

Attachment M

Draft Section 4(f) Analysis

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Attachment M. Draft Section 4(f) Analysis

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Acronyms, Initialisms, and Abbreviations

ADA	Americans with Disabilities Act
APE	Area of Potential Effect (term used for cultural resources)
API	Area of Potential Impact
BES	City of Portland Bureau of Environmental Services
CFR	Code of Federal Regulations
CIP	Capital Improvement Plan
CSZ	Cascadia Subduction Zone
EIS	Environmental impact statement
EQRB	Earthquake Ready Burnside Bridge
FHWA	Federal Highway Administration
FR	Federal Register
NEPA	National Environmental Policy Act of 1969
NHPA	National Historic Preservation Act of 1966
NRHP	National Register of Historic Places
ODOT	Oregon Department of Transportation
OWJ	Official with Jurisdiction
PP&R	Portland Parks and Recreation
PSM	Portland Saturday Market
SHPO	State Historic Preservation Office
UPRR	Union Pacific Railroad
USC	United States Code
USDOT	U.S. Department of Transportation
WRWT	Willamette River Water Trail

Chapter 1 – Section 4(f) Technical Analysis

1.1 Introduction

This Section 4(f) analysis report has been prepared with and is attached as part of the Supplemental Draft Environmental Impact Statement (SDEIS) for the Earthquake Ready Burnside Bridge (EQRB) Project. It is an update to the Section 4(f) analysis prepared as part of the Draft EIS and is organized into the following chapters:

- Chapter 1 – Technical Analysis
Identifies, describes, and provides preliminary determination of Section 4(f) use for Section 4(f) properties within the Project's Area of Potential Impact (API).
- Chapter 2 – Section 4(f) Evaluation
Analyzes the alternatives that avoid Section 4(f) property and determines if they are feasible and prudent.
- Chapter 3 – Nationwide Programmatic Section 4(f) Evaluation for Projects that Necessitate the Use of Historic Bridges
Applies and analyzes project details specific to the Burnside Bridge to document compliance with the programmatic evaluation.

Section 4(f) of the U.S. Department of Transportation (USDOT) Act of 1966 prohibits FHWA and other USDOT agencies from using land from publicly owned parks, recreation areas (including recreational trails), wildlife and waterfowl refuges, or public and private historic properties unless there is no feasible and prudent alternative to that use and the action includes all possible planning to minimize harm to the property resulting from such a use. Section 4(f) properties include the following:

- Parks and recreational areas of national, state, or local significance that are both publicly owned and open to the public.
- Publicly owned wildlife and waterfowl refuges of national, state, or local significance that are open to the public to the extent that public access does not interfere with the primary purpose of the refuge.
- Historic sites of national, state, or local significance either listed on, or eligible for listing on the National Register of Historic Places (NRHP) in public or private ownership regardless of whether they are open to the public.
- Archaeological sites that are either listed on, or eligible for listing on, the NRHP and warrant preservation in place.

1.2 Project Location

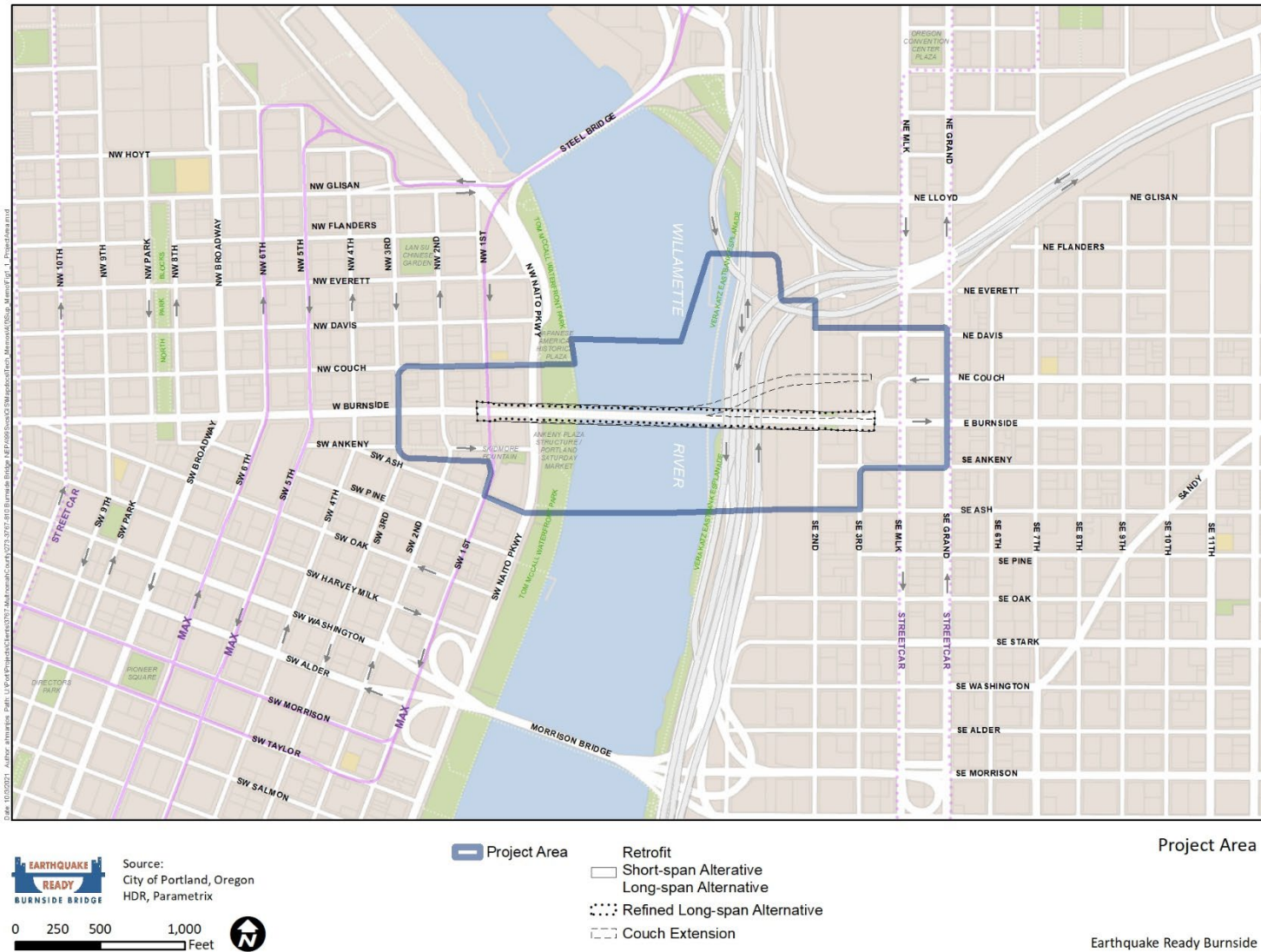
The project area is located within the central city of Portland. The Burnside Bridge crosses the Willamette River connecting the west and east sides of the city. The project area encompasses a one-block radius around the existing Burnside Bridge and W/E Burnside Street, from NW/SW 3rd Avenue on the west side of the river and

NE/SE Grand Avenue on the east side. Several neighborhoods surround the area including Old Town/Chinatown, Downtown, Kerns, and Buckman. Figure 1-1 shows the project area.

1.3 Project Purpose

The primary purpose of the project is to build a seismically resilient Burnside Street lifeline crossing over the Willamette River that will remain fully operational and accessible for vehicles and other modes of transportation following a major Cascadia Subduction Zone (CSZ) earthquake. The Burnside Bridge would provide a reliable crossing for emergency response, evacuation, and economic recovery after an earthquake. Additionally, the bridge would provide a long-term safe crossing with low-maintenance needs.

Figure 1-1. Project Area



Source: City of Portland, HDR, Parametrix

1.4 Project Alternatives

The project alternatives are described in detail with text and graphics in the *EQRB Description of Alternatives Report* (Multnomah County 2021c) and in Chapter 2 of the *EQRB Supplemental Draft Environmental Impact Statement* (Multnomah County 2022e). That memo describes the alternatives' current design as well as operations and construction assumptions.

This technical analysis, as well as the Draft EIS combined with the SDEIS, evaluate the No-Build Alternative and four build alternatives. The Draft EIS studied an Enhanced Seismic Retrofit Alternative that would replace certain elements of the existing bridge and retrofit other elements, and it studied three replacement alternatives that would completely remove and replace the existing bridge. The Draft EIS identifies one of the replacement alternatives, known as the Replacement Long-span Alternative, as the Preferred Alternative. The draft Section 4(f) Analysis that was published with the Draft EIS demonstrated that the Replacement Long-span Alternative was the Section 4(f) least harm alternative. Since the publication of the Draft EIS, the Multnomah Board of County Commissioners requested that the project team identify and evaluate ways to reduce project construction costs while still achieving the performance and impact advantages of the Long-span Alternative. Toward that end, the project team developed a Refined Long-span Alternative that is very similar to the Draft EIS Long-span Alternative except that it has one less vehicle lane (four versus five) and has a narrower bridge deck and bridge piers. Evaluating the impacts and performance of the Refined Long-span Alternative is the focus of the SDEIS and this Section 4(f) analysis. This Section 4(f) analysis also discusses how the impacts would compare for refined (narrowed) versions of the other replacement alternatives, including the Short-span and Couch Extension Alternatives.¹ Figure 1-11 shows the Refined Long-Span Alternative footprint and Boundary of Potential Construction Impacts. The refined versions of the other replacement alternatives would have the same Boundary of Potential Construction Impacts. In addition, the Draft EIS and this technical analysis consider options for managing traffic during construction. Nomenclature for the alternatives/options is:

- No-Build Alternative
- Build Alternatives
 - Enhanced Seismic Retrofit (Retrofit Alternative)
 - Replacement Alternative with Short-span Approach (Short-span Alternative) and the refined, narrower version of the Short-span Alternative (Refined Short-span Alternative)
 - Replacement Alternative with Long-span Approach (Draft EIS Long-span Alternative), the Draft EIS names this alternative as the Preferred Alternative (with no temporary bridge)

¹ There is no narrower version of the Enhanced Retrofit Alternative that was studied in the Draft EIS because this alternative would retrofit large sections of the existing bridge and therefore the bridge width is fixed and could not be narrowed. Also, this alternative is already the same width as the refined (narrowed) versions of the replacement alternatives.

- Refined Replacement Alternative with Long-span Approach (Refined Long-span Alternative), this is a refinement of the Draft EIS Preferred Alternative, also with no temporary bridge
- Replacement Alternative with Couch Extension (Couch Extension) and the refined, narrower version of the Couch Extension Alternative (Refined Couch Extension)
- Construction Traffic Management Options
 - Temporary Detour Bridge Option (temporary bridge) includes three modal options:
 - Temporary Bridge: All modes
 - Temporary Bridge: Transit, Bicycles and Pedestrians only
 - Temporary Bridge: Bicycles and Pedestrians only
 - Without Temporary Detour Bridge Option (No Temporary Bridge)

Please see the *EQRB Description of Alternatives Report* (Multnomah County 2021c) and Chapter 2 of the *EQRB Supplemental Draft Environmental Impact Statement*. (Multnomah County 2022e) for text, maps, and graphical descriptions of the alternatives.

1.5 Definitions

The following terminology is used when discussing geographic areas in the EIS and this analysis:

- **Project Area** – The area within which improvements associated with the project alternatives would occur and the area needed to construct these improvements. The project area includes the area needed to construct all permanent infrastructure, including adjacent parcels where modifications are required for associated work such as utility realignments or upgrades. For the EQRB Project, the project area includes approximately a one-block radius around the existing Burnside Bridge and W/E Burnside Street, from NW/SW 3rd Avenue on the west side of the river and NE/SE Grand Avenue on the east side.
- **Area of Potential Impact (API)** – This is the geographic boundary within which physical impacts to the environment could occur with the project alternatives. The API is resource-specific and differs depending on the environmental topic being addressed. The API for Section 4(f) properties is defined in Section 1.7.1.

1.6 Section 4(f) Regulations

Federal requirements protecting publicly owned parks, greenspaces, recreational areas and trails, wildlife and waterfowl refuges, and public or private historic sites apply to all transportation projects that receive USDOT funding or require USDOT approval. These requirements, known as Section 4(f), are originally from Section 4(f) of the USDOT Act of 1966, which was recodified in 1983 as 49 United States Code (USC) 303, Policy on lands, wildlife and waterfowl refuges, and historic sites and 23 USC 138 Preservation of parklands. The implementing regulations for Section 4(f) are located at 23 CFR 774.

The Section 4(f) analysis relies on information from, and coordination conducted for, the *EQRB Parks and Recreation Technical Report* (Multnomah County 2021e), *EQRB Parks and Recreation Supplemental Memorandum* (Multnomah County 2022d), *EQRB Cultural Resources Technical Report* (Multnomah County 2021b), and the *EQRB Cultural Resources Supplemental Memorandum* (Multnomah County 2022a).

