

City of
Sherwood



SW Oregon Street Improvements & Regional WQF Project



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CES|NW

City of
Sherwood

SW OREGON ST | Roadway Project Context

- Two-lane collector roadway, connecting the Tonquin Industrial Area to old town
- Redevelopment of the historic Tannery site has begun, public works facility relocation in the future
- Regional Ice Age Tonquin Trail is planned run along the north side of Oregon Street, for which the first segment was built with Zenport development



City of Sherwood | SW Oregon Street Improvements & Regional WQF Project



4



RAILROAD ENROACHMENT

47'

5



DRIVEWAYS

2



RIGHT OF WAY ACQUISITION

1



STORMWATER WQF & REMEDIATION

Up to 63'

3

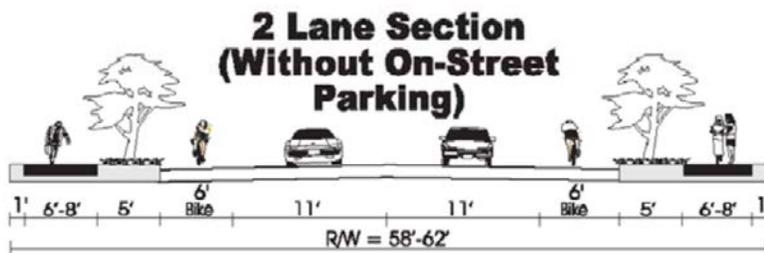


CROSS SECTION

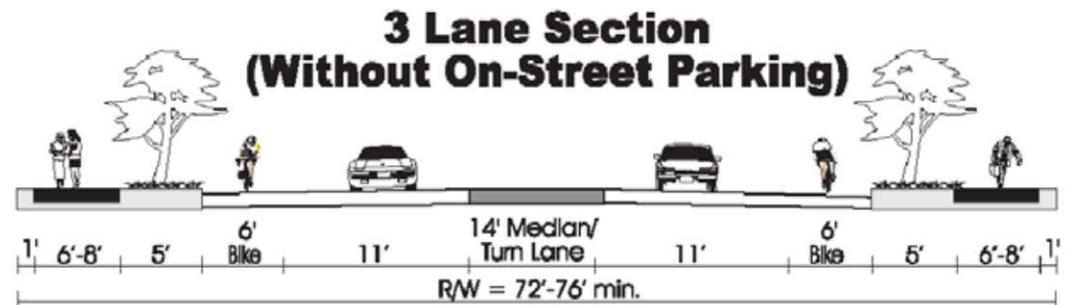
TOP CHALLENGES

SW OREGON ST | Roadway Cross-Section Goals

- Provide continuous pedestrian and bicycle facilities consistent with the TSP (Sherwood Collector Streets Standard Cross sections) while considering the ROW constraints and anticipated traffic growth, in order to support maximize developable land potential of the historic Tannery site
- Underground existing overhead utilities to improve natural environment, and provide continuous illumination along the corridor using Westbrooke style decorative lighting (photo)

