**Ohio Department of Transportation**

**Scope of Services**

**C-R-S: HAR-67/235-2.59/4.39**

# General Information

District/Central Office:

PID#: 121970

|  | **No.** | **Scope of Services Meeting Date** | **Approved Final Scope of Services** |
| --- | --- | --- | --- |
| Prime Agreement | 0 | 10/30/2024 |  |

| **SR 235** | | | | |
| --- | --- | --- | --- | --- |
|  |  |  | Unit | Measure |
| Functional Classification | Major Collector | From: | SLM | 4.311 |
| Design Functional Classification | Major Collector | To: | SLM | 4.463 |
| Posted Speed (MPH) | 55 | Project Length | MI | 0.304 |
| Design Speed (MPH) | 60 | Work Length |  |  |
|  |  | Lateral Limits |  |  |

| **SR 67** | | | | |
| --- | --- | --- | --- | --- |
|  |  |  | Unit | Measure |
| Functional Classification | Major Collector | From: | SLM | 2.467 |
| Design Functional Classification | Major Collector | To: | SLM | 2.716 |
| Posted Speed (MPH) | 55 | Project Length | MI | 0.498 |
| Design Speed (MPH) | 60 | Work Length |  |  |
|  |  | Lateral Limits |  |  |

# PDP Phases Included in this Agreement: Phase PL through Phase COAgreement between Consultant and: Ohio Department of Transportation

This scope approval is the initial scope for development of the agreement. As the project moves through additional project development Phases, the project specific scopes of services for these additional Phases shall be developed and incorporated herein.

This Agreement will be implemented in Parts appropriate to the PDP Phases. The initial price proposal and authorization will include:

Phase PL thru the Phase PE

The specific scope of work and cost proposal for succeeding PDP Phase(s) will be developed as the current Phase(s) is completed.

# Price Proposal Due Date: 11/20/2024

# Project Location:

Construct a single lane roundabout at the intersection of SR 235 and SR 67.

# Project Description:

Intersection improvement to increase safety and improve operation at the intersection of SR 235 and SR 67.

# Communication/Contacts:

The respective project managers (ODOT and Consultant) will be the primary points of communication. Rules for communication between project staff listed below will be discussed at the Scope of Services Meeting and further described herein. Technical issues may be discussed directly (between project staff) below the project manager level, but the respective project managers must be informed of such discussions and any decisions resulting there from. Contractual issues should always be communicated at the project manager level.

ODOT

|  | **Name** | **Phone #** | **E-Mail Address** |
| --- | --- | --- | --- |
| Utilities Coordinator | Matt Pickering | 419-999-6811 | matt.pickering@dot.ohio.gov |
| Contract Manager | Travis McKibben | 419-999-6841 | travis.mckibben@dot.ohio.gov |
| Real Estate | Shell Miller | 419-999-6876 | shell.miller@dot.ohio.gov |
| Environmental Coordinator | Nate Tessler | 419-999-6886 | nate.tessler@dot.ohio.gov |
| Design Engineer | Eric Scheckelhoff | 419-999-6879 | eric.scheckelhoff@dot.ohio.gov |
| Planning Engineer | Adam Francis | 419-999-6859 | adam.francis@dot.ohio.gov |
| Survey Operations Manager | Sara Morrisey | 419-999-6921 | sara.morrisey@dot.ohio.gov |
| Project Manager | Robert Mooney | 419-999-6987 | robert.mooney@dot.ohio.gov |

# Schedule

|  |  |
| --- | --- |
| **Completion Time for Phases** | PL thru PE: 6 |
| **Completion Time for all Phases** | PL thru CO: 48 |

The following commitment dates are derived from the Ellis events as developed:

