Jacobs Challenging today. Reinventing tomorrow.

Westside Trail Bicycle & Pedestrian Bridge Over Highway 26

Property & Agency Stakeholders Virtual Meeting

September 30, 2020

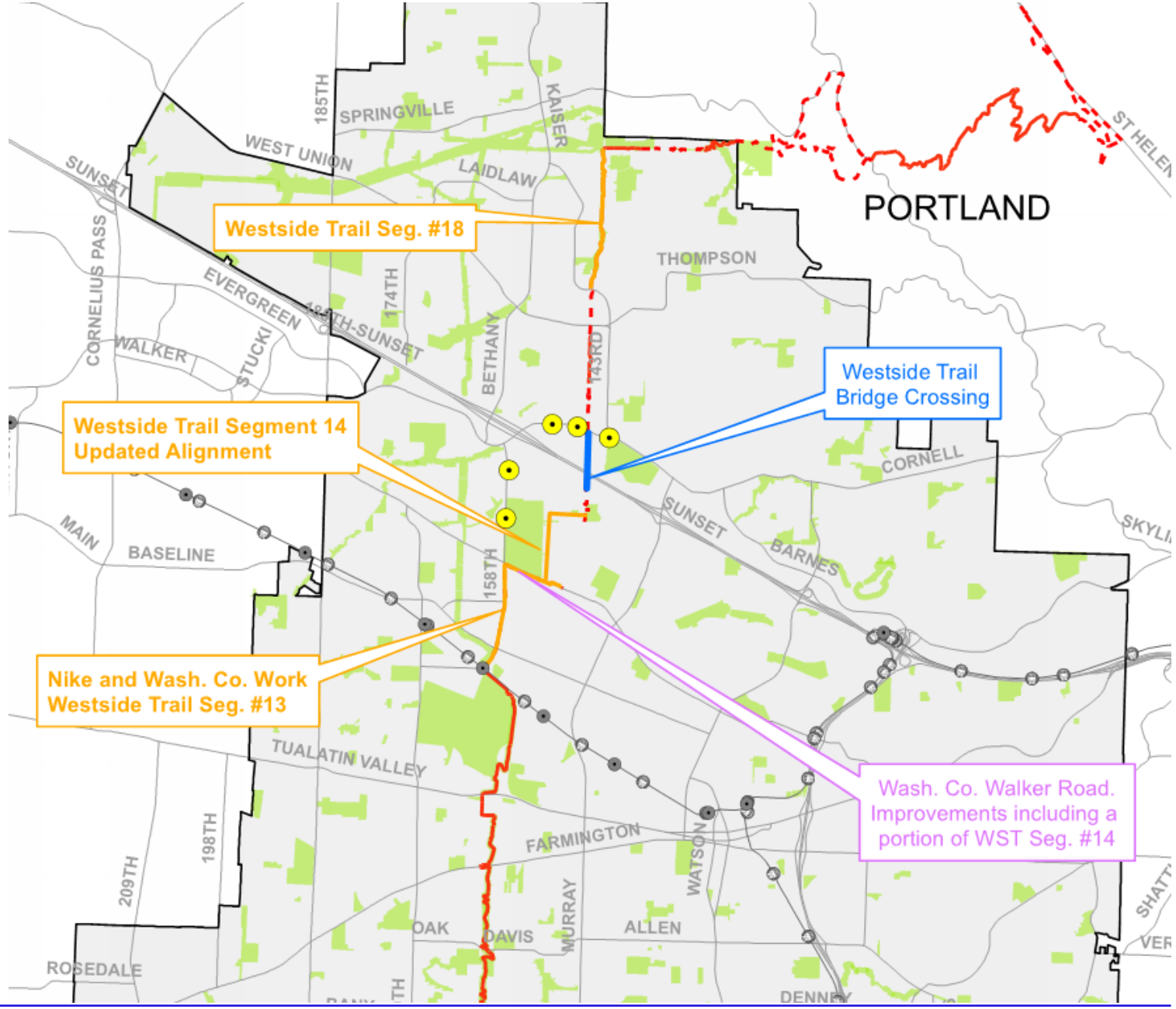
TUALATIN HILLS
PARK & RECREATION DISTRICT

