

FINAL DRAFT

Interchange Area Management Plan

**Cornelius Pass Road/Highway 26 Interchange Improvements
Washington County, Oregon**

Prepared for
Washington County
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1. INTRODUCTION

Pursuant to the special conditions of the ODOT/Washington County IGA (Attachment A), an interchange area management plan (IAMP) is required for the Cornelius Pass Road/Highway 26 Interchange Improvements Project in urban Washington County and the City of Hillsboro, Oregon. This IAMP will assist the County and ODOT with the long-term transportation management in the area around the interchange. The Cornelius Pass Road/Highway 26 IAMP will conform with Policy 3C: Interchange Access Management Areas of the 1999 Oregon Highway Plan (OHP) and Washington County and applicable City of Hillsboro land use regulations.

This IAMP has been prepared with participation of the affected local governments. Contacts were made with ODOT and with representatives of Washington County and the City of Hillsboro about the proposed new interchange and possible effects on existing and planned land uses, and on the local road system.

This IAMP has been developed concurrent with refinement of the preliminary design of the interchange improvements and with required environmental clearance documentation being prepared for the interchange project. This plan includes an access management strategy that addresses two of the special IGA conditions detailed below:

- Three access points located north of the new off ramp would be closed. A new service/access road will enter Cornelius Pass Road at a signalized intersection (Wagon Way). The new service road will access the properties from the east.
- The County and City will, as development occurs, reduce the driveway access from parcels north of the abandoned railroad tracks. The County will require that a new access occur onto a side street, at a signalized intersection (Rock Creek Boulevard) or at a minimum be restricted to a right in/out until another access can be provided.

The objectives of the IAMP are to protect the function of the interchange to serve regional trips, to provide safe and efficient operations on US 26 (Sunset Highway) and Cornelius Pass Road, and to ensure ODOT involvement in future land use decisions that could affect the function of the interchange.

2. PROJECT DESCRIPTION

The Cornelius Pass Road/US Highway 26 interchange is located approximately 1.75 miles west of the US 26 interchange at NW 185th Avenue and approximately 1.4 miles east of the interchange at NW Helvetia/Shute Road in Washington County. A portion of the project study area, including the existing interchange, is located within the Hillsboro city limits; part of the project area located northeast of the interchange is located within unincorporated urban Washington County. The entire project area is located within the Metro urban growth boundary (UGB). The planning area for the US 26/Cornelius Pass Road IAMP is shown on Figures 1 and 2. Figure 3 shows a detail of the interchange.

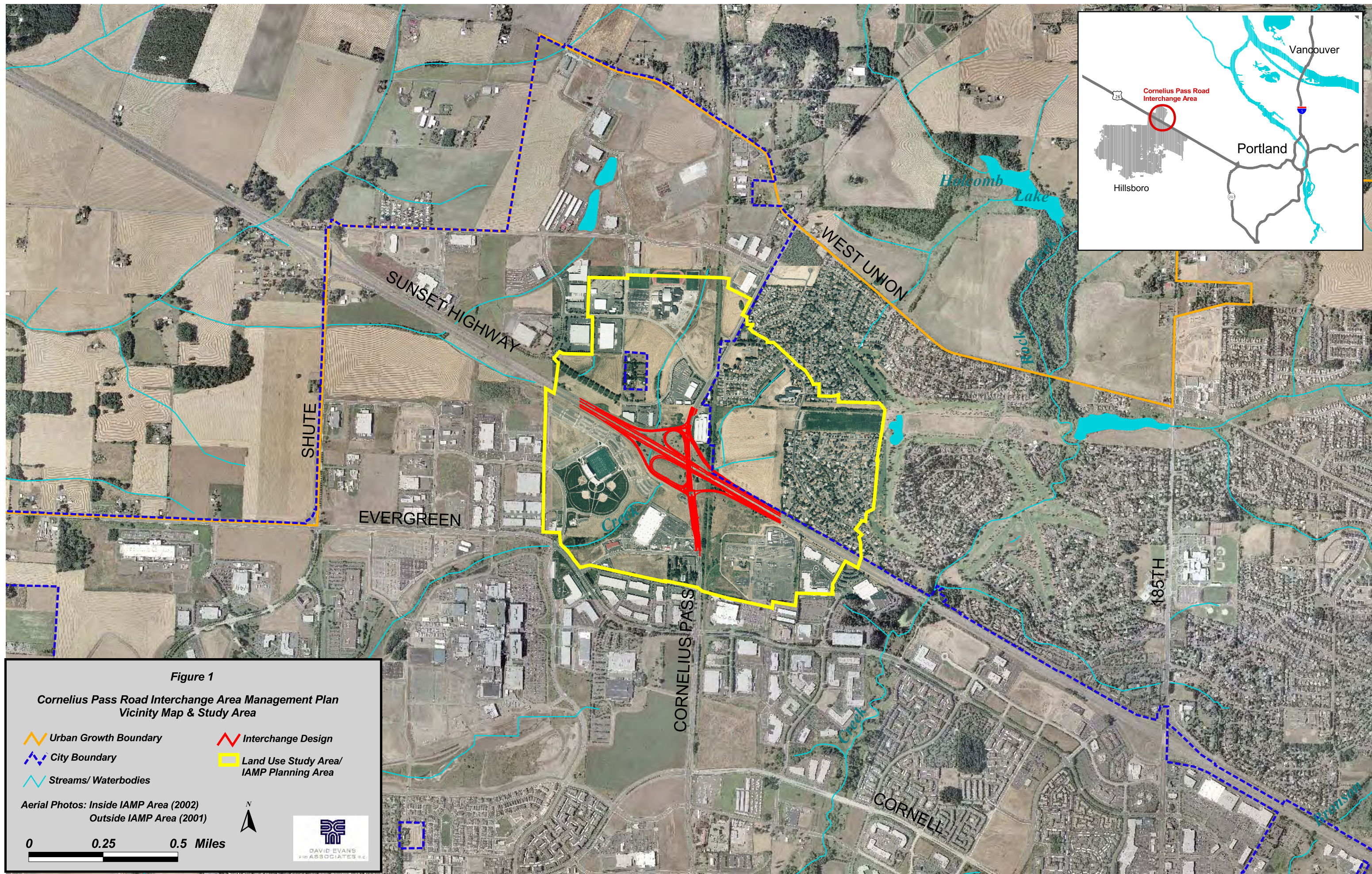







Figure 1

**Cornelius Pass Road Interchange Area Management Plan
Vicinity Map & Study Area**

-  Urban Growth Boundary
-  City Boundary
-  Streams/ Waterbodies
-  Interchange Design
-  Land Use Study Area/
IAMP Planning Area

Aerial Photos: Inside IAMP Area (2002)
Outside IAMP Area (2001)

