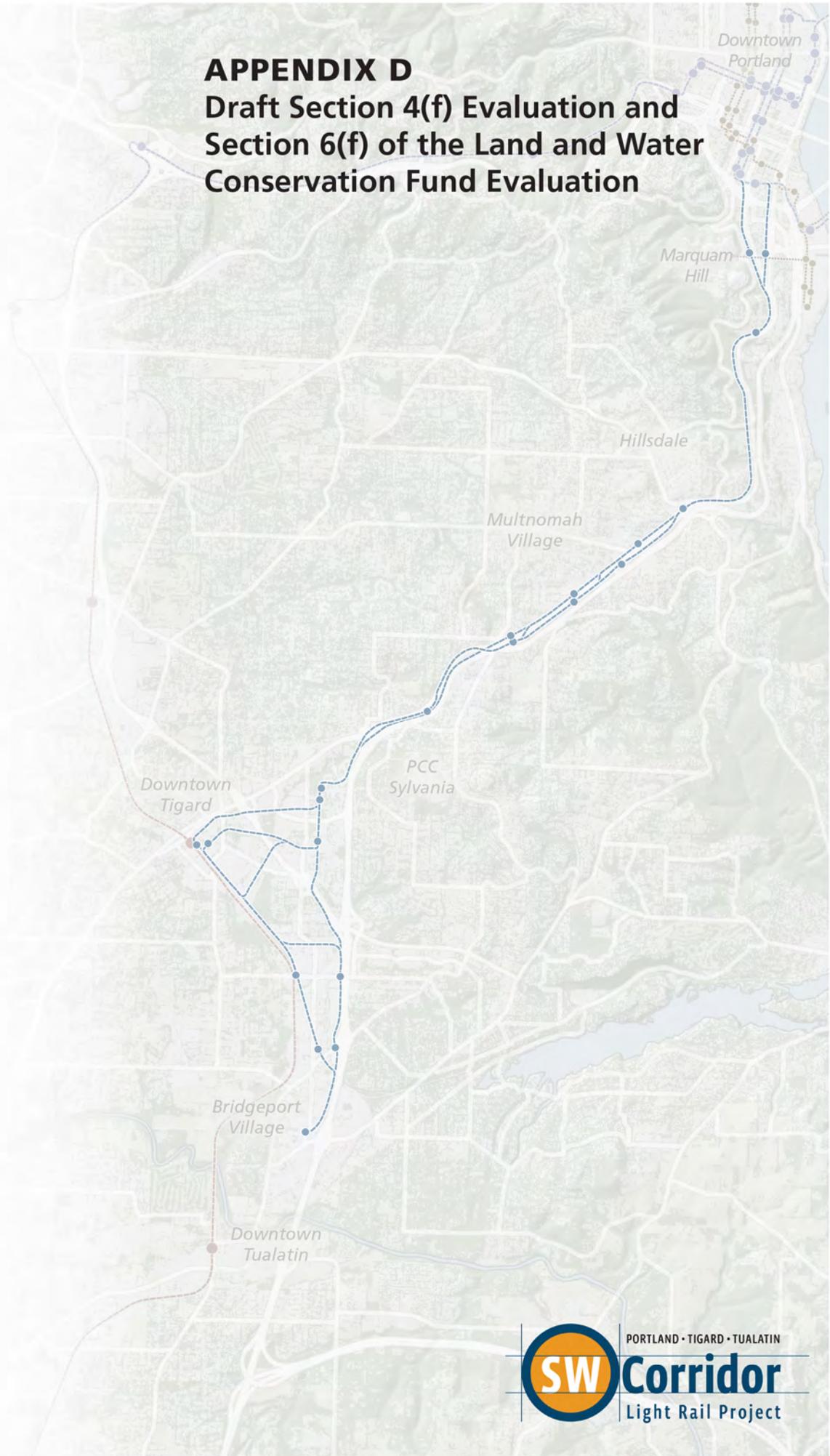


APPENDIX D

Draft Section 4(f) Evaluation and Section 6(f) of the Land and Water Conservation Fund Evaluation



APPENDIX D – DRAFT SECTION 4(f) EVALUATION

This appendix provides draft analysis and information to support determinations required to comply with Section 4(f) of the U.S. Department of Transportation Act (49 United States Code [USC] 303). A Final Section 4(f) Evaluation will be prepared with the Final Environmental Impact Statement that focuses on the Preferred Alternative with the final supporting documentation and analysis to support FTA’s decisions and determinations.

Introduction

The U.S. Department of Transportation Act of 1966, Section 4(f), generally prohibits U.S. Department of Transportation (USDOT) agencies (including the Federal Transit Administration [FTA]) from approving projects that would use land from:

... a significant publicly-owned park, recreation area or wildlife and waterfowl refuge or any significant historic site, unless there is no feasible and prudent alternative to the use of land from the property and the action includes all possible planning to minimize harm to the property resulting from the use.

A use is generally defined as a transportation activity that permanently or temporarily acquires land from a Section 4(f) property, or that substantially impairs the important activities, features or attributes that qualify the property as a Section 4(f) resource.

Section 4(f) applies to significant publicly owned parks and recreation areas that are open to the public; publicly owned wildlife and waterfowl refuges; and historic sites of national, state or local significance. The USDOT regulations for Section 4(f) define historic properties as those listed in or eligible for the National Register of Historic Places (NRHP).

The Section 4(f) study area for the Southwest Corridor Light Rail Project is based on the analysis for cultural, archaeological and historic resources (see Section 3.6, Historic and Archaeological Resources) and the parks and recreational resources (see Section 3.7, Parks and Recreation Resources). This evaluation also takes into account the areas of effect and analyses from other environmental investigations, including acquisitions, displacements and relocations; transportation; land use; noise and vibration; and visual and aesthetic resources.

“Uses” of Section 4(f) Resources

Under Section 4(f), a use can be permanent, temporary or constructive.

Permanent use would acquire or incorporate all or part of a Section 4(f) property as part of the transportation facility.

Temporary use occurs, according to Section 4(f), when the project temporarily occupies any portion of the resource (typically during construction), and it substantially impairs the resource. FTA can allow a Section 4(f) exception under the following conditions:

- Duration must be temporary, i.e., less than the time needed for construction of the project, and there should be no change in ownership of the land;
- Scope of the work must be minor, i.e., both the nature and the magnitude of the changes to the Section 4(f) property are minimal;

- There are no anticipated permanent adverse physical impacts, nor will there be interference with the protected activities, features, or attributes of the property, on either a temporary or permanent basis;
- The land being used must be fully restored, i.e., the property must be returned to a condition which is at least as good as that which existed prior to the project; and
- There must be documented agreement of the official(s) with jurisdiction over the Section 4(f) resource regarding the above conditions (§774.13).

Constructive, or indirect, use can occur when the project is near the Section 4(f) resource and has effects that substantially impair the protected activities, features or attributes of a property. For example, a park property that is primarily a scenic viewpoint could have a constructive use if a transportation project blocks views from the park.

De Minimis Section 4(f) Impact

FTA can approve a transportation *de minimis* impact of a Section 4(f) property if, after taking into account any measures to minimize harm, it results in either:

- a Section 106 finding of no adverse effect or no historic properties affected on a historic property, or
- a determination that the project would not adversely affect the activities, features or attributes qualifying a park, recreation area or refuge for protection under Section 4(f).

A *de minimis* impact finding takes into account any mitigation or enhancement measures that would be implemented, including design measures to avoid or reduce impacts. Before FTA can make this finding, written notice to the official with jurisdiction over the resource, notifying them of the intent to make a *de minimis* finding, must be made. In addition, there must be an opportunity for public notice and comment.

For public parks or recreation properties, a *de minimis* impact finding requires written concurrence from the agency with jurisdiction over the property, such as a city or county parks department. For historic and archaeological sites, a *de minimis* impact is allowed if FTA has determined “no adverse effect” in compliance with Section 106 of the National Historic Preservation Act (NHPA) (see Section 3.6 of this Draft Environmental Impact Statement [EIS]). Before making a *de minimis* finding on a historic or archaeological site, FTA must send a written notice to the State Historic Preservation Office (SHPO). If the SHPO concurs or does not object, FTA may proceed with a *de minimis* finding. When FTA has made a *de minimis* determination, the project is not required to analyze avoidance alternatives for that Section 4(f) property.

Avoidance Alternatives and Least Harm Analysis

When a project’s Section 4(f) impact would be greater than *de minimis*, FTA must consider whether there are feasible and prudent alternatives that would avoid the impact. As defined in the Section 4(f) regulation, an alternative is feasible if it can be built as a matter of sound engineering judgment. An alternative is prudent if:

- It meets the project purpose and need and does not compromise the project to a degree that makes it unreasonable to proceed in light of its stated purpose and need;

- It does not cause extraordinary operational or safety problems;
- It causes no other unique problems or severe economic or environmental impacts;
- It would not cause extraordinary community disruption;
- It does not have construction costs of an extraordinary magnitude; and
- There are no other factors that collectively have adverse impacts that present unique problems or reach extraordinary magnitudes.

If FTA finds that an alternative is not feasible and prudent, that alternative is removed from consideration as a way to avoid a Section 4(f) use. If there are no prudent and feasible alternatives that can avoid all Section 4(f) resources, then FTA must determine which alternative results in the least overall harm, after considering the following factors:

- the ability to mitigate adverse impacts to each Section 4(f) property (including mitigation measures that result in benefits to the property)
- the relative severity of the remaining harm, after mitigation, to the protected activities, attributes or features of the Section 4(f) property
- the relative significance of each Section 4(f) property
- the views of the official(s) with jurisdiction over each Section 4(f) property
- the degree to which each alternative meets the purpose and need for the project
- after reasonable mitigation, the magnitude of any adverse impacts to resources not protected by Section 4(f)
- substantial differences in costs among the alternatives.

The officials with jurisdiction are the SHPO for historic sites or, if the property is located on tribal land, the Tribal Historic Preservation Officer (THPO). The Advisory Council on Historic Preservation (ACHP) can also be involved in consultation; the officials with jurisdiction for public parks, recreation areas, and wildlife and waterfowl refuges are the officials of the agency or agencies that own or administer the property.

Section 4(f) Approach

The Section 4(f) analysis in this chapter should be considered preliminary, because a Preferred Alternative has not yet been identified for the project. While potential Section 4(f) permanent use, temporary use, and *de minimis* impacts are identified throughout this chapter, the current analysis is based on conceptual design information and preliminary National Register of Historic Places (NRHP) eligibility determinations that do not include input from the Oregon State Historic Preservation Officer (SHPO). After the Preferred Alternative is selected, a complete Section 4(f) Evaluation will be conducted. This analysis will be documented and presented in the Final EIS.

This Draft Section 4(f) Evaluation includes a description of all eligible and potentially eligible historic properties that are impacted by any alternative. Any full or partial parcel acquisition will be documented as a Section 4(f) use, and potential *de minimis* impacts are also identified. The Determination of Eligibility and Finding of Effects for the Preferred Alternative will be completed with the SHPO as part of the development of the Final EIS and the Section 106 consultation process.

Historic resources that would be fully acquired by any alternative will be considered a Section 4(f) use for that alternative. Partial parcel acquisitions and temporary construction easements are not evaluated in detail for the Draft EIS and this Draft Section 4(f) Evaluation because of the lack of detailed design information; a draft effects determination is provided for partial parcels that are impacted.

Targeted public involvement efforts for eligible historic resources that are affected by the project will occur between the Draft EIS and Final EIS. Metro (the designated Metropolitan Planning Organization, or MPO, for the Portland, Oregon, region) and the Tri-County Metropolitan Transportation District of Oregon (TriMet) will coordinate with FTA to develop a public involvement plan that includes specific dates and types of activities for outreach. The outreach will include tribes, stakeholders and the public through an open house specifically for Section 4(f) and historic resources.

The following schedule for adopting the Preferred Alternative locally and publishing the Final EIS and Record of Decision (ROD) shows how the Section 4(f) outreach folds into this process:

- June 2018 – Draft EIS published and 45-day comment period occurs
- Summer 2018 – Southwest Corridor Steering Committee recommends the Preferred Alternative
- September 2018 – begin developing formal Determination of Eligibility (DOE)/Finding of Effects (FOE) documentation for properties that would be impacted
- October 2018 – Metro Council adopts the Preferred Alternative into the Regional Transportation Plan
- November 2018 – hold public meeting, which may be an open house format, for Section 106 process and Section 4(f) Evaluation to share historic property impacts for the Preferred Alternative and any proposed 4(f) *de minimis* impacts; put a meeting notice in appropriate media, such as the Oregon Live; the meeting will provide an opportunity for the public to provide oral and written comments
- January 2019 – submit DOE/FOE documentation to SHPO and consulting parties for 30-day review and concurrence
- March 2019 – add Section 4(f) and Section 106 resources to ongoing public outreach for the project that is occurring before the Final EIS
- April 2019 – develop a draft Section 106 Memorandum of Agreement¹ that includes inadvertent discovery plan
- June 2019 – finalize Section 106 Memorandum of Agreement and obtain signatures
- July 2019 – release Final EIS
- September 2019 – Publish ROD

This draft Section 4(f) Evaluation includes a preliminary assessment of potential avoidance or minimization measures for all full acquisitions and large park and recreation parcels or potentially eligible historic resources. FTA, Metro and TriMet will need to continue to review potential impact avoidance and minimization measures in order to apply the prudent and feasible test, and analyze the least harm alternative. The Final EIS will include the full evaluation for the Preferred Alternative.

¹¹ The Memorandum of Agreement will be developed in coordination with the SHPO, consulting parties and the public.

The ongoing analysis will require further coordination with the parties with jurisdiction over the affected properties.

Project Background and Purpose and Need

Metro and TriMet are proposing a new 12-mile light rail project and related investments to improve transit service along the Southwest Corridor, extending from downtown Portland to Tigard and Bridgeport Village in Tualatin.

The Metro Council, a regionally elected body, identified this corridor in 2009 as a near-term priority in the regional *High Capacity Transit System Plan*. The Southwest Corridor Light Rail Project will provide needed mobility options within and through the Southwest Corridor, which increasingly faces congested and unreliable freeways in an area receiving substantial residential and employment growth under the region's adopted *2040 Growth Concept*. It is also needed to improve regional access to major employers and higher education facilities already located in the Southwest Corridor, and to meet state, regional and local goals for land use and reducing greenhouse gas emissions.

The purpose of the Southwest Corridor Light Rail Project is to directly connect Tualatin, downtown Tigard, southwest Portland and the region's central city with light rail, high quality transit and appropriate community investments in a congested corridor to improve mobility and create the conditions that will allow communities in the corridor to achieve their land use vision. Specifically, the project aims to, within the Southwest Corridor:

- provide light rail service that is cost-effective to build and operate with limited local resources
- serve existing transit demand and significant projected growth in ridership resulting from increases in population and employment in the corridor
- improve transit service reliability, frequency and travel times, and provide connections to existing and future transit networks including Westside Express Service (WES) Commuter Rail
- support adopted regional and local plans including the *2040 Growth Concept*, the *Barbur Concept Plan*, the *Tigard Triangle Strategic Plan* and the *Tigard Downtown Vision* to accommodate projected significant growth in population and employment
- complete and enhance multimodal transportation networks to provide safe, convenient and secure access to transit and adjacent land uses
- advance transportation projects that increase active transportation and encourage physical activity
- provide travel options that reduce overall transportation costs
- improve multimodal access to existing jobs, housing and educational opportunities, and foster opportunities for commercial development and a range of housing types adjacent to transit
- ensure benefits and impacts promote community equity
- advance transportation projects that are sensitive to the environment, improve water and air quality, and help achieve the sustainability goals and measures in applicable state, regional and local plans.

Chapter 1 of this Draft EIS has more detail on the project’s background, purpose and need. Chapter 2 describes the No-Build Alternative and the light rail alternatives being considered, and summarizes the other alternatives and concepts studied to date.

The project area is divided into three main geographic segments:

- Segment A: Inner Portland
- Segment B: Outer Portland
- Segment C: Tigard and Tualatin

Each segment includes light rail alignment alternatives with stations and possibly park and rides. Each segment also includes station access improvements, and additional project elements that are analyzed separately from the alignment alternatives in order to isolate their impacts, although they would also be integral to a complete light rail project.

Description of Section 4(f) Resources with a Potential “Use”

Every alternative has potential Section 4(f) uses identified for multiple resources. As described above, this draft Section 4(f) analysis focuses on impacts that might result in direct permanent or temporary incorporation of land from a Section 4(f) resource and the measures that could help either avoid or minimize those uses. This focus could help Metro and TriMet identify an alternative or alternatives likely to qualify as a “least harm alternative,” should FTA determine that there is no feasible and prudent alternative to a Section 4(f) use. Constructive uses will be evaluated after the preferred alternative is selected and more details about the Section 4(f) properties are obtained.

This appendix reviews the Section 4(f) historic, park and recreational resources that could have a permanent or temporary use by the project. There are no wildlife or waterfowl refuges in the study area. This analysis considers potential impacts to significant publicly owned parks and recreation areas that are within 150 feet from the areas likely to be directly altered by the construction of the project’s alignment alternatives, referred to as the “study area.” For significant historic properties, the initial study area extends 50 feet from the edge of construction.

Parks and Recreation Resources

Parks and recreation resources in the study area are owned and managed by the City of Portland Parks and Recreation (PPR), City of Tigard Public Works Department, Metro and Portland Public Schools (PPS). There are 11 parks and recreation properties that are open to the public in the study area; 10 of these are considered Section 4(f) resources (see Table D-1). Figures D-1 and D-2 show the locations of the Section 4(f) parks and recreation resources that could have a permanent use based on the intersection with the construction footprint in Segments A and B. Segment C would not have any parks and recreation resources that could have a permanent use. Parks and recreation resources can also be historic resources, as noted in the text throughout this appendix. There are no parks and recreation resources that are fully acquired by the project; therefore, the analysis is based on the partial parcel acquisition at each resource. Because any Temporary Construction Easement (TCE) would be in addition to partial parcel acquisition, TCEs are not assessed separately. The analysis for parks and recreation resources is focused on determining whether the use can be *de minimis* or not.

Because the Water and Gibbs Community Garden is not a Section 4(f) resource due to its location within City of Portland Bureau of Transportation property that is defined as primarily for transportation use, it is not discussed further in this document. In addition, Sylvania Natural Area Park, Potso Dog Park and Fields Natural Area (Brown Natural Area) are not discussed further in this draft Section 4(f) document, because there is no planned permanent or temporary physical incorporation of land from these properties for the project.