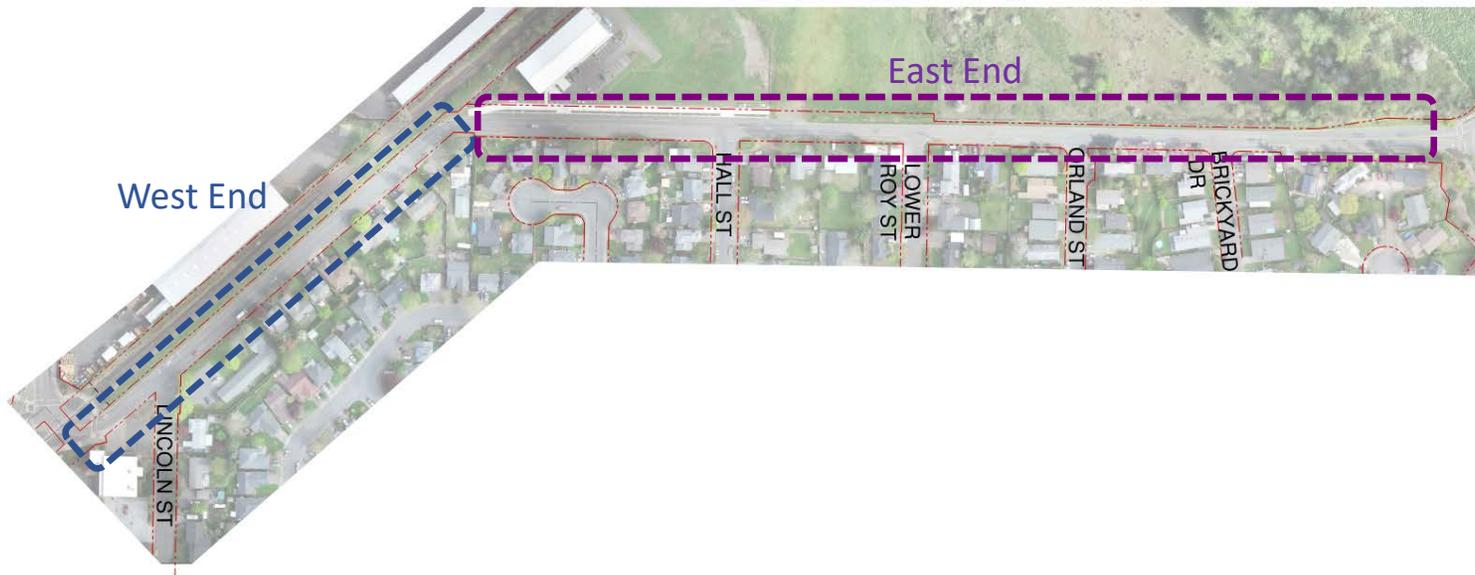


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SW OREGON ST | Initial Concepts

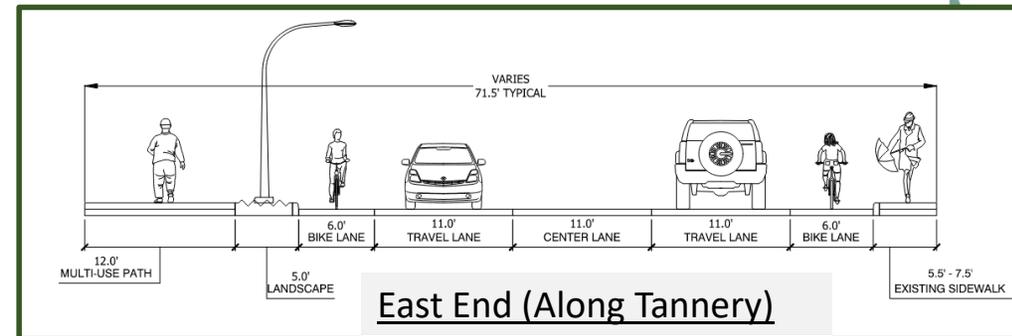
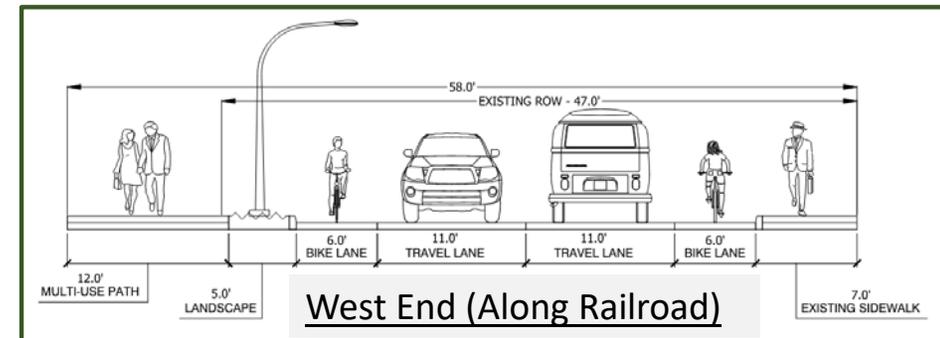
- 1A – Strictly TSP Compliant Alternative
- 1A-2 – TSP Intent, Modified to fit with ROW along Railroad
- 1A-3 - Ice Age Trail Along the South-side of Roadway



SW OREGON ST | 1A Strictly TSP Compliant

Challenges:

- Significant ROW needs from the railroad (unlikely to be received)
- Notable ROW needs along the tannery site (reducing developable land)
- Zenport curbline would need to be reconstructed



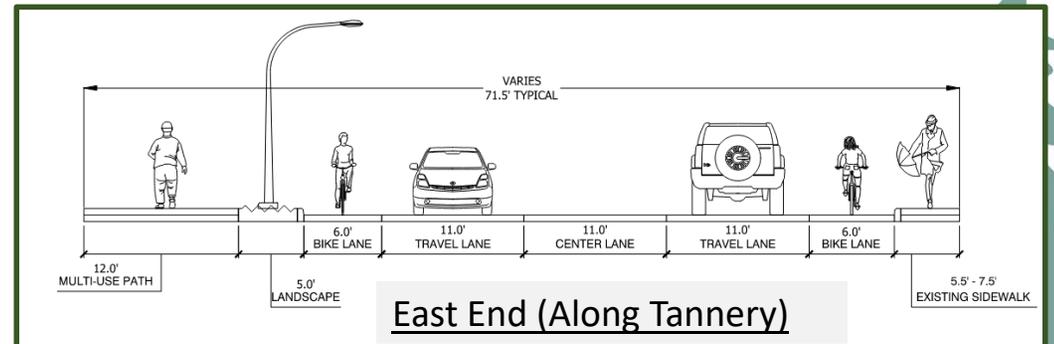
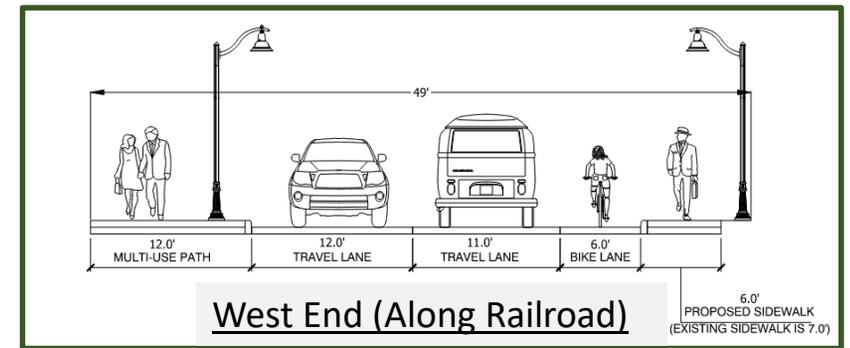
SW OREGON ST | 1A-2 TSP Intent, Modified to fit within ROW along the Railroad

Challenges:

- No south(west)bound bicycle lane can fit
- Existing 7' sidewalk along houses would reduce to 6'

Same Challenges as 1A:

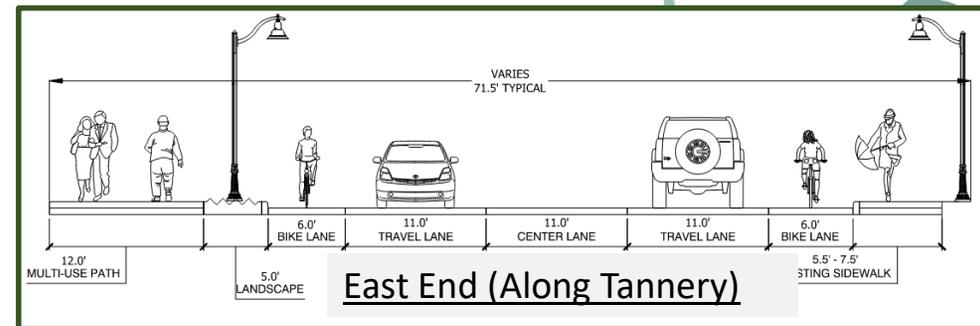
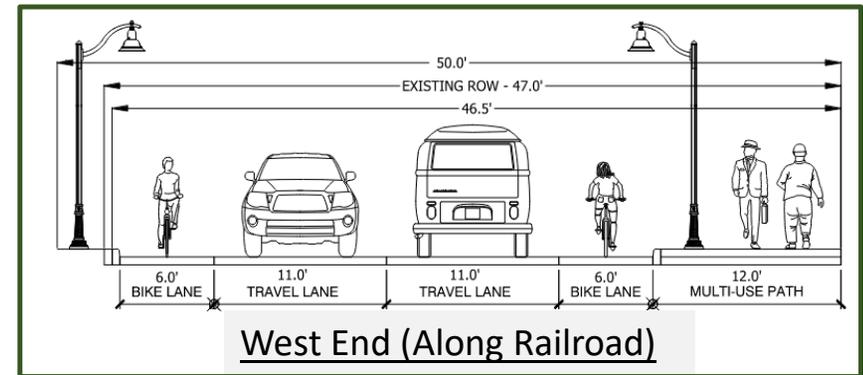
- Notable ROW needs along the tannery site (reducing developable land)
- Zenport curbline would need to be reconstructed