0 0.25 0.5 Miles



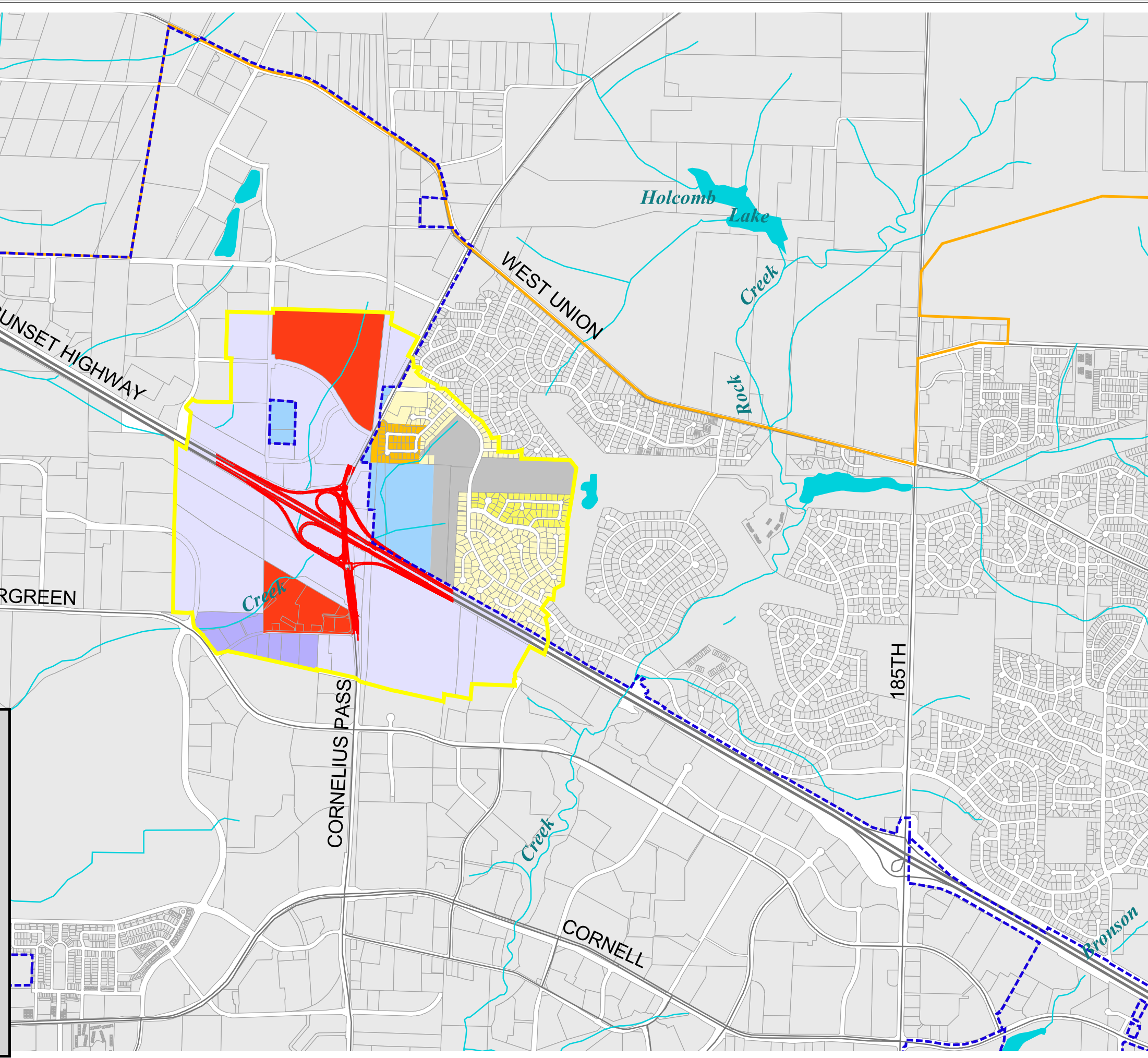


















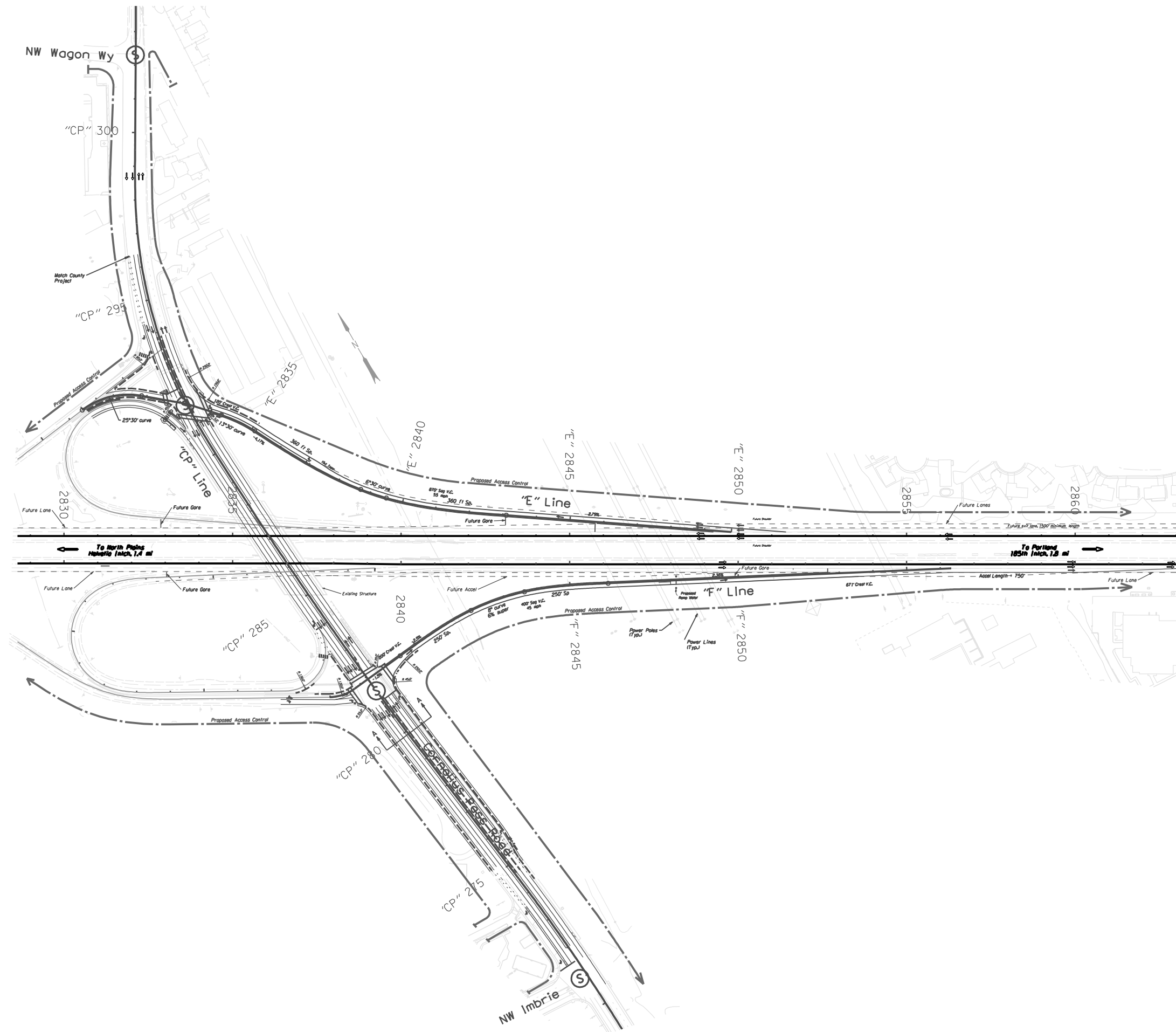
Figure 2

**Cornelius Pass Road Interchange Area Management Plan
Land Use Designations and Study Area**

-  Interchange Design
 -  Land Use Study Area/
IAMP Planning Area
 -  City Boundary
 -  Urban Growth Boundary
 -  Streams/ Waterbodies
 -  Taxlots
 -  Freeways
 -  Major Streets
-
- Hillsboro**
 -  General Commercial
 -  Light Industrial
 -  Mixed Use Industrial
-
- Washington County**
 -  Heavy Industrial
 -  Multi-family (R-15)
 -  Institutional
 -  Single Family (R-5)
 -  Single Family (R-9)