| **Milestone** | **SFY** | **Current** |
| --- | --- | --- |
| In-House Scope Meeting | 2025 | 7/23/2024 |
| Initial Project Scope Complete | 2025 | 12/2/2024 |
| Authorized Design Consultant | 2025 | 1/2/2025 |
| Survey Initiated | 2025 | 1/16/2025 |
| NEPA Start Date | 2025 | 2/3/2025 |
| Survey Deliverables Complete | 2025 | 3/31/2025 |
| Stage 1 Plans - Submitted | 2026 | 7/1/2025 |
| Stage 1 Plans - Complete | 2026 | 8/1/2025 |
| Preliminary R/W Review Submission - Submitted | 2026 | 9/2/2025 |
| Preliminary R/W Review Submission - Approved | 2026 | 11/3/2025 |
| Compliance R/W Review Submission- Submitted | 2026 | 12/1/2025 |
| Stage 2 Plans - Submitted | 2026 | 12/1/2025 |
| Stage 2 Plans - Complete | 2026 | 1/2/2026 |
| Compliance R/W Review Submission - Approved | 2026 | 1/2/2026 |
| Environmental Document Approved | 2026 | 3/2/2026 |
| Final R/W Plan Submission - Approved | 2026 | 3/2/2026 |
| R/W Authorized | 2026 | 3/16/2026 |
| Stage 3 Plans - Submitted | 2027 | 8/17/2026 |
| Stage 3 Plans - Complete | 2027 | 9/17/2026 |
| Final Tracings - Submitted | 2027 | 1/4/2027 |
| Final Tracings - Complete | 2027 | 2/4/2027 |
| R/W Acquisition Complete | 2027 | 3/15/2027 |
| District R/W Certification | 2027 | 4/1/2027 |
| Plan Package Received in C.O. | 2027 | 4/15/2027 |
| Award | 2029 | 7/1/2028 |
| Sale | 2029 | 7/1/2028 |
| Begin Construction | 2029 | 8/1/2028 |
| End Construction | 2029 | 10/31/2028 |

The Consultant will prepare a detailed Master Schedule Gantt Chart (from initial authorization of the agreement thru completion (sale) utilizing Microsoft Project. This schedule is to be included with the price proposal. The Schedule will include beginning and ending dates as well as key milestones on the critical path (Ellis milestones) for the project. Based on the type of Consultant Agreement, the Schedule shall also accommodate appropriate time frames for scoping, negotiation and authorization for the additional Phases. If applicable to the project, the schedule will also include, at a minimum, all milestones as per the Department’s approved Enhanced Tracking Milestone Listings. The overall schedule past those phases contracted for may be general in nature meeting the dates as established within this scope. The Consultant will be responsible for timelines of Phases as authorized within this agreement. The Consultant is responsible for updating the schedule as needed throughout the PDP (or as requested by ODOT) and providing these schedules monthly or as mutually agreed at the time of scope meeting (typically with Consultant Invoices). Monthly project updates are required to be submitted to the Departments Project Manager at a minimum indicating or identifying work completed this month, expected work next month and identifying any critical items needing action from both the Consultant and Departments personnel. These updates are typically provided with monthly invoicing and should be coordinated with the Department’s Project Manager for an approved format and schedule.

# Electronic Distribution of Design Information

The development of this project shall be performed in accordance with the Department’s design manuals and documents. The consultant shall perform all work required by the design manuals unless a specific exception is included herein. Absence of a specific reference to required elements of the work either in this Scope of Services or the consultant’s price proposal shall not relieve the consultant of responsibility to perform the work or justify additional compensation. The consultant’s price proposal shall be based on the most current revision of each manual at the date of the Scope of Services Meeting.

The consultant shall also be responsible to revise the plans to conform to the most recent revision of the design manuals and documents. The Department maintains current documents and a summary of the latest revisions through the Design Reference Resource Center (DRRC) (http://www.dot.state.oh.us/drrc/) (the DRRC page of the Department’s Website). This site will release all new and revised design information quarterly, on four specific dates. The most significant recent changes made to this page are reflected under the heading “Latest Revision/Revision History."

Minor changes should be routinely incorporated in the work. The consultant shall notify the Department (District Office or other office charged with administration of the agreement) in writing of any subsequent changes in design manuals or other documents that would substantially impact work already performed or change the overall impacts of the project including construction costs, right of way impacts or environmental impacts. The Department will respond in writing concerning the disposition of any such changes. The Department agrees that a substantial change in design policy or plan preparation requirements may constitute a valid request for additional compensation.

The correspondence transmitting final deliverables shall note the last revision date of the Design Reference Resource Center upon which the plans were based.