1.6.1 Use of Section 4(f) Properties

Section 4(f) prohibits the use of Section 4(f) properties for USDOT-approved transportation projects except under certain defined circumstances. USDOT agencies, including the Federal Highway Administration:

...may approve a transportation program or project (other than any project for a park road or parkway under section 204 of title 23) requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, State, or local significance, or land of an historic site of national, State, or local significance (as determined by the Federal, State, or local officials having jurisdiction over the park, area, refuge, or site) only if—

1. *there is no prudent and feasible alternative to using that land; and*
2. *the program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use.*

A Section 4(f) "use" occurs under the following three scenarios:

(1) A Section 4(f) property is permanently incorporated into a transportation facility. Permanent incorporation can include fee simple acquisition as well as permanent easements.

(2) A Section 4(f) property is required, in whole or in part, for project construction-related activities. The Section 4(f) property is not permanently incorporated into a transportation facility, but the effects are considered to be adverse in terms of the preservation purposes the Section 4(f) statute. Such effects constitute a "use" unless the effects meet all the conditions for "temporary occupancy" as stated in 23 CFR §774.13(d). Temporary occupancy is not a "use."

(3) A Section 4(f) property is not permanently incorporated, but the transportation project's proximity effects are so severe that the protected activities, features, or attributes that qualify the property for protection under Section 4(f) are substantially impaired. This is known as "constructive use." Examples of such use include the following:

- **Noise** – The projected noise level increase from the project substantially interferes with the use and enjoyment of a resource that is protected by Section 4(f), such as enjoyment of a historic site where a quiet setting is a generally recognized feature or attribute of the site's significance.
- **Aesthetics** – The proximity of the proposed project impairs the aesthetic quality of a resource, where aesthetic qualities are considered important contributing elements to the value of a resource, such as impairment to visual or aesthetic qualities that obstructs or eliminates the primary views of an architecturally significant historic building.

- **Access Restrictions** – The project results in a restriction of access to the Section 4(f) resource, which substantially diminishes the utility of the resource.
- **Vibration** – A vibration impact from the operation of a project substantially impairs the use of a Section 4(f) resource, such as projected vibration levels from a rail transit project great enough to affect the structural integrity of a historic building.
- **Ecological Intrusion** – The ecological intrusion of the project substantially diminishes the value of wildlife habitat in a wildlife or waterfowl refuge adjacent to the project or substantially interferes with the access to a wildlife or waterfowl refuge. There are no wildlife or waterfowl refuges in or adjacent to the project area, so ecological intrusion is not discussed further.

1.6.2 Exceptions to Section 4(f) Use

23 CFR 774.13 identifies various exceptions to the requirement for Section 4(f) approval. Subsection (d) provides that temporary occupancies of land that are so minimal as to not constitute a use are not considered a Section 4(f) use when the following conditions are satisfied:

- 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.

1.6.3 Approval of Section 4(f) Use

When there is a use of Section 4(f) property, FHWA will determine what level of documentation is needed to make a Section 4(f) approval. Under Section 4(f), FHWA cannot approve the use of land from Section 4(f) properties as part of a transportation project unless:

- There is no feasible and prudent avoidance alternative to the use of land and the action includes all possible planning to minimize harm to the Section 4(f) property resulting from such use; or
- FHWA determines that the use of the property will have a *de minimis* impact. *De minimis* impacts related to historic sites are defined as the determination of either “no adverse effect” or “no historic properties affected” in compliance with Section 106 of the National Historic Preservation Act (NHPA). *De minimis* impacts on publicly owned parks, recreation areas, and wildlife and waterfowl refuges are defined as those that do not “adversely affect the activities, features, and attributes” of the

Section 4(f) property. The Official with Jurisdiction (OWJ) must concur with the *de minimis* determination. For historic sites, the State Historic Preservation Office (SHPO) is the OWJ; for parks, recreation areas, and wildlife and waterfowl refuges, the OWJ is the official of the agency that owns and/or administers the property. If a transportation use of Section 4(f) property results in *de minimis* impact, analysis of avoidance alternatives is not required, and the Section 4(f) evaluation process is complete.

If impacts to a Section 4(f) resource do not meet the conditions for a *de minimis* impact determination, there are two approval options depending on the type of Section 4(f) use: A programmatic Section 4(f) evaluation or an individual Section 4(f) evaluation. These approval types are described below.

1.6.3.1 Programmatic Section 4(f) Evaluations

FHWA has issued five nationwide programmatic Section 4(f) evaluations which can be implemented if the project meets specific conditions. Two of the nationwide programmatic evaluations may be applicable to this Project:

1.6.3.2 Historic Bridge Programmatic Section 4(f) Evaluation

One of the five nationwide programmatic evaluations includes the Programmatic Section 4(f) Evaluation and Approval for FHWA Projects that Necessitate the Use of Historic Bridges. This programmatic Section 4(f) evaluation may be applied by FHWA to projects which meet the following criteria:

1. The bridge is to be replaced or rehabilitated with federal funds.
2. The project will require the use of a historic bridge structure which is on or is eligible for listing on the NRHP.
3. The bridge is not a National Historic Landmark.
4. The FHWA Division Administrator determines that the facts of the project match those sections of the programmatic Section 4(f) evaluation guidelines regarding alternatives, findings, and mitigation.
5. Agreement among FHWA, SHPO, and the Advisory Council on Historic Preservation has been reached through procedures pursuant to Section 106 of the NHPA.

Following publication of the Draft EIS, including the draft Section 106 Memorandum of Agreement (MOA), FHWA will review comments received from the public, agencies, and the Oregon SHPO and determine whether this Project meets the five criteria above. This determination will be included in the Final EIS.

1.6.3.3 Net Benefit Programmatic Section 4(f) Evaluation

The net benefit nationwide programmatic Section 4(f) evaluation is applicable when FHWA and the OWJ agree that due to the project, the use of the Section 4(f) property would result in a net benefit to the Section 4(f) property. The criteria for use include the following:

1. The proposed transportation project uses a Section 4(f) park, recreation area, wildlife or waterfowl refuge, or historic site.

2. The proposed project includes all appropriate measures to minimize harm and subsequent mitigation necessary to preserve and enhance those features and values of the property that originally qualified the property for Section 4(f) protection.
3. For historic properties, the project does not require the major alteration of the characteristics that qualify the property for the NRHP such that the property would no longer retain sufficient integrity to be considered eligible for listing. For archaeological properties, the project does not require the disturbance or removal of the archaeological resources that have been determined important for preservation in place rather than for the information that can be obtained through data recovery. The determination of a major alteration or the importance to preserve in place will be based on consultation consistent with 36 CFR Part 800.
4. For historic properties, consistent with 36 CFR Part 800, there must be agreement reached amongst the SHPO and/or Tribal Historic Preservation Officer, as appropriate, FHWA and the applicant on measures to minimize harm when there is a use of Section 4(f) property. Such measures must be incorporated into the project.
5. The official(s) with jurisdiction over the Section 4(f) property agree in writing with the assessment of the impacts; the proposed measures to minimize harm; and the mitigation necessary to preserve, rehabilitate and enhance those features and values of the Section 4(f) property; and that such measures will result in a net benefit to the Section 4(f) property.
6. FHWA determines that the project facts match those set forth in the Applicability, Alternatives, Findings, Mitigation and Measures to Minimize Harm, Coordination, and Public Involvement sections of the programmatic evaluation.

1.6.3.4 Individual Section 4(f) Evaluations

An individual Section 4(f) evaluation must be completed when approving a project that requires the use of Section 4(f) property if the use results in a greater than *de minimis* impact and a programmatic Section 4(f) evaluation cannot be applied. An individual Section 4(f) evaluation must document the proposed use of Section 4(f) properties by all project alternatives and make the following determinations:

1. That there is no feasible and prudent alternative that completely avoids the use of the Section 4(f) property; and
2. The project includes all possible planning to minimize harm to the Section 4(f) property resulting from the transportation use. (23 CFR 774.3).

This chapter identifies and describes the Section 4(f) properties in the EQRB project area and analyzes the potential of each of the Alternatives to use those resources. After public comments on this draft Section 4(f) Analysis are received, a final Section 4(f) Analysis will be prepared and issued with the Final EIS/Record of Decision.

1.7 Affected Environment

1.7.1 Area of Potential Impact

The API specifically for the Section 4(f) analysis is a combined API including the same area as that for the parks and recreation and archaeologic and historic resources Area of Potential Effect (APE).² The parks and recreation API is bounded by the parcels of land immediately adjacent to the project area (see Figure 1-1). There are no wildlife/waterfowl refuges present in or nearby the project area, so no separate API is defined for refuges.

FHWA is the lead federal agency and is responsible for defining the APE for EQRB; FHWA has delegated some NHPA responsibilities to the Oregon Department of Transportation (ODOT). Formal definition of the APE has been made in consultation with Oregon SHPO. The APE for the Project has been defined to address where the Project may have physical alterations to historic properties, as well as where there may be effects from noise and vibration, and changes to traffic patterns and the visual setting. The APE defined in consultation with the SHPO includes the maximum footprint of the build alternatives, including approaches and the temporary bridge proposed during construction. The APE has also been defined to include all of the geographic extent of the New Chinatown/Japantown Historic District and Skidmore/Old Town National Historic Landmark District. The APE abuts the East Portland Grand Avenue Historic District at SE Ankeny and SE Grand Avenue, but that historic district is not within the APE. The APE therefore extends from SE Grand Avenue on the east to NW 5th Avenue on the west. The New Chinatown/Japantown Historic District boundaries are West Burnside north to NW Glisan, NW 5th Avenue on the west, and NW 3rd on the east. The Skidmore/Old Town National Historic Landmark District boundaries are irregular and are best defined as mapped in Figure 1-2.

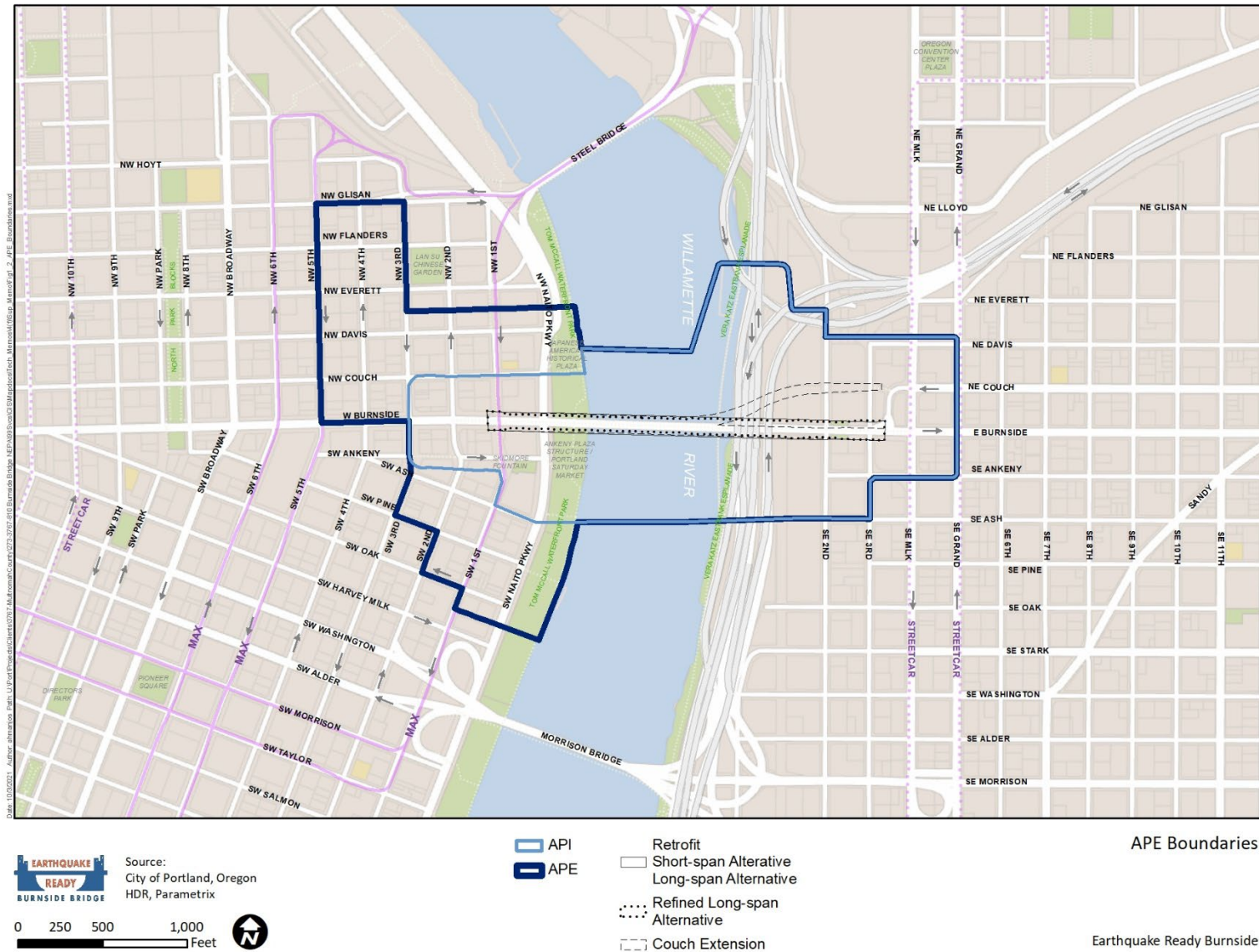
1.7.2 Resource Identification and Evaluation Methods

This report relies on the data collected and analyzed in the *EQRB Parks and Recreation Technical Report* (Multnomah County 2021e), *EQRB Parks and Recreation Supplemental Memorandum* (Multnomah County 2022d), *EQRB Cultural Resources Technical Report* (Multnomah County 2021b), and the *EQRB Cultural Resources Supplemental Memorandum* (Multnomah County 2022a).