Table D-1. Summary of Park and Recreation Resources Considered for Section 4(f) Eligibility (multi-page table)

Resource Name	Location/ Property Manager or Owner	Site Features and Characteristics	Qualifies as Section 4(f) Resource?
Segment A: Inner Portland			
Duniway Park**	SW Barbur Blvd. and SW Sheridan St. City of Portland	<p>The 14.08-acre park was acquired by the City of Portland in 1918 and currently includes a variety of recreation amenities, such as a lilac garden with more than 125 varieties of lilacs, a newly updated synthetic surface soccer field, horseshoe pit, paved and unpaved paths, picnic tables and a newly resurfaced exercise track. The park has a small, 11-space parking area accessed only by southbound traffic on SW Barbur Blvd.</p> <p><u>Historic Characteristics and Significance:</u> Recommended Eligible, NRHP Criterion A</p> <p>South Portland once lacked dedicated places for children to play. Following public outcry, the city established Duniway Park in 1918 at Marquam Gulch. Up until that time, Marquam Gulch was used as a dump. It took several years after the park's establishment to fill and level the former dump to make it an open space for public benefit. The park retains a historic-period lilac garden and a restroom building.</p>	Yes
Lair Hill Park**	SW Barbur Blvd. and SW Woods St. City of Portland	<p>This 3.3-acre neighborhood park features mature trees, lawns, structures and recreation amenities that include a tennis court, tennis backboard, public art, picnic tables, playgrounds and paved paths.</p> <p><u>Historic Characteristics and Significance:</u> Contributing Resource, South Portland Historic District (Listed in 1998)</p> <p>Lair Hill Park was established in 1927 and post-dates the two buildings encompassed within its boundary: the 1918 Multnomah County Hospital Nurses' Quarters and the 1921 South Portland (Carnegie) Library. The Nurses' Quarters and surrounding Lair Hill Park were documented separately from the South Portland Library in the 1998 nomination for the South Portland Historic District; however, both were counted as contributing to the significance of the district. In addition to Lair Hill Park's significance for associations with significant patterns of events under Criterion A, the two buildings at the park are good examples of their respective types and periods of construction under Criterion C.</p>	Yes

Table D-1. Summary of Park and Recreation Resources Considered for Section 4(f) Eligibility (multi-page table)

Resource Name	Location/ Property Manager or Owner	Site Features and Characteristics	Qualifies as Section 4(f) Resource?
Terwilliger Parkway**	SW Terwilliger Blvd. approximately from the intersection with SW Sam Jackson Park Rd. to the intersection with SW Capitol Hwy. City of Portland	This approximately 99-acre linear parkway along SW Terwilliger Blvd. is part of the regional 40-Mile Loop trail system and provides paved walking paths, picnic tables, viewpoints, hiking trails, bike paths and one playground.	Yes
Water and Gibbs Community Garden	SW Water Ave. and SW Gibbs St. City of Portland	This 0.25-acre site contains approximately 20 garden plot areas and is located on City of Portland right of way, not on a designated parcel.	No. Located within City of Portland Bureau of Transportation property defined as primarily for transportation use.
Front and Curry Community Garden	SW Naito Pkwy. Frontage Rd. and SW Curry St. City of Portland	This 0.23-acre site was acquired in 1952, and includes approximately 25 garden plot areas and a storage garage.	Yes
George Himes Natural Area Park**	Between SW Capitol Hwy., SW Terwilliger Blvd. and SW Barbur Blvd. City of Portland	<p>This park consists of 32.4 acres of forested natural area with paved and unpaved paths, picnic tables and hiking trails. One of the hiking trails connects Terwilliger Parkway with the Johns Landing area via SW View Point Terr. by passing under SW Barbur Blvd. and the I-5 freeway. This recreation trail provides unique access from the west side of the I-5 corridor down to the Willamette River and Willamette Park.</p> <p><u>Historic Characteristics and Significance:</u> Recommended Eligible, NRHP Criterion A</p> <p>One of several parks envisaged for the City of Portland by John Charles Olmsted in his 1903 report to the city's Park Board. Originally named Fulton Park, land for this park was donated to the City of Portland in 1903 by Charles Ladd, Henry Pittcock and S. B. Lombard. The park is operated as a natural area, and thus has few permanent or historic built features. Its significance is derived from associations with patterns of history relating to the early development of Portland's park system.</p>	Yes
Segment B: Outer Portland			
Fulton Park, Community Garden and Community Center**	SW Barbur Blvd. and SW Miles St. City of Portland	The park, community garden and community center comprise 8.21 acres and provide multiple recreation amenities, including a large community garden area (1.77 acres), basketball court, unpaved walking paths, picnic tables, a playground and a soccer field. The park also includes the Fulton Park Community Center at the east end of the park. The Community Center offers one main hall area that is rented out for community events and classes on a regular basis.	Yes
Markham Elementary School**	10531 SW Capitol Hwy. Portland Public Schools	This 4.38-acre school playground's western property boundary is located along SW Barbur Blvd., which is at the far end of the playground from the school and is elevated above SW Barbur Blvd. The playground contains three baseball diamonds, open grass field areas, a paved basketball court and a play structure.	Yes

Table D-1. Summary of Park and Recreation Resources Considered for Section 4(f) Eligibility (multi-page table)

Resource Name	Location/ Property Manager or Owner	Site Features and Characteristics	Qualifies as Section 4(f) Resource?
		<p>Although PPS school grounds are not public parks, many school grounds play areas are used by the public during non-school hours.</p> <p><u>Historic Characteristics and Significance:</u> Eligible, NRHP Criteria A and C The brick school was built in 1951 in the Colonial Revival style. The single-story, gable roof building was designed by architect Richard Sundeleaf of Portland and named in honor of Oregon Poet Laureate Edwin Markham. It was constructed during a period of modernization initiated by Portland Public Schools after World War II. With only minor alterations, the school retains a high level of architectural integrity.</p>	
Sylvania Natural Area Park	SW Capitol Hwy. and SW 53rd Ave. City of Portland	This 2.7-acre forested park was acquired in 2002 and contains two paths that provide access to it. The Portland Community College Sylvania Restoration Habitat Team is partnering with PPR to remove invasive English ivy and other invasive species, and also plants native species with funding from the City of Portland’s Community Watershed Stewardship Program. There is no dedicated parking for this park, and pedestrian access is focused on SW Capitol Hwy. and SW Coronado St.	Yes, but the construction footprint does not intersect with the property.
Segment C: Tigard and Tualatin			
Potso Dog Park	SW Wall St. south of SW Hunziker St. City of Tigard	At 1.5 acres, this is Tigard’s largest fenced dog park. It includes perimeter fencing, a walking path, a smaller fenced area for smaller dogs and puppies, shaded picnic tables and benches. The park includes off-street parking, with approximately 30 parking spaces.	Yes, but the construction footprint does not intersect with the property.
Fields Natural Area (Brown Natural Area)	East of Tigard Library, between Fanno Creek and Railroad Metro	The Brown Natural Area consists of approximately 26 acres of woods and open fields. It is located east of the Tigard Library, between Fanno Creek and the railroad. Metro owns the property and has been actively conducting restoration activities to restore native Oregon white oak habitat in portions of the site.	Yes, but the construction footprint does not intersect with the property.

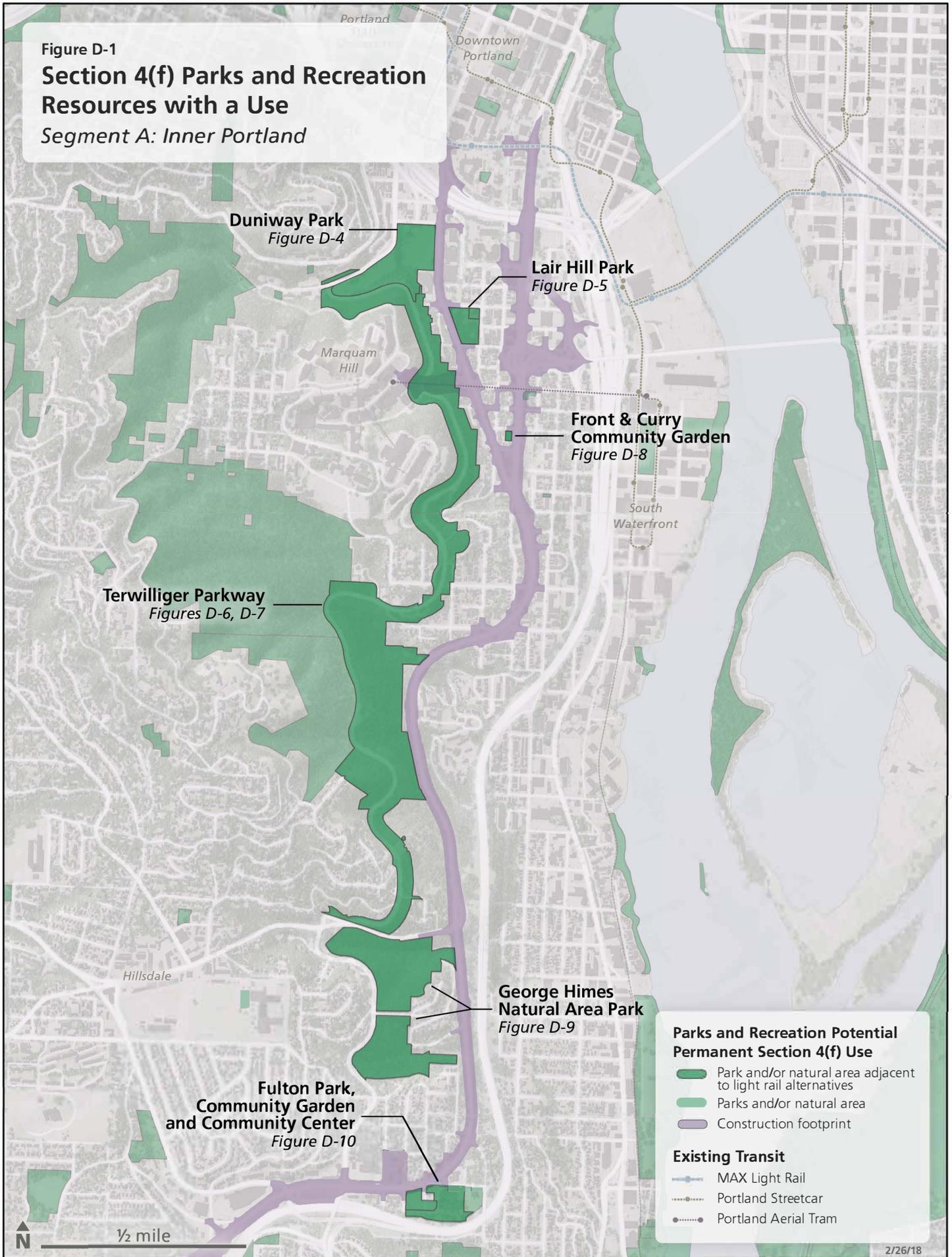
Source: Portland Parks and Recreation Parks Finder available at <https://www.portlandoregon.gov/parks/finder/> (May 2017).

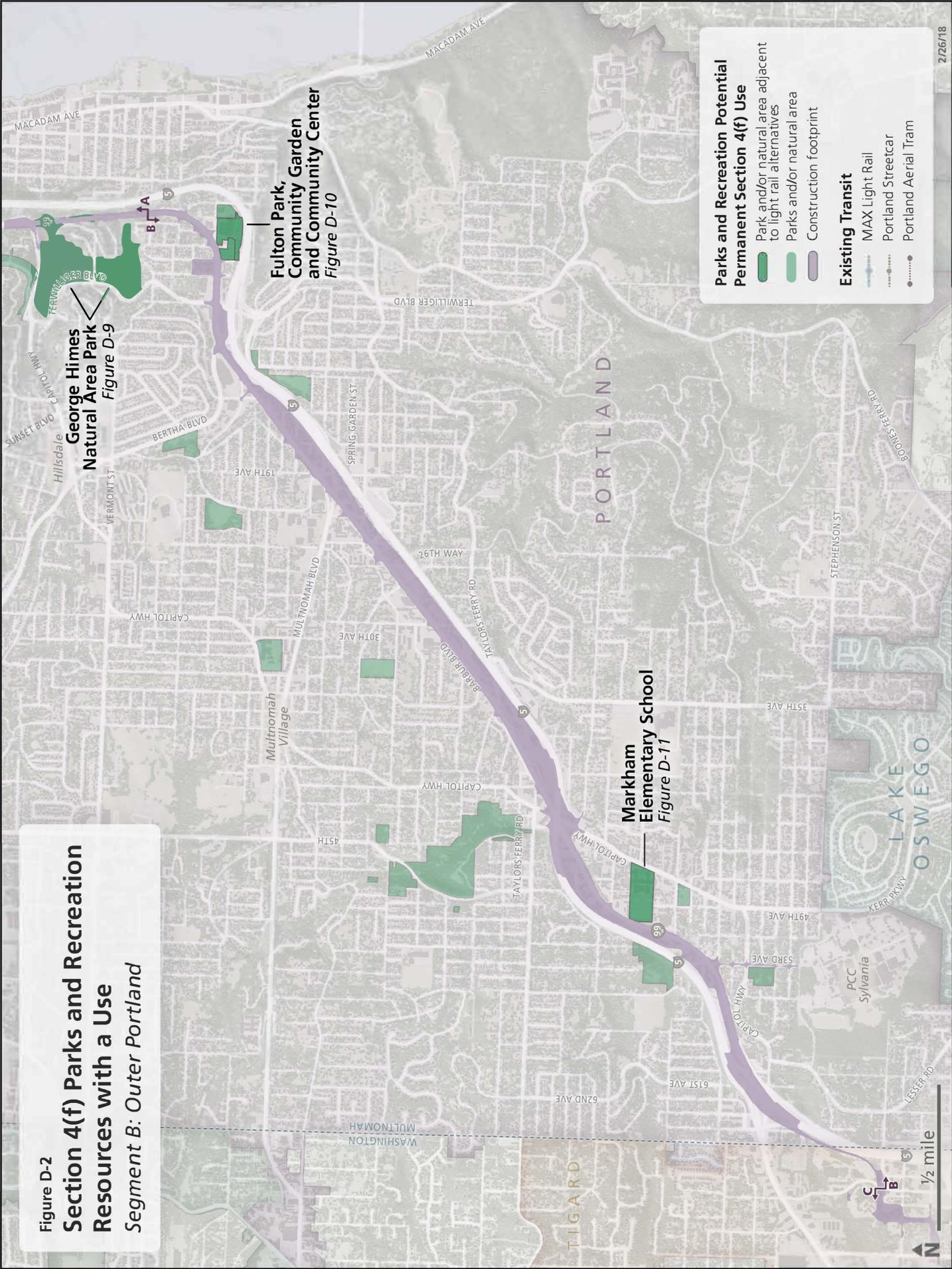
City of Tigard Community Dog Parks available at <http://www.tigard-or.gov/community/dogparks.php> (May 2017).

** Indicates a park and recreation resource that is also considered eligible or potentially eligible for the National Register of Historic Places.

Note: I-5 = Interstate 5.

Figure D-1
Section 4(f) Parks and Recreation Resources with a Use
Segment A: Inner Portland





Parks and Recreation Potential Permanent Section 4(f) Use

- Park and/or natural area adjacent to light rail alternatives
- Parks and/or natural area
- Construction footprint

Existing Transit

- MAX Light Rail
- Portland Streetcar
- Portland Aerial Tram

Figure D-2
Section 4(f) Parks and Recreation Resources with a Use
Segment B: Outer Portland

Historic Resources

Built Environment Resources

For historic resources, the project's resource specialists surveyed known and potential historic properties in the area of potential effects for historic resources (the APE) by documenting every building, structure, district, site (e.g., park) and object that would be 50 years old by the year 2020 and that is within 50 feet of the currently defined construction limits of the project's alignment alternatives. Any historic property or district that intersects this buffer is included. The historic properties that are identified as Section 4(f) resources are those that are listed in the NRHP, properties previously documented as eligible, or those that this Draft EIS has preliminarily identified as eligible for the NRHP as part of FTA's National Environmental Policy Act (NEPA) and Section 106 processes.

Based on the efforts to date, 144 historic resources are identified as significant historic properties that qualify as Section 4(f) resources. The *Cultural Resource Survey for the Southwest Corridor Light Rail Project, Multnomah and Washington Counties, Oregon* (AINW, 2017) provides a list, maps and photographs of all the properties surveyed, including preliminary determinations about which properties are historically significant. This preliminary determination of eligibility is the basis for Section 4(f) eligibility. All backup documentation is located in Appendix B of the *Cultural Resource Survey for the Southwest Corridor Light Rail Project, Multnomah and Washington Counties, Oregon* (AINW, 2017). Table D-2, below, summarizes the listed or potentially eligible historic resources with potential Section 4(f) permanent use due to full parcel acquisitions, and Figure D-3 shows their locations. This appendix assumes that any full parcel acquisition of a historic property would be a Section 4(f) use. Other project effects, including partial parcel acquisitions as well as construction easements, are also being considered for potential Section 4(f) use, but some could meet requirements for *de minimis* findings or exceptions to a Section 4(f) use. At this stage of the project, based on the level of design, any partial parcel acquisition for historic properties is a potential *de minimis* impact or a permanent use. Any parcel that is identified for a TCE only is assumed to be a temporary use. As mentioned above, proximity impacts that result in a constructive use are not considered in this draft Section 4(f) evaluation.

As part of the project's Section 106 compliance efforts, FTA is consulting with the Oregon SHPO. After the Draft EIS (including this Appendix D) is released for public review and a preferred alternative is identified, FTA will request the SHPO's written concurrence with FTA's determinations of eligibility and findings of effect for historic properties. FTA will inform SHPO on proposed *de minimis* findings or exceptions to a Section 4(f) use for historic properties based on their eligibility concurrence. FTA will also request SHPO's involvement in developing protective measures and other avoidance or minimization strategies that could reduce harm to a historic property.

Archaeological Resources

Project archaeologists identified 16 sites within the APE, based on sites previously documented for other projects. Only one of these sites has been determined NRHP-eligible, and it is not within the construction area of the alignment alternatives. Several of the others identified in previous documents did not have determinations of eligibility, but they also are not affected by any of the alignment alternatives. Project archaeologists also reviewed other information sources to predict the potential for undiscovered archaeological resources and conducted field reconnaissance.

In some locations, as-yet-undiscovered archaeological resources could still be present, particularly in areas that have not been disturbed by development. Still, most of the project APE is paved or occupied by developments, which makes the ground beneath them inaccessible for investigations using traditional archaeological hand survey methods. To address sites where archaeological resources could remain, project archaeologists predicted the potential for discovering significant archaeological sites by identifying high probability areas (HPAs) using maps and records of Euro American and Native American land use, and analyzing remaining intact lands that could be associated with the presence of archaeological sites. (For example, artifacts from Native Americans in the Northwest are often found near historic water bodies.) A total of 28 HPAs were defined within the APE.