# Variations from the Scope of Service

This Scope of Services document is based on the Department’s knowledge of project requirements at the time when the document was prepared, and serves as the basis for the price proposal and agreed fee. However, changes in the work may be required as the project develops and more complete information becomes available. Such changes also may be dictated by written procedures included in manuals or decisions made by the Department. As the project develops, it is the Consultant’s responsibility to advise the Department of significant changes in the work that may require modification of the agreement, and to maintain separate cost accounting for each specific issue. The Department’s written comments and other technical decisions concerning development of the project shall not be construed as authorization for extra work for which additional compensation may be claimed. Modification of the agreement or written authorization to proceed is required prior to the performance of additional work. In short, at all times the Consultant remains responsible to advise the Department of work that exceeds the scope of services.

Requests for modification will be evaluated from the standpoint of the scope of services in its entirety and not in terms of a single issue. Additions to the scope of services may be offset by reductions in other areas of the work.

# PDP Process

The Ohio Department of Transportation (ODOT) has developed and implemented a Project Development Process (PDP) that includes regular communication among technical disciplines, results in quality plans and minimizes cost overruns during right-of-way acquisition and project construction. Depending on their size, complexity, and/or potential impact to the environment, ODOT transportation projects are categorized as one of five paths (Path 1– 5). The PDP consists of five phases that projects must advance through prior to construction. These phases include Planning, Preliminary Engineering, Environmental Engineering, Final Engineering and Construction. While all projects advance through these phases, project managers have the flexibility to adjust scope activities within the phases to better support decision-making.

The PDP is a project management and transportation decision-making procedure that outlines project development from concept through completion. Each PDP activity is timed to facilitate informed decision making based on an appropriate level of project development and risk management. The PDP encourages communication among disciplines, requires documentation of the reasoning behind project related decisions, eliminates duplicated effort among disciplines and provides for early identification of potential issues. Involvement of all disciplines during the early stages of project development ensures that issues affecting project type, scope, development schedule and costs can be correctly evaluated and anticipated.

The manual and associated tools provide guidelines to identify activities required during each phase of project development. The project scope determines the amount of work performed within the phases. Although the manual and web-based tool identifies work tasks, deliverables and potential stakeholders for each phase in the process, the process requires coordination of people and tasks between phases to ensure continued review and study of the best possible options.

Communication and transition among disciplines are critical to a project’s success. By establishing communication opportunities and responsibilities throughout the PDP, the project manager ensures that those involved in the project fulfill their project commitments. The project manager for each step is responsible for ensuring appropriate coordination and involvement of other disciplines throughout the process.

# On-Going Consultant Involvement during the Construction Phase

The Consultant shall provide construction phase services as requested by the Department, for the purpose of advising the Department concerning interpretations of the plans and specifications prepared by the consultant, advising the Department of any changed or unanticipated field conditions that will impact the work, and participating in a formal Partnering process if applicable. The consultant will not have any formal ongoing duties in administration of the construction contract or inspection and testing of the project. The Consultant’s personnel assigned to this phase of the work shall be the same personnel that designed the project and prepared the plans (generally the personnel whose initials appear on the drawings).

The Consultant shall provide the following construction phase services as requested by the Department:

1. Attend meetings including the preconstruction meeting, job progress meetings, partnering meetings if applicable, and other meetings as requested.
2. In conjunction with job progress meetings or as requested, visit the job site at appropriate intervals to monitor critical areas of the work and advise the Department of any conditions that would affect the work.
3. If authorized, provide on-site geotechnical support for construction of geotechnical complex systems.
4. Respond to questions and visit the job site on an as needed basis.
5. Assist the Department in evaluation of change orders or claims.
6. If directed by the Department, replace right of way monumentation destroyed by the Contractor’s construction operations. Monuments shall be ¾ inch diameter steel rod, 30 inches long, with an aluminum cap having a minimum diameter of 1 ½ inch, stamped ODOT R/W and bearing the surveyor’s Ohio Registration Number and name, and/or company name. In order to support the Department’s efforts in recovering costs from the Contractor, maintain separate cost accounting records for this work.  
     
   Centerline Adjustable Monument Assemblies shown on the Recorded Centerline Plat shall be set by the consultant at an appropriate stage of construction, as directed by the Department. After construction of the Centerline Adjustable Monument Assemblies by the contractor, the Consultant shall set the iron pin and cap in the Centerline Adjustable Monument Assembly Box. All centerline monuments, reference monuments and right of way monuments shall conform to Standard Construction Drawing RM-1.1 (pages 1 and 2)
7. Attend the post construction meeting and prepare minutes of the meeting including a discussion of preventable change orders.

