



# Council Creek Regional Trail Master Plan

*Report No. 2*

## **TRAIL ALIGNMENT ANALYSIS**



### ***Prepared for***

City of Banks, Oregon  
City of Forest Grove, Oregon  
City of Cornelius, Oregon  
City of Hillsboro, Oregon  
Washington County, Oregon  
Oregon Department of Transportation



### ***Prepared by***

Parametrix

### ***Date***

July 2014







## Citation

Parametrix. 2014. Council Creek Regional Trail Master Plan  
Report No. 2 – Trail Alignment Analysis.  
Prepared by Parametrix, Portland, Oregon. July 2014.

### **Parametrix**

700 NE Multnomah, Suite 1000  
Portland, OR 97232-4110

T. 503.233.2400 T. 360.694.5020 F. 503.233.4825

[www.parametrix.com](http://www.parametrix.com)







# Table of Contents

<b>1. TRAIL ALIGNMENT ALTERNATIVES PROCESS AND RECOMMENDATIONS .....</b>	<b>1-1</b>
PROCESS SUMMARY .....	1-1
ALIGNMENT ALTERNATIVE RECOMMENDATIONS .....	1-3
Segment 1: Banks .....	1-3
Segment 2: Washington County North .....	1-4
Segment 3: Forest Grove .....	1-4
Segment 4: Cornelius .....	1-4
Segment 5: Jobes Ditch .....	1-5
Segment 6: Washington County East and Hillsboro.....	1-5
<b>2. BACKGROUND .....</b>	<b>2-1</b>
<b>3. GOALS AND OBJECTIVES .....</b>	<b>3-1</b>
<b>4. CONTEXT.....</b>	<b>4-1</b>
TRAIL ALIGNMENT ANALYSIS CONSIDERATIONS .....	4-1
Segment Boundary Adjustments and Number of Trail Alternatives ...	4-2
TRAIL DESIGN FEATURES AND ELEMENTS .....	4-2
Preferred Trail Type .....	4-2
Alternative Trail Types .....	4-3
Special Structures .....	4-4
Stream Crossings .....	4-5
<b>5. TRAIL ALIGNMENT ALTERNATIVE RATING CRITERIA.....</b>	<b>5-1</b>
RATING LEVELS .....	5-1
RATING CATEGORIES AND FEATURES .....	5-2
Trail Types .....	5-2
Trail User Experience .....	5-2
Safety and Security.....	5-2
Connectivity.....	5-3
Environmental and Cultural Resources .....	5-3



Plans and Regulations .....	5-4
Property Ownership .....	5-4
Directness of Travel.....	5-5
Cost .....	5-5

## **6. SEGMENT 1: BANKS .....6-1**

TRAIL SEGMENT ALIGNMENT ANALYSIS .....	6-1
Mapped Trail Route Alternatives .....	6-2
Localized Route Variations .....	6-2
Preliminary Mapped Trail Route Assessment .....	6-5
Alternatives Considered/Not Mapped .....	6-6

## **7. SEGMENT 2: WASHINGTON COUNTY (NORTH).....7-1**

TRAIL SEGMENT ALIGNMENT ANALYSIS .....	7-1
Mapped Trail Route Alternatives .....	7-2
Localized Route Variations .....	7-2
Preliminary Mapped Trail Route Assessment .....	7-5
Alternatives Considered/Not Mapped .....	7-6

## **8. SEGMENT 3: FOREST GROVE .....8-1**

TRAIL SEGMENT ALIGNMENT ANALYSIS .....	8-1
Mapped Trail Route Alternatives .....	8-2
Localized Route Variations .....	8-2
Preliminary Mapped Trail Route Assessment .....	8-5
Alternatives Considered/Not Mapped .....	8-6

## **9. SEGMENT 4: CORNELIUS .....9-1**

TRAIL SEGMENT ALIGNMENT ANALYSIS .....	9-1
Mapped Trail Route Alternatives .....	9-2
Localized Route Variations .....	9-2
Preliminary Mapped Trail Route Assessment .....	9-5
Alternatives Considered/Not Mapped .....	9-7

## **10. SEGMENT 5: JOBES DITCH .....10-1**

TRAIL SEGMENT ALIGNMENT ANALYSIS .....	10-1
Mapped Trail Route Alternatives .....	10-2
Localized Route Variations .....	10-2



Preliminary Mapped Trail Route Assessment .....	10-5
Alternatives Considered/Not Mapped .....	10-6
<b>11. SEGMENT 6: HILLSBORO – WASHINGTON COUNTY (EAST).....</b>	<b>11-1</b>
TRAIL SEGMENT ALIGNMENT ANALYSIS .....	11-1
Mapped Trail Route Alternatives .....	11-2
Localized Route Variations .....	11-2
Preliminary Mapped Trail Route Assessment .....	11-5
Alternatives Considered/Not Mapped .....	11-7





## **APPENDIX A. PAC MEMORANDUM REGARDING JUNE 17, 2014 SAC OUTCOME**

### **APPENDIX B. CCRT ALIGNMENTS (TASK 4) RECOMMENDED FOR PREFERRED ALTERNATIVE ANALYSIS (TASK 5)**

- B1. APRIL 30, 2014 SAC MEETING
- B2. JUNE 4, 2014 OPEN HOUSE
- B3. SUBMITTED QUESTIONNAIRES, EMAILS, LETTERS
- B4. KEY STAKEHOLDER INTERVIEWS
- B5. BACKGROUND TO CCRT TASK 4 SEGMENT  
RECOMMENDATIONS

### **LIST OF DETAILED MAPS**

#### **FINAL TRAIL ALTERNATIVE MAPS PUBLISHED JULY 2014**

Map 1-1. Trail Alternative Segments 1, 2, and 3 .....	1-7
Map 1-2. Trail Alternative Segments 4, 5, and 6 .....	1-9
Map 1-3. Trail Alternative Segment 1: Banks.....	1-11
Map 1-4. Trail Alternative Segment 2: Washington County (North) .	1-13
Map 1-5. Trail Alternative Segment 3: Forest Grove .....	1-15
Map 1-6. Trail Alternative Segment 4: Cornelius.....	1-17
Map 1-7. Trail Alternative Segment 5: Jobes Ditch .....	1-19
Map 1-8. Trail Alternative Segment 6: Hillsboro – Washington County (East) .....	1-21

#### **ORIGINAL TRAIL ALTERNATIVE MAPS PUBLISHED MAY 2014**

Map 6-1. Trail Alternative Segment 1: Banks.....	6-3
Map 7-1. Trail Alternative Segment 2: Washington County (North) ...	7-3
Map 8-1. Trail Alternative Segment 3: Forest Grove .....	8-3
Map 9-1. Trail Alternative Segment 4: Cornelius.....	9-3
Map 10-1. Trail Alternative Segment 5: Jobes Ditch .....	10-3
Map 11-1. Trail Alternative Segment 6: Hillsboro – Washington County (East) .....	11-3



# 1. Trail Alignment Alternatives Process and Recommendations


The purpose of this summary is to concisely synthesize the Council Creek Regional Trail (CCRT) trail alignment alternative review process that was initiated with publication of the first draft version of Plan Report No. 2, Trail Alignment Analysis, and a Project Management Team (PMT) review on April 15, 2014. The goal of this Plan Report No. 2 was to identify up to three primary trail alignment alternatives per trail planning segment.

## PROCESS SUMMARY

Detailed summaries of the advisory committee meetings, key stakeholder interviews, and public open house processes and outcomes that are highlighted below can be found under Appendices A and B of this Plan Report No. 2. The capitalized (WEST, CREEK, etc.) trail alternatives alignments noted below can be found on the updated trail segment alignment maps that follow.

- PMT directed Consultant (Parametrix) to preliminarily map more than three trail alternatives per segment for the purposes of stakeholder and public reviews, if in the Consultant's judgment there were more than three viable alternatives worth considering. The PMT also directed the Consultant not to map trail alignments simply for the sake of "counting to three".
- The initial draft Trail Alignment Analysis (Plan Report No. 2) was published on April 15, 2014, and was reviewed by the PMT. Some minor changes were suggested and a Version 2 was re-published (dated May 2014 to distinguish from the initial version). The revised Plan Report No. 2 illustrated:
  - Four primary trail alignment alternatives in each of Segments 1, 2, 3, and 4.
  - Two in Segment 5.
  - Three in Segment 6.
  - Localized alignment variations were also identified for short sections of primary routes in Segments 2, 4 and 6.
- Plan Report No. 2 - Version 2 was reviewed by the project's Stakeholder Advisory Committee (SAC) on April 30, 2014.



- 
- Five stakeholder interviews or discussions were conducted in this period: the City of Banks, Metro, the Natural Resource Conservation Service/Tualatin Soil and Water Conservation District, ODOT, and indirectly (via City of Cornelius staff) with the owners of Killarney West Golf Course (Segment 6).
  - Plan Report No. 2 - Version 2 was presented at a public Open House on June 4, 2014. Approximately 60 individuals attended.
  - The Consultant prepared meeting summaries reflecting SAC Meeting #1, Open House, and stakeholder interview outcomes; and a consolidated memorandum making recommendations for the retention, deletion or modification of trail alignment alternatives in response to these activities. The Consultant recommended:
    - Two trail alternatives (WEST and EAST 1) in Segment 1.
    - Three alternatives (WEST, CENTER, EAST 1) in Segments 2 and 3.
    - Two alternatives (CREEK and RAIL) in Segments 4 and 6. All localized CREEK alignment variations in Plan Report No. 2 – Version 2 were retained for a second SAC review.
    - One alignment alternative (345th) in Segment 5.
    - Some prior localized alignment variations were retained for short sections of primary routes in Segments 2 and 4.
    - New variation be added for Segment 6 (use of Walnut Street for east end of RAIL option).
  - The SAC met a second time on June 17, 2014, reviewed the Consultant's recommendations as above, and made further recommendations. The Consultant prepared a second memorandum reflecting SAC Meeting #2 recommendations:
    - Retain one modified trail alternative (WEST) in Segment 1 that uses the existing Oregon 47 under crossing of Oregon 6.
    - Retain three alternatives (WEST, CENTER, and EAST 1) in Segments 2 and 3, but merge the WEST and CENTER alternatives at the south end of Segment 3 to follow Oregon 47.
    - Use NW Greenville Road instead of NW Dierckx Road or NW Wilkesboro Road to connect Segment 1 to the WEST or EAST 1 options.



- Deferred to the Project Advisory Committee (PAC) on the two WEST alignment localized variations between NW Kemper Road and NW Purdin Road.
- Retain two alignment alternatives (CREEK 1-3-4-6 and RAIL) through Segments 4 and 6, but deferred a decision on the CREEK alignment between N 19th Avenue/Susbauer Road and N 29th Avenue/NW Hobbs Road to the PAC.
- Retain RAIL option but modify east end to use SE Washington Street sidewalks and bike lanes to connect to downtown Hillsboro light rail station. Eliminate Walnut Street and Main Street local variations.
- Add a new west-east alternative (RAIL 2) through Segments 4, 5 and 6, subject to rail line owner cooperation as to using this rail corridor for a rail-with-trail option.
- Retain one alignment alternative in Segment 5 (the SAC recommended the HOBBS option over 345th).

## ALIGNMENT ALTERNATIVE RECOMMENDATIONS


The Project Advisory Committee (PAC) consisting of representatives from cities of Banks, Forest Grove, Cornelius and Hillsboro, Washington County, Metro, and ODOT met on July 1, 2014 to consider the SAC's recommendations, and Open House and stakeholder interview outcomes, and to select up to three alignment alternatives per segment for additional analysis in the next phase of the master plan (Task 5/Plan Report No. 3).

Under Task 5, *Implementation Strategy*, the following PAC recommended trail alignment alternatives will be given a comparative analysis, and a preferred alternative(s) will be selected. In addition, preferred alignments will be refined as necessary, development costs will be estimated, regulatory and jurisdictional requirements described, specific trail types and treatments identified, and a phasing plan and short connector trails will be proposed.

### Segment 1: Banks

1. Advance **WEST** north of Oregon 6 to the next phase of the master plan process, but connect to WEST, CENTER or EAST 1 south of Oregon 6 via a common CENTER undercrossing of Oregon 6.
2. Eliminate **CENTER** (Main Street) north of the Oregon 6/Oregon 47 interchange.



- 
3. Advance **WEST**, **CENTER**, and **EAST 1** south of Oregon 6 to the next phase, but connect the common alignment under Oregon 6 to the **WEST** and **EAST 1** alignments via NW Greenville Road.
  4. Eliminate **EAST 2**.

### Segment 2: Washington County North

1. Advance **WEST** and **EAST 1** to the next phase, but connect both alignments to the common **CENTER** alignment under Oregon 6 via NW Greenville Road.
2. Advance **CENTER** to the next phase.
3. Further analyze the two localized **WEST** alignment variations between NW Kemper Road and NW Purdin Road, particularly consulting with BPA on trail design opportunities and constraints along its transmission power corridor.
4. Modify **EAST 1** thru the community of Verboort by using NW Heesacker Road, NW Visitation Road, and NW Verboort Road to create a small shared use street loop around the center of the community.
5. Eliminate **EAST 2**.

### Segment 3: Forest Grove

1. Advance **WEST** to the next phase, following the BPA power corridor, but crossing Oregon 47 at the existing Sunset Drive/NW Beal Road signalized intersection.
2. Combine **WEST** and **CENTER** alternatives into a common alignment on the northeast side of Oregon 47 between Sunset Drive/NW Beal Road and NW Martin Road/Quince Street.
3. Advance **EAST 1** to the next phase. East 1 in this segment is exclusively along NW Porter Road and the anticipated closing of the Porter Road Bridge and low housing density along the road make a shared use street solution highly viable.
4. Eliminate **EAST 2**.

### Segment 4: Cornelius

1. Advance **CREEK 1 and 3** to the next phase, but eliminate: a) multiuse trail and on-street alternatives north of creek between NW Susbauer Road and NW Hobbs Road, and b) on-street alternative along NW Cornelius-Schefflin Road and the north and east sections of NW Spiesschaert Road.



2. Between N 19th Avenue and NW Hobbs Road/N 29th Avenue use **CREEK 2** by extending an existing pedestrian trail along Council Creek, combined with rail-with-trail along RAIL 1 to accommodate commuter and higher intensity bicycle and pedestrian traffic.
3. Advance **RAIL 1** to the next phase.
4. Consider, subject to rail line owner cooperation, a **RAIL 2** alternative using the rail line south of Oregon 8, including a street-adjacent multiuse trail section between Oak Street and N 4th Avenue.
5. Eliminate **HOLLADAY** and **HIGHWAY**.

#### Segment 5: Jobes Ditch

1. Advance **HOBBS** to the next phase.
2. Eliminate **345th**.

#### Segment 6: Washington County East and Hillsboro

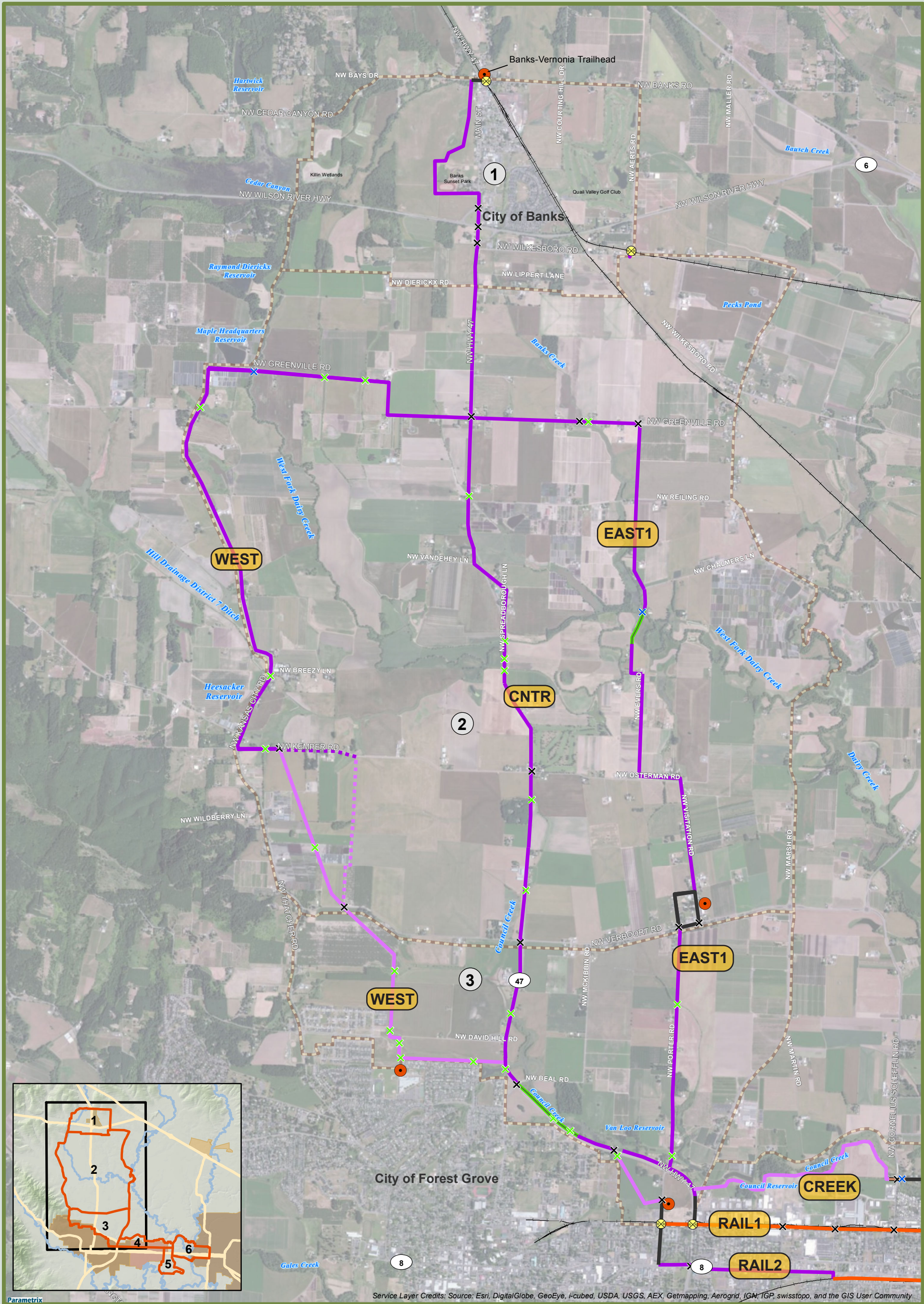
1. Advance **CREEK 4 and 6** to next phase, but connect CREEK back to the downtown Hillsboro light rail station along NW Connell Avenue.
2. Advance **RAIL 1** to next phase, but using existing sidewalks and bike lanes along SE Washington Street between SW Dennis Avenue and SW Adams Avenue.
3. Consider, subject to rail line owner cooperation, a **RAIL 2** alternative using the rail line south of Oregon 8, connecting to downtown Hillsboro light rail station along SW Dennis Avenue.
4. Eliminate **CREEK 5** and **HIGHWAY**.





*This page intentionally left blank.*





Council Creek Regional Trail  
Master Plan - Trail Alternatives  
Segment 1, 2 & 3  
Banks  
Washington Co. (North)  
Forest Grove

July 1, 2014

0 0.25 0.5 0.75 1 Miles

\* Dashed lines represent possible local variation

Trail Type\*

- Multiuse Trail
- Street-adjacent Multiuse
- Shared Street
- Multiuse Rail-with-Trail
- Multiuse Boardwalk
- Pedestrian Trail
- Flood-resistant Trail
- Bridge
- Conceptual Trailhead Location

Crossing Type

- Collector/Arterial Road Crossing
- Major Stream Crossing
- Minor Stream Crossing
- Railroad Crossing

- Trail Segment Boundary
- BPA Corridor
- Streams
- Railroad
- Waterbody
- Wetland Area
- FEMA 100 Yr. Flood Plain

- Taxlot Boundary
- Park
- Natural Area
- Private Recreation Area
- Cemetery
- Public Land



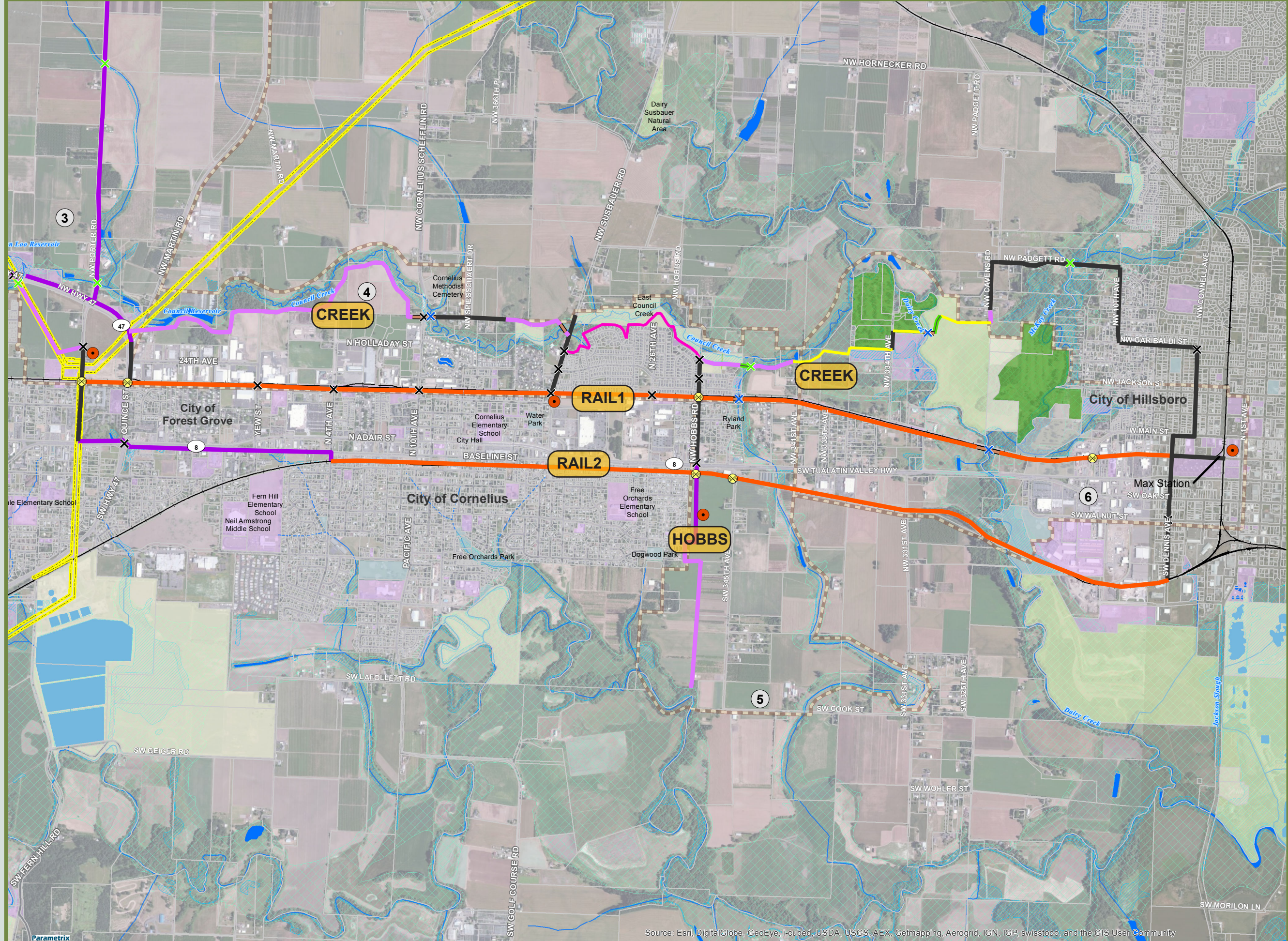
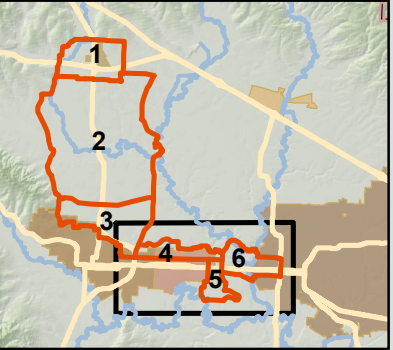
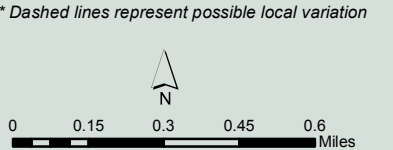


*This page intentionally left blank.*



Council Creek Regional Trail Master Plan  
Trail Alternatives  
Segment 4,5 & 6  
Cornelius  
Jobes Ditch  
Washington Co. (East)  
July 1, 2014

- Trail Type\***
- Multiuse Trail
  - Street-adjacent Multiuse
  - Shared Street
  - Multiuse Rail-with-Trail
  - Multiuse Boardwalk
  - Pedestrian Trail
  - Flood-resistant Trail
  - Bridge
  - Conceptual Trailhead Location
- Crossing Type**
- Collector/Arterial Road Crossing
  - Major Stream Crossing
  - Minor Stream Crossing
  - Railroad Crossing
- StudyAreas
- Railroad
  - Taxlot Boundary
  - Park
  - Natural Area
  - Private Recreation Area
  - Cemetery
  - Streams
  - Waterbody
  - Wetland Area
  - FEMA 100 Yr. Flood Plain
  - Public Land



Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community





*This page intentionally left blank.*



# Council Creek Regional Trail Master Plan

## Trail Alternatives

### Segment 1

#### Banks

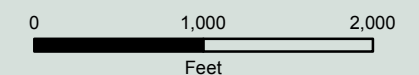
July 1, 2014

#### Trail Type

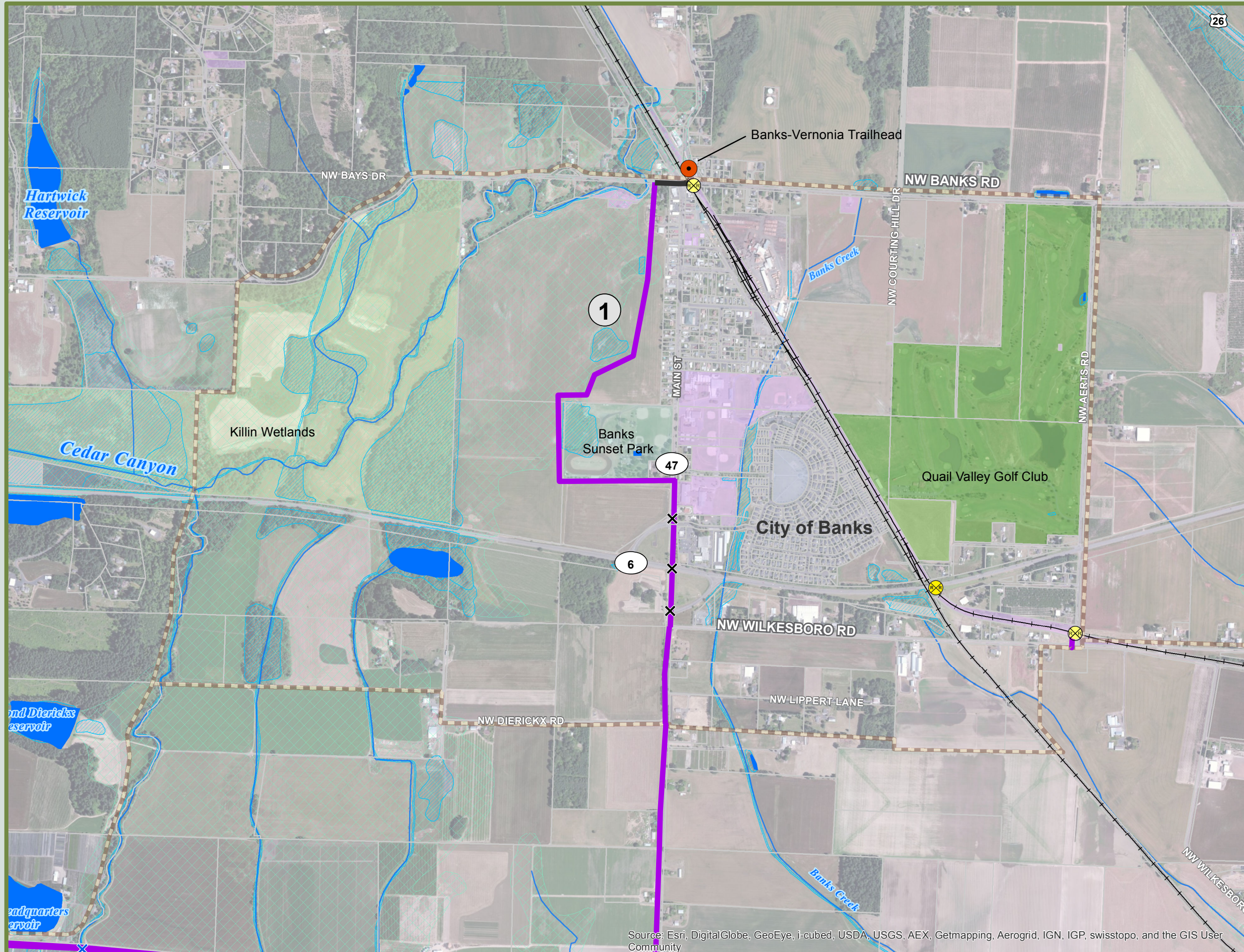
- Multiuse Trail
- Street-adjacent Multiuse
- Shared Street
- Multiuse Rail-with-Trail
- Multiuse Boardwalk
- Flood-resistant Multiuse Trail
- Pedestrian Trail
- Bridge
- Conceptual Trailhead Location