0 0.25 0.5 Miles





Cornelius Pass Interchange Area Management Plan
 ODOT November, 2003

Washington County plans to make improvements to the US 26/Cornelius Pass Road Interchange as part of an overall capital improvement project to widen Cornelius Pass Road to five continuous travel lanes between NW Rock Creek Boulevard and US 26.

The proposed interchange improvements consist of:

- Widening Cornelius Pass Road, south of US 26, to include a third southbound lane from the existing eastbound loop terminal to NW Imbrie Drive. Associated improvements include modifying the landscaped island at the existing ramp terminal to extend the existing auxiliary lane south through the island and terminating at NW Imbrie Drive. The existing traffic signal at the ramp terminal would be modified to remove the left turn movement from northbound Cornelius Pass Road to the existing eastbound US 26 entrance loop ramp.
- Providing sidewalks and bicycle lanes along both sides of Cornelius Pass Road with crosswalks to be provided across the existing eastbound loop terminal, across Cornelius Pass Road north of the eastbound US 26 off ramp, and across the new US 26 eastbound on-ramp. The existing traffic signal would be modified to provide for the pedestrian crosswalks.. Pedestrian crossings would also be provided at the new US 26 westbound to northbound Cornelius Pass Road exit ramp, across Cornelius Pass Road on the south side of the new ramp, and across the existing westbound ramp terminal.
- Constructing a new one-lane entrance ramp (with a sub-grade wide enough to accommodate an additional lane) from northbound Cornelius Pass Road to eastbound US 26. The typical section would include enough width to provide stacking for two lanes of traffic at the ramp meter during the peak hour.
- Constructing a new single-lane exit ramp (flares to two lanes at Cornelius Pass Road) from US 26 westbound to northbound Cornelius Pass Road. The ramp would provide for a two-lane right-turn only at the ramp terminal for traffic northbound onto Cornelius Pass Road. The existing traffic signal would be removed and a new signal would interconnect to the new signal at NW Wagon Way. The northbound Cornelius Pass Road to westbound US 26 left turn refuge would be moved further to the south. The landscaped island at the existing exit loop ramp terminal would be modified to align with the revised traffic movements through the intersection.
- The existing access to the park-and-ride lot and mini storage facility on the east side of Cornelius Pass Road north of US 26 would be closed. A new access for this site would be provided by means of a new driveway that would extend north from the site and intersect Cornelius Pass Road at a new approach on the east side of the NW Wagon Way intersection.
- Miscellaneous proposed improvements not identified above include new and/or modifications to the existing illumination, signing, drainage and curbs. Landscaping would be provided, and stormwater retention/detention/wetland mitigation facilities such as ponds may be constructed.

Washington County plans to control access along Cornelius Pass Road by limiting full access movements to locations of the closest existing major signalized intersections located north (NW Wagon Way) and south (NW Imbrie Drive) of the interchange. Washington County will continue to coordinate with ODOT for transportation related issues around the interchange. In addition, the County and ODOT have entered into an intergovernmental agreement to identify the County and ODOT jurisdiction for controlling access near the interchange and construction/maintenance responsibilities of the new facilities (Attachment A).

No significant environmental effects are anticipated as a result of the project. Wetlands are present within the project area on both the north and south sides of US 26. The wetlands are confined to the ditch along both sides of the track bed of the abandoned railroad aligned east of and parallel to Cornelius Pass Road. The wetlands are generally narrow with a few exceptions. The width of the wetlands on the north side of US 26 varies, and in one location there is also a pond area. A small area on the south side of US 26 that ponds water during the year and contains hydrophytic vegetation, but the soils are not mapped as hydric soils. ODOT is in the process of completing environmental permitting for the project.

Approximately 1.81 acres of new right-of-way would be required from seven parcels in the immediate vicinity of the interchange. No relocations would be required. North of US 26, additional right of way would be required from TL 1200 and TL 800. Bonneville Power Administration (BPA) owns both of these parcels. Right of way would also be required from TL 1500, a vacant parcel owned by Parr Lumber. South of US 26, the project would require additional right of way from three parcels. Washington County and the City of Hillsboro are both shown as owners of TL 910; assessor's maps do not show which portion of the parcel is owned by either jurisdiction. The Majestic-Hillsboro Partnership LLC owns TL 912 and TL 700, two affected parcels located west of NW Cornelius Pass Road.

2.1. Purpose of Project

The US 26/Cornelius Pass Road Interchange experiences severe congestion and extensive vehicle queuing on the westbound loop exit ramp and the eastbound loop entrance ramp during the weekday morning and afternoon peak traffic periods. The levels of congestion and queuing are expected to increase substantially as a result of multiple planned developments that will be served by the interchange. These planned developments include the Intel Ronler Acres site located southwest of the interchange, Liberty High School (opening fall 2003) located north of the interchange, and other designated commercial sites situated north and south of the interchange.

Consistent with the functions of US 26 and Cornelius Pass Road, the US 26/Cornelius Pass Road Interchange will provide safe and efficient access for long-distance, regional trips (e.g., between Hillsboro and Portland) as well as for local traffic that originates and terminates within urban Washington County. The proposed interchange improvement project will address future traffic demands and allow the interchange to function at a more acceptable level of service.

2.2. Interchange Function

The US 26/Cornelius Pass Road Interchange functions as a critical link along US 26 that provides access to the City of Hillsboro. Land in the immediate vicinity of the US 26/Cornelius Pass Road Interchange is a combination of developed and developing land on the urbanizing periphery of Hillsboro. The Cornelius Pass Road and interchange improvement plans recognize that traffic volumes in the area are increasing as growth occurs. The interchange improvement project is included in the US 26 Corridor Plan and Metro's Regional Transportation Plan (RTP), as well as the Washington County 2020 Transportation Plan and the City of Hillsboro Comprehensive Plan.