Compliance with Health and Safety Requirements

For Consultant personnel visiting the site, the Consultant shall be responsible for compliance with applicable health and safety requirements including OSHA requirements (CFR 29-1926), and medical testing required by OSHA and ODOT rules and regulations.

The Consultant shall provide, as a minimum, the same level of safety equipment as required for ODOT inspectors. Consultant personnel shall be subject to compliance inspections by ODOT personnel.

Responsibilities of the Department

1. The District Project Manager for the design agreement will remain as the point of contact for the consultant during the construction phase
2. District construction personnel may contact the consultant directly regarding any plan questions or interpretations, but the District Project Manager for the design agreement will be notified of all such communications.
3. The Department will advise the consultant in writing of any potential errors or omissions which must be corrected without undue delay and without additional costs to the State
4. The Department will direct the consultant to set the iron pin and cap in the Adjustable Monument Assembly Boxes at an appropriate stage of construction.

# Exceptions/Clarification from Manuals

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# Existing Document (Not Attached to the Profile)

**External Documents**

# Attachments (Attached to the Profile or Tasks)

# Task List

| **Task Label** | **Task Name** | **Consultant** | **ODOT** | **LPA** | **If Authorized** |
| --- | --- | --- | --- | --- | --- |
| **1** | **Planning Phase** |  | | | |
| **1.1** | **Project Start-up** |  | | | |
| 1.1.A | **Planning and Programming** |  |  |  |  |
| 1.1.B | **STIP/TIP** |  |  |  |  |
| **1.2** | **Project Initiation Package** |  | | | |
| 1.2.A | **Define Study Area and Logical Termini** |  |  |  |  |
| 1.2.B | **Conduct Field Review (walk through)** |  |  |  |  |
| **1.2.C** | **Identify Discipline Specific Issues for Project Initiation Package** |  | | | |
| 1.2.C.A | **Identify Design Issues** |  |  |  |  |
| 1.2.C.B | **Identify Geotechnical Issues** |  |  |  |  |
| 1.2.C.C | **Identify Environmental Issues** |  |  |  |  |
| 1.2.C.D | **Identify Utility Issues** |  |  |  |  |
| 1.2.C.F | **Transportation and Land Use Plans** |  |  |  |  |
| 1.2.C.G | **Identify Safety Priorities** |  |  |  |  |
| 1.2.D | **Project Initiation Package Preparation and Submittal** |  |  |  |  |
|  | Narrative:  Consultant to review the Project Initiation Package provided by the District and update as needed. | | | | |
| 1.2.E | **Aerial/Base Mapping Coordination with ODOT** |  |  |  |  |
| 1.2.F | **Concept, Scope and Budget Estimates** |  |  |  |  |
| **1.3** | **Existing Data, Research and Analysis** |  | | | |
| 1.3.B | **Crash Analysis** |  |  |  |  |
| **1.3.C** | **Traffic Data** |  | | | |
| 1.3.C.A | **Turning Movement Counts at Intersections - No Build** |  |  |  |  |
| 1.3.C.B | **Machine Counts on Roadways and Ramps - No Build** |  |  |  |  |
| 1.3.D | **Planning Level Traffic - No Build Condition** |  |  |  |  |
| 1.3.F | **Capacity Analysis - No Build Condition** |  |  |  |  |
| 1.3.G | **Safety Analysis - No Build Condition** |  |  |  |  |
| 1.3.H | **Develop Purpose & Need** |  |  |  |  |
| **1.4** | **Stakeholder Involvement and Public Involvement Plan** |  | | | |
| 1.4.A | **Public Involvement Plan** |  |  |  |  |