Agenda

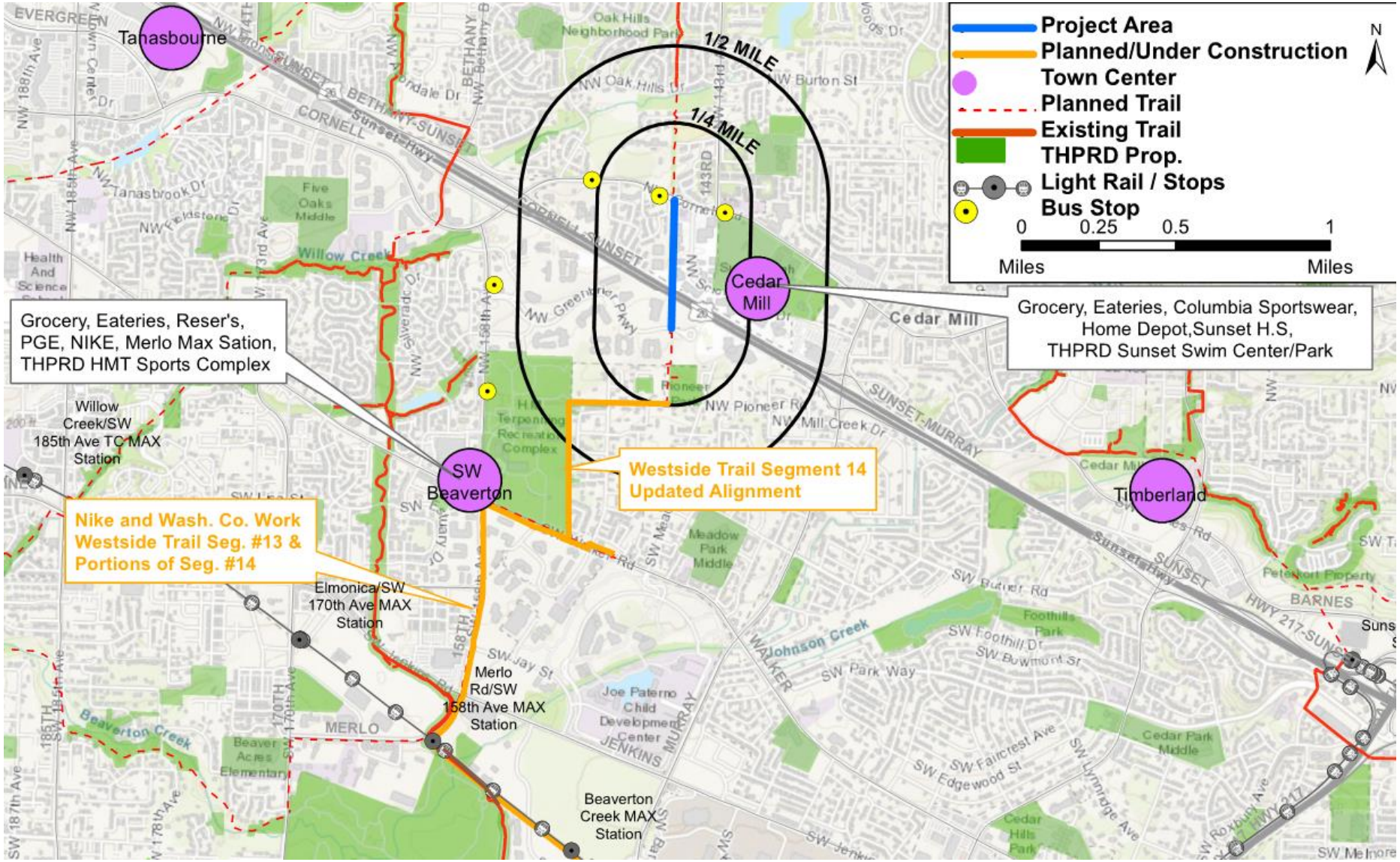
- Meeting Expectations
- Project Overview
  - Existing baseline conditions
  - Preliminary design concepts
- Project Timeline
- Next Steps
- Questions

Westside Trail Bridge Overview

Westside Trail Overview Map



Westside Trail Community Attributes Map



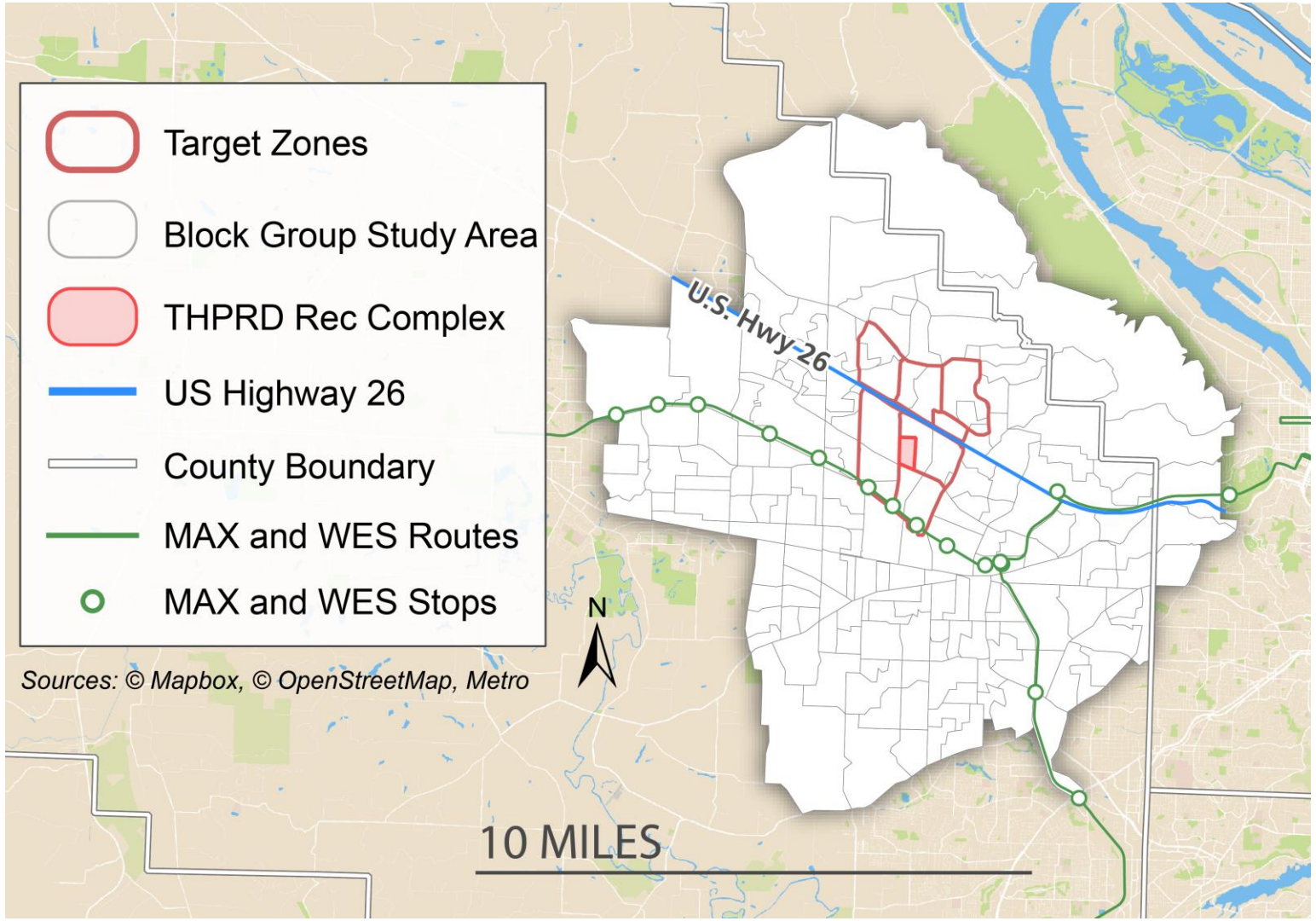
Westside Trail & Pedestrian/Bike Bridge Crossing US 26