SW OREGON ST | 1A-3 – Ice Age Trail shifted to the south

Challenges:

- Luminaires and other utilities would to be located in railroad ROW (unlikely to be allowed)
- The trail would cross several driveways, increasing conflicts and reducing smoothness of the trail
- Trail would have to cross back to the north side of Oregon Street near the curve to tie into Zenport pathway



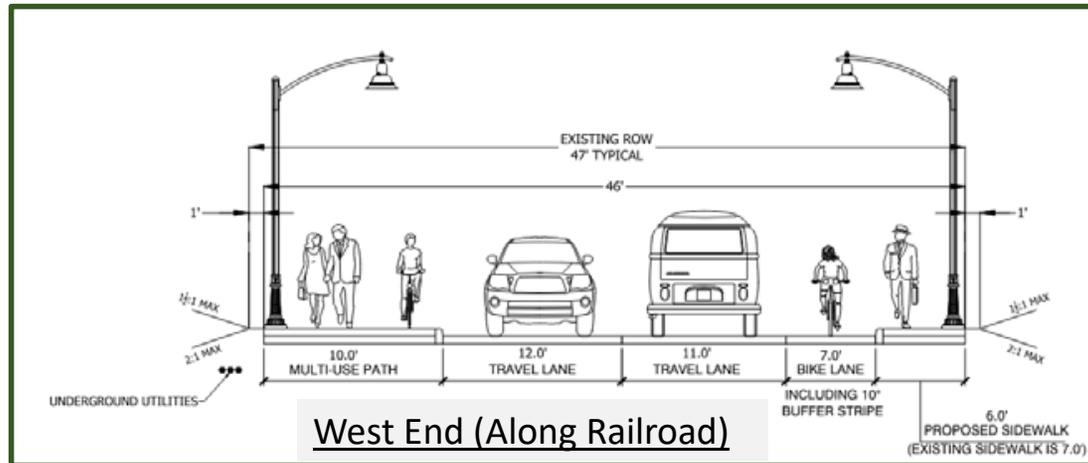
SW OREGON ST | Tonquin Ice Age Regional Trail

- Ice Age Tonquin Trail Master Plan (2013)
 - Identified a 12 feet wide shared use path along the north side of Oregon Street
- Yellow shows a north alignment, Red shows a south alignment