An HPA is not automatically a Section 4(f) resource, because it first must be confirmed to hold an archaeological site, and that site needs to be significant and intact enough to be NRHP-eligible. There are also exceptions to a Section 4(f) use when a site does not require preservation in place in order to be significant. After a preferred alternative is identified, further archaeological investigations may be conducted for the Final EIS and the Final Section 4(f) Evaluation. Other standard measures, such as a Construction Monitoring Plan and an Inadvertent Discovery Plan, will be put in place for construction, and any archaeological sites will be evaluated at that time. At this point, no known sites would be impacted and no Section 4(f) use of an archaeological resource would occur, so archaeological resources are not further discussed in this analysis.

Table D-2. Summary of Section 4(f) Historic Resources¹ with Potential Permanent Use Due to Full Parcel Acquisitions (multi-page table)

Map ID	Historic and Common Names Construction Date, Style and Type Address	Historic Characteristics and Significance	Photographs
Segment A: Inner Portland			
36	Tartarimi, Gaetano & Victoria House #1 1914 Craftsman Bungalow 338 SW Meade St., Portland	Contributing Resource, South Portland Historic District (Listed in 1998) The house is a good example of a Bungalow style residence and is significant as part of a larger grouping of residential housing in South Portland.	
52	Baldwin, LeGrand M., House 1913 Italianate Building 16 SW Porter St., Portland	Contributing Resource, South Portland Historic District (Listed in 1998) The house is a good example of an Italianate style residence and is significant as part of a larger grouping of residential housing in South Portland.	
53	Jolly, William, House 1906 Bungalow 25 SW Woods St., Portland	Contributing Resource, South Portland Historic District (Listed in 1998) The house is a good example of a Bungalow style residence and is significant as part of a larger grouping of residential housing in South Portland.	

Table D-2. Summary of Section 4(f) Historic Resources¹ with Potential Permanent Use Due to Full Parcel Acquisitions (*multi-page table*)

Map ID	Historic and Common Names Construction Date, Style and Type Address	Historic Characteristics and Significance	Photographs
59	Fiebiger, Victoria, House 1912 Craftsman House 3124 SW Barbur Blvd., Portland	Contributing Resource, South Portland Historic District (Listed in 1998) The house is a good example of the Craftsman style and contributes to the South Portland Historic District as part of a larger grouping of residential housing in South Portland. The house retains adequate integrity of its style.	
69	Robertson, John, House 1888 Queen Anne Building 018 SW Grover St., Portland	Contributing Resource, South Portland Historic District (Listed in 1998) The house is a good example of a Queen Anne style residence and is significant as part of a larger grouping of residential housing in South Portland.	
70	Carlson, John & Sophia, House 1888 Victorian Eclectic House 015 SW Gibbs St., Portland	Contributing Resource, South Portland Historic District (Listed in 1998) The house is a good example of a Victorian Eclectic house and contributes to the South Portland Historic District as part of a larger grouping of residential housing in South Portland. The condition of the house is poor, although historic integrity remains adequate.	

Table D-2. Summary of Section 4(f) Historic Resources¹ with Potential Permanent Use Due to Full Parcel Acquisitions (multi-page table)

Map ID	Historic and Common Names Construction Date, Style and Type Address	Historic Characteristics and Significance	Photographs
95	Maxwell, Mary L., House 1904 Colonial Revival Building 3323 SW Naito Pkwy., Portland	Contributing Resource, South Portland Historic District (Listed in 1998) The house is a good example of a Colonial Revival residence and is significant as part of a larger grouping of residential housing in South Portland. Although modern stone and shingles and several vinyl windows have been added, overall the house retains adequate integrity of its type and style.	
97	Tillman, Constance & Frank, House 1890 Italianate Building 5 SW Whitaker St., Portland	Contributing Resource, South Portland Historic District (Listed in 1998) The building is a good example of an Italianate style residence and is significant as part of a larger grouping of residential housing in South Portland. Sanborn Maps indicate it was two separate commercial storefronts in the early 1900s.	
98	Driskell, C. E., House 1904 Colonial Revival House 017 SW Whitaker St., Portland	Contributing Resource, South Portland Historic District (Listed in 1998) The house is a good example of the Colonial Revival style, and contributes to the South Portland Historic District as part of a larger grouping of residential housing in South Portland.	
68	Wolfman, A., Building 1952 Modern Commercial Building 11 SW Gibbs St., Portland 3223 SW Front Ave.	Recommended Eligible, NRHP Criterion C Previously documented as noncompatible, noncontributing to the South Portland Historic District due to its 1952 date of construction. However, this building appears to be eligible for listing in the NRHP under Criterion C as a good example of its type and period of construction.	

Table D-2. Summary of Section 4(f) Historic Resources¹ with Potential Permanent Use Due to Full Parcel Acquisitions (*multi-page table*)

Map ID	Historic and Common Names Construction Date, Style and Type Address	Historic Characteristics and Significance	Photographs
180	House 1908 Colonial Revival House 022 SW Lowell St., Portland	Recommended Eligible, NRHP Criterion C The house is a good local example of the Colonial Revival style, and is representative of its type and period of construction.	
187	Jewish Shelter Home 1902 Colonial Revival Building 4133 SW Corbett Ave., Portland	NRHP Listed in 1984 City of Portland Landmark Originally constructed as a private residence for Elmer Colwell, this house was purchased in 1919 for use as a shelter home for Jewish children. It is significant for its function as an early Jewish humanitarian institution in Portland, and it is eligible under Criteria A and C.	
188	House 1898 Queen Anne House 4145 SW Corbett Ave., Portland	Recommended Eligible, NRHP Criterion C The house is a good local example of the Queen Anne style, and is representative of its type and period of construction.	

Table D-2. Summary of Section 4(f) Historic Resources¹ with Potential Permanent Use Due to Full Parcel Acquisitions (multi-page table)

Map ID	Historic and Common Names Construction Date, Style and Type Address	Historic Characteristics and Significance	Photographs
189	House 1898 Queen Anne House 4205 SW Corbett Ave., Portland	Recommended Eligible, NRHP Criterion C The house is a good local example of the Queen Anne style, and is representative of its type and period of construction. A detached garage associated with the house is unlikely to contribute to its NRHP eligibility.	
238	House 1937 Tudor Revival House 5910 SW Ralston Dr., Portland	Recommended Eligible, NRHP Criterion C The house is a good local example of the Tudor Revival style, and is representative of its type and period of construction.	
572	Bridge #01983; SW Newbury St. Viaduct 1934 Composite Truss Structure SW Newbury St. Viaduct, SW Barbur Blvd. on SW Barbur Blvd. south of Highway 10	Recommended Eligible, NRHP Criterion C This bridge is included as a Category II Bridge in ODOT's Historic Bridge Field Guide (2013), indicating that it retains historic integrity and meets minimum NRHP eligibility requirements. The bridge is a representative example of its type and period of construction.	

Table D-2. Summary of Section 4(f) Historic Resources¹ with Potential Permanent Use Due to Full Parcel Acquisitions (*multi-page table*)

Map ID	Historic and Common Names Construction Date, Style and Type Address	Historic Characteristics and Significance	Photographs
573	Bridge #01984; SW Vermont St. Viaduct 1934 Composite Truss Structure SW Vermont St. Viaduct, SW Barbur Blvd. on SW Barbur Blvd. south of Bridge #01983	Recommended Eligible, NRHP Criterion C This bridge is included as a Category II Bridge in ODOT’s Historic Bridge Field Guide (2013), indicating that it retains historic integrity and meets minimum NRHP eligibility requirements. The bridge is a representative example of its type and period of construction.	
147	Congregation Ahavath Achim Synagogue 1965 Post-modern Building 3225 SW Barbur Blvd., Portland	Recommended Eligible, NRHP Criteria A and C This Post-modern building was designed by noted local architects Church & Shiels and John Storrs. In addition to its potential NRHP eligibility under Criterion C for its distinctive Post-modern design, the religious facility may be eligible under Criterion A for its association with Jewish settlement patterns and social history in South Portland. The building appears to meet Criterion Consideration A for religious properties.	
Segment B: Outer Portland			
379	Capitol Hill Motel 1940 Minimal Traditional Building 9110 SW Barbur Blvd., Portland	Recommended Eligible, NRHP Criterion C Previously recorded as eligible for listing in the NRHP in 1998. The motel is highly representative of its type and period of construction. The motel retains adequate historic integrity to convey its style.	

Table D-2. Summary of Section 4(f) Historic Resources¹ with Potential Permanent Use Due to Full Parcel Acquisitions (multi-page table)

Map ID	Historic and Common Names Construction Date, Style and Type Address	Historic Characteristics and Significance	Photographs
400	Stash's Hollywood Motel; Antler Motel; Ranch Inn 1948 Minimal Traditional Building 10138 SW Barbur Blvd., Portland	Recommended Eligible, NRHP Criterion C This motel complex features two buildings built in 1948 and a third in 1955. It is highly representative of its type and period of construction. The motel retains adequate historic integrity to convey its style.	
411	House 1938 Tudor Revival House 5350 SW Pasadena St., Portland	Recommended Eligible, NRHP Criterion C The house is a good local example of the Tudor Revival style, and is representative of its type and period of construction. The setting of the house has been impacted by the construction of I-5 to the north, and associated outbuildings are unlikely to contribute to its NRHP eligibility.	
412	Building 1969 Modern Period Building 11125 SW Barbur Blvd., Portland	Recommended Eligible, NRHP Criterion C This building is a good local example of a Modern Period office building, and is highly representative of its period of construction. The building is likely architect-designed.	

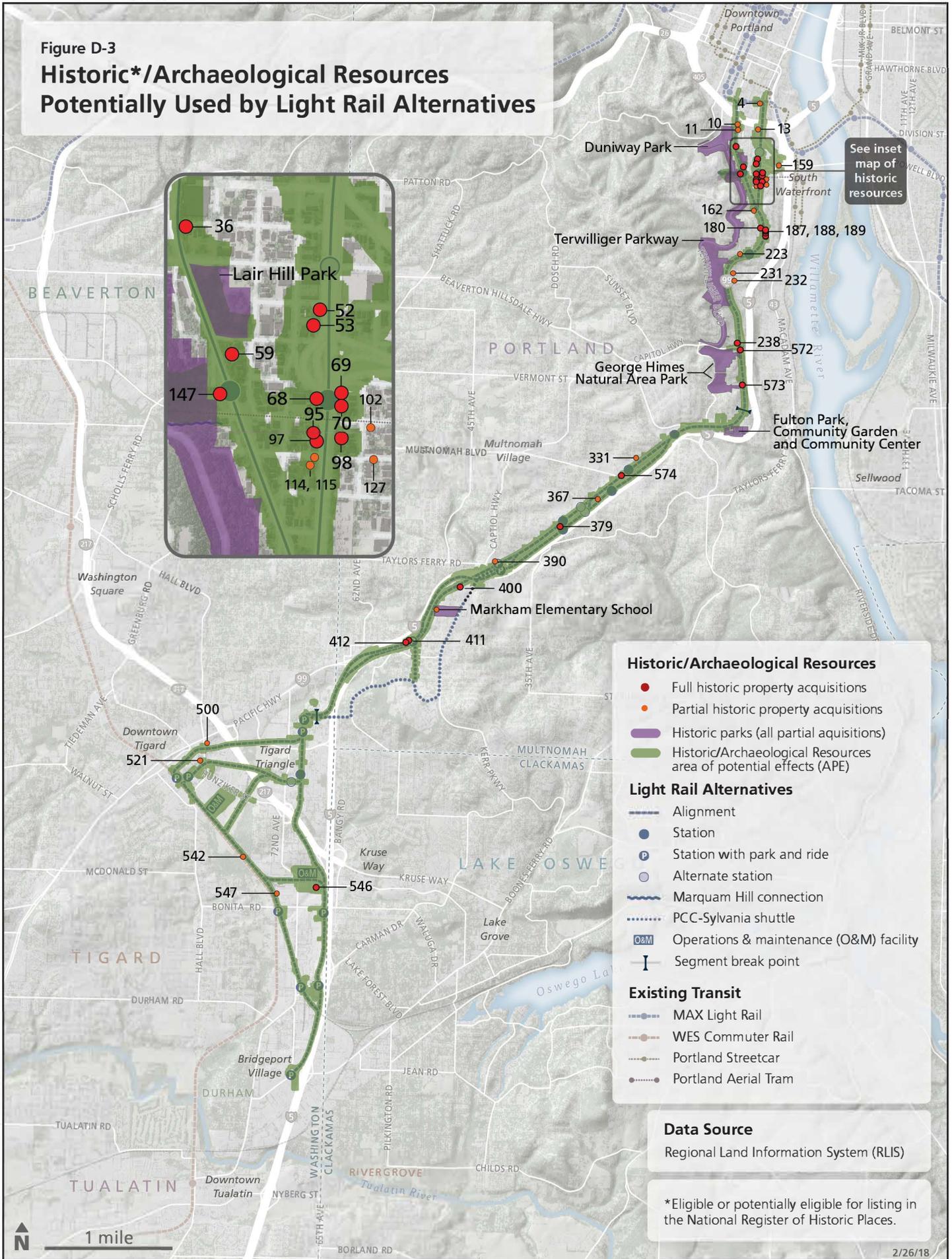
Table D-2. Summary of Section 4(f) Historic Resources¹ with Potential Permanent Use Due to Full Parcel Acquisitions (*multi-page table*)

Map ID	Historic and Common Names Construction Date, Style and Type Address	Historic Characteristics and Significance	Photographs
574	Bridge #02010; Oregon Electric Railway Overcrossing; 1934 Reinforced Concrete Girder Structure SW Barbur Blvd. crossing SW Multnomah Blvd.	Recommended Eligible, NRHP Criterion C This bridge is included as a Category II Bridge in ODOT’s Historic Bridge Field Guide (2013), indicating that it retains historic integrity and meets minimum NRHP eligibility requirements. The bridge is a representative example of its type and period of construction.	
Segment C: Tigard and Tualatin			
546	Gerber Legendary Blades; Gerber Gear Circa 1966 Late 20th Century Building 14200 SW 72nd Ave., Tigard	Recommended Eligible, NRHP Criteria A and C Headquarters and manufacturing facility for Gerber since 1966. The company was established in Portland in 1939, but moved to Tigard in 1966 during a period of rapid expansion for this formerly rural community. The building may be associated with significant patterns of economic development in Tigard during the mid-20th century. In addition, this building is likely architect-designed, and is representative of its type and period of construction.	

¹ Historic parks are addressed in the Potential Parks and Recreation Section 4(f) Use sections that follow for each alternative.

² Map IDs shaded with green denote contributing resources of the South Portland Historic District. This district was listed in the NRHP in 1998. Under NRHP Criterion A, the district is significant for its associations with patterns of events relating to the settlement of immigrant communities in Portland. Under NRHP Criterion C, the district is a significant collection of modest buildings that reflect popular architectural styles of the defined Period of Significance, 1876–1926.

Figure D-3
Historic*/Archaeological Resources
Potentially Used by Light Rail Alternatives



Potential Use of Section 4(f) Resources by Alternative

FTA, Metro and TriMet analyzed all locations where a use of a Section 4(f) resource could occur with the light rail alternatives. Metro and TriMet also coordinated with the cities of Portland and Tigard, PPS, the Oregon SHPO, and the officials with jurisdiction or ownership of individual Section 4(f) resources that could be used by an alignment alternative.

This section is organized geographically from north to south, following these three segments:

- Segment A – Inner Portland
- Segment B – Outer Portland
- Segment C – Tigard and Tualatin

Segment A – Potential Parks and Recreation Section 4(f) Uses

Table D-3 lists the parks with potential Section 4(f) use, and the following sections provide further detail.

Table D-3. Summary of Potential Section 4(f) Uses of Parks and Recreation Resources in Segment A (multi-page table)

4(f) Resource (Owner/Custodian)	Impacted Features	Potential 4(f) Use						
		Segment A			Marquam Hill Connection			
		A1	A2-BH	A2-LA	1A	1B	1C	2
Duniway Park** (City of Portland)	Vegetation removal for sidewalk reconstruction. Reduction of buffer around track, but no permanent impacts to parking or other features.	Potential <i>de minimis</i> Impact or Permanent Use	N/A	N/A	N/A	N/A	N/A	N/A
Lair Hill Park** (City of Portland)	Vegetation removal for widening on SW Barbur Blvd. Impacts entrance path and tennis backboard court.	Potential <i>de minimis</i> Impact or Permanent Use	N/A	N/A	N/A	N/A	N/A	N/A
Terwilliger Parkway** (City of Portland)	Segment A: Vegetation removal along SW Barbur for widening.	Potential <i>de minimis</i> Impact or Permanent Use	Potential <i>de minimis</i> Impact or Permanent Use	Potential <i>de minimis</i> Impact or Permanent Use	Potential Permanent Use	Potential Permanent Use	Potential Permanent Use	Potential Permanent Use

Table D-3. Summary of Potential Section 4(f) Uses of Parks and Recreation Resources in Segment A (multi-page table)

4(f) Resource (Owner/Custodian)	Impacted Features	Potential 4(f) Use						
		Segment A			Marquam Hill Connection			
		A1	A2-BH	A2-LA	1A	1B	1C	2
	Marquam Hill connections: Vegetation removal for a paved walking trail.							
Front and Curry Community Garden (City of Portland)	Vegetation removal for widening of SW Barbur Blvd. Eastern portion of garden is outside of parcel boundary.	N/A	Potential <i>de minimis</i> Impact or Permanent Use	Potential <i>de minimis</i> Impact or Permanent Use	N/A	N/A	N/A	N/A
George Himes Natural Area Park** (City of Portland)	Vegetation removal. Temporary closure of trail connection under bridge.	Potential <i>de minimis</i> Impact or Permanent Use	Potential <i>de minimis</i> Impact or Permanent Use	Potential <i>de minimis</i> Impact or Permanent Use	N/A	N/A	N/A	N/A
Assumed Permanent Use		0	0	0	1	1	1	1
Potential <i>de minimis</i> Impact or Permanent Use		4	3	3	0	0	0	0
Potential Temporary Use		0	0	0	0	0	0	0

** Indicates a park and recreational resource that is also considered eligible or potentially eligible for the National Register of Historic Places.
 N/A means there is no physical incorporation of the Section 4(f) property to a transportation use nor is there a temporary use.

Duniway Park – Section 4(f) Potential de minimis Impact or Permanent Use

Duniway Park would be impacted by Alternative A1. In addition to permanent incorporation of a small portion of the northeast corner of the property, tree removal would occur on the eastern edge of the property, which would have minor direct long-term impacts (see Figure D-4). None of the impacts would permanently change the recreation uses offered by the park, although widening of and improvements to SW Barbur Boulevard could reduce the buffering area around a portion of the track. Small trees between the track and the sidewalk in the northeast corner of the park would be removed as part of reconfiguring SW Barbur Boulevard and the nearby intersection to accommodate light rail and improve bicycle and pedestrian facilities. Small trees and vegetation between the parking lot and the street would also be removed. The on-site parking would remain. Duniway Park is recommended as eligible for listing on the NHRP. No historic features would be impacted under Alternative A1.