- No funding past concept design
- Survey
- Baseline environmental studies
- Options >>>Preferred Concept
- Establish NEPA pathway
- Develop cost estimates to advance

Transportation Patterns

Existing Travel Behavior in Area

- People traveling in the area tend to have lower incomes than those of the county overall
- Streetlight data allowed us to examine vehicle, bicycle, and pedestrian trips:
  - Origins and destinations
  - Travel time and distance
  - Average daily trip volumes by zone and TAZ
  - Disaggregation by time of day and days of the week



Walking and Biking in Area

- Trips in the area are already made by walking and biking, showing that people do use active transportation. But very few trips cross US Hwy 26.
- Potential for motor vehicle trips originated from a bikeable distance, less than 3 miles away, that could mode shift.
- Motor vehicle to and from the Recreation Center and high school, in particular, represent a key opportunity to shift modes to active transportation.
- A new bridge could provide a more direct route for some of these trips.
- New bridge could benefit individuals of lower incomes and communities of color.

STREETLIGHT DATA

Big Data for Mobility

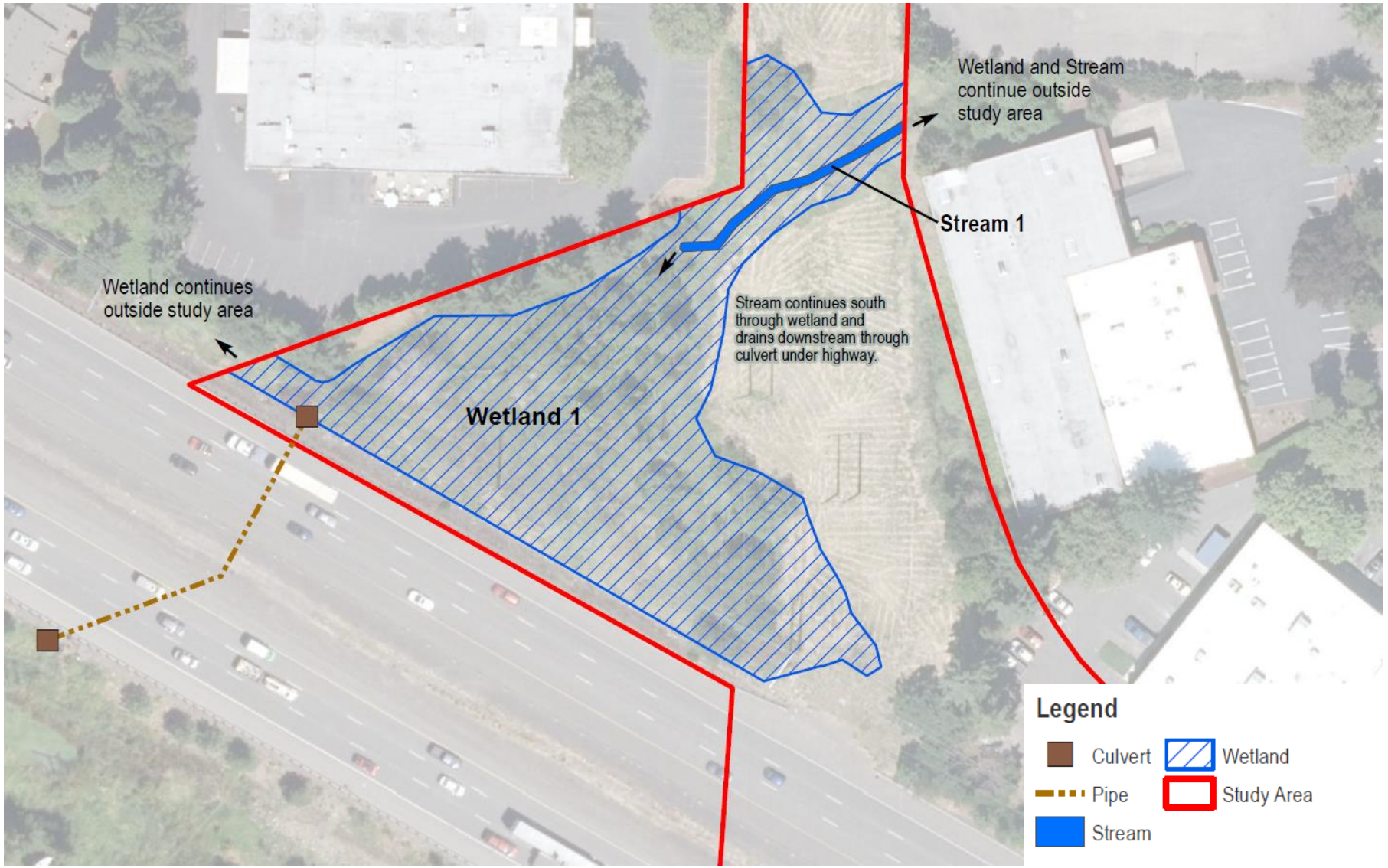
Data provided by Streetlight enabled team to gain a better understanding of how people walk, bike, and drive in area.