ODOT classifies US 26 as a Non-Interstate Freeway. The Washington County 2020 Transportation Plan and City of Hillsboro Comprehensive Plan designates US 26 as a Freeway and Cornelius Pass Road as an Arterial. The primary function of freeways, as defined in the OHP, is "to provide connections and links to major cities, regions of the state, and other states." Most arterials serve as primary routes for travel between major areas of urban activity, and connections to the highway system and other arterials. Cornelius Pass Road is a major north/south arterial that traverses urban, suburban, and rural portions of Washington County. It links the urban area of Hillsboro with US 26, and connects to the Tualatin Valley Highway south of the project area and to US 30 northeast of the project area.

Kittelson & Associates, Inc. prepared a traffic study for Cornelius Pass Road improvements, including the interchange improvements, in May 2002 (Section 4.1.1 provides a summary of the existing traffic conditions along Cornelius Pass Road and US 26). The study used traffic volumes to forecast for a 20-year period (2022) based on known in-process and future developments in addition to an assumed background traffic growth rate. The interchange improvements have been designed to provide capacity and safe operations to accommodate traffic forecast over the 20-year planning period. Even with the improvements, however, the volume/capacity (v/c) ratio at the westbound US 26 ramp terminal is expected to be over 1.0 during both the AM and PM peak hours in the year 2022. Based on a straight-line type forecast, it is estimated that the ODOT OHP v/c ratio standard of 0.99 would be exceeded in approximately 15 years.

The proposed interchange design described in the US 26 Corridor Plan would accommodate 20 years of projected traffic and would require a complete reconstruction of the interchange. However, OTIA funding identified for the project would not be adequate to fund the cost of a complete interchange reconstruction, only interim improvements (as proposed) are possible with the available funding. The interim improvements would have an estimated design life of 15 years. Because the 15-year design life is less than a 20-year planning horizon that ODOT requires, the proposed improvements would require a design exception approval from ODOT.

2.3. Alternatives Considered

The construction of a new one-lane entrance ramp in the southeast quadrant of the existing interchange is consistent with the preliminary design developed by ODOT in the mid 1980's. The proposed alignment follows ODOT's design. Pedestrian and bicycle facilities would be provided on both sides of Cornelius Pass Road. A 20-year design meeting the ODOT OHP v/c

ratio standard of 0.99 was not considered due to the prohibitive cost of a complete interchange reconstruction.

Two alternative alignment options for the US 26 westbound to northbound Cornelius Pass Road were developed for consideration. Both alternatives include a 1,500-foot long auxiliary lane on US 26 and additional right-of-way from BPA. The first alternative alignment is similar to the ODOT design developed in the mid 1980's.

The second alternative alignment follows the abandoned railroad right-of-way located east of and parallel to Cornelius Pass Road. This alternative, while feasible, is not consistent with normal engineering design for interchange ramp configurations. It raises a safety concern associated with terminating an exit ramp at an intersection with opposing traffic (NW Wagon Way). Furthermore, the second alternative would have a greater impact upon existing wetlands and would also require a sound wall along the highway adjacent to the Rock Creek residential neighborhood. Based on impact evaluation and discussions with ODOT, the first option is preferred over the second.

3. IAMP OBJECTIVES

Oregon Administrative Rules (OAR) 734-051-0200 implements conditions for IAMP access management standards, specifies elements to be included in the IAMP, and conditions of approval. This IAMP addresses these requirements and is consistent with OAR requirements for addressing IAMP areas.

The objectives of this IAMP are:

- To protect the function of the US 26/Cornelius Pass Road Interchange to serve traffic and to provide safe and efficient access for long-distance, regional trips (e.g., between Hillsboro and the Portland metropolitan area).
- To provide safe and efficient operations between connecting roadways (i.e., Cornelius Pass Road) and US 26 and meet applicable policies and standards.
- To ensure ODOT is involved in land use decisions affecting the function of the interchange, such as any future changes in zoning densities or allowable uses that could result in substantially different trip generation that would affect the interchange's function. The purpose of ODOT's involvement in local planning efforts to ensure the state agency a role in protecting public investment in transportation facilities of statewide significance.

4. CHARACTERISTICS OF THE PLANNING AREA

The planning area for the US 26/Cornelius Pass Road IAMP is shown on Figures 1 and 2. Figure 3 shows a detail of the interchange. The IAMP planning area is located entirely within the Metro urban growth boundary (UGB) and consists predominantly of land within the City of Hillsboro (land to the west of Cornelius Pass Road and to the south of U.S. 26 including the interchange) and also includes urban land within unincorporated Washington County (land northeast of the

Cornelius Pass Road/U.S. 26 interchange). This planning area correlates with the land use analysis area for the IAMP (see Section 4.2). The IAMP planning area is generally a rectangular-shaped area that encompasses the US 26/Cornelius Pass Road Interchange. The study area extends north to Liberty High School (approximately 2,650 feet north from the north edge of US 26), south past Evergreen Road (approximately 1,900 feet north from the north edge of US 26), approximately 2,400 feet west of Cornelius Pass Road, and approximately 2,600 feet east of Cornelius Pass Road. The IAMP planning area was identified as the general area where the interchange could potentially influence land use patterns. This area also covers land that is less likely to be affected by the Helvetia Road/Shute Avenue or 185th Avenue interchanges with US 26.

The interchange traffic and access management impact area is situated within the IAMP planning area and extends north from US 26 along Cornelius Pass Road to the nearest signalized intersection at NW Wagon Way, and south from US 26 along Cornelius Pass Road to the nearest signalized intersection at NW Imbrie Drive. The 3,137-foot corridor between the existing signalized intersections was identified as sufficient to address traffic operations related to the improved interchange through the design traffic forecast period of 15 years.

4.1. Roadways

4.1.1. Existing Roadways in the Planning Area

The primary roadways in the planning area are US 26, Cornelius Pass Road, NW Wagon Way and NW Imbrie Drive. NW Wagon Way and NW Imbrie Drive form the southern border of the transportation analysis area, although the planning area includes additional areas north of NW Wagon Way and south of NW Imbrie Drive (see Figure 1). The nearest interchanges on US 26 are at Shute/Helvetia Road and at 185th Avenue to the west and east, respectively.

US 26: According to the 1999 Oregon Highway Plan, US 26 is a statewide highway on the National Highway System. It is designated as an expressway and a freight route. The posted speed on the highway is 55 mph. US 26 serves as a major link from downtown Portland to the westerly suburb cities and to the coast. It carries local and commuter traffic, as well as long-distance recreational and commercial traffic. US 26 carries approximately 57,800 vehicles (two-way) daily between the Shute Avenue/Helvetia Road and 185th Avenue interchanges. Within the study area about three percent of the vehicular volume is truck traffic.

In the project area, US 26 is a four-lane, east-west highway with directional traffic separated by a grass median. Currently, US 26 crosses under Cornelius Pass Road at the interchange.

The existing right-of-way for US 26 is approximately 240 feet wide in the vicinity of Cornelius Pass Road. Other than immediately around the interchange and new ramps, additional right-of-way along the highway would not be acquired.

