**FY25 – Pavement Scope of Services**

Project Name: DEL US 36 7.25 PID: 111608

County : DEL Route: 36 Section: 7.25-10.42

 DEL 521 0.00-0.18

1. **PROJECT IDENTIFICATION:**

DEL-36-7.25 – 10.42 Functional Classification: 04 Minor Arterial (Urban)

DEL-521-00.00 – 0.18 Functional Classification: 04 Minor Arterial (Urban)

1. **PURPOSE AND NEED:**

DEL-36 was last *maintained* in 2012 and DEL-521 was last *maintained* in 2009. This route is currently displaying deteriorations including raveling, edge cracking, rutting, wheel track cracking, and longitudinal cracking. Resurfacing and repairs are needed on this route to ensure pavement integrity and to provide the traveling public with safe driving surfaces.

DEL-36

2022 PCR: 73 to 83

2022 Structural Deduct: 3.04 to 10.10

DEL-521

2022 PCR: 86

2022 Structural Deduct: 4.8

1. **PROJECT INITIATION PACKAGE:**  Yes [x]  No [ ]

Site visit conducted 5/18/23 with *Grace Dennis, Dave Poling, Jon Roseler*.

Scope meeting conducted on 6/29/23 with *Grace Dennis, Dave Poling, Dave Rankin, Troy Bryant, Brad Ruble, V Patel, Jason Lucas, Wade Dennis, Dave Carlin, Marci Lininger, Amy Turner, Jon Adams, Jeff Hipp, Zane Diehl, Jonathan Owen, John Roseler.*

All noted red flags from field visits contained within scope.

1. **PROJECT LIMITS:**

From: DEL-36-7.27 (at existing pavement break/at end of PID 109070)

Suspend: TBD for Columbia Gas Project

Resume: TBD fpr Columbia Gas Project

Suspend: DEL-36-10.40 (at start of concrete pavement)

Resume: DEL-36-10.49 (at end of concrete pavement)

To: DEL-36-10.60 (at existing pavement break/begin limits of PID 95625)

Project Length: 3.175 centerline miles

Work Length: 3.175 centerline miles

From: DEL-521-0.00 (US 36)

To: DEL-521-0.18 (SR 37)

Project Length: 0.18 centerline miles

Work Length: 0.18 centerline miles

Total Project Length: 3.355 centerline miles

Total work Length: 3.355 centerline miles

The following sections are inside a City:

The *City of Delaware*: DEL-36-7.25-8.816, 8.854-8.865 & 9.02-10.425

 DEL-521-0.00-0.18

1. **PRIOR STUDIES/PLAN (IDENTIFY):**

2012 DEL-36-7.28 1.50” Item 442 Surface Course

2009 DEL-521-0.00 1.50” Item 448 Surface Course

1. **TYPE OF ACCESS:** Limited [ ]  Controlled [ ]  Non-Controlled [x]
2. **NHS ROUTE:** Yes [x]  No [x]

DEL-36 just East of US-23

1. **FEDERAL TRUCK ROUTE (FAP):** Yes [x]  No [x]

 DEL-36

1. **RWIS Sensor:** Yes [ ]  No [ ]
2. **ATR** (Ed Newmeyer): Yes [ ]  No [x]  Possible [ ]  (To Be Determined)
3. **GENERAL DESCRIPTION OF WORK:**

TBD yd2 Item 251-Partial Depth Pavement Repair (Asphalt Concrete Base), As Per Plan:

 Repair areas shall be determined by the project engineer before the beginning of work.

Repairs shall consist of removing X” of pavement and placing X” of Item 301 – Asphalt Concrete Base, PG64-22. Work shall be performed prior to resurfacing and repair areas are to be included into general resurfacing. To Be Determined with Pavement Engineer/County Manager during detailed field review.