- It's NOT a model, a report or a static heatmap.
- It's a self-serve desktop software with **on-demand access to accurate mobility metrics.**

Environmental Findings

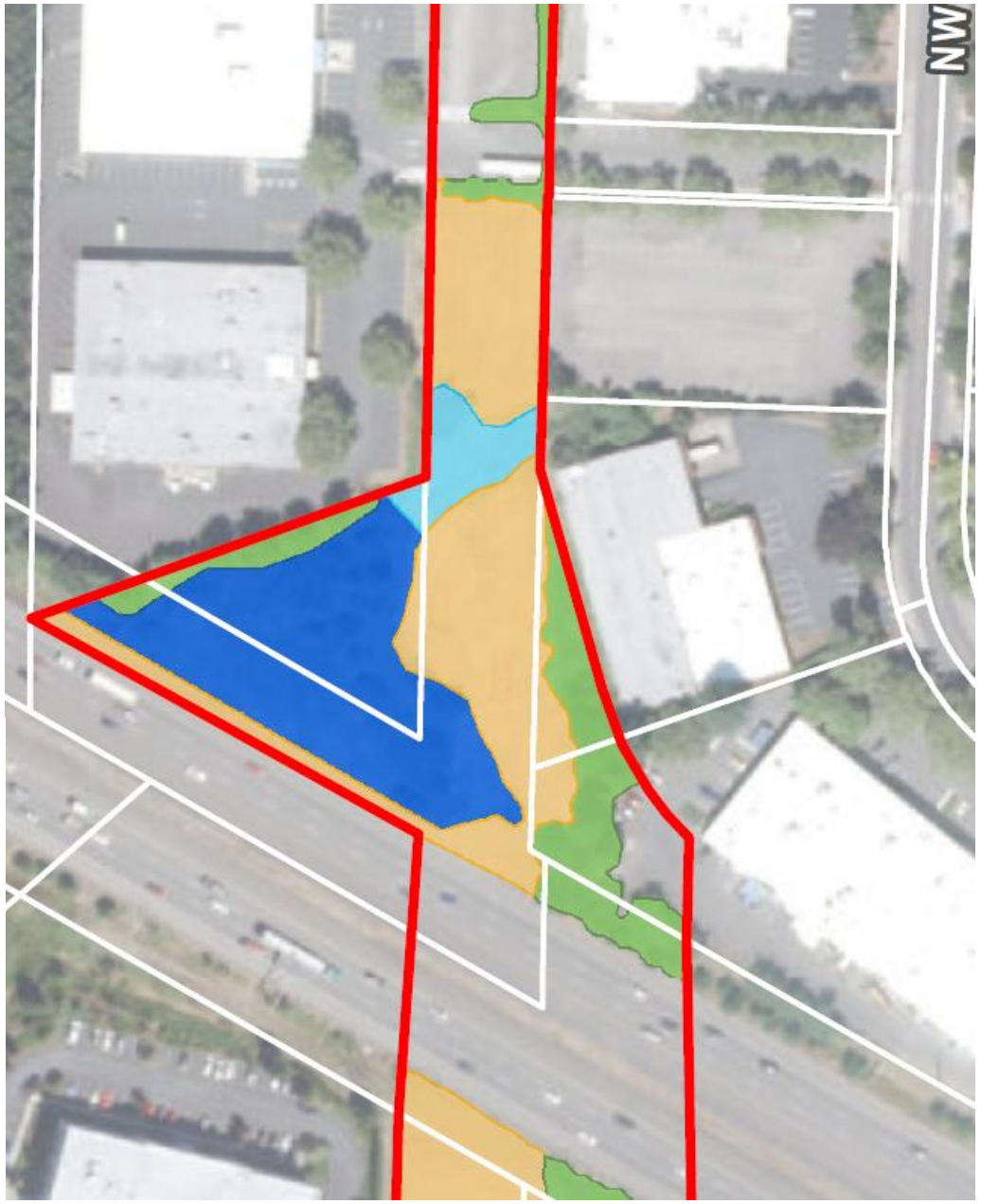
Wetlands

- 1.02 acre wetland shown with 50’ buffer
  - 0.4 acre onsite
  - 0.6 acre offsite



Vegetation and Habitat

- Noxious & invasive weeds present
- Marginal habitat for special status plants



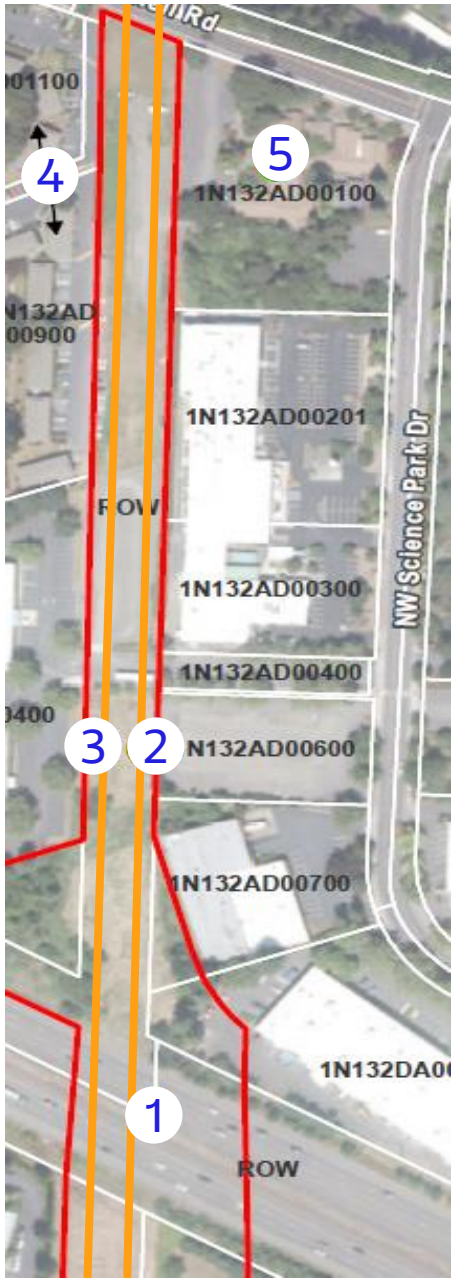
Biological Resources

- No federal, state Endangered Species Act listed species or their designated critical habitats present
- 1 unnamed perennial tributary to Willow Creek present
- US 26 is likely a complete barrier to fish passage in this tributary