Cornelius Pass Road: Within the project area, Cornelius Pass Road is a four-lane, north-south roadway and is under the jurisdiction of Washington County. North of Washington County, the roadway is under Multnomah County jurisdiction where it eventually terminates at US 30. Within Washington County, Cornelius Pass Road is classified as an arterial and has been

identified as a truck route in the County's 2020 Transportation Plan from its southern terminus at the Tualatin Valley Highway (OR 8) to the northern Washington County line. Sidewalks and bicycle lanes are present along both sides of Cornelius Pass Road between NW Wagon Way and NW Imbrie Drive. The capacity of the road is consistent with its function and with the planned land uses in the City of Hillsboro and Washington County comprehensive plans.

Between the US 26 eastbound and westbound ramps, Cornelius Pass Rd carries approximately 27,000 vehicles (two-way) daily, with approximately 13 percent trucks. Cornelius Pass Road has a posted speed of 45 miles per hour in the planning area.

Washington County maintains access management standards for arterial roadways under County jurisdiction. The arterial spacing standard applies to Cornelius Pass Road beyond the interchange traffic impact area (north of NW Wagon Way and south of NW Imbrie Drive within the IAMP planning area). The minimum access spacing distance for County arterials is 600 feet.

The existing right-of-way for Cornelius Pass Road is 110 feet wide. Additional right-of-way would be acquired to improve the interchange, mainly along the north and south sides of US 26 east of the existing interchange, and also along the west side of Cornelius Pass Road south of the proposed westbound off-ramp.

Other Roadways: In addition to US 26 and Cornelius Pass Road, several other roads provide critical connections within or in the vicinity of the IAMP planning area. These other major roads accommodate a large portion of trips distributed between the Shute Avenue/Helvetia Road and 185th Avenue interchanges north and south of US 26. These other roads include arterials (West Union Road, Shute Road, Helvetia Road, Evergreen Road/Evergreen Parkway, Cornell Road, 185th Avenue), collectors (NW Jacobson Road, NW Rock Creek Boulevard, NW Century Boulevard, NW 229th Avenue, and NW Imbrie Drive), and neighborhood routes (NW Wagon Way/Five Oaks Drive).

4.1.2. Other Planned Roadway Improvements in the Vicinity

There are other roadway improvement projects that are planned or under construction within the US 26/Cornelius Pass Road IAMP planning area in addition to the interchange improvements proposed in the IAMP. These include:

- Widening Cornelius Pass Road north of US 26 to NW Rock Creek Boulevard to a continuous five-lane arterial section. Traffic signals will be installed along Cornelius Pass Road at the NW Jacobson Road, NW Rock Creek Boulevard, and NW Wagon Way intersections. These improvements are a part of the Washington County capital improvement project for Cornelius Pass Road.
- Constructing the planned NW Century Boulevard/NW 229th Avenue overpass over US 26 west of the US 26/Cornelius Pass Road Interchange. The overpass is expected to provide a viable alternate route to Cornelius Pass Road and is expected to attract a substantial portion

of traffic associated with existing, in process, or planned developments located north of US 26 and west of Cornelius Pass Road.

4.1.3 Accidents in the Project Vicinity

A crash analysis was conducted along Cornelius Pass Road and US 26 near the Cornelius Pass Road Interchange. Crash information along US 26 and Cornelius Pass Road was collected and evaluated using the ODOT detailed crash reports from the ODOT Crash Analysis and Reporting Unit. The detailed crash reports are based on crash data from the three-year period from January 1, 1999 through December 31, 2001. Crash information collected represents only those crashes that were reported.

The detailed crash reports were analyzed for three primary reasons: (1) to identify any crash patterns that may exist, (2) to determine the probable causes of crashes with respect to drivers, roadways, and vehicles, and (3) to develop measures that will reduce the rate and severity of crashes.

For the three-year period from 1999 through 2001, there were 51 ODOT reported crashes within the study area with. Twenty of the crashes occurred along US 26, while 31 crashes occurred along Cornelius Pass Road and the highway ramps. The majority of the crashes involved more than one vehicle, although the severity of the accidents were typically minor with over half of the crashes (33) resulting in property damage only and no fatalities.

US 26: During the three-year period analyzed, 20 crashes were reported along US 26 near Cornelius Pass Road. The types of crashes involved were rear-end crashes (10), vehicles hitting fixed objects (4), vehicles sideswiping cars in same direction (3), non-collision (2), and one head-on crash. The crashes were scattered along the highway and there were no particular locations that showed a consistent crash pattern. The 2001 computed crash rate for US 26 near Cornelius Pass Road Interchange ranged between 0.13 and 0.26 according to the *2001 State Highway Crash Rate Tables* published by ODOT.

Cornelius Pass Road Interchange: During the three-year period analyzed, 31 crashes were reported at or near the US 26/Cornelius Pass Road Interchange. The most common vehicle maneuvers involved in the crashes included turning type, rear-end type, and sideswipe type collisions. Eleven of the thirty-one crashes occurred at or near the eastbound ramps along Cornelius Pass Road. Two of the crashes, one rear-end and one turning type, may have been preventable by the new northbound to eastbound on-ramp. Six of the thirty-one crashes occurred at the westbound ramps along Cornelius Pass Road. The one coded crash that may have been prevented by the new westbound to northbound off-ramp was a turning type crash. The 31 crashes were scattered along Cornelius Pass Road and the highway ramps near the US 26 interchange and there were no particular locations that showed a consistent crash pattern.

4.2. Land Parcels and Planning

Much of the US 26/Cornelius Pass Road IAMP planning area is developed at urban level residential densities both in Hillsboro and the County. Most of the remaining vacant land within

the study area is planned for industrial development. Figure 2 shows the planning area with existing land use designations.

The IAMP planning area covers approximately (1,103 acres [ac]). Of this total land inside the planning area, about 75 percent (825 acres) are designated for industrial uses. The majority of undeveloped properties within the IAMP planning area are planned for industrial development.

West of Cornelius Pass Road, the study area is within the Hillsboro UGB. Existing land uses in the study area and immediate vicinity of the interchange consist mainly of rapidly developing industrial park (M-P) land with one pocket of general commercial (C-1) located northwest of the NW Imbrie Drive/ Cornelius Pass Road intersection. Immediately south of U.S. 26 is a tax lot owned by Washington County and the City of Hillsboro that is used as a utility corridor connecting to the Keeler electrical substation located east of Cornelius Pass Road.

The Hillsboro School District (1J) owns two large parcels zoned for industrial uses (M-2) northwest of the NW Wagon Way/ Cornelius Pass Road intersection. There are also several other lots that are privately owned.

Land southeast of the U.S. 26/ Cornelius Pass Road interchange is also within the City of Hillsboro UGB. The Oregon Department of Transportation (ODOT) owns three tax lots adjacent to Cornelius Pass Road A larger tax lot located east of the ODOT property and adjacent to U.S. 26 is owned by Bonneville Power Administration (BPA) and is the site of the Keeler electrical substation.