Permanent access to a small parking lot for the track would be provided generally as it is today (access is currently restricted to right-in, right-out movements from southbound traffic on SW Barbur Boulevard). Light rail infrastructure would be visible to park users within the track and soccer field area, especially in the park's northeast corner, but this would not affect track and field activities.

These impacts would likely be *de minimis*, because they would be very minor and would not affect the park features and attributes. It is also possible to minimize or avoid these impacts altogether. The impacts would not affect the historic significance of this park.

Lair Hill Park – Section 4(f) Potential de minimis Impact or Permanent Use

Alternative A1 would widen SW Barbur Boulevard along Lair Hill Park, requiring acquisition of a narrow strip of land along the western boundary of the park (see Figure D-5). This widening would impact the entrance path and the edge of the tennis backboard court in the northwest corner of the park, and would remove mature evergreen and deciduous trees and plantings adjacent to SW Barbur Boulevard. The vegetation removal would change the character of this side of the park by making it more open to SW Barbur Boulevard, although it would retain a grade separation from the roadway. The loss of perimeter trees would reduce but not remove the buffering function, and the interior trees would continue to provide shade and a semi-forested feeling in this part of the park. A metal sculpture in the park would be surrounded by fewer trees.

Alternative A1 includes improvements on SW Hooker Street to accommodate bicycle and pedestrian facilities at the intersection. These improvements would impact a small section of existing sidewalk that is on the north end of the park, and potentially remove a couple of trees. The tennis court is not impacted from these improvements.

Lair Hill Park was listed on the NRHP in 1998 as a contributing resource to the South Portland Historic District. None of the contributing features would be impacted under Alternative A1.

Lair Hill Park is a contributing resource to the South Portland Historic District. Although the impacts to the park would be minor and would not affect the park features and attributes, it could be a permanent use, because impacts to the historic district would likely result in an adverse effect. More research is needed to determine impacts to the historic significance of this park.

Figure D-4

Duniway Park

Alternative A1: Section 4(f) Potential de minimis Impact or Permanent Use



Figure D-5

Lair Hill Park

Alternative A1: Section 4(f) Potential de minimis Impact or Permanent Use



Terwilliger Parkway – Section 4(f) Potential de minimis Impact or Permanent Use

All of the alignment alternatives in Segment A would widen SW Barbur Boulevard from approximately SW Hamilton Street to SW Capitol Highway, acquiring approximately 0.06 acre of Terwilliger Parkway (see Figure D-6). The impacts are to forested or semi-forested natural areas, but they do not contain facilities supporting recreational activities. No impact to recreational activities would occur. However, there would be minor impacts to the natural area attribute of the park from the vegetation and tree removal. Terwilliger Parkway is recommended as eligible for listing on the NRHP. More research is needed to determine impacts to the historic significance of this park. Impacts to Terwilliger Parkway related to the Marquam Hill connection options are discussed below.

Marquam Hill Connection Options – Section 4(f) Permanent Use

There are four options for the connection between SW Barbur Boulevard and Marquam Hill that all would constitute a Section 4(f) use (see Figure D-7):

- Connection 1A: Elevator/Bridge and Path
- Connection 1B: Elevator/Bridge and Recessed Path
- Connection 1C: Elevator/Bridge and Tunnel
- Connection 2: Full Tunnel

Connections 1A and 1B would have very similar impacts; Connection 1A would impact approximately 0.68 acre, and Connection 1B would impact approximately 0.88 acre (see Figure D-7). Both connections would impact approximately 450 feet of currently undisturbed forested area between SW Terwilliger Boulevard and SW Barbur Boulevard, and approximately 50 feet of moderately disturbed area between SW Terwilliger Boulevard and the Oregon Health & Science University (OHSU) campus property. Developed recreational resources along the parkway in this area consist of a paved walking trail and bike lanes on the east side of SW Terwilliger Boulevard, both of which would be impacted during construction of the Marquam Hill connection.

Connections 1C and 2 would affect a similar area within Terwilliger Parkway totaling 1.19 acres, but because they incorporate a tunnel, long-term impacts to the natural setting in the area would be less than with Connections 1A and 1B, assuming replanting and natural cover would be placed over the tunnel.

All of the Marquam Hill connection options would remove mature trees and shrubs. For recreational use, the removal of trees and shrubs would change the appearance of this part of the hillside from the paved trail. The recreation impact would be negligible, because many acres of forested parkway would remain unchanged and available for public use.

Developing the Marquam Hill connection options with aboveground components would alter the setting of the parkway in this area. Currently the slope below SW Terwilliger Boulevard is forested, with limited visible development. With the connection options, developed infrastructure would displace the mature vegetation. However, because the OHSU campus is directly uphill of Terwilliger Parkway here, the change to the setting would be localized and reduced by the existing presence of large buildings and transportation infrastructure.

Figure D-6

Terwilliger Parkway

Alternatives A1, A2-LA, A2-BH: Section 4(f) Potential de minimis Impact or Permanent Use

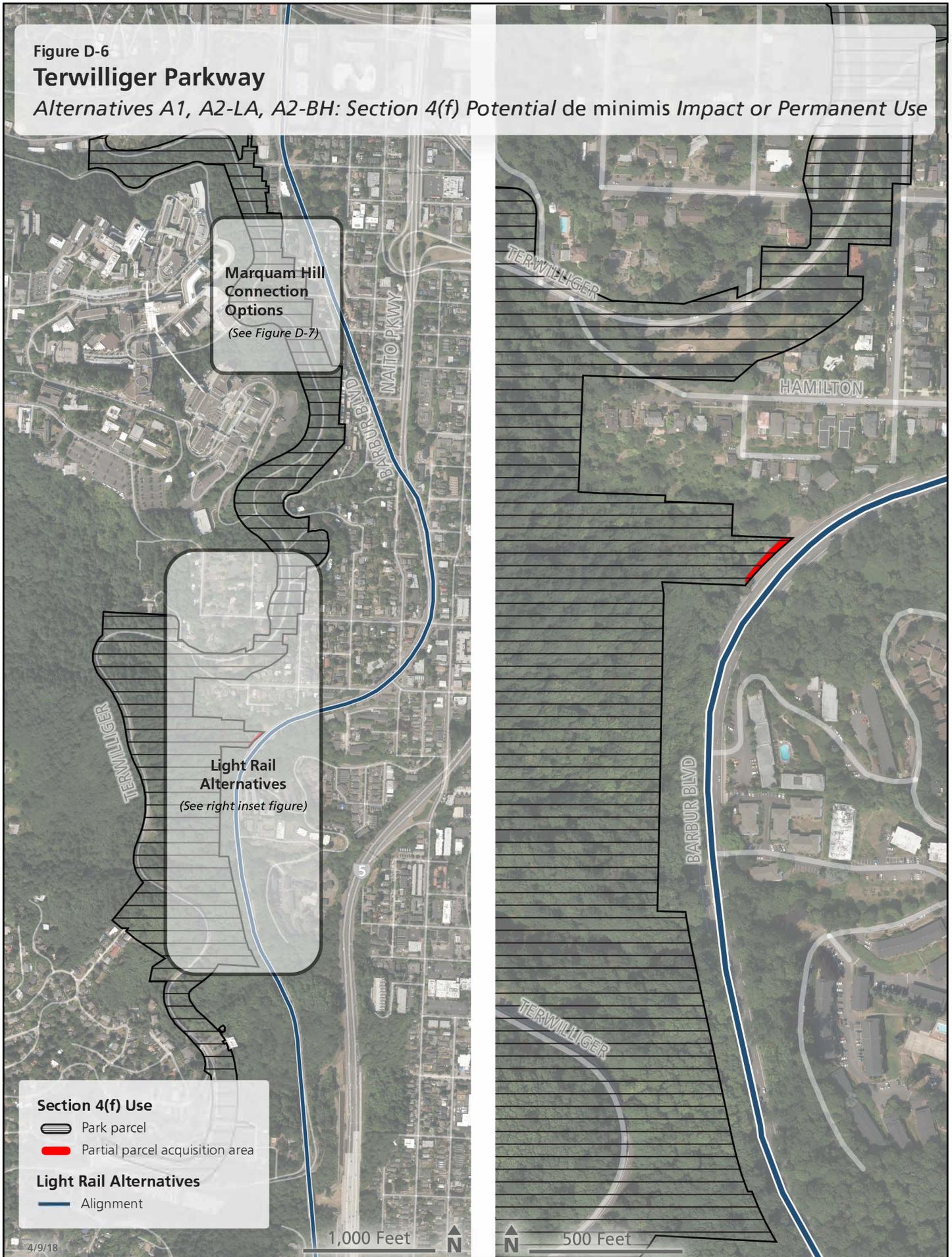
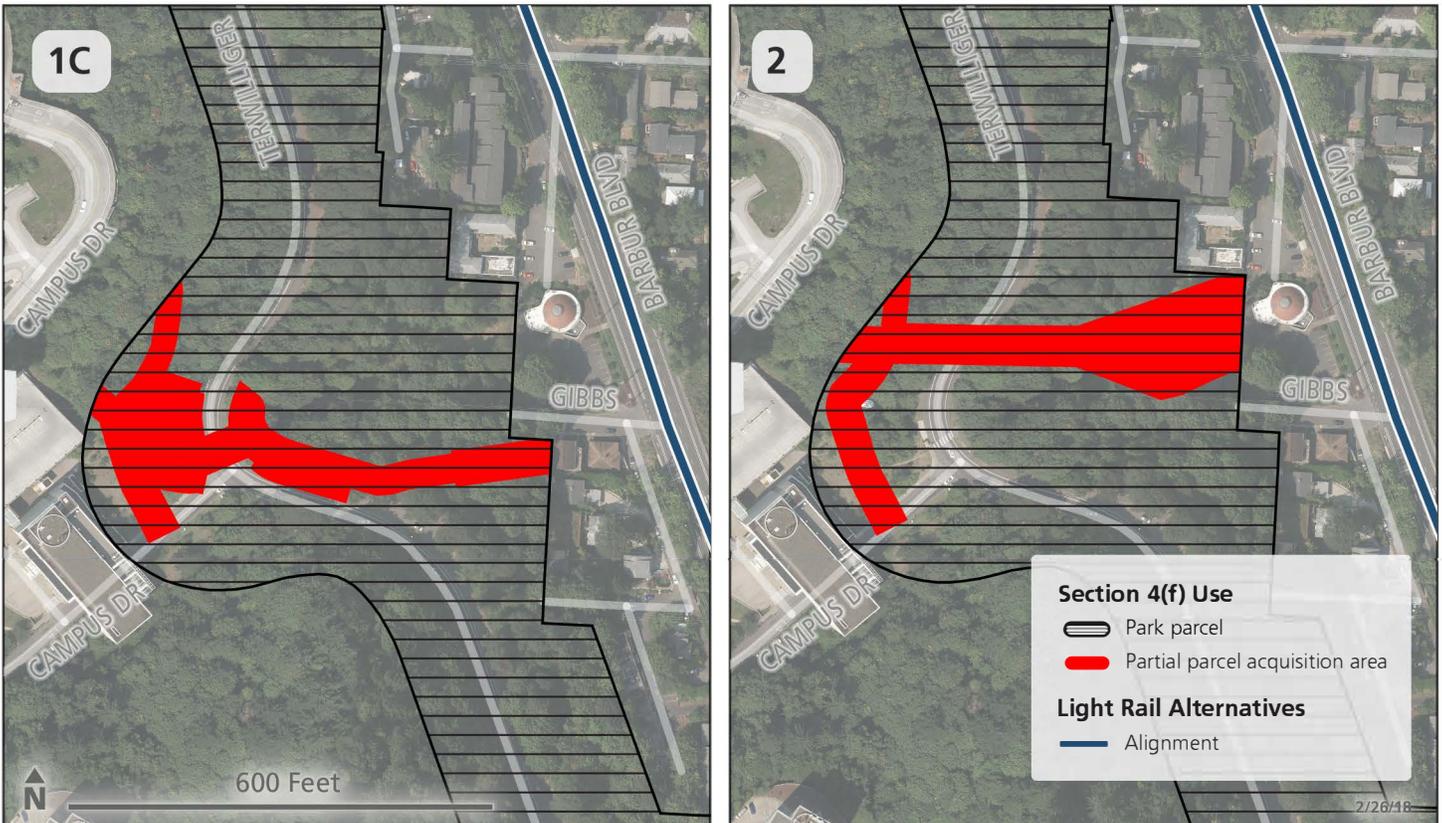
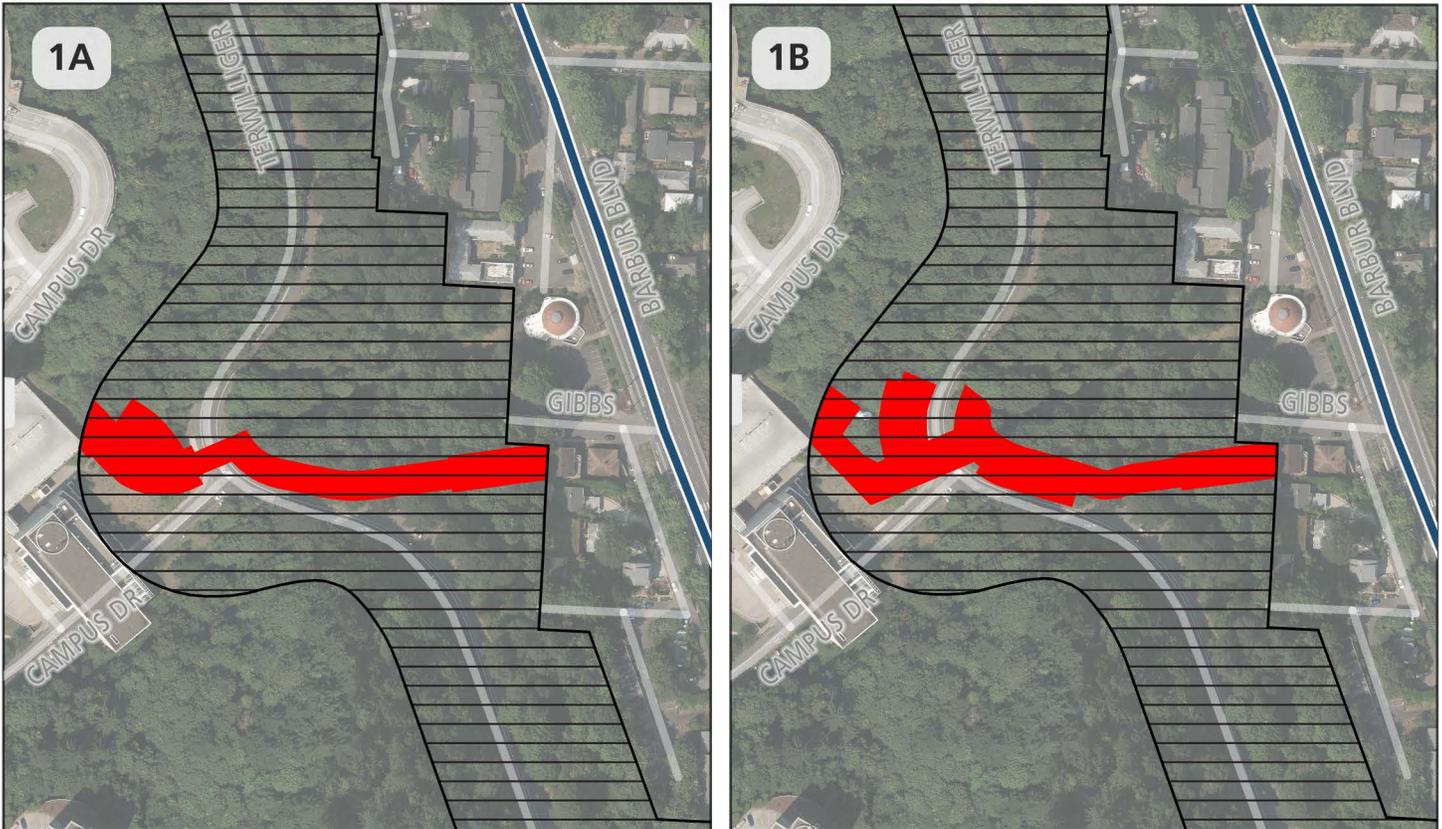


Figure D-7

Terwilliger Parkway

Marquam Hill Connection Options: Section 4(f) Permanent Use



More research is needed to determine impacts to the historic significance of this park from the Marquam Hill connection. The impacts to Terwilliger Parkway from the vegetation removal and ground disturbance will be long-lasting and will result in a severe visual change to this park. These impacts cannot be mitigated down to *de minimis*, and the Marquam Hill connection is therefore assumed to be a permanent use regardless of the option selected.

Front and Curry Community Garden – 4(f) Potential de minimis Impact or Permanent Use

Alternatives A2-BH and A2-LA would widen SW Naito Parkway adjacent to the Front and Curry Community Garden (see Figure D-8). Alternatives A2-BH and A2-LA would impact approximately 2 to 5 feet, respectively, at the northern edge of the garden area. These permanent impacts would not impact any garden plots, but a large tree outside of the parcel boundary would be removed. Additionally, Alternatives A2-BH and A2-LA would impact right of way on the east side adjacent to SW Naito Parkway that is used as part of the garden. The eastern portion of the garden appears to be operating outside of the boundaries of the parcel, so the impacted area does not appear to be part of the park property. These impacts could result in the removal of mature trees that currently provide shade to areas of the garden and a buffer from SW Naito Parkway.

Impacts to this community garden would either be minimal or outside of the community garden parcel boundary. The garden would still be able to function after the project is complete. These impacts are likely *de minimis*.

George Himes Natural Area Park – Section 4(f) Potential de minimis Impact or Permanent Use

Alternatives A1, A2-BH and A2-LA include widening SW Barbur Boulevard, which would impact a vegetated strip along George Himes Natural Area Park (see Figure D-9). The strip of vegetation is part of a larger park and does not impact any trails or recreation areas directly. A large swath of vegetation will remain as a buffer to SW Barbur Boulevard. George Himes Natural Area Park is recommended as eligible for listing on the NRHP.

Construction of the Newbury trestle bridge replacement would temporarily impact SW Trail #3, which is within this park. The trail passes through a forested natural area and descends into the ravine below SW Barbur Boulevard. The trail emerges into a cleared area that was temporarily closed during construction along the Interstate 5 (I-5) corridor. The trail connection to the John's Landing neighborhood and Willamette Park will be closed temporarily. There would be no direct long-term impact to SW Trail #3.