#### Crossing Type

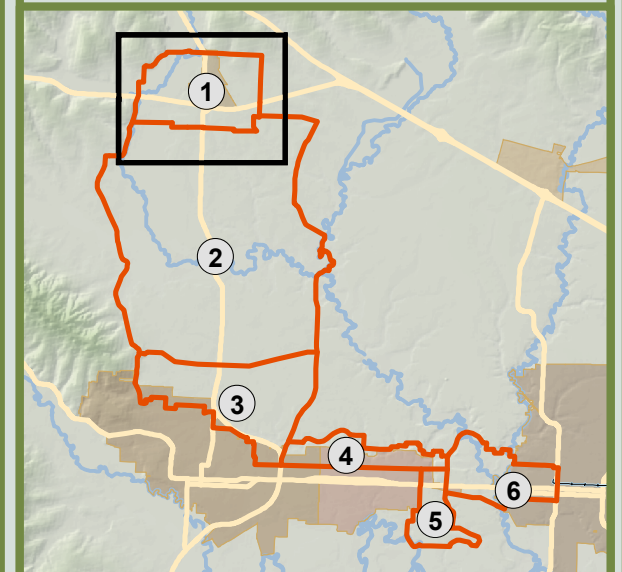
- ✕ Collector/Arterial Road Crossing
- ✕ Major Stream Crossing
- ✕ Minor Stream Crossing
- ✕ Railroad Crossing
- ✕ Trail Segment Boundary
- Railroad
- BPA Corridor
- Taxlot Boundary
- Park
- Natural Area
- Private Recreation Area
- Cemetery
- Public Land
- Streams
- Waterbody
- Wetland Area
- FEMA 100 Yr. Flood Plain



\* Dashed lines represent possible local variation



Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community







*This page intentionally left blank.*



Council Creek Regional Trail  
Master Plan  
Trail Alternatives  
Segment 2  
Washington County (North)

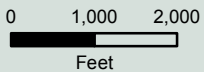
July 1, 2014

Trail Type

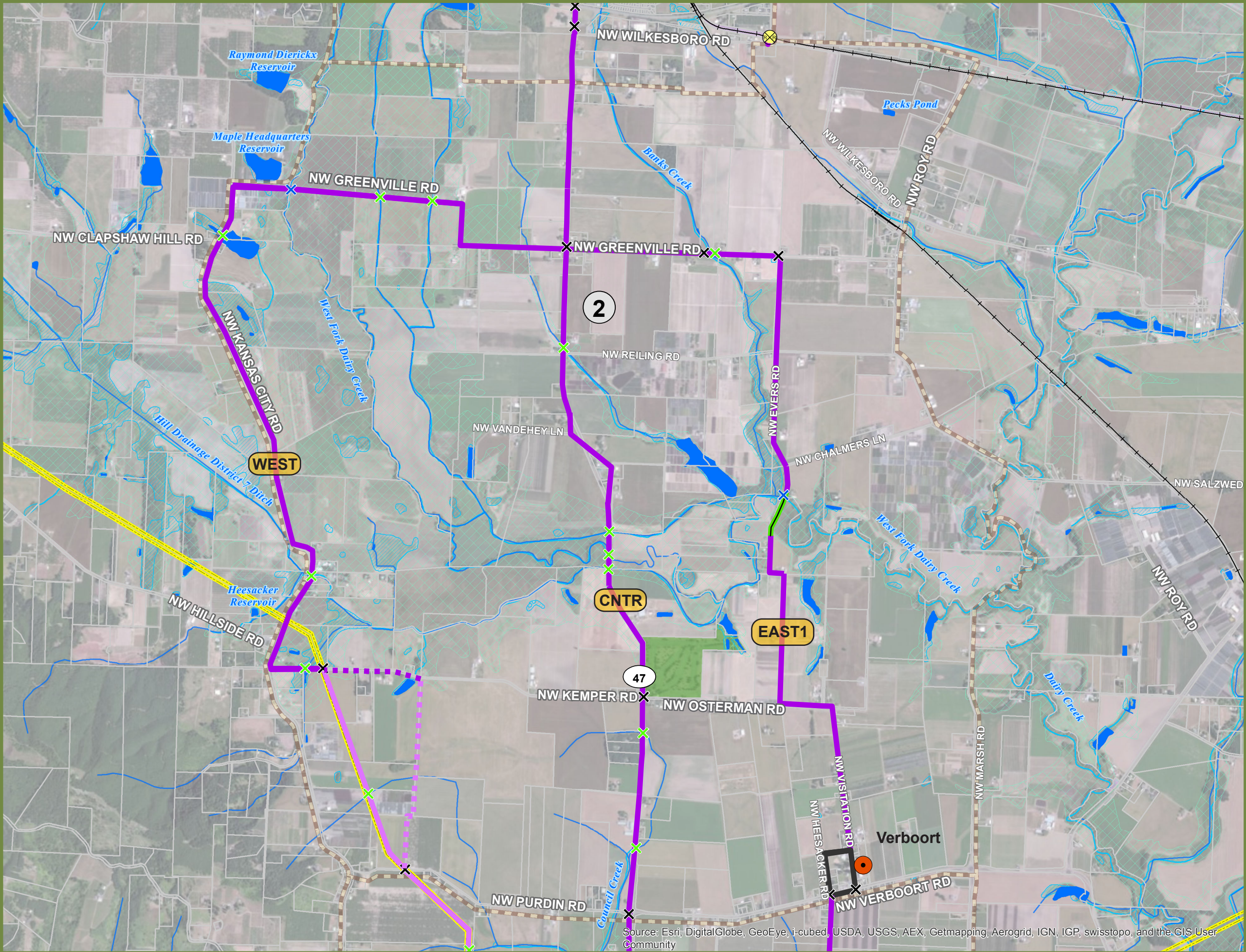
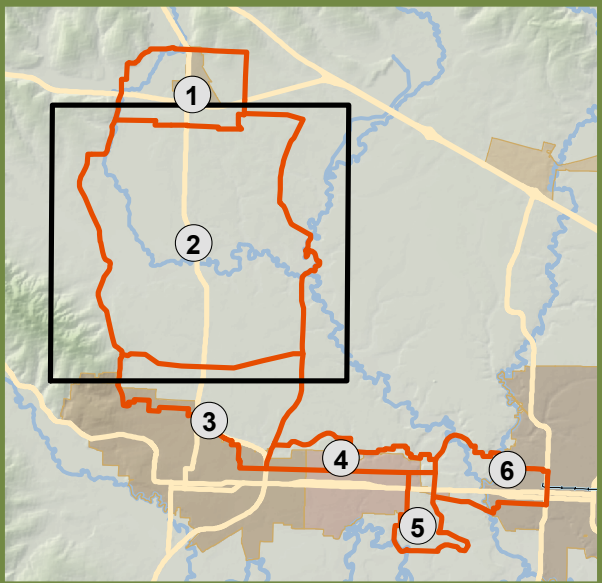
- Multiuse Trail
- Street-adjacent Multiuse
- Shared Street
- Multiuse Rail-with-Trail
- Multiuse Boardwalk
- Flood-resistant Multiuse Trail
- Pedestrian Trail
- Bridge
- Conceptual Trailhead Location

Crossing Type

- Collector/Arterial Road Crossing
- Major Stream Crossing
- Minor Stream Crossing
- Railroad Crossing
- Trail Segment Boundary
- BPA Corridor
- Railroad
- Taxlot Boundary
- Park
- Natural Area
- Private Recreation Area
- Cemetery
- Public Land
- Streams
- Waterbody
- Wetland Area
- FEMA 100 Yr. Flood Plain



\* Dashed lines represent possible local variation



Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community





*This page intentionally left blank.*



Council Creek Regional Trail  
Master Plan  
Trail Alternatives July 1, 2014  
Segment 3  
Forest Grove

**Trail Type**

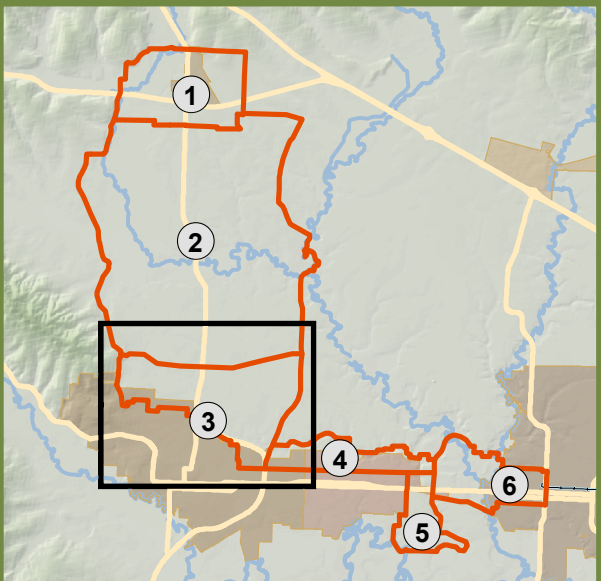
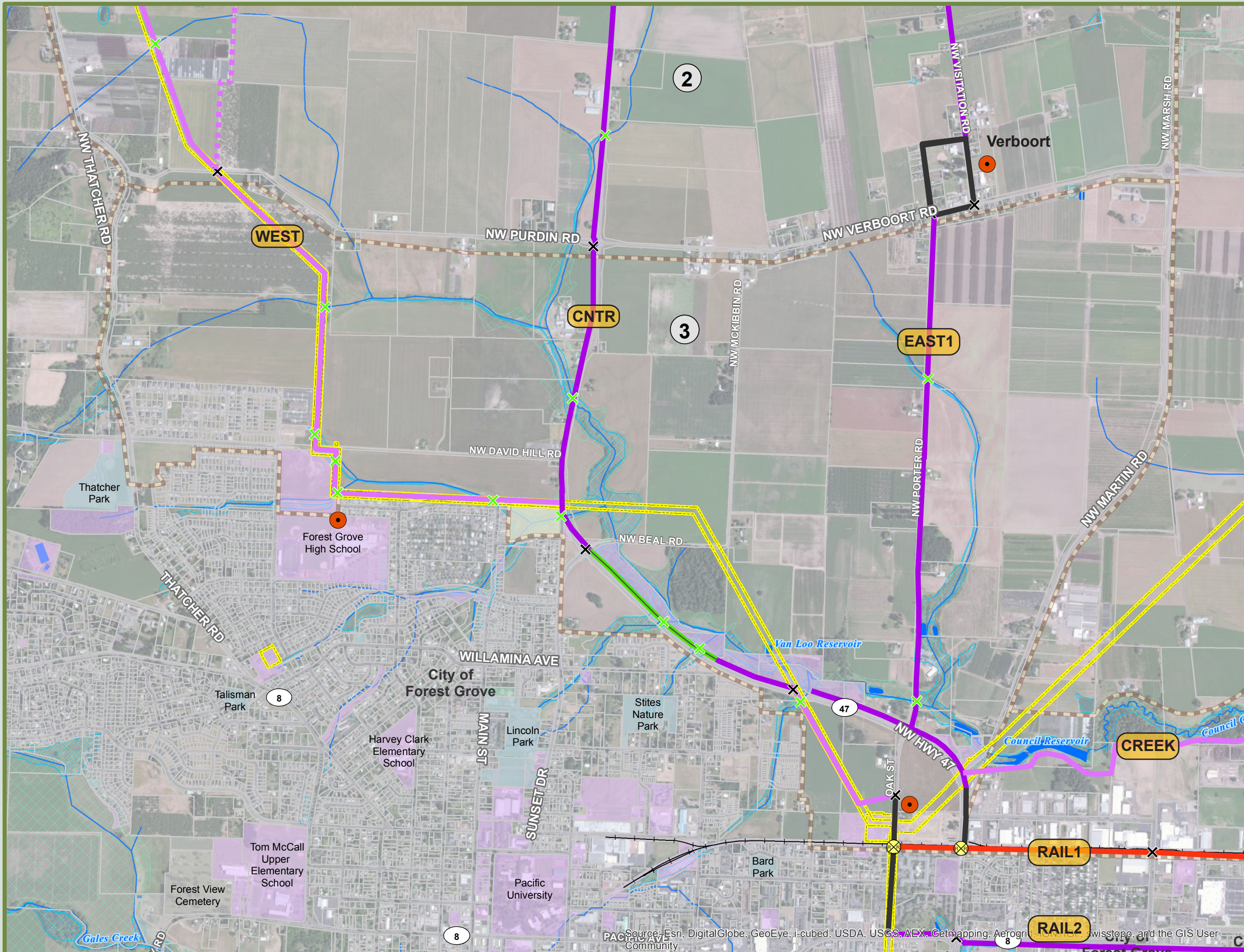
- Multiuse Trail
- Street-adjacent Multiuse
- Shared Street
- Multiuse Rail-with-Trail
- Multiuse Boardwalk
- Flood-resistant Multiuse Trail
- Pedestrian Trail
- Bridge
- Conceptual Trailhead Location

**Crossing Type**

- Collector/Arterial Road Crossing
- Major Stream Crossing
- Minor Stream Crossing
- Railroad Crossing
- Trail Segment Boundary
- BPA Corridor
- Railroad
- Taxlot Boundary
- Park
- Natural Area
- Private Recreation Area
- Cemetery
- Public Land
- Streams
- Waterbody
- Wetland Area
- FEMA 100 Yr. Flood Plain

0 1,000 2,000  
Feet

\* Dashed lines represent possible local variation







*This page intentionally left blank.*



Council Creek Regional Trail  
Master Plan  
Trail Alternatives  
Segment 4  
Cornelius

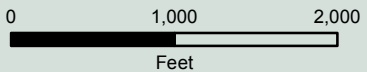
July 1, 2014

Trail Type

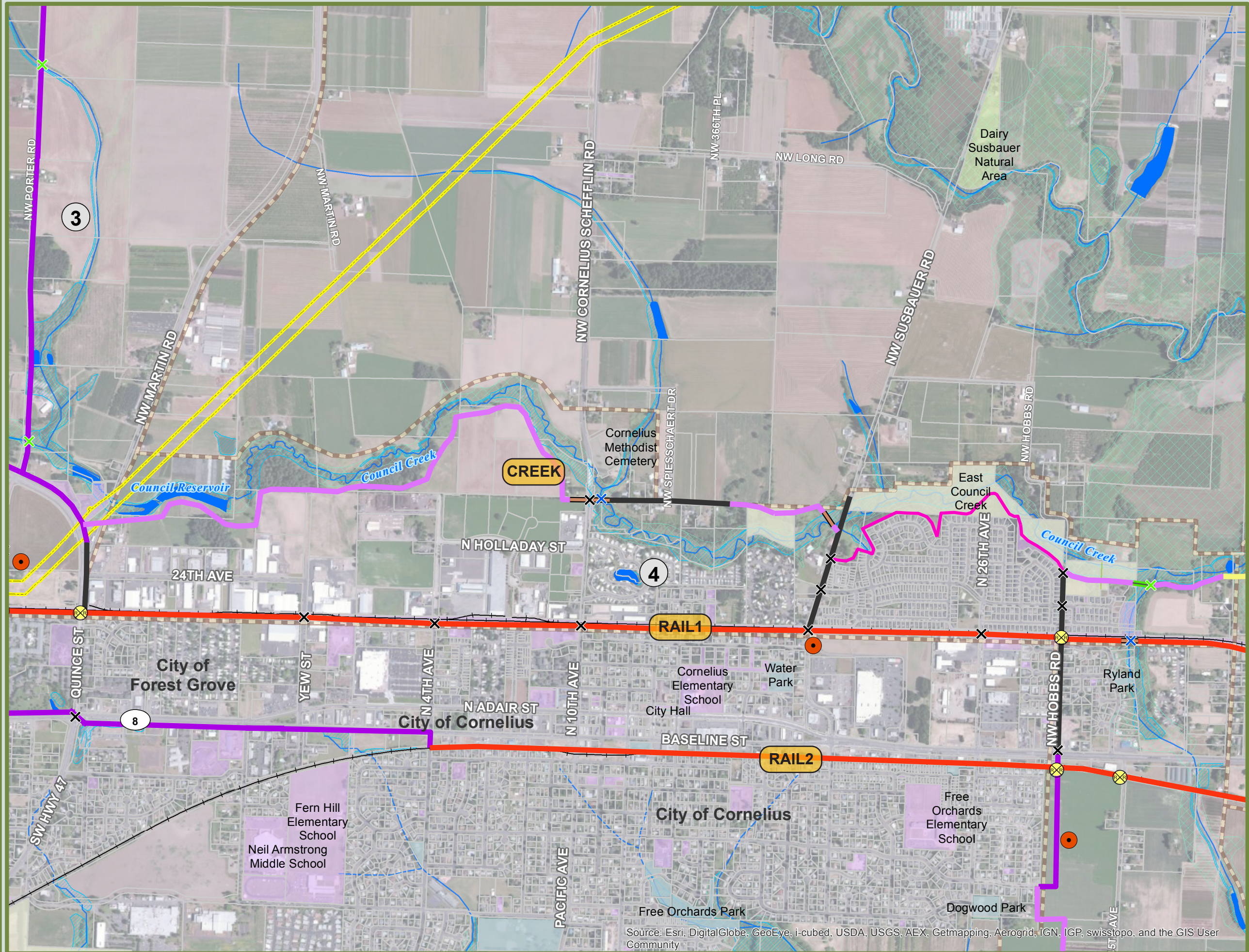
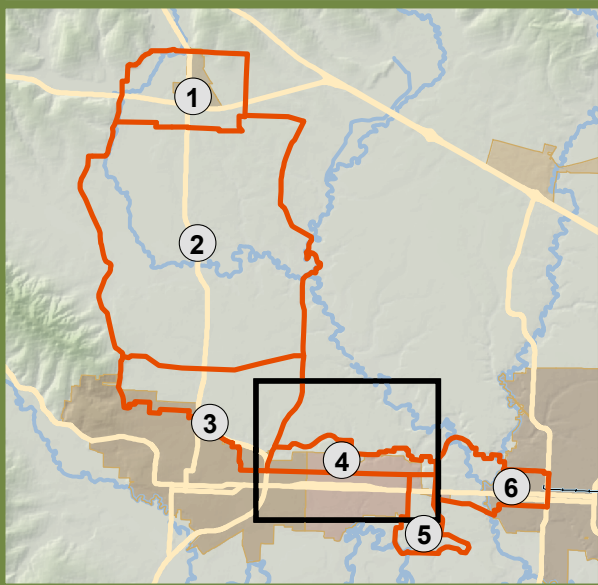
- Multiuse Trail
- Street-adjacent Multiuse
- Shared Street
- Multiuse Rail-with-Trail
- Multiuse Boardwalk
- Flood-resistant Multiuse Trail
- Pedestrian Trail
- Bridge
- Conceptual Trailhead Location

Crossing Type

- Collector/Arterial Road Crossing
- Major Stream Crossing
- Minor Stream Crossing
- Railroad Crossing
- Trail Segment Boundary
- BPA Corridor
- Railroad
- Taxlot Boundary
- Park
- Natural Area
- Private Recreation Area
- Cemetery
- Public Land
- Streams
- Waterbody
- Wetland Area
- FEMA 100 Yr. Flood Plain



\* Dashed lines represent possible local variation



Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community





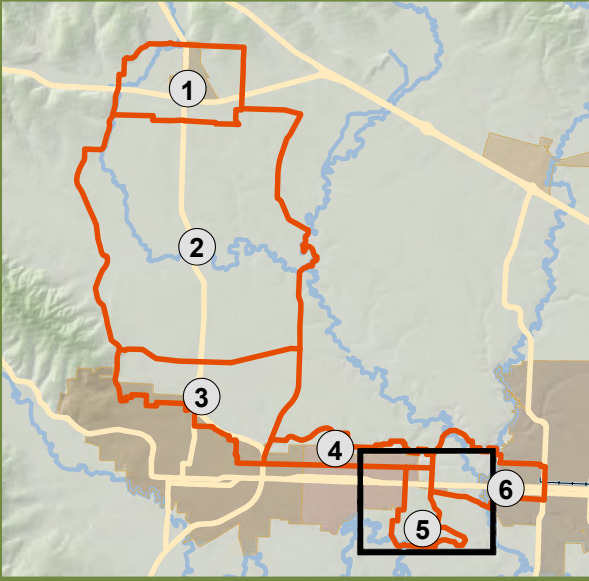
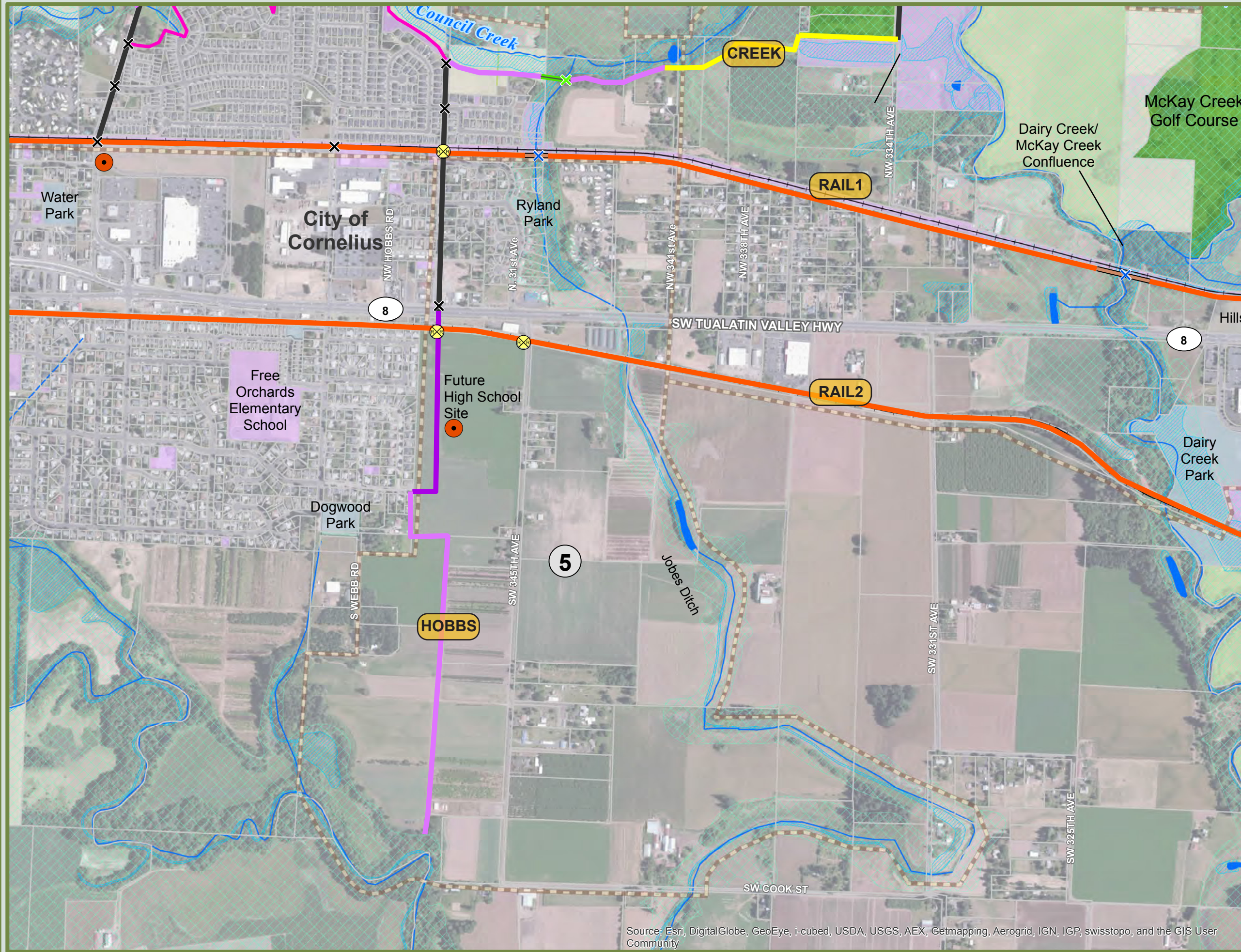
*This page intentionally left blank.*



Council Creek Regional Trail  
Master Plan  
Trail Alternatives  
Segment 5  
Jobs Ditch

July 1, 2014

- Trail Type**
- Multiuse Trail
  - Street-adjacent Multiuse
  - Shared Street
  - Multiuse Rail-with-Trail
  - Multiuse Boardwalk
  - Flood-resistant Multiuse Trail
  - Pedestrian Trail
  - Bridge
  - Conceptual Trailhead Location
- Crossing Type**
- Collector/Arterial Road Crossing
  - Major Stream Crossing
  - Minor Stream Crossing
  - Railroad Crossing
  - Trail Segment Boundary
  - BPA Corridor
  - Railroad
  - Taxlot Boundary
  - Park
  - Natural Area
  - Private Recreation Area
  - Cemetery
  - Public Land
  - Streams
  - Waterbody
  - Wetland Area
  - FEMA 100 Yr. Flood Plain
- 0 1,000 2,000  
Feet
- \* Dashed lines represent possible local variation



Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community





*This page intentionally left blank.*



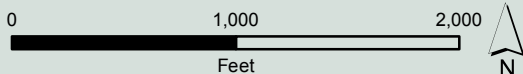
Council Creek Regional Trail  
Master Plan  
Trail Alternatives July 1, 2014  
Segment 6 - Hillsboro  
Washington County (East)

Trail Type

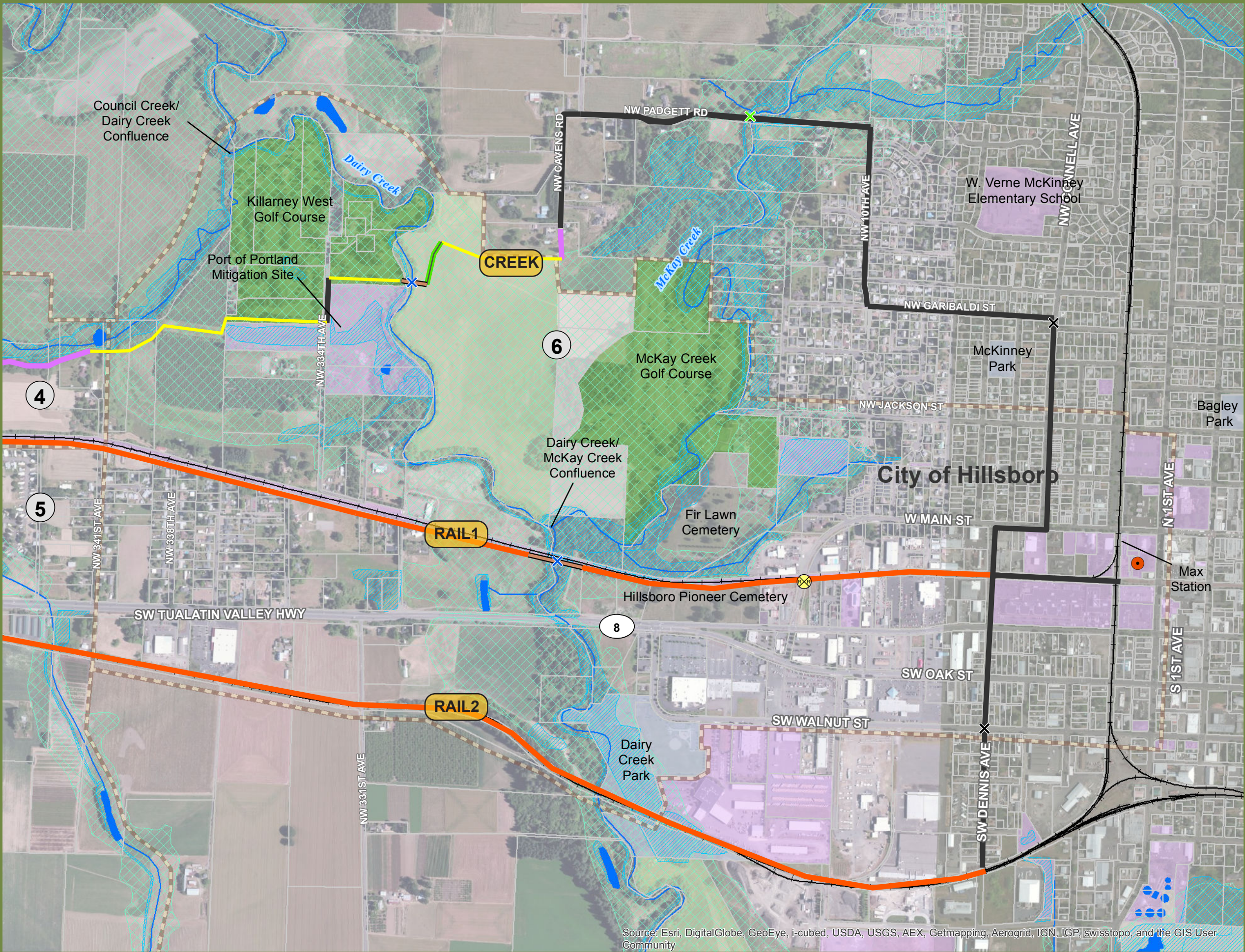
- Multiuse Trail
- Street-adjacent Multiuse
- Shared Street
- Multiuse Rail-with-Trail
- Multiuse Boardwalk
- Flood-resistant Multiuse Trail
- Pedestrian Trail
- Bridge
- Conceptual Trailhead Location

Crossing Type

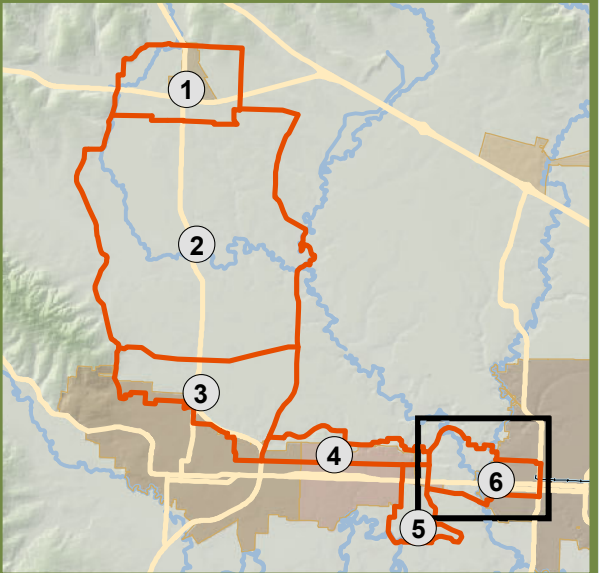
- Collector/Arterial Road Crossing
- Major Stream Crossing
- Minor Stream Crossing
- Railroad Crossing
- Trail Segment Boundary
- BPA Corridor
- Railroad
- Taxlot Boundary
- Park
- Natural Area
- Private Recreation Area
- Cemetery
- Public Land
- Streams
- Waterbody
- Wetland Area
- FEMA 100 Yr. Flood Plain



\* Dashed lines represent possible local variation



Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community







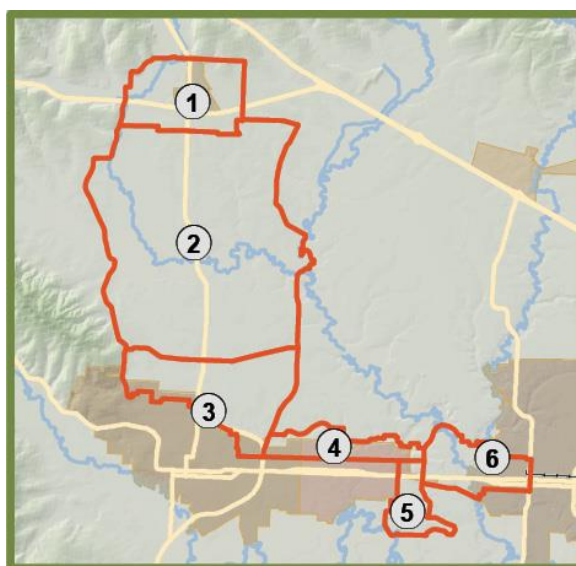
*This page intentionally left blank.*



## 2. Background

This CCRT Alignment Analysis Report (Plan Report No. 2) identifies, maps and describes up to three trail alignment alternatives within each of six trail segments (see map below) based on technical analysis, and advisory committee and stakeholder and public review. The original boundaries of these segments were defined at the outset of the project and refined at the Existing Conditions phase completed in February 2014. The master plan's Existing Conditions Report (Plan Report No. 1) should be used as a background reference in reviewing the trail alignment alternatives mapped and described herein. Plan Report No. 1 can be found online at the official project website.<sup>1</sup>

All trail alignment alternatives and features that are illustrated or described in this Plan Report No. 2 are “plan level” and subject to detailed permitting, design, and engineering in advance of trail construction. In the first draft of Plan Report No. 2, some segments had more than three alternatives described. The results of stakeholder and public review processes between April and July 2014 guided the project team in narrowing segment alternatives to three or fewer and identifies alternatives not previously considered. In the next phase of this master plan—Implementation Strategy (Plan Report No. 3)—the one to three alignments identified for each segment will undergo additional analysis and stakeholder and public review, and a preferred alignment for each segment will be selected.