With the exception of four tax lots located east of Cornelius Pass Road and west of the BPA transmission corridor aligned north-south through the planning area, land northeast of the US 26/ Cornelius Pass Road interchange is under Washington County jurisdiction. Although this part of the study area is unincorporated Washington County, the area is within the Metro UGB, and it supports more urban-oriented development patterns than rural uses. At the northeast corner of Cornelius Pass Road and US 26, the BPA owns one large vacant parcel designated for industrial (IND) uses, which is unlikely to develop because power lines are located above the majority of the site. Adjacent to Cornelius Pass Road, tax lots are privately owned with the exception of two ODOT-owned tax lots located between the vacant BPA property and the privately held land adjacent to Cornelius Pass Road. Near the NW Wagon Way/ Cornelius Pass Road intersection, land is residential in nature and is zoned R-5 for five units per acre and R-15 for 12 to 15 residential units per acre.

Since the US 26/Cornelius Pass Road Interchange is located within the Metro UGB service boundary, Metro would have a significant role in any future amendments to the UGB that could potentially impact the interchange. Metro recently adopted amendments to the regional UGB to maintain a 20-year supply of buildable land as required by state law. While most of the land Metro considered for inclusion in the UGB is located far away from the IAMP planning area, Metro did include approximately 200 acres located near the intersection of Shute Avenue and Evergreen Road. The Land Conservation and Development Commission must approve UGB amendments. Should that area be added to the UGB and developed, traffic volumes at the Shute

Avenue/Helvetia Road Interchange would increase, which may in turn encourage some traffic to use the Cornelius Pass Road Interchange.

4.2.1 State Planning Goals

Land use decision-making in the vicinity of the proposed Cornelius Pass Road Interchange area is governed by a number of different rules and regulations, most of which have been in effect for many years. Two of the 19 statewide planning goals play key roles in the management and planning for the Cornelius Pass Road Interchange Improvement Project. They are Statewide Planning Goals 2 (Land Use Planning) and 12 (Transportation). The adopted City of Hillsboro and Washington comprehensive plans are compliant with the statewide planning goals. Land use planning provisions of these local planning documents that apply to the US 26/Cornelius Pass Road IAMP are described as follows.

4.2.2 City of Hillsboro

The City of Hillsboro has land use planning jurisdiction for the entire project area except for land northeast of the U.S. 26/ Cornelius Pass Road interchange that is under Washington County planning jurisdiction. The City of Hillsboro Comprehensive Plan identifies the portion of the project area within the City limits primarily as industrial land. Some land is also designated for commercial uses, located near the NW Imbrie Drive/ Cornelius Road intersection. The Hillsboro Zoning Ordinance implements these designations through its General Commercial (C-1), Industrial (M-2), and Industrial Park (M-P) zones codified in Sections 54 to 74 of the Hillsboro Zoning Ordinance that describes permitted and conditional uses and development standards allowed with these districts.

In addition to meeting the land use criteria described above, the proposed roadway improvements within the Hillsboro UGB would need to meet the minimum design standards listed within the Hillsboro Transportation System Plan, which is adopted as a part of the Hillsboro Comprehensive Plan (Section 13).

4.2.3 Washington County

Washington County has land use planning jurisdiction for the portion of the study area northeast of the U.S. 26/ Cornelius Pass interchange. The Washington County Comprehensive Plan includes several planning elements including area plans that describe in more explicit detail planned land uses for a particular area and where specific design criteria would be applied. The Sunset West Community Plan is an area and site specific application of the Washington County Comprehensive Plan for the county portion of the project area. The plan further identifies subareas; the project area is within the Rock Creek Subarea, which generally is residential in nature, although the project area also includes land zoned for industrial (IND) and residential (R-5 and R-15) uses. The specific design elements in the Sunset West Community Plan is implemented by other plan elements, primarily the County's Community Development Code (CDC) and the Transportation Plan.

The Sunset West Community Plan identifies significant natural and cultural resources within the project area. The community plan identifies the BPA owned vacant tax lot and easement as Open Space/Bicycle Pathways. Rock Creek Country Club and Bethany Pond Park are also designated as Open Space/Bicycle Pathways.

The CDC lists the permitted and conditional uses and development standards allowed within industrial and residential districts. Existing residential and industrial land within the project area fall under permitted uses in CDC Sections 302-2 to 302-4 (R-5), 305-1 to 305-4 (R-15), Sections 320-2 to 320-4 (IND), and Section 330-2 to 330-5 (INS).

The R-5 District is intended to implement the policies of the Comprehensive Plan for areas designated for residential development at no more than five (5) units per acre and no less than four (4) units per acre. The primary purpose is to protect existing neighborhoods developed at five (5) units per acre or less. Infill development on all parcels two (2) acres or less may occur only through application of the infill policy.

The intent and purpose of the R-15 District is to implement the policies of the Comprehensive Plan for areas designated for residential development at no more than fifteen (15) units per acre and no less than twelve (12) units per acre.

The IND District provides sites for all types of industrial uses, to provide for the recognition and regulation of existing industrial sites, and to provide the regulatory framework for future industrial development. This zone also allows some commercial, office and service uses as accessory uses through mixed use developments where all uses conform to the environmental performance standards of Section 423.

Additional setbacks may be required for future right-of-way within the IND zone depending on the type of development and anticipated growth. These standards are described in the CDC Section 418.

The standards for creating smaller lots are found Article VI—Land Divisions and Property Adjustments. Property line adjustments are not permitted to create substandard lot dimensions or setbacks. Property line adjustments would be allowed provided the final lot size would meet the lot size requirements of the zone.

In Washington County, proposals for transportation improvements are reviewed as a distinct type of development proposal separate from the uses in the underlying land use district. Proposed public road improvements are reviewed under Article VII of the CDC. Article VII of the CDC applies to project development for the design, construction, operation, maintenance, repair, and preservation of public transportation facilities. Section 701-1.1 states that transportation improvements are permitted in each district and subject only to the standards in Article VII.

The INS District provides for the identification of existing and proposed institutional facilities on the Community Plan maps. This District is intended to allow the public service providers and governmental agencies the assurance that future sites identified through long range and capital improvement planning will be available for the uses specifically identified when they are needed.

4.3. Natural and Cultural Resources

4.3.1. Natural Resources

A Draft Wetland Delineation Report dated February 25, 2003 and a Draft Natural Resource Assessment Report dated March 4, 2003 for the US 26/Cornelius Pass Road Interchange Improvements were prepared by David Evans and Associates, Inc. This section presents findings of these reports.

Six water quality sensitive areas (wetlands) occurs in various locations within the study area. The locations of on-site wetlands are shown on Figure 3. The vegetated corridor extends 25 feet around each of the wetland boundaries. Vegetated corridors condition is listed as Degraded. The new off-ramps and on-ramps will impact all or a portion of the on-site wetlands. Buffer mitigation will need to occur for this project. The buffer mitigation will require replacement or enhancement of the impacted 25 feet buffers. Corridors will be totally impacted and some partially impacted during construction.

The project will be constructed almost entirely within existing highway right-of-way, and in additional small areas of new right of way in which no known endangered plant or animal species occur.

4.3.2. Cultural Resources

No known archaeological or historic sites or issues would be impacted by the proposed interchange improvement project. Excavation for storm sewer systems and roadbed construction will occur within previously disturbed areas. Grading will occur within a highway corridor containing no known cultural resources.