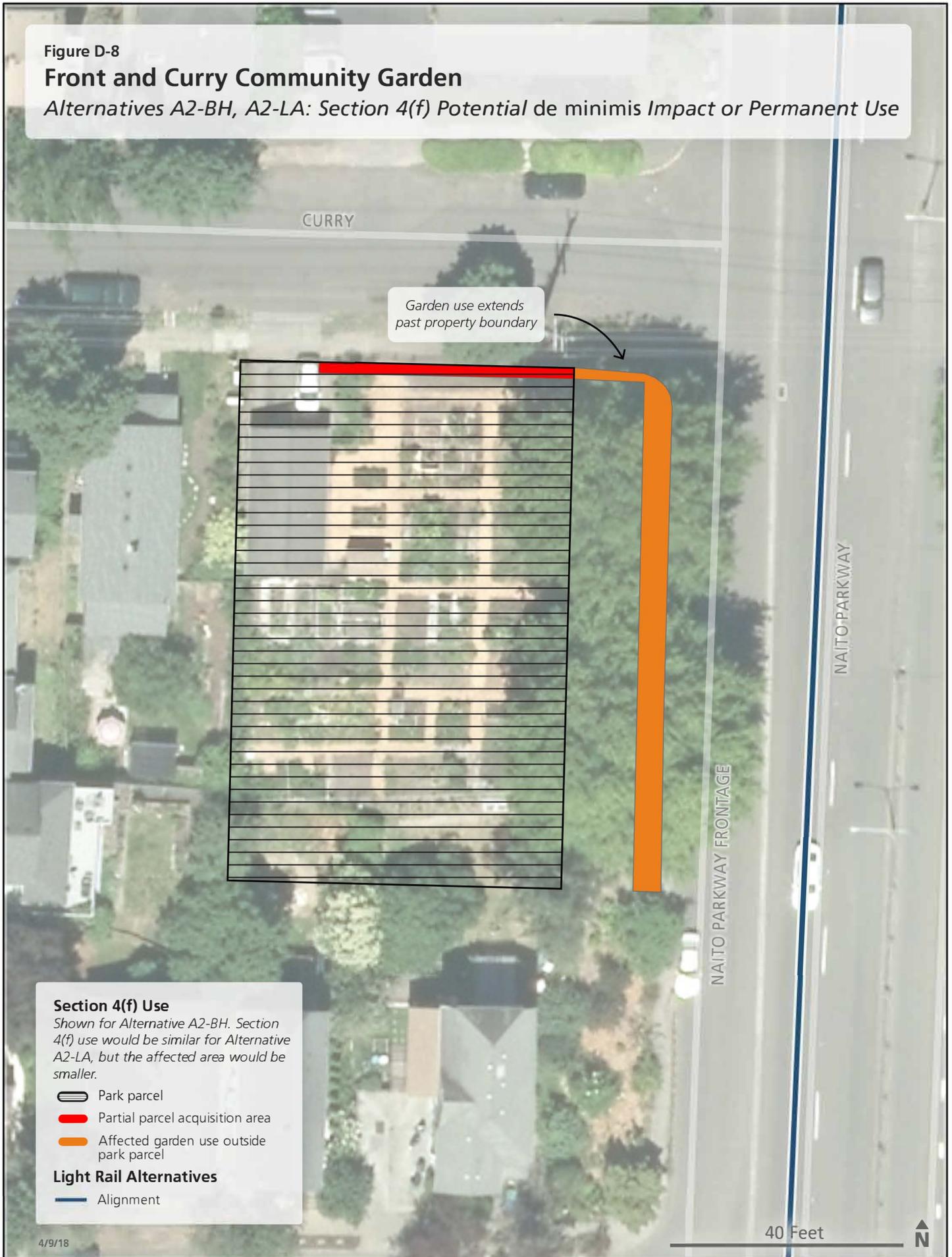
Views of the light rail infrastructure on SW Barbur Boulevard would be very limited for users in George Himes Natural Area Park. Users would see only glimpses of light rail features above the roadway while approaching the bridge undercrossing directly. The majority of the experience of using the trails within the park would be unchanged, and no access changes would occur.

The impacts to George Himes Natural Area Park would be a result of minimal vegetation removal. This removal would not impact the function of the park and would be on the outer edge of the park boundary. Additionally, the short-term closure of SW Trail #3 would be temporary. More research is needed to determine impacts to the historic significance of this park, but the impacts are likely *de minimis*.

Figure D-8

Front and Curry Community Garden

Alternatives A2-BH, A2-LA: Section 4(f) Potential de minimis Impact or Permanent Use



Section 4(f) Use

Shown for Alternative A2-BH. Section 4(f) use would be similar for Alternative A2-LA, but the affected area would be smaller.

-  Park parcel
-  Partial parcel acquisition area
-  Affected garden use outside park parcel

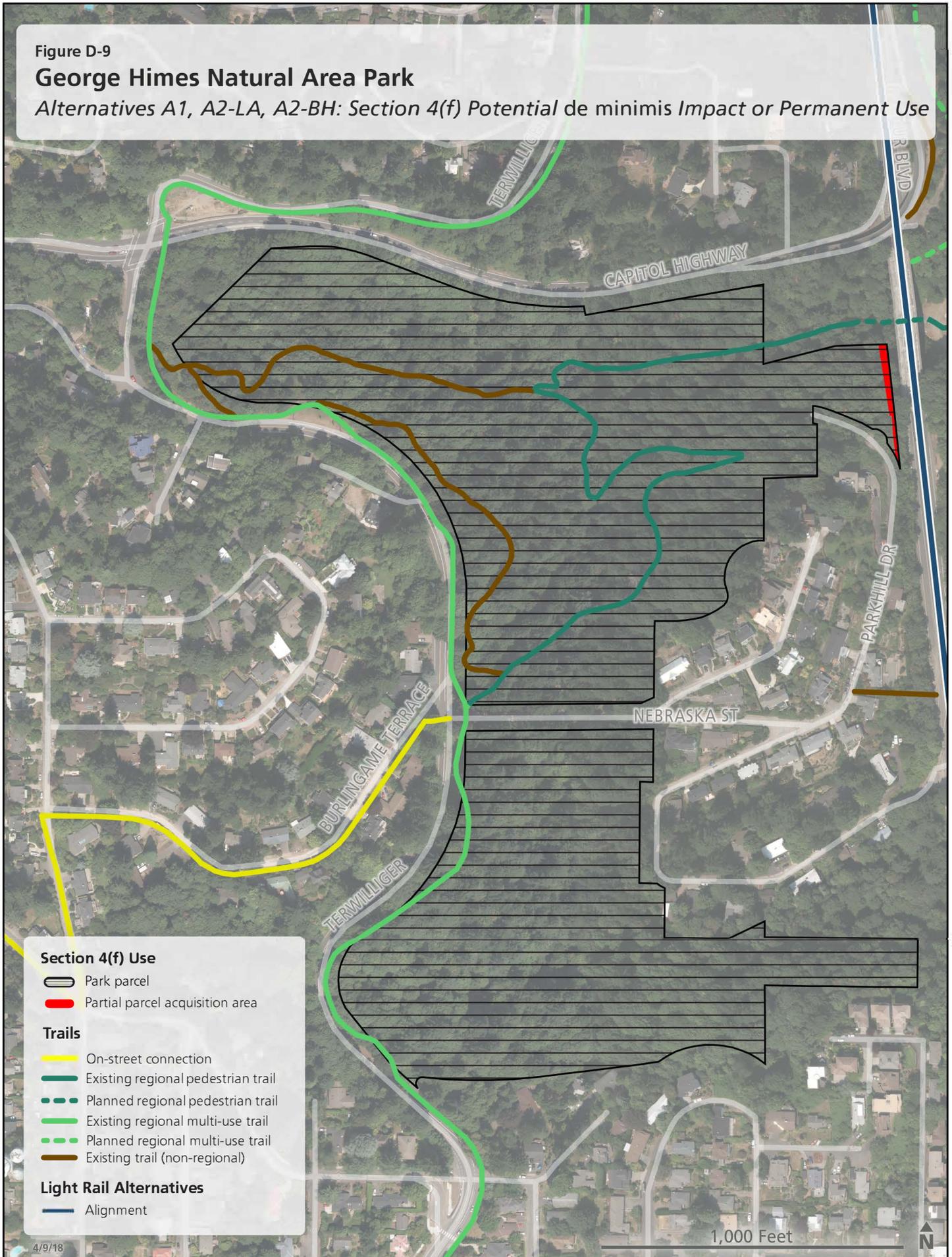
Light Rail Alternatives

-  Alignment

Figure D-9

George Himes Natural Area Park

Alternatives A1, A2-LA, A2-BH: Section 4(f) Potential de minimis Impact or Permanent Use



Segment A – Potential Section 4(f) Uses of Historic Properties

Segment A has a high concentration of NRHP-listed and potential NRHP historic resources, including an NRHP-listed historic district (see Table D-4). All of the Segment A alignment alternatives involve at least one use of a historic property due to an acquisition of an entire historic property. All of them also involve temporary construction impacts to other historic properties, and acquisitions of parts of historic properties. The construction-period impacts and the acquisitions of parts of the properties could qualify for exceptions to a Section 4(f) use, but they could also result in a Section 4(f) use.

In general, full and partial parcel acquisitions are due to widening roadways and reconfiguring intersections to accommodate light rail, stations, park and rides, operation and maintenance (O&M) facilities and associated bicycle and pedestrian facilities. Further analysis of these impacts and avoidance or minimization measures will be evaluated after the preferred alternative is selected and analyzed for the Final EIS.

Table D-4. Summary of Potential Section 4(f) Uses of Historic Properties in Segment A (multi-page table)

Map ID No.	Historic and Common Names Address	Alignment Alternatives		
		A1	A2-BH	A2-LA
2	IMB Building 2000 SW 1ST AVE., PORTLAND	N/A	Potential Temporary Use	Potential Temporary Use
4	Building 2112 SW 1ST AVE., PORTLAND	N/A	Potential <i>de minimis</i> Impact or Permanent Use	Potential <i>de minimis</i> Impact or Permanent Use
10	Farley Building; Duniway Plaza 2400 SW 4TH AVE., PORTLAND	Potential <i>de minimis</i> Impact or Permanent Use	N/A	N/A
11	Marquam Plaza 2525 SW 3RD AVE., PORTLAND	Potential <i>de minimis</i> Impact or Permanent Use	N/A	N/A
13	Addressograph-Multigraph Building; Summa Institute 2510 SW 1ST AVE., PORTLAND	N/A	Potential <i>de minimis</i> Impact or Permanent Use	Potential <i>de minimis</i> Impact or Permanent Use
21	Helen Kelly Manley Community Center (South Portland Settlement Center); National University of Natural Medicine Administration Building 2828 SW NAITO PKWY., PORTLAND	N/A	Potential Temporary Use	N/A
28	Failing, Josiah, School; National University of Natural Medicine Academic Building 2828 SW NAITO PKWY., PORTLAND	N/A	Potential <i>de minimis</i> Impact or Permanent Use	Potential <i>de minimis</i> Impact or Permanent Use
32	House 036N/A038 SW PORTER ST., PORTLAND	N/A	Potential Temporary Use	N/A
160	South Portland Historic District	Permanent Use	Permanent Use	Permanent Use
36	Tartarimi, Gaetano & Victoria, House #1 338 SW MEADE ST., PORTLAND	Permanent Use	N/A	N/A
39	Lakefish, B. & Mary, House (2721) and Lamberson, C. E. House (2725) 2721N/A2725 SW 1ST AVE., PORTLAND	N/A	Potential Temporary Use	N/A
42	Marquam, Philip Augustus, House #1 2740 SW 1ST AVE., PORTLAND	N/A	Potential Temporary Use	N/A
43	Taylor, Peter & Haehlen, John & Gotlieb House #1 2806 SW 1ST AVE., PORTLAND	N/A	Potential Temporary Use	N/A

Table D-4. Summary of Potential Section 4(f) Uses of Historic Properties in Segment A (multi-page table)

Map ID No.	Historic and Common Names Address	Alignment Alternatives		
		A1	A2-BH	A2-LA
44	Rosenfeld, Maris Sophia, House 26 SW MEADE ST., PORTLAND	N/A	Potential Temporary Use	N/A
46	Warren, Mary, House	N/A	Potential Temporary Use	N/A
48	Multnomah County Hospital Nurses' Quarters; Lair Hill Park; South Portland (Carnegie) Library 3037 SW 2ND AVE., PORTLAND	Potential <i>de minimis</i> Impact or Permanent Use	N/A	N/A
51	Perlot, John N. & Harriet E., House 26 SW PORTER ST., PORTLAND	N/A	Potential Temporary Use	Potential <i>de minimis</i> Impact or Permanent Use
52	Baldwin, LeGrand M., House 16 SW PORTER ST., PORTLAND	N/A	Potential Temporary Use	Permanent Use
53	Jolly, William B., House 25 SW WOODS ST., PORTLAND	N/A	Potential Temporary Use	Permanent Use
59	Fiebiger, Victoria, House 3124 SW BARBUR BLVD., PORTLAND	Permanent Use	N/A	N/A
69	Robertson, John, House 018 SW GROVER ST., PORTLAND	N/A	Permanent Use	Permanent Use
70	Carlson, John & Sophia, House 015 SW GIBBS ST., PORTLAND	N/A	Permanent Use	Permanent Use
71	Watkins, George and Rood, E. H., House 3213N/A3215 SW WATER AVE., PORTLAND	N/A	Potential Temporary Use	N/A
73	Drake, John M. & Angeline, House 025 SW GIBBS ST., PORTLAND	N/A	Potential Temporary Use	N/A
74	Wallace, Hugh M. & Catherine E., House #1 031 SW GIBBS ST., PORTLAND	N/A	Potential Temporary Use	N/A
75	Wallace, Hugh M. & Catherine E., House #2 039 SW GIBBS ST., PORTLAND	N/A	Potential Temporary Use	N/A
77	Cardwell, B. P., House 0110 SW GROVER ST., PORTLAND	N/A	Potential Temporary Use	N/A
92	Fear, W. H., House, #3 117 SW WHITAKER ST., PORTLAND	Potential Temporary Use	N/A	N/A
93	Boyd, Narcissa and Thomas, House #2 3333 SW 1ST AVE., PORTLAND	Potential Temporary Use	N/A	N/A
94	Rudy, Marcus, House #2 3334 SW 1ST AVE., PORTLAND	Potential Temporary Use	N/A	N/A
95	Maxwell, Mary L., House 3323 SW NAITO PKWY., PORTLAND	N/A	Potential <i>de minimis</i> Impact or Permanent Use	Permanent Use
97	Tillman, Constance and Frank, House 5 SW WHITAKER ST., PORTLAND	N/A	Potential <i>de minimis</i> Impact or Permanent Use	Permanent Use
98	Driskell, C. E., House 017 SW WHITAKER ST., PORTLAND	N/A	Permanent Use	Permanent Use
101	Rummeline, Frank and Louise R., House #1 023 SW WHITAKER ST., PORTLAND	N/A	Potential Temporary Use	N/A
102	Rummeline, Frank and Louise R., House #2 031N/A037 SW WHITAKER ST., PORTLAND	N/A	Potential Temporary Use	N/A

Table D-4. Summary of Potential Section 4(f) Uses of Historic Properties in Segment A (multi-page table)

Map ID No.	Historic and Common Names Address	Alignment Alternatives		
		A1	A2-BH	A2-LA
103	G. H. Lamberson House 0106 SW GIBBS ST., PORTLAND	N/A	Potential <i>de minimis</i> Impact or Permanent Use	N/A
110	R. F. Strauss House 3404 SW 1ST AVE., PORTLAND	Potential Temporary Use	N/A	N/A
113	Laura Foulkes House #1 3404 SW 1ST AVE., PORTLAND	N/A	Potential Temporary Use	N/A
114	H. R. and S. E. Long House 3405 SW NAITO PKWY., PORTLAND	Potential <i>de minimis</i> Impact or Permanent Use	Potential <i>de minimis</i> Impact or Permanent Use	Potential <i>de minimis</i> Impact or Permanent Use
115	Robert Foulkes House 3417 SW NAITO PKWY., PORTLAND	Potential <i>de minimis</i> Impact or Permanent Use	Potential Temporary Use	Potential Temporary Use
121	Marie Francone House 036 SW WHITAKER ST., PORTLAND	N/A	Potential Temporary Use	N/A
127	W. C. Harmor Ensemble 3404 SW WATER AVE., PORTLAND	N/A	Potential <i>de minimis</i> Impact or Permanent Use	N/A
137	Osias Sussman House 23 SW PENNOYER ST., PORTLAND	Potential Temporary Use	N/A	N/A
138	Ferdinand Gundoph House #2 19 SW PENNOYER ST., UN. A, PORTLAND	Potential Temporary Use	Potential Temporary Use	N/A
68	A. Wolfman Building 11 SW GIBBS ST., PORTLAND	N/A	Potential <i>de minimis</i> Impact or Permanent Use	Permanent Use
147	Congregation Ahavath Achim Synagogue 3225 SW BARBUR BLVD., PORTLAND	Potential <i>de minimis</i> Impact or Permanent Use	N/A	N/A
155	House 3605 SW CONDOR AVE., PORTLAND	Potential Temporary Use	N/A	N/A
159	Ross Island Bridge	N/A	Potential <i>de minimis</i> Impact or Permanent Use	N/A
162	House 3811 SW BARBUR BLVD., PORTLAND	Potential <i>de minimis</i> Impact or Permanent Use	Potential <i>de minimis</i> Impact or Permanent Use	Potential <i>de minimis</i> Impact or Permanent Use
168	House 3926 SW WATER AVE., PORTLAND	N/A	N/A	Potential Temporary Use
178	House 4019 SW CORBETT AVE., PORTLAND	Potential Temporary Use	Potential Temporary Use	Potential Temporary Use
179	House 0123 SW LOWELL ST., PORTLAND	Potential Temporary Use	Potential Temporary Use	Potential Temporary Use
180	House 022 SW LOWELL ST., PORTLAND	N/A	Potential Temporary Use	Permanent Use
187	Jewish Shelter Home 4133 SW CORBETT AVE., PORTLAND	Potential <i>de minimis</i> Impact or Permanent Use	Permanent Use	Permanent Use
188	House 4145 SW CORBETT AVE., PORTLAND	Potential <i>de minimis</i> Impact or Permanent Use	Potential <i>de minimis</i> Impact or Permanent Use	Permanent Use

Table D-4. Summary of Potential Section 4(f) Uses of Historic Properties in Segment A (multi-page table)

Map ID No.	Historic and Common Names Address	Alignment Alternatives		
		A1	A2-BH	A2-LA
189	House 4205 SW CORBETT AVE., PORTLAND	Potential <i>de minimis</i> Impact or Permanent Use	Potential <i>de minimis</i> Impact or Permanent Use	Permanent Use
190	House 4215N/A4217 SW CORBETT AVE., PORTLAND	Potential <i>de minimis</i> Impact or Permanent Use	Potential <i>de minimis</i> Impact or Permanent Use	Potential <i>de minimis</i> Impact or Permanent Use
192	Building 4231N/A4237 SW CORBETT AVE., PORTLAND	Potential <i>de minimis</i> Impact or Permanent Use	Potential <i>de minimis</i> Impact or Permanent Use	Potential <i>de minimis</i> Impact or Permanent Use
223	House 218N/A220 SW HAMILTON ST., PORTLAND	Potential <i>de minimis</i> Impact or Permanent Use	Potential <i>de minimis</i> Impact or Permanent Use	Potential <i>de minimis</i> Impact or Permanent Use
231	Building 4820 SW BARBUR BLVD., PORTLAND	Potential <i>de minimis</i> Impact or Permanent Use	Potential <i>de minimis</i> Impact or Permanent Use	Potential <i>de minimis</i> Impact or Permanent Use
232	Rasmussen Village 4950 SW BARBUR BLVD., PORTLAND	Potential <i>de minimis</i> Impact or Permanent Use	Potential <i>de minimis</i> Impact or Permanent Use	Potential <i>de minimis</i> Impact or Permanent Use
238	House 5910 SW RALSTON DR., PORTLAND	Permanent Use	Permanent Use	Permanent Use
572	Bridge #01983; SW Newbury St. Viaduct, Hwy. 1W	Permanent Use	Permanent Use	Permanent Use
573	Bridge #01984; SW Vermont St. Viaduct, Hwy. 1W	Permanent Use	Permanent Use	Permanent Use
Total Number of Full Parcel Acquisitions; Assumed Permanent Use		6	8	16
Total Number of Partial Parcel Acquisitions; Potential <i>de minimis</i> Impact or Permanent Use		15	18	11
Total Number of Potential Temporary Construction Easements: Potential Temporary Use		9	25	5

N/A means there is no physical incorporation of the Section 4(f) property to a transportation use nor is there a temporary use.