Council Creek Trail Segments

<sup>1</sup> <http://www.oregonmetro.gov/index.cfm/go/by.web/id=43951>





*This page intentionally left blank.*



### 3. Goals and Objectives

The goal of the CCRT Master Plan is to identify and plan a preferred trail alignment within a trail corridor study area that is approximately 15 miles long, extending from downtown Banks through unincorporated farmlands in Washington County to the cities of Forest Grove and Cornelius then into downtown Hillsboro.

The overarching objective is for the CCRT to primarily be a multiuse (bicyclists and pedestrians) trail separate from road rights of way. Other trail types (boardwalks, shared use, etc.) are used where physical conditions, property restrictions, or other factors challenge multiuse solutions. Other master plan objectives include:

- Coordinate the inputs and actions of the various project jurisdictional partners and other stakeholders.
- Engage local jurisdictions, property owners, citizens, businesses, and other stakeholders in the CCRT's development.
- Collect and summarize baseline information on the existing conditions within the CCRT corridor and in immediately abutting areas. This information can be found in CCRT Plan Report No. 1.
- Analyze specific trail segments within the trail corridor addressing opportunities and constraints with respect to roadway and railway crossings, stream and wetland impacts, urban and rural land uses, and other opportunities and limitations, to best assure trail sections and segments can be constructed to regional trail standards. This information can be found in this Plan Report No.2.
- Develop implementation and phasing strategies. This information will be published in Plan Report No. 3 scheduled in November 2014, and will include recommendations on preferred trail alignments, costs, and phasing.
- Produce a draft CCRT Master Plan for jurisdictional, stakeholder, and public review and distribution.
- Produce a final CCRT Master Plan with a preferred alignment to guide local jurisdictions in the development of the trail.





*This page intentionally left blank.*



## 4. Context

### TRAIL ALIGNMENT ANALYSIS CONSIDERATIONS

A variety of constraints and opportunities influence CCRT alignment alternatives. Adopted regulations and policies, natural resource features, historic and cultural resources, prior or planned development, existing transportation and utility infrastructure, and connections to destinations and services factored into the identification of possible trail routes in this Trail Alignment Analysis phase.

In addition, trail alternatives rating criteria were developed to assist in uniformly comparing alignment alternatives. The criteria are comparative not quantitative. These criteria were developed in the Existing Conditions phase of this master plan, based on the input and direction of the Project Advisory Committee (PAC). At this Trail Alignment Analysis phase, the criteria were used to preliminarily and generally inform the identification of trail route options. As applied in this current phase, relevant findings are summarized for each segment to help guide the reader in thinking about preferred alternatives.

Not all of the rating criteria categories were applied at this Trail Alignment Analysis phase. Criteria related to directness of travel and the cost of building the trail, as well as additional criteria for trail segment or section phasing, will be applied under the Implementation Strategy phase. During the Implementation Strategy phase, the full criteria will be formally applied and documented to help arrive at a preferred alignment for each trail segment. The criteria generally considered for this Trail Alignment Analysis phase of the master plan are:

- Trail Types
- Trail User Experience
- Safety and Security – Connectivity
- Environmental and Cultural Resources
- Regulations and Plans
- Property Acquisition

See Chapter 4 of this Plan Report No. 2 for the complete set of trail alternative rating criteria.





## Segment Boundary Adjustments and Number of Trail Alternatives

As noted in Plan Report No. 1, the potential for segment boundary adjustments or adjustments outside of the study boundary were anticipated in the Trail Alignment Analysis phase. In fact, the analysis reflected in this Plan Report No. 2 preliminarily identified three possible routes partly or wholly outside of then current segment boundaries based on significant constraints within Segment 4: Cornelius and Segment 6: Hillsboro-Washington County East. In addition, a distinct alternative route with some merit was identified by a citizen participating in the Open House.

The characteristics of some segments (for instance Segment 2: Washington County North) suggested more than three viable alternatives, as well as some localized alternatives or cross-connections for portions of the identified routes. These are documented in this Plan Report No. 2. In addition, some segments (such as Segment 5: Jobes Ditch) exhibited multiple constraints, making identification of up to three viable alternatives significantly challenging or functionally unnecessary.

## TRAIL DESIGN FEATURES AND ELEMENTS

Trail alignment and design alternatives are mapped or described in this Plan Report No. 2 for the following factors or elements:

- Trail type classifications and widths (see additional information below).
- Horizontal alignments and grades. With respect to grades, the entire study area is relatively flat except along the west edge of Segments 2 and 3 and for one or two localized and short sections in Segments 4 and 6. Accordingly, mitigating for trail grades in excess of an Americans with Disabilities Act [ADA]–compliant 5 percent is not a significant factor, except for one alignment alternative along the west edge of the study area.
- Location and extent of special structures (see types below).
- Potential trailhead locations (see segment maps).

## Preferred Trail Type

The **preferred trail type** for the CCRT is a multiuse trail that exhibits:

- Width of 10 to 12 feet, with 2-foot wide graveled shoulders.
- Off-road alignment, completely separate and on a different alignment from existing road routes and right-of-way.
- ADA-compliant grades (e.g., less than 5 percent) and asphalt or other hard surface.




A wide variety of constraints suggested or required that some variations to the preferred trail type were desirable or even necessary in order to develop a continuous and fully functional regional-scale trail accommodating all users. In particular, 10- to 12-foot wide multiuse trails adjacent to and paralleling the roadways are used extensively. Alternative solutions are sorted into three categories below: trail types, special structures, and stream crossings.

### Alternative Trail Types

- **Alternative trail types** include: **Street-adjacent trail** – Multiuse trail closely paralleling a roadway but separated by a 4- to 5-foot-wide landscaped buffer. Acquisition of new right of way will usually be required. At this Trail Alignment Analysis phase, street-adjacent solutions do not identify the side of the roadway followed. The final street-adjacent trail location will be determined as part of the Implementation Strategy phase. The Implementation Strategy phase may also determine that a street solution (see definitions below) is more feasible than a street-adjacent trail for a particular location.
- **Rail-with-trail** – Multiuse trail that parallels an active rail line, separated by a buffer and usually some form of safety fencing. Actual design and setbacks from the rail line will be established in consultation the rail line owner.
- **Multiuse boardwalk** – A low elevated multiuse structure set on piers across wetlands, floodplain areas, or other sensitive lands.
- **Flood resistant multiuse trail** – Multiuse trail through areas subject to occasional but regular inundation. Trail materials may differ from the preferred multiuse trail type, trail may be elevated, and/or additional structures for cross-drainage included.
- **Pedestrian trail** – Width of 8 feet or narrower and either paved or soft-surface that can also accommodate short distance recreational bicycle trips. Use of this alternative may require a nearby route more suitable for commuter or longer distance bicyclists.
- **Street solutions** – A variety of alternatives within road right of way are possible. At this Trail Alignment Analysis phase, identification of a street solution only indicates that a street-adjacent multiuse trail or other trail type was deemed not feasible. Specific street solutions will be determined during the Implementation Strategy phase as part of preferred trail alignment selection. Street solution alternatives may include:
  - “Cycle tracks” using protected or raised lanes, exclusively for bicyclists, with a parallel pedestrian sidewalk.



- 
- Bike lane, designated by road surface striping/signing, with a parallel pedestrian sidewalk.
  - Widened roadway shoulders that may be more appropriate than other solutions in rural areas.
  - Shared roadway solutions allowing trail users to share vehicle roadways. This solution is only practical and safe on low-speed, low-traffic roadways. Speed bumps, signing, and/or surface striping is required to assure safety.

### Special Structures

**Special structures** could include but are not limited to:

- **Roadway crossings** – At-grade, both at intersections and mid-block. Plan Report No. 2 mapping identifies arterial and collector roadway crossings where, in addition to conventional crosswalk signing and striping, user-activated beacons or signals and/or raised mid-street islands may be needed to assure safety.
- **Rail line crossings** – At-grade, with actual design and improvements determined in consultation with rail line owner. Trail alternatives identified in this Plan Report No. 2 primarily use existing rail crossings which may need upgrades. New rail line crossings may be needed in Segments 4 and 6.
- **Undercrossings** – Only two undercrossings are suggested by this Trail Alignment Analysis, both in Segment 1. These are the Oregon 47/Oregon 6 interchange, and a nearby rail line undercrossing of Oregon 6. Both undercrossings, if used for the trail, could require upgrades and improvements, particularly the Oregon 47 alternative.
- **Bridges** – Major elevated structures crossing streams (Segments 4 and 6), and in one case (Segment 4) crossing an arterial roadway.
- **Retaining walls** – Used in areas with occasional flooding that require an elevated flood resistant trail, or where switchbacks are necessary to meet ADA-compliant trail grades. This Trail Alignment Analysis identified only three areas where switchbacks may be necessary due to grade issues: a crossing of Jobes Ditch at the east end of Segment 4, NW Kansas City Road in Segment 2, and a short trail section in Segment 6.
- **Trailheads** – Conceptual trailhead locations are shown with icons on segment maps. Except for co-location with the existing Banks-Vernonia trailhead in Segment 1, mapped trailhead locations are only



an indication of the general area where a facility might be desirable, not the specific property on which a trailhead is planned.

For example, a trailhead is shown in the community of Verboort (Segment 2), but the trailhead icon does not indicate the specific preferred location. In addition, as the CCRT develops, co-location of trailheads with existing uses where shared parking agreements may be possible, such as schools, parks, churches, or businesses, is desirable.

- **Short connector trails** – Short connector trails should be developed to key destinations and sites that are not directly accessed by the main stem of the CCRT. Desirable connector trail alternatives will be identified during the Implementation Strategy phase once preferred main stem alternatives are determined. Trail width may vary based on the destination and the expected type and volume of bicycle and pedestrian traffic.

### Stream Crossings

**Stream crossings** are also identified on Plan Report No. 2 mapping. Major and minor crossing points are mapped. “Major” and “minor” do not denote the size or width of the stream being crossed. Instead, these terms denote the relative level of physical trail improvements required. All solutions are plan-level and conceptual and will have to be designed and permitted in close consultation with Clean Water Services and other agencies.

- **Major stream crossing** – Crossing requiring a new bridge structure, significant modification to an existing bridge, and/or lengthy elevated boardwalk(s) to cross over stream-associated wetlands and floodplain.
- **Minor stream crossing** – Crossing that can be made with a new culvert or a short new elevated boardwalk, with minor physical modifications to existing structures (such as extending an existing culvert), or by using signing and striping on existing crossing structures.





*This page intentionally left blank.*



## 5. Trail Alignment Alternative Rating Criteria

Nine categories of rating criteria will be applied in evaluating the strengths and weaknesses of the proposed trail alignment alternatives. As noted earlier in this Plan Report No. 2, up to three alternatives in each segment will be comparatively rated during the Implementation Strategy phase using the full criteria listed below. A separate set of rating criteria for phasing the building of the trail will also be applied at the Implementation Strategy.

Rating levels are a matter of degree and are intended as guidance in making relative comparisons of route alternatives within the same trail segment. The categories and features are not weighted, nor in order of importance. Points are not assigned. Rating criteria should not be used as an absolute indication that one alternative is better than another, except perhaps for categories that rate “fatally flawed.” Trade-offs are to be expected. A given alternative may rate well for most categories but very poorly or even significantly flawed for one or two others, and end up as the preferred choice.

The preliminary application of these criteria at the Trail Alignment Alternatives phase can be found under the Preliminary Mapped Route Trail Assessment section of each trail segment alignment analysis chapter that follows. At this phase these findings are presented as a guide to the reader. No conclusions or recommendations are derived. That will come in the master plan’s Implementation Strategy phase. Directness of travel, cost of building the trail, and trail phasing criteria are not applied at this phase.

### RATING LEVELS

**Strongest** Impact is primarily positive and/or best meets project goals and objectives.

Impact is neutral or positive and negative impacts are approximately balanced.

Impact is primarily negative and/or is contrary to project goals and objectives.

**Weakest** Significantly or fatally flawed due to multiple and extensive adverse impacts and/or is entirely contrary to project goals and objectives.

Note: The process of reviewing and selecting trail alignment alternatives should eliminate most, if not all, significantly or fatally flawed options.





## RATING CATEGORIES AND FEATURES

### Trail Types

A variety of trail types may be used to accommodate a variety of trail users and to respond to constrained conditions. A multiuse regional-scale trail on an alignment separate from any road route—10 to 12 feet wide, paved, under 5 percent grade—or a rail-with-trail solution rates strongest. Other trail solutions that, in approximate descending order of desirability, may be used are:

- Street-adjacent multiuse trail (same typology as multiuse trail but closely follows streets, separated by narrow buffer).
- Variations from the standard trail type, such as reduced width or alternate surfaces; or special treatments, such as retaining walls, boardwalks, bridges, and flood-resistant structures.
- Solutions with pedestrian and bicycle users separated onto different routes; including soft-surface trails.
- Bike lanes/sidewalks or solutions such as cycle tracks within higher traffic road right of way.
- Shared-use of lower traffic roadways.

### Trail User Experience

The relative quality of a trail alternative from the perspective of the trail user. Quality of experience factors that rate stronger include, but are not limited to:

- Accesses and/or passes near to attractive views.
- Passes through or near to parks, natural areas and features, recreational facilities, and similar sites.
- Passes through or near to quiet neighborhoods, local community downtowns, historic sites, and other area attractions and destinations.
- Avoids noise and safety impacts from higher speed/volume roadways, industrial activities, and other major activity generators.
- Provides trailheads or other facilities accommodating trail users.
- Provides connections to other transportation opportunities such as transit, light rail, local trails, and other regional trails.

### Safety and Security

Features that can impact trail user safety, security, and accessibility. Safety and accessibility features that rate stronger include, but are not limited to:



- Off-street trails (e.g., separate from street sections) rate stronger than street solutions (bike lanes/sidewalks or shared use of vehicular street surfaces).
- Lower speed/volume roadways used for shared-use or bike lane/sidewalk solutions rate stronger than higher speed/volume roadways.
- Fewer road crossings, particularly midblock.
- Trail alternatives in open and visible areas, or close to uses and activities that provide a sense of security.
- Flatter trail grades that accommodate a wider range of user skill and condition levels, and that simplify ADA accessibility compliance.

### Connectivity


Trail alternatives with more and better connections to recreational and commuter destinations rate stronger. Desirable connections/destinations include but are not limited to:

- Other trails, trailheads, and bikeways.
- Public transit and bus stops.
- Public schools and other educational institutions.
- County, city, and special district offices and services.
- Community services such as hospitals and senior centers.
- Downtowns of Banks, Verboort, Forest Grove, Cornelius, and Hillsboro.
- Commercial shopping areas.
- Employment areas.
- Residential neighborhoods.
- Active recreation facilities and public open spaces.

### Environmental and Cultural Resources

Trail routes can have positive and/or adverse impacts on existing habitats, other environment features, and cultural resources. Alternatives that best avoid adverse impacts or provide opportunities for on-site enhancements rate stronger. Factors to consider include, but are not limited to:



- 
- Specific environmental factors that significantly support (or impede) trail development.
  - Degree to which trail improvements may degrade environmental features.
  - Opportunities as part of trail development for habitat restoration and enhancements.
  - Requirements, if any, to create environmental mitigation areas (such as restored wetlands), either on-site or off-site.
  - Degree to which trail improvements may degrade cultural, historic, or archeological resources.

### Plans and Regulations

The relative degree that special plans or regulations may apply to a given trail alternative compared to other possible routes in the same segment.

Alternatives with simple and efficient regulatory and permitting requirements rate strongest. Complicating factors to consider include, but are not limited to:

- Special or complex land use approvals.
- Permitting across a wide range of regulations and agencies.
- Major variations from approved or customary standards or policies.
- Trail alternative is feasible only as part of some other infrastructure development, such as a roadway extension.
- Special approvals under a different plan unrelated to trails or transportation, such as water quality regulations.

### Property Ownership

Trail development will probably require property acquisitions or easement purchases. Outright cost and relative permitting complexity is accounted for under Cost and Plans and Regulations categories. Other factors to consider include, but are not limited to:

- The fewer the number of property acquisitions that are required the stronger the alternative.
- The smaller the area that has to be acquired the stronger the alternative.



## Directness of Travel

Relative to other possible alternatives, this factor considers the degree to which a given trail alternative avoids out-of-direction or circuitous travel. The shortest distance between two points rates strongest, although detours or slightly longer routes providing more functionality with respect to connectivity, environmental features, safety and security, and other factors should be considered.

## Cost

The relative cost of building a given trail alternative as compared to other possible routes in the same trail segment. The more cost-efficient alternatives rate stronger. Cost factors may include, but are not limited to:

- Property or easement acquisition.
- Relocation requirements such as the cost of moving transmission-level power lines or a residence.
- Design and engineering including the degree to which special structures (boardwalks, ramps, bridges, etc.) are required.
- Construction costs.
- Mitigation efforts such as replacing or restoring wetlands degraded as an outcome of trail installation.
- Maintenance costs.



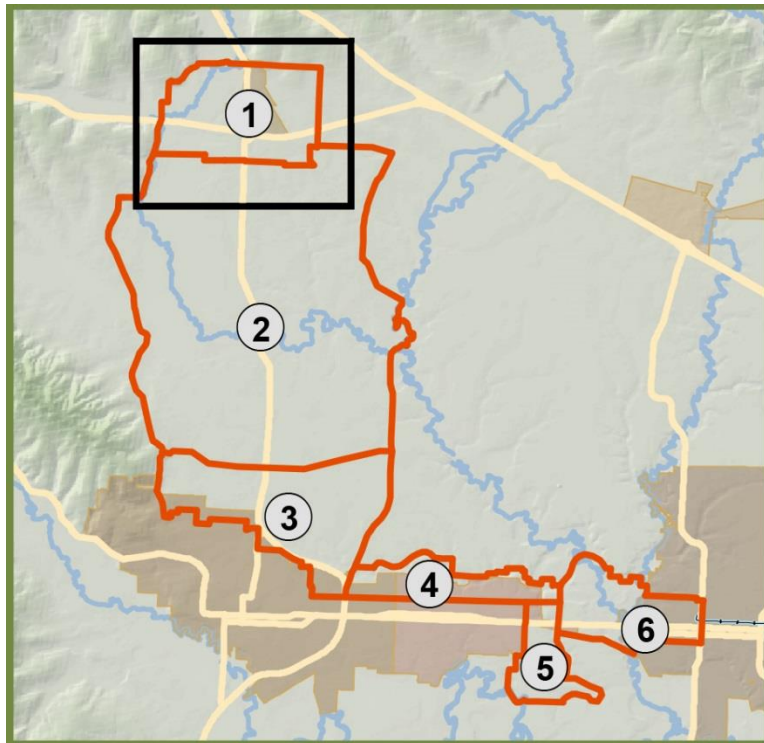


*This page intentionally left blank.*



## 6. Segment 1: Banks

### TRAIL SEGMENT ALIGNMENT ANALYSIS







## SEGMENT 1: BANKS

### Mapped Trail Route Alternatives

**WEST** **West of Downtown** – Separate multiuse trail OR street-adjacent multiuse trail near a proposed future City of Banks street; at-grade crossing of Oregon 6; multiuse trail at border of farmlands south of Oregon 6.

**CNTR** **Main Street/Oregon 47** – Existing or improved bike lanes and sidewalks along Main Street in downtown Banks; extend street solution through undercrossing of Oregon 6 to NW Wilkesboro Road, significant improvements to undercrossing may be necessary; street-adjacent multiuse trail along Oregon 47 south of NW Wilkesboro Road into Segment 2.

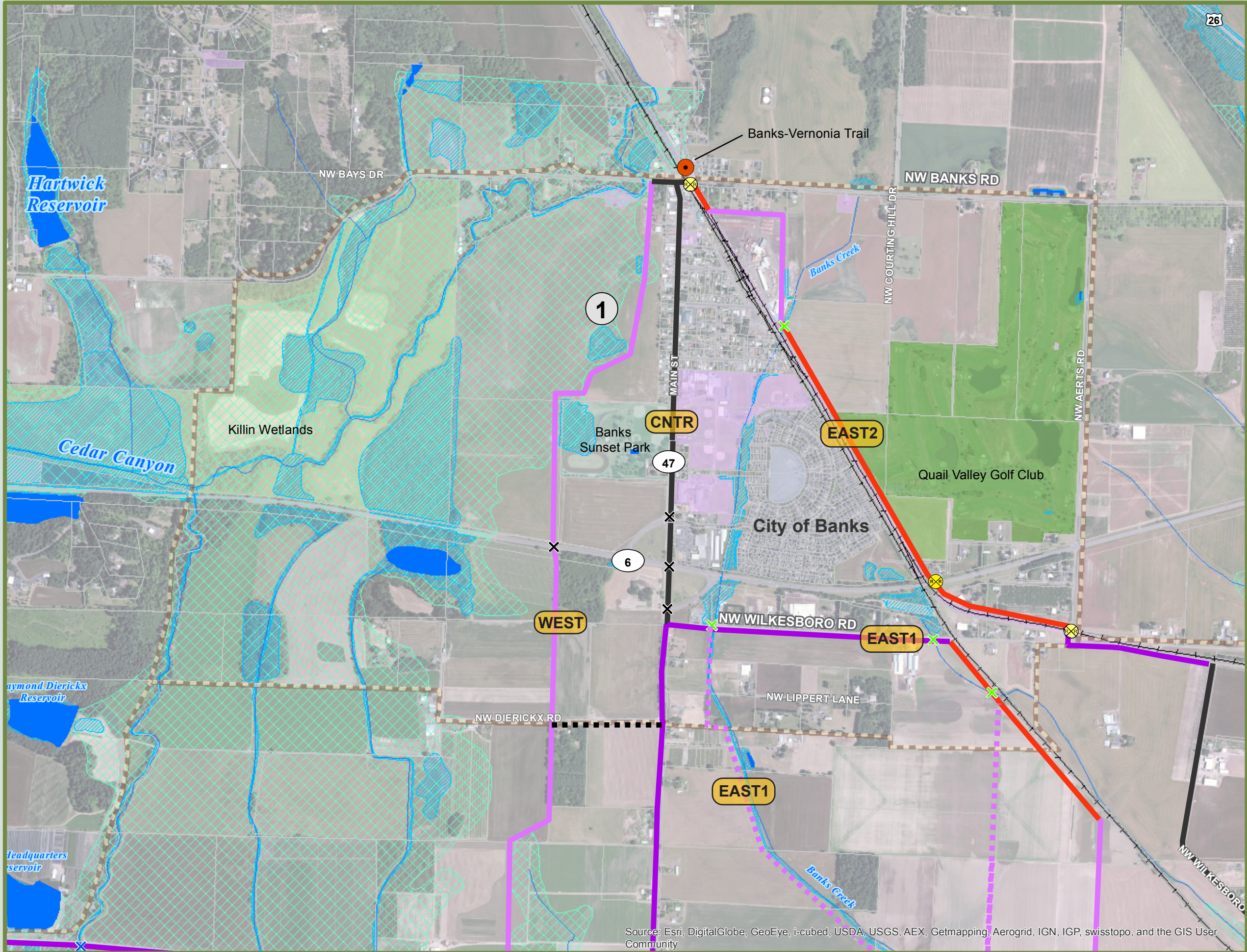
**EAST1** **Banks Creek** – Same as Segment 1 CENTER route to NW Wilkesboro Road; multiuse trail south of NW Wilkesboro Road along Banks Creek into Segment 2 OR street-adjacent multiuse trail east along NW Wilkesboro Road combined with short multiuse rail-with-trail or multiuse trail section into Segment 2.

**EAST2** **Railroad Corridor** – Multiuse trail around north and east sides of existing sawmill near NW Banks Road to crossing of Banks Creek; then rail-with-trail along east side of rail line; this alternative uses existing rail undercrossing at Oregon 6 and at-grade rail crossing at NW Aerts Road.

### Localized Route Variations

- Street solution along NW Dierickx Road at south end of Segment 1 between WEST and CENTER routes.





# Council Creek Regional Trail Master Plan

## Trail Alternatives

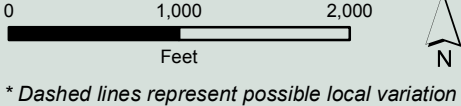
### Segment 1

#### Banks

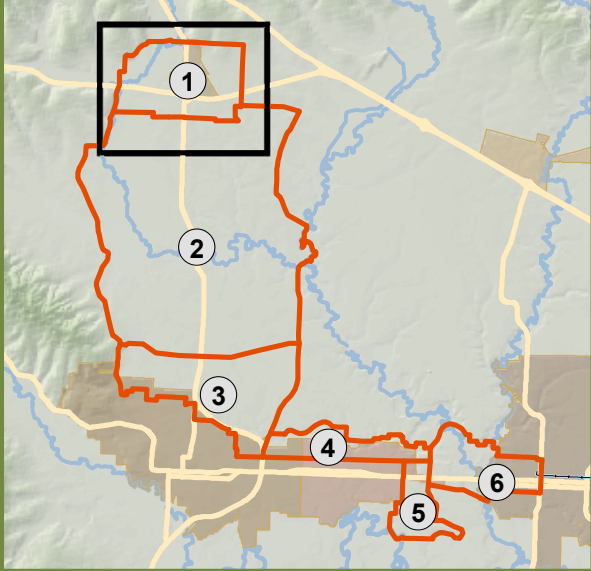
- Trail Type\***
- Multiuse Trail
  - Street-adjacent Multiuse
  - Street Solution
  - Multiuse Rail-with-Trail
  - Multiuse Boardwalk
  - Flood-resistant Multiuse Trail
  - Pedestrian Trail
  - Conceptual Trailhead Location

- Crossing Type**
- Collector/Arterial Road Crossing
  - Major Stream Crossing
  - Minor Stream Crossing
  - Railroad Crossing

- Trail Segment Boundary
- BPA Corridor
- Railroad
- Taxlot Boundary
- Park
- Natural Area
- Private Recreation Area
- Cemetery
- Public Land
- Streams
- Waterbody
- Wetland Area
- FEMA 100 Yr. Flood Plain



\* Dashed lines represent possible local variation



Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community





*This page intentionally left blank.*



## SEGMENT 1: BANKS

### Preliminary Mapped Trail Route Assessment

#### Trail User Experience

- All alternatives connect to the Banks-Vernonia Trailhead at north end of Segment 1.
- WEST will pass Sunset Park, farmlands, and wetlands with downtown Banks to the east.
- CENTER will pass residences, businesses, schools, and parks along Main Street, and use the Main Street/Oregon 47 undercrossing of Oregon 6.
- EAST 1 uses CENTER alternative through downtown Banks; then parallels Banks Creek southward into Segment 2; OR passes rural residences along NW Wilkesboro Road and exits Segment 1 south along rail line.
- EAST 2 parallels rail line east of downtown, passing a sawmill, farmland, rural residences, and Quail Valley Golf Course; then crosses rail line and enters Segment 2.

#### Safety and Security – Connectivity

- WEST has one major (Oregon 6) and one collector (NW Banks Road) road crossing; somewhat limited visibility to activities and uses compared to other alternatives; more limited connections to developed areas.
- CENTER has one collector road crossing (NW Banks Road); one undercrossing and two at-grade crossings at Oregon 6 interchange; multiple minor road crossings in downtown area; high visibility to adjacent activities and uses; many connections to developed areas.
- EAST 1 uses CENTER alternative through downtown Banks and across Oregon 6; one minor crossing/connection south of Oregon 6 at NW Wilkesboro Road; area south of Oregon 6 is more rural than city area, thus more limited visibility and connections to other uses and activities.
- EAST 2 includes one at-grade rail crossing and one rail undercrossing of Oregon 6; good visibility to adjacent uses activities; limited connectivity to uses in City of Banks due to rail line.





## Environmental and Cultural Resources

- WEST crosses outer edge of 100-year floodplain and skirts wetlands.
- CENTER is through downtown Banks and passes several historic sites and buildings.
- EAST 1 variation is along channelized portion of Banks Creek and crosses this creek once; second variation is along rural roadway and rail line.
- EAST 2 crosses portion of Banks Creek draining through culvert, and other altered landscapes such as residential areas and a golf course.