Historic-era Properties

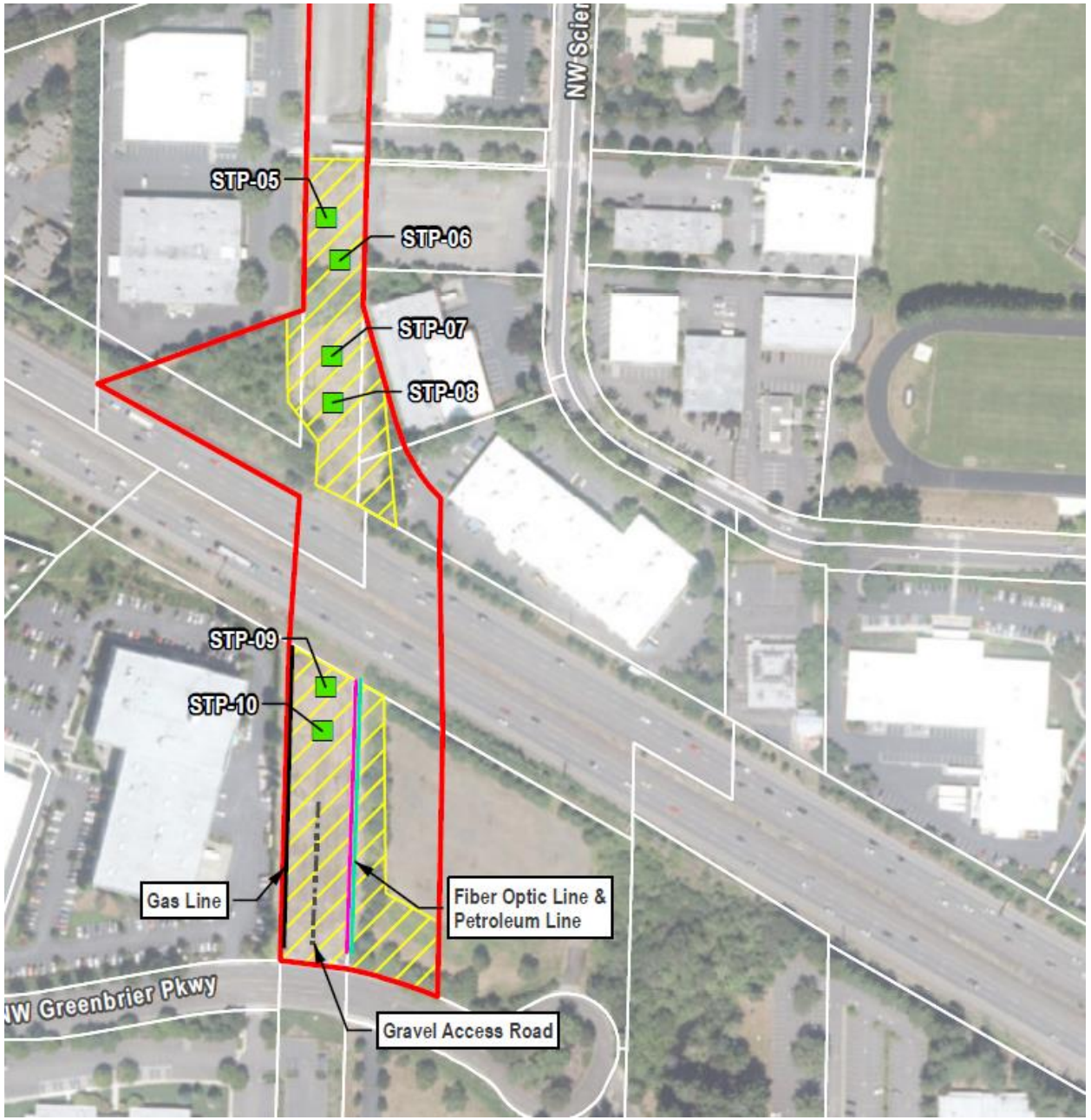
1. US 26, Sunset Highway
2. BPA Transmission Line*
3. Oregon City to St. Johns Transmission Line*
4. Oaks Apartments complex
5. Lifeworks Northwest

*properties that require Determinations of Eligibility to the National Register of Historic Places