Field visits to Section 4(f) properties within the API were conducted to confirm descriptions of existing conditions and observe activities at these properties.

² Area of Potential Effect, or APE, is the term used when discussing an impact area for cultural or historic resources. When discussion all other type of resources, the term used is Area of Potential Impact, or API.

Figure 1-2. APE Boundaries



Source: City of Portland, HDR, Parametrix

1.7.3 Section 4(f) Resources

1.7.3.5 Parks, Recreation, and Open Space Resources

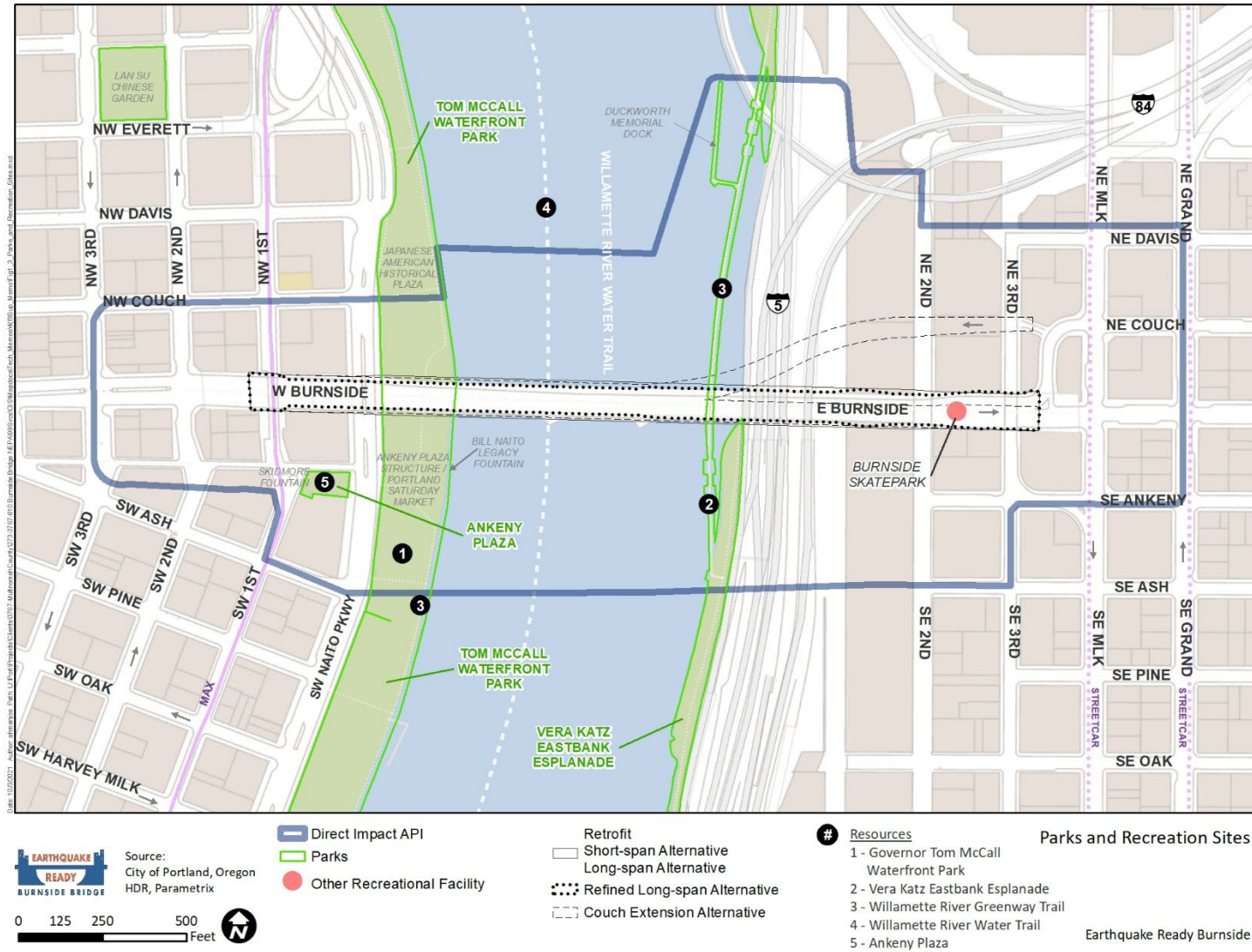
Table 1-1 identifies publicly owned park, recreation, and open space areas within the API that qualify as Section 4(f) resources (also see Figure 1-3, Figure 1-4, and Figure 1-5). Additional information about each resource is available in the *EQRB Parks and Recreation Technical Report* (Multnomah County 2021e). There are no changes to the existing conditions of the parks and recreation resources between the Draft EIS and the SDEIS.

Table 1-1. Section 4(f) Parks and Recreation Resources

ID	Resource	Ownership (Management)	General Resource Description and Features Within API
1	Governor Tom McCall Waterfront Park	City of Portland	Waterfront Park is an approximately 36-acre park that stretches between the Willamette River and Downtown Portland that was constructed between 1974 and 1978. The park replaced Harbor Drive to become the city's direct visual and physical access to the Willamette River. Features in the API include the following: <ul style="list-style-type: none"> • Willamette River Greenway Trail • Japanese American Historical Plaza • Ankeny Plaza Structure/Portland Saturday Market Location • The Meadow and Bill Naito Legacy Fountain
2	Vera Katz Eastbank Esplanade	City of Portland – Structure Oregon Division of State Lands – Beds and Banks of River	The 1.5-mile Esplanade extends north from the Hawthorne Bridge, past the Morrison and Burnside Bridges, and terminates at the Steel Bridge, with connections to eastside neighborhoods as well as across the river to Waterfront Park. The City of Portland developed the Esplanade after its completion of the Eastbank Riverfront Park Master Plan in 1994 (City of Portland 1994). Construction was completed in May 2001. Features in the API include the following: <ul style="list-style-type: none"> • Open all hours, all days • Floating walkway • Stairs connecting to Burnside Bridge • Multi-use pedestrian and bicycle trail • Kevin J. Duckworth memorial Dock
3	Willamette River Greenway Trail	City of Portland (within API)	The Willamette River Greenway Trail is an interconnected network of trails as components of the Willamette River Greenway Program, originated with the Willamette River Greenway Act by the Oregon Legislature in 1967 and guided by Oregon Statewide Planning Goal 15 to preserve natural spaces and public access to the Willamette River. Features in the API include the following: <ul style="list-style-type: none"> • Trail on west side of the river travels within Waterfront Park, adjacent to the seawall where possible within the API. • Trail on east side of the river travels within the Esplanade.
4	Willamette River Water Trail	Oregon Parks and Recreation Department	The Willamette River Water Trail (WRWT) administered by the Oregon Parks and Recreation Department is a 216-mile-long water-based trail. The WRWT is not a specific location or route within the river, but as the Willamette passes under the Burnside Bridge, the WRWT does as well.

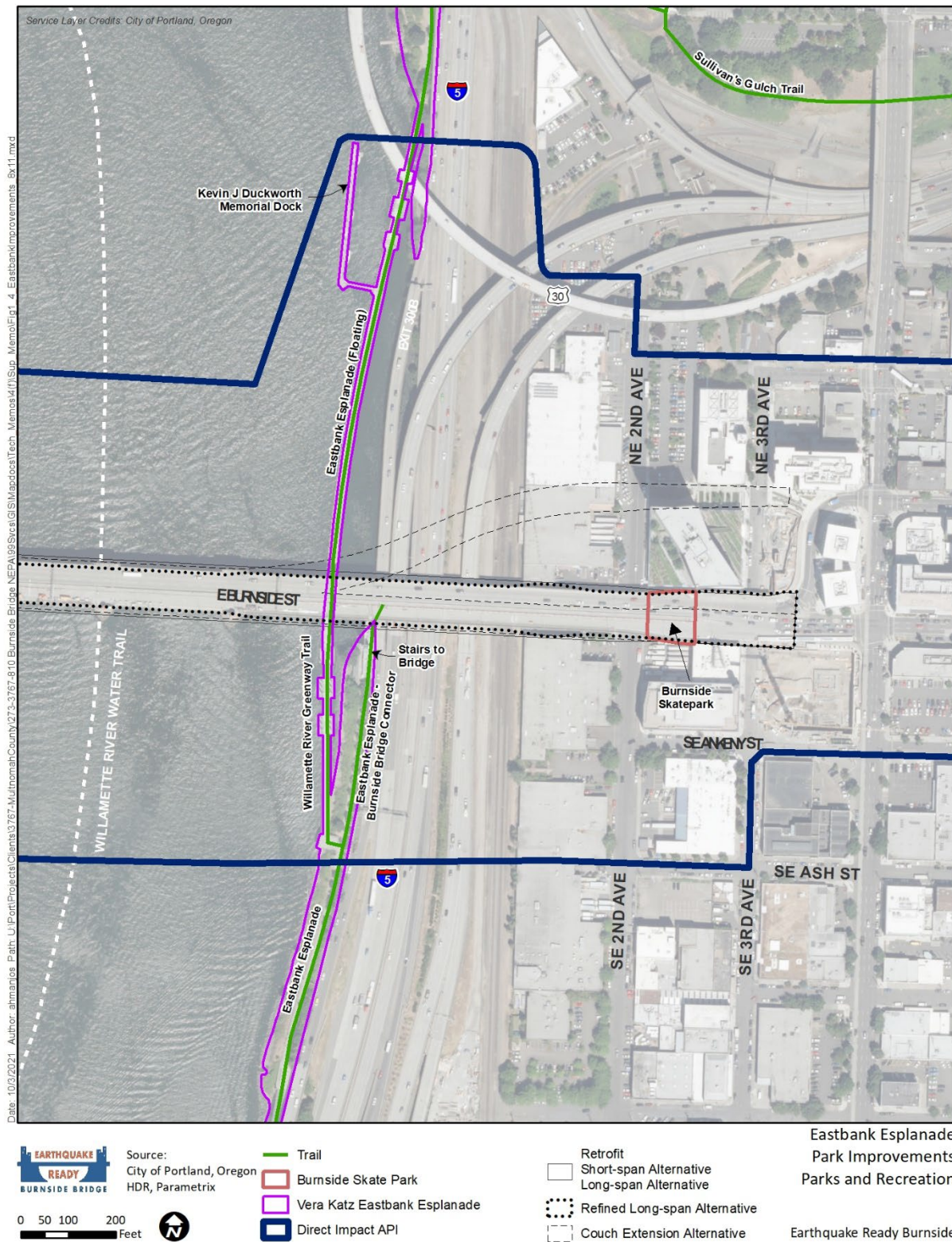
ID	Resource	Ownership (Management)	General Resource Description and Features Within API
5	Ankeny Plaza	City of Portland	<p>Ankeny Plaza is a 1.33-acre City of Portland park property just south of the Burnside Bridge between SW 1st Avenue and SW Naito Parkway, adjacent to SW Ankeny Street. Features in the API include the following:</p> <ul style="list-style-type: none"> • Hardscape plaza that features historic building material components, wrought iron details, and rows of deciduous trees. • Skidmore Fountain is a prominent feature in the park and is Portland's oldest piece of public art. • The plaza is used as part of the Portland Saturday Market.

Figure 1-3. Parks and Recreation Sites



Source: City of Portland, HDR, Parametrix

Figure 1-4. Vera Katz Eastbank Esplanade



Source: City of Portland, HDR, Parametrix

Figure 1-5. Gov. Tom McCall Waterfront Park



Source: City of Portland, HDR, Parametrix

1.7.3.6 Historic Sites

The API encompasses portions of one historic district, Skidmore/Old Town National Historic Landmark District, and abuts two additional districts, New Chinatown/Japantown Historic District on the west side of the API and East Portland / Grand Avenue Historic District on the east side of the API (see Figure 1-6). The *EQRB Cultural Resources Technical Report* (Multnomah County 2021b) identifies the contributing resources for the Skidmore/Old Town and New Chinatown/Japantown Historic Districts within the district boundaries but outside of the API. However, at the Oregon SHPO's direction, the *EQRB Cultural Resources Technical Report* (Multnomah County 2021b) focused the detailed survey on resources within the API.