## Plans and Regulations

- WEST traverses land outside the Banks UGB that is not classified as either Rural or Urban Reserve; alternative generally avoids wetlands but some environmental permitting may be required; new at-grade crossing of Oregon 6 will have to be permitted.
- CENTER traverses land mostly inside the Banks UGB with one area between Oregon 6 and NW Dierickx Road that is not classified as either Rural or Urban Reserve; upgrading of Oregon 6 undercrossing may require permitting.
- EAST 1 traverses some land between Oregon 6 and the line of NW Dierickx Road that is outside the Banks UGB that is not classified as either Rural or Urban Reserve; permitting for the crossing of or following Banks Creek may be required.
- EAST 2 traverses land mostly outside the Banks UGB that is not classified as either Rural or Urban Reserve; existing rail line crossings and undercrossing used for this alternative, but some improvements may be required.

## Property Ownership

- WEST will require right-of-way acquisition.
- CENTER will use existing road right-of-way.
- EAST 1 will require right-of-way acquisition.
- EAST 2 will require cooperation with rail line owner and right-of-way acquisition.

## Alternatives Considered/Not Mapped

- Through Killin Wetlands, with new at-grade crossing of Oregon 6.



- Along NW Banks Road to NW Aerts Road, across Oregon 6 at-grade, then east and across rail line to NW Roy Road and into Segment 2.
- Existing residential pedestrian paths and local streets between downtown Banks and Banks Creek, across rail lines and NW Washington Avenue to NW Aerts Road.



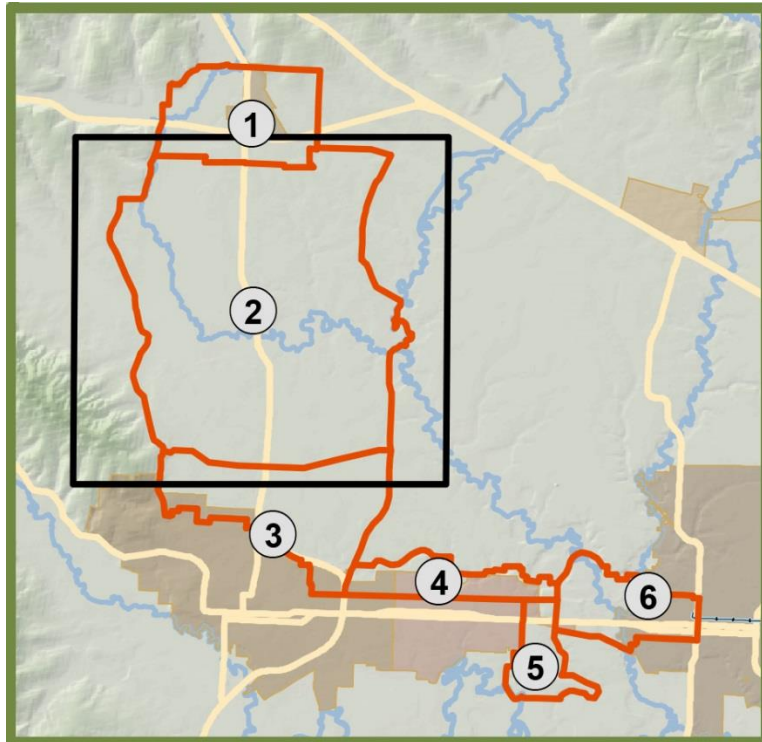


*This page intentionally left blank.*



## 7. Segment 2: Washington County (North)

### TRAIL SEGMENT ALIGNMENT ANALYSIS





## SEGMENT 2: WASHINGTON COUNTY (NORTH)

### Mapped Trail Route Alternatives

**WEST** **West of Oregon 47** – Connects to Segment 1 WEST route; multiuse trail across farmlands to NW Greenville Road, then street-adjacent multiuse trail along NW Greenville Road to NW Kansas City Road; street-adjacent multiuse trail south along NW Kansas City Road to NW Kemper Road; then multiuse trail within BPA power corridor OR along farmlands to NW Purdin Road.

**CNTR** **Oregon 47** – Connects to Segment 1 CENTER route; street-adjacent multiuse trail along Oregon 47 south of NW Wilkesboro Road to NW Purdin Road/NW Verboort Road intersection; short street solution near NW Vandehey Lane.

**EAST1** **Banks Creek-Verboort** – Connects to Segment 1 CENTER route via Segment 1 Banks Creek localized route variation OR to Segment 1 EAST 1 route variation via one of two north-south multiuse trail alternatives; crosses or follows NW Greenville Road to street-adjacent multiuse trail along NW Evers Road; crosses West Fork Dairy Creek floodplain with extended multiuse boardwalk; then street-adjacent multiuse trail along NW Evers Road, NW Osterman Road, and NW Visitation Road to community of Verboort.

**EAST2** **Roy Road-Marsh Road**– Connects to Segment 1 EAST 2 route at rail line crossing; follows NW Wilkesboro Road with short street-adjacent multiuse trail, then street solution to NW Roy Road; crosses minor stream and rail line; then street-adjacent multiuse trail along NW Roy Road and NW Chalmers Lane; turns south across farmlands using multiuse trail; crosses West Fork Dairy Creek with short boardwalk, bridge, and flood-resistant trail; street-adjacent multiuse trail along NW Osterman Road, then multiuse trail along farmlands to NW Marsh Road; then street-adjacent multiuse trail along NW Marsh Road south to NW Verboort Road.

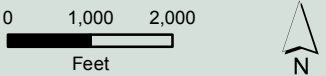
### Localized Route Variations

- WEST continues as street-adjacent multiuse trail along NW Kemper Road and crosses BPA corridor; multiuse trail south along farmlands to NW Purdin Road; route avoids variable grades within power corridor between NW Kemper Road and NW Purdin Road.
- Three alternative multiuse trail routes connect Segment 1 CENTER and to EAST 1 route at north end of Segment 2.
- Two alternative street-adjacent multiuse trails between EAST 1 and EAST 2 alternatives: NW Reiling Road and NW Osterman Road.
- Short street solution around west side of community of Verboort.

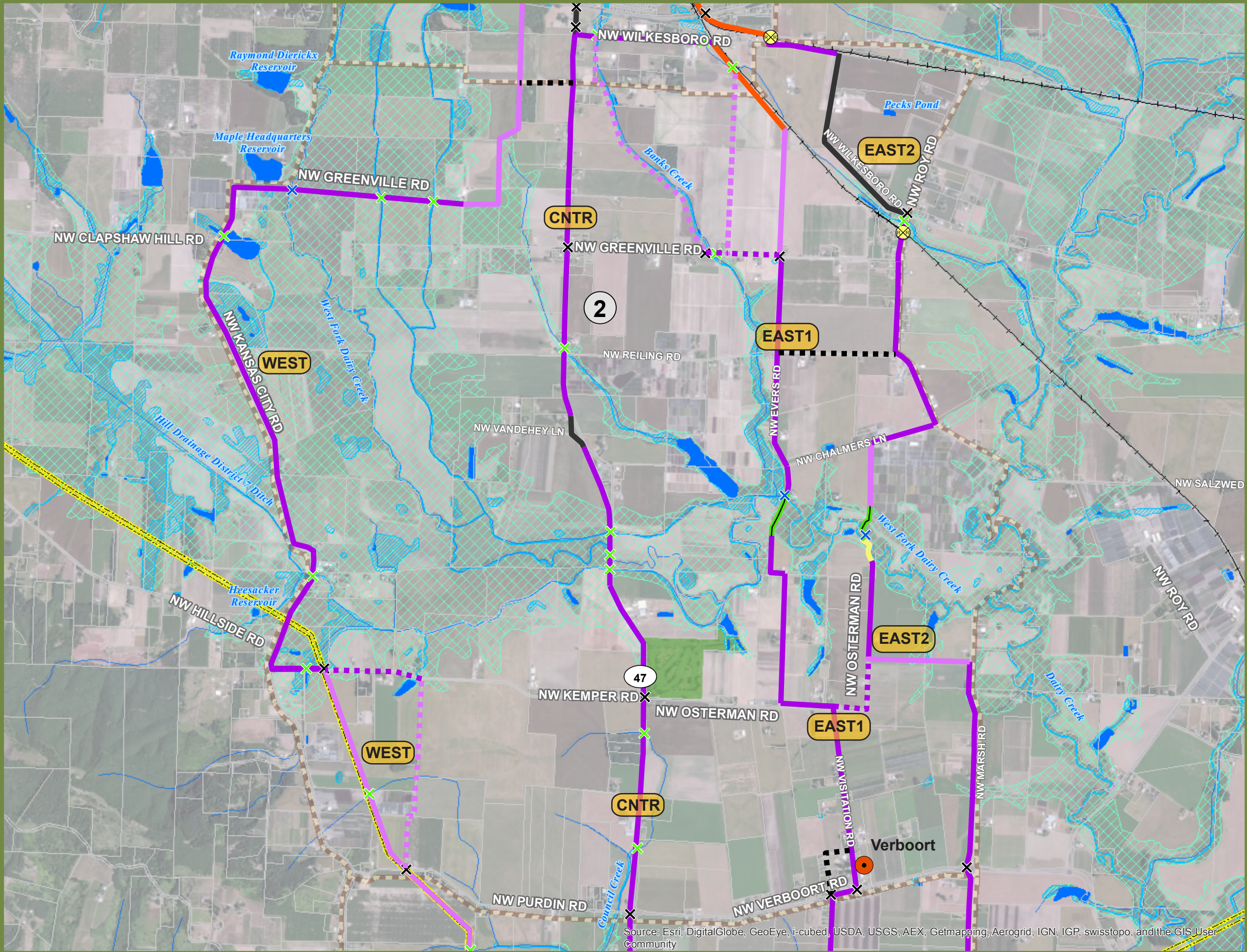
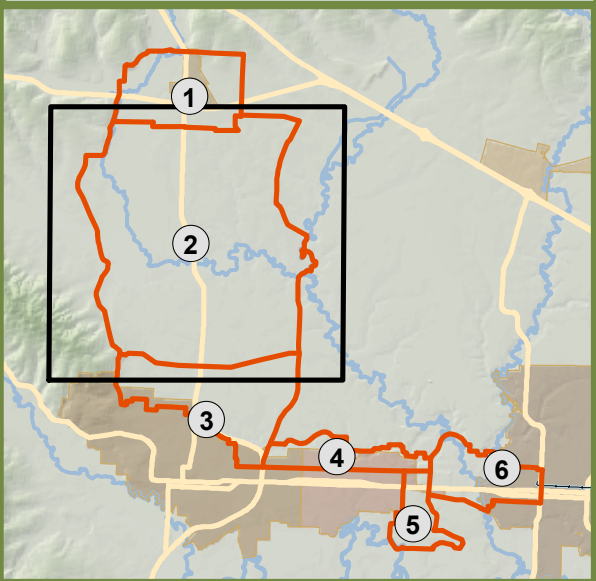


Council Creek Regional Trail Master Plan  
Trail Alternatives  
Segment 2  
Washington County (North)

- Trail Type\***
- Multiuse Trail
  - Street-adjacent Multiuse
  - Street Solution
  - Multiuse Rail-with-Trail
  - Multiuse Boardwalk
  - Flood-resistant Multiuse Trail
  - Pedestrian Trail
  - Conceptual Trailhead Location
- Crossing Type**
- Collector/Arterial Road Crossing
  - Major Stream Crossing
  - Minor Stream Crossing
  - Railroad Crossing
  - Trail Segment Boundary
  - Railroad
  - Taxlot Boundary
  - Park
  - Natural Area
  - Private Recreation Area
  - Cemetery
  - Public Land
  - Streams
  - Waterbody
  - Wetland Area
  - FEMA 100 Yr. Flood Plain



\* Dashed lines represent possible local variation



Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community





*This page intentionally left blank.*



## SEGMENT 2: WASHINGTON COUNTY (NORTH)

### Preliminary Mapped Trail Route Assessment


#### Trail User Experience

- WEST will pass through and by farmlands; crossing the main stem of West Fork Dairy Creek and five branches, and potentially a pond area near NW Kansas City Road; excellent views—several ponds, nurseries, wooded wetlands, and Mt. Hood.
- CENTER will pass by farmlands and rural residences, crossing the main stem of West Fork Dairy Creek and three branches, plus two branches of Council Creek; some views of nurseries, riparian woodlands, and Mt. Hood; proximity to Oregon 47 may diminish user experience.
- EAST 1 will parallel Banks Creek OR briefly run along a rail line then south through farmlands; then parallel local roads with farmlands, wooded wetlands, and rural residences; cross the main stem and wetlands of West Fork Dairy Creek and enter the community of Verboort; a historic church, Visitation Cemetery, and a Century Farm are visible along this route; trailhead facility in vicinity of Verboort would be desirable.
- EAST 2 will pass by farmlands, rural residences, a large nursery, and bridge the West Fork Dairy Creek.

#### Safety and Security – Connectivity

- WEST has two potential collector road crossings at the south end of segment; crosses many rural driveways; good visibility to adjacent uses and activities.
- CENTER crosses three collector roadways or intersections, three local roads, many rural driveways; good visibility to adjacent uses and activities.
- EAST 1 has two potential arterial roadway crossings, one collector crossing, two local road crossings; crosses a few rural driveways, more driveway crossings in Verboort; excellent connectivity to community; good visibility to adjacent uses and activities, except in vicinity of proposed West Fork Dairy Creek boardwalk crossing.
- EAST 2 has one rail crossing, one collector and one arterial road crossing; good visibility to a variety of uses and activities; connectivity





to Verboort possible with short street-adjacent trail solution along NW Osterman Road.

### Environmental and Cultural Resources

- WEST crosses the main stem and several branches of West Fork Dairy Creek, a large area of 100-year floodplain, and skirts wetlands.
- CENTER crosses the main stem and several branches of West Fork Dairy Creek; crosses a narrower 100-year floodplain than WEST alternative; near to two historic sites.
- EAST 1 parallels channelized portion of Banks Creek; crosses a portion of a 100-year floodplain that flooded as recently as March 2014; near several historic sites, mostly in vicinity of Verboort.
- EAST 2 would require a major new bridge crossing of the main stem of West Fork Dairy Creek; also crosses some 100-year floodplain.

### Plans and Regulations

- Permitting of stream and wetland crossings may be required for all alternatives.
- WEST use of BPA power corridor requires permission from BPA as well as underlying landowners.
- CENTER may require relocation of PGE transmission power poles along Oregon 47.
- EAST 1 may require PGE pole relocation along NW Osterman Road or NW Visitation Road.

### Property Ownership

- All routes will require right-of-way acquisition.

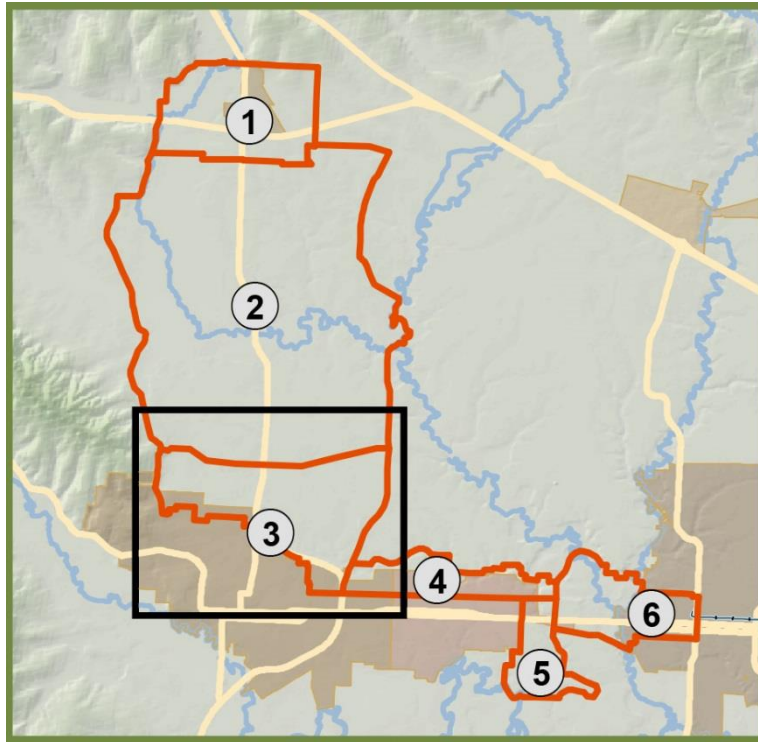
### Alternatives Considered/Not Mapped

- WEST using street or street-adjacent trail solution along NW Thatcher Road south of NW Kemper Road to NW Purdin Road; then reconnecting with BPA corridor OR continuing due south along NW Thatcher Road into Segment 3.



## 8. Segment 3: Forest Grove

### TRAIL SEGMENT ALIGNMENT ANALYSIS







## SEGMENT 3: FOREST GROVE

### Mapped Trail Route Alternatives

**WEST BPA Corridor** – Connects to Segment 2 WEST along power corridor; multiuse trail within BPA power corridor crosses farmlands between NW Purdin Road and NW David Hill Road; continues as multiuse trail in power corridor south of NW David Hill Road through urbanizing lands; crosses Oregon 47 and Council Creek; continues east and south in power corridor; re-crosses Council Creek (new bridge or boardwalk structure required) and Oregon 47 (new midblock crossing required); exits power corridor just north of Oak Street BPA power substation; follows future extension of N Holladay Street with street-adjacent multiuse trail into Segment 4.

**CNTR Oregon 47** – Connects to Segment 2 CENTER route; street-adjacent multiuse trail along Oregon 47 from NW Purdin Road to intersection with NW Sunset Drive; combination of boardwalk (or flood-resistant trail) and street-adjacent multiuse trail on north side of Oregon 47 between NW Sunset Drive and Oak Street; then short section of street-adjacent multiuse trail into Segment 4.

**EAST1 Porter Road** – Connects to Segment 2 EAST 1 on NW Verboort Road; street-adjacent multiuse trail from west side of community of Verboort south along NW Porter Road; crosses Council Creek over existing bridge; short section of street-adjacent multiuse trail along Oregon 47 between intersections with Oak Street and NW Martin Road.

**EAST2 Martin Road** – Connects to Segment 2 EAST 2 at intersection of NW Marsh Road/NW Verboort Road/NW Martin Road; street-adjacent multiuse trail from this point south along NW Martin Road to Oregon 47 intersection.

### Localized Route Variations

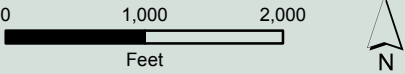
- If EAST 1 or EAST 2 is selected as the preferred CCRT alternative, WEST and CENTER could be used as routes for community-scale or connector trails accessing uses and activities in Forest Grove.



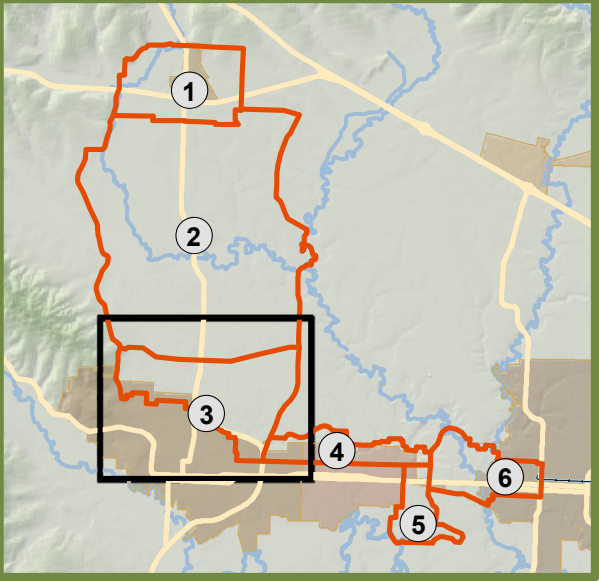
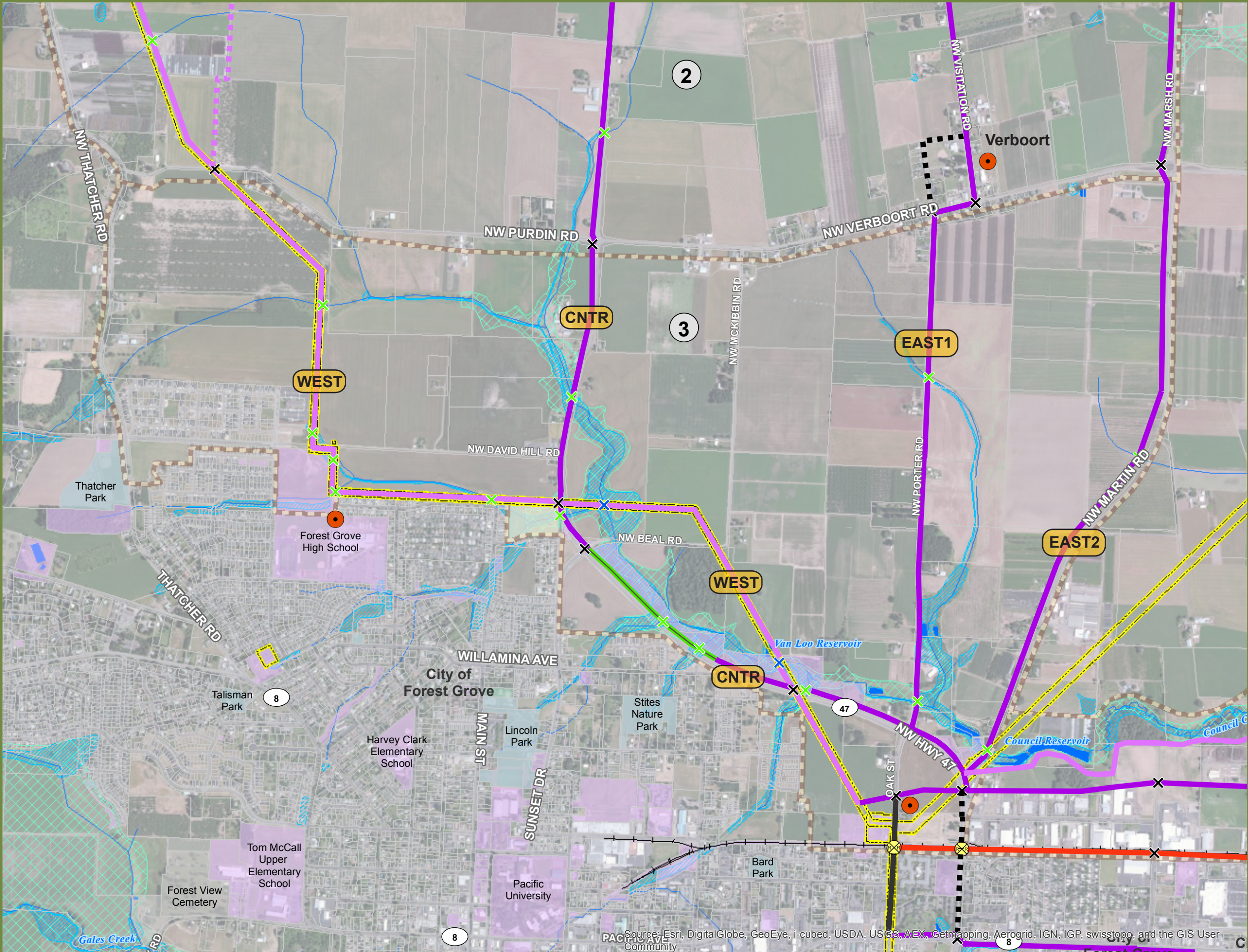
Council Creek Regional Trail Master Plan  
Trail Alternatives  
Segment 3  
Forest Grove

- Trail Type\*
- Multiuse Trail
  - Street-adjacent Multiuse
  - Street Solution
  - Multiuse Rail-with-Trail
  - Multiuse Boardwalk
  - Flood-resistant Multiuse Trail
  - Pedestrian Trail
  - Conceptual Trailhead Location

- Crossing Type
- Collector/Arterial Road Crossing
  - Major Stream Crossing
  - Minor Stream Crossing
  - Railroad Crossing
  - Trail Segment Boundary
  - BPA Corridor
  - Railroad
  - Taxlot Boundary
  - Park
  - Natural Area
  - Private Recreation Area
  - Cemetery
  - Public Land
  - Streams
  - Waterbody
  - Wetland Area
  - FEMA 100 Yr. Flood Plain



\* Dashed lines represent possible local variation







*This page intentionally left blank.*



## SEGMENT 3: FOREST GROVE

### Preliminary Mapped Trail Route Assessment

#### Trail User Experience

- WEST will cross Oregon 47; pass through and by farmlands and under power lines; cross the main stem of Council Creek twice and five branches; views of residential development, farmlands, and Council Creek; shared-use trailhead facility at Forest Grove High School desirable, or trailhead could be built as part new residential development.
- CENTER will pass by farmlands and rural residences; cross the main stem of Council Creek and four branches; views of neighborhoods and Council Creek; trailhead facility in vicinity of Oak Street desirable, this trailhead location could also serve WEST, EAST 1, or EAST 2 alternatives.
- EAST 1 will pass by farmlands and rural residences; cross the main stem (over the Porter Road Bridge) and one branch of Council Creek; then follow Oregon 47 for a short section into Segment 4.
- EAST 2 will cross the main stem of Council Creek (at an existing crossing near Oregon 47) and one minor branch; pass by farmlands and rural residences; views of some commercial and industrial activities at the south end of segment.

#### Safety and Security – Connectivity

- WEST will cross Oregon 47 three times, and two collector roadways; good visibility to adjacent uses and activities; offers multiple neighborhood connections and passes Forest Grove High School.
- CENTER may cross Oregon 47 and one to two collectors; good visibility to adjacent uses and activities; has somewhat limited connectivity to neighborhoods as trail is on north side of Oregon 47 with only two existing controlled crossings to the south side.
- EAST 1 has no arterial or collector road crossings; visibility to neighboring farmsteads limited only by the number of homes; most direct connection between Verboort and Forest Grove.
- EAST 2 may cross Oregon 47 once depending on the preferred trail solution for Segment 4; good visibility and good connectivity.





## Environmental and Cultural Resources

- WEST twice crosses the main stem, 100-year floodplain and wetlands of Council Creek and five branches.
- CENTER crosses the Council Creek main stem once and four branches; skirts or is within the creek's 100-year floodplain and edges of wetlands between NW Sunset Drive and Oak Street.
- EAST 1 crosses one branch of Council Creek; skirts some wetlands at the south end of NW Porter Road; uses an existing bridge (Porter Road) to cross the main stem of the creek (motorized vehicle use of this bridge may be limited or eliminated in the future).
- EAST 2 crosses the main stem of Council Creek over the existing NW Martin Road Bridge (using existing bike lanes and sidewalks), and one minor branch of the creek.

## Plans and Regulations

- WEST passes through lands classified as Urban and Rural Reserve, also lands within the UGB; use of the power corridor will require permission from BPA as well as permission or acquisition from underlying private landowners; stream crossings will require environmental permitting.
- CENTER is the dividing line between Urban and Rural Reserves; the boardwalk trail solution between Sunset Drive and Oak Street will, in particular, require environmental permitting and possible mitigation.
- EAST 1 skirts some wetlands; environmental permitting or mitigation may be required.
- EAST 2 may require relocation of PGE power poles along NW Martin Road
- EAST 1 and EAST 2 are in Rural Reserve; use of existing bridge crossings of Council Creek should reduce environmental permitting.

## Property Ownership

- All routes will require right-of-way acquisition.

## Alternatives Considered/Not Mapped

- Street-adjacent multiuse trail along NW Thatcher Road south of NW Purdin Road to NW David Hill Road.



- Conventional sidewalk/bike lane treatment planned as part of NW David Hill Road extension.
- Multiuse trail on north side of Council Creek south of NW David Hill Road.
- Street solution along Oak Street between power substation and Oregon 47.



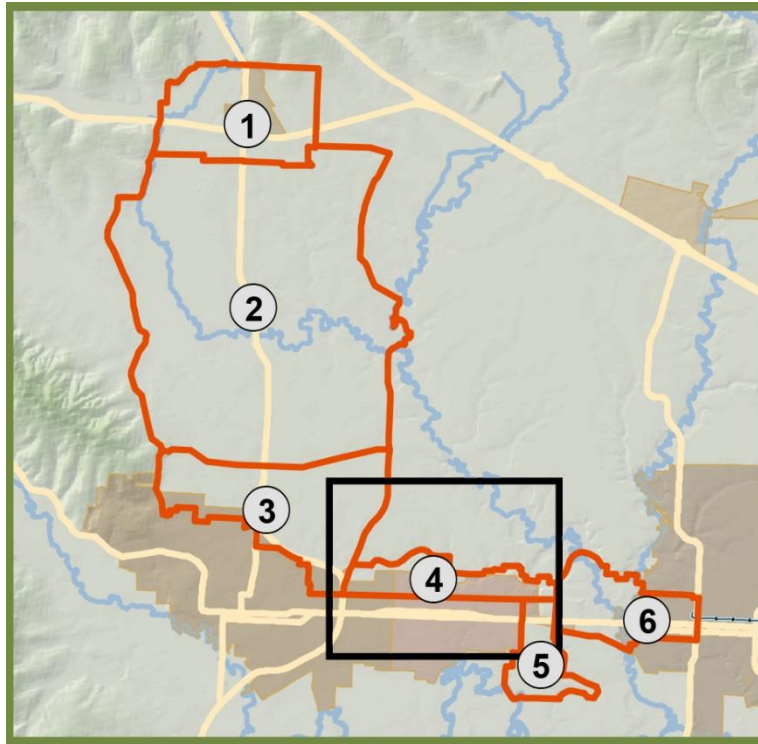


*This page intentionally left blank.*



## 9. Segment 4: Cornelius

### TRAIL SEGMENT ALIGNMENT ANALYSIS





## SEGMENT 4: CORNELIUS

### Mapped Trail Route Alternatives

**CRK1** Council Creek 1 – Connects to Segment 3 CENTER, EAST 1, and EAST 2 near Oregon 47/NW Martin Road intersection; multiuse trail along the south side of Council Creek to N 10th Avenue/NW Cornelius-Schefflin Road; crosses to north side of Council Creek on existing bridge; street solution along NW Spiesschaert Drive; transitioning to multiuse trail; crosses NW Susbauer Road then one of two multiuse trail alternatives with short boardwalk along north edge of Metro-owned natural area; street solution along NW Hobbs Road; crosses to south side of creek using Hobbs Road Bridge.

