C-R-S: DEL CR91 0.54
Berlin Station Road, Phase 3

Scope Narrative

General:

County: Delaware County
PID#: 1809
Description: The Consultant's services include preparation of final construction and right of way plans for widening of Berlin Station Road to a uniform 2-lane section from CSX Railroad Delaware spur to CSX Railroad.
Project Length: 0.86 miles

Traffic Analysis:

No traffic analysis is required for this project.

Design Designation:

Current ADT (2024)	3000
Design Year ADT (2049)	4500
DHV (2049)	450
Directional Distribution	56%
Trucks (24 Hour B&C)	4%
Design Speed:	45 mph
Legal Speed	5 mph
Current Functional Classification	Urban Major Collector
Design Functional Classification	Urban Major Collector

Design Exceptions:

None

Survey Parameters:

Survey and base mapping should use the Ohio County Coordinate System (OCCS) or, at the surveyor's option, the project may be base mapped and designed on state plane coordinates to simplify coordination with adjacent site plans which would be designed on grid coordinates. Based on NGS monuments located within 2 miles of the project limits, estimated difference in grid to ground measurements is less than 20 parts per million resulting in an absolute difference of less than 0.10 feet from extreme ends of project limits.

Plan Sheets:

The following plan sheets are anticipated:

- Title Sheet (1)

- Schematic Plan (1)
- Typical Sections (2)
- General Notes (3)
- Maintenance of Traffic Notes (2)
- MOT Details (8)
- Detour Plan (1)
- General Summary (2)
- Estimated Quantities (3)
- Stormwater Pollution Prevention Plan (4)
- Plan and Profile (10)
- Cross Sections at 50’ Intervals Plus Driveway Profiles (30-36)
- Storm Sewer Profiles (4)
- Driveway Subsummary (1)
- Driveway Details (1)
- Right of Way Legend Sheet (1)
- Summary of Additional ROW (3)
- ROW Topo Sheets (10)
- ROW Boundary Sheets (10)

Note:
1. Centerline plat optional at the surveyor’s discretion, but is not required. Centerline may be described on right of way detail sheets.

Cross Section Design:

Lane Width	11’
Treated Shoulder Width	2’ Paved (full depth)
Total Shoulder Width	8’ (2’ treated, 6’ graded turf)
Curb Type:	Type 2 Combined, if needed
Guardrail Type	Do Not Use Guardrail
Maximum Foreslope	4:1
Maximum Backslope	4:1

Pavement Design:

Pavement Buildup:
- 1 ¼” Item 441, Asphalt Concrete Surface Course, Type 1 (449), PG64-22
- Item 407 Tack Coat for Intermediate Course @ 0.04 gal/sy
- 1 ¾” Item 441, Asphalt Concrete Intermediate Course, Type 2 (449), PG64-22
- Item 407 Tack Coat @ 0.075 gal/sy
- 6” Item 301, Asphalt Concrete Base
- 6” Item 304, Aggregate Base
- Item 206, Cement Stabilized Subgrade

Roadside Design:

Consultant shall consider use of enclosed ditches (storm sewer and catch basins) to minimize the ROW limits and lessen the depth of roadside ditches. Do not exceed an open ditch depth of 3 feet measured vertically from the edge of pavement, especially along frontage of residential homes.

Existing leach fields are expected within the areas of proposed roadside work. Consultant shall research Delaware General Health District records and delineate leach fields.

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:

DCEO anticipated the preferred MOT method for Berlin Station Road is a minimum of one lane of one-way traffic for the duration of the project. Traffic will be shifted between the existing pavement and newly completed pavement. Direction of traffic is to be determined. Ingress and egress from work zone properties shall be maintained with traffic compacted surface through the proposed roadway. A detour plan for detoured traffic will be required.

Hydraulics Requirements:

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

Conduit Material Type: Culvert and storm sewer material preference should be as per the DCEO Supplement 1203 to the ODOT L&D Manual

BMP Type: Vegetated Filter Strips are anticipated to be the most feasible BMP for the project.

There is an existing box culvert located approximately 700’ east of the CSX Delaware spur that was reconstructed by DCEO in 2021. No additional work on this culvert is anticipated with this project.

Geotechnical Engineering:

Subsurface Investigation: DCEO will perform soil borings and geotechnical engineering by separate consultant contract and provide design data to the Consultant as required.

Pavement Design: The Consultant shall use the pavement design specified in the Conceptual Plan. DCEO has good experience with and prefers cement stabilization for roadway reconstruction and widening areas. The subsurface investigation report will verify use of cement stabilization is appropriate for soils in the project limits.

Environmental:

No jurisdictional wetland or stream impacts are anticipated. DCEO may direct the consultant to provide an encumbrance of funds in the fee proposal for if-authorized environmental studies.

Waterway Permitting:

No permitting is anticipated for this project.

Utilities:

Consultant shall coordinate and obtain location of existing utilities through OUPS or contacting the utility owner(s) directly. DCEO will coordinate with utility companies regarding relocation plans and project timing.

Public Involvement:

Consultant shall prepare electronic versions of project maps showing proposed work limits and shaded right of way limits and proposed improvements in PDF or image format. DCEO anticipates direct mailing to affected property owners and a project information web page hosted on the DCEO website. A public meeting is not anticipated; however, the Consultant shall provide a separate if-authorized fee for preparation and attendance.

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.

Railroad Coordination:

No coordination with CSX Railroad is anticipated. Improvements should be designed to avoid all disturbances or encroachment into the railroad right-of-way.