A total of 49 historic resources were identified. No historic resources were added or removed as a result of the Refined Long-span Alternative.

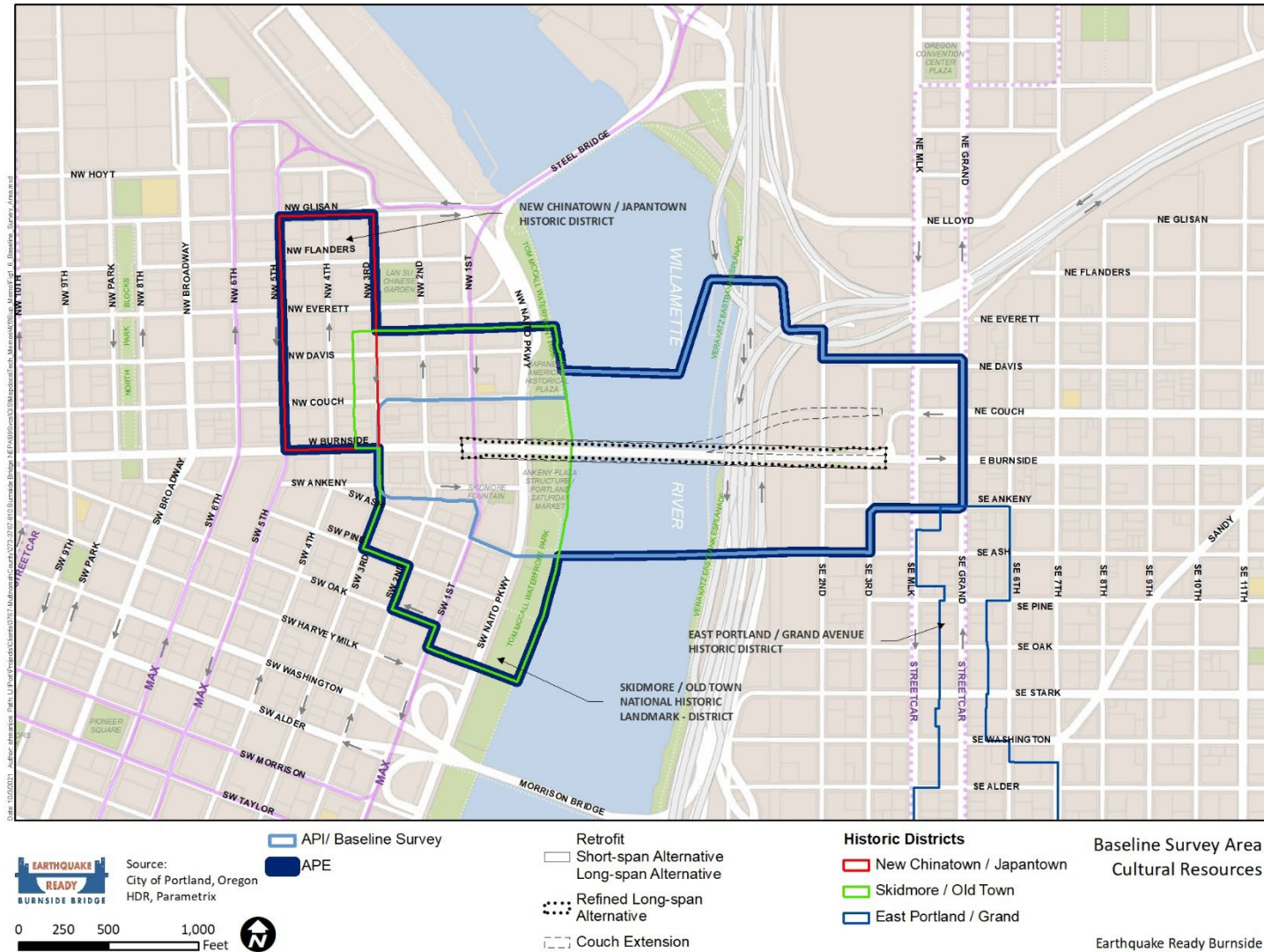
There are 29 resources within the API currently listed on the NRHP as either contributing resources in the Skidmore/Old Town National Historic Landmark District or individually listed. An additional 8 resources are eligible for listing on the NRHP. The 29 listed resources and 8 eligible resources are included in Appendix A and are considered historic Section 4(f) resources (also see Figure 1-7).

Section 4(f) resources either listed or considered eligible for listing on the NRHP within the API notable for their proximity to the Burnside Bridge include:

- The Burnside Bridge
- White Stag sign
- Portland Harbor Wall
- Burnside Skatepark
- Ankeny Pump Station
- Union Pacific Railroad
- Frigidaire/Templeton Building
- Bates Building
- Burnside Hotel
- Salvation Army Building
- Reed Building

In addition to above-ground historic resources, there is one previously recorded archaeological site within the API. Its status is unevaluated at this time. Further determination is needed to establish whether retention in place is warranted.

Figure 1-6. Baseline Survey Area



Source: City of Portland, HDR, Parametrix

Source: City of Portland, HDR, Parametrix



1.8 Assessment Methods

There are no changes to the assessment methods between the Draft EIS and SDEIS.

1.8.1 Use Assessment

All identified Section 4(f) properties were assessed to determine whether the project alternatives would result in a Section 4(f) use of the resource. The *EQRB Parks and Recreation Technical Report* (Multnomah County 2021e) analysis assisted in determining impacts that could be considered a Section 4(f) use. Use of archaeological and historic resources was evaluated in conjunction with the *EQRB Cultural Resources Technical Report* (Multnomah County 2021b) and the Findings of Effect prepared for the Section 106 analysis.

Conceptual engineering information for the build alternatives, in conjunction with property boundary and acquisition maps for the identified resources, were used to determine where the build alternatives might permanently or temporarily incorporate all or part of a Section 4(f) property into the transportation project. To determine whether there would be a constructive use, the Section 4(f) analysis evaluated whether there would be proximity impacts and determined whether the build alternatives would substantially impair protected activities, features, or attributes of adjacent or nearby Section 4(f) properties.

Where Section 4(f) use is anticipated, the agency with jurisdiction over that resource has been identified and contacted. The project team has arranged meetings with the Official with Jurisdiction over the properties to discuss the significance of the property and probable effects based on the assessment in this report.

Chapter 1 – Section 4(f) Technical Analysis identifies the alternatives that involve use of a Section 4(f) property and which alternatives, if any, would avoid or reduce the use. This chapter also discusses potential beneficial effects to Section 4(f) properties.

1.8.2 Avoidance and Measures to Minimize Harm

When project impacts to a Section 4(f) resource cannot be addressed through a *de minimis* impact determination or a nationwide programmatic evaluation, the project must consider whether there are feasible and prudent alternatives that would avoid the Section 4(f) use. As defined in the Section 4(f) regulations, an alternative is feasible if it can be built as a matter of sound engineering judgment. An alternative is prudent if all the following requirements are met:

- 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.

- There are no other factors that collectively have adverse impacts that present unique problems or reach extraordinary magnitudes.

If an alternative to avoid a Section 4(f) use is not feasible and prudent, that alternative may be removed from consideration. If there are no feasible and prudent alternatives that can avoid all Section 4(f) properties, then the project 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 properties not protected by Section 4(f)
- Substantial differences in costs among the alternatives

Avoidance and minimization measures are included in the EQRB Draft Section 4(f) Evaluation in Chapter 2.

1.9 Section 4(f) Preliminary Determinations of Use

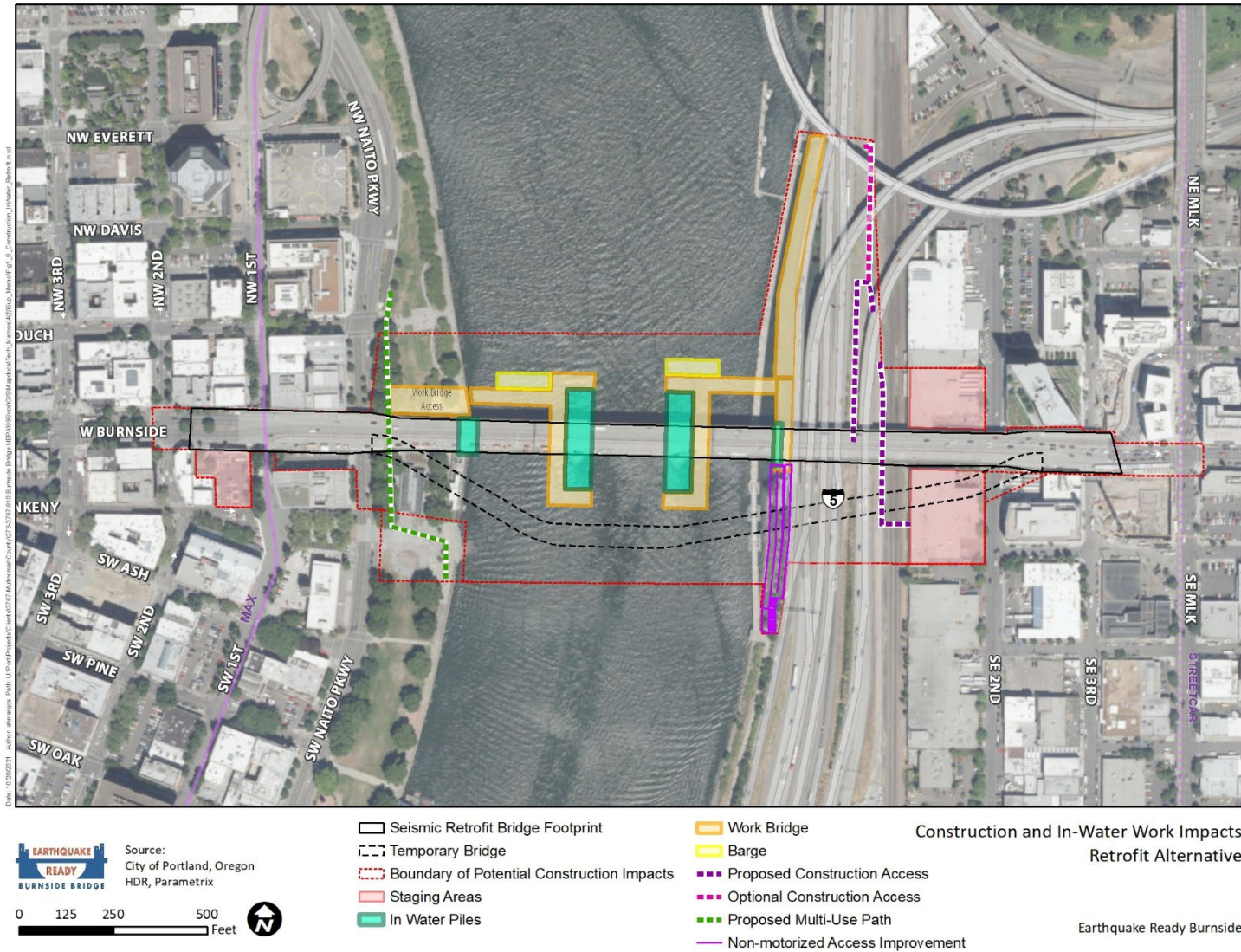
1.9.1 Parks, Recreation, and Open Space Resources

No permanent conversion of park property to a transportation or related use would occur under any of the build alternatives, including the Refined Long-span Alternative, thus no permanent use of Section 4(f) parkland resources is anticipated.

Temporary construction activities identified in the *EQRB Parks and Recreation Technical Report* (Multnomah County 2021e) and *EQRB Parks and Recreation Supplemental Memorandum* (Multnomah County 2022d) are anticipated to affect Gov. Tom McCall Waterfront Park, the Vera Katz Eastbank Esplanade, the Willamette Greenway Trail, and the Willamette River Water Trail (WRWT). These temporary construction activities are discussed below. No permanent use would occur within or adjacent to Ankeny Plaza, and no temporary activities would occur within Ankeny Plaza under any of the build alternatives, so this resource is not discussed further.