CREEK 1 north of Council Creek is partly outside of Segment 4.

**CRK2** Council Creek 2 – Same as CREEK 1 to NW Susbauer Road/N 19th Avenue; crosses to the south side of Council Creek at existing N 19th Avenue Bridge; pedestrian-only trail along the south side of creek to NW Hobbs Road.

CREEK 2 would require bicycle traffic to use CREEK 1 between NW Susbauer Road and NW Hobbs Road OR HOLLADAY or RAIL alternatives.

**CRK3** Council Creek 3 – CREEK 1 and 2 join at NW Hobbs Road; a multiuse trail and short boardwalk along the south bank of Council Creek enters Segment 6.

**HLDY** N Holladay Street – Connects to Segment 3 WEST, CENTER, EAST 1, and EAST 2 in the vicinity of the Oregon 47/NW Martin Road intersection; street-adjacent multiuse trail built as part of new road extension to N 4th Avenue; additional street-adjacent multiuse trail section built as part of new road extension between N 10th Avenue and N 19th Avenue; street solutions on all currently built street sections almost to Jobes Ditch; at the very east end this alternative uses a set of switchbacks and short boardwalk to cross Jobes Ditch to a pedestrian-only trail that enters Segment 6.

The east end transition for this alternative would require bicycle traffic to use CREEK 1 or RAIL.

**RAIL** Rail-with-Trail – Connects to all Segment 3 alternatives via short street solutions; originates at the northerly rail line's intersection with Oak Street in Segment 3; multiuse rail-with-trail from Oak Street to the east end of Segment 4 at 341st Avenue; RAIL alternative continues into Segment 6.

**HWAY** Pacific Avenue/Neighborhood Streets – Connects to all Segment 3 alternatives via short north-south street solutions along Oak Street or Oregon 47; street-adjacent multiuse trail along Pacific Avenue; crosses southerly rail line; then street solution using west-east neighborhood streets south of Oregon 8 and rail line to NW Hobbs Road; connects to Segment 5 via a short section of new multiuse trail along southerly rail line.

HIGHWAY alternative is outside of the Segment 4 study boundary.

### Localized Route Variations

- CREEK 1 multiuse alternatives or one street solution between NW Susbauer Road and NW Hobbs Road.
- Same as CREEK 1 to N 10th Avenue; but continues due east at N 10th Avenue with new major bridge structure crossing both N 10th Avenue and Council Creek to NW Spiesschaert Road; reconnects to CREEK 1.



Council Creek Regional Trail Master Plan

Trail Alternatives

Segment 4

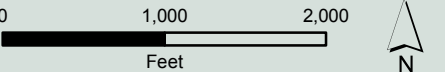
Cornelius

Trail Type\*

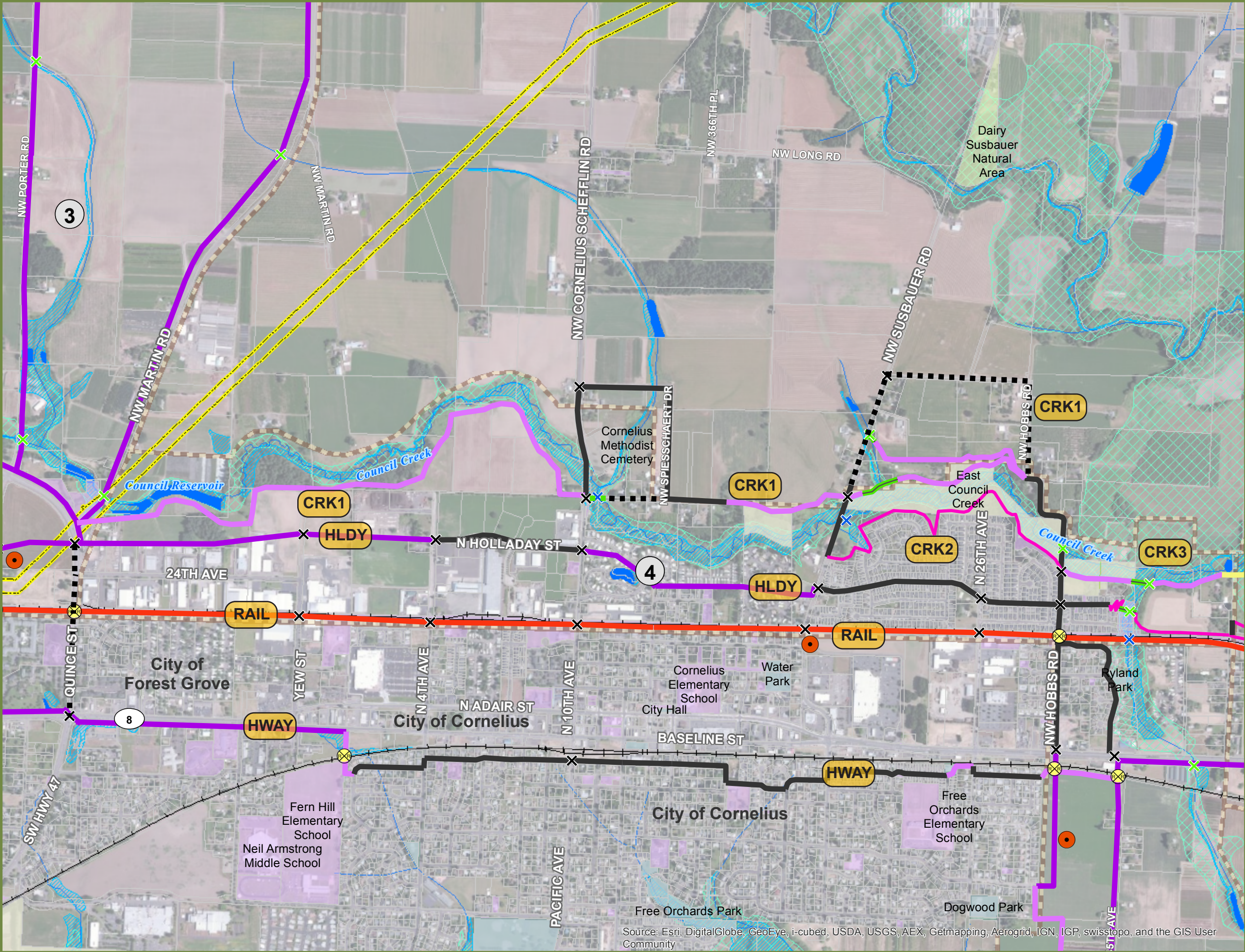
- Multiuse Trail
- Street-adjacent Multiuse
- Street Solution
- Multiuse Rail-with-Trail
- Multiuse Boardwalk
- Flood-resistant Multiuse Trail
- Pedestrian Trail
- Conceptual Trailhead Location

Crossing Type

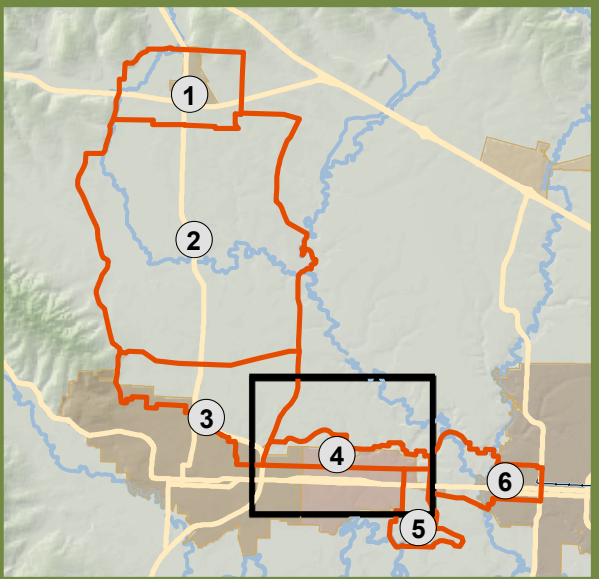
- Collector/Arterial Road Crossing
- Major Stream Crossing
- Minor Stream Crossing
- Railroad Crossing
- Trail Segment Boundary
- BPA Corridor
- Railroad
- Taxlot Boundary
- Park
- Natural Area
- Private Recreation Area
- Cemetery
- Public Land
- Streams
- Waterbody
- Wetland Area
- FEMA 100 Yr. Flood Plain



\* Dashed lines represent possible local variation



Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community







*This page intentionally left blank.*



## SEGMENT 4: CORNELIUS

### Preliminary Mapped Trail Route Assessment


#### Trail User Experience

- All CREEK alternatives pass through or by farmlands, rural and suburban residences, and follow, or are close to, Council Creek, riparian areas, and wetlands.
- HOLLADAY passes industrial and commercial development, and vacant lands, until N 10th Avenue; then primarily passes through neighborhoods for most of the balance of the segment; at east end, a pedestrian-only trail across Jobes Creek requires several switchbacks for ADA-compliant grades, then follows rail line *outside of the rail right-of-way* to NW 341th Avenue.
- RAIL will pass by industrial and commercial development (often the back side of such buildings and yards), along PGE power transmission lines and by a power substation; more residential uses in east half of segment; rail line currently has very infrequent and low-speed rail traffic, future use for a MAX extension would increase rail traffic.
- HIGHWAY will pass by commercial and industrial development; cross the southerly rail line; pass through neighborhoods until reaching NW Hobbs Road; neighborhood section will be within view and hearing of traffic on southerly rail line and Oregon 8.

#### Safety and Security – Connectivity

- CREEK 1 will cross and follow two arterial roadways, one collector, and several local streets; good visibility to adjacent uses and activities in most sections; multiple business and neighborhood connections.
- From origination at Oak Street in Segment 3, HOLLADAY will cross three arterial roads, three collector roads, and many local streets; good visibility and multiple connections to numerous nearby activities, uses, and destinations.
- From origination at Oak Street in Segment 3, RAIL will cross three arterial roadways and five collectors; good visibility and multiple connections to numerous activities, uses, and destinations; prior development limits trailhead locations, one possible at N 19th Avenue.
- From origination at Oak Street in Segment 3, HIGHWAY will cross one arterial and two collector roadways, and may require a new rail line crossing; has good visibility and multiple connections to numerous





activities, uses, and destinations, although few crossings of southerly rail line are established.

### Environmental and Cultural Resources

- CREEK 1 uses existing bridges to cross Council Creek; CREEK 1 local variation between N 10th Avenue and NW Spiesschaert Drive crosses Council Creek using a major new bridge.
- CREEK 2 pedestrian-only section and CREEK 3 multiuse trail along the banks of Council Creek can be sited to minimize impacts to existing trees and slopes; CREEK 2 in particular may involve environmental permitting and mitigation.
- HOLLADAY extensions and connections may impact existing trees in residential areas.
- RAIL and HIGHWAY routes will have no identified significant negative impacts to environmental or cultural resources.

### Plans and Regulations

- All CREEK alternatives may require environmental permitting and mitigation.
- HOLLADAY could require relocations of many existing residential structures, presumably as part of road extension and connection projects.

*HOLLADAY is a long-term solution as only portions of N Holladay Street are currently built; Forest Grove, Cornelius, and County transportation system plans call for three new street sections between Oak Street in Segment 3 and NW Hobbs Road at the east end of Segment 4. Between Oak Street and N 4th Avenue, land is vacant or lower density industrial. The two planned new street sections between N 10th Avenue and N 19th Avenue would require residential relocations. HOLLADAY alternative is only viable as and if new road sections are constructed.*

- RAIL and HIGHWAY will require agreements and permissions from rail line owner.
- RAIL may have some conflicts with PGE transmission power poles.

### Property Ownership

- All CREEK alternatives and HOLLADAY will require right-of-way acquisition.



- CREEK 1 may require permission from Metro to cross natural area.
- RAIL will require cooperation with rail line owner.
- HIGHWAY may require use of a portion of a small neighborhood park at the east end of Segment 4 for a very short multiuse trail section.

#### Alternatives Considered/Not Mapped

- Multiuse trail on south side of creek between N 10th Avenue and N 19th Avenue.
- Street solution along Oregon 8.



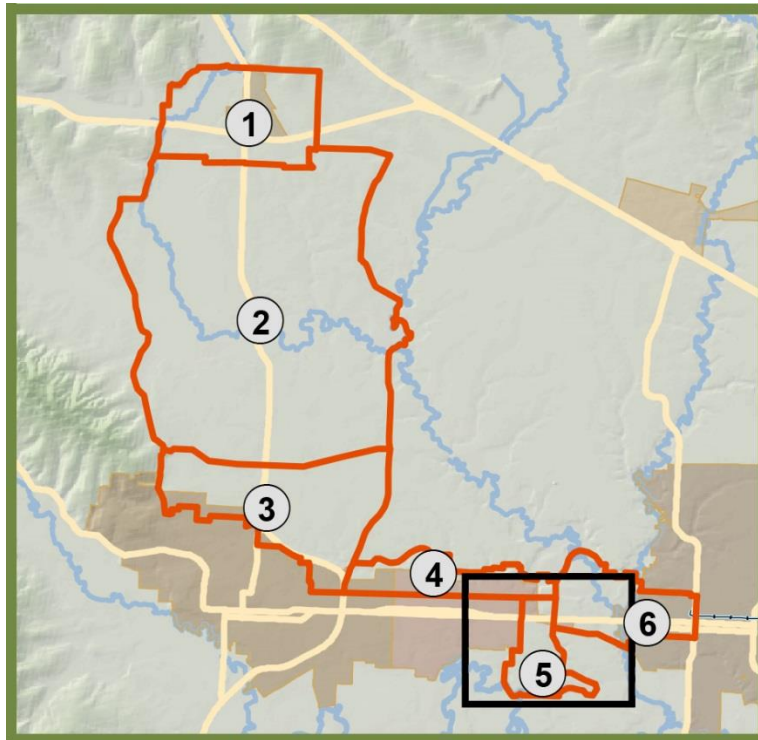


*This page intentionally left blank.*



## 10. Segment 5: Jobes Ditch

### TRAIL SEGMENT ALIGNMENT ANALYSIS







## SEGMENT 5: JOBES DITCH

### Mapped Trail Route Alternatives

**HOBBS** **Hobbs Road** – Connects directly to Segment 4 HIGHWAY and to Segment 4 CREEK and HOLLADAY using street solution along existing NW Hobbs Road that crosses both rail lines and Oregon 8; continues south as a street-adjacent multiuse trail along future extension of NW Hobbs Road behind new high school to S Dogwood Street; then multiuse trail to the Tualatin River.

**345TH** **SW 345th Avenue** – Connects to the Segment 4 HIGHWAY using Segment 5 HIGHWAY alternative (see below) OR to the Segment 4 CREEK and HOLLADAY alternatives using a N 31st Avenue street solution that crosses Oregon 8 and the southerly rail line; street-adjacent multiuse trail along SW 345th Avenue; then short section of multiuser trail to the Tualatin River.

**HWAY** **Oregon 8** – Connects to Segment 4 HIGHWAY across future extension of NW Hobbs Road; uses short multiuse trail; then crosses the southerly rail line at 345th Avenue; then street-adjacent multiuse trail along the south side of Oregon 8, crossing Jobes Ditch, and entering Segment 6.

### Localized Route Variations

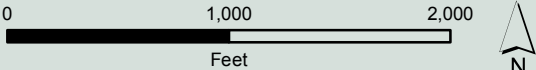
- None



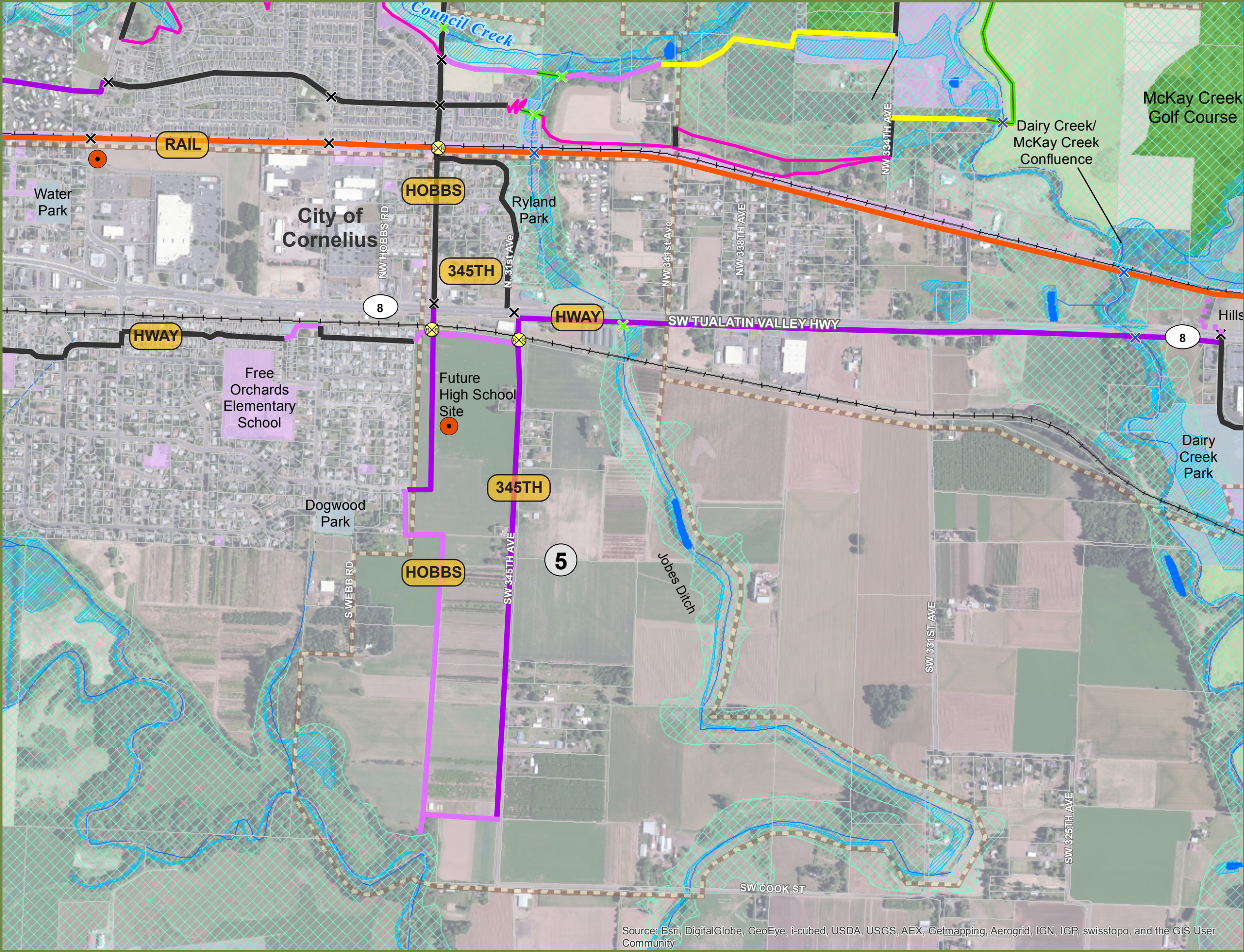
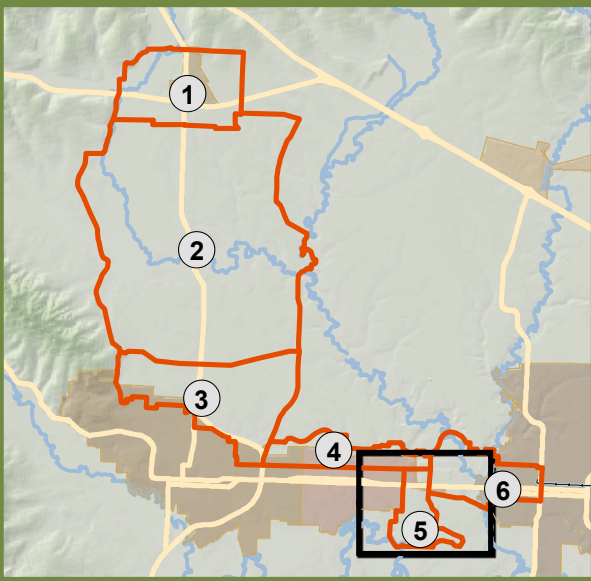
Council Creek Regional Trail Master Plan  
Trail Alternatives  
Segment 5  
Jobes Ditch

- Trail Type\*
- Multiuise Trail
  - Street-adjacent Multiuse
  - Street Solution
  - Multiuise Rail-with-Trail
  - Multiuise Boardwalk
  - Flood-resistant Multiuse Trail
  - Pedestrian Trail
  - Conceptual Trailhead Location

- Crossing Type
- Collector/Arterial Road Crossing
  - Major Stream Crossing
  - Minor Stream Crossing
  - Railroad Crossing
  - Trail Segment Boundary
  - BPA Corridor
  - Railroad
  - Taxlot Boundary
  - Park
  - Natural Area
  - Private Recreation Area
  - Cemetery
  - Public Land
  - Streams
  - Waterbody
  - Wetland Area
  - FEMA 100 Yr. Flood Plain



\* Dashed lines represent possible local variation



Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community





*This page intentionally left blank.*



## SEGMENT 5: JOBES DITCH

### Preliminary Mapped Trail Route Assessment

#### Trail User Experience

- The northerly rail line used for RAIL alternative is the north limit of Segment 5 HOBBS and 345th alternatives.
- After street solution between rail lines, HOBBS will cross between existing residential development to the west and the new Cornelius High School to the east; then pass through presently undeveloped Urban Reserve area ending at Tualatin River.
- When Urban Reserves and the high school develop, 345th alternative will be the urban/rural divide; alternatives ends at the Tualatin River.

#### Safety and Security – Connectivity

- HOBBS will require two rail crossings and a crossing of Oregon 8; the route has very good visibility to existing neighborhoods and to future urban development; directly connects to the new Cornelius High School and Tualatin River; high school is opportunity for shared use trailhead.
- 345th will require two rail crossings and a crossing of Oregon 8; offers good visibility to adjacent activities once urbanization west of SW 345th Avenue occurs; directly connects to the new Cornelius High School and to the Tualatin River.

#### Environmental and Cultural Resources

- HOBBS and 345th have no identified significant negative impacts to environmental or cultural resources, although any facilities (such as viewing structures) at Tualatin River will have to be sited carefully.

#### Plans and Regulations

- HOBBS and 345th traverse lands outside the Cornelius UGB that are classified as Urban Reserve.
- The HOBBS southerly rail line crossing will be new, but presumably part of permitting for the new NW Hobbs Road street crossing.

#### Property Ownership

- HOBBS and 345th alternatives will require right-of-way acquisition.





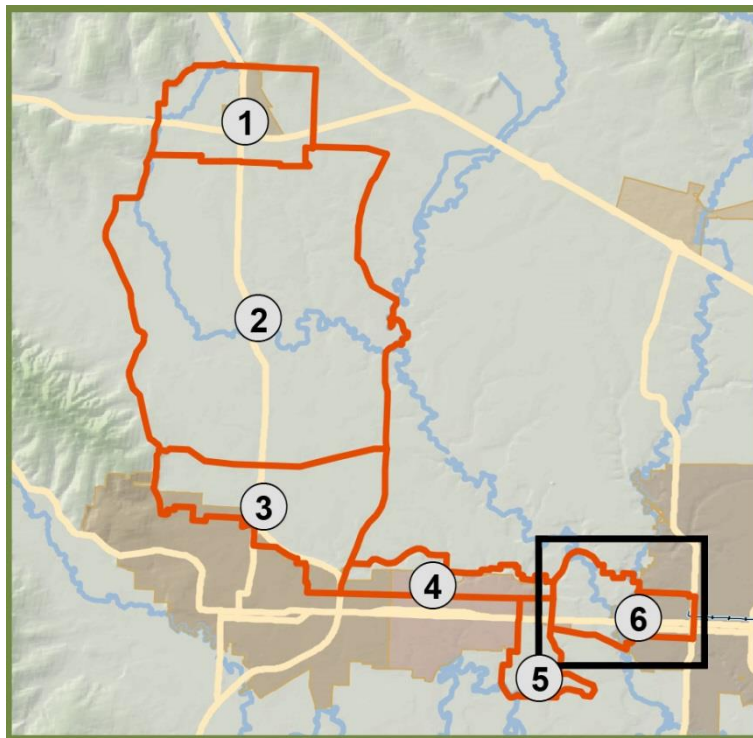
### Alternatives Considered/Not Mapped

- Street solution along N 26th Avenue past commercial development, across Oregon 8, then south on S Webb Road through neighborhoods past Dogwood City Park to Tualatin River; alternative is within Segment 4 at north end but otherwise almost entirely outside of study area until nearing Tualatin River.
- Multiuse trail following Jobes Ditch.



# 11. Segment 6: Hillsboro – Washington County (East)

## TRAIL SEGMENT ALIGNMENT ANALYSIS





## SEGMENT 6: HILLSBORO – WASHINGTON COUNTY (EAST)

### Mapped Trail Route Alternatives

**CRK4 Council Creek 4** – Connects with Segment 4 CREEK 3; flood-resistant multiuse trail to very short street solution along NW 334th Avenue; then another flood-resistant trail section on the north side of Port of Portland mitigation site to new bridge crossing of Dairy Creek; connects to CREEK 6 multiuse boardwalk.

**CRK5 Council Creek 5** – Connects to pedestrian-only trail section in Segment 4 HOLLADAY; two pedestrian-only trail alternatives that cross the south edge of Council and Dairy Creek floodplain to NW 334th Avenue; short street solution transitions to flood-resistant multiuse trail on the south side of Port of Portland mitigation site to second site for new bridge to CREEK 6 multiuse boardwalk.

*As in Segment 4, bicyclists will have to follow an alternate route such as RAIL or HIGHWAY.*

**CRK6 Council Creek 6** – Connects to CREEK 4 and 5; combines multiuse boardwalk and flood-resistant multiuse trail along east bank of Dairy Creek and along north edge of natural area; very short section of multiuse trail transitions to street solution following NW Cavens Road, NW Padgett Road (crossing McKay Creek), NW 10th Avenue, and NW Garibaldi Street to north-south rail line just west of N 1st Avenue; multiuse rail-with-trail section to downtown Hillsboro MAX station.

*The street solution between NW Cavens Road and the north-south rail line is outside of the Segment 6 study boundary.*

**RAIL Rail-with-Trail** – Continuation of multiuse RAIL alternative in Segment 4 to crossing of West Main Street; street solution along West Main Street to downtown MAX station.

**HWAY Oregon 8/Walnut Street** – Continuation of Segment 4 HIGHWAY street solution that also crosses Segment 5; street-adjacent multiuse trail along south side of Oregon 8; crosses Dairy Creek; then street solutions on SW Walnut Street and S 1st Avenue to downtown MAX station.

### Localized Route Variations

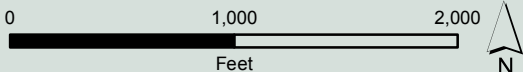
- Short multiuse trail west of Hillsboro Pioneer Cemetery between the HIGHWAY and RAIL alternatives; connects RAIL west of cemetery to SW Walnut Street portion of HIGHWAY alternative.