*Designer Note:*

* *Large ruts on SR-521 SB in right lane & right wheel path on the North and south side of the intersection with Winter Street*

General Work to be performed on DEL-36 & DEL-521

1 ½” Item 254 – Pavement Planing, Asphalt Concrete

1 ½” Item 442 – Asphalt Concrete Surface Course, 12.5mm, Type A (446)

Item 407 – Non-Tracking Tack Coat

Item 617 – Compacted Shoulder Aggregate (average 2” deep and 1’ wide) – non-curbed sections

 Item 209 – Linear Grading – non-curbed sections

Notes:

(1). Butt joints begin/end of project, at milling limits, and bridges not being paved over. Not intended to include butt joints at paved driveways.

(2) Item 611 - Manhole Adjusted to Grade (4 each)

(3). Item 638 – Valve Box Adjusted to Grade (4 each)

(4). Existing Plans, Copy of Destape, and SLD’s have been placed in following location in project folder:

 Scopes

1. **ALIGNMENT:** New [ ]  Existing [x]  Combination [ ]  Journalized Alignment [ ]
2. **PROFILE:** New [ ]  Combination [ ]  Salvage [x]
3. **SCHEMATIC PLAN**: Yes [x]  No [ ]

At minimum, provide location map that shows overview of project (corp limits, suspend/resume, guardrail/bridge/culvert work, other miscellaneous work). Plan sheets are required since this project is within the City of Delaware.

1. **TYPICAL SECTION:** Yes [x]  No [ ]
2. **REST AREAS:** Yes [ ]  No [x]
3. **INTERCHANGES:** Yes [ ]  No [x]
4. **SERVICE ROADS:** Yes [ ]  No [x]
5. **SIDE ROADS:** Yes [x]  No [ ]

Pavement at all approaches should extend back to the right of way limits, with a minimum distance of 20' beyond the edgeline with the following exceptions:

* US-36:
	+ Springer Woods Boulevard/Lehner Woods Boulevard:
		- Spring Woods: pave back past loops if updated to radar or pave straight through (match pavement break)
		- Lehner Woods: pave back past loops if updated to radar or pave straight through (match pave break)
	+ Grand Circuit Boulevard/Lansdale Drive:
		- Grand Circuit Boulevard: pave back past loops if updated to radar or pave straight through (match pavement break)
		- Lansdale Drive: match pavement break – behind stop bar
	+ Houk Road:
		- North side: pave in line with shoulder
		- South side: pave back just behind crosswalk
	+ Acme Road:
		- Match pavement break (~2’ off EOP)
	+ Carson Farms Boulevard/Valleyside Drive:
		- Carson Farms: pave back to pavement break near island
		- Valleyside: match pavement break
	+ Rockcreek Drive:
		- Pave back to stop bar
	+ New Market Drive:
		- Pave back to stop bar
	+ Delaware Crossing East/Applegate Lane:
		- Delaware Crossing East: Match pavement break – in line with EOP
		- Applegate Lane: Pave back about 10’ from existing pavement joint
	+ Penick Avenue:
		- Pave back to stop bar
	+ Curtis Street:
		- Pave back to stop bar
	+ Perkins Street:
		- Pave back to stop bar
	+ Gruber Street:
		- Pave back to stop bar
	+ Toledo Street:
		- Pave back to stop bar
	+ Columbus Avenue: pave back to stop bar
	+ Montrose Avenue: pave back to stop bar
	+ King Avenue: pave back to behind cross walk (no stop bar present)
	+ Elizabeth Street:
		- Match pavement break – in line with curb
	+ Catherine Street: pave back to stop bar
	+ Liberty Street:
		- North side: match pavement break – in line with curb
		- South side: match pavement break - ~2’ off curb
	+ Washington Street:
		- North side: pave to just in front of crosswalk
		- South side: pave back to just in front of stop bar
	+ Franklin Street:
		- North side: pave in line with curb
		- South side: pave in line with curb
	+ Sandusky Street:
		- North side: paving with a part of this project
		- South side: pave back between stop bar and crosswalk
	+ Union Street:
		- North side: pave in line with curb
		- South side: pave in line with curb
	+ Henry Street:
		- North side: pave in line with curb
		- South side: pave in line with curb
	+ US-36/US-23 SB Ramp: pave to ramp bridge
	+ River St: pave back to just in front of stop bar
	+ Little St: pave back to just in front of stop bar
	+ Lewis St: pave back to just in front of stop bar
* SR-521:
	+ SR-37: just pave to South side of intersection – intersection was last paved in 2020
	+ Winter Street:
		- West side: pave just in front of crosswalk
		- East side: pave just in front of crosswalk
1. **DRIVEWAYS:** Yes [ ]  No [x]
2. **MAILBOX APPROACHES:** Yes [ ]  No [x]
3. **DESIGN SPEED:** DEL-36: 55, 45, 35, 25 mph