Segment B – Potential Parks and Recreation Section 4(f) Uses

Table D-5 lists the parks and the attributes or features that are potentially used by the alignment alternatives in Segment B. A full description of these impacts follows the table.

Table D-5. Summary of Potential Section 4(f) Park and Recreational Uses in Segment B (multi-page table)

4(f) Resource (Owner/Custodian)	Impacted Features	Alignment Alternatives Potential 4(f) Use			
		B1	B2	B3	B4
Fulton Park, Community Garden and Community Center** (City of Portland)	Vegetation removal and loss of buffer from street. Northern 15 feet of property impacted, affecting four garden plots.	Potential <i>de minimis</i> Impact or Permanent Use			
Markham Elementary School** (Portland Public Schools)	Vegetation removal on western 12 feet of property. Impacts pedestrian access stairwell and would be within 12 feet of the baseball diamond.	Potential <i>de minimis</i> Impact or	N/A	N/A	N/A

Table D-5. Summary of Potential Section 4(f) Park and Recreational Uses in Segment B (multi-page table)

4(f) Resource (Owner/Custodian)	Impacted Features	Alignment Alternatives Potential 4(f) Use			
		B1	B2	B3	B4
		Permanent Use			
Sylvania Natural Area Park (City of Portland)	No Section 4(f) Use: Narrow strip of vegetation is removed along the eastern edge, but impacts are within existing right of way.	N/A	N/A	N/A	N/A
Assumed Permanent Use		0	0	0	0
Potential <i>de minimis</i> Impact or Permanent Use		2	1	1	1
Potential Temporary Use		0	0	0	0

** Indicates a park and recreational resource that is also considered eligible or potentially eligible for the National Register of Historic Places.

N/A means there is no physical incorporation of the Section 4(f) property to a transportation use nor is there a temporary use.

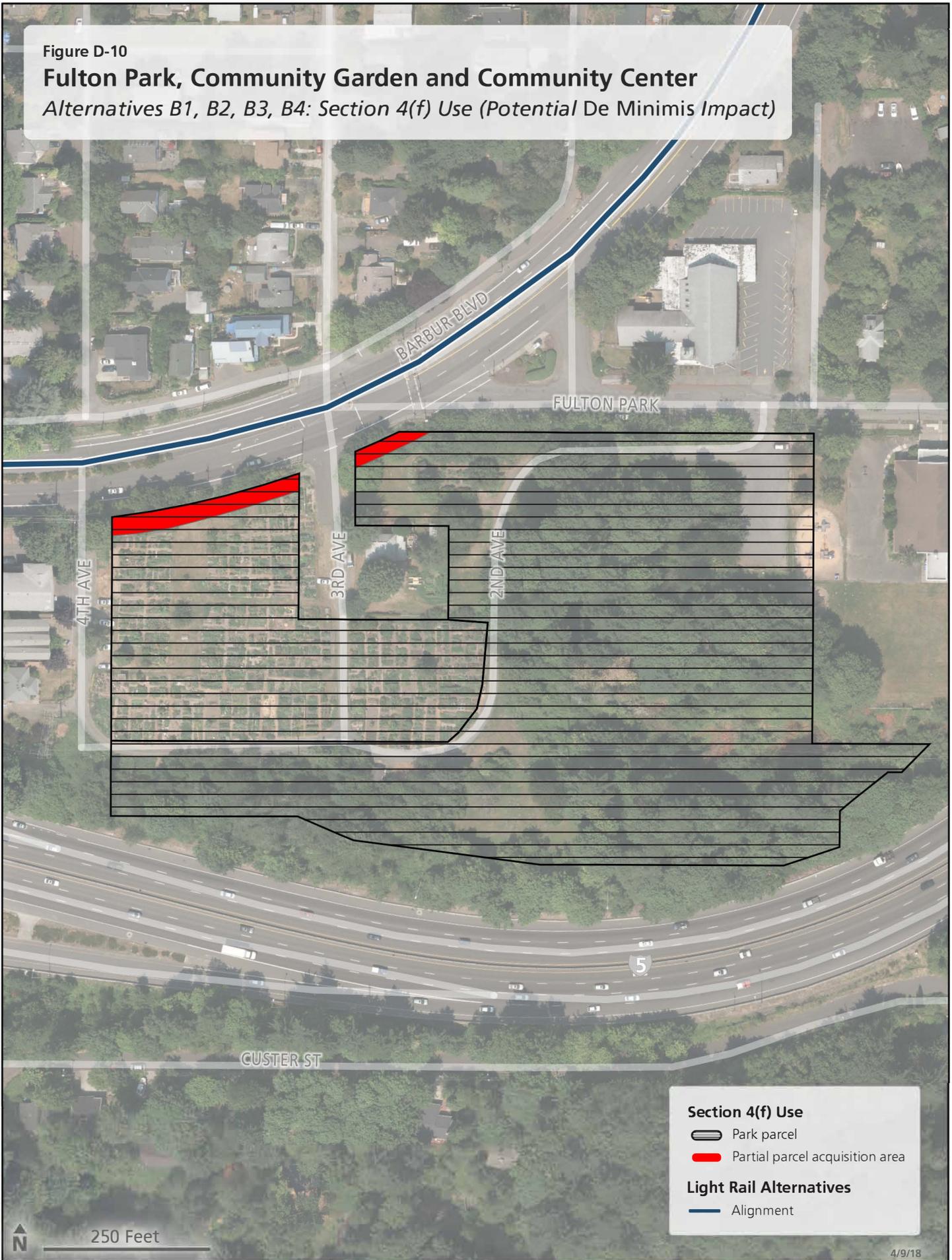
Fulton Park, Community Garden and Community Center – Potential de minimis Impact or Permanent Use

All four of the Segment B alignment alternatives have the same impacts to Fulton Park and associated recreation areas (see Figure D-10). The western end of Fulton Park is entirely developed with community garden plots. All of the Segment B alignment alternatives widen SW Barbur Boulevard at this location, which would impact the northern 15 feet of the property. This impact would likely eliminate portions of approximately four garden plots and remove all of the mature trees along the sidewalk. Some portions of garden plots may exist partially within right of way. The majority of the community garden has no trees, and the trees along SW Barbur Boulevard provide some buffer functions between the roadway and the gardens. Approximately 15 feet of the southeastern corner of the SW Barbur Boulevard and SW 3rd Avenue intersection would be impacted. Mature vegetation would be removed.

Figure D-10

Fulton Park, Community Garden and Community Center

Alternatives B1, B2, B3, B4: Section 4(f) Use (Potential De Minimis Impact)



The Metro Home Composting Demonstration Garden is located approximately 20 feet to the east of the impacts at SW Barbur Boulevard and SW 3rd Avenue, and it would no longer be visually separated from the roadway, although it could still function.

The impacts to the outer edge of the park would be minor and could likely be minimized. Further research is needed to determine potential impacts to the historic significance of this park. The minor impacts could likely be *de minimis* or could be avoided.

Markham Elementary School– Potential de minimis Impact or Permanent Use

Alternative B1 would widen SW Barbur Boulevard at the Markham Elementary School grounds. There would be direct permanent impacts to approximately 12 feet of mature trees along the western boundary of the property (see Figure D-11). The school grounds are elevated above SW Barbur Boulevard and do not currently have any visual or physical access to the roadway. This alignment would be within 12 feet of a baseball diamond, and might require further design measures, such as adding fencing or screening, to avoid impacting baseball activities. Alternative B1 would also impact a pedestrian stairwell that provides access from SW Barbur Boulevard to the school grounds.

The historic elementary school building would not be impacted by any alignment alternative. The minor impact along the western boundary of the property would not affect the baseball diamond, and the access through the pedestrian stairwell would be moved. These minor impacts could likely be *de minimis*, minimized further or avoided.

Figure D-11

Markham Elementary School

Alternative B1: Section 4(f) Potential de minimis Impact or Permanent use



Segment B – Potential Section 4(f) Uses of Historic Properties

Alternative B1 would have the most uses of Section 4(f) historic resources within Segment B, and Alternative B4 would have the fewest. This is largely because most of the historic resources are on SW Barbur Boulevard, which Alternative B1 follows for most of its distance, while Alternative B4 runs along I-5 more than the other alternatives.

Table D-6 summarizes the potential Section 4(f) uses of historic properties in Segment B.

Table D-6. Summary of Potential Section 4(f) Uses of Historic Properties in Segment B

Map ID No.	Historic and Common Names Address	Alignment Alternatives			
		B1	B2	B3	B4
331	House 1801 SW EVANS ST., PORTLAND	Potential <i>de minimis</i> Impact or Permanent Use	Potential <i>de minimis</i> Impact or Permanent Use	Potential <i>de minimis</i> Impact or Permanent Use	N/A
367	Pancake House; Original Pancake House 8601 SW 24TH AVE., PORTLAND	Potential <i>de minimis</i> Impact or Permanent Use			
379	Capitol Hill Motel 9110 SW BARBUR BLVD., PORTLAND	Permanent Use	Permanent Use	Potential <i>de minimis</i> Impact or Permanent Use	Potential <i>de minimis</i> Impact or Permanent Use
381	Good Shepherd Lutheran Church; Good Shepherd Lutheran Church and Little Lambs Preschool/Daycare 3405 SW ALICE ST., PORTLAND	Potential Temporary Use	Potential Temporary Use	Potential Temporary Use	Potential Temporary Use
390	Gas Station 9803 SW BARBUR BLVD., PORTLAND	Potential <i>de minimis</i> Impact or Permanent Use	N/A	Potential <i>de minimis</i> Impact or Permanent Use	Potential <i>de minimis</i> Impact or Permanent Use
400	Stash’s Hollywood Motel; Antler Motel; Ranch Inn 10138 SW BARBUR BLVD., PORTLAND	Permanent Use	N/A	N/A	N/A
404	Markham School; Edwin Markham Elementary School 10531 SW CAPITOL HWY., PORTLAND	Potential Temporary Use	Potential Temporary Use	Potential Temporary Use	Potential Temporary Use
411	House 5350 SW PASADENA ST., PORTLAND	Permanent Use	Permanent Use	Permanent Use	Permanent Use
412	Building 11125 SW BARBUR BLVD., PORTLAND	Permanent Use	Permanent Use	Permanent Use	Permanent Use
574	Bridge #02010; Oregon Electric Railway Overcrossing; Hwy. 1W over SW Multnomah Blvd.	Permanent Use	Permanent Use	Permanent Use	N/A
Total Number of Full Parcel Acquisitions; Assumed Permanent Use		5	4	3	2
Total Number of Partial Parcel Acquisitions; Potential <i>de minimis</i> Impact or Permanent Use		3	2	4	3
Total Number of Potential Temporary Construction Easements; Potential Temporary Use		2	2	2	2

N/A means there is no physical incorporation of the Section 4(f) property to a transportation use nor is there a temporary use.

Segment C – Potential Parks and Recreation Section 4(f) Uses

There are no park and recreation facilities in Segment C that would have permanent or temporary incorporation of Section 4(f) property.

Segment C – Potential Section 4(f) Uses of Historic Properties

There are five historic properties that could be potentially used in Segment C (see Table D-7). All six alignment alternatives would require a partial parcel acquisition from the Tigard Branch of the Southern Pacific Railroad.

Of the five design options for O&M facilities, only the Branched SW 72nd Facility option would result in a direct effect on a historic property. That option would require a full acquisition of the Gerber Legendary Blades headquarters building and manufacturing facility at 14200 SW 72nd Avenue, Tigard.

Table D-7. Summary of Potential Section 4(f) Uses of Historic Properties in Segment C

Map ID No.	Historic and Common Names Address	Alignment Alternatives					
		C1	C2	C3	C4	C5	C6
500	Knauss Chevrolet; Fidelity Fleet & Finance Auto Sales 11880 SW Pacific Hwy., Tigard	N/A	N/A	Potential <i>de minimis</i> Impact or Permanent Use	Potential <i>de minimis</i> Impact or Permanent Use	N/A	N/A
521	The Williamsburg Townhouse Apartments 12265 SW Hall Blvd., Tigard	Potential <i>de minimis</i> Impact or Permanent Use	Potential <i>de minimis</i> Impact or Permanent Use	N/A	N/A	Potential <i>de minimis</i> Impact or Permanent Use	N/A
542	Southern Pacific Railroad, Tigard Branch	Potential <i>de minimis</i> Impact or Permanent Use					
546	Gerber Legendary Blades; Gerber Gear 14200 SW 72nd Ave., Tigard	Potential <i>de minimis</i> Impact or Permanent Use	N/A	Potential <i>de minimis</i> Impact or Permanent Use	N/A	Potential <i>de minimis</i> Impact or Permanent Use	Potential <i>de minimis</i> Impact or Permanent Use
547	Fought & Company; Fought & Company, Inc. 14255 SW 72nd Ave., Tigard	N/A	Potential <i>de minimis</i> Impact or Permanent Use	N/A	Potential <i>de minimis</i> Impact or Permanent Use	N/A	N/A
Total Number of Full Parcel Acquisitions; Assumed Permanent Use		0	0	0	0	0	0
Total Number of Partial Parcel Acquisitions; Potential <i>de minimis</i> Impact or Permanent Use		3	3	3	3	3	2
Total Number of Potential Temporary Construction Easements: Potential Temporary Use		0	0	0	0	0	0

N/A means there is no physical incorporation of the Section 4(f) property to a transportation use nor is there a temporary use.

Alternatives Analysis

Avoidance Alternatives Analysis

Section 4(f) analysis requires an analysis of feasible and prudent avoidance alternatives to each use of a Section 4(f) property. This analysis requires documentation of the factors that make any avoidance measure or alternative infeasible or imprudent. The potential avoidance alternatives could be any of the following:

- **Location Alternatives.** This refers to rerouting the entire project in a different alignment.
- **Alternative Actions.** This could include an alternative transit mode or other improvements that do not require construction.
- **Alignment Shifts.** This includes alternative routes at a specific location or locations to route around resources.
- **Design Refinements.** A design modification that avoids impacts.

The feasibility and prudence standards that are applied as defined in 23 CFR Part 774.17 are used to eliminate the alternative from further considering. An alternative is infeasible if it cannot be built as a matter of sound engineering judgement. An alternative could be imprudent for any of the following reasons:

- **Factor 1.** It doesn't meet the state purpose and need.
- **Factor 2.** It Results in unacceptable operation or safety problems.
- **Factor 3.** Even with mitigation applied, is still causes severe social or environmental impacts, disruption to communities, disproportional impacts on low-income or minority populations or impacts on federally protected environmental resources.
- **Factor 4.** It causes additional construction, maintenance, or operational costs of an extraordinary magnitude.
- **Factor 5.** There are other unusual factors or unique issues.
- **Factor 6.** It would involve multiple factors in 1 through 5 that, while individually minor, could cumulatively cause unique problems or impacts of extraordinary magnitude.

The Southwest Corridor Project evaluated conceptual options for avoiding Section 4(f) resources that are identified as full acquisitions, but did not conduct the required analysis on all of the alternatives. This analysis will be completed for the preferred alternative.

Southwest Corridor Avoidance Alternatives

There are currently no light rail alternatives that avoid all Section 4(f) resources. Segment A represents a unique challenge, because the alignment alternatives would impact several Section 4(f) resources. Segments B and C have fewer resources, and therefore there is more flexibility to potentially avoid resources in those segments.

There have been three major phases of project development that have defined the alternatives currently being considered, including the proposal for light rail itself as well as the types of alignments being considered. First, between 2009 and 2011, the Southwest Corridor Steering Committee evaluated

the goals shared by communities in the region for living, working and getting around. Next, between 2012 and 2013, the project focused on the Southwest Corridor Land Use Vision to evaluate the needs of a more effective, reliable and safe regional transportation network. In 2013, the steering committee proposed further study of a high capacity transit (HCT) line using either light rail transit or bus rapid transit. Finally, between 2013 and 2016, the project refinement process focused on identifying a reasonable range of proposed HCT alternatives that would best meet the 2014 adopted purpose and need for the project. More details on this review process are provided in Chapters 1 and 2 of this Draft EIS.

The project refinement phase included the review of many alternatives to connect Portland to Tigard and Tualatin using alternate routes; termination points; and combinations of bus rapid transit, light rail, streetcar and improvement of the WES Commuter Rail. The following potential avoidance alternatives were considered and removed from further consideration for the reasons listed below:

- WES improvements were eliminated, because they would result in high property impacts, including impacts to potentially historic properties, and they did not meet the land use goals outlined in the purpose and need.
- Bus rapid transit alternatives using high occupancy vehicle or high occupancy toll lanes on I-5 would not meet the corridor land use vision outlined in the Purpose and Need.
- Streetcar service would not meet the demand in the corridor without dedicated right of way that would likely have similar Section 4(f) impacts as light rail .
- Bus rapid transit in exclusive right of way would have impacts very similar to those of light rail in exclusive right of way and would likely impact Section 4(f) resources. However, it would not be able to accommodate long-term ridership demand.
- Three tunnels under Marquam Hill in South Portland for bus rapid transit were removed from consideration, because they would reduce the major advantage of bus rapid transit over light rail of reduced capital costs. Other tunnels were removed, because they would not serve the demand on SW Barbur Boulevard in support of the land use goals outlined in the Purpose and Need.