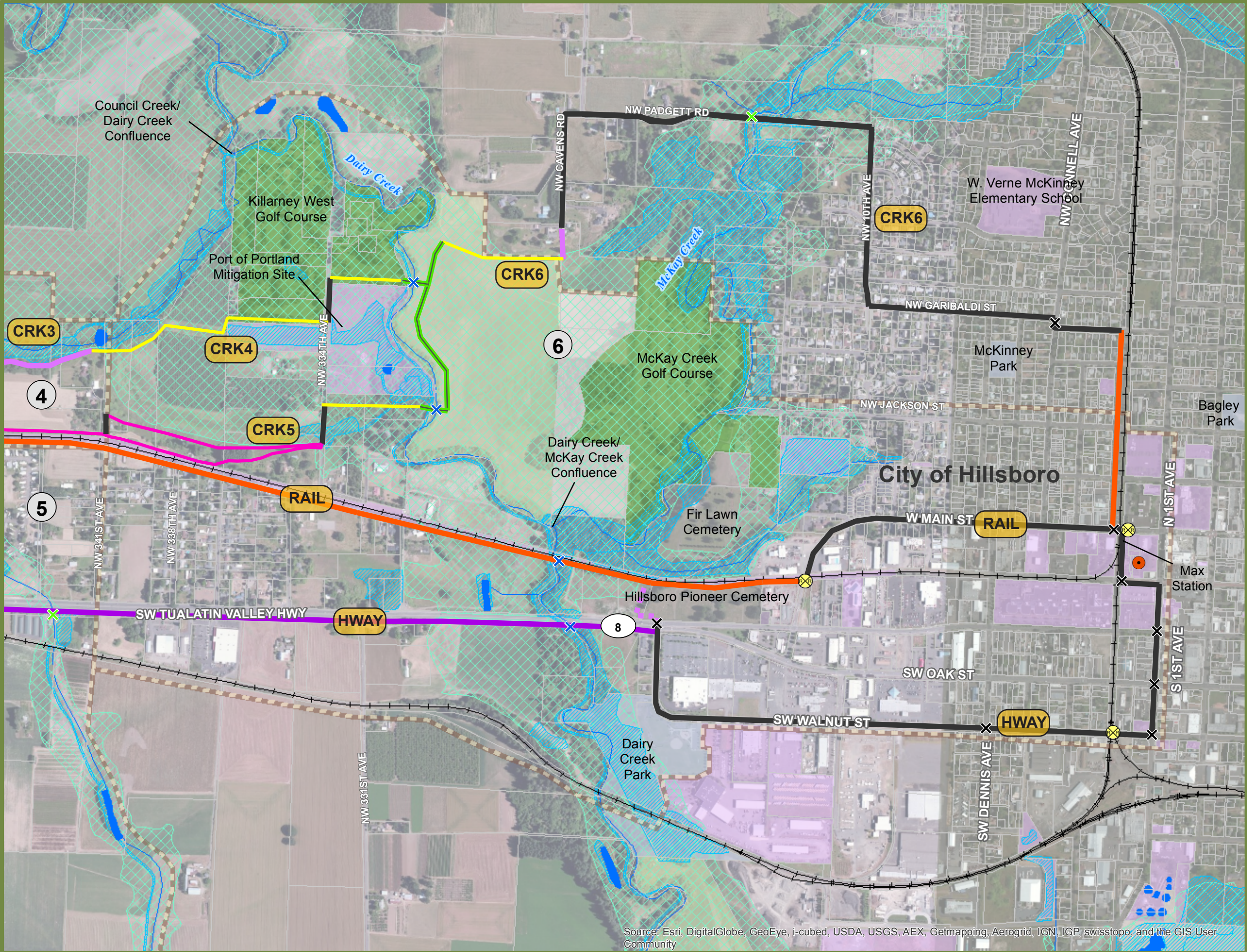
Council Creek Regional Trail Master Plan  
Trail Alternatives  
Segment 6 - Hillsboro  
Washington County (East)

- Trail Type\*
- Multiuse Trail
  - Street-adjacent Multiuse
  - Street Solution
  - Multiuse Rail-with-Trail
  - Multiuse Boardwalk
  - Flood-resistant Multiuse Trail
  - Pedestrian Trail
  - Conceptual Trailhead Location

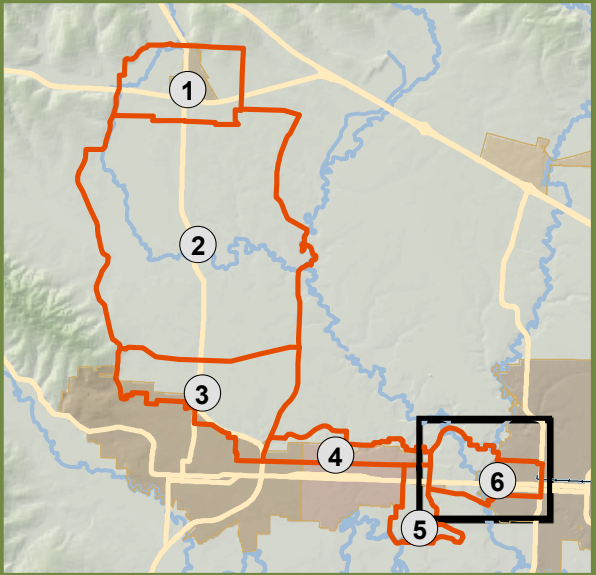
- Crossing Type
- Collector/Arterial Road Crossing
  - Major Stream Crossing
  - Minor Stream Crossing
  - Railroad Crossing
  - Trail Segment Boundary
  - BPA Corridor
  - Railroad
  - Taxlot Boundary
  - Park
  - Natural Area
  - Private Recreation Area
  - Cemetery
  - Public Land
  - Streams
  - Waterbody
  - Wetland Area
  - FEMA 100 Yr. Flood Plain



\* Dashed lines represent possible local variation



Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community







*This page intentionally left blank.*



## SEGMENT 6: HILLSBORO – WASHINGTON COUNTY (EAST)

### Preliminary Mapped Trail Route Assessment


#### Trail User Experience

- All alternatives end in the vicinity of downtown Hillsboro MAX station near N 1st Avenue; trail users will have a variety of options within a few blocks for parking, bicycle facilities, and other amenities.
- CREEK 4 will pass by farmlands and rural residences, close to Killarney West Golf Course and Port mitigation site; follows Council Creek for a section at west end of segment and crosses Dairy Creek.
- CREEK 5 will take a more southerly route than CREEK 4 through floodplain closer to rail line and crosses Dairy Creek.
- CREEK 6 connects to either CREEK 4 or CREEK 5 across Dairy Creek; follows east bank of Dairy Creek and north edge of Metro-owned natural area; first enters rural neighborhoods, crosses McKay Creek, and then enters urban Hillsboro neighborhood.
- RAIL will pass farmlands to north and some vacant land and neighborhoods to south; cross Dairy Creek very close to its confluence with McKay Creek; pass the Hillsboro Pioneer and Fir Lawn Cemeteries; then pass through commercial areas along West Main Street; rail line has very infrequent and slow traffic, but a future MAX extension would increase daily rail traffic.
- HIGHWAY will pass farmlands and commercial uses along west end of segment along Oregon 8; then commercial and light industrial development on SW Walnut Street; Oregon 8 is a heavily trafficked arterial, SW Walnut Street has lighter traffic but is a truck route; proximity to these roadways may negatively impact user experience.

#### Safety and Security – Connectivity

- CREEK 4 and CREEK 5 only cross one local road; visibility to other uses and activities (primarily Killarney Golf Course and some homes) will be good, especially for CREEK 4; excellent connections to golf course to the north and Metro-owned natural area to the east.
- CREEK 6 passes through large natural area; then crosses or follows several rural and urban local streets and one collector road (NW Connell Avenue); finally following north-south rail line to downtown MAX station; visibility to other uses will be limited in natural area but





improves along roadways into Hillsboro; excellent connectivity to natural areas, neighborhoods, and downtown Hillsboro.

- RAIL may have to co-exist with future MAX extension; bridged rail line crossing at Dairy Creek will require significant upgrades to safely accommodate trail traffic; good visibility to adjacent uses and activities along entire alternative, and many good connections.
- HIGHWAY crosses no arterial roadways, but up to six collector roads and two to three rail crossings after transition to street solution along SW Walnut Street and South 1st Avenue; many commercial driveway crossings; higher vehicle count and speeds could impact safety; good visibility to adjacent uses and activities along entire alternative, and many good connections.

### Environmental and Cultural Resources

- CREEK 4, CREEK 5, and CREEK 6 alternatives traverse and/or follow significant areas of floodplain, wetlands, stream banks, and creek riparian corridors; use of boardwalks, flood-resistant trail sections and narrow pedestrian-only sections recommended to mitigate negative environmental impacts.
- RAIL and HIGHWAY routes will have no identified significant negative impacts to environmental or cultural resources, although upgrades to the Dairy Creek rail bridge could require environmental permitting.

### Plans and Regulations

- All CREEK alternatives could require extensive environmental permitting and mitigation.
- RAIL uses an existing rail corridor and would require cooperative arrangements with the rail line owner; PGE power poles may also conflict with trail alignment.
- HIGHWAY passes some Rural Reserve areas but proximity of this alternative to Oregon 8 should greatly limit permitting issues.

### Property Ownership

- CREEK 4 and CREEK 5 will require property acquisition.
- CREEK 6 may require agreements with Metro for passage through natural area but only limited, if any, acquisitions for street solution.
- RAIL will require cooperation with rail line owner.



- HIGHWAY *may* have adequate right-of-way to accommodate proposed trail solutions.

#### Alternatives Considered/Not Mapped

- Routes directly crossing Port of Portland mitigation site.
- Multiuse boardwalk or flood resistant trail eastward along the north bank of Dairy Creek; then along north bank of McKay Creek, and south edge of golf course, to existing bridge over McKay Creek to NW Jackson Street.





*This page intentionally left blank.*



## Appendix A:

### PAC MEMORANDUM REGARDING JUNE 17, 2014 SAC OUTCOME

#### ATTENDEES

##### **Stakeholder Advisory Committee**

- Howard Sullivan, Forest Grove/Cornelius Chamber of Commerce
- Lyle Spiesschaert, Washington County Citizen-Farmer
- Steve Boughton, Washington County Bicycle Transportation Coalition
- Tom Beck, Forest Grove Planning Commission
- Jauna Merez, Centro Cultural

##### **Project Advisory Committee**

- Derek Robbins, City of Forest Grove
- Shelley Oylear, Washington County
- Dick Reynolds, City of Cornelius
- Mary Ordal, City of Hillsboro

##### **Consultant Staff**

- Jim Rapp
- Gregg Everhart

#### MEETING PURPOSE AND ORIENTATION

Derek Robbins outlined the purpose of tonight's SAC meeting:

- Review outcomes of the prior SAC meeting, the first project open house, and a set of key stakeholder interviews
- Consider the consultant's analysis and recommendations for modified trail alignment alternatives.
- Make recommendation to the PAC as to up to 3 alternatives per segment to consider after additional analysis for a preferred alternative

Jim Rapp went through the published packet for the SAC meeting and reviewed meeting summaries from the prior SAC meeting and open house and stakeholder interviews, and highlighted key points and comments that influenced modifications to the original set of trail alignment alternatives.





## **QUESTIONS AND GENERAL OBSERVATIONS/CONCERNS**

### **Property Acquisition**

Lyle Spiesschaert asked if trail right-of-way could be acquired through eminent domain. Jim responded that this question came up at the open house and the answer was that yes it could be but based on comments from Metro and other jurisdictions there was not a known example in the Portland region. It is expected any acquisitions would be on a willing seller basis. Several meeting participants indicated that their jurisdictions did not use eminent domain by policy. Tom Beck verified that Forest Grove would not use eminent domain. Lyle felt that even property owners who support the trail in concept may resist allowing the trail through their “backyard”. Jim indicated that there would have to be substantial right-of-way acquisition for the Council Creek Trail to be realized but that alignments on the edges of properties or along property lines were used whenever possible rather than alignments cutting across parcels. At the plan level, no major property improvements - homes, barns, etc. - would have to be removed by an alignment, except along the HOLLADAY option through Cornelius which the consultant was recommending be dropped from further consideration.

### **ODOT Regions**

Shelley pointed out that the City of Banks was in ODOT Region 2 not Region 1 and that the input from Region 1 on the Oregon 6 at-grade and undercrossing options should be verified.

### **Use of Easements**

Jim pointed out that the riparian restoration easements held by NRCS/SWCD were actually time limited contracts and that given the purpose – tree replanting – a paved regional trail couldn’t go into these areas. However, NRCS/SWCD did indicate that in the future such contracts could conceptually include more width in order to also accommodate trails. Lyle felt this might be useful along areas like Council Creek.

The BPA power corridor is secured by easement not fee-ownership as with other transmission corridors in the BPA system. Private property owners still have underlying rights and while this may make the owners more willing or reduce land value, the private owners would still have to provide permission to use the corridor for a the trail.

Jim also pointed out that he had observed Tualatin Valley Irrigation District infrastructure along a couple of roadways (Porter and Kansas City Roads) where agricultural production was setback from the road. This might be an opportunity for street-adjacent trail alignments if the owner does not “farm over” the pipelines. It was also suggested that Clean Water Services easement be given another look, particularly along the west side of study area.

### **Equestrian Uses**

The issue of equestrian uses was raised. Equestrian trails are not part of the Council Creek Trail Master Plan scope. Several members felt that the inclusion of such trails,



particularly between Banks and Forest Grove, might build support among property owners and others. Suggested that the Oregon Equestrian user group or the commercial stable in Banks could be contacted.

### **Different Commuter-Recreation Routes**

SAC members discussed how commuters might prefer more direct routes than recreational users. A direct route between Forest Grove and Hillsboro seemed crucial for commuting. The SAC agreed that there might be significantly more commuting between Forest Grove, Cornelius and Hillsboro than between Forest Grove and Banks, which might mean that two east-west routes with different characters or purposes (recreation vs. commute) could be desirable. Direct routes between Banks and Forest Grove seemed less important, as the SAC perceived there would be much less commute traffic. Recreational and commute users could be accommodated on a single less direct route between Banks and Forest Grove. The importance of establishing connectors and loop trails off the selected preferred alternative was also reiterated several times.

### **Tualatin Valley Scenic Bikeway**

Members discussed how the Tualatin Valley Scenic Bikeway fit with the Council Creek Regional Trail. Portions of the scenic bikeway (Greenville, Kansas City, Kemper, Visitation, Porter) are Council Creek Trail Master Plan options for street-adjacent trails. The bikeway is an on-street facility. Shelley Oylear noted that the County will be widening shoulders along the Tualatin Valley Scenic Bikeway as it passes through the study area. These improvements could serve as interim or potentially permanent Council Creek Trail solutions, or as local connectors.

## **STAKEHOLDER ADVISORY GROUP RECOMMENDATIONS**


Jim and Gregg reviewed the various options considered for trail alignments, and a set of hand drawn maps illustrating Consultant recommendations for modifications to the original set of trail alignment alternatives, and reviewed the benefits and challenges of each option. After extensive questions and discussion the SAC came to the following general consensus:

### **Segments 1 to 3: Banks to Forest Grove**

#### **WEST should be retained for further analysis.**

1. The SAC generally supported the trail modification north of Oregon 6 to follow the City's planned west side collector roadway and cross under Oregon 6 via the existing Oregon 47 undercrossing (note: the SAC also had ideas for using the rail undercrossing further east – see EAST 2 below).
2. For both WEST and the EAST 1 options, the SAC asked that thought be given to using Greenville Road as the connection to these options from the common Oregon 47 entry into Banks (rather than Dierickx for WEST and Wilkesboro for EAST 1). Members thought this would reduce farm land acquisition requirements





but also recognized that this meant a longer section of 47 would have to be used which would probably have some reduced user safety and comfort outcomes.

3. Members did not have a clear preference for the BPA vs the farm land alternatives between Kemper and Purdin. The BPA easement option has some topographic challenges but the farm land option would require more private property acquisition.
4. There was considerable discussion on how the WEST option would approach and cross Highway 47 near Forest Grove. The SAC agreed that the WEST and CENTER options should merge at the signalized Sunset/Beal intersection and follow 47 into Segment 4. In order to minimize Oregon 47 and arterial road crossings, alignments on both sides of this highway should be considered. Note: If the trail follows the southwest side of Oregon 47, and the RAIL option through Segment 4-6 is selected, the BPA corridor in the area of Oak Street may be a highly functional option.
5. The approach to Oregon 47 from the west was another issue. A variety of activities temporarily complicate the trail alignment decision – completion of David Hill Road with sidewalks and bike lanes, a new residential subdivision which will realign and restore a channel of Council Creek and provide for a soft surface walking trail, uncertainty as to how the subdivision would wrap around the BPA corridor, and improvements to Purdin Road and David Hill Road intersections with 47.

**CENTER (Oregon 47) should retained for further analysis**, merging with WEST at the Sunset/Beal signalized crossing of 47.

**EAST 1 should be retained for further analysis.**

1. The SAC did not express a clear preference for the two north end EAST 1 alternatives entering Segment 1 and Banks, although based on SAC concerns expressed about acquiring farm lands, and the interest in a longer rail-with-trail section entering Banks (see EAST 2 below), the more easterly of the two north side options (less farm land, more rail) would seem to be preferred.
2. The SAC endorsed using Heesecker Road instead of Visitation Road through Verboort.
3. In a conversation with remaining members after the formal meeting adjourned, Shelley Oylear indicated that the closure to vehicular traffic of the Porter Road Bridge over Council Creek was becoming increasingly probable. If this occurs, traffic volumes on Porter would be so low that a shared roadway solution along most or all of NW Porter Road using signing and pavement marking would be very viable. There are presently about a dozen homes or farmsteads along the 1.5 miles of NW Porter Road between NW Verboort Road and the bridge, 5 of which are at the north end within 500 feet of NW Verboort.



**EAST 2 should be dropped.**

Some members felt combining the rail-with-trail alignments from East 2 and EAST 1 all the way into Banks was preferable to the illustrated EAST 1 Wilkesboro Road/rail/across farm land EAST 1 option. Also that the rail undercrossing of Oregon 6 would be simpler undertaking (trail could be sited with virtually no modification to the crossing) than the Oregon 47 undercrossing of Oregon 6.

Gregg pointed out the technical challenges to using this suggested combination. The combination could involve more new rail crossings than for either the presently mapped EAST 1 or EAST 2 alignment. To avoid new rail crossings, the rail-with-trail for EAST 1 coming out of Segment 2 is on the west side of the line. Two rails lines and sidings converge north of Oregon 6. EAST 2 on the north of Oregon 6 is presently mapped on east side of the dual rail to avoid abutting development and the rail sidings on the west.

Jim also pointed out that Banks preferred the regional trail to be on the west side of downtown, on the east side of the rail tracks. Shelley noted that Banks is starting a trail master plan study soon that may provide insight into other trail possibilities in the area east of the railroad.


**Segments 4 to 6: Forest Grove to Hillsboro.**

A general question that arose is how the north-south Segments 1 to 3 alternatives and west-east Segment 4 to 6 alternatives would be connected. For all alternatives there will have to be a connection across Oregon 47. Intersecting roadways, rail lines, and prior and planned development would all influence the final solution and location. Once the next phase begins to focus in on a preferred alternative(s), conceptual crossing(s) and costing will be identified.

**CREEK 1-2-3-4-6 should be retained for further analysis.**

1. The SAC suggested that in the next phase of analysis that the entire CREEK alignment should be examined as a full multiuse trail AND as a recreational trail (narrower widths, soft surface, and/or pedestrians and recreational bicycle use only, etc.) with commute traffic on a separate route (RAIL).
2. Sections of CREEK could also be ultimately retained for local loop and connector trails
3. CREEK 1 should use the local variation that crosses N 10th Avenue and Council Creek with a new bridge.
4. The SAC left two variations “on the table” between N 19th/Susbauer and Hobbs Road: a) the most northern of the multiuse trail options north of Council Creek, and b) pedestrian-only trail (CREEK 2) combined with use of the parallel built section of HOLLADAY for bicyclists.
5. The CREEK 3-4-6 route was preferred over CREEK 2-5-6.





**HOLLADAY should be dropped**, except for the section between N 19th and Jobes Ditch which could be used as a parallel bicycle route to CREEK 2 or a variation to CREEK 3.

**RAIL 1 should be retained for further analysis**, but the route should connect directly to MAX in downtown Hillsboro along NW Washington Street. Derek will be confirming with TriMet that the potential light rail extension from Hillsboro to Forest Grove along this line will be single track. A two-track MAX would leave no room for an adjacent trail.

**HIGHWAY should be dropped.**

**RAIL 2 may have some merit** but should only be retained in part or whole if the railroad agrees that use of the line for rail-with-trail would be acceptable. The SAC indicated that if the response from PNWR was not positive that RAIL 2 should be dropped. Several PAC and SAC members confirmed that the line has daily traffic, not once weekly as claimed by the local neighborhood proponent of this option. Derek will be confirming with PNWR.

**HOBBS should be used for the Jobes Ditch spur trail**, rather than 345th as suggested by the Consultant. Dick Reynolds indicated that the only possibility for new highway and rail crossings was the future Hobbs Road/29th Avenue extension. Once the highway and rail are crossed it makes the most senses to stay on the HOBBS route all the way to the Tualatin River.

#### **Wrap-up and Next Steps.**

- The Project Advisory Committee (PAC) will meet on July 1 and make the final decision on which trail alignment alternatives are advanced to the next phase.
- The next phase will be initiated in July, 2014 and will evaluate the remaining options for selection of a preferred alternative by: further detailing alignments as to location and trail type, costing the alternatives, including land acquisition requirements and costs; determining jurisdictional and regulatory impacts; and assessing the alignments against the nine trail alignment rating criteria approved in Plan Report No. 1, Existing Conditions.
- The SAC felt that a tour of the remaining options would be most useful as the Consultant Team and Project Management Team (PMT) get closer to preferred alternative(s) recommendations. Probably September or early October 2014.
- Once the Consultant Team finalizes its recommendations, and the PMT reviews same and approves the draft for publication, the formal preferred alternative review process will be initiated – 2nd open house, 3rd SAC meeting, and then PAC approval. This sequence is tentatively scheduled for the 2nd half of October and first half of November.



## Appendix B:

### CCRT ALIGNMENTS (TASK 4) RECOMMENDED FOR PREFERRED ALTERNATIVE ANALYSIS (TASK 5)


**June 11, 2014**

The purpose of this summary and attachments is to synthesize the process of prior Project Management Team (PMT), Stakeholder Advisory Committee (SAC), and Open House reviews; and to present to the SAC and the Project Advisory Committee (PAC) a set of recommendations for the “up to 3” alignment alternatives to take in to the next phase of the master plan process (Task 5: Implementation Strategy).

#### **Process Summary**

- PMT directed Consultant to preliminarily map more than 3 alternatives for the purposes of stakeholder and public review, **if** there were more than 3 viable alternatives worth considering. The PMT also directed the Consultant not to map routes simply for the sake of “counting to 3”.
- Four primary route alternatives were identified in Segments 1, 2, 3, and 4; two in Segment 5; and three in Segment 6. Route variations were also identified for short sections of primary routes in Segments 2, 4, and 6.
- The initial draft Trail Alignment Analysis (Plan Report No. 2) was published in April 2014, and was reviewed by the PMT. Some minor changes were suggested and a Version 2 was re-published (dated May 2014 to distinguish from the earlier version).
- Version 2 was first reviewed by the SAC on April 30, 2014. Meeting summary notes are attached (Attachment B1).
- Version 2 was presented in a public Open House on June 4, 2014. Approximately 60 individuals attended. Open House summary notes and a spreadsheet compiling written questionnaire comments are attached (Attachments B2 and B3).
- Five stakeholder meetings or discussions were conducted: the City of Banks, Metro, the Natural Resource Conservation Service/Tualatin Soil and Water Conservation District, ODOT, and the owners of Killarney West Golf Course (Segment 6). Summary notes are attached (Attachment B4).
- Attachment B5 provides brief recaps of the original route options, and key considerations with respect to advancing, modifying, or eliminating an option for the next phase (Task 5).





On June 17, 2014, the SAC will meet a second time and make recommendations to the PAC on up to 3 options per segment to advance to Task 5. On July 1, 2014, the PAC will consider this advice and select up to 3 routes per segment. Task 5 will begin shortly thereafter. Under Task 5, the remaining options will be given a comparative analysis, and a preferred alternative(s) will be selected. In addition, alignments will be refined as necessary, development costs will be estimated, regulatory and jurisdictional requirements described, specific trail types and treatments identified, and a phasing plan proposed.

### **Segment Recommendations**

Additional input from the SAC and PAC is particularly requested for trail alignment alternatives highlighted below in ***bold italic***.

#### **SEGMENT 1: BANKS**

1. Advance **WEST** north of Oregon 6 to the next phase of the master plan process, but connect to WEST, CENTER or EAST 1 south of Oregon 6 via the CENTER option undercrossing of Oregon 6.
2. Eliminate **CENTER** (Main Street) north of the Oregon 6/Oregon 47 interchange.
3. Advance **EAST 1**, and **CENTER** south of Oregon 6, to the next phase.
4. Eliminate **EAST 2** as City strongly prefers more westerly options.

#### **SEGMENT 2: WASHINGTON COUNTY NORTH**

1. Advance **WEST** to the next phase, using the ***BPA power corridor - OR - an alignment across farm land between NW Kemper Road and NW Purdin Road.***
2. Advance **CENTER** to the next phase.
3. Advance **EAST 1** to the next phase but:
  - Eliminate the Banks Creek local variation and ***select one of two variations partly using rail-with-trail solutions.***
  - Modify **EAST 1** thru Verboort by using NW Heesacker Road.
4. Eliminate **EAST 2** based on proximity to EAST 1, less direct connection to Verboort, more complex rail and stream crossings, and limits to street-adjacent trails in some areas.

#### **SEGMENT 3: FOREST GROVE**

1. Advance **WEST** to the next phase following the BPA power corridor, except cross Highway 47 at Sunset Drive/NW Beal Road.
2. Advance **CENTER** and **EAST 1** to the next phase.



3. Eliminate **EAST 2** for reasons stated in Segments 1 and 2, due to concerns with arterial vehicle traffic conflicts with parallel bicycle and pedestrian traffic.

#### **SEGMENT 4: CORNELIUS**

1. Advance **CREEK 1**, **CREEK 2** and **CREEK 3** to the next phase, but eliminate: a) multiuse trail option along edge of Metro land north of creek between Susbauer and Hobbs, and b) street solutions along Cornelius-Schefflin/Spiesschaert and Susbauer-Hobbs. ***Select one of three or combination of remaining options between 19th/Susbauer and Hobbs.***
2. Advance **RAIL** to the next phase.
3. Eliminate **HOLLADAY**, except for possibility of using a built section between N 19th Avenue and Jobes Ditch for an on-street bicycle route combined with CREEK 2 pedestrian-only trail option.
4. Eliminate **HIGHWAY**. On-street solutions (along Oregon 8 or along neighborhood streets) were well received, and sidewalks and bike lanes will be added over time in any event.
5. ***Consider a SECOND RAIL option using the southerly rail line*** (including street-adjacent section along Oregon 8 at west end into Forest Grove).

#### **SEGMENT 5: JOBES DITCH**

1. **345th** should be selected as the preferred alternative for Segment 5.
2. Eliminate **HOBBS** from consideration, as the option is dependent on a future road extension and high school development for which there is no schedule or funding.

#### **SEGMENT 6: WASHINGTON COUNTY EAST AND HILLSBORO**


1. Advance **CREEK 4 and 6** to next phase.
2. Eliminate **CREEK 5** and **HIGHWAY**.
3. Advance **RAIL** to next phase, but ***select SW Walnut, West Main, OR NW Washington as final connection to downtown Hillsboro and MAX.***
4. ***Consider a SECOND RAIL option using the southerly rail line.***

#### **SECOND RAIL OPTION**

Near the conclusion of the June 4 Open House, a participant approached Derek Robbins with a suggestion for an option that had not been previously considered: using the SOUTHERLY PNWR rail line for a rail-with-trail between Forest Grove and Hillsboro. This rail line had not been considered because:

- a) The original project study boundary, as defined in the ODOT grant application and agreement funding this master plan, only included areas





between Council Creek and the northerly of the two PNWR rail lines. Even after the study boundary was modified, only a short stretch of the south line (between NW Hobbs Road and Dairy Creek) was included.

- b) There were no alternate plans for this line (MAX) nor was PNWR service potentially coming to an end and the line being abandoned (as is the case with the north line).
- c) Freight rail traffic on the south line, while not frequent, is regular and serves a relatively important local industry (Stimson Lumber).

The suggestion focused on using the south rail for rail-with-trail only between downtown Hillsboro and Jobes Ditch. At Jobes Ditch the original RAIL option or a CREEK option would be re-joined. Reasons given were:

- a) The south line crosses industrial and farm lands, avoiding many concerns expressed by the residential neighbors along the original RAIL option.
- b) The south line connects directly to Dairy Creek Park.
- c) On-street solutions were not necessary to connect the east end of this option with MAX (as is the case with the RAIL option).
- d) This route would provide a better user experience than the HIGHWAY street-adjacent trail and on-street combination.

In consultation with Derek Robbins, it was decided that this idea had enough merit to be brought to the SAC, but that the concept should be taken to its logical conclusion, that being that this south rail-with-trail suggestion be extended along the full length of Segments 4, 5 and 6. This effectively replaces the original HIGHWAY option up to N 4th Avenue, where the route would then follow a street-adjacent solution on the south side of Oregon 8 to Oak Street in Forest Grove.

This south rail-with-trail option has NOT yet been discussed with PNWR. Derek is the process of scheduling a meeting as soon as possible to determine PNWR's response and position.



## B1. APRIL 30, 2014 SAC MEETING

**Activity:** Stakeholder Advisory Committee (SAC) #1, Trail Alignment Alternatives Phase

**Purpose:** SAC review and input on outcomes of initial trail alignment alternatives analysis

### Attendees

#### SAC

- Greg Vandervelden, City of Cornelius Parks Advisory Board
- Howard Sullivan, Forest Grove-Cornelius Chamber of Commerce
- Peggy Harris, Citizen Participation Organization (CPO) 15
- Steve Boughton, Washington County Bicycle Transportation Coalition
- Karla Antonini, City of Hillsboro Economic Development Commission
- Lyle Spiesschaert, Washington County Citizen/Farmer
- Tom Beck, City of Forest Grove Planning Commission
- Glenn Van Blarcom, Forest Grove Citizen
- Juana Merez, Centro Cultural
- April Olbrich, Tualatin River Watershed Council

#### Other

- Margaret Harris

#### Project Management Team (PMT)

- Derek Robbins, Forest Grove
- Dick Reynolds, Cornelius

#### Project Advisory Committee (PAC)

- Mary Ordal, City of Hillsboro
- Joy Chang, Washington County


#### Consultant Staff

- Jim Rapp, Project Manager
- Gregg Everhart, Lead Trail Planner

### OPENING COMMENTS AND ORIENTATION

Following introductions, Derek Robbins and Jim Rapp reviewed the project purpose and goals, and highlighted the materials that were distributed to the SAC and those displayed at the meeting. These included the final Existing Conditions Plan Report No. 1, draft Trail Alignment Analysis Plan Report No. 2, Plan Report No. 2 Appendix:





Simplified Trail Alignment Maps, display boards illustrating the possible trail types and other trail treatments, display maps combining Segments 1-3 and 4-6.

Derek and Jim indicated that the purpose of SAC meeting #1 was to review the preliminary trail route options and treatments in all six trail segments. The advice needed from the SAC was their perceptions of the challenges and opportunities with the identified and mapped trail options, ideas for additional or combined options, and/or to identify options for which there were substantial or fatal flaws.

Derek and Jim indicated that the same set of reports, maps, and trail options would be presented at the project Open House on June 4, and that the input from the Open House and SAC would be forwarded to the PAC for its June 17 meeting. The PAC will review the draft reports and maps, and SAC and Open House input, and select between 1 and 3 alternatives per segment for additional analysis under the next project phase: Implementation Strategy.

The ultimate goal is to select a single preferred alternative for each segment, although the preferred alternative could involve more than one route using different trail type solutions or different trail types applied to a single route.

## **WORKSHOP**

The SAC broke into two tables: one reviewing Segments 1 (Banks), 2 (Washington County), and 3 (Forest Grove); and the second, Segment 4 (Cornelius), 5 (Jobes Ditch), and 6 (Washington County-Hillsboro). SAC members self-selected their initial table, although after the mid-meeting break most participants switched tables.

