



**To:** Members of Dublin City Council

**From:** Dana L. McDaniel, City Manager

**Date:** May 4, 2021

**Initiated By:** Megan D. O'Callaghan, P.E., Deputy City Manager/Chief Finance and Development Officer

Paul A. Hammersmith, P.E., Director of Engineering/City Engineer

Jean-Ellen Willis, P.E., Deputy Director of Transportation & Mobility

Shawn Krawetzki, PLA, ASLA, Landscape Architect Manager

**Re: US 33 – SR 161 – Post Road Interchange Landscaping and Aesthetics**

## Background

The City of Dublin is working cooperatively with project partners at the Ohio Department of Transportation (ODOT) and Union County to improve the interchange at US 33 – SR 161 – Post Road. The project was developed in the early 2000's with the original interchange modification study approved in 2001. Detailed design was developed from 2005 through 2008, and then the design project was put on hold. Meanwhile, phases of the design surrounding the central interchange were constructed, including the Liggett Road relocation in 2008; widening SR 161, realigning and improving the intersection of Industrial Parkway in 2010; and constructing the Eiterman Road roundabout in 2015. The central interchange project was recently revived in 2019 through cooperation of the project partners to complete a full funding package.

The current project schedule requires the final plan package to be submitted to ODOT in early October 2021. The detailed design, environmental updates, and right-of-way acquisition are on schedule to be completed in 2021. The project is anticipated to bid in February 2022 with an award in mid-March 2022 and construction to start in May 2022.

Approximately 65,000 vehicles use the US 33 – SR 161 – Post Road interchange to access the Industrial Parkway area and Dublin's West Innovation and Perimeter Commerce Business Districts each day. About 7,600 trucks per day travel the US 33 corridor with freight from major Ohio companies, including Scotts, Honda, and FedEx using Industrial Parkway and SR 161 to access US 33. This is a critical rural freight corridor on ODOT's Statewide Freight System.

Two new loop ramps will eliminate existing left turn conflicts to enter the US 33 ramps. A multi-lane roundabout and an expanded traffic signal at the ramp terminals, at the west and east terminals, respectively, will keep vehicles moving efficiently. The design also includes landscaping and a shared-use path on the south side of SR 161, as shown in Figure 1. Fiber connectivity will support the testing of connected and autonomous vehicle operations, and other technology initiatives in the corridor.

## Summary

The proposed overall landscape plan for the interchange creates a low maintenance / semi-annual mowed grassland aesthetic similar to the Muirfield Drive medians just south of the roundabout at Brand Road. Additionally, some accent landscape beds were placed nearer to the travel lanes to provide seasonal interest. Moving upward, trees are arranged in a hierarchy of arcs and rows that ties the landscape to the Ohio University Campus' very distinct architectural rows of trees, celebrating the West Innovation District. These are illustrated in Figures 1 and 2, as coordinated by the City's Landscape Architect. The design provides a diversity of plant materials and create a balance between trees, evergreens, woody shrubs, various large grasses, and ground covers that provide color variety and balance in landscape textures throughout the seasons. Hardscape elements are also included in the landscape plan, with curved bands of cobblestone pavers. These bands will also function as drainage swales for the project within the loop ramps on the northwest and southeast quadrants.