|  | Narrative:  District will develop the Public Involvement Plan.  At this time, it is anticipated that only an online pre-recorded presentation and a press release will be necessary.   Consultant may be asked to review certain parts or dates within the plan.  Additionally, the consultant may need to assist with responses to questions or comments from the public if they are technical in nature. | | | | |
| **1.5** | **Project Management for Planning Phase** |  | | | |
| 1.5.A | **Meetings** |  |  |  |  |
| 1.5.B | **General Oversight** |  |  |  |  |
| 1.5.C | **Project Set Up** |  |  |  |  |
| 1.5.E | **DBE/EDGE Participation Plan (scope only not a pay item)** |  |  |  |  |
| **2** | **Preliminary Engineering Phase** |  | | | |
| **2.1** | **Develop Preliminary Alternatives** |  | | | |
| **2.1.A** | **Prepare and complete Feasibility Study** |  | | | |
| 2.1.A.A | **Planning Level Traffic Feasible (Build) Alternative(s)** |  |  |  |  |
| 2.1.A.C | **Capacity Analysis Feasible (Build) Alternative(s)** |  |  |  |  |
| 2.1.A.D | **Safety Analysis for Feasible (Build) Alternative(s)** |  |  |  |  |
| 2.1.A.G | **Preliminary Alignment and Profile** |  |  |  |  |
| 2.1.A.I | **Mapping** |  |  |  |  |
| 2.1.A.J | **Stakeholder Public Involvement** |  |  |  |  |
|  | Narrative:  District does not anticipate the need for a formal Stakeholder meeting at this time.  The ODOT Project Manager will reach out to potentially affected property owners.  If any of the property owners would like to discuss RW impacts further in person, they will be invited to do so.  If an informal property owners meeting is requested, the consultant may be asked to attend to help answer questions regarding the design, and also provide a site plan to aid in the conversations.  Typically, only 1 person would be necessary.  This is an if-authorized task. | | | | |
| 2.1.A.K | **Prepare Feasibility Study** |  |  |  |  |
|  | Narrative: This task will be for an informal AER report summarizing and evaluating the proposed roundabout alternatives.  It will not be a true feasibility study or AER.  District 1 has previously completed an intersection safety study which will be provided.  Furthermore, ORE previously evaluated non-roundabout alternatives.  Through these preliminary engineering studies, a roundabout has already been selected as the preferred improvement. | | | | |
| **2.2** | **Perform Environmental Field Studies** |  | | | |
| 2.2.B | **Cultural Resources Scoping Request Form** |  |  |  |  |
| 2.2.C | **Ecological Survey Report** |  |  |  |  |
| 2.2.D | **Regulated Materials Review Screening** |  |  |  |  |
| 2.2.E | **Social and Economic Resources** |  |  |  |  |
| **2.3** | **AER Design** |  | | | |
| **2.3.A** | **Field Survey and Aerial Mapping** |  | | | |
| **2.3.A.A** | **Project Control, Benchmarks, and Reference Points** |  | | | |
| 2.3.A.A.2 | **Type "B" Monument Specified** |  |  |  |  |
| **2.3.A.B** | **Monumentation Recovery and Records Research** |  | | | |
| 2.3.A.B.1 | **Records Research including deeds and easements** |  |  |  |  |
| 2.3.A.B.2 | **Existing Centerline and R/W Field Survey** |  |  |  |  |
| 2.3.A.B.3 | **Property Lines/Easements Field Survey** |  |  |  |  |
| **2.3.A.C** | **Base Mapping (incl. field verify.)** |  | | | |
| 2.3.A.C.2 | **R/W Project** |  |  |  |  |
| 2.3.A.F | **Establish property lines, tax id, & ownerships on base map** |  |  |  |  |
| 2.3.A.G | **Property Owner Notification** |  |  |  |  |