*Note: for brevity, the summaries below often refer to segment route options by the names used in draft Plan Report No. 2. For more information, the reader should refer to draft Plan Report No. 2.*

### **Segments 1 to 3: Banks to Forest Grove**


- A. Show Tualatin Valley Scenic Bikeway route on maps (*note: this bikeway is shown on Existing Conditions maps but not Trail Alignment Analysis maps*); Washington County staff noted that the bikeway is appropriate for medium to advanced cyclists due to vehicle traffic; the County is reviewing the route for areas that could be improved for safety.
- B. Important to have direct route to Banks.
- C. Preferred route should minimize conflicts between bicyclists, pedestrians, and vehicle traffic. Families with children avoid routes where pavement is shared with vehicles, need enough separation for jogging strollers and small children; fast commuting cyclists can also be a hazard.
- D. Convert rail line to bike/ped (*note: this reference is to the rail lines that head south/southeast out of Banks – this route is designated on the regional trail plan as*



*a rail-with-trail route totally separate from CCRT. The rail line is active and planned to remain so, thus rail-to-trail is not a current option).*

- E. How can multiuse trail be built near a low area such as along Banks Creek, subject to flooding? All trails should be usable in in all seasons.
- F. Consider developing multiuse trail usable by bikes, pedestrians, and farm equipment through agricultural areas where a roadside alignment does not work for trail route; may require 14-16 foot wide trail to accommodate farm equipment. Many farmers now move their large farm equipment after midnight which would help minimize conflicts.
- G. Elevated “cycle track” solution provides better safety that striped bike lanes.
- H. For trails near creeks, undo channelization and restore.
- I. What are construction impacts for trails thru areas subject to flooding?
- J. Traffic congestion and road curves cause dangerous conditions in area of Hwy 47 crossed by WEST alignment - Purdin Road, Sunset, David Hill – Beal Road as an alternative?
- K. ODOT classifies Hwy 47 as a rural road which affects how it is managed – should change to highway classification, lower speeds and improve intersections (*note: Hwy 47 is classified as a principal arterial. To qualify for lower speeds, it would have to be reclassified as an arterial (for instance the Tualatin Valley Highway – Hwy 8 -between Hillsboro and Forest Grove is an arterial).*
- L. CENTER (Hwy 47) least desirable trail route; adding a buffered or street-adjacent trail would adversely impact adjacent housing
- M. EAST 1 (Evers Road) is preferable given fewer cars and recent paving; even though street right-of-way does end at the north and the trail would have to go through farm land.
- N. Forest Grove is trying to attract new industry and truck access is limited; Hwy 8 is a constraint so Hwy 47 should be improved for trucks; which would make CENTER route less desirable.
- O. Street option on west side of Verboort is the better crossing point for trail over Verboort Road (instead making turns to and from the short segment of busy Verboort road).
- P. WEST is a great street-adjacent trail route – scenic, low traffic, quiet – IF the property can be acquired.
- Q. CENTER is a truck route, many developed properties next to highway – not desirable.
- R. EAST 1 is a good route – direct and quiet.



- 
- S. Use existing roadside drainage swales as the buffer between streets and street-adjacent trails; change the cross-section for easier maintenance; multiple benefits if re-vegetated as “bioswale”.
  - T. Keep Tualatin Valley Scenic Bikeway and CCRT separate; others note that a safe, attractive CCRT would probably attract some cyclists from bikeway and reduce conflicts with vehicles and farm equipment using those roads.
  - U. Large cycling events are a problem for residents and farmers.
  - V. Get conservation reserve lands maps – many farms have conservation easements which from the land owners perspective may be a trail route of least impact.
  - W. BPA power line easements good to use – but trail structure needs to support loads from utility maintenance vehicles.
  - X. Agreements with BPA restrict farming uses under power lines – so underlying property owners may be willing to permit trail.
  - Y. Trails that accommodate loop trips are ideal, particularly in or near each community; include trailheads with parking and bathrooms.
  - Z. Centro Cultural representative pointed out that safe access between Cornelius and Hillsboro is a priority; many Hispanics walk or bike instead of using bus or car; TV Highway is especially dangerous and the railroad route is already used unofficially.
  - AA. CCRT offers exciting potential to link to future Salmonberry and Yamhelas Trails.


#### **Segments 4 to 6: Cornelius to Hillsboro**

- A. HOLLADAY road extension is intended to provide an emergency services route when TV Highway is closed. Routing of emergency and regional trail traffic through existing neighborhoods may not be acceptable.
- B. RAIL – currently 1 or 2 monthly freight trains, if used for MAX frequency and speeds will increase, trail may need wider separation to anticipate MAX traffic.
- C. North side of railroad has two sidings, PGE transmission power poles, and some close-in development – will challenge trail routing.
- D. A variety of questions were asked re: cost of different trail type options – examples were provided (note: full cost estimates will be applied in next phase of project).
- E. Hillsboro’s Main Street too narrow and busy – need new bike lanes and sidewalks to make this street solution work.
- F. Prefer shared street solution in Hillsboro along Walnut connecting HIGHWAY and RAIL options to MAX terminus of trail.



- G. RAIL option is rail-with-trail, use of rail line for freight, and potentially MAX, needs to be preserved – CCRT will not call for outright rail to trail conversion.
- H. The two groups considered a variety of combination solutions.
- I. Walnut Street with rail-with-trail (Segment 6).
- J. Rail-with-trail from Hillsboro connecting to CREEK solution around Hobbes Road.
- K. Street-adjacent trail along TV Highway connecting to Walnut on east end and RAIL or CREEK at west end via a short shared street solution.
- L. Rail-with-trail solution could substituting for ped-only CREEK 5 solution.
- M. Commuter route along rail line; recreational route using a CREEK solution.
- N. Balancing the needs and interests of commuter and recreational users was a concern – commuters may want the most direct thru-route and be less concerned about scenic issues. Recreational users may only use short portions of the trail and be more interested in views and amenities.
- O. Need to ID connecting links to other trails and to destinations that are not directly on the main stem of the trail (note: connecting trails will be added at the Implementation phase).
- P. Hobbs/Jobes Ditch spur trail (Segment 5) as originally included for access to Tualatin River, connection to new high school came afterwards.
- Q. What is a flood resistant trail? – how much more costly than regular trails or boardwalks?
- R. HOLLADAY route does not appear to be feasible due to the large number of residential relocations that would be involved.
- S. Shared street solutions for portions of HOLLADAY and HIGHWAY route options may not be acceptable to local neighborhoods.
- T. The HIGHWAY street adjacent solution on south side of Hwy 8 between Hobbs Road and Dairy Creek may be a suitable solution if other options don't work.
- U. Don't make bike lane/sidewalk improvements along the developed portions of Hwy 8 part of trail plan – these will be taken care of anyway as highway is upgraded.
- V. Rail-with-trail may not be best for recreational users – industrial surroundings, rail traffic impacts, little scenic value.
- W. Is the trail intended to be transportation or recreation? Ideal would be both but maybe not possible.
- X. Consider disabled and elderly populations (in Cornelius and Forest Grove especially). What types of trail and routes best serve these needs and limitations?



- 
- Y. Use of Metro lands and local streets for CREEK solutions did not generate any adverse comments, the groups did not generally state a preference for the many variations of CREEK solution.
  - Z. For non-commuting purposes the more scenic routes near to creeks and natural areas were definitely preferred routes.
  - AA. No clear preferences for Jobes Ditch route emerged, although given the building of the new high school, the Hobbs Road extension, and a new rail crossing were all problematic, the 345th option is probably most realistic.
  - BB. Consider separate commuter and recreational routes.
  - CC. Commuter – direct routes to other transportation and employment centers needed.
  - DD. Recreation routes – less abutting vehicle traffic, lower speeds, family groups, scenery, access to parks and services needed.
  - EE. Loops and connector trails should be included as most users will only travel on short portions of the trail, not for regular commuting.
  - FF. Don't let cost be the deciding or primary factor – keep long term community needs in mind.

## **NEXT STEPS**

1. The Open House is scheduled for June 4, 2014 from 6-8pm at the Forest Grove Community Auditorium. The participation of SAC and PAC members would be greatly appreciated.
2. After the Open House the Consultant will prepare a set of recommendation for selecting the trail route alternatives to be considered for the preferred alternative under Task 5: Implementation Strategy.
3. The SAC will reconvene on June 17, 4-6 pm to consider the Consultants recommendations and concur or provide alternative recommendation to the PAC
4. The PAC – Hillsboro, Forest Grove, Metro, Cornelius, Washington County, Banks and ODOT – will meet, probably during the week of June 30, to discuss and review the draft trail alignment analysis report, and the inputs from the Open House and two SAC meetings, and select “up to 3” alternatives for each segment for further analysis as part of the Implementation Strategy phase of the project.
5. Maps published in the draft trail alignment analysis report will be revised to reflect the PAC decisions. On a Saturday in the second half of July, a joint SAC/PAC field trip will be offered so that members can see the “up to 3” options on the ground in preparation for the Implementation Strategy phase. This next phase will identify and select the preferred alternatives. The Implementation Strategy phase will swing into full gear in August.



6. The next formal SAC meeting is tentatively scheduled for the week of November 4, 2014 with the PAC following during the week of November 17. At that time the SAC will be asked to weigh in on the preferred alternative, and the PAC will select same. This phase will also develop costing, road and stream crossing treatments, phasing, trail design typology, and information on plan-level regulatory requirements and jurisdictional limitations to build/maintain trails.





*This page intentionally left blank.*



## B2. JUNE 4, 2014 OPEN HOUSE

**Activity:** Public Open House, Trail Alignment Alternatives Phase

**Purpose:** Public review and input on outcomes of initial trail alignment alternatives analysis

### Attendees


58 individuals signed in. There may have been a few others in attendance.

Comments below were recorded on flip charts, on sticky tags, or directly onto maps at the event.

### GENERAL SESSION Q&A AND STATEMENTS

- Banks and Highway 47 – likes Highway 6 undercrossing improvements.
- What are steps after plan completion? Jurisdictions approve plan and then have to find funding.
- How many people bike/walk vs. drive? This data was not available.
- When will it be built? Long term maybe up to 20 years. All depends on funding.
- Many comments on adverse impacts of trail on landowners/residents: theft, noise, trash, crime vandalism, etc. Commenters primarily focused on the trail options north of Council Creek between 19th/Susbauer and Hobbs Road, and on the RAIL option through unincorporated Washington County between Cornelius and Hillsboro.
- Rail line is already used by people and is a nuisance.
- Public safety – trails pass by backyards, keep bikes and peds on streets and sidewalks where police can patrol.
- Night lighting will be needed for security.
- How is land acquired – willing seller or condemnation? Willing seller.
- Uses Banks-Vernonia Trail and doesn't see trash.
- Experience with other urban trails is positive.
- Who decides what trail alignments will be used? Will there be a vote? Project's SAC and PAC consider input (such as from Open House) and will make recommendations to various cities, County, and Metro for adoption.
- Several concerns/questions re: public notice – why no direct notifications? Should have postcard notice to all nearby land owners like land use notices.





Notices were given thru utility bills and newspapers, etc. Participants noted that this excluded residents on their own water and septic systems who do not get such utility bills.

- Need to do more outreach.
- Prefer trails being off-street (2 statements to this effect).
- Likes rail with trail – but with possible MAX extension could trail fit adjacent to rail line? Probably, although rail sidings and power poles present a challenge.
- Avoid bikes in road as with the Scenic Bikeway program.
- Will a regional trail really happen? All depends on funding and jurisdiction commitment.
- Concerns expressed with trail safety with safety. Transients are already in some areas, 24 hour trail will make problem worse. Most commenters were from the two neighborhoods noted earlier.
- Supports trail for safety and health.
- Will road crossing be safe? Will use Washington County crossing specifications that include crosswalks, signing, signals and beacons etc. based on the type of road crossed.
- Very glad you are doing this. Thanks. Please take advantage of scenic nature amenities.

#### **SEGMENT 1: BANKS**

- Like the options that are on along or near rural roads, not along Highway 47 (except for the Oregon 6 underpass widening).
- Like Highway 47 with street-adjacent trail option – good and direct for commuters.
- Prefers WEST alignment.
- Avoid Highway 47 unless street-adjacent trail.
- Do not use Main Street in Banks.

#### **SEGMENT 2: WASHINGTON COUNTY**

- Both EAST options are good – more direct and lower traffic.
- Any alignment except Highway 47 option works.
- Identify Tualatin Valley Irrigation District lines and see if they can be used for trail routes.



- WEST option preferred.
- Verboort community needs to be part of the process.
- Corner of NW Evers Dr. and NE Reiling Rd. is unsafe – don't use this route unless improved ("route" is EAST 2)
- WEST option preferred – less commerce / more trees.

### **SEGMENT 3: FOREST GROVE**

- Highway 47 is unsafe.
- Include local routes and connectors to main trail.
- Highway 47 (CENTER) option is unsafe due to traffic, and impractical due to houses along the highway.
- WEST option is best.
- Porter Road (EAST 1) – good option – less traveled.

### **SEGMENT 4: CORNELIUS**

- Use RAIL not CREEK trails (several comments to this effect).
- CREEK trails are too expensive.
- Prefers RAIL (several comments to this effect).
- Prefers RAIL option - closer to city center.
- Like CREEK 1 option.
- Use Clean Water Services easements for trail routes.
- Use Tualatin Valley Irrigation District easements for trail routes.
- Keep bicycles off rural roads, use widened shoulders or street-adjacent trail if following roads.
- Keep green space for wildlife and their habitat.
- Likes HOLLADAY – provides access to city dwellers.
- Preserving wildlife habitat is important.
- Keep trail with city limits - better security.

### **SEGMENT 5 (JOBES DITCH) AND SEGMENT 6 (HILLSBORO)**

- Every neighbor along proposed routes should have been notified by letters sent to home addresses.



- There are security and trespass issues on the rail line near 334th.
- There are transient and homeless issues on the rail line near 334th.
- There are litter and crime issues on the rail line near 334th.
- Do not favor trail or MAX - both will bring crime.
- Leave the railroad as is.
- Property values will increase with trail.
- Love it. All options look good.
- Use TV Highway – other options will attract crime.
- RAIL alignment is desirable for directness but CREEK alignment would be more scenic. Could the RAIL alignment be made more park-like?
- ODOT owns rail line. PNWR operates 1 engine and car every 7 to 10 days.
- Need crossing improvements at Dairy Creek.
- 1996 flood impacted Highway 8 at Dairy Creek Bridge.
- Use the south rail line for a rail-with-trail. Low rail traffic, and Stimson Lumber is the only customer.

#### **SPANISH LANGUAGE COMMENTS**

- Que no tarden mucho en construir la línea. *Don't take too long to build the trail!*
- A mí me gusta la carretera 8 y el sendero cerca del tren. *I like the Highway 8 and trail near the railroad option.*
- La carretera 8 tiene mucho tráfico. *Highway 8 has too much traffic.*
- Si queremos un sendero. *We do want a trail.*
- Me gusta la idea de un sendero. *I like the idea of a trail.*
- En Cornelius me gusta que el sendero va por la línea de tren. *In Cornelius, I like the trail that runs along the railroad line.*
- Prefería que el sendero este separado de carros. *I prefer that the trail be separated from cars.*
- La carretera 47 tiene mucho tráfico – primero arreglen la carretera. *Highway 47 has too much traffic. First spend money fixing the roadway.*
- Quiero que el sendero tenga conexiones con parques, el Banks / Vernonia porque lo quiero usar cuando salgo durante el fin de semana. *I want the trail to*



*have connections to parks and the Banks-Vernonia Trail because I want to use it on the weekend.*

- Queremos más lugares naturales y lugares para pasear. *More natural areas and places to walk.*
- Quiero que el sendero esté separado de los carros. *I want the trail to be separated from cars.*





*This page intentionally left blank.*



### B3. SUBMITTED QUESTIONNAIRES, EMAILS, LETTERS





*This page intentionally left blank.*



## Appendix B3 - Submitted Questionnaires V.3 - Council Creek Regional Trail Open House #1

Responder #	Name	Please mark the trail area(s) you are most interested in:	Why are you most interested in the trail areas you identified above?	What do you think? Do you have a preferred alignment and why? Are there other existing conditions that we should know about?	Which community do you live in?	Which community do you work in?	How would you use the Council Creek Regional Trail?	How often would you use the CCRT?	Is there anything else you would like to tell us about the trail.
1	Brian Cooper	2, 3, 4, 5, 6	I live in Forest Grove and frequently bike / hike in the surrounding area.	In general, I prefer the alignments that are not directly adjacent to major roads (i.e. Hwy 47 & TV Hwy). The benefits of getting further from these main roads include less noise on trails, less exhaust fumes, more wildlife and probably less need for stop signs on trail (because of fewer cross streets). Bikes in general do not appreciate lots of stop signs.	Forest Grove	Forest Grove	Walking/jogging, biking, commuting to work, recreation, and to experience nature.	A few times a week	
2	Dorotea Lopez	3, 4, 6	Porque un trail - sendero - es muy importante para la recreacion, para la transportacion de nuestra comunidad (because a trail is very important for recreation and for our community's transportation needs).		Cornelius	Cornelius / Hillsboro	Walking/jogging, biking, commuting to work, recreation, to reach schools, to reach shopping or other community destinations, and to experience nature.	A few times a week, once a week, and a few times a month	
3	Alejandro Tecum	4			Cornelius	Forest Grove	Biking	A few times a month	It's a good project; it will improve people's health and the enjoyment of nature.
4	Elaine Cole	2, 3, 4	I am most interested in the trail near my home and where our kids go to school (open enrolled) in Cornelius - Segment 2, 3, 4		Forest Grove	PCC Rock Cree	Walking/jogging, biking, recreation, to experience nature, to get to MAX.	Once a week	Thank you
5	Susan Cooper	1, 2, 3, 4	I live and work and bike commute and ride for recreation in Forest Grove and nearby.		Forest Grove	Forest Grove	Walking/jogging, biking, commuting to work, recreation, to reach shopping or other community destinations, and to experience nature.	Once a week	
6	Bill Garcia	1, 2, 4	I would like a direct route to the Banks / Vernonia Trail	Commuter friendly will encourage more daily use	Beaverton	Portland	Biking		Make it as straight as possible. No switchbacks / minimal turns. Don't follow creeks - #1 bugs, #2 windy, and #3 goes nowhere.
7	Jose Orozco	4, 5, 6	A safer alternative to ride to work... nowhere along Highway 8	P&W Rail. Parallel MAX line proposed by Forest Grove. Bi-directional train. Not 2 one-way trains.	Cornelius	Hillsboro	Walking/jogging, biking, commuting to work, recreation, to reach schools, and to reach shopping or other community destinations.	Daily	Look into innovative lighting options. Sensors that make lights brighter on approach. Dim when no one is detected.
8	Sabrina Orozco	4, 5, 6	A safer alternative to ride our bicycles to Forest and Hillsboro. Nowhere along Highway 8.	Preferred alignment is the Pacific-Western Rail [alignment] through Forest Grove-Cornelius-Washington County - Hillsboro. I think planners should leave room for 1 MAX line. But rather than have 2 one-way trucks (trains?). Plan enough room for 1 bi-directional one accepting the schedule delays.	Cornelius	Cornelius	Walking/jogging, biking, in-line skating/kick scooter, recreation, to reach schools, and to reach shopping or other community destinations.	A few times a week	Plan to avoid construct under trees that drop leaves - low maintenance & saves money.
9	Harley Crowder	3, 4, 5	I live in Cornelius for the last 35 years. Would like to see the trails to be as close to city centers as possible.		Cornelius	Hillsboro	Biking and to experience nature.	A few times a month	
10	Dave Pauli	4	I would like to be able to commute from Forest Grove to Hillsboro, safely.		Forest Grove	Hillsboro	Walking/jogging, biking, commuting to work, and recreation.	A few times a week	Love the concept. Would like to see it accommodate as many types of uses as possible.



# Appendix B3 - Submitted Questionnaires V.3 - Council Creek Regional Trail Open House #1

Responder #	Name	Please mark the trail area(s) you are most interested in:	Why are you most interested in the trail areas you identified above?	What do you think? Do you have a preferred alignment and why? Are there other existing conditions that we should know about?	Which community do you live in?	Which community do you work in?	How would you use the Council Creek Regional Trail?	How often would you use the CCRT?	Is there anything else you would like to tell us about the trail.
11	Mike & Lauren Petit	4	We do not want a trail or bike lane through the green space that runs along the side of our property.	The creek floods in the winter. We would like to see the railroad tracks used as the trail and bike lane. This makes more sense financially.	Cornelius	Portland	Walking/jogging	Never	
12	Lisette Romig	3, 4, 5	All areas for different purposes. Forest Grove to Hillsboro and Cornelius for shopping and schools. Forest Grove to Banks for recreation and access to Banks/Vernonia Trail.	A combination of trail along side road and separated from road. Safety is a big concern along the heavy traffic stretches. Some bikes/walkers would like to be near cars and not isolated because of visibility and safety. Don't make the trail too isolated from developed areas and roads. A combination would be great.	Forest Grove	Forest Grove	Walking/jogging, biking, commuting to work, recreation, to reach schools, to reach shopping or other community destinations, and to experience nature.	A few times a week (depending on season)	I love the idea. This trail will bring much needed economic boost to the area. Great work. You have my support. Let me know how I can help.
13	Lin Vanderzanden	3, 4	Close to home	Prefer along rail line (seg. 4)	Forest Grove	N/A	Walking/jogging and biking.	Once a week	
14	Joseph Auth & Amanda Spahn	6	Segment 6 may affect Amanda's parents land and neighbors' land. For the Rail Option in Segment 6, walls or fence should be placed to prevent people on the trail walking onto private property. Retaining walls may be needed on some sections of the Rail Option to avoid property taxes.	We do not support the proposed alignment of the CRK Option that runs east and south of the Port of Portland Mitigation site. We would like to propose an option that runs north of Port of Portland Mitigation Site that goes down NW 334th Avenue and connects into the pink CRK alignment (see attached map). We do not oppose the other proposed routes from the open house (WA, RAIL, or purple CRK that runs near Killarney Golf course). See next page for more comments. - We do not support the alignment with the RED X since it goes through our neighbors' properties. We are okay if this alignment goes through the Port of Portland Mitigation Site, but it is probably not allowed - We are proposing the ORANGE LINE alignment that runs on NW 334th Avenue that attaches to the pink CRK alignment. The pink CRK alignment would be a more scenic route for the trail with the terrain and flood plain. We prefer the pink CRK alignment over th	Unincorporated Washington County	Hillsboro & Portland	Walking/jogging, biking, and to reach shopping or other community destinations. 'No Parking' signs may need to be posted on NW 334th Avenue to avoid trail users parking their cars on this street.	A few times a week	We support the concept of the trail system and we would likely use it. During this planning process, postcards should be sent to property owners whose land may be affected by a trail alignment to give them an opportunity to comment.
15	Francis Bates	2, 3, 4, 5, 6	To make the ride to Hillsboro easier and make easier access to the Banks-Vernonia trail.	Every alignment away from traffic is best. Along Council Creek, north of the highway is my favorite route.	Forest Grove	N/A	Biking and recreation	A few times a month	Please keep it away from the road. It will be most enjoyable if the traffic noise and traffic danger is minimized.
16	Patti & Dave Schmidlin	3	I live on NW Martin Rd. and am concerned about the intrusion of a public trail through my property. However, it is evident that you people are bound and determined to push a trail down somebodys throat. It is also evident that you do not really want to hear from anybody who opposes your ill conceived plan.		Unincorporated Washington County	Retired	Walking/jogging and to experience nature.	A few times a week / once a week	
17	Melissa Jacobsen	1, 2, 3, 4, 5, 6	I bike in all these areas regularly. I know that most drivers would be happy to see fewer bikes on the road. I'd get off the road if I had another option.	Whenever possible, I hope you put the path along railroad tracks. My neighbors at 1260 NW Susbauer Road are especially concerned about encroachment on or adjacent to their property. I understand and sympathize with their concern.	Cornelius	Unincorporated Washington County / Portland	Walking/jogging, biking, community to work (possibly), recreation, to reach shopping or other community destinations, and to experience nature.	Daily	I'm excited about it and only wish it had been in place when we moved here over 20 years ago!
18	Virgil Hockett & Beth Zetter	4	See attached letter	See attached letter	Just outside city limits of Cornelius	N/A	Would not use.	Never	See attached letter



## Appendix B3 - Submitted Questionnaires V.3 - Council Creek Regional Trail Open House #1

Responder #	Name	Please mark the trail area(s) you are most interested in:	Why are you most interested in the trail areas you identified above?	What do you think? Do you have a preferred alignment and why? Are there other existing conditions that we should know about?	Which community do you live in?	Which community do you work in?	How would you use the Council Creek Regional Trail?	How often would you use the CCRT?	Is there anything else you would like to tell us about the trail.
19	Rosa Rodríguez	1, 2, 3, 4, 5, 6	Because these trails are a place where I can share time with my children, and by using them, we also stop polluting.	I like these trails because I will be far from vehicles. When I ride my bike the turbulence originated by cars are that strong that I'm afraid of falling.	Hillsboro	Forest Grove	Walking/jogging, to experience nature.	A few times a week	
20	Abby Hernández	3, 4	Because those areas are the closest to my home.		Cornelius		Walking/jogging, biking, recreation, to experience nature.	A few times a month	
21	Anita Santiago	1, 2, 3, 4, 5	Because I live in Hillsboro; I'd love to be able to walk and I'd like to have a place to go biking with our children.	I think it's important that we participate, for our children; projects like this are very good and important	Hillsboro	Hillsboro	Walking/jogging, biking, commuting to work, to reach schools, to reach shopping or other community destinations, to experience nature.	A few times a week	This project is important. Thank you.
22	Aure Aguilar Paredes	1, 3, 4, 5, 6	Because it is the place where I live, and I'd like to see this project completed, to go out and have fun with the kids and with the whole family.	Yes, I would like to see it completed (the project), because it is very important to have more space to ride bikes and to walk more outdoors	Cornelius		Walking/jogging, biking	A few times a week	I hope this could be possible, and yes I would like it to be achievable.
23	Graciela Chávez	3, 4, 6	Because I live and study in those areas, as well as my friends and my family.		Hillsboro		Walking/jogging, biking, recreation, to reach schools, to experience nature.	A few times a week	
24	Maribel Alfaro	4	I am interested in the Trail Area 4 because would be very close to me and therefore I will enjoy it with my whole family.	I would like a route that is far from busy roads, because with too much traffic is just impossible to relax while walking with our children.	Cornelius		Walking/jogging, recreation, to reach schools, to experience nature.	A few times a month	
25	Angelina Vejar	4, 6		I would love that you could take into account to all people, especially children (with disabilities).	Cornelius		Walking/jogging, biking, equestrian, commuting to work, recreation, to reach schools, and to reach shopping or other community destinations, To experience nature.	Daily	They are very good ideas and we like it to have it completed as soon as possible.
26	Sandra Cruz Moreno				Beaverton		Biking	A few times a week	
27	Estefana Bautista Cruz		Because I will not drive too much, I could ride the MAX and enjoy nature.	I like the idea of the trail because I'm worry for the safety of the community and about lowering pollution, because more people will ride the MAX instead of driving.	Hillsboro	Hillsboro	Walking/jogging, recreation, to experience nature.	A few times a week	
28	Eva Gómez	1, 3, 4, 5	Because I'd like to get there riding my bike; right now is kind of a challenge because I'm 45 years old. I did not ride a bike for many years, I used to ride a bike when I was very young. And a year ago I started again.	I think it would be nice having a new bike trail to ride with confidence, and safer.	Cornelius		Walking/jogging, biking, to reach schools, to experience nature.	Daily, weather permitting	It is very interesting. If I can't enjoy that, my children and my grandchildren will.
29	Yeraldín Flores Castro	4	The Cornelius trail area, because the bus takes a big deal of time and I don't drive, and this is the area where I live.	The trail connecting Hillsboro with Banks, that is the area where I live and travel.	Cornelius	Hillsboro	Walking/jogging, biking, commuting to work, to reach schools, to reach shopping or other community destinations, to experience nature.	Daily	So far everything is fine and I think is a good idea.
30	Amalia Zárate de Villarruel	2, 3, 4	Because from Sunset to Purdin there is no room for bikes, or to take a walk, and it is a very dangerous road because the speed of passing cars.	There's no room for bicycles, nor sidewalks for walking, and the cars speed is very high.	Forest Grove		Walking/jogging, In-line skating / kick scooter, recreation, To visit my family that lives across NW Purdin.	Daily	
31	Guadalupe Maldonado	1,2,3,4, 6	I don't know all the places, but I think those are the routes that would be easier for me to use.	I don't have an answer.	Hillsboro	Forest Grove, Cornelius, Hillsboro	Walking/jogging, biking (my children will do it), In-line skating / kick scooter (my children will do it), recreation, to experience nature.	A few times a week.	It would be excellent because walking down quiet roads and breathe healthier air helps to control stress.
32	Emely Castañeda	1, 4, 6	Because I work near that area.		Hillsboro	Forest Grove, Cornelius.	Walking/jogging, biking, to reach schools.	A few times a year	This trail is very important to the community.



### Appendix B3 - Submitted Questionnaires V.3 - Council Creek Regional Trail Open House #1

Responder #	Name	Please mark the trail area(s) you are most interested in:	Why are you most interested in the trail areas you identified above?	What do you think? Do you have a preferred alignment and why? Are there other existing conditions that we should know about?	Which community do you live in?	Which community do you work in?	How would you use the Council Creek Regional Trail?	How often would you use the CCRT?	Is there anything else you would like to tell us about the trail.
33	Karla Hernández	3, 6	Because I work in this area.			Banks	Walking/jogging, recreation, to experience nature.	A few times a month	
34	Caitlin Matthews	1, 2, 3, 4, 5, 6			Forest Grove	Forest Grove	Walking/jogging, biking, commuting to work, recreation, to experience nature.	A few times a week.	
35	Francisca Pérez	3, 4, 6	It would be great to have trails for people who live nearby.		Hillsboro	Forest Grove	Walking/jogging, In-line skating / kick scooter, recreation, To visit my family that lives across NW Purdin.	A few times a week	
36	Mary Esther Rizo	4	To go out and walk more safely		Forest Grove		Walking/jogging, biking, commuting to work, to reach schools, experience nature.	Daily	
37	Rosalía Domínguez L.	3, 4	Because it is the closest one to where I live.		Forest Grove	Forest Grove	Walking/jogging, recreation, to experience nature.	A few times a week.	
38	Javier Urenda Camacho	3, 4, 6	Because I work in Forest Grove and I live close to Hillsboro.	The alignments that I love are Hillsboro-Forest Grove and Banks.	Beaverton	Forest Grove	Biking, commuting to work, recreation, to experience nature.	A few times a week	Great project for the community!!! I hope this project is completed soon. Thanks.
39	Cristina Delgado	4	Because we need more development project in the city of Cornelius. Cornelius is one of the places where more resources are needed.		Forest Grove	Forest Grove	Walking/jogging, biking, recreation, to experience nature.	A few times a month	
40	Carrie Schmid	1, 2, 3, 4, 5, 6	Access to nature/ exercise for all. Alternative to driving.		Portland	Forest Grove	Walking/jogging, to experience nature.	Once a month	
41	Kymberli Contreras	1, 3	Because I work in Forest Grove. Because I heard that there is a trail starting in McMinnville and continuing to Vernonia, and I live in Dayton.		Dayton	Forest Grove	Walking/jogging, biking.	A few times a month	Thank you for constructing this.
42	Anne Morse	1, 2, 3	This area would be the most accessible for me and is all connected and rural area.		St. Johns, Portland	Forest Grove	Walking/jogging, biking, to experience nature.	A few times a month	
43	Anonymous	3	Because I live close to this trail.		Yamhill		Walking/jogging, biking, to experience nature.	Once a month	
44	Eduardo Corona	2, 4, 6	I like it.		Hillsboro	Forest Grove	Walking/jogging, biking, commuting to work, recreation, To reach shopping or other community destinations, to experience nature.	A few times a week	I love it!
45	Anonymous	2, 3, 4, 6	Because will satisfy a need for transportation for many people in this county.	It is good because it offers many options		Forest Grove	Commuting to work.	A few times a week	
46	Kaely Summers	2, 3, 4, 6	Trail for exercise and recreation (walking & bicycle). Commuting & alternative transportation options to get to and from Forest Grove, Cornelius, and to the Max station.		Forest Grove	Forest Grove	Walking/jogging, biking, commuting to work, to reach schools, to reach shopping or other community destinations, to experience nature.	A few times a week	Would love to see this happen – it would add greatly to the livability to the area!!
47	Arturo Villaseñor	1, 3, 4	These are the closest to my address.	The prefer one to me could be the one that connects Hillsboro-Cornelius-Forest Grove, because right now those area are underserved. Also, having this project will represent a great economical asset for the area.	Forest Grove	Forest Grove	Walking/jogging, biking, recreation, to reach schools, to reach shopping or other community destinations, o experience nature.	A few times a week	Please, keep this project moving forward.