5. ACCESS MANAGEMENT

This section describes the access management strategy for the Cornelius Pass Road Interchange. Access management is the principal method that will be used to protect the safety, operation, and function of the interchange. The complete access management plan for the interchange is provided under separate cover from this IAMP. Other strategies intended to protect the function of the interchange are listed in Section 6, IAMP Action Items.

The access management intent for this project is conveyed through the access management strategy. It serves as a rationale or justification for the access management actions identified in the official project access list.

US 26 Strategy:

ODOT will continue to control roadway access along US 26 between interchanges at Helvetia/Shute Road, Cornelius Pass Road (including lands between US 26 and the ramp signals), and 185th Avenue by restricting grants of access in compliance with the 1999 OHP and

applicable governing rules and statutes regarding access management. No specific access management actions are needed along US 26 in association with this project.

Cornelius Pass Road Strategy:

To address the 1999 OHP and applicable governing rules and statutes regarding access management, ODOT will work in concert with Washington County to control access along Cornelius Pass Road for the 3,137-foot long section of road located within the interchange management area between the existing signalized intersections with NW Wagon Way and NW Imbrie Drive. ODOT controls access between US 26 and the first ramp signal; Washington County controls access from the signals at the ramp to the second signals on Cornelius Pass Road. The existing spacing between each of these signalized intersections and the nearest ramp terminus of the proposed improved interchange does not meet the applicable ODOT OHP access spacing standards. In addition, some existing driveway approaches located on the east side of Cornelius Pass Road north of the interchange, and one existing right-in only driveway located on the west side of Cornelius Pass Road south of the interchange and within the interchange management area do not meet the spacing standard. These approaches include:

- A driveway that serves as a joint access to a commercial storage unit facility and a parking area used as a temporary public park-and-ride located on the east side of Cornelius Pass Road approximately 300 feet north of the proposed US 26 westbound off-ramp taper;
- A driveway located approximately 444-feet south of the NW Wagon Way intersection that provides access to a single family residence; and
- Two driveway approaches that serve a single commercial parcel. One driveway is located 150-feet south of the NW Wagon Way intersection, and the other is located 250-feet south of this intersection.

Three access points north of the new off ramp would be closed. A new service/access road will enter Cornelius Pass Road at a signalized intersection (Wagon Way). The new service road will access the properties from the east.

As a separate action from the US 26/Cornelius Pass Road Interchange Improvement Project, Washington County is widening Cornelius Pass Road to five lanes (4 lanes with a left turn lane at the NW Wagon Way approach) north of US 26 to NW Wagon Way and installing a traffic signal at the Cornelius Pass Road/NW Wagon Way intersection. In association with this Cornelius Pass Road widening project, each of the four existing driveway approaches listed above will be closed and relocated. Access to the properties served by these approaches will be provided by a shared driveway that will connect to Cornelius Pass Road as a new east leg approach to the signalized intersection with NW Wagon Way. The new driveway will be constructed to the east (rear side) of the four parcels fronting the east side of Cornelius Pass Road south of NW Wagon Way.

An existing right-in only driveway is located on the west side of Cornelius Pass Road 700-feet south of the existing end of the eastbound off-ramp taper and 270-feet north of the intersection with NW Imbrie Drive. This approach provides a secondary access to an existing fuel station and to a retail grocery store site situated west of the fuel station. While this limited access does not

meet the current spacing standard, it does not represent a safety or operational concern in association with the proposed improvements. The deceleration lane to be extended between the existing US 26 eastbound off-ramp and NW Imbrie Drive will also serve as auxiliary lane to extend merging distance for drivers destined south on Cornelius Pass Road, and to more safely accommodate right turns to this access and to NW Imbrie Drive.

Washington County will coordinate with ODOT within the interchange access management area limits on Cornelius Pass Road. Beyond the interchange access management area limits on Cornelius Pass Road, Washington County will manage access by through their development review procedures.

In general, regulating access rights near interchanges is not intended to control or preserve how properties are used or developed, but to protect and preserve the public investment. By regulating access rights to Cornelius Pass Road within the interchange access management area, turning conflicts within the influence area of the interchange ramp terminals are minimized.

The OHP access spacing standards were developed based on extensive technical evaluation of the complex traffic operations and safety characteristics inherent to interchange areas.¹ Spacing standard criteria were developed to consider transitions between local roadway and highway facilities, sight distance requirements, queuing, traffic volumes, and travel speeds when establishing recommended access spacing standards. The extensive evaluation of these criteria led to the adoption of the 1,320-foot access spacing standard between an urban freeway interchange ramp terminal and the closest major intersection that is contained in the OHP. Implementing access management actions to approach this standard is expected to ensure that approaches to Cornelius Pass Road will be sufficiently restricted to obtain safe operation of the improved interchange on US 26.

6. IAMP ACTION ITEMS

According to OAR 734-051-0200, IAMPs should contain short-, medium-, and long-range actions to improve and maintain safe and efficient roadway operations in the interchange area. Such actions may include roadway improvements, access management, traffic control devices, and local land use actions.

This IAMP relies on state and local land use regulations but also calls for ODOT involvement in reviews of proposed land use actions in the vicinity of the interchange.

ODOT will control access along US 26 and to the first ramp signal, and will coordinate with Washington County and the City of Hillsboro to control access along Cornelius Pass Road between the interchange and the closest signals at NW Wagon Way and NW Imbrie Drive. The interchange will be built to operate acceptably for a 15-year plan horizon. ODOT will adopt the IAMP as an amendment to the Portland-Cannon Beach Junction (US 26) Corridor Plan and the City of Hillsboro will adopt the IAMP as an amendment to the City transportation system plan element of the comprehensive plan. The Washington County Transportation Plan would not be

¹ *Background Paper #2-Interchange Access Management*, Robert D. Layton, August 1996.

amended because City of Hillsboro has jurisdiction for land uses in the vicinity of the interchange, and the County's Transportation Plan already contains policies that would implement the function of the IAMP, including requiring coordination with ODOT (Policy 19) and protection of the function and purpose of Cornelius Pass Road (Policy 10). Additionally, Washington County and ODOT have entered into an intergovernmental agreement (Attachment A) identifying responsibility for interchange construction and maintenance and access management along Cornelius Pass Road.

ODOT will continue to coordinate with local jurisdictions and state agencies, through the plan amendment and development review processes, to keep existing land use protections in place. In addition, ODOT will monitor and comment on any future actions that would amend a UGB in the vicinity of the US 26/Cornelius Pass Road Interchange. Other actions include making planned improvements to the Shute Avenue/Helvetia Road interchange with US 26 to serve future traffic in and from urban areas.

The recommended action items for the IAMP fall into four general categories: design/capacity controls, access management, agency coordination, and other related actions. They are listed below.

6.1. Design/Capacity Controls

Washington County

- **US 26/Cornelius Pass Road Interchange Improvement Project (short-range action)**

Washington County will construct improvements to the US 26/Cornelius Pass Road Interchange. The project will improve safety and traffic operations at Cornelius Pass Road and US 26 and will be designed to serve the local and regional-trip function of the interchange. The project will be designed to accommodate 15 years of planned growth, based on the existing, and acknowledged comprehensive plans of Hillsboro and Washington County.