DEL-521: 25 mph

1. **TRAFFIC DATA:**

|   | **OPENING DAY** **(2025)** | **DESIGN YEAR** **(2037)** |
| --- | --- | --- |
|   | ADT | ADTT | ADT | ADTT |
| DEL-36-7.25-10.144 | 14,000 | 1,120 | 16,500 | 1,320 |
| DEL-36-10.144-10.373 | 18,500 | 555 | 21,500 | 645 |
| DEL-36-10.373-10.425 | 20,000 | 1,200 | 22,500 | 1,350 |
| DEL-521-0.00-0.18 | 9,100 | 273 | 9,400 | 282 |

1. **Crash Analysis:** Yes [x]  No [ ]  Possible [ ]  (To Be Determined)

This project does require a crash analysis. An email requesting the crash analysis was sent on 5/25/23 to the D6 Safety Team, and a response was requested by 6/29/23. Any recommendations based on the results of the crash analysis have been added to the scope. A copy of the crash analysis has been placed within the following folder: [Q:\Safety Studies\Crash Analysis Documents](file:///%5C%5C%5C%5Cdotd06file01.dot.state.oh.us%5C%5Ctech%5C%5CSafety%20Studies%5C%5CCrash%20Analysis%20Documents)

1. **ADDITIONAL SAFETY IMPROVEMENTS:** Yes [ ]  No [x]  Possible [ ]  (To Be Determined)

The City is developing a safety action plan that is to be adopted at the end of 2023.

District 6 does not recommend any other safety countermeasures at this time.

1. **COMPLETE STREETS CONSIDERATION:** Yes [ ]  No [x]

 The City will review curb ramps in summer 2023 and include in annual citywide construction contract in 2024.

1. **ITS** (Paul Beck):Yes [ ]  No [x]
2. **RUMBLE STRIPS/RUMBLE STRIPES:** Yes [ ]  No [x]  Possible [ ]  (To Be Determined)
3. **TSMO** (Greg Channel): Yes [ ]  No [x]
4. **LIGHTING:** Yes [ ]  No [x]
5. **SIGNING:** Yes [ ]  No [x]
6. **SIGNALS:** Yes [ ]  No [x]
7. **PAVEMENT MARKING:** Yes [x]  No [ ]

Item 644 – Thermoplastic Pavement Marking

Item 646 – Epoxy Pavement Marking (for all concrete bridge decks)

All center lines shall be 4”. All edge lines and lane lines shall be 4”.

All channelizing lines shall be 8”.

School markings in the following locations:

* SLM 10.262 EB lane
* SLM 10.392 WB lane

Railroad markings at the following locations:

* SLM 9.315 EB lane
* SLM 9.455 WB lane

Include stop bars at the following locations:

* 36:
	+ Springer Woods/Lehner Woods
	+ Grand Circuit Boulevard/Lansdale Boulevard

Include crosswalk at the following locations

* 36:
	+ Springer Woods/Lehner Woods
	+ Grand Circuit Boulevard/Lansdale Boulevard
	+ Perkins
	+ Columbus
	+ Montrose
	+ King
	+ Catherine
	+ South Washington (South side)
	+ Sandusky

Use traditional ladder striping (Type 1) crosswalk at non-critical intersections (Refer to ODOT SCD TC-74.10 Standard Crosswalk Details using 12” markings)

Use City of Columbus SCD 1648 Type 2 Crosswalk at critical intersections; critical intersections include crossing of state routes, crossing of city arterials at non-controlled intersections where posted speed is 35moh or greater, downtown business district, adjacent to schools, mid-block ped crossings.