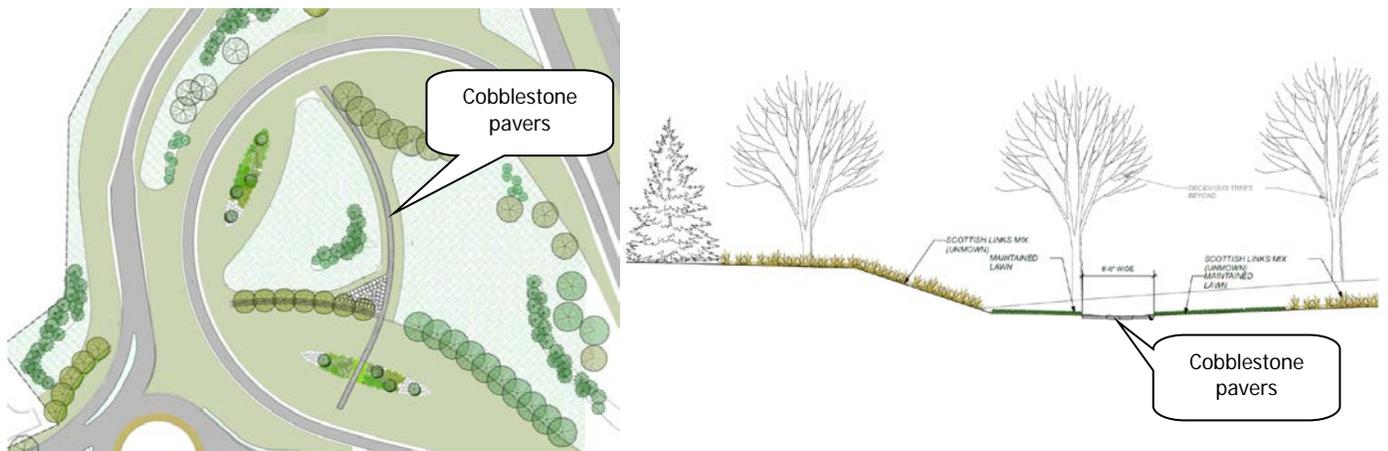


Figure 2. Landscape Details

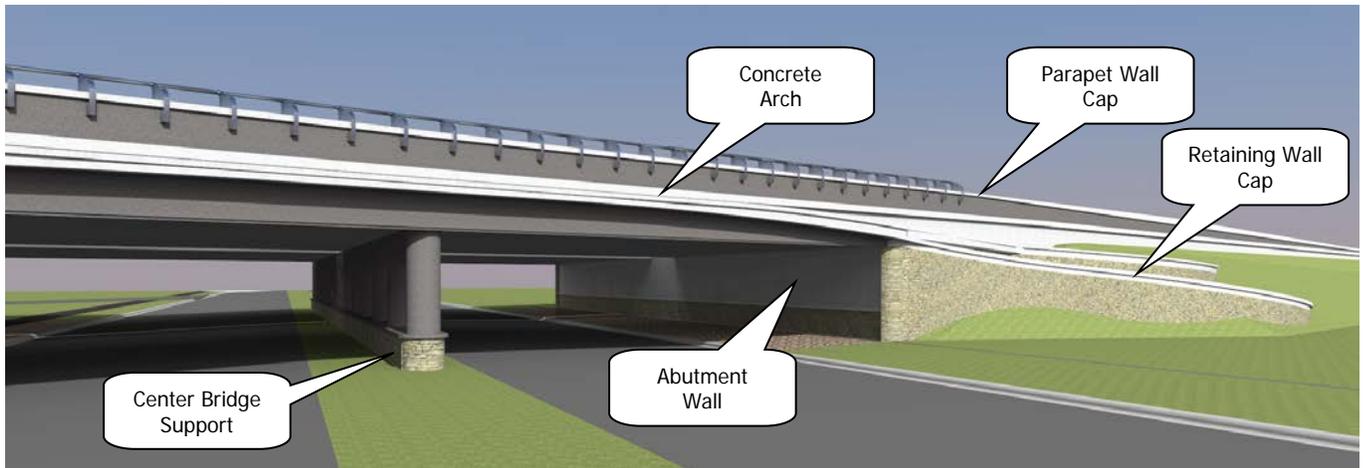
Dublin's standard shared-use path and street lighting will be incorporated along SR 161/Post Road. Lighting will also be provided under the bridge for the path and travel way. The corridor character will be similar to the Emerald Parkway, Perimeter Drive, and Woerner-Temple Road corridors.

Through the design process, the project partners evaluated several aesthetic options for the project, with a focus on the US 33 bridges over SR 161. The design represents the rural character of Union County connected with the medical and technology fields in Dublin, and also reflects the traditional Dublin bridge aesthetics. The mix of traditional and modern elements marry these themes in the surrounding area, including the 33 Smart Mobility Corridor, 33 Innovation Park, West Innovation District,

agriculture, neighborhoods, universities, and the transition between Dublin and Union County. The project partners selected the concept shown in Figures 3 and 4, as the best representation of these themes through design, colors, and textures.



*Figure 3. US 33 over SR 161 Bridge Rendering – Elevation View*



*Figure 4. US 33 over SR 161 Bridge Rendering – Oblique View*

A decorative rail is included on the bridge, along with concrete bands to highlight the arch. The white bands visually extend to the caps of the retaining walls on both sides of the bridge, creating levels to step down to the surrounding elevation. The parapet wall cap and upper abutment wall are also white to match the concrete arch and retaining wall caps, as shown in Figure 4. The retaining walls will support planting beds between the levels, and will be clad in real stone. Stone accents will also be applied to the base of the center bridge supports and abutment walls located beneath the bridge deck. The remaining concrete for the center supports and between the railing and highlighted bands will be dark gray to match the painted steel beam, further accentuating the arch. The stone elements and arch complement other key bridges in Dublin, including the Avery-Muirfield Drive and Emerald Parkway bridges over US 33.

Union County is cooperatively engaged in the overall project and the aesthetic treatments. Staff will continue coordinating with the project partners to include these aesthetic elements into the US 33 – SR 161 – Post Road interchange improvement.

### **Recommendation**

This aesthetic information for the US 33 – SR 161 – Post Road interchange is provided for information only. Staff recommends City Council refer this matter to the Public Services Committee for review and discussion about the plantings and hardscape elements of the interchange landscaping package.