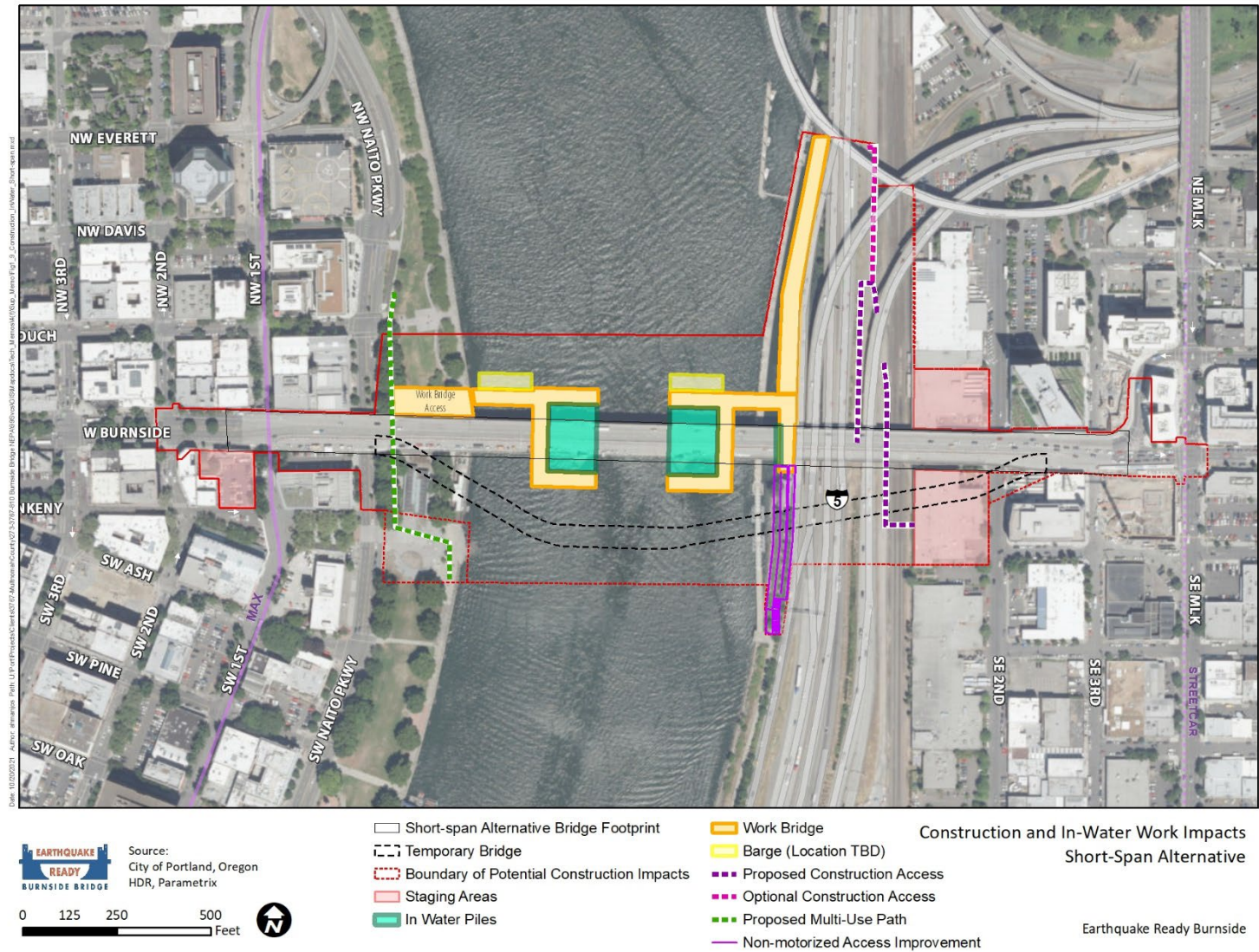
The area expected to be used by construction activities is shown on Figure 1-8 through Figure 1-12 as the Boundary of Potential Construction Impacts. Although the area is the same with respect to parks and recreation for all Draft EIS build alternatives (the area is reduced with the Refined Long-span Alternative), the length of time of construction and specific construction activities varies. With the addition of a temporary bridge to any build alternative, the Boundary of Potential Construction Impacts expands to the south (does not apply to the Refined Long-span Alternative). Table 1-2 summarizes the anticipated construction durations and closures with each of the build alternatives. Table 1-3 summarizes specific types of construction activities for each alternative.

Figure 1-8. Construction and In-Water Work Impacts – Retrofit Alternative



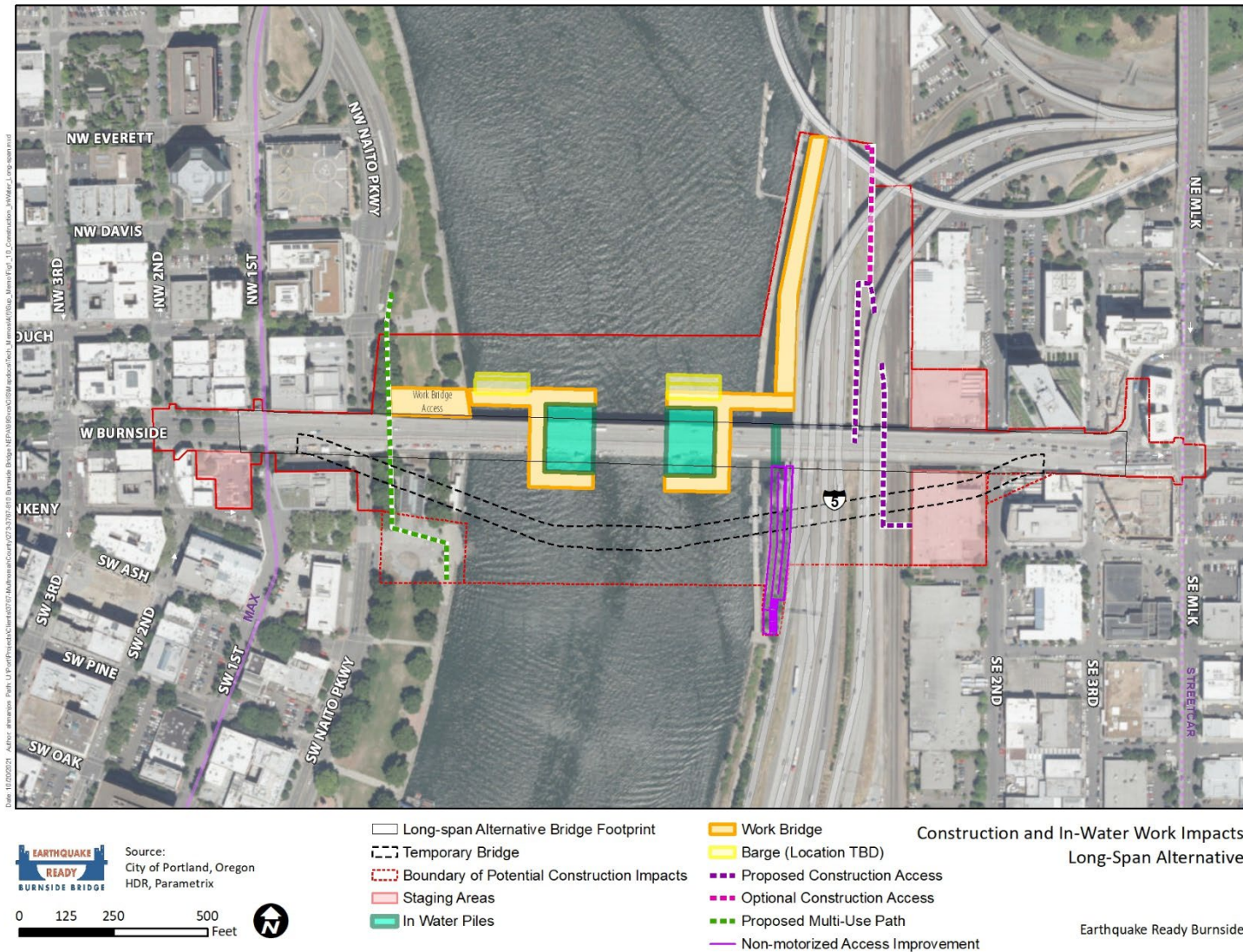
Source: City of Portland, HDR, Parametrix

Figure 1-9. Construction and In-Water Work Impacts – Short-Span Alternative



Source: City of Portland, HDR, Parametrix

Figure 1-10. Construction and In-Water Work Impacts – Long-Span Alternative



Source: City of Portland, HDR, Parametrix

Figure 1-11. Construction and In-Water Work Impacts – Refined Long-Span Alternative

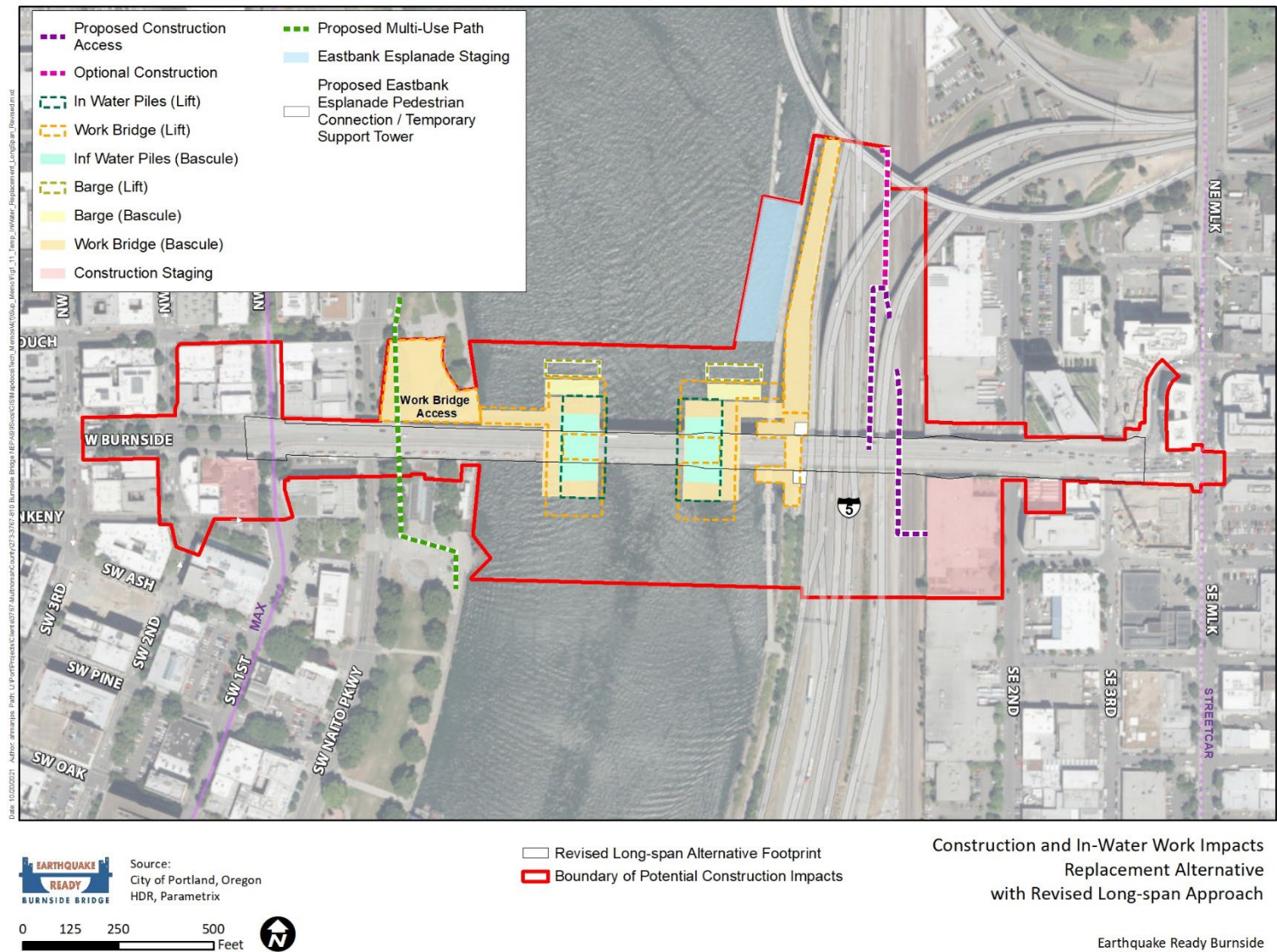
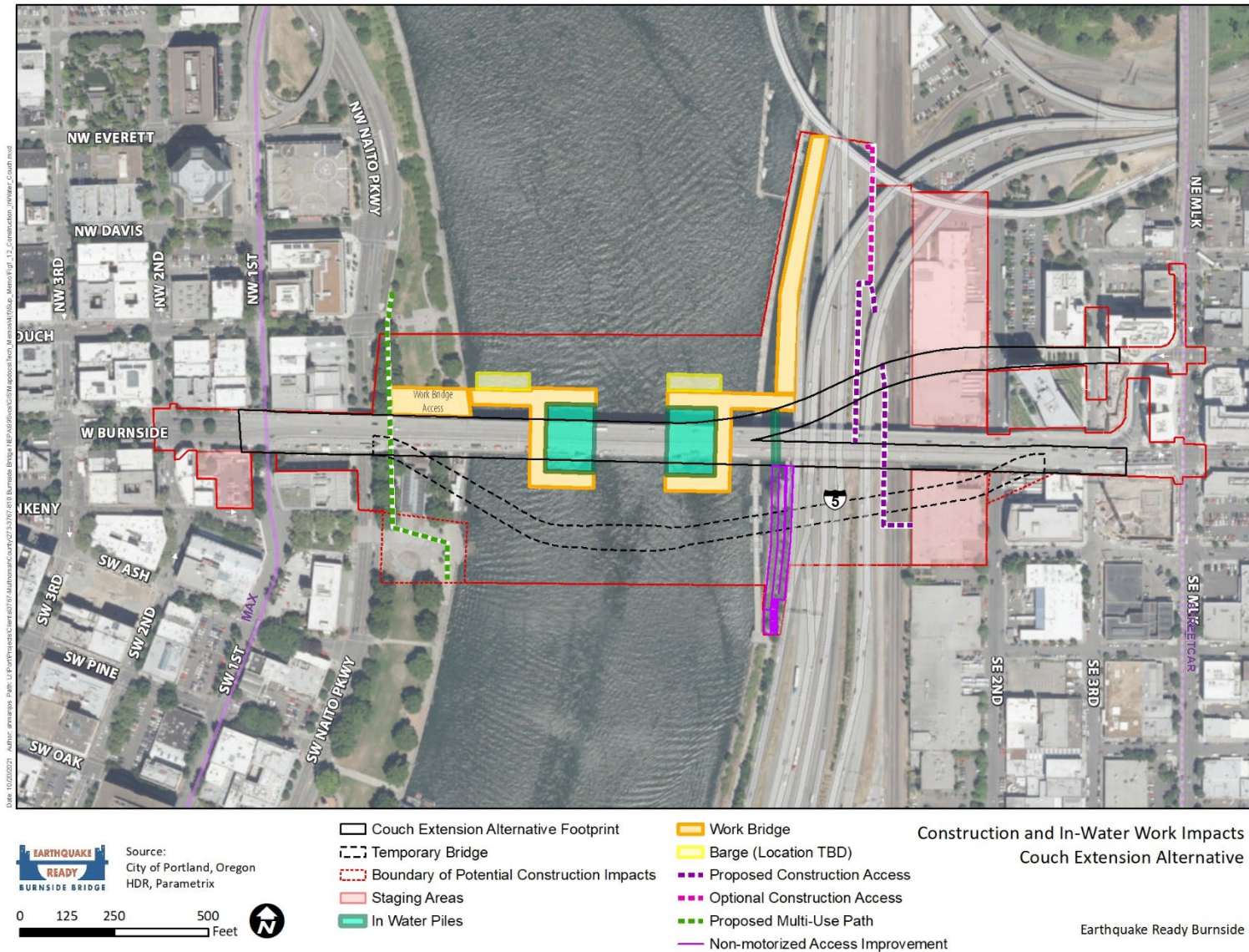


