DATE: October 26, 2023

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PROJECT: South Willamette River Trail Refinement (Independence) (SWRTR)

REGARDING: Project Narrative Summary

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The following is a summary of the tasks completed during this study, brief statements of findings, and recommendations for additional work as part of future design efforts and construction.

**Survey**

A topograhic survey was completed to support design efforts. This work consisted of research of property records, existing horizontal/vertical control, and utility records. In addition, wetland boundaries from the wetland delineation were mapped. This information was utilized to develop a base map and surface model on which the conceptual design was based.

Additional work will need to be completed during the subsequent Preliminary Engineering design phase. These items include:

- Some areas in proximity to the River Road connection were not accessible. These areas will need to be surveyed during the subsequent Preliminary Engineering design phase.
- The area under the River Road bridge was regraded after our survey topo was completed to allow a Marion County contractor to access temporary work areas and perform bridge support related work. This included impacts to the wetlands. This area will need to be resurveyed only if the River Road Trail connection goes through the County right of way. At minimum, the topo along the main trail alignment through the county right of way should be redone.
- Title reports were not made available and should be reviewed during the subsequent Preliminary Engineering design phase to identify easements or other encumbrances.
- As-Built drawings for various improvements on or adjacent to the project were not available. These include public utilities, including stormwater infrastructure along Main Street and the newer City Hall parking lot, existing water wells located along the alignment, and the associated pump station near the south terminus.

**Environmental**

Two environmental tasks were incuded in the scope of work and are discussed below:

> ***Archeological Resources*** - The archeological survey was undertaken by Heritage Research Associates to determine if potentially significant precontact or historical archaeological sites that may be eligible for inclusion in the National Register of Historic Places (NRHP) are present within the area and may be affected by this project. The study did not identify resources eligbible for inclusion in the NHRP.

Currently, there is no requirement to submit the report to the State Historic Preservation Office. This could change depending on future funding streams for the project. The City and ODOT should discuss options for internal ODOT review and submittal to SHPO as the project removes forward.

***Wetlands and Water Resources*** – PBS completed a wetland/waters delineation and report for the project area. One wetland, totalling approximately 0.30 acres was identified during the study. The wetland is located in the area beneath and north of the Willamette River Bridge on Riverside Road and includes portions of the county right of way and Tax Lots 1200 and 200, which are not currently owned by the City. The wetland would be impacted by three of the four options that were evaluated for the River Road Bridge connection, including the non-ADA/stair option.

**Hydraulic Study**
West Consultants completed this portion of work which has four elements including a Hydraulic Site Analysis, Hydrologic Analysis, Hydraulic Analysis and Floodplain Impact Analysis.

Based on this analysis, the proposed trail alignment lies outside the floodway. Most of the trail alignment lies within the 100-year floodplain. The study results indicate that the proposed conditions will not result in a rise in water surface elevations along the Willamette River for either the base flood or the floodway. A no-rise certificate is provided in the hydraulics report.

A floodplain permit was not obtained as part of this study but will be required as part of final permit approvals. This should occur during final design efforts.

**Trail Design and Bridge Evaluation Study** -
The conceptual trail design development included many various elements. A summary is provided below

***Trail Alignment/Design***
The proposed trail alignment runs along the existing railroad grade and associated easement. A portion of the north end just south of the City Hall property runs through private property, Tax Lot 800. The proposed Independence Bridge trail connection to Corvallis Road just north of the Willamette River Bridge on Riverside Road and county right of way runs through private property as well, Tax Lot 1200. The proposed alignment and physical constraints dictate the trail crosses these privately owned parcels. The alignment also crosses right-of-way for the existing Willamette River Bridge on Riverside Road, located approximately ¼ mile south of the north end trail connection.

The profile design grade follows the top of the old railroad grade as much as possible where it exists to minimize grading impacts and construction costs. The intent was to stay under a 5% grade to eliminate the need for pedestrian handrails. Most of the alignment was easily amenable, but two short sections will require refinement during Preliminary Engineering to stay under 5% grade.

The proposed main trail typical section is 12 feet wide with 2-foot gravel shoulders. The Independence Bridge trail connection to Corvallis Road is 8 feet wide with 2-foot gravel shoulders. The trail surfaces are currently proposed as asphalt pavement to keep this more as a rural feel and to reduce construction cost as compared to a concrete surface.