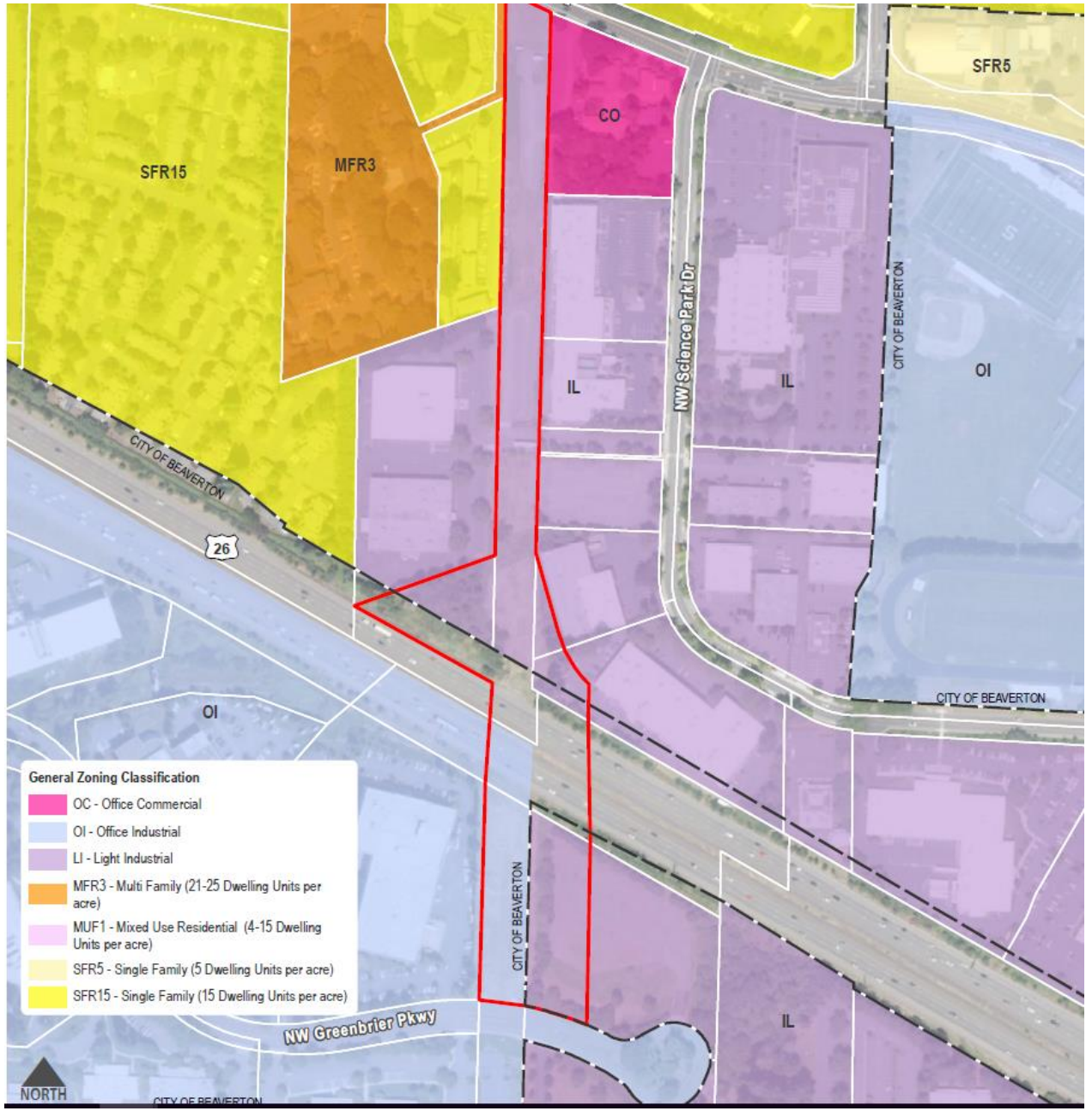
Archaeology

- All negative shovel test pits and no findings during pedestrian survey
- Zero historic or pre-historic artifacts found in prior surveys of the area
- No further study required



Land Use and Zoning

- Westside Trail Bridge and connections in long-range planning documents
- Half-way between Murray and Cornell overpasses
- Two local jurisdictions
- Industrial and Office Industrial Zoning
- Existing use of the BPA ROW