Figure 1-12. Construction and In-Water Work Impacts – Couch Extension Alternative



Source: City of Portland, Oregon, HDR, Parametrix

Table 1-2. Construction Timing with Parks and Recreation Resources

	Retrofit	Short-Span Alternative ^a	Couch Extension ^a	Draft EIS Long-Span Alternative	Refined Long-Span Alternative
Overall Construction – No Temporary Bridge	3.5 years	4.5 years	4.5 years	4.5 years	4.5 years
Overall Construction – w/ Temporary Bridge	5 years	6.5 years	6.5 years	6.5 years	N/A
Waterfront Park Restrictions – No Temporary Bridge	3.5 years	4.5 years	4.5 years	4.5 years	4.5 years
Waterfront Park Restrictions – w/ Temporary Bridge	5 years	6.5 years	6.5 years	6.5 years	N/A
Willamette River Water Trail Closure – No Temporary Bridge	6–10 weeks (intermittent)	6–10 weeks (intermittent)	6–10 weeks (intermittent)	6–10 weeks (intermittent)	6–10 weeks (intermittent)
Willamette River Water Trail Closure – w/ Temporary Bridge	8–12 weeks (intermittent)	8–12 weeks (intermittent)	8–12 weeks (intermittent)	8–12 weeks (intermittent)	N/A
Eastbank Esplanade Detour and Dock Closure – No Temporary Bridge	26 months	30 months	30 months	18 months	18 months
Eastbank Esplanade Detour and Dock Closure – w/ Temporary Bridge	30 months	34 months	34 months	22 months	N/A

N/A = not applicable

^a Construction timing for the refined versions of the Short-span and Couch Extension Alternatives is the same as reported above.**Table 1-3. Construction Activities within Parks and Recreation Resources**

Resource and Anticipated Construction Activity	Retrofit	Short-Span Alternative	Couch Extension	Draft EIS Long-Span Alternative	Refined Long-Span Alternative
Waterfront Park – Harbor Wall Replacement (segment)	Yes	Potential	Potential	No	No
Waterfront Park – Pier/support within Waterfront Park	Yes (expand existing)	Yes (new)	Yes (new)	Yes (less than existing)	Yes (less than existing)
Waterfront Park – In-Ground Improvements / jet grouting	Yes	Yes	Yes	No	No
Waterfront Park – Japanese American Plaza Southern Portion Closure	Yes	Yes	Yes	Yes	Yes
Waterfront Park – Ankeny Plaza (PSM) Structure Deconstruction/Rebuild	Yes – with a Temporary Bridge	Yes – with a Temporary Bridge	Yes – with a Temporary Bridge	Yes – with a Temporary Bridge	No – no Temporary Bridge Option

Resource and Anticipated Construction Activity	Retrofit	Short-Span Alternative	Couch Extension	Draft EIS Long-Span Alternative	Refined Long-Span Alternative
Waterfront Park – Bill Naito Fountain Area Temporary Closure	Yes – With a Temporary Bridge	Yes – With a Temporary Bridge ^a	Yes – With a Temporary Bridge ^a	Yes – With a Temporary Bridge	No – Smallest closure south of bridge
Waterfront Park – Willamette Greenway Trail Temporary Detour	Yes	Yes	Yes	Yes	Yes
Waterfront Park – Tree Removal North of Bridge (4 large and 10 smaller flowering ornamental trees)	Yes	Yes	Yes	Yes	Yes
Waterfront Park – Tree Removal South of Bridge	No – (9 with a Temporary Bridge)	Yes – 2 (7 Additional from Temporary Bridge)	Yes – 2 (7 Additional from Temporary Bridge)	Yes – 2 (7 Additional from Temporary Bridge)	Yes – 2 (no Temporary Bridge Option)
Eastbank Esplanade – In-ground Improvements / jet grouting	Yes	Yes	Yes	No	No
Eastbank Esplanade – Temporary Floating Esplanade Relocation/Detour	Yes	Yes	Yes	Yes	Yes
Eastbank Esplanade – Reconstructed Access to South Side of Bridge	Yes	Yes	Yes	Yes	Yes
Eastbank Esplanade – Piers Between Esplanade and Riverbank	Yes (existing)	Yes	Yes	No	No

N/A = not applicable

^a The refined versions of the Short-span and Couch Extension Alternatives would have the same reduced closure as the Refined Long-span Alternative.

1.9.1.7 All Parks and Recreation Resources

The *EQRB Noise and Vibration Technical Report* (Multnomah County 2021d) and *EQRB Noise and Vibration Supplemental Memorandum* (Multnomah County 2022c) indicate that some phases of construction would result in relatively high construction noise levels with exceedances of the City of Portland's construction noise limits, but that these could be reduced by implementing mitigation measures coordinated with Portland Parks and Recreation (PP&R). With these mitigation measures, Section 4(f) constructive use from noise and vibration is not anticipated at any parks and recreation resources. See the *EQRB Parks and Recreation Technical Report* (Multnomah County 2021e), *EQRB Parks and Recreation Supplemental Memorandum* (Multnomah County 2022d), *EQRB Noise and Vibration Technical Report* (Multnomah County 2021d), and *EQRB Noise and Vibration Supplemental Memorandum* (Multnomah County 2022c) for additional information.

There would be no Section 4(f) use of parks and recreation properties with the No-Build Alternative.

1.9.1.8 Willamette River Water Trail

The *EQRB Parks and Recreation Technical Report* and *EQRB Parks and Recreation Supplemental Memorandum* discuss recreation on the Willamette River in general, as well as the Willamette River Greenway Trail. Rivers and general recreation on rivers are

not typically considered to be Section 4(f) resources, but an identified recreation area or water trail is a Section 4(f) resource. As such, this section only focuses on the WRWT. The WRWT is a designation and not a property, as such, no temporary or permanent easements are discussed for this resource.

All Build Alternatives

During construction of any of the build alternatives (including refined versions of the replacement alternatives) with the No Temporary Bridge Option, the navigation channel would remain open except for short-term closures. Each closure could be up to 3 weeks in duration, and the number of closures could range from 2 to 10 closures over the duration of construction, depending on the type of bridge lift chosen. A vertical lift would require a lower number of river closures while a bascule lift would require a higher number of closures. During the majority of the construction period, a minimum width of 165 feet would be open to navigation, thus, except for temporary closures up to 3 weeks in duration at a time, the WRWT would be accessible for passage beneath the Burnside Bridge. With the Temporary Bridge Option for any of the build alternatives, there would be up to two additional 2-week-long closures. Coordination with PP&R will be necessary to avoid issues with special events docking.

The temporary construction impacts described above meet the conditions necessary for a Temporary Occupancy to not be considered a Section 4(f) use, as follows:³

- Duration/Ownership: Met – Construction activities would be shorter in duration than the full construction time for the Project, and there is no change in ownership.
- Nature/Magnitude: Met – The change to the resource is minimal in that the waterway would still be open to use for the majority of the construction period, and this location on the waterway is only a small part of the full water trail.
- Permanent Change/Temporary Interference: Met – There would be no permanent physical change to the water trail. The temporary closure of the main river channel passing under the bridge is minor enough in nature to meet this requirement. The portion of the WRWT temporarily closed is proportionately very small compared to the full length of the facility, such that it is not considered an interference to use of the facility.
- Restoration: Met – There would be no change to the condition of the water trail after the Project compared to before the Project.
- Documentation: Coordination with the Oregon Parks and Recreation Department is necessary to document agreement with this preliminary Section 4(f) determination of Temporary Occupancy.

As shown above, the WRWT would not be subject to a Section 4(f) use from permanent or temporary activities, but it is adjacent to, and passes beneath the Project, so whether

³ Code of Federal Regulations (CFR) Title 23: Part 774, Section 13, outlines conditions under which a “Temporary Occupancy” of a Section 4(f) property would not be considered a section 4(f) “Use”. The conditions for this type of exception are: occupancy duration must be temporary, with no change in ownership; nature/magnitude of changes to the resource must be minimal; absence of permanent physical impacts; full restoration following temporary impact; and documented agreement of the officials with jurisdiction.

it is subject to a Section 4(f) constructive use must be considered. The following assessment has determined that there would not be a constructive use:

- Noise: No – No long-term traffic noise levels are identified that would impact this noise-sensitive use.
- Aesthetics: No – River users pass under many bridges of various sizes, types, and styles. Although the replacement alternatives and design options would introduce a bridge of different bulk and potentially different style from the current Burnside Bridge, this would not alter the experience of WRWT users.
- Access: No – The Project would not alter permanent access to the WRWT.
- Vibration: No – There are no historic resource buildings within the WRWT.

Temporary Bridge Option

The inclusion of a temporary bridge would not affect the Section 4(f) use assessment described for the build alternatives.

Agency Coordination

The waterway portion of the WRWT is not owned or managed in a specific location within the river, and property management is limited to upland locations along the WRWT. The Project will not affect any managed properties, and no direct coordination has occurred with OPRD about the Project at this time. Concurrence with the preliminary finding below will be necessary.

Preliminary Section 4(f) Use Determination

The Willamette River Water Trail would not be subject to Section 4(f) use under all build alternatives with or without the temporary bridge based on the exception at 23 CFR 774.13(d).