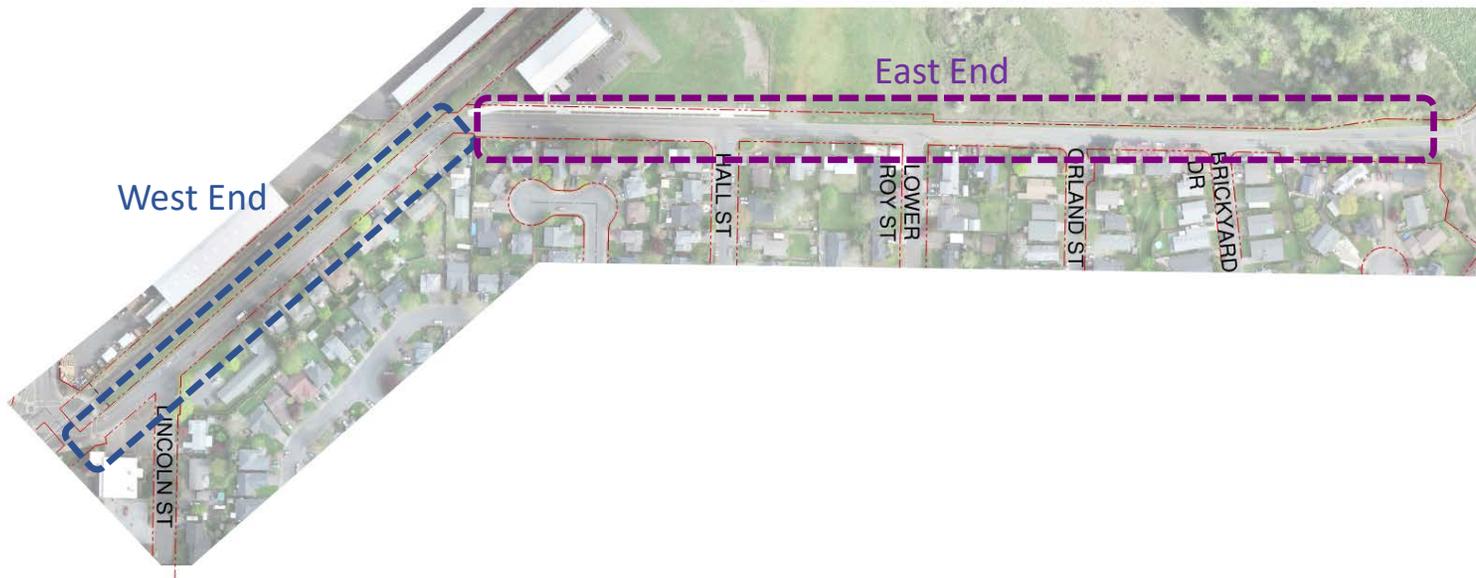
SW OREGON ST | Recommended West End Alternative

Concept 1A-2 modified to fully fit in ROW (10' multiuse pathway instead of 12')



SW OREGON ST | Refined East End Concepts

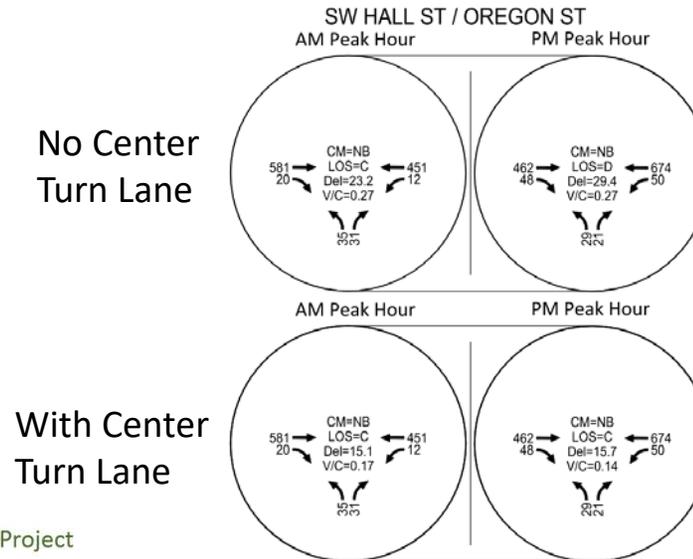
- Concepts A, B, C



SW OREGON ST | Left-Turn Lane Consideration

Left-turn lane volume warrants are met – However:

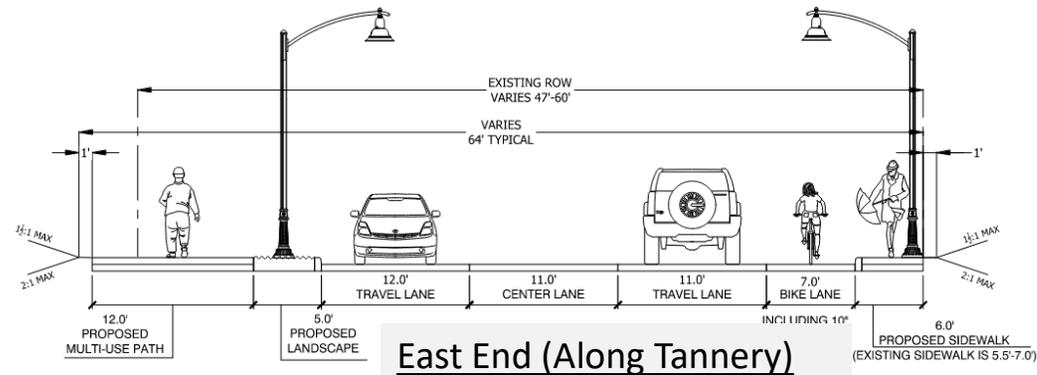
- Without a center turn lane, traffic operations in future 2040 conditions still meet City operating standard. Residential street delay of 30 seconds = Level-of-Service D
- Left-turning traffic volumes are low – less than 50 vehicles per peak hour (see below)
- Providing a left-turn lane either increases ROW need, or doesn't allow for TSP consistent landscaping buffer and adequate sidewalk widths



