, locations, and limits of any subgrade stabilization needed.

Final Requirements to be determined during Phase 1 of the Contract.

## 14 ROADWAY

Horizontal and vertical alignments are provided in the existing survey and as per the existing plans. Proposed horizontal and vertical alignments shall follow the Location and Design Manual, Vol. 1 utilizing the design speeds and volumes provided in Table 1-2.

Final Requirements to be determined during Phase 1 of the Contract.

## 15 DRAINAGE

The DBT shall perform a detailed flood plain analysis for all highways that encroach on floodplains, bodies of water or streams. The analysis shall be in accordance with the Location & Design Manual Volume 2 and the Bridge Design Manual. The extent of the analysis shall be from a minimum of 500' downstream, to the greater of either one bridge opening/width upstream, or to the limits of the area inundated by the 100-year event.

The results of the detailed flood plain study, supporting hydraulic calculations, and recommendations shall be submitted to the District for review and comment prior to construction of the drainage structure. If the proposed crossing is in a special flood hazard area as defined by FEMA, the detailed flood plain analysis shall be submitted concurrently to the local flood plain coordinator.

Final Requirements to be determined during Phase 1 of the Contract.

## 16 LANDSCAPING

Landscaping Required:  Yes  No

The DBT shall permanently grade and seed all impacted areas.

Landscaping in the center of the roundabout shall be permanently graded and seeded per the Location & Design Manual Volume 1. The center landscape area should try to have a max slope of 6:1 and a min slope of 12:1.

Final Requirements to be determined during Phase 1 of the Contract.

## 17 ADDITIONAL DESCRIPTION OF REQUIRED WORK AND SPECIAL PROVISIONS

The intent of this project is to reduce the risk of future subsidence of the roadway. The DBT shall develop construction procedures that allow the department to confirm that the mine voids within the project have been addressed. These construction procedures shall also include a way to physically confirm that the overburden has been improved in the area of past subsidence near B-001-1-19.

Final Requirements to be determined during Phase 1 of the Contract.

## 18 STRUCTURES

### 18.1 Noise Barrier

Noise Barrier Construction Required:  Yes  No

## 19 TRAFFIC CONTROL

### 19.1 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

Item 807 wet reflective epoxy pavement markings

B. Raised Pavement Markers:  Yes  No.

Requirements and Locations: Match existing

C. Delineators:  Yes  No.

All flexible delineators shall conform to Item 620 and shall be placed in accordance with current design standards. Confirmation that no conflicts exist between the proposed locations of delineators and any underground utilities shall be made prior to the installation of the delineators.

Locations and requirements:

D. Barrier Reflectors:  Yes  No.

All barrier reflectors shall conform 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.

Final Requirements to be determined during Phase 1 of the Contract.

### 19.2 Signing

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

#### 19.2.1 Flat Sheet Signs

A. Flat Sheet Sign work required:  Yes  No.

Remove and replace any signs that are in conflict with the project.

Final Requirements to be determined during Phase 1 of the Contract.

### 19.2.2 Extrusheet Signs

1. Extrusheet Sign Work Required:  Yes  No.

### 19.2.3 Ground Mounted Post Supports

- A. Replace:  Yes  No.
1. Redesign and replace all existing ground mounted post supports with new supports. New sign installations shall be on new supports. No reuse of existing ground mounted supports shall be allowed.
  2. Removed ground mounted supports shall become the property of the Contractor.

Final Requirements to be determined during Phase 1 of the Contract.

### 19.2.4 Ground Mounted Beam Supports

- A. Ground Mounted Beam required:  Yes  No.
- B. Overhead Supports:  Yes  No.

Final Requirements to be determined during Phase 1 of the Contract.

## 19.3 Lighting

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

There is highway lighting within the project area. It is the intent to reduce impacts to this lighting and remove and replace only as necessary.

Final Requirements to be determined during Phase 1 of the Contract.

## 19.4 Traffic Signals

- A. Signal Support work required:  Yes  No.
- B. Vehicle Signal Heads:  Yes  No
- C. Pull box:  Yes  No
- D. Conduit:  Yes  No
- E. Cable and Wire:  Yes  No

Signal(s) part of an Intelligent Transportation System (as defined by the Traffic Engineering Manual, Part 13):  Yes  No

## 19.5 Intelligent Transportation Systems (ITS)

A. ITS Work Required:  Yes  No

## 20 PROJECT SCHEDULE REQUIREMENTS

[RESERVED]

## 21 PLAN SUBMITTALS AND REVIEW REQUIREMENTS

### 21.1 Plan Components

Final Requirements to be developed during Phase 1 of the Contract.

### 21.2 Quality Control

The DBT is responsible for the professional quality, technical accuracy 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) as applicable of this document, the Department will advise the DBT of the shortcomings and direct the DBT to revise and resubmit the model. No time extension will be granted because of such action. The Department will schedule a review meeting or issue review comments as appropriate.

### 21.3 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.

The DBT shall cooperate and coordinate with the Department during Phase 1 of the Contract to develop the process.

#### **21.4 Comment Resolution Process**

The DBT shall cooperate and coordinate with the Department during Phase 1 of the Contract to develop the process.

#### **21.5 Document Management**

The DBT shall cooperate and coordinate with the Department during Phase 1 of the Contract to develop the process.

#### **21.6 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.

#### **21.7 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.

#### **21.8 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.

### **21.9 Interim Design Review Submission**

The DBT shall cooperate and coordinate with the Department during Phase 1 of the Contract to develop the process.

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

### **21.10 FINAL DESIGN Review Submission**

The DBT shall cooperate and coordinate with the Department during Phase 1 of the Contract to develop the process.

### **21.11 Released for Construction Plans**

The DBT shall cooperate and coordinate with the Department during Phase 1 of the Contract to develop the process.

### **21.12 [RESERVED]**

### **21.13 Plan Distribution Addresses**

The DBT shall cooperate and coordinate with the Department during Phase 1 of the Contract to develop the process.

### **21.14 Plan Revisions**

The DBT shall cooperate and coordinate with the Department during Phase 1 of the Contract to develop the process.

### **21.15 As-Built Construction Record-Drawing Plans**

The DBT shall cooperate and coordinate with the Department during Phase 1 of the Contract to develop the process.

Prior to Final Acceptance of the Work, the DBT shall furnish the Department formal As-Built Construction Record-Drawing Model and plans. The DBT shall provide a general summary within the final As-Built Construction Record-Drawing plans.