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Project/Subject: Wilsonville Affordable Housing TOD Strategy – Civil Engineering Site Options Memorandum

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The purpose of this memorandum is to document the civil engineering feasibility of the development options for the Wilsonville TOD site. The options A, B and C as presented in the October 27, 2021 presentation were evaluated.

Municipal Utilities

The following is a summary of the available municipal utilities for the development concepts.

Sanitary Sewer. All three site layout options can be served the existing sanitary sewer main in SW Barber Street as outlined in the Civil Engineering Sufficiency and Obstacles Analysis memorandum.

Storm Conveyance. All three site layout options can be served the existing storm main in SW Barber Street as outlined in the Civil Engineering Sufficiency and Obstacles Analysis memorandum.

Water. All three site layout options can be served the existing water main in SW Barber Street as outlined in the Civil Engineering Sufficiency and Obstacles Analysis memorandum.

Stormwater Management. Stormwater management will need to be provided on-site for each development option. Stormwater management for development on the TOD site would most likely be achieved through on-site low impact development stormwater management facilities. Using the BMP sizing tool, approximately 2,000 to 4,000 square feet of surface vegetated stormwater facilities would need to be constructed on-site to achieve the stormwater management requirements, depending on the final design details. The site has adequate space to achieve this.

Franchise Utilities

Options A and B include modification to the existing sidewalk section east of the proposed driveway. It appears that these modifications and improvements would abut the existing public utility easement and that there would be no impacts to the existing underground utilities.

Public Streets and Access

SW Barber Street. The proposed improvements do not propose any changes to SW Barber Street road section other than the construction of a new driveway apron. This driveway apron meets the minimum access spacing requirement of 100' from an adjacent access. It is not lined up with the existing access on the opposite side of the street, but likely does not pose operational issues (see additional discussion below).

Access Locations. For Options A and B the proposed access onto SW Barber Street serves as a one way exit for 16 on-site parking spaces. A traffic study is recommended, but this access appears feasible. For Option C, the proposed access onto SW Barber Street serves 87 parking stalls and is the sole ingress and egress point. A traffic study is recommended, but this volume of traffic at this access point may pose an operational issue. We recommend considering an access at the west end of the parcel onto the Park and Ride driveway to consolidate access points onto SW Barber Street.

SW Barber Street Frontage Improvements. The proposed improvements in Options A and B include modification to the existing sidewalk section east of the proposed driveway. A public sidewalk connection will be required to create continuous pedestrian access along the site frontage. If this is incorporated into the site frontage, easements will likely be required. The existing stormwater facility for runoff from SW Barber Street will also be impacted under Options A and B. This facility will need to be reconfigured to maintain stormwater management for the road.

Conclusion

All three proposed design options appear feasible from a civil engineering perspective. The access point on SW Barber Street, under all three alternatives, requires further investigation and coordination with City staff and may require some modifications or access restrictions to be feasible.