SW OREGON ST | Refined Concept A

Concept A

- Provides a center turn lane
- No westbound bicycle lane
- No southside landscaping buffer
- Minimal southside sidewalk



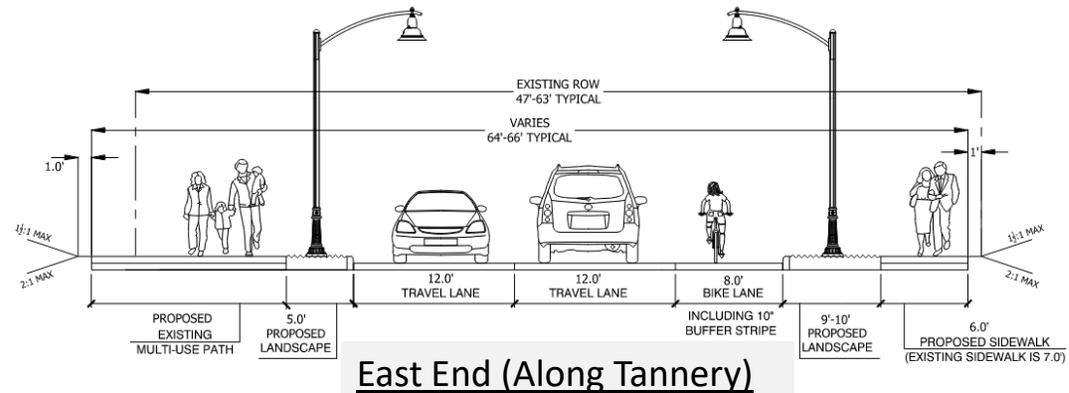
PROS	CONS
Meets TSP requirement to provide a left-turn lane where warranted	Additional paved width for turn lane means limited landscaping and sidewalk can be provided
Reduces turning delay in future conditions (LOS C – 15 seconds) for left-turning vehicles from the residential streets	Installation of Westbrooke luminaires would reduce southside sidewalk width to minimum 4' in spots
Continues established Zenport curbline	Additional lane of vehicle traffic for pedestrians to contend with at crossings



SW OREGON ST | Refined Concept B

Concept B

- No center turn lane
- No westbound bicycle lane
- Additional space on south side for landscaping and widened sidewalk



PROS

Additional space available for **south side landscaping and sidewalk**, better facilitating continuous Westbrookes without reducing pedestrian travel width

If a center turn lane was needed in future, south side curbline could be rebuilt narrower

Continues established Zenport curbline

CONS

Does not meet TSP requirement to provide left-turn lane where warranted (left-turn volume warrant is met)

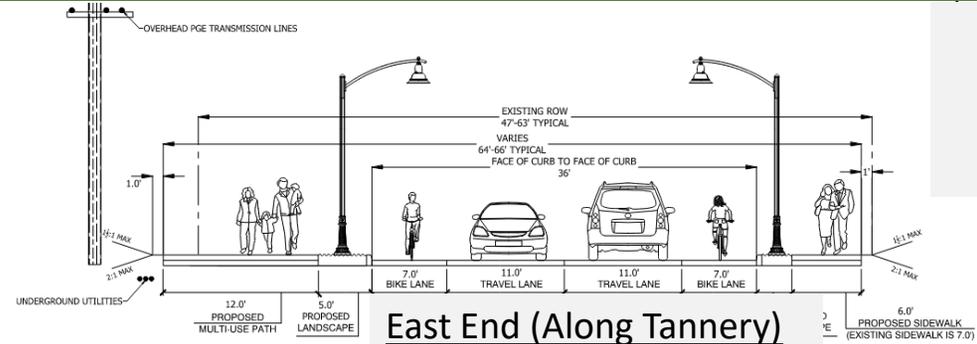
Increases delay for turning movements from the residential streets (LOS D – up to 30 seconds) but still meets City operating standard (LOS E – 50 seconds)

