



**CITY COUNCIL MEETING
STAFF REPORT**

Meeting Date: December 19, 2022		Subject: Canyon Creek / Boeckman Intersection Design Update	
		Staff Member: Andrew Barrett, P.E. Capital Projects Manager and Zach Weigel, P.E., City Engineer	
		Department: Community Development	
Action Required		Advisory Board/Commission Recommendation	
<input type="checkbox"/> Motion <input type="checkbox"/> Public Hearing Date: <input type="checkbox"/> Ordinance 1 st Reading Date: <input type="checkbox"/> Ordinance 2 nd Reading Date: <input type="checkbox"/> Resolution <input checked="" type="checkbox"/> Information or Direction <input type="checkbox"/> Information Only <input type="checkbox"/> Council Direction <input type="checkbox"/> Consent Agenda		<input type="checkbox"/> Approval <input type="checkbox"/> Denial <input type="checkbox"/> None Forwarded <input checked="" type="checkbox"/> Not Applicable Comments: N/A	
Staff Recommendation: N/A			
Recommended Language for Motion: N/A			
Project / Issue Relates To:			
<input checked="" type="checkbox"/> Council Goals/Priorities: Goal 1.5. Implement existing transportation plans and advance planning efforts to improve our local transportation network.	<input checked="" type="checkbox"/> Adopted Master Plan(s): Transportation System Plan Project UU-01	<input type="checkbox"/> Not Applicable	

ISSUE BEFORE COUNCIL:

The project team will share the results from the Canyon Creek Road / Boeckman Road intersection analysis (Intersection Control Evaluation), roundabout conceptual design and cost estimates for City Council feedback.

EXECUTIVE SUMMARY:

The Canyon Creek/Boeckman Intersection Improvements project (CIP 4206) is one of the five high priority capital improvement projects that make up the Boeckman Road Corridor Project (BRCP). The other BRCP projects include roadway, sewer, and storm drainage improvements along Boeckman Road between Canyon Creek Road and Stafford Road. The existing Canyon Creek/Boeckman intersection consists of an all-way stop control and is projected to exceed Wilsonville's Level of Service (LOS) standards in the near future, leading to unacceptable vehicle delay. The BRCP includes intersection improvements through a traffic signal or roundabout at this location to increase vehicle capacity and meet LOS standards.

On June 6, 2022, City Council approved Resolution No. 2976, entering into a Progressive Design Build (PDB) Agreement with Tapani | Sundt A Joint Venture for design and construction of the BRCP. Included as part of the preliminary work under the PDB Agreement is performance of an Intersection Control Evaluation (ICE) for the Canyon Creek/Boeckman intersection, assessing both traffic signal and roundabout design options. Now that the BRCP preliminary design work is underway, the Canyon Creek/Boeckman ICE (**Attachment A**) is complete and results summarized as follows:

- **Traffic Operations** – Roundabout has the same overall Level of Service as a signalized intersection, but has less overall delay than a Traffic Signal.
- **Traffic Queues**- Traffic Signal results in longer traffic queues than a Roundabout.
- **Safety** – Traffic Signal is projected to result in more total crashes and more than double fatal and injury crashes than a Roundabout.
- **Constructability** – Roundabout will take longer to construct than a Traffic Signal. However, intersection traffic can be accommodated during construction for both designs.
- **Property Impacts** – Roundabout will require more right-of-way and result in more landscaping and parking impacts to adjacent properties than a Traffic Signal. No major structural impacts are anticipated and all impacts can be appropriately mitigated with both designs.
- **Estimated Cost** – Roundabout (\$2.96 M) estimated construction cost is \$1.15 million more than a Traffic Signal (\$1.81 M). The life cycle cost of the Roundabout results in less long term expense of approximately \$0.5 million than the Traffic Signal.
- **Placemaking** – Roundabout provides an opportunity for enhanced aesthetic and landscaping opportunities, as well as establishment of a gateway for the new bridge and road to the east.