***Public Access***

The trail will have three public access connection points, one at the north end near City Hall, one at the River Road/Main Street/Corvallis Road intersection, and the third at the south end where it will connect with Corvallis Road. The **north end connection** will connect into the existing concrete path at the east end of the City Hall parking lot. Various alignments were considered based on the topography before deciding on the preferred location shown. This alignment can be refined during subsequent design phases.

There is one legal maintenance access road 400 feet south of River Road that connects to Corvallis Road. This access at the trail and along the old railroad grade to the bridge was recently cleared and improved to allow for the County's bridge scour project in 2022. Coordination with Marion County will be needed during subsequent design phases.

The **River Road/Main Street/Corvallis Road intersection connection** lies approximately ¼ mile south of the north end City Hall connection. Several alignment connections were developed and considered, including ADA compliant alignments and two non-ADA alignments with stairs crossing wetlands with boardwalks. See the River Road Alternatives Analysis document for a more detailed review of all the options considered. The preferred alignment connects to the main SWRTR trail approximately 50 feet north of the River Road right of way. The intent was to keep the alignment as far south as possible without crossing under the bridge, staying out of the county right of way and avoiding wetland impacts, which the connection alignment accomplishes. The trail connection goes around the wetlands, sidehills the steep slopes, and connects at the northeast corner of the road intersection.

The **south end connection** connects with the Corvallis Road intersection approximately ½ mile south of River Road at the future proposed new minor arterial road alignment to the west. The last 75 feet of the trail may require some horizontal refinement considering existing features and the future west arterial roadway alignment.

***Bridges***

PBS performed an evaluation of alternative structure types to determine an applicable type and approximate size and location for two new bridges. Two bridges will be required, with lengths of approximately 25 and 160 feet. A summary of that study is included as a separate document.

***Retaining Walls***

Retaining walls are necessary at a few locations to prevent or minimize grading onto private property and including preservation of trees where possible. Aside from the two proposed trail bridge structures, proposed gabion walls are shown and recommended between trail stations 37+20 – 38+40 on both sides. Additionally, walls may be needed along the steep sidehill trail connection coming down off Main Street to reduce grading and tree impacts. Gabion walls may also be used instead of embankment further down this connection to preserve and protect trees.

***Stormwater Management***

Stormwater from the proposed trail will run directly off through existing vegetation and into the Willamette River system. Sheet flow dispersion is the preferred water quality treatment for this condition up to the maximum extent practicable. Filter strips may also be considered.

Storm culverts may be needed at a few locations north of River Road bridge and south of City Hall. These will be better defined during Preliminary Engineering.

***Utilities***

Utility base map records were not made available from the city. Along the southerly 1600' of the proposed trail, several unidentified features believed to be related to groundwater testing lie directly on top of the old railroad grade and within the proposed alignment. Additional coordination with city staff will help determine the use and need to use these facilities in the future. Rerouting the trail alignment around to avoid these facilities would require significant grading impacts onto private property or the river side because of the steep embankments on both sides of the trail. For these reasons the alignment was not adjusted to avoid impact until the city determines the fate of these facilities.

The City is planning a new water intake at the south end of the trail, so this will need to be considered along with the existing water facilities in place off Corvallis Road.

Survey at the north end located a storm structure just east of the new City Hall parking lot/retaining wall. This may likely require adjustment, but the as-built plans from the city have not been made available. This information will be needed for the Preliminary Engineering phase.

***Construction Cost Estimate***

A preliminary cost estimate was prepared with the primary elements described above. The estimate also includes right-of-way acquisition costs and estimated engineering design costs. For the Independence Bridge Trail connection to Corvallis Road options, cost was not a significant factor.

**Right of Way Support**

Universal Field Services (UFS) determined the feasibility and potential costs associated with acquiring access to private property with the proposed trail alignment (see map below). This could be accomplished either through an easement or purchase. All three tax lots (800, 1000, 1200) involved are owned by the same out of state property owner.

UFS contacted the property owner, and a purchase price was discussed. The results of that study are included in UFS's report and are incorporated into the cost estimate for the project.

Additional work will be required during the subsequent Preliminary Engineering phase of the project to determine the preferred method of gaining access (e.g. easement vs. purchase). The City should continue negotiations with the property owner.