Travel lane transition needed near roundabout (more awkward than Option C)

SW OREGON ST | Refined Concept C

Concept C

- No center turn lane
- On-street bicycle lanes in both directions



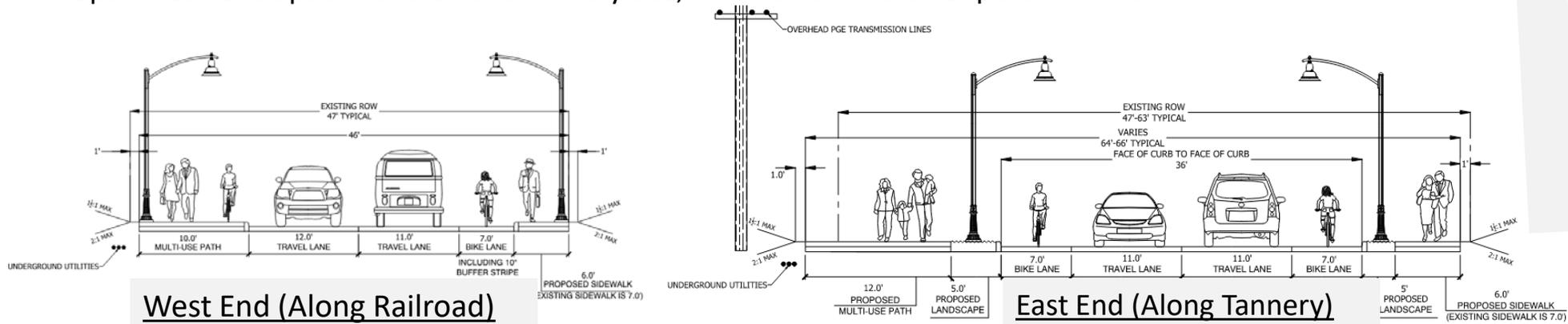
PROS

CONS

TSP friendlier of the two-lane concepts – provide on-street bike lanes in both directions	Does not meet TSP requirement to provide left-turn lane where warranted (left-turn volume warrant is met)
Ease of future conversion to provide center turn lane, if needed in future, without needing to reconstruction south curbline	Increases delay for turning movements from the residential streets (LOS D – up to 30 seconds) but still meets City operating standard (LOS E –50 seconds)
Landscaping buffer fits on both sides of the road, facilitating continuous Westbrooke luminaires without obstructing pedestrian travel ways	Westbound bicycle lane does not fit along entire corridor (ramp to pathway provided near Zenport)
Smooth travel lane transition near roundabout (less new striping and curbing needed compared to Option B)	

SW OREGON ST | Recommended Alternative

- Concept 1A-2 + Concept C were selected as the recommended alternative
 - Two vehicle lane cross section the length of the corridor,
 - Contiguous bicycle lanes and landscaping buffer where ROW allows (east end),
 - Continuous sidewalk or pathway along both sides of the road the entire length of the corridor,
 - Optimizes developable land on the Tannery site, and maintains the Zenport curbline



- Concept 1A-2 + Concept C was progressed to rollplot layout and cost estimate, and a 3D visualization video was prepared, which can be found on the project website

SW OREGON ST | Cross-section Transition

- Westbound bicycle lane transitions up to the multiuse path along the Railroad
- Truck turn checks completed to ensure roadway width adequate around curve



SW OREGON ST | Closing Comments

- Beyond the roadway design, is on-going coordination with Clean Water Services on options for a regional water quality facility
- All are encouraged to view the roadway project visualization on the project website

<https://www.sherwoodoregon.gov/engineering/page/oregon-street-improvements>