Least Overall Harm Analysis

There are seven factors to consider when determining which alternative would cause the least overall harm [23 CFR Part 774.3(c)(1), including:

1. Ability to mitigate adverse impacts on each Section 4(f) resource (including any measures that would result in benefits for the resource);
2. Relative severity of the remaining harm, after mitigation, to the protected activities, attributes, or features that qualify each Section 4(f) resource for protection;
3. Relative significance of each Section 4(f) resource;
4. Views of the officials with jurisdiction over each section 4(f) resource;
5. Degree to which each alternative meets the purpose and need for the project;

6. After reasonable mitigation, the magnitude of any adverse impacts on resources not protected by Section 4(f);
7. Substantial differences in cost among alternatives.

The full Section 4(f) least harm analysis will be completed with the Final EIS following the selection of the preferred alternative and further coordination with the officials with jurisdiction. Metro and TriMet evaluated potential avoidance minimization measures for the large park and recreation parcels and any potentially eligible resource that is identified as a full acquisition (See Table D-8). This analysis will be further refined as design progresses.

Southwest Corridor Measures to Minimize Net Harm

As discussed above, there are no prudent and feasible alternatives that can avoid all of the Section 4(f) resources. Therefore, it is necessary to determine which alternative would result in the least overall harm to Section 4(f) resources, taking into account the net impacts to Section 4(f) resources after applying reasonable measures to minimize harm.

Because the Southwest Corridor Light Rail Project is currently in the conceptual design phase, it is not possible to draw conclusions about the feasibility of all of the potential measures to minimize harm. This Appendix D Draft 4(f) Evaluation carries all likely and potentially likely measures forward for consideration. These measures will be further evaluated as the project sponsors identify a PA and refine the project design. In all cases, measures to minimize harm to Section 4(f) resources will be considered in coordination with the relevant consulting parties for historic resources, and with the officials with jurisdiction for park resources.

Table D-8 presents the overall potential Section 4(f) uses for each alignment alternative. Table D-9 provides a summary of potential minimization measures for park and recreational resources and any historic property identified as a full acquisition. FTA, Metro and TriMet will continue to refine the design to avoid and minimize impacts to Section 4(f) resources.

Table D-8. Full-Corridor Section 4(f) Uses by Segment (multi-page table)

Alignment Alternatives and Options	Effects Due to Acquisitions (Full and Partial) and Easements at Section 4(f) Resource Locations			
	Permanent 4(f) Use	Potential <i>de minimis</i> Impact or Permanent Use	Potential Temporary Use	Total Potential Use
No-Build	0	0	0	0
Segment A: Inner Portland – Alignment Alternatives				
A1: Barbur	6	19	9	34
A2-BH: Naito Bridgehead	8	21	25	54
A2-LA: Naito Limited Access	16	14	5	35
Segment A: Inner Portland – Marquam Hill Connection Options				
1A: Elevator/Bridge and Path	1	0	0	1
1B: Elevator/Bridge and Recessed Path	1	0	0	1

Table D-8. Full-Corridor Section 4(f) Uses by Segment (multi-page table)

Alignment Alternatives and Options	Effects Due to Acquisitions (Full and Partial) and Easements at Section 4(f) Resource Locations			
	Permanent 4(f) Use	Potential <i>de minimis</i> Impact or Permanent Use	Potential Temporary Use	Total Potential Use
1C: Elevator/Bridge and Tunnel	1	0	0	1
2: Full Tunnel	1	0	0	1
Segment B: Outer Portland – Alignment Alternatives				
B1: Barbur	5	5	1	11
B2: I-5 Barbur TC-60th	4	3	1	8
B3: I-5 26th-60th	3	5	1	9
B4: I-5 Custer-60th	2	4	1	7
Segment C: Tigard and Tualatin – Alignment Alternatives				
C1: Ash-I-5	0	3	0	3
C2: Ash-Railroad	0	3	0	3
C3: Clinton-I-5	0	3	0	3
C4: Clinton-Railroad	0	3	0	3
C5: Ash-I-5 Branched	0	3	0	3
C6: Wall-I-5 Branched	0	2	0	2

Note: TC = Transit Center.

Table D-9 lists the measures being considered to avoid or minimize harm to Section 4(f) park and recreational resources and historic resources (for full acquisitions). The table indicates which Section 4(f) resources could benefit from each measure and which measures are considered likely.

Table D-9. Potential Minimization Measures (multi-page table)

Section 4(f) Resource	Potential Minimization Measure	Impact Avoided
Segment A: Inner Portland		
Park and Recreational Resources		
Duniway Park	Retain existing sidewalk.	Avoid partial acquisition in northeast corner of site, which is already developed with an existing sidewalk.
Lair Hill Park	Remove left-turn lane to reduce light rail alignment cross-section. Maintain existing sidewalk. Potentially elevate light rail in center-running alignment.	Reduce or avoid partial acquisition along western property boundary that would remove mature trees.
Terwilliger Parkway (along SW Barbur Boulevard)	Minor shifts in alignment and/or utilize multiuse path (MUP) section and/or elevate light rail.	Avoid partial acquisition and construction easement use of open space parcels on west side of SW Barbur Blvd. that are managed as part of Terwilliger Parkway.
Front and Curry Community Garden	Reduce sidewalk width or street limits.	Reduce or avoid partial acquisition and removal of vegetation.

Table D-9. Potential Minimization Measures (multi-page table)

Section 4(f) Resource	Potential Minimization Measure	Impact Avoided
George Himes Natural Area Park	Light rail could be located along east side of the Newbury trestle bridge structure and/or utilize side-running MUP section to reduce cross-section.	Reduce or avoid partial acquisitions and removal of vegetation. Cannot avoid temporary closure of SW Trail #3.
Historic Resources		
ID 36 – Tartarimi House #1	Could elevate light rail and place MUP under structure.	Could avoid house but still impact property.
ID 52 – Baldwin House	Reconfigure widening as part of A2-LA.	Could avoid house but still impact property.
ID 53 – Jolly House	Reconfigure widening as part of A2-LA.	Avoid impact to property.
ID 59 – Fiebiger House	Shift alignment west (without increasing impacts to historic resources on west side) and/or narrow sidewalks.	Could avoid house and property impacts.
ID 68 – Wolfman House	Reconfigure widening as part of A2-LA.	Avoid impact to property.
ID 69 – Robertson House	Shift alignment west, but that would impact additional historic property on west side.	Avoid impact to property.
ID 70 – Carlson House	Shift alignment west, but that would impact additional historic property on west side.	Avoid impact to property.
ID 95 – Maxwell House	Reconfigure widening as part of A2-LA.	Avoid impact to property.
ID 97 – Tillman House	Reconfigure widening as part of A2-LA.	Avoid impact to property.
ID 98 – Driskell House	Shift alignment west, but that would impact additional historic property on west side.	Avoid impact to property.
ID 147 – Ahavath Achim Synagogue	Design to avoid building.	Could avoid building, but still would impact property.
ID 180 – 022 SW Lowell St.	Reconfigure or narrow A2-LA. Retaining wall height could be difficult.	Avoid impact to property.
ID 187 – Jewish Shelter Home	Shift alignments to west, resulting in additional impacts to the west for A2-BH and A2-LA. For A1, could narrow the sidewalk.	Avoid impact to property.
ID 188 – 4145 SW Corbett Ave.	Shift alignment west, but that would impact additional historic property.	Avoid impact to property.
ID 189 – 4205 SW Corbett Ave.	Shift alignment west, but that would impact additional historic property.	Avoid impact to property.
Segment B: Outer Portland		
Park and Recreational Resources		
Fulton Park, Community Garden and Community Center	Realign curve to shift alignment to northwest.	Avoid partial acquisition and vegetation removal.
Markham Elementary School	Shift alignment to the west and/or reduce sidewalk width.	Avoid partial acquisition, vegetation removal and impact to pedestrian stairwell access.
Historic Resources		
ID 379 – Capitol Hill Motel	Could use elevated option for B1 and B2.	Avoid impact to building, but still would impact property.
ID 400 – Stash’s Hollywood Motel; Antler Motel	Eliminate left-turn pocket at SW Huber St. and narrow cross-section.	Avoid impact to building, but still would impact property.
ID 411 – 5350 SW Pasadena St.	Move or reduce the Barbur TC Park and Ride.	Avoid impact to building, but still would impact property.

Table D-9. Potential Minimization Measures (multi-page table)

Section 4(f) Resource	Potential Minimization Measure	Impact Avoided
ID 412 – 11125 SW Barbur Blvd.	Could reduce total park and ride footprint by building more levels of the park and ride structure.	Avoid building and property impacts.
Segment C: Tigard and Tualatin		
No minimization measures were considered in Segment C at this phase.		

Preliminary Conclusion

There are no prudent and feasible alternatives that could avoid all Section 4(f) resources.

The range of alternatives includes alternatives that can avoid one or more Section 4(f) resources, and a variety of measures that will be considered in order to further minimize harm to Section 4(f) resources. Additional design work, mitigation development and coordination will be required to make a final conclusion on which measures are likely feasible, and what combination of measures will cause the least overall harm.

Officials with Jurisdiction Coordination

State Historic Preservation Office (SHPO)

FTA initiated Section 106 consultation with Oregon SHPO and requested comment on the initial area of potential effects (APE) in April 2017. Before initiating consultation, SHPO reviewed and commented on the historic and archaeological and Section 4(f) analysis methods as a participating agency for NEPA. Additionally, FTA initiated Section 106 consultation with four tribes (Confederated Tribes of Grand Ronde Community of Oregon, Confederated Tribes of the Warm Springs, Confederated Tribes of Siletz Indians of Oregon and Cowlitz Indian Tribe) and invited six agencies or organizations to become a consulting party for the Section 106 process. The preliminary APE was sent to the Oregon SHPO, tribes and consulting parties for comment, and the Oregon SHPO requested to concur on the revised APE for the preferred alternative. The Oregon SHPO also attended a tour of the corridor on May 1, 2017. SHPO was offered an opportunity to review early drafts of the Section 4(f) and associated historic and archaeological resources information in February 2018. In addition, FTA shared with SHPO a memo outlining the phased approach to complying with Section 106 for concurrence. SHPO offered no comments on the information shared and concurred with the phased approach for Section 106 in a letter dated March 2, 2018.

City of Portland

Metro and TriMet have met with the City of Portland PPR four times over the last year to discuss impacts to parks that are managed or owned by the city. In addition, Metro and TriMet have met weekly with staff from the City of Portland Bureau of Transportation, which is the city bureau designated at the lead for the Southwest Corridor Light Rail Project. The City of Portland reviewed and commented on all sections of the Draft EIS, including this appendix. Additionally, PPR sent a letter to Metro (attached) on May 15, 2018, that indicates the coordination that has occurred and the expectations for the Final EIS and further discussions related to Section 4(f) park properties.

Future Coordination

A preferred alternative will be selected in summer 2018. After the preferred alternative is identified and further details on properties to be acquired and potentially removed are known, the year of eligibility for historic resources will be expanded to 1975. This update will ensure adequate review and documentation under Section 106 even if the start of property acquisitions is delayed past 2020, and will maintain consistency with other projects in the region.

Historic archaeological and built environment resources that would be impacted by the preferred alternative will be formally documented using the Determination of Eligibility (DOE) forms. FTA will formally submit the revised APE and DOEs combined with a proposed Finding of Effect (FOE) to SHPO for concurrence with a 30-day review period during development of the Final EIS.

Oregon SHPO acknowledged that an extensive archaeological investigation would not be practical and recommended a programmatic agreement and detailed inadvertent discovery plan for artifacts uncovered during construction. (See more on resolving adverse effects below.) In addition, focused shovel tests may be undertaken in areas where there is a high probability for discovering artifacts through ground-disturbing construction activities. These areas will be identified using the Draft EIS analysis and information about the programmatic agreement, and in consultation with SHPO and tribes.

Historic resources that are fully or partially acquired or included in the temporary construction easement boundary for the preferred alternative will be fully evaluated for effects. Such evaluation will include appropriate public and consulting party review and comment prior to completion of the Final EIS. The FOE reports will be prepared based on the Criteria of Adverse Effect established in 36 CFR 800, which will include effects to historic properties from visual and aesthetic changes, noise and vibration, context and setting effect from partial parcel acquisitions and any construction-related impacts. As described above, FTA will formally transmit the FOEs along with the DOEs to SHPO for a 30-day review and concurrence.

Metro and TriMet will continue to coordinate with the City of Portland on impacts to parks and recreational resources. Metro and TriMet will obtain written correspondence from the City of Portland on any *de minimis* impact. In addition, any required mitigation will be coordinated with the city.

Targeted public involvement for eligible historic and parks and recreation resources that are affected by the project will occur between the time of the Draft EIS and Final EIS processes. Metro and TriMet will coordinate with FTA to develop a public involvement plan that includes specific dates and types of activities for outreach. The outreach will include tribes, stakeholders and the public through an open house specifically for Section 4(f) resources.

APPENDIX D – DRAFT SECTION 6(F) OF THE LAND AND WATER CONSERVATION FUND EVALUATION

Introduction

Section 6(f) of the federal Land and Water Conservation Fund (LWCF) Act of 1965 (54 U.S.C. 200305 et seq.) requires that recreational properties acquired or developed with grant be replaced in the event of permanent, non-recreation uses of those properties. Replacement land must be of at least equivalent property and recreation value. The National Park Service (NPS) is the agency that approves any LWCF conversion based on an evaluation that illustrates that the replacement proposed is equivalent to the property being removed from LWCF.

There are three types of conversions (36 CFR Part 59):

- **Full conversion.** When the use of or access to an entire LWCF resource property would be changed from recreation to another use for longer than six months
- **Partial conversion.** When the use of a portion of an LWCF property would be changed from recreation to another use for longer than six months

An evaluation is required for any proposed conversion of an LWCF property to a non-recreation use. The Southwest Corridor Light Rail Project identified a potential conversion that will need to be evaluated and approved. This appendix is not a full LWCF evaluation because there is not a Preferred Alternative selected. This appendix includes a description of the potentially impacted LWCF property, potential measures to avoid and minimize impacts to the property, and a description of the coordination with NPS and officials with jurisdiction. Additionally, it outlines the next steps for the project to complete the full LWCF conversion evaluation for the Preferred Alternative in the Final Environmental Impact Statement (EIS).

What Is the Process?

The process for converting an LWCF property (36 CFR Part 59) to a non-recreation use is described below. Most of this process will occur between the Draft EIS and the Final EIS, following the selection of a Preferred Alternative.

1. **Determine if a LWCF resource is present in or near the project area.** The NPS and officials with jurisdiction (Oregon Parks and Recreation Department and Portland Parks and Recreation) keep records of all properties that have received LWCF grants.
2. **Determine the boundary area submitted in the original LWCF application.** The boundary area can be a small area within the park, the whole park, a trail or an area that traverses through the park. The boundary is determined based on what area is considered to be park property at the time of the final LWCF payment.
3. **Evaluate avoidance and minimization measures.** All practical alternatives that would avoid the LWCF conversion need to be evaluated and then rejected only if there is a sound basis for doing so. In addition, efforts to minimize the LWCF conversion should be evaluated and documented.

4. **Coordinate with the NPS and officials with jurisdiction to identify potential replacement property.** The replacement property must be of at least equal fair market value as the original property, as determined by a state-approved appraisal that follows the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970. The property must also have reasonably equivalent usefulness and location as the property being converted, but it does not need to be adjacent.
5. **Send NPS a formal request for regulatory approval to convert an LWCF property to a use other than a public outdoor recreation use.** The request will identify the LWCF property, summarize the alternatives analysis, describe the commitment to mitigation, and demonstrate support from the officials with jurisdiction.
6. **Acquire the land being converted and the replacement property¹.** The properties will be acquired utilizing the Tri-County Metropolitan Transportation District of Oregon (TriMet) right of way process. The replacement property should be deeded to the City of Portland and added to the properties subject to LWCF requirements.
7. **Close out the LWCF conversion process.** Near the end of construction, a formal LWCF conversion proposal must be submitted to the NPS for final approval. This step closes the process.

Under the LWCF regulations (36 CFR Part 59), conversion of parkland may be approved only if NPS finds that the following criteria have been met:

1. All practical alternatives to the proposed conversion have been evaluated;
2. The fair market value of the park property to be converted has been established, and the property proposed for substitution is of at least equal fair market value, as established by an approved appraisal in accordance with the Uniform Appraisal Standards for Federal Land Acquisitions, excluding the value of structures or facilities that will not serve recreational purposes;
3. The proposed replacement property is of reasonably equivalent usefulness and location as the converted property;
4. The property proposed for substitution meets the eligibility requirements for LWCF-assisted acquisition;
5. For properties that are proposed to be partially rather than wholly converted, the impact of the converted portion on the remainder must be considered, and the unconverted area must remain recreationally viable or be replaced as well;
6. All necessary coordination with other federal agencies has been satisfactorily accomplished;
7. The guidelines for environmental evaluation have been satisfactorily completed and considered by the NPS during its review of the conversion proposal; and
8. The proposed conversion is in accordance with the applicable Statewide Comprehensive Outdoor Recreation Plan and/or equivalent recreational plans.

The Section LWCF evaluation in the Final EIS will describe how the conversion meets all of the criteria.

¹ The project proponent can acquire the land being converted and replacement property with written permission from National Park Service.

Description of LWCF Resources with a Potential Conversion

Terwilliger Parkway is the only recreation resource in the Southwest Corridor project area that has property subject to an LWCF grant. Terwilliger Parkway is a 99-acre linear parkway along SW Terwilliger Boulevard between SW Sam Jackson Park Road and SW Capitol Highway. The City of Portland acquired the land for Terwilliger Parkway beginning in 1917; it is part of the regional 40-Mile Loop Trail system and provides paved walking paths, picnic tables, viewpoints, hiking trails, bicycle paths and a playground.

There are two parcels discussed in this section. The “Gilbert Parcel” was acquired as part of an LWCF grant that included acquisition of six additional properties totaling 74.66 acres. The Gilbert Parcel was donated as matching funds valued at \$5,500. The original LWCF grant was intended to expand the Marquam Nature Park area and support the eventual construction of a trail connecting Marquam Nature Park to Tryon Creek State Park (see Attachment 1). A portion of the Terwilliger Parkway was included in the LWCF boundary as part of that grant.