Preliminary Alignment

Google Earth View

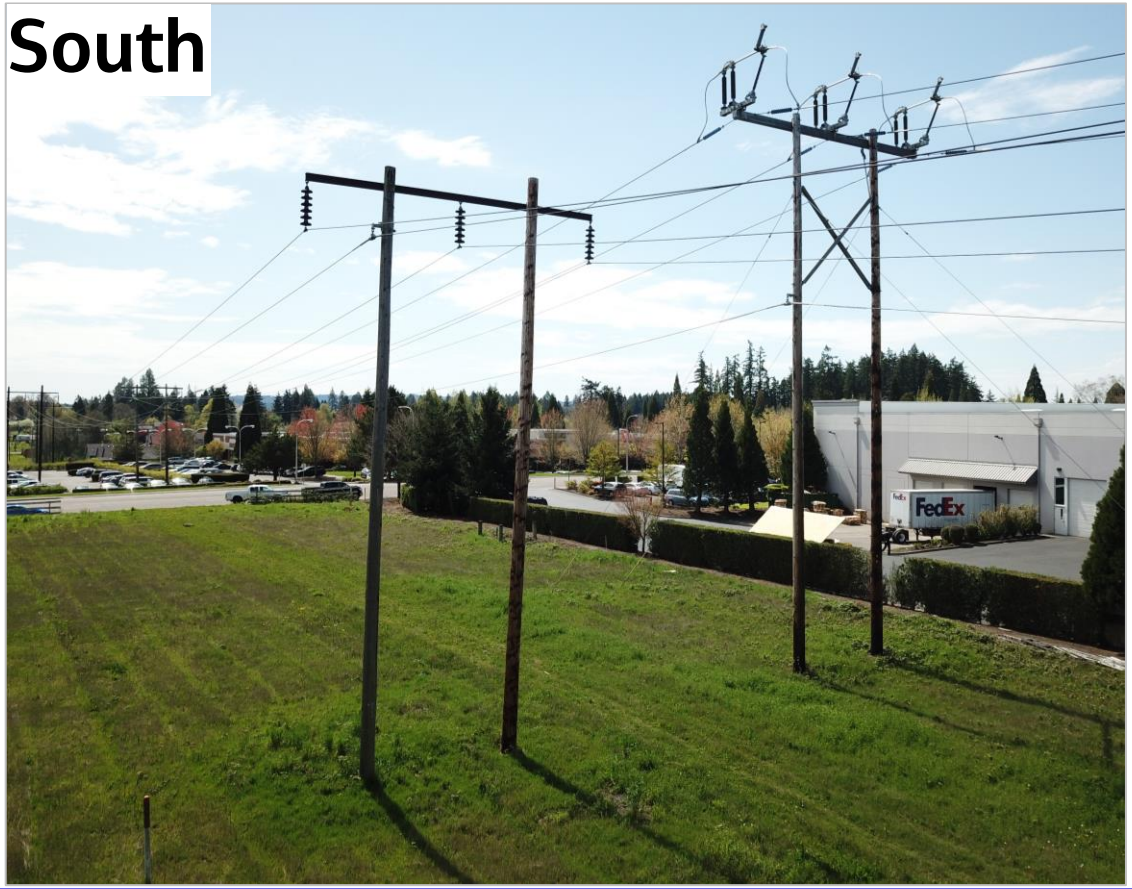
THPRD Pedestrian Bridge.kmz

North and South Perspectives

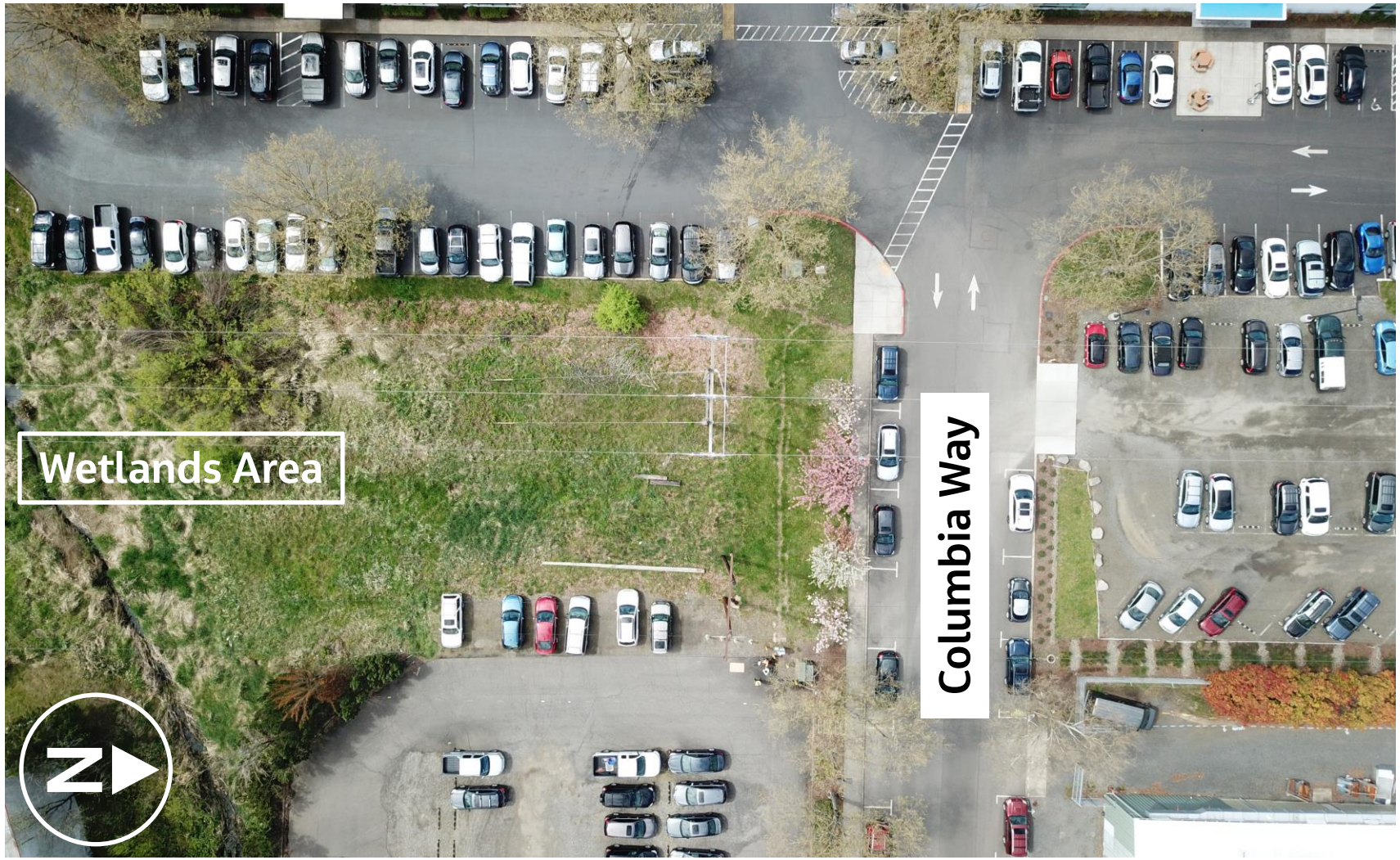
- Desired clearance from transmission tower is 25’ - requires further coordination