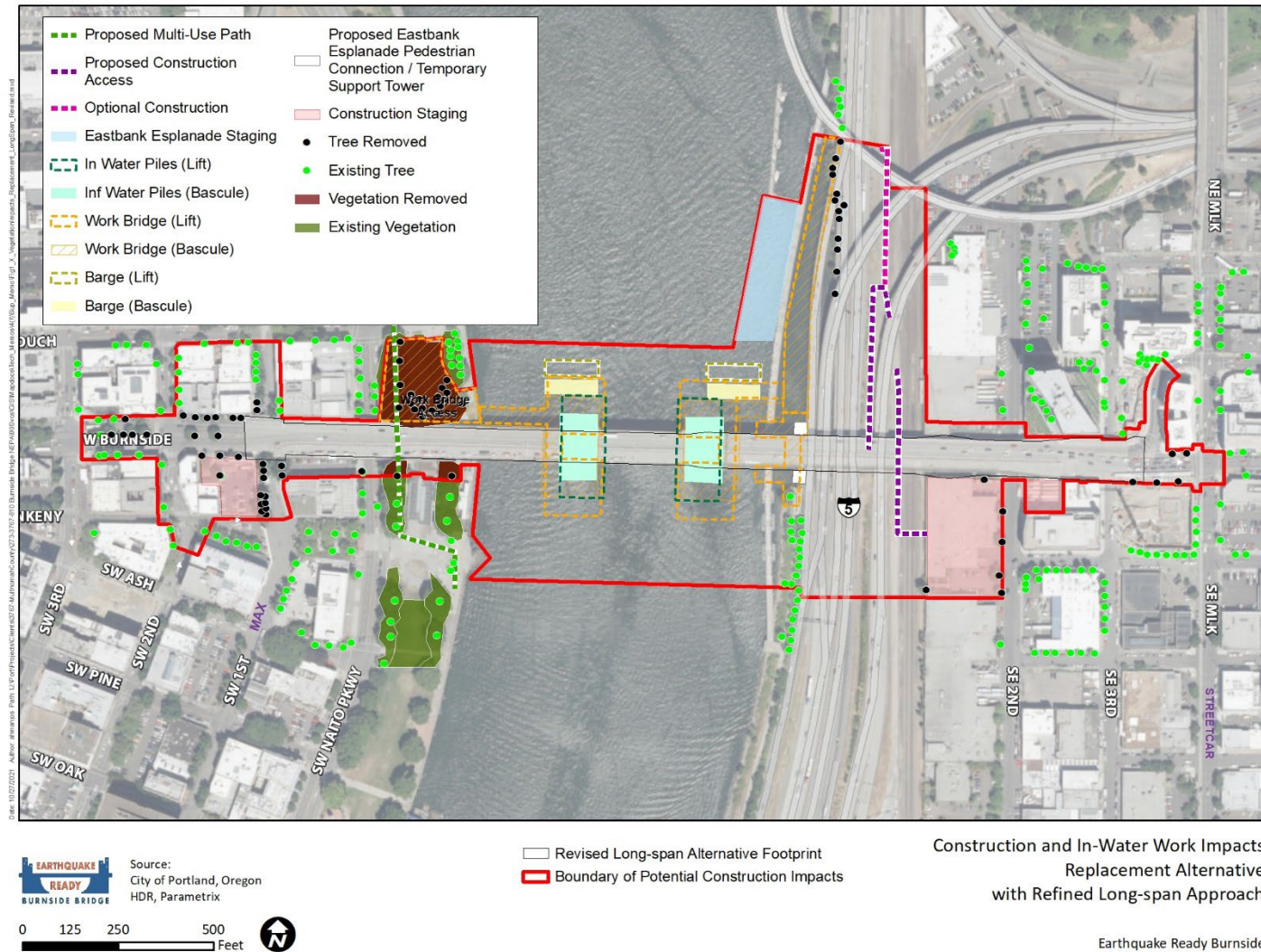
1.9.1.9 Governor Tom McCall Waterfront Park

Enhanced Seismic Retrofit Alternative

The portion of Gov. Tom McCall Waterfront Park within the Boundary of Potential Construction Impacts would be closed to recreation uses for the construction periods shown in Table 1-2, and temporary construction easements in and potentially around this area would be necessary. No permanent property acquisition would occur. These construction periods are approximately the full duration of expected construction. Several changes to the use of Waterfront Park would occur during construction.

- The closure north of the bridge would require that a portion of the Japanese American Historic Plaza and Bill of Rights Memorial area be temporarily closed for construction access. A majority of the trees in this area would likely be removed. Notably, this includes 4 large mature deciduous trees and 10 ornamental flowering cherry trees adjacent to the plaza (see Figure 1-13). After construction, the trees would be replaced. The full area from the north edge of the bridge to the west edge of the plaza sidewalk/pavers would be cleared and used as a construction and staging area; 10 cherry trees, and the berm they are planted in, and the

Figure 1-13. Refined Long-Span Alternative Tree Locations and Removals



Source: City of Portland, HDR, Parametrix

paver/walkway to their west would be excluded from the staging area, thus preserving these trees and the hardscape features. This would include preserving the arching slate-covered berm that makes up the southern half of the Japanese American Historic Plaza and Bill of Rights Memorial.

Portland Saturday Market (PSM) would need to operate at another location for the duration of construction. PSM is a large, well-attended attraction in this part of Waterfront Park bringing more visitors and users to the area than would use the park in its absence. No trees south of the bridge in the area of PSM would be removed under this alternative.

In addition to PSM normally occurring on a weekly basis (March through December), many other events are hosted in Waterfront Park on an annual basis. For the duration of construction, these events could not occur within the Boundary of Potential Construction Impacts area. Events normally held in the Japanese American Historical Plaza could still use the unimpacted north half of the plaza; however, because these events are typically memorials, vigils, and remembrance days, their reflective, quiet nature would likely be disturbed by intense construction on the bridge unless they occurred on the many weekends when no major construction would occur. The many events held in the Meadow and further south in Waterfront Park could continue but would be restricted from park access within the Boundary of Potential Construction Impacts.

The Rose Festival and Fleet Week combined events generate the largest number of attendees of the annual events in Waterfront Park. Each year, the City of Portland imposes a road construction moratorium during the Rose Festival. The project team would request an exemption from the moratorium for bridge construction but would specify that the contractor may need to provide access for the Fleet Week ships to dock along the Harbor Wall within the Boundary of Potential Construction Impacts and may need to provide safe public access for festival attendees to access the ships.

Portland Parks and Recreation maintenance activities rely on access under the Burnside Bridge, and maintenance vehicles and personnel need to pass under the bridge to access the north end of the park daily throughout the year and up to three times per day during the summer months. The project team would work with PP&R to provide safe maintenance access with this general frequency.

The temporary construction impacts described above do not meet all of the conditions necessary for a Temporary Occupancy to not be considered a Section 4(f) use, as follows:

- Duration/Ownership: Not Met – Temporary occupancy of the Boundary of Potential Construction Impacts would last as long as the full construction period.
- Permanent Change/Temporary Interference: Not Met – There would be no permanent adverse impacts to Waterfront Park; however, there would be significant temporary interference to activities and purposes of the recreation resource.

Replacement Alternatives

The temporary construction activities described above for the Retrofit Alternative all apply with the replacement alternatives (including refined versions of the replacement alternatives) with a few differences described in this section. In Gov. Tom McCall Waterfront Park, the Short-span Alternative (and the refined version) would mean an

additional year of closure within the Boundary of Potential Construction Impacts and the removal of two additional trees south of the Burnside Bridge. The same detour restrictions would apply, but for 4.5 years (see Table 1-2). Within the Japanese American Historical Plaza, the same removal of trees and potential temporary impacts to the berm would occur, but reconstruction would occur 1 year later. The same is true for PSM operation. There are differences in pier and column locations, and the Short-span Alternative and Draft EIS Long-span Alternative would not require in-ground improvements (see Table 1-3), but those physical construction actions would not change the Boundary of Potential Construction Impacts that is the overall construction activity preventing recreational use of this area of Waterfront Park and its components.

The Refined Long-span Alternative would have the same construction duration as the Draft EIS Long-span Alternative but would have a reduced Boundary of Potential Construction Impacts area on the south side of the bridge (see Figure 1-10 and Figure 1-11). The reduced construction area would restrict event and recreation use to less area within Waterfront Park than the other alternatives. Because the width of the refined (narrowed) versions of the Short-span and Couch Extension Alternatives would be the same as the footprint shown in Figure 1-11, the Boundary of Potential Construction Impacts for those versions would also be reduced.

The Refined Long-span Alternative includes a girder bridge style, which would have two sets of support columns within Waterfront Park. This is fewer supports than the existing structure or Enhanced Seismic Retrofit Alternative, but one additional support compared to the Draft EIS Long-span Alternative.

The temporary construction impacts described above do not meet all of the conditions necessary for a Temporary Occupancy to not be considered a Section 4(f) use, as follows:

- Duration/Ownership: Not Met – Temporary occupancy of the Boundary of Potential Construction Impacts would last as long as the full construction period.
- Permanent Change/Temporary Interference: Not Met – There would be no permanent adverse impacts to Waterfront Park; however, there would be notable temporary interference to activities and purposes of the recreation resource.

Temporary Bridge Option

Any of the build alternatives⁴ with the Temporary Bridge Option would require an additional active construction area south of the bridge within Gov. Tom McCall Waterfront Park, shown as an expanded Boundary of Potential Construction Impacts area on Figure 1-8 through Figure 1-12. This would also include a larger temporary construction easement area. As a result, nine trees south of the Burnside Bridge would be removed and replaced after construction (see Figure 13 in the *EQRB Vegetation, Wildlife, and Aquatic Species Technical Report* [Multnomah County 2021f]). Under the replacement alternatives, seven of these trees are in addition to those removed by the construction of the replacement bridge, while under the Retrofit Alternative, all nine are in addition to the retrofit construction work. The Ankeny Plaza Structure would be

4 The Refined Long-span Alternative does not propose a temporary bridge.

deconstructed and stored. The structure would be reconstructed after bridge construction is complete.

The Bill Naito Legacy Fountain and surrounding hardscape plaza area would be closed and non-operational for recreation use for the duration of construction. The hardscape and other features would be protected from construction impacts and returned to existing conditions after construction is complete. Waterfront Trail/Willamette River Greenway Trail users would either be flagged through the area or would be rerouted around the work site using the east lane of Naito Parkway (Better Naito). In addition to these construction impacts, a temporary bridge would increase the duration of construction time as shown in Table 1-2. Thus, the temporary bridge increases the intensity and duration of the construction activities in Waterfront Park and the Willamette River Greenway Trail.

The temporary construction impacts described above do not meet all of the conditions necessary for a Temporary Occupancy to not be considered a Section 4(f) use, as follows:

- Duration/Ownership: Not Met – Construction activities would be for the full construction time for the Project, but there is no change in ownership.
- Permanent Change/Temporary Interference: Not Met – There would be no permanent adverse impacts to Waterfront Park; however, there would be significant temporary interference to activities and purposes of the recreation resource.

De Minimis Analysis

De minimis impacts on publicly owned parks, recreation areas, and wildlife and waterfowl refuges are defined as those that do not “adversely affect the activities, features, and attributes” of the Section 4(f) property. Although the area of impact within Waterfront Park is small compared to the overall size of the park, much of the impacted area is within parking or maintenance areas under the bridge and not within fully recreational areas, and the avoidance, minimization, and mitigation measures of the project mean that the park would be returned to the same or better condition after the project is complete, the length of time of recreation use restrictions under any of the alternatives would adversely affect activities in the park. The temporary impacts are not *de minimis* under any of the alternatives.

Programmatic Approval Analysis

As discussed in Section 1.6.3, approval of Section 4(f) use can occur through programmatic Section 4(f) evaluations. The Programmatic Section 4(f) Evaluation and Approval for Transportation Projects That Have a Net Benefit to a Section 4(f) Property is potentially applicable for Section 4(f) use of Waterfront Park.

All measures to minimize harm and mitigation to preserve and enhance the features and values of the property must be found to result in a net benefit to the property. For Waterfront Park, under any build alternative, the Project would return all disturbed areas to pre-construction conditions, meeting all applicable City of Portland design and land use standards.

As a result of the Project, under the Long-span Alternative (identified as the Preferred Alternative in the Draft EIS) or the Refined Long-span Alternative, Waterfront Park would no longer have the many existing bridge supports within its boundaries under the bridge. Instead, there would be increased open area with longer unobstructed views north and south and obliquely to the Willamette River and a small vertical clearance increase beneath the bridge compared to existing conditions. Having fewer bridge structures in the park would also remove existing barriers to travel by maintenance vehicles and would allow redesign of the space used by the PSM.

Preliminary conversations with PP&R have identified potential enhancements that would further create benefits in this area. These improvements are preliminary and will be refined further.

Agency Coordination

The project team has met several times with representatives of Portland Parks and Recreation and the stakeholders with activities or features within the affected area of Waterfront Park (see Table 1-4).

Table 1-4. Meetings with Parks and Recreation Stakeholders Regarding Gov. Tom McCall Waterfront Park

Stakeholder	Meeting Dates
Portland Parks & Recreation (PP&R)	July 3, 2019 July 31, 2019 October 29, 2019 November 25, 2019 September 2, 2020 November 25, 2020 January 8, 2021 March 18, 2021 April 13, 2021
Portland Parks Board	August 6, 2019
PP&R Parks Director	September 13, 2019
Japanese American Museum of Oregon	June 18, 2019 January 16, 2020
Portland Saturday Market	July 10, 2019 January 10, 2020
Rose Festival	July 18, 2019

Discussion of potential project impacts, Section 4(f) use, avoidance alternatives, and mitigation have occurred during these meetings. The Project has made efforts to avoid impacts while still achieving the necessary earthquake resiliency of the Burnside Bridge and is anticipating that PP&R review of this draft technical analysis and draft evaluation will result in additional suggestions for minimization and mitigation measures and concurrence.

Preliminary Section 4(f) Use Determination

Gov. Tom McCall Waterfront Park would be subject to Section 4(f) use from temporary construction activities for all build alternatives with or without the temporary bridge.

1.9.1.10 Vera Katz Eastbank Esplanade

Enhanced Seismic Retrofit Alternative

The Boundary of Potential Construction Impacts for all build alternatives encompasses approximately 80 percent of the length of the floating portion of the Vera Katz Eastbank Esplanade. Because construction barges would need to access both sides of the Esplanade and extensive work would occur directly above and below the Esplanade, it is impractical and unsafe to allow users access during construction. Temporary construction easements in and potentially around this area would be necessary. No permanent property acquisition would occur.