- Multi-use path crossing of US-36 at Springer Woods Boulevard

- Houk Road crossing of US-36

- King Avenue crossing of US-36

- Liberty Street

- Washington Street

- Franklin Street

- Sandusky Street

- Union Street

- Henry Street

- SB US-23 on Ramp

- NB US-23 off Ramp



1. **DELINEATION:**

Barrier Reflectors: Yes [x]  No [ ]

Delineators: Yes [ ]  No [x]

Raised Pavement Markers: Yes [x]  No [ ]

\*US-36: Include reinstallation of RPM’s from western project limit to New Market Drive.

1. **GUARDRAIL:** Yes [ ]  No [x]

See guardrail scope of work – include replacement of guardrail within the project limits.

1. **DRAINAGE/CULVERTS:** Yes [ ]  No [x]
2. **BRIDGES** (Tim Peddicord):Yes [x]  No [ ]

DEL-36-10.43 over Olentangy River: Replace 12” Pressure Relief Joint, Type C at far ends of approach slabs. Between approach slab and bridge deck, use 519 patching to square up the joint, re-saw, and fill joint with hot-applied joint sealer (this joint was previously filled with a compression seal).

1. **INVESTIGATE PREFABRICATED STRUCTURE:** Yes [ ]  No [x]
2. **SUBSURFACE INVESTIGATION:** Yes [ ]  No [x]
3. **RETAINING WALLS:** Yes [ ]  No [x]
4. **NOISE WALL:** Yes [ ]  No [x]
5. **MAINTENANCE OF TRAFFIC:** Yes [x]  No [ ]

Lane closure hour restrictions, *details*. Lane closures anticipated to be *details*. Final coordination with MOT Engineer.

Add a note to the plan that requires the contractor to obtain all applicable R/W use permits prior to installation of MOT detour signing.

The following note shall be included in this project:



Include coordination between adjacent projects notes.

Special Events – City of Delaware to provide finalized list of special events

***DELAWARE COUNTY FAIR*** *– LANE OR SHOULDER CLOSURES ARE NOT PERMITTED DURING THE DELAWARE COUNTY FAIR 6AM-10PM DAILY ON THE FOLLOWING ROUTES:*

*US 36 BETWEEN SR 257 AND I-71*

Within City limits – no lane closures 6A-9A or 3P-6P.

1. **MAINTENANCE OF PEDESTRIAN TRAFFIC:**  Yes [ ]  No [x]
2. **BIKEWAYS:** Yes [ ]  No [x]
3. **MASS TRANSPORTATION:** Yes [ ]  No [x]  Possible [ ]  (To Be Determined)
4. **RAILROADS:** Yes [x]  No [ ]

Designer to coordinate with CSX Railroad for crossings at DEL-36 SLM 9.368. **Agreement will be required.** Initial coordination should begin immediately and be sent out with “Begin In-House Design” submittal.

1. **MAINTENANCE OF RAILROAD TRAFFIC:** Yes [x]  No [ ]

Designer to coordinate with CSX Railroad for crossings at DEL-36 SLM 9.368. Agreement will be required. Initial coordination should begin immediately and be sent out with “Begin In-House Design” submittal.

1. **AERIAL PHOTOGRAPHY AND/OR MAPPING:** Yes [ ]  No [x]
2. **FIELD SURVEYS:** Yes [ ]  No [x]
3. **R/W ACQUISITION ANTICIPATED:** Yes [ ]  No [x]
4. **R/W ENCROACHMENT:** Yes [ ]  No [ ]  Possible [x]  (To Be Determined)

The City of Delaware will do a review of the project limits and determine if there are any existing RW Encroachments. Please provide all information to D6 ROW office by no later than xx/xx/xxxx.