The boundary area for this Marquam Nature Park grant is determined by the portions of Terwilliger Parkway that connect the parks, as depicted on the LWCF grant submittal maps, that were owned by the City of Portland as of the grant closeout in December 1981. The boundary is not easily delineated; it requires an exhaustive records search from the City of Portland. National Park Service provided guidance that any portion of Terwilliger Parkway that was considered park in 1981 and is connected by the trail in Attachment 1 is subject to LWCF.

A small parcel adjacent to SW Barbur Boulevard (not the Gilbert parcel) is potentially impacted by the project. This small triangle parcel is part of a larger portion of the Terwilliger Parkway property that was donated in 1911 by the heirs of James Terwilliger, and based on preliminary research, the small triangle parcel adjacent to SW Barbur Boulevard was included in that gift. See Figure 1 for pictures of the parcel included in the LWCF boundary. The parcel is gravel and wooded, with no trail access or developed recreation facilities in this area.

Additional research will be conducted during the Final EIS to determine when this property was acquired by the city.

LWCF Resource Impacts

The Southwest Corridor Light Rail Project would potentially impact approximately 0.08 acre of the small triangle parcel adjacent to SW Barbur Boulevard that is described above. Figure 1 illustrates the location of the Gilbert Parcel and the impacted parcel adjacent to SW Barbur Boulevard. At this location, SW Barbur Boulevard would be widened to accommodate center-running light rail, and would include a sidewalk, bicycle lanes, and two motor vehicle travel lanes in each direction. In total, the width of SW Barbur Boulevard in this area would be 114 feet. Additionally, the alignment would include a 20-foot-high retaining wall on this parcel.

The impacts are based on preliminary designs for an area that has not been surveyed. Both survey data and additional design will be required to understand the magnitude of the impact. The design will also take into account a drainage structure that crosses the parcel, traffic impacts and potential mitigation measures.

Figure 1
Potential 6(f) Conversions



Preliminary Evaluation of Avoidance and Minimization Measures

Metro and TriMet conducted a preliminary evaluation of potential ways to avoid or minimize potential impacts to the LWCF property. The two design modification options they developed are: (1) reduce the overall width of the cross section of the light rail alignment or (2) shift the entire alignment to the east.

Reduce the Overall Cross Section

Travel lane, bicycle lane and/or sidewalk widths would need to be reduced in order to avoid or minimize impacts to the LWCF property. Reductions in the width of the cross section would lessen impacts; however, as mentioned above, there is not sufficient survey or design information to allow for a clear evaluation of whether reducing the width would completely avoid the impact to the LWCF property.

Shift Alignment East

The entire project alignment would need to shift approximately 20 feet to the east to keep the current cross section width and avoid or minimize permanent or construction-related impacts to the LWCF property. A retaining wall would increase the overall cross-section width an additional 10 to 30 feet. The potentially impacted parcel is located on a curve, which will cause impacts to parcels that are north and south of this location on the east side of SW Barbur Boulevard, including likely impacts to a multifamily residential building or its access, and additional impacts to a Seventh Day Adventist Church located to the north on the south side of SW Condor Avenue.

Coordination with NPS and Officials with Jurisdiction

Beginning in early 2017, Metro and TriMet contacted the NPS and the Oregon Parks and Recreation Department to obtain a list of LWCF grants within the study area, which was defined as 150 feet in all directions from the edge of all alignment alternatives and options. Additionally, Metro and TriMet have conducted ongoing coordination with the City of Portland Parks and Recreation department about the impact to the property described in this appendix and other city park properties.

The City of Portland Parks and Recreation Department sent a letter on May 15, 2018 (Attachment 2) documenting the coordination that has occurred during the Draft EIS development and stated the intent to continue those discussion through the Final EIS (Attachment 2). This coordination will continue after the Preferred Alternative has been selected and sufficient survey and design information exists to more fully understand the impact to the LWCF resource. As the design advances, Metro and TriMet will continue to explore designs that will avoid or minimize impacts.

UNITED STATES DEPARTMENT OF THE INTERIOR
 Heritage Conservation and Recreation Service
 Land and Water Conservation Fund Project Agreement

State Oregon Multnomah County	Project Number 41-01056
Project Title Marquam Nature Park	
Project Period 12/27/78 to 12/31/83	Project Stage Covered by this Agreement

Project Scope (Description of Project)

To acquire 6 parcels of land with a total area of approximately 74.65 acres as a nature park.

Project Cost	
Total Cost	\$ <u>1,490,500</u>
Fund Support not to exceed 50% Fund Amount	\$ <u>745,250</u>
Cost of this Stage	\$ <u>1,490,500</u>
Assistance this Stage	\$ <u>745,250</u>

The following are hereby incorporated into this agreement:

1. General Provisions (HCRS Manual)
2. Project Application and Attachments.
3. _____
4. _____

Date <u>5/25/79</u> By <u>YH</u>

The United States of America, represented by the Director, Heritage Conservation and Recreation Service, United States Department of the Interior, and the State named above (hereinafter referred to as the State), mutually agree to perform this agreement in accordance with the Land and Water Conservation Fund Act of 1965, 78 Stat. 897 (1964), the provisions and conditions of the Heritage Conservation and Recreation Service Manual (Grants-in-Aid Series), and with the terms, promises, conditions, plans, specifications, estimates, procedures, project proposals, maps, and assurances attached hereto or retained by the State and hereby made a part hereof.

The United States hereby promises, in consideration of the promises made by the State herein, to obligate to the State the amount of money referred to above, and to tender to the State that portion of the obligation which is required to pay the United States' share of the costs of the above project stage, based upon the above percentage of assistance. The State hereby promises, in consideration of the promises made by the United States herein, to execute the project described above in accordance with the terms of this agreement.

The following special project terms and conditions were added to this agreement before it was signed by the parties hereto:

In witness whereof, the parties hereto have executed this agreement as of the date entered below.

THE UNITED STATES OF AMERICA

By Maurice H. Lundy

(Signature)

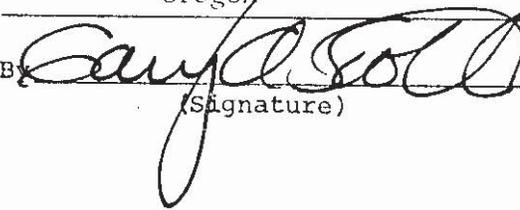
Heritage Conservation and
Recreation Service
United States Department
of the Interior

Date MAY 17 1979

STATE

Oregon

By


(Signature)

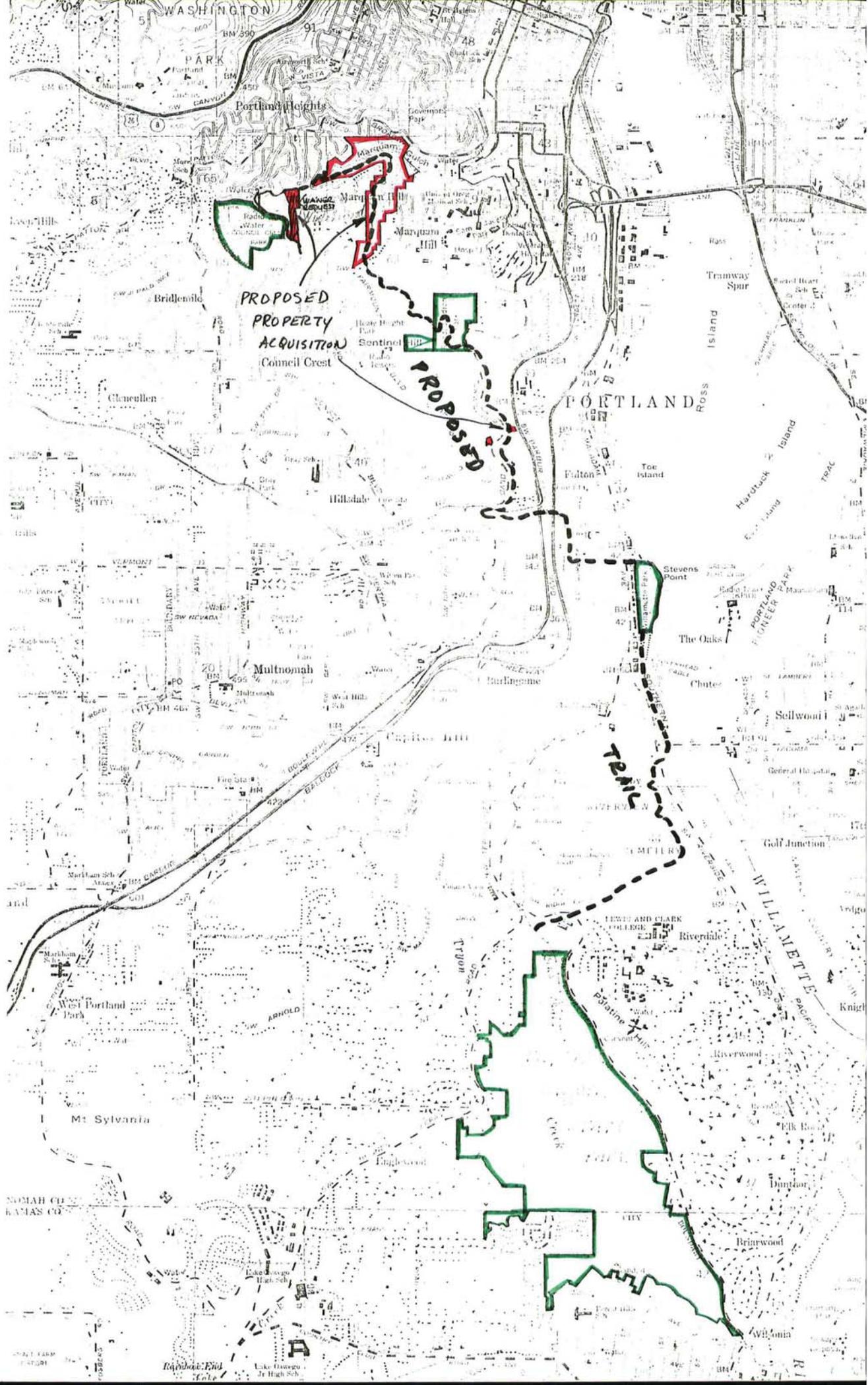
Gary A. Scott

(Name)

State Recreation Director

(Title)

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U.S. DEPARTMENT OF THE INTERIOR



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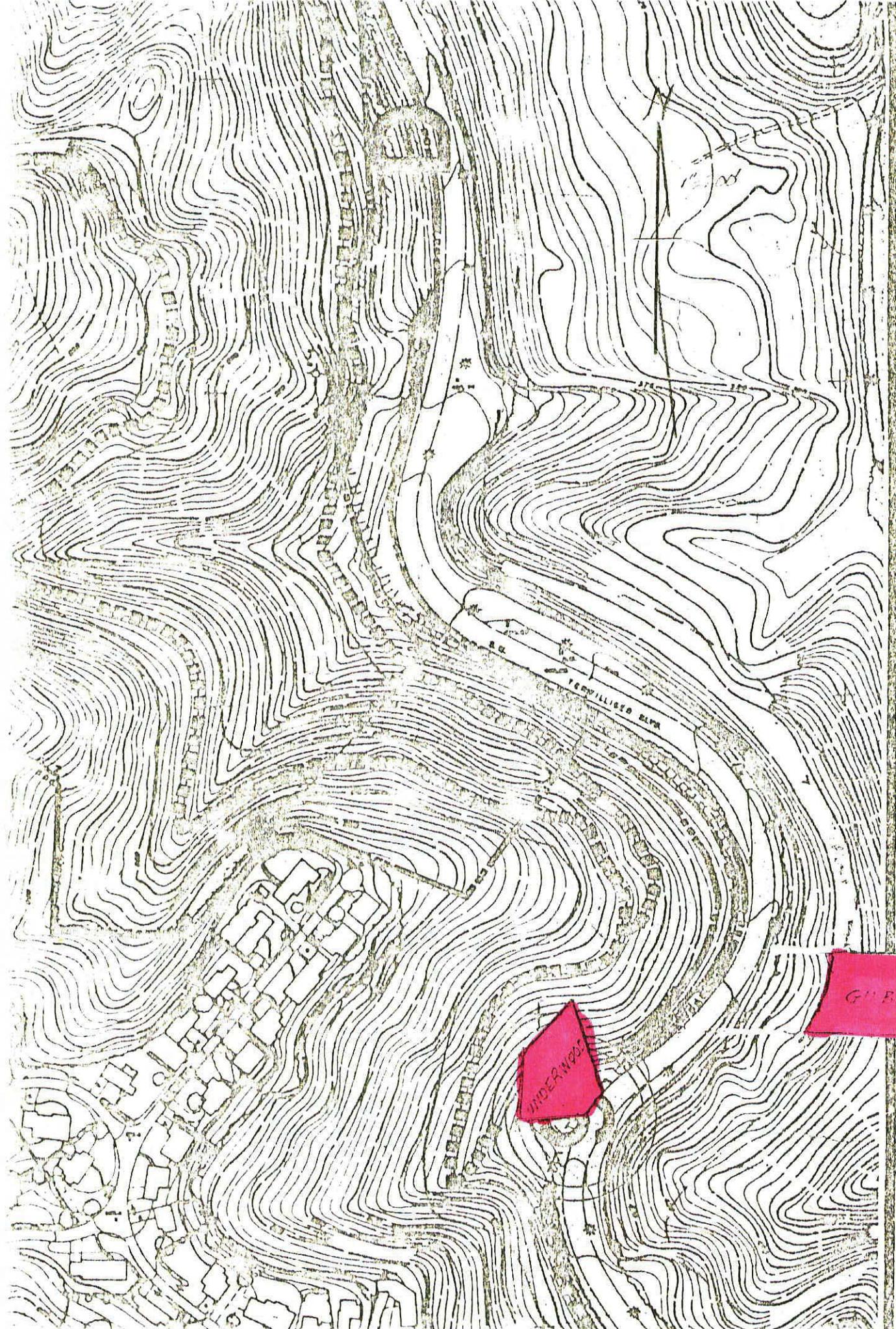
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Walker, and Mac... P.C. April 28, 1978



PORTLAND PARKS & RECREATION

Healthy Parks, Healthy Portland

May 14, 2018

Chris Ford
SW Corridor Project Manager
Metro
600 NE Grand Avenue
Portland, OR 97212

Subject: SW Corridor Project Potential Park Property Use

Dear Mr. Ford,

The City of Portland Parks and Recreation (PP&R) is pleased to collaborate with TriMet and Metro on the SW Corridor Light Rail Project (“the Project”) – a project of regional and statewide significance. As in past projects, PP&R staff look forward to reviewing alternative alignments in such a way as to avoid, minimize, and/or mitigate potential impacts to PP&R properties. Based on past experience and the collaboration to date on this current project, we have confidence that the Project team will support the PP&R mission. PP&R and Project staff have met to discuss potential Section 4(f) and 6(f) impacts and we are committed to continuing to collaborate on each potential park facility impact as summarized below.

Duniway Park – Potential impacts to this park occur with the SW Barbur Blvd. alignment in Segment A and include sidewalk, low retaining wall, and parking lot issues at the northwest corner of the park. PP&R and Project staff will continue to collaborate on project design refinements to minimize and mitigate these impacts to the park.

Lair Hill Park – Potential impacts to this park occur with the SW Barbur Blvd. alignment in Segment A from a small expansion of SW Barbur Boulevard in the northwest edge of the park. Project staff will coordinate with PP&R and other City bureaus and Project partners to ensure all parties arrive at a design solution that balances safe transportation with potential park impacts.

Terwilliger Parkway – PP&R understands that all Project alternatives provide a direct pedestrian connection to OHSU from a planned SW Gibbs Street station that will impact this park property. PP&R acknowledges that

Administration

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Portland, OR 97204
Tel: (503) 823-7529 Fax: (503) 823-6007

www.PortlandParks.org
Amanda Fritz, Commissioner
Mike Abbaté, Director



both a bridge/elevator design or tunnel option would impact the parkland. PP&R also understands that this connection is vital to providing a successful Project due to the crucial social equity benefits of greatly improving access to the medical services, jobs and education opportunities on Marquam Hill. Project staff have committed to convene a committee representing interested parties, including PP&R, to pursue a refined design to minimize and mitigate potential park impacts from this proposed pedestrian connection.

Front and Curry Community Garden – Both SW Naito Parkway alignments have the potential to remove mature trees and landscaping within the street right-of-way along the eastern edge of this park facility. Project staff have been exploring ways to minimize impacts to park users by minimizing the cross section of Naito Parkway should either of these alignments move forward.

George Himes Park and Recreational Trail – All DEIS alignment alternatives show potential impacts to the eastern edge of this park facility along SW Barbur Boulevard and the associated public trail below the Barbur Blvd. structure. Project staff have identified ways to avoid any permanent impacts to the park. PP&R and Project staff will coordinate on construction impact minimization and mitigation. LRT designs must also consider ways to allow for eventual Red Electric Trail (an important regional trail) connectivity across the Barbur right-of-way, whether under the Newberry Viaduct or at SW Miles Street (near Fulton Park).

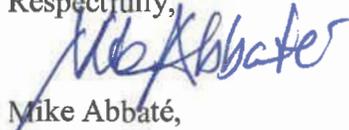
Fulton Park – All DEIS alignment alternatives show potential impacts to the western edge of this facility along SW Barbur Boulevard. Project staff are exploring ways to avoid or reduce impacts to this park by minimizing the width of Barbur Blvd. improvements. PP&R and Project staff will continue to coordinate on minimizing impacts and identifying appropriate mitigation to park facilities.

Sylvania Natural Area Park – PP&R understands that all Project alternatives provide an improved pedestrian and bicyclist connection between a planned SW 53rd Ave. station and the PCC Sylvania Campus on existing transportation right-of-way. No physical encroachment into the park is anticipated, however mature vegetation adjacent to the eastern edge of the nature park will be removed and path entrances may be temporarily impacted. PP&R and Project staff expect to work closely with neighborhood residents to refine designs for this street connection that fit seamlessly with the adjacent Sylvania Natural Area Park.

While PP&R is committed to a cooperative and collaborative process with the Project, this letter shall in no way constitute an approval by either the City or PP&R, of the Project, or resolution, acceptance of mitigation of impacts, or approval or findings of the various issues identified with the Project, including, but not limited to, the 6(f) and 4(f) issues. PP&R considers the impacts of the

Marquam Hill connector to be rather important in terms of its potential visual, historic, ecological and cultural impacts to the Terwilliger park property, which will require careful thought in its design, as well as mitigation. PP&R looks forward to continue working on design refinement as the project proceeds to ensure PP&R facilities are made whole through this process, so that neighborhoods served by the proposed light rail project also have the parks and recreation facilities that they've come to expect.

Respectfully,

A handwritten signature in blue ink that reads "Mike Abbate". The signature is written in a cursive style and is positioned above the printed name.

Mike Abbate,
Director

cc Dave Unsworth, TriMet