North

South

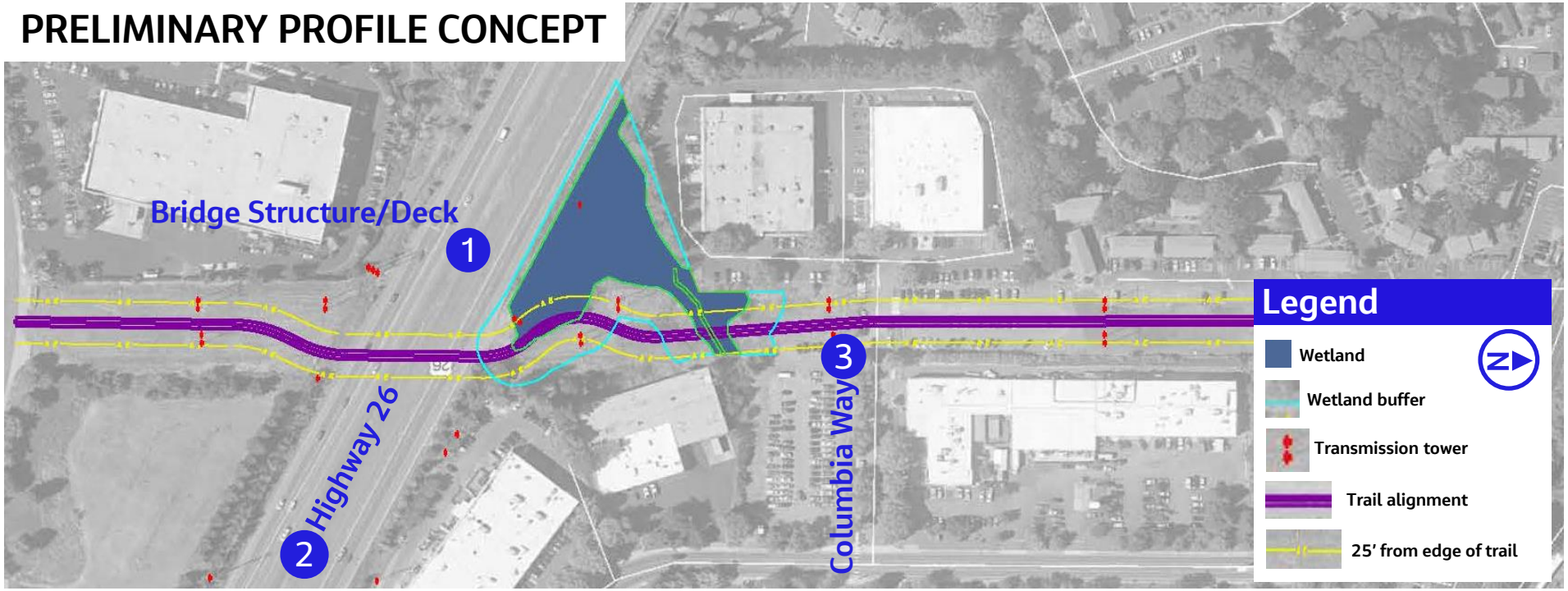


Trail Connection at Columbia Way



View North Toward Columbia Way

PRELIMINARY PROFILE CONCEPT



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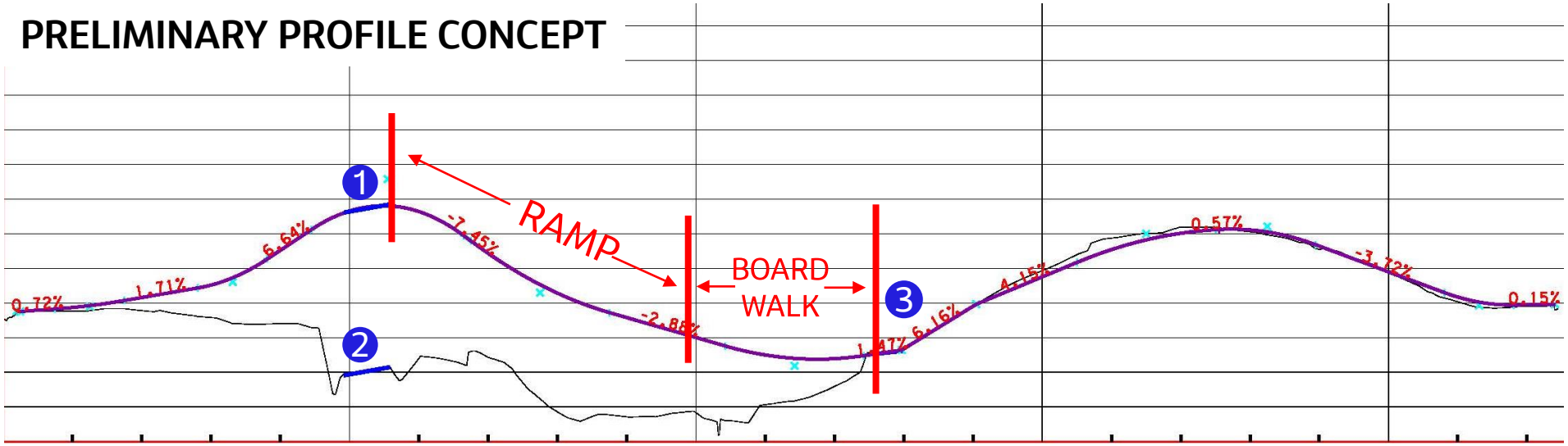

Bridge Types

Bridge Data Overview

- Span Configuration:
  - 2 Spans at 125’$^{+/-}$ per span
- Bridge Width:
  - 12’-0” clear, assume 14’ out-to-out
- Total Bridge Area:
  - 3,500 SQFT
- Min Clearance Under Hwy 26:
  - 17’-4”, however this needs to be confirmed with the MAC and ODOT
- Span lengths are fairly typical and many bridge types will fit the site. The following slides present options that would fit the site and spell out the costs and some items to consider for each type.

Possible Bridge Type: Prefabricated Steel Truss

- Superstructure Depth: 7’-5” (0.06 D/S)
  - Top chord to bottom chord, deck can be in the middle
- Typical Unit Cost: $350/SF
- Potential Overall Cost: $1,225,000
  - Does not account for added architecture
- Pros:
  - Can be constructed without falsework
  - Can be painted or use weathering steel
  - Above deck superstructure allows for shallower path profile
  - Accelerated construction
  - Low maintenance
- Cons:
  - Not all that common over local highways, but there are some over Highway 26
- Other considerations:
  - Deck can be concrete or wood. Can use wood for rub rails to bring in natural element. Can have a roof for bad weather. Supports could be made to look like natural stone or incorporate natural stone.

Photo courtesy of Excel Bridge

Next Steps

1. **Virtual Community Meeting**
   October 20th

2. **Community Input Survey**
   October 5 - November 22

3. **Project news & updates**
   www.thprd.org/parks-in-progress/westside-trail-bridge/

4. **Ongoing community engagement**

Thank you

Questions?

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