* 1. If there are no RW encroachments, the City will provide that information, in writing to Tammy Boring 2 months prior to the RW Certification date (to be determined as the project schedule develops)
	2. If there are RW encroachments, Tammy Boring will need a list of those encroachments and if they are being permitted, removed by the property owner or being removed by the project. This list and disposition of how encroachments will be handled, needs to be provided 2 months prior to the RW Certification date (to be determined as the project schedule develops).
1. **UTILITY IMPACTS ANTICIPATED:** Yes [ ]  No [x]
2. No utility impact anticipated on this project due to the scope of the work in relation to the proximity to the existing utilities within the construction limits of the project.
3. All aerial crossings of utilities will need to be taken into consideration because they will remain during project.
4. If any depth of pavement changes, take underground utilities into consideration at the impacted station locations if applicable.
5. All guardrail replacements must be placed in the same location or it is the expectation of the contractor to place the guardrail in locations that do not cause conflicts with underground utilities.

*Designer Note – Please add the following plan note –*

***UTILITIES:***

THE ODOT CONTRACTOR IS REQUIRED TO CONTACT OHIO811 A MINIMUM OF 48 HOURS EXCLUDING WEEKENDS AND HOLIDAYS TO PERMIT ALL UNDERGROUND UTILITIES AN OPPORTUNITY TO MARK THEIR LINES. IT IS ALSO THE ODOT CONTRACTOR’S RESPONSIBILITY TO CONTACT ALL NON-MEMBERS OF OHIO811. DIRECTLY A MINIMUM OF 48 HOURS’ NOTICE EXCLUDING WEEKENDS AND HOLIDAYS TO PROVIDE THEM WITH THE SAME OPPORTUNITY.

IT IS ODOT’S EXPECTATION THAT ALL GUARD RAIL POSTS WILL BE INSTALLED IN THE SAME LOCATIONS AND THERE WILL BE NO DISRUPTION TO UNDERGROUND UTILITIES. IF THERE IS A UTILITY MARKING WITHIN THE TOLERANCE ZONE OF A UTILITY LOCATE FROM THE PROPOSED GUARDRAIL PLACEMENT IT IS THE ODOT CONTRACTORS RESPONSIBILITY TO DIRECTLY CONTACT THE IMPACTED UTILITY AND WORK WITH THEM TO FIND A SOLUTION THAT DOES NOT CHANGE THE GUARDRAIL PLACEMENT OR DAMAGE THE EXISTING UTILITY. NO UTILITY RELOCATION WILL BE REIMBURSED NOR WILL DELAY CLAIMS BE PERMISSIBLE BASED ON A LACK OF COORDINATION BETWEEN THE ODOT CONTRACTOR AND THE IMPACTED UTILITY.

1. **ENVIRONMENTAL DOCUMENT TYPE ANTICIPATED:**

 C1 [x]

 C2 [ ]

 D1 [ ]

 D2 [ ]

 D3 [ ]

 Other Higher Level Document [ ]

1. **PROJECT LIMITS WITHIN FLOODPLAIN:** Yes [x]  No [ ]

Possible small encroachment on US-36. The current environmental document level, C1, requires no further coordination.

See Floodplain Maps located at:

 [Q:\Bridge\Bridge Maps\Floodplain](../../../Bridge/Bridge%20Maps/Floodplain)

Shortcut of map also copied into project folder:

 Delaware.pdf

1. **ENVIRONMENTAL ISSUES ANTICIPATED:**
2. **FENCING:** Yes [ ]  No [x]
3. **LEGISLATION:** Yes [x]  No [ ]

*Participatory legislation will be required for this project. ODOT’s funds are capped on this project at $85k/LM, the City of Delaware funding contribution is currently estimated at ~$375.5k for the surface related items. Any full depth pavement repairs, special striping, curb ramps, signal upgrades, etc., will be funding 100% by the City of Delaware and are not currently estimated at this time.*

1. **OTHER WORK NOT DESCRIBED ABOVE:** Yes [ ]  No [x]
2. **DELIVERABLES REQUIRED (but not limited to):**
* Prelim Coordination Plan (Env and R/R)
* Stage 3 Plan for Review
* Final Plan Package

All Project Development to follow the current version of the ODOT Plan Development Process and applicable Design Manuals.

**BRIDGE SCOPE OF WORK**

* **DEL-36-9.838, SFN 2100851, over Delaware Run – 16’ long culvert –** pave over with same treatment as roadway

**GUARDRAIL SCOPE OF WORK**