Based on the results of the ICE, the project team has determined that a roundabout for the Canyon Creek/Boeckman Road Intersection is the preferred design treatment based on improved traffic operations, significant safety benefits, and ability to mitigate private property impacts. Because the roundabout will increase the BRCP construction costs, the project team seeks City Council feedback prior to proceed with design work.

EXPECTED RESULTS:

Upon City Council feedback, the design team will proceed with design of the Canyon Creek/Boeckman Intersection Improvements, allowing the BRCP to remain on schedule and be completed by the end of 2024. The BRCP as a whole, will make needed safety improvements to Boeckman Road by correcting a vertical curve deficiency and upgrading the steep, narrow, rural roadway to an urban standard with safe bicycle and pedestrian facilities that connect residential neighborhoods, jobs, schools, and commercial land uses.

TIMELINE:

Construction of the Canyon Creek/Boeckman Intersection improvements is anticipated to begin in the first quarter of 2024 and be completed by the end of that year.

CURRENT YEAR BUDGET IMPACTS:

The Canyon Creek/Boeckman Intersection Improvements (Project #4206) is funded through transportation system development charges (SDC). The amended Fiscal Year (FY) 22/23 budget includes \$1,491,749 for owner's representative services, engineering design, right-of-way acquisition, construction, contract administration, and overhead. The cost increase of approximately \$1,150,000 for the roundabout intersection improvement will not affect the current FY 22/23 budget, but will be included as part of the FY 23/24 budget request. In review of the Transportation System Development Charge fund, sufficient reserves are available to support the increase costs for the roundabout through next year's budget authorization.

COMMUNITY INVOLVEMENT PROCESS:

The BRCP design began in early 2022 with public outreach activities kicking off, including frequent project updates to the community and opportunities to provide feedback on project priorities and concerns. Several public events have been held, including the 2022 Block Party, Popsicles in the Park, an open house in conjunction with the West Linn-Wilsonville School District at Meridian Creek Middle School, and a project survey on Let's Talk, Wilsonville! A roundabout design at the Canyon Creek/Boeckman intersection was heavily favored by those queried by the project team at the public events.

The project team has met with a number of smaller group and individual stakeholders as the design of the project proceeds, including representatives of the New Life Church on the northeast corner of the Canyon Creek/Boeckman intersection. This property is the most impacted by the intersection improvements and the representatives are supportive of the roundabout design due to the enhanced safety benefits. The project team will continue to work with the New Life Church to mitigate property impacts resulting from the project.

Ongoing outreach and public participation is occurring through the project website, the monthly project e-newsletter, text alerts about travel conditions related to the project, Boones Ferry Messenger articles, and project surveys on Let's Talk Wilsonville. Link to project website: <https://www.ci.wilsonville.or.us/engineering/page/boeckman-road-corridor-news-and-updates>

Link to news updates on the project:

<https://www.ci.wilsonville.or.us/engineering/page/boeckman-road-corridor-news-and-updates>

POTENTIAL IMPACTS OR BENEFIT TO THE COMMUNITY:

The BRCP includes roadway improvements necessary to provide safe and accessible transportation infrastructure, improving the City's local transportation network and benefitting the community. More specifically, a roundabout at the Canyon Creek/Boeckman intersection provides a safer, more efficient transportation connection along an important school access route and transition between office/industrial on the north and west to residential neighborhoods on the south and east. In addition, a roundabout design option will result in less long term cost to the community over time due to the expected decrease in vehicle delay and reduced incidence of traffic crashes.

ALTERNATIVES:

The project team identified the roundabout as the preferred Canyon Creek/Boeckman intersection design. City Council could direct staff to proceed with the traffic signal installation for the intersection. This is not recommended as an expected increase in crash frequency and associated decreased safety performance of the intersection would result, which is not desirable.

CITY MANAGER COMMENT:

N/A

ATTACHMENT:

1. Intersection Control Evaluation (ICE) for Boeckman Road & Canyon Creek Road Technical Memorandum