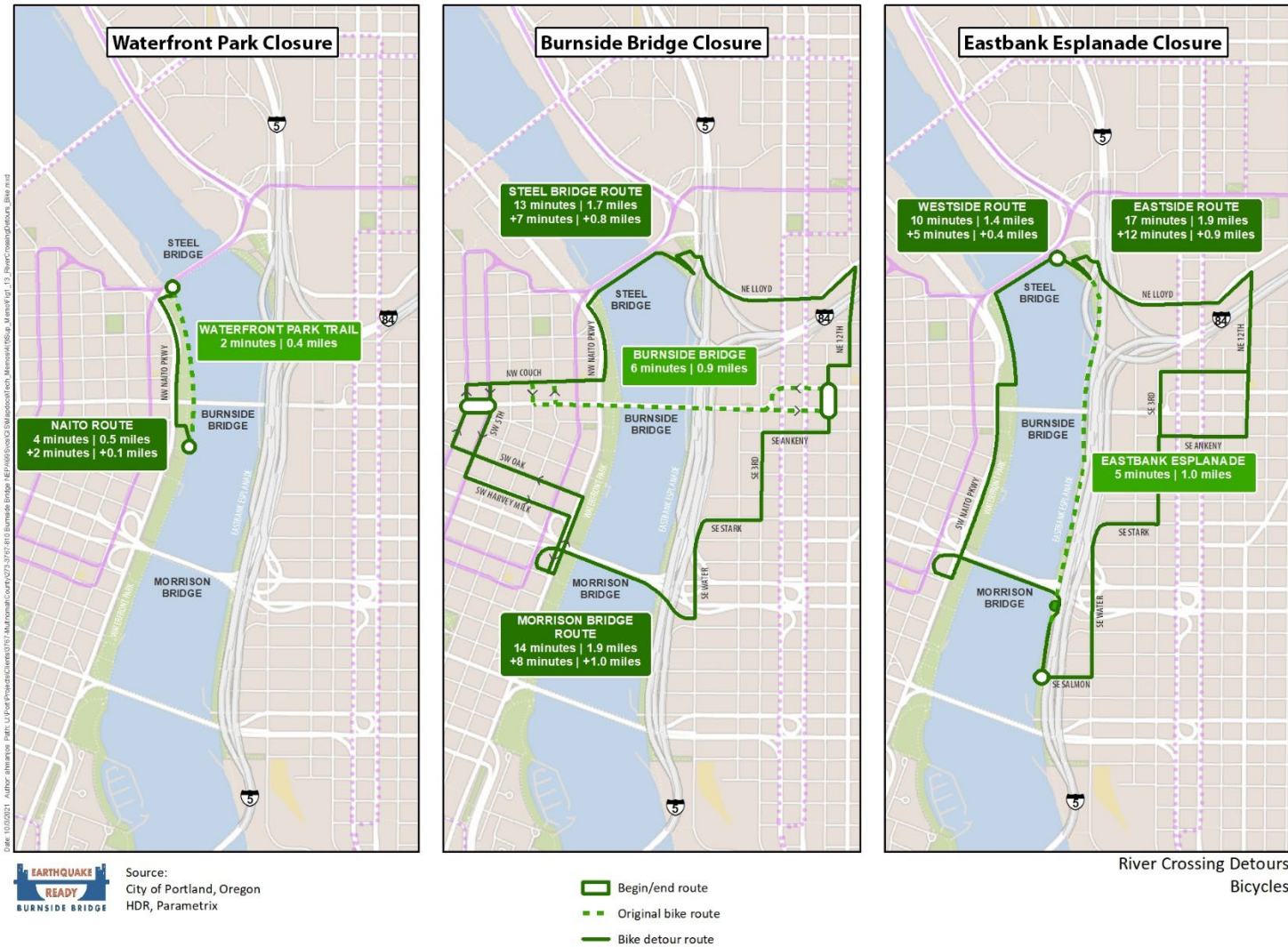
Intermittently during construction, portions of the floating structure (not including Kevin J. Duckworth Dock) would be disconnected and moved out of the way to allow barge movement and other construction activities. For the Retrofit Alternative, the estimated closure/detour length of time is 26 months (see Table 1-2). During this time, the Esplanade would not be available, and bike and pedestrian trail users would use the proposed detour routes shown in Figure 1-14 and Figure 1-15. Depending on the detour route taken, the added time would be 5 to 12 minutes for bicyclists and 10 to 15 minutes for pedestrians; travel would be on surface streets rather than on the Esplanade's bike and pedestrian path floating in the nearshore area of the river.

As discussed for Gov. Tom McCall Waterfront Park, many events occur on the Esplanade throughout the year, often creating a loop route by linking up with a portion of the Willamette River Greenway Trail on the west side of the river. This route creates an uninterrupted circuit for events without the need to cross traffic, which has been noted as unique and very important to the events. As both of these trails would be temporarily closed and detoured by construction, many of the typical annual events would either not occur or would use detour routes. Detours would affect the overall length of loop route events and would generally avoid the waterfront for some or all of an event route. Preventing access along the Esplanade would make recreation in this location inaccessible, including the views across the river to downtown and the West Hills.

The temporary construction impacts described above do not meet all of the conditions necessary for a Temporary Occupancy to not be considered a Section 4(f) use, as follows:

- **Permanent Change/Temporary Interference: Not Met** – There would be no permanent adverse impacts to the Esplanade; however, there would be significant temporary interference to recreation activities and purposes of the recreation resource.

Figure 1-14. River Crossing Detours – Bicycles

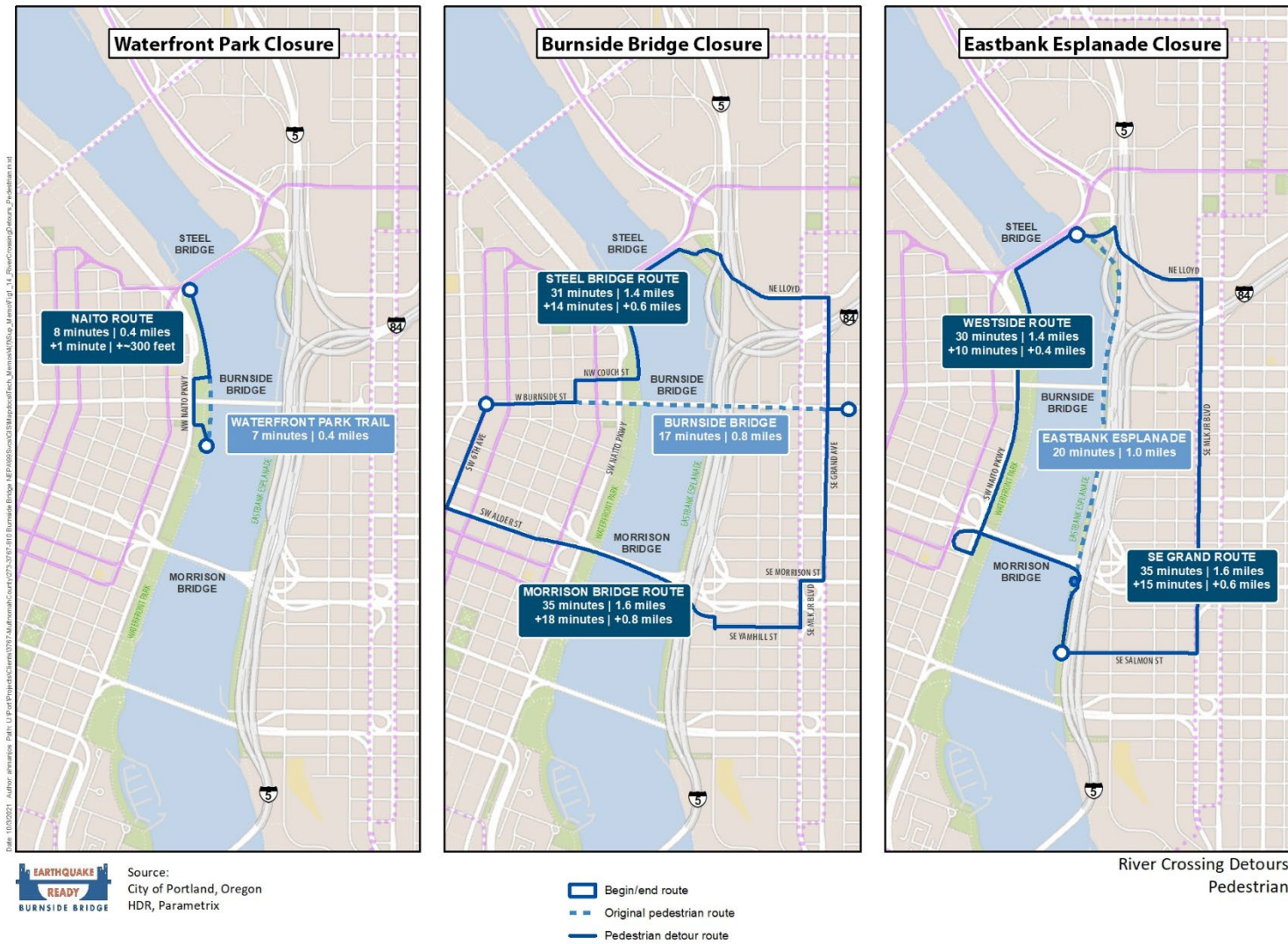


River Crossing Detours
Bicycles

Earthquake Ready Burnside

Source: City of Portland, HDR, Parametrix

Figure 1-15. River Crossing Detours – Pedestrian



River Crossing Detours
Pedestrian

Earthquake Ready Burnside

Replacement Alternatives

The replacement alternatives including the Refined Long-span, Refined Short-span, and Refined Couch Extension Alternatives would have the same Boundary of Potential Construction Impacts as the Enhanced Retrofit Alternative with respect to the Vera Katz Eastbank Esplanade. Closure and detour around the floating portion of the Esplanade would occur to allow construction barge access for deconstruction of the existing bridge and construction of the new bridge. With the full-width and the narrowed versions of the Short-span and the Couch Extension Alternatives, the Esplanade would be closed for 30 months, while with the Draft EIS Long-span and Refined Long-span Alternatives, the closure would last 18 months (see Table 1-2). The Draft EIS Long-span Alternative and Refined Long-span Alternative have the shortest overall closure times of the Esplanade compared with the other build alternatives.

Detour routes and out-of-direction travel time and event disruption would be the same as described for the Retrofit Alternative but would last either 30 months (Short-span and Couch Extension Alternatives and their respective refined versions) or 18 months (Draft EIS Long-span and Refined Long-span Alternatives).

The temporary construction impacts described above do not meet all of the conditions necessary for a Temporary Occupancy to not be considered a Section 4(f) use, as follows:

- Permanent Change/Temporary Interference: Not Met – There would be no permanent adverse impacts to the Esplanade; however, there would be significant temporary interference to recreation activities and purposes of the recreation resource.

Temporary Bridge Option

With the Temporary Bridge Option⁵ there would be an additional structure over a portion of the Vera Katz Eastbank Esplanade during construction. The Esplanade would need a detour route for 4 months longer than with the No Temporary Bridge Option under all build scenarios (see Table 1-2).

The temporary construction impacts described above do not meet all of the conditions necessary for a Temporary Occupancy to not be considered a Section 4(f) use, as follows:

- Permanent Change/Temporary Interference: Not Met – There would be no permanent adverse impacts to the Esplanade; however, there would be significant temporary interference to recreation activities and purposes of the recreation resource.

Access Options between Burnside Bridge and the Vera Katz Eastbank Esplanade

With the existing bridge, a stairway (installed and owned by the City of Portland) connects the southern sidewalk on the Burnside Bridge to the Vera Katz Eastbank

⁵ The Refined Long-span Alternative does not propose a temporary bridge.

Esplanade approximately 50 vertical feet below it. The stairway is primarily for pedestrians because it is not Americans with Disabilities Act (ADA)-accessible and requires bicyclists to carry their bikes up or down the stairs. There is no existing connection between the Esplanade and the bridge's northern (westbound) sidewalk and bike lane. There is ADA, pedestrian, and bicycle access to the bridge approximately 1,000 feet east of these stairs at the eastern end of the bridge.

Replacing the existing bridge would require removing the connection to the City-owned existing stairs. The EQRB Project initially envisioned replacing the stairs with a similar stairs structure that may also include an elevator to provide ADA access as well as easier bike access. Some stakeholders indicated they would prefer a ramp structure instead. The project design team developed several potential options and preliminary permanent footprint and construction impact details, as summarized below. It is important to note that any of these access options are compatible with any of the EQRB bridge alternatives. While the impacts from the access options do not change the status of the determination of Section 4(f) use for the Esplanade, not all of the options would be considered "least harm" as discussed below and in Section 2.4.2 and Section 3.6. The options evaluated as part of the Draft EIS