

Delaware County Engineer's Office (DCEO) Scope of Services

C-R-S: DEL CR13-02.88

1. General Information

County: Delaware
PID#: 2513 (DCEO)

	No.	Scope of Services Meeting Date	Approved Final Scope of Services
Prime Agreement	0	TBD	

Worthington Road (CR 13)

			Unit	Measure
Functional Classification	Minor Arterial	From:		Highland Lakes Ave.
Design Functional Classification	Urban Minor Arterial	To:		TR 109
Posted Speed (MPH)	45	Project Length	MI	1.3
Design Speed (MPH)	45	Work Length	MI	1.3
		Lateral Limits	FT	Varies up to 75

2. PDP Phases Included in this Agreement: Phase PE through Phase FE Task Agreement between Consultant and: Delaware County Board of Commissioners

This scope approval includes development through Phase FE final tracings submittal.

3. Funding:

Preliminary engineering phase, right of way acquisition and construction will be 100% locally funded.

4. Project Location:

Worthington Road in Genoa Township, Delaware County, Ohio; extending from Highland Lakes Avenue to just south of Big Walnut Road.

5. Project Description:

Minor widening to 3 lanes from Highland Lakes Ave to ¼ mile south of Big Walnut Road.

6. Communication/Contacts:

The respective project managers (DCEO 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.

	Name	Phone	Email
DCEO Project Manager	Ryan Mraz	740-833-2425	rmraz@co.delaware.oh.us
Consultant	TBD		
Consultant Project Manager	TBD		
Consultant Staff	TBD		

7. Schedule

Completion Time for Phases	PE thru FE: 18 months

The following commitment dates are to be used by the Consultant in developing the project schedule:

Milestone	Current
Consultant NTP	1/1/2027
Stage 1 Submittal	8/1/2027
Stage 2 Submittal	2/1/2028
Preliminary R/W Submittal	2/1/2028
Final R/W Submittal	4/1/2028
Stage 3 Submittal	5/1/2028
Begin R/W Acquisition	7/1/2028
Final Plan Package	7/1/2028
End R/W Acquisition	8/1/2029
Award	2/1/2030
Estimated Begin Construction	6/1/2030
Estimated End Construction	7/1/2031

The Consultant will prepare a detailed Master Schedule Gantt Chart (from initial authorization of the agreement thru completion (final plan package) 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 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. 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 DCEO) 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 DCEOs 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 DCEO's personnel. These updates are typically provided with monthly invoicing and should be coordinated with the DCEO's Project Manager for an approved format and schedule.

8. Electronic Distribution of Design Information

The development of this project shall be performed in accordance with the "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/drcc/>) (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 DCEO 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 DCEO will respond in writing concerning the disposition of any such changes. The DCEO 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.

9. 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 DCEO'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 DCEO 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.

10. 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.

DCEO utilizes the framework of the ODOT PDP as the basis for developing projects; however, on locally funded projects, DCEO is not required to complete every step and may omit certain tasks when not required.

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.

11. On-Going Consultant Involvement during the Construction Phase

The Consultant shall provide construction phase services as requested by the DCEO, for the purpose of advising the DCEO concerning interpretations of the plans and specifications prepared by the consultant, advising the DCEO 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 DCEO:

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 DCEO 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 DCEO in evaluation of change orders or claims.
6. If directed by the DCEO, replace right of way monumentation destroyed by the Contractor's construction operations.

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 DCEO. 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 DCEO rules and regulations.

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

Responsibilities of the DCEO

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 DCEO 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 DCEO will direct the consultant to set the iron pin and cap in the Adjustable Monument Assembly Boxes at an appropriate stage of construction.