|  | Narrative:  District will prepare a real estate spreadsheet (mailing list) and parcel map and provide it to the consultant for their review. The parcel map will establish ODOT parcel numbers that will be used through RW plan development.  The consultant will review to ensure they agree that all properties requiring entry for survey are included.  District will draft the letters and mail them. | | | | |
| **2.3.B** | **Roadway** |  | | | |
| 2.3.B.A | **Design Criteria** |  |  |  |  |
| 2.3.B.B | **Conceptual Typical Sections** |  |  |  |  |
| 2.3.B.C | **Horizontal Alignment and Vertical Profile - Mainline** |  |  |  |  |
| 2.3.B.D | **Plan and Profile - Crossroads** |  |  |  |  |
| 2.3.B.F | **Conceptual cross sections** |  |  |  |  |
| 2.3.B.H | **Analyze Drive locations** |  |  |  |  |
| 2.3.B.I | **Identify Construction Limits** |  |  |  |  |
| 2.3.B.J | **Preliminary Pavement Design** |  |  |  |  |
| **2.3.C** | **Drainage** |  | | | |
| 2.3.C.E | **Conceptual BMP** |  |  |  |  |
| **2.3.G** | **Utilities** |  | | | |
| 2.3.G.A | **Utility Coordination and Documentation** |  |  |  |  |
|  | Narrative: District will perform the majority of this work and will coordinate with the consultant as needed.  Consultant shall send out the Stage 1, Stage 2, Stage 3, and Final Tracings Plans to the utility companies and copy the District 1 Utility Coordinator (Matt Pickering).  District 1 will follow up and coordinate with the utility companies. | | | | |
| 2.3.G.B | **Subsurface Utility Engineering** |  |  |  |  |
| **2.3.H** | **Miscellaneous** |  | | | |
| 2.3.H.E | **Identify potential total take parcels** |  |  |  |  |
| 2.3.H.G | **Evaluate aesthetic options** |  |  |  |  |
| 2.3.H.I | **Determine need for Design Exception** |  |  |  |  |
| **2.4** | **Prepare Cost Estimates** |  | | | |
| 2.4.A | **Roadway/Interchange Costs** |  |  |  |  |
| 2.4.B | **Right of Way Costs** |  |  |  |  |
| 2.4.C | **Utility** |  |  |  |  |
| **2.6** | **Public Involvement/Coordination** |  | | | |
| 2.6.A | **Public Involvement / Coordination** |  |  |  |  |
|  | Narrative:  District will handle the majority of the public involvement including planning, setup, letter and media announcements, presentation, and managing public comments.  The consultant will be asked to provide displays and visual aids for the online presentation, and potentially assist with answering public comments that are technical in nature. | | | | |
| **2.7** | **Stage 1 Design** |  | | | |
| **2.7.A** | **Roadway** |  | | | |
| 2.7.A.A | **Title Sheet** |  |  |  |  |
| 2.7.A.B | **Schematic Plan** |  |  |  |  |
| 2.7.A.C | **Roundabout Geometric Layout** |  |  |  |  |
| 2.7.A.D | **General Notes** |  |  |  |  |
| 2.7.A.E | **Typical Sections** |  |  |  |  |
| 2.7.A.F | **Cross Sections** |  |  |  |  |
| 2.7.A.G | **Plan and Profile - Mainline** |  |  |  |  |
| 2.7.A.H | **Plan and Profile - Crossroads** |  |  |  |  |
| 2.7.A.J | **Superelevation Table** |  |  |  |  |
| 2.7.A.K | **Intersection Details** |  |  |  |  |
| 2.7.A.N | **Driveway Details** |  |  |  |  |
| 2.7.A.P | **Traffic Control** |  |  |  |  |
| **2.7.B** | **Drainage** |  | | | |
| 2.7.B.A | **Storm Sewer Profiles** |  |  |  |  |
| 2.7.B.C | **Channel Relocation Details & Section Sheets** |  |  |  |  |
| **2.7.B.D** | **Drainage Calculations** |  | | | |
| 2.7.B.D.1 | **Culvert** |  |  |  |  |
| 2.7.B.D.2 | **Ditches** |  |  |  |  |
| 2.7.B.D.3 | **Storm Sewer/Inlet Spacing** |  |  |  |  |
| 2.7.B.E | **BMP Design** |  |  |  |  |
| **2.7.C** | **Utilities** |  | | | |
| 2.7.C.A | **Utility Coordination and Documentation** |  |  |  |  |
| 2.7.C.C | **Subsurface Utility Engineering (SUE)** |  |  |  |  |
| 2.7.C.D | **Add Utilities to Plan/Profile Sheets** |  |  |  |  |
| **2.7.D** | **Geotechnical Services** |  | | | |
| 2.7.D.A | **Geotechnical Services and Report** |  |  |  |  |
| **2.7.G** | **Miscellaneous** |  | | | |
| 2.7.G.A | **Perform Airway/Highway clearance analysis** |  |  |  |  |
| 2.7.G.C | **Finalize Pavement Build up and subsurface drainage requirements** |  |  |  |  |
| **2.7.H** | **Prepare C2 Cost Estimates and Update Milestones** |  | | | |
| 2.7.H.A | **Roadway/Interchange Costs** |  |  |  |  |
| 2.7.H.B | **Right of Way Costs** |  |  |  |  |
| 2.7.H.C | **Utility Costs** |  |  |  |  |
| 2.7.I | **Lighting Plans** |  |  |  |  |
| **2.7.J** | **Maintenance of Traffic** |  | | | |
| 2.7.J.A | **Detour Plan** |  |  |  |  |
| **2.8** | **Project Management for Preliminary Engineering Phase** |  | | | |
| 2.8.A | **Meetings** |  |  |  |  |
| 2.8.B | **General Oversight** |  |  |  |  |
| 2.8.C | **Project Set Up** |  |  |  |  |
| **3** | **Environmental Engineering Phase** |  | | | |
| **3.1** | **Environmental Field Studies and Refined Impacts** |  | | | |
| 3.1.A | **Phase I Cultural Archaeological** |  |  |  |  |
| 3.1.B | **Phase II Cultural Resource History/Architecture Survey** |  |  |  |  |
| 3.1.D | **Regulated Materials Review Assessment** |  |  |  |  |
| 3.1.E | **Farmland Studies** |  |  |  |  |
| 3.1.F | **Indirect Effects and Cumulative Impacts (ICE) Analysis** |  |  |  |  |
| 3.1.G | **Address NEPA Specific Environmental Justice Concerns** |  |  |  |  |
| 3.1.I | **Biological Assessment for Federally Listed Species** |  |  |  |  |
| 3.1.K | **Determine Right of Way Encroachments** |  |  |  |  |
| 3.1.O | **Regulated Materials Review Investigation** |  |  |  |  |
| **3.3** | **Stage 2** |  | | | |
| **3.3.A** | **Roadway** |  | | | |
| 3.3.A.A | **Title Sheet** |  |  |  |  |
| 3.3.A.B | **Schematic** |  |  |  |  |
| 3.3.A.C | **Roundabout Geometric Layout** |  |  |  |  |
| 3.3.A.D | **General Notes** |  |  |  |  |
| 3.3.A.E | **Typical Sections** |  |  |  |  |
| 3.3.A.F | **Plan and Profile - Mainline** |  |  |  |  |
| 3.3.A.G | **Plan and Profile - Crossroads** |  |  |  |  |
| 3.3.A.I | **Cross Sections** |  |  |  |  |
| 3.3.A.J | **Intersection Details** |  |  |  |  |
| **3.3.B** | **Drainage** |  | | | |
| 3.3.B.A | **Storm Sewer Profiles** |  |  |  |  |
| 3.3.B.C | **Channel Relocation Details** |  |  |  |  |
| 3.3.B.D | **Underdrain details** |  |  |  |  |
| 3.3.B.E | **BMP Details** |  |  |  |  |
| **3.3.C** | **Traffic Control** |  | | | |
| 3.3.C.A | **Pavement Marking Plan** |  |  |  |  |
| 3.3.C.B | **Signing Plan** |  |  |  |  |
| **3.3.E** | **Maintenance of Traffic** |  | | | |
| 3.3.E.A | **MOT General Notes** |  |  |  |  |
| 3.3.E.B | **Detour Plan - Custom Guide Signs** |  |  |  |  |
| **3.3.F** | **Lighting Plan** |  | | | |
| 3.3.F.A | **Lighting Analysis** |  |  |  |  |
| 3.3.F.B | **Power/Circuit Layout & Details** |  |  |  |  |
| 3.3.F.C | **Lighting Plan and Details** |  |  |  |  |
| 3.3.F.D | **Voltage Drop Calculation** |  |  |  |  |
| 3.3.F.E | **Power Service** |  |  |  |  |
| **3.3.G** | **Landscape Plan** |  | | | |
| 3.3.G.A | **Landscape Plan and Details** |  |  |  |  |
| 3.3.G.B | **General Notes** |  |  |  |  |
| **3.3.J** | **Utilities** |  | | | |
| 3.3.J.A | **Utility Coordination and Documentation** |  |  |  |  |
| **3.3.K** | **Geotechnical Services** |  | | | |
| 3.3.K.A | **Finalize Geotechnical Exploration and Report** |  |  |  |  |
| **3.4** | **Right of Way Plans** |  | | | |
| **3.4.B** | **Preliminary & Compliance Right of Way Plans** |  | | | |
| 3.4.B.A | **ROW Legend Sheet** |  |  |  |  |
| 3.4.B.B | **Centerline Plat Sheet** |  |  |  |  |
| 3.4.B.C | **Property Map Sheet** |  |  |  |  |
| 3.4.B.D | **Summary of Additional Right of Way Sheet** |  |  |  |  |
| 3.4.B.E | **ROW Detail Sheets** |  |  |  |  |
| 3.4.B.G | **Legal Descriptions and Closure Calculations** |  |  |  |  |
| 3.4.B.H | **Right-of-Way Acquisition Estimate** |  |  |  |  |
| 3.4.B.I | **Field Review** |  |  |  |  |
| **3.4.C** | **Final Right of Way Plans** |  | | | |
| 3.4.C.A | **Final Right of Way Plan Sheets and Legal Descriptions** |  |  |  |  |
| 3.4.C.B | **Field Review & Verify Property Owners** |  |  |  |  |
| 3.4.C.C | **Record Centerline Plat and all appropriate documents** |  |  |  |  |
| 3.4.C.D | **Set R/W Pins after acquisition** |  |  |  |  |
| 3.4.C.E | **Right of Way Staking** |  |  |  |  |
| **3.5** | **Prepare Environmental Document** |  | | | |
| 3.5.A | **Prepare Environmental Document** |  |  |  |  |
| **3.6** | **Environmental Commitments and Plan Notes** |  | | | |
| 3.6.A | **Environmental Commitment Plan Notes** |  |  |  |  |
| **3.8** | **Prepare Cost Estimates and Revise Milestone** |  | | | |
| 3.8.A | **Roadway/Interchange Costs** |  |  |  |  |
| 3.8.C | **Utility Costs** |  |  |  |  |
| **3.9** | **Project Management for Environmental Engineering Phase** |  | | | |
| 3.9.A | **Meetings** |  |  |  |  |
| 3.9.B | **General Oversight** |  |  |  |  |
| **4** | **Final Engineering and R/W Phase** |  | | | |
| **4.1** | **Right of Way Acquisition** |  | | | |
| 4.1.A | **Right of Way Acquisition** |  |  |  |  |
| **4.2** | **Stage 3 Detailed Design Plans** |  | | | |
| **4.2.A** | **Quantities and Notes** |  | | | |
| 4.2.A.A | **Pavement Subsummary** |  |  |  |  |
| 4.2.A.B | **Drainage Subsummary** |  |  |  |  |
| 4.2.A.C | **Roadway Subsummary** |  |  |  |  |
| 4.2.A.E | **Maintenance of Traffic Subsummary** |  |  |  |  |
| 4.2.A.F | **Pavement Marking Subsummary** |  |  |  |  |
| 4.2.A.G | **Signing Subsummary** |  |  |  |  |
| 4.2.A.K | **Lighting Subsummary** |  |  |  |  |
| 4.2.A.L | **Landscape Subsummary** |  |  |  |  |
| 4.2.A.M | **General Summary Sheet** |  |  |  |  |
| 4.2.A.P | **General Notes** |  |  |  |  |
| 4.2.A.Q | **Driveway Subsummary or Driveway Details (if included on same sheet)** |  |  |  |  |
| 4.2.A.R | **Lighting Notes** |  |  |  |  |
| **4.2.C** | **Signing Plans** |  | | | |
| 4.2.C.A | **Signing Plans** |  |  |  |  |
| **4.2.D** | **Miscellaneous** |  | | | |
| 4.2.D.B | **Prepare FAA Form 7460-1 for Airway/Highway Clearance** |  |  |  |  |
| 4.2.D.C | **Project Site Plan** |  |  |  |  |
| 4.2.D.G | **Title Sheet** |  |  |  |  |
| **4.3** | **Prepare Cost Estimates and Revise Milestone** |  | | | |
| 4.3.A | **Roadway/Interchange Costs** |  |  |  |  |
| 4.3.B | **Right of Way** |  |  |  |  |
| 4.3.D | **Utility Costs** |  |  |  |  |
| **4.4** | **Final Plan Package** |  | | | |
| 4.4.A | **Submission of Final Tracings and Documentation** |  |  |  |  |
| 4.4.B | **Utility 4(A) Note** |  |  |  |  |
| **4.5** | **Project Management for Final Engineering and Right of Way Phase** |  | | | |
| 4.5.A | **Meetings** |  |  |  |  |
| 4.5.B | **General Oversight** |  |  |  |  |
| **4.6** | **Pre-Bid Activities** |  | | | |
| 4.6.A | **Pre-Bid Questions** |  |  |  |  |
| **5** | **Construction Phase** |  | | | |
| **5.1** | **On-going services during Construction** |  | | | |
| 5.1.A | **On-going Services During Construction** |  |  |  |  |