- **Ramp metering (short-range action)**

As a part of the interchange improvement project, Washington County will install two lane ramp meter signals on the proposed US 26 eastbound entrance ramp.

- **Cornelius Pass Road management (ongoing action)**

Washington County will continue to manage Cornelius Pass Road in accordance with the County's adopted 2020 Transportation Plan. The Transportation Plan designates Cornelius Pass Road as a five-lane arterial.

- **US 26/Cornelius Pass Road Interchange Improvement Project (short-range action)**

Washington County will maintain access control consistent with the access management plan where legally feasible.

City of Hillsboro

- **US 26/Cornelius Pass Road Interchange Improvement Project (short-range action)**

The City of Hillsboro will maintain access control consistent with the access management plan where legally feasible.

6.2. Access Management

ODOT

- **Access management along US 26 (short-range action)**

ODOT will continue to restrict access along US 26. No additional highway access will be allowed between the NW Helvetia/Shute Road, Cornelius Pass Road, and NW 185th Avenue interchanges.

- **Access management along Cornelius Pass Road (short-range action)**

A draft access management plan to help maintain proper function of the interchange has been prepared for the US 26/Cornelius Pass Road Interchange Improvement Project. The plan calls for the prohibition of street or driveway access from the interchange ramps along Cornelius Pass Road for the purpose of approaching the 1,320-foot access spacing standard in accordance with the Oregon Highway Plan.

Washington County

- **Driveways (short-range action)**

Washington County will construct a new shared access driveway to implement the access management plan and provide access to four existing properties located on the east side of Cornelius Pass Road between the interchange and the intersection with NW Wagon Way.

City of Hillsboro

- **Driveways (short-range action)**

The City of Hillsboro will maintain access control consistent with the access management plan where legally feasible.

6.3 Agency Coordination

Washington County

- **Washington County coordination with ODOT (short-range action)**

Washington County will coordinate with ODOT in the evaluation of any action (such as a comprehensive plan amendment) that would affect the function of the US 26/Cornelius Pass Road Interchange as defined by this IAMP. The need for the project to go through the Washington County land use process is not anticipated if annexation to the City of Hillsboro (see City of Hillsboro coordination below) is completed prior to construction of the improvements.

- **Washington County/ODOT preparation of a funding plan (long-range action)**

The Washington County 2020 Transportation Plan and City of Hillsboro Comprehensive Plan designate Cornelius Pass Road as a five-lane arterial. Any change to that capacity would require a plan amendment. ODOT and the County shall jointly prepare a funding plan for the provision of any further improvements to the US 26/Cornelius Pass Road Interchange necessitated by adding capacity to Cornelius Pass Road. The funding plan shall be submitted to the OTC for approval.

City of Hillsboro

- **City of Hillsboro coordination with ODOT (short-range action)**

In order to construct the US 26 westbound off-ramp as currently designed, a small area of right-of-way would be required in the northeast corner of the interchange. This property is currently located outside of the Hillsboro city limits and would be annexed into the City prior to construction.

The City of Hillsboro will coordinate with ODOT the evaluation of land use actions that would affect the function of US 26 interchanges.

7. IMPLEMENTATION OF THE IAMP

The following identifies the steps that are anticipated to occur for implementation of the US 26/Cornelius Pass Road IAMP.

Oregon Transportation Commission (OTC)

- ODOT will request that the OTC approve a Resolution of Intent to adopt the IAMP as an amendment to the Portland-Cannon Beach Junction (US 26) Corridor Plan following action by local jurisdictions. ODOT will forward the IAMP to the following jurisdictions for action:
 - Washington County
 - City of Hillsboro
 - Metro
- Following the requested actions by the local jurisdictions, the OTC will be requested to formally amend the Portland-Cannon Beach Junction (US 26) Corridor Plan to incorporate the US 26/Cornelius Pass Road IAMP.

Metro

- Metro will consider adopting a Resolution of Support for the IAMP amendment to the Portland-Cannon Beach Junction (US 26) Corridor Plan.

Washington County

- Washington County Board of Commissioners will consider adopting a Resolution of Support for the IAMP amendment to the Portland-Cannon Beach Junction (US 26) Corridor Plan.

Hillsboro

- The City of Hillsboro will support an amendment in writing for the IAMP amendment to the Portland-Cannon Beach Junction (US 26) Corridor Plan.
- The City of Hillsboro will amend the City Transportation Plan to include specific references to the Cornelius Pass Road Interchange IAMP as identified in Section 7.2.

7.1. Amendment to Washington County Comprehensive Plan

As discussed, the Washington County Transportation Plan already contains policies that would implement the IAMP. No amendments would be required. The following existing policies/sections address the relevant issues discussed in the IAMP:

- **Purpose and Function of the Cornelius Pass Road Interchange**

The function of the Cornelius Pass Road Interchange is to provide safe and efficient access for long-distance, regional trips (e.g., between Hillsboro and the Portland metropolitan area) as well as for local traffic that originates and terminates within urban Washington County. The function and purpose of Cornelius Pass Road is described in the Washington County Transportation Plan and in detail in Table 6: Functional Classification Matrix. Any future changes in capacity to the roadway would require a plan amendment; however, this process is already described of the Washington County Transportation Plan. No amendments to the Transportation Plan are necessary.

- **Washington County Coordination with ODOT**

Washington County already coordinates with ODOT in the evaluation of any action (such as a comprehensive plan amendment) that would affect the function of the Cornelius Pass Road Interchange. This is described under Policy 19 of the Washington Transportation Plan. No amendments to the Transportation Plan would be required.

- **Cornelius Pass Road Management**

Washington County shall continue to manage Cornelius Pass Road in a manner consistent with its functional classification in the County's adopted 2020 Transportation Plan (an element of the County comprehensive plan). The Transportation Plan designates Cornelius Pass Road as a five-lane arterial. Protecting the function and purpose of Cornelius Pass Road is already addressed under Policy 10 of the Washington County Transportation Plan. No amendments to the Transportation Plan would be required.

7.2 Amendment to the City of Hillsboro Comprehensive Plan

The following are the specific elements that the City of Hillsboro will be requested to include as amendments to its Transportation Plan:

- **Purpose and Function of US 26 Interchanges**

The function of the US 26 interchanges are to provide safe and efficient access for long-distance, regional trips (e.g., between Hillsboro and the Portland metropolitan area) as well as for local traffic that originates and terminates within Hillsboro.

- **City of Hillsboro Coordination with ODOT**

The City of Hillsboro shall coordinate with ODOT the evaluation of land use actions that would affect the function of US 26 interchanges.

7.3 Metro Action

Metro will support an amendment to the Portland-Cannon Beach Junction (US 26) Corridor Plan.

7.4 Amendment to Portland-Cannon Beach Junction (US 26) Corridor Plan

The IAMP would be adopted by the OTC as an amendment to the Portland-Cannon Beach Junction (US 26) Corridor Plan.

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