12. Exceptions/Clarification from Manuals

Delaware County Supplement to the ODOT Location and Design Manual, Bridge Design Manual, CADD Standards Manual, and Traffic Engineering Manual incorporated by reference

URL: <https://engineer.co.delaware.oh.us/drp/>

13. Existing Document (Provided to Selected Consultant After Selection Only)

Road Construction Plans

DEL-CR13-1.65 (Worthington Road Phase 2)

DEL-CR13-3.25 (Worthington and Freeman Road)

Worthington Road (DEL-CR13 for Hawk's Nest at Highland Lakes)

As-built construction plans for adjacent subdivisions

Subdivision plats (available on Delaware County Auditor's GIS)

Survey plats (available on Delaware County Auditor's GIS)

14. Attachments (Attached to the Scope of Services)

Scope Narrative

C-R-S: DEL CR 13-2.88

Scope Narrative

General Information:

County: Delaware County

PID#: 2513

Description: Minor widening to 3 lanes from Highland Lakes Ave to ¼ mile south of Big Walnut Road

Traffic Analysis:

No traffic analysis required.

Survey Parameters:

Due to the small linear distortion, this project may be designed on SPC Ohio North Zone using grid coordinates, or consultant may use Delaware, Ohio County Coordinate System (OCCS). It is preferred not to use a scaled ground coordinate system.

Cross Section:

Lane Width	12'
Treated Shoulder Width	2' paved (full depth)
Total Shoulder Width	8' (2' paved, 6' graded turf)
Curb Type:	Type 2 where used
Guardrail Type	Do not use guardrail
Foreslope	4:1
Backslope	4:1

Pavement:

Project is intended to be an overlay and widen project and to retain existing profile. Pavement buildup for full depth widening sections:

- 1 1/4" Item 441, Asphalt Concrete Surface Course, Type 1 (449), PG64-22
- Item 407 Non-tracking Tack Coat @ 0.04 gal/sy
- 1 3/4" Item 441, Asphalt Concrete Intermediate Course, Type 2 (449)
- Item 407 Non-tracking Tack Coat @ 0.075 gal/sy
- 9" Item 301, Asphalt Concrete Base
- 6" Item 304, Aggregate Base

Roadside:

Consultant shall give special consideration to right of way impacts of the roadside design – in particular, presence and depth of any ditches where none currently exist, and the slope and appropriateness of a ditch. Uniform use of curb

and gutter may not be appropriate due to existing flat roadway profile segments which would require full depth reconstruction of existing pavement.

Enclosed drainage using storm sewers and catch basins is expected in certain areas where roadside impacts may be costly. Do not exceed an open ditch depth of 3 feet measured vertically from the edge of pavement.

Existing leach fields are expected on the south side of Lewis Center Road. Consultant shall research Delaware General Health District records and delineate leach fields when located within 25 feet of construction limits.

Traffic Control:

Provide notes per the DCEO Design Resource Page and from sample plans provided by DCEO for sign sheet and sign support material types. Specify 5-inch pavement markings for centerlines and edge lines.

Maintenance of Traffic:

One-way traffic maintained northbound on Worthington Road is expected for this project.

Hydraulics:

Standards: Hydrologic and hydraulic analysis should be performed in accordance with ODOT L&D Volume 2.

Post-Construction Stormwater Quality: Perform BMP calculations and determine whether vegetated biofilters or vegetated filter strips in the open ditch segments will be sufficient to meet minimum treatment credit.

Conduit Material Type: Culvert and storm sewer material preference should be as per the DCEO Supplement to the ODOT L&D Manual.

Geotechnical:

Soil Borings and Geotechnical Investigation: Not required

Pavement Design: The Consultant shall use the pavement design specified above.

Environmental:

No jurisdictional wetland or stream impacts are anticipated. No federal funding is used on this project and no federal action is anticipated therefore no US ACE involvement is expected.

Ensure the requirements of the Ohio EPA Construction General Permit are met regarding post-construction water quality treatment.

Utilities:

Provide SUE as required for underground utilities in the construction limits. Provide fee as if-authorized encumbrance in the contract to be determined during AER design.

Public Involvement:

Consultant shall prepare electronic versions of project maps showing proposed work limits and shaded right of way limits in PDF or image format. DCEO anticipates direct mailing to affected property owners and a project information web page hosted on the DCEO website.

Right of Way Design:

Consultant shall specify WD right of way for parcels to be acquired in the name of the Delaware County Board of Commissioners where appropriate. TMP parcels for a duration of 24 months shall be used to minimize the extent of permanent ROW where tie-in grading is required and no significant change to the grading of such areas results from the project.