## B4. KEY STAKEHOLDER INTERVIEWS

**Activity:** Key Stakeholder Interviews

**Date:** May 2014

**Purpose:** Among the ideas and concerns raised by the SAC on April 30, 2014, the following five issues were determined to merit direct discussions with the parties involved in advance of the June 4, 2014 project Open House.

1. **Issue:** Will Metro permit CCRT thru Metro-owned natural areas in Segments 4 and 6?

**Implications:** If East Council Creek natural area (Segment 4) is off-limits, the trail alternatives are across a series of small private properties north of Council Creek (CREEK 1) or a combination of a pedestrian-only trail (CREEK 2) and a separate bike route south of Council Creek (RAIL or elsewhere). If McKay/Dairy Creek natural area (Segment 6) is off-limits, the combined CREEK 3, 4, and 6 alignment option is rendered effectively infeasible.

**Process:** Met on May 12, 2014 with Elaine Stewart, Metro Natural Resource Scientist in charge of Metro-owned Council Creek natural areas, and Robert Spurlock, Metro Associate Trail Planner along with City PM Derek Robbins (note: Robert is also Metro's alternate representative to the PAC).


**Outcomes:** We discussed 3 proposed trail sections. In general, Metro indicated that there was no outright policy prohibiting trails in natural areas (in contrast to the Port of Portland mitigation site in the vicinity, where trails of any sort are prohibited). Metro also suggested for any trail ROW acquisitions along creeks that extra land be acquired for restoration purposes (say instead of 20'-25' to accommodate the physical trail, acquire 40'-50' to accommodate a trail and riparian restoration).

**East Council Creek parcel north of Council Creek** between Susbauer and Hobbs – Metro is working to limit/close the informal uses and trails that have developed on this site. We reviewed the 4 trail options for this section. Metro suggested using narrower trail sections (such as CREEK 2) to limit impacts. Elaine indicate that with CREEK 2 she thought there was narrow bench along the creek slope edge that might be used combining with existing neighborhood pathways.

Jim indicated that the PMT and SAC members were “cool” to the Susbauer/Hobbs street solution north of the creek, particularly due to poor Susbauer road conditions, including safety impacts from higher speed/high volume traffic and poor sight lines.

The multiuse trail with boardwalk section immediately north of the creek and along the edge of Metro property (“Metro variation”) was discussed in conjunction with a second variation (“north variation”) slightly north and entirely on private land. The north variation utilizes about 4 times the length of Susbauer as the Metro variation,





but the Metro variation intersects with Susbauer very near to the Susbauer Bridge and has a significant sight line problem with southbound traffic.

Elaine indicated that “on-the-ground” was somewhat different than with GIS/aerial photography. She felt nearly all the Metro land was below the edge of slope with very few if any bench areas along which a trail could be sited. She suggested that since private land acquisition would be a part of this Metro variation anyway that the less challenging (from standpoint of topography and impacts on natural features) “north variation” be pursued. She thought some of the property around the north variation was for sale.

**East Council Creek parcel south of Council Creek and east of Hobbs** – Jim indicated that the boardwalk/multiuse trail alignment through this property (CREEK 3) was designed to skirt the edge of wetlands. Elaine noted the property was acquired with a life estate agreement and the trail may interfere with the existing residence and structures. Note: a post-meeting review of aerial photography and a site visit with Dick Reynolds of Cornelius determined this was not the case.

**McKay/Dairy Creek parcel** – We discussed the various CREEK options and also how these options could be combined with RAIL option. From the perspective of limiting impacts in this natural area, generally Metro felt that using the RAIL option east of Hobbs or 341st was preferable. Metro also noted that the RAIL option was considerably more direct, may not require any private acquisition, and did not involve as many trail types (multiuse, flood resistant, boardwalk, ped-only, boardwalks).

**RECOMMENDATION:** Subject to SAC Meeting #2 and PAC review, continue one or two CREEK options into the next phase of the CCRT, using Metro’s advice and ongoing participation to inform the decision-making process with respect to use of natural areas.

2. **Issue:** What are the City’s preferences for CCRT alignments thru Banks?

**Implications:** The CCRT route options from the Banks-Vernonia Trail through Banks (Segment 1) will in many respects lock-in the possible trail route options through Segment 2 and into Segment 3 nearly all the way to the north side of Forest Grove.

**Process:** Conducted a brief telephone interview with City Manager Jolynn Becker on Tuesday, May 6. Jolynn is member of the CCRT PAC. Jim Rapp conducted an in-person interview with interim City Manager Gian Paolo Mammone at Banks City Hall on May 12, 2014 (note: Jolynn was on a one month leave).

Subsequent to discussion with Jolynn but before the interview with Gian Paolo, Parametrix examined ODOT bridge drawings for the Oregon 8/Oregon 47 interchange and prepared a conceptual specification and cost estimate for widening the Main Street undercrossing of Oregon 6 to accommodate a 12-foot-wide multiuse



trail. This undercrossing is used for both the CENTER and EAST 1 trail route options, and could also be used as part of a modified WEST option.

Estimate for direct undercrossing modifications was \$150,000 (essentially cutting into the bank and building a new retaining wall). The trail approaches along the west side of Main Street/Oregon 47 to the undercrossing would involve cutting into approximately 750 linear feet of bank and building new retaining walls (adding \$400,000). Existing signalization at the Oregon 6 off-ramp would be used. In contrast, a new midblock at-grade signalized trail crossing of Oregon 6 would cost \$600,000. The equivalent length (750') of approach trail (which would simply be at-grade across farmland) would add another \$150,000.

A midblock crossing of Oregon 6 so close (approximately 600 feet) to the Main Street/Oregon 6 interchange off-ramp may also be unacceptable to ODOT.

### **Outcomes**


**WEST:** The City's TSP calls for a new roadway paralleling Main Street on the west side, then looping around Sunset Park and intersecting with Main Street just north of the Oregon 6 off-ramp across from the new middle school. Gian Paolo indicated that the WEST alternative had been discussed with Jolynn and the City mayor before Jolynn's departure. They generally indicated that the WEST trail option that was near to Main Street and follows the new road in the TSP was preferred, although they would like the trail to be street-adjacent and be as close to the edges of urbanized properties as possible. Gian Paolo stated that if the WEST option needed to continue south and cross Oregon 6 midblock for the purposes of the regional trail that was fine with the City; but that a trail along the proposed street south of Sunset Park connecting back to Main Street should still be included in the plan.

Gian Paolo indicated that the cost differential between an improved Oregon 6 undercrossing at Main Street/Oregon 47 and the midblock highway crossing further west made using the improved undercrossing very attractive. Jim pointed out that the WEST option could be revised to follow the City TSP street back to Main, and use the undercrossing. Both the balance of the WEST option and the CENTER and EAST 1 options in Segment 2 could be accessed via the undercrossing and short street-adjacent trail sections along Highway 47.

Parametrix also examined ODOT bridge drawings for the Oregon 6 undercrossing of the two rail lines east of downtown. For the EAST 2 option there is approximately 50 feet of space between bridge columns, well separated from the easternmost rail line. A 12-foot-wide trail could be easily extended through this space with little added or no expense over any other multiuse trail section.

**Main Street CENTER:** The City did not favor the Main Street CENTER option. Jim clarified that the CENTER option was intended as a street solution. Existing sidewalks and additional striping and signing for bike lanes were the solution. The City indicated that interim use of Main Street for regional trail users was fine, but that otherwise Main Street should stay as-is.





**EAST 1:** As this alternative is primarily outside of the City except for using Main Street, Gian Paolo indicated no particular position pro or con except for the afore-stated City position on Main Street improvements.

**EAST 2:** The City did not favor the development of the CCRT on an alignment east of the rail lines, as it would be too disconnected from the center of the city.

**RECOMMENDATION:** Consider a modification to the WEST option to use the improved Oregon 6 undercrossing. The improved undercrossing would also be effective in concert with CENTER and EAST 1 options into Segment 2. The improved undercrossing could also be built at any time to provide immediate benefits to bike traffic already using local streets, county roads, and state highways to access the Banks-Vernonia Trail and the Tualatin Valley Scenic Bikeway.

3. **Issue:** Could the Segment 2 and 3 agricultural conservation areas be potential trail routes?

**Implications:** A SAC member (Lyle Spiesschaert) indicated that many active farms in Segments 2 and 3 have agricultural conservation easements that limit farming activities. The premise was that as farming activities are limited in these areas that any trail routes through private farmlands within the conservation areas might be more acceptable to the property owners.

**Process:** Interviewed Dean Moberg at Washington County Natural Resource Conservation Service - NRCS/Tualatin Soil and Water Conservation District – SWCD.

**Outcomes:** Dean confirmed that the conservation program referenced by Lyle was in fact a NRCS-SWCD program. He said the program was in cooperation with Clean Water Services (the Washington County surface water utility) in some areas. The program provides for riparian area restoration along streams, primarily by replanting of riparian trees. The areas are conserved via 10 to 30 year agreements with the underlying property owners and are not easements (although conversion to easements at some point in the future is a possibility). Although there are other forms of agricultural conservation zones and easements, the program identified by Lyle only involves stream riparian corridor restoration.

As current agreements only cover lands subject to riparian replanting there would be no place to locate a multiuse trail. Dean did speculate that in the future that new agreements could incorporate land for the trail and the replanting of riparian vegetation on one or both sides of the trail route.

**RECOMMENDATION:** To the extent that preferred trail routes parallel stream corridors, NRCS/SWCD should be consulted to determine if a riparian conservation agreements could be applied that allow for trail siting.

4. **Issue:** Will ODOT permit a new at-grade crossing of Oregon 6 as mapped by the conceptual WEST trail alternative?



**Implications:** The WEST option includes a new at-grade crossing of Oregon 6 approximately 600 feet west of the Oregon 6/Oregon 47 interchange ramp accessing Banks. If this crossing were not permitted by ODOT, the WEST option in Segment 1 would have significantly modified.

**Process:** Discussed the WEST option with Seth Brumley of ODOT Region 1 (note: Seth is also the ODOT representative to the CCRT PMT). Also discussed the feasibility of widening the Oregon 6 undercrossing. Seth took to issues to other staff at Region 1.

**Outcomes:** Seth reported back that ODOT approval of the proposed at-grade crossing would be unlikely. Besides proximity to the interchange, concerns over vehicle speeds on Oregon 6 were expressed. ODOT did however indicate that the widening of the Oregon 6 undercrossing at Oregon 47/Main Street was feasible.

**RECOMMENDATION:** In conjunction with the City of Banks request for a trail route that used their planned new collector roadway and connected back to Main Street near to the interchange, consider dropping this portion of the WEST alternative and connecting the City back to WEST via the widened highway undercrossing and a short trail section adjacent to Oregon 47.

5. **Issue:** Will the owners of the Killarney West Golf Course in Segment 6 permit a trail to cross the south edge of their property?

**Implications:** If the Killarney owners were unwilling to sell right-of-way or grant an access easement the CREEK 4 option would not work. The alternative - CREEK 5 - is more limited (ped-only sections) and connections to the longer boardwalk section of CREEK 6.

**Process:** Talked to Mary Ordal of Hillsboro and Dick Reynolds of Cornelius (both PAC members) about who the owners were and how to best approach them. Dick indicated that Cornelius Public Works Director Mark Crowell had worked with the family that owns the Killarney West and McKay Creek courses. Mark contacted Coleen Vulsteke, daughter of the owner of Killarney, Bill O'Mera.

**Outcomes:** Mark reported: "I spoke to Coleen Vulsteke yesterday. Her father, Bill O'Mera, is the owner of the Killarney West Golf Course and she said he probably had NO interest in having anything to do with a trail on or near his property. She did say you could call her and she would approach him but reiterated his interest would be low".

Jim placed two calls and a one message for Ms. Vulsteke, but did not received a call back.

**RECOMMENDATION:** Continue with CREEK 4, which has some distinct advantages over CREEK 5 as presently aligned and classified (as to trail type) - OR - redesign CREEK 5 to accommodate a multiuse trail type and alignment.





*This page intentionally left blank.*



## B5. BACKGROUND TO CCRT TASK 4 SEGMENT RECOMMENDATIONS

### SEGMENT 1: BANKS

#### Alignment Alternative Overviews

All options originate at the major trailhead for the Banks-Vernonia Trail at the north end of the City.

**WEST** is a standard multiuse trail outside of the city limits, but could follow a future city collector roadway. WEST would cross Oregon 6 (principal arterial classification) about 600 feet west of the off-ramp to downtown Banks. Farm lands south of Oregon 6 would be crossed into Segment 2. Shifting this option further west is limited by extensive floodplain and wetland areas.

**CENTER and EAST 1** both use Main Street/Oregon 47. Sidewalks and road shoulders are along most of this section to Oregon 6, although on-street parking limits function as a complete bike/ped route. Improvements to the Oregon 6 undercrossing would be required. South of Oregon 6, CENTER follows Oregon 47 into Segment 2 as a street-adjacent trail. EAST 1 turns east on NW Wilkesboro Road as a street-adjacent trail until intersecting with a rail-with-trail solution into Segment 2.

**EAST 2** is east of downtown and two parallel rail lines. Primarily a rail-with-trail solution until crossing under Oregon 6 and entering Segment 2 at NW Aerts Road. Nominal improvement to the undercrossing would be required but rail operator permission would be needed. The existing at-grade rail crossing at NW Aerts Road would require bike/ped upgrades.


#### Key Alignment Considerations

All Segment 1 options need to be considered jointly with options through Segment 2.

Segment 1 **WEST** may not be feasible except in conjunction with a new city collector roadway and requires a new Oregon 6 at-grade crossing (\$600,000 cost estimate). ODOT indicates that this new crossing of Oregon 6 would probably not be permitted. City has expressed a clear preference for WEST to follow the future City roadway as a street-adjacent trail, and to return to Main Street as per the City TSP. City has no route preference south of Oregon 6.

**CENTER and EAST 1** follow Main Street through downtown Banks. City does not want CENTER north of Oregon 6 upgraded or signed/stripped to create additional bike lanes. Improvements to the undercrossing of Oregon 6 to allow 12-foot-wide trail are considerably less expensive than at-grade crossing (\$150,000 vs. \$600,000), although trail approaches to the undercrossing will be more expensive than for at-grade crossing. City expressed interest in using improved Oregon 6 under-crossing for WEST and EAST 1 options. CENTER continues south into Segment 2 and could connect via local roads to WEST in that segment.





**EAST 2** is separated from downtown Banks by two parallel rail lines. Between NW Banks Road and Oregon 6 there is only one existing at-grade rail crossing, a dead-end access to the sawmill east of the tracks. EAST 2 is probably the least expensive crossing of Oregon 6 as there is considerable open area for a trail where the rails cross under the Oregon 6 bridge. In PMT and SAC meetings, a variety of concerns and issues with EAST 2 emerged, and combined with close proximity to EAST 1 through Segment 2, this route garnered limited support. City expressed strong preference for the WEST option north of Oregon 6 over the EAST 2.

## **SEGMENT 2: WASHINGTON COUNTY NORTH**

### **Alignment Alternative Overviews**

**All options** are within unincorporated Washington County (which does not exercise a parks authority).

**WEST** primarily utilizes multiuse or street-adjacent solutions. Most of this route is along the Scenic Bikeway. Follows NW Greenville, NW Kansas City and NW Kemper Roads, then the BPA power corridor or crosses farm land. This “farm land” local variation route would cross 5,000 feet of private land.

**CENTER** follows Oregon 47 between Banks and Forest Grove. CENTER is almost exclusively a street-adjacent multiuse trail, but some short street solutions may be necessary.

**EAST 1** continues the Segment 1/EAST 1 NW Wilkesboro Road alignment. To connect to NW Greenville Road, this variation crosses 3,500 linear feet of farm land. A second variation crosses 5,000 feet of farm land. A third variation follows the west side of Banks Creek and connects NW Wilkesboro Road to NW Greenville Road across 7,000 feet of farm land. All variations merge at NW Greenville Road and follow NW Evers Road south, cross Dairy Creek, then follow NW Visitation Road to Verboort.

**EAST 2** follows NW Wilkesboro, NW Roy and NW Chalmers Roads and crosses both rail lines exiting Banks. Crosses farm land, requires a major new crossing of Dairy Creek, then follows NW Osterman Road (a portion is private in this section) to connect to EAST 1 or NW Marsh/NW Martin Roads.

### **Key Alignment Considerations**

**WEST** has the best/most sustained long distance views, but has sections of steeper grades and close-in development, particularly at south end of the segment. A street-adjacent trail may require some switchbacks or curves to meet ADA, impacting property improvements and increasing right-of-way acquisition. Irrigation system setbacks/easements along roads may be opportunity for street-adjacent routing in some places. Extensive floodplain and seven streams are crossed, but all but one stream crossing is along an existing road. The BPA power corridor is not owned in fee, rather is secured by easement over private property, and has some challenging topographic variations.



**CENTER** is most direct route between Banks and Forest Grove. Five streams are crossed but all at existing Oregon 47 crossing points. Street solutions have adverse safety and experience impacts. Street-adjacent trail would mitigate some of the adverse impacts of vehicular traffic on safety and user experience. PGE transmission power poles on eastside of Oregon 47 may restrict street-adjacent trail.

**EAST 1** route variations all require farm land to be acquired. EAST 1 also crosses two streams at existing road crossings. Boardwalks and other improvements would be required at Dairy Creek crossing. EAST 1 is the only alternative that connects through Verboort, although an EAST 2 variation could connect, albeit less directly. SAC suggested that the NW Heesacker Road local route variation through Verboort connecting directly to NW Porter Road is less busy than the NW Visitation Road variation.

**EAST 2** has two rail crossing where upgrades would probably be required, has at least one section (NW Wilkesboro Road) where local conditions would require an on-street solution, and has three sections that cross farm land or use private roadways. The crossing of Dairy Creek would require new bridge, boardwalk and flood resistant trail solutions. A local route variation at NW Osterman Road could merge this route with the EAST 1 route down NW Visitation Road into Verboort.

### **SEGMENT 3: FOREST GROVE**

#### **Alignment Alternative Overviews**

**WEST** multiuse trail exclusively follows the BPA power corridor from NW Purdin Road into Forest Grove at Oak Street. NW Thatcher Road (the continuation of NW Kansas City Road) is too steep and constrained by prior development to be considered a viable alternative.

**CENTER** street-adjacent trail exclusively follows Oregon 47. A more detailed analysis in the next phase of the master plan could find that constraints in some sections may only allow street solutions.


**EAST 1** street-adjacent trail exclusively follows NW Porter Road, crossing Council Creek over the existing Porter Road Bridge, and intersecting with Oregon 47 near Oak Street.

**EAST 2** street-adjacent trail exclusively follows NW Martin Road and crosses Council Creek on existing bridge. This bridge crossing has no sidewalks or bike lanes. NW Martin Road is classified as an arterial.

#### **Key Alignment Considerations**

**WEST** BPA route provides a lengthy trail section totally separate from roadways through farm lands and future urban areas. WEST BPA variation also passes the north edge of Forest Grove neighborhoods and the high school. Streams would be crossed 7 times. WEST BPA requires permissions, easements or acquisitions from many private properties, although BPA easement restrictions could simplify acquisition. Farm land





variation has better topographic condition for a trail but may require more, or more expensive, land acquisition.

The point where **WEST** BPA first crosses Oregon 47 is a heavily trafficked and on a curve. SAC members had safety concerns. This point also would involve a major crossing over Council Creek and a wetland. Using NW David Hill Road or Sunset Drive/NW Beal Road for these crossings, and then returning to the BPA corridor, is a possibility. The second WEST crossing of Oregon 47 near the Van Loo Reservoir would require a midblock arterial crossing structure and one major and one minor stream crossing, all in the same general vicinity.

**CENTER** follows the east and then northeast side of Oregon 47. Most of the property along Council Creek between Sunset Drive/NW Beal Road and NW Porter Road/Oak Street is publically owned. There are 5 stream crossings and an extended boardwalk section may needed. Given issues with safety at the WEST BPA corridor crossing, CENTER could be combined in several ways with WEST to mitigate concerns.

**EAST 1** provides a straight connection along NW Porter Road from Verboort to the Oak Street/Oregon 47 intersection in Forest Grove. This option crosses Council Creek over the Porter Road Bridge. If the plans to close the bridge to vehicular traffic come into effect, this crossing could be used as-is for the trail. If the east side of NW Porter Road is used for the street-adjacent trail, one section near a wetland may require a boardwalk. Some irrigation system setbacks/easements might be utilized for trail route.

**EAST 2** would provide the shortest distance from Hillsboro to the point where the CCRT turns north towards Banks. Being along an arterial roadway, EAST 2 may also have many of the same issues regarding safety and use experience as CENTER in Segments 2 and 3.

#### **SEGMENT 4: CORNELIUS**

##### **Alignment Alternative Overviews**

**All options** connect to Segment 3 within area bounded by Oak Street-Martin Road-Oregon 47-Oregon 8.

**CREEK 1-2-3** follows the south bank of Council Creek from NW Martin Road/Oregon 47 to the east end of Cornelius at NW 341th Avenue. A variety of local trail route variations on both sides of the creek are possible between N 10th Avenue and NW Hobbs Road. Between NW Hobbs and NW 341st Avenue a combined multiuse trail with short sections of boardwalk and flood resistant trail is specified.

**HOLLADAY** would utilize a street-adjacent trail along a future collector roadway extension between Oak Street and NW Hobbs Road. Some sections of Holladay Street are already constructed. These sections would use an extended shared-use/on-street solution through existing neighborhoods. After crossing Hobbs Road, HOLLADAY uses a shared-use street and pedestrian-only option into Segment 6.

**RAIL** utilizes a rail-with-trail solution along a rail line across the entire segment.



**HIGHWAY** follows the south side of the Pacific Avenue portion of Oregon 8 with a street-adjacent trail from Oak Street to S 1st Avenue – S 4th Avenue (Cornelius), crosses a different rail line, and then shares local neighborhood streets to NW Hobbs Road.

### **Key Alignment Considerations**

**CREEK 1-2-3** is influenced by a variety of factors. Considerable trail right-of-way would have to be acquired between Oregon 47 and N 10th Avenue. To eliminate circuitous route variations, a major new bridge would be required at N 10th Avenue. Between N 19th Avenue and Hobbs Road north of the creek, Metro-owned natural areas and/or private lands will be needed for portions of the section. A pedestrian-only option (CREEK 2) may be possible south of the creek between these two points. Existing neighborhood paved paths would be utilized and extended, and bicyclists would have to use some other route. CREEK 3 is on the south side of the creek east of Hobbs Road, using a multiuse trail section with some boardwalk. A section of CREEK 3 crosses Metro natural areas. These complexities aside, these are the only options in Segment 4 that offers an open space trail-like experience.

**HOLLADAY** is only feasible if the full extension and connection of N Holladay Street occurs. Although in the County, Forest Grove, and Cornelius Transportation System Plans (TSP), the road project is not funded and would require significant land acquisition and relocation of a large number of residences.

**RAIL** would provide the most direct off-street trail route connecting Forest Grove to Hillsboro. The rail corridor is 60 feet wide, with low volume and speed freight. A trail could be safely sited within the existing right-of-way, at least on the **south side**. The **north side** of the rail line is somewhat restricted along its entire length by the location of PGE power transmission poles, numerous industrial and commercial buildings, and rail sidings between Oregon 47 and N 13th Avenue. On **both sides** between 13th Avenue and NW 341st, uses are mostly residential and user experience would be less “hemmed in”.


Two primary **HIGHWAY** variations were originally considered. The option illustrated in Plan Report No. 2 uses shared streets through residential neighborhood; the second, conventional sidewalks and bike lanes on the south side of Baseline Road (Oregon 8). The neighborhood option improves safety and user experience, but directing regional trail ridership thru established neighborhoods could be a problem.

## **SEGMENT 5: JOBES DITCH**

### **Alignment Alternative Overviews**

**Both alternatives** originate at the same north point – an existing NW Hobbs Road rail crossing. Both end at the same south point - a bend in the Tualatin River. Between the rail line and Oregon 8 both options use street solutions. There are no existing crossing improvements for either option over Oregon 8, so both would require an arterial crossing structure, probably a center island and user-activated signal (or for HOBBS





perhaps a conventional signalized intersection associated with the future road extension).

**HOBBS** uses NW Hobbs Road (also named N 29th Street) which is a designated collector. The only existing non-vehicular improvement is a bike lane/sidewalk on the west side for approximately a third of its length. South of Oregon 8, HOBBS requires a new rail crossing and uses a street-adjacent multiuse trail paralleling the future Hobbs Road extension behind the future new high school. South of the high school site, a multiuse trail would cross private farm land.

**345th** uses local streets (N Davis Drive/N 31st Avenue) which curve through neighborhoods. Sidewalks are continuous on both sides almost all the way to Oregon 8 with only one major gap. 345th would utilize an existing rail crossing (bike/ped improvements would be needed), then follow this rural road with a street-adjacent trail. The trail is probably best sited on the west side of 345th, staying within the Urban Reserve area, and minimizing conflicts with existing residences and driveways.

### **Key Alignment Considerations**

**HOBBS** has the advantage of following an existing collector roadway, although higher density housing makes the road relatively busy. Extension of sidewalks/bike lanes would be necessary. South of Oregon 8 this alternative is dependent on the timing of the Hobbs Road extension, and at least a final site plan for the high school. Neither project is funded or scheduled. In addition, the south half of this option would require farm land acquisition.

**345th** could use a shared local roadway solution north of Oregon 8, made safer by the existing sidewalks along N Davis Drive and N 31st Avenue. The 345th crossing of Oregon 8 is at a greater distance than HOBBS from nearest signalized intersection (N 26th Avenue) making permitting of a new highway crossing more feasible. The rail crossing is also existing, although improvements would be needed. A street-adjacent trail along the west side of 345th would have identical degree of access to the new high school as HOBBS, and could be sited to accommodate any future widening of 345th. Right-of way acquisition would be along the edges of, rather than through, farm land.

## **SEGMENT 6: WASHINGTON COUNTY EAST-HILLSBORO**

### **Alignment Alternative Overview**

**All options** end at the Downtown Hillsboro MAX station.

**CREEK 4** connects to CREEK 3 and follows the south bank of Council Creek and south side of a golf course across NW 334th Avenue to Dairy Creek, crossing the creek on a new bridge to the east edge of a Metro natural area using flood resistant and boardwalk multiuse trails.

**CREEK 5** connects to the NW Hobbs Road to 341st HOLLADAY on-street/ped-only solution close to the RAIL option, and uses ped-only and flood resistant trail solutions to reach a second Dairy Creek bridge crossing into the Metro land.



**CREEK 6** varies in the length of boardwalk needed to connect to CREEK 4 and CREEK 5 bridges across Dairy Creek. At NW Cavens Road, the CREEK 6 trail primarily uses local streets to enter downtown Hillsboro. This local street section is already designated as part of the Bicycle Way Network under Hillsboro's current TSP.

**RAIL** utilizes a rail-with-trail solution along a rail line for two-thirds of Segment 6. After crossing Dairy Creek and associated wetlands, RAIL transitions to a street solution to reach MAX.

**HIGHWAY** follows the south side of Oregon 8 with a street-adjacent trail until reaching SW Walnut Street then follows Walnut and S 1st Avenue (Hillsboro) with a shared-use solution to MAX.

### **Key Alignment Considerations**

**CREEK 4-5-6** is influenced by a variety of factors. Trail routing, creek crossings, and land acquisition is complicated in the west end of the segment by a private outdoor recreation use (golf course) and an "off-limits" wetland mitigation site. Once across Dairy Creek and the Metro natural area, a circuitous route along local streets is required to get to downtown Hillsboro and the MAX station. A variety of special trail treatments (ped-only, flood resistant, and boardwalk) are also required.

These complexities aside, the CREEK route through Segment 6, especially with combined with a CREEK route through Segment 4, offers the most extended open space trail-like experience for CCRT users between Forest Grove and Hillsboro.

**Segment 6 RAIL** is distinguished from the more "urbanized" Segment 4 RAIL in that it passes open lands and residential neighborhoods for perhaps two-thirds of its length. The rail bridge across Dairy Creek would have to be widened, or more probably paralleled by a new bike/ped bridge. The SAC suggested that the SW Walnut Street section of HIGHWAY be used as the final connection to the MAX station for this option rather than Main Street section of RAIL. Use of Washington Street is another possibility and affords the most direct connection to the MAX station.

**HIGHWAY** through Segment 6 is only viable if the HIGHWAY options through Segments 4 and 5 are selected.





*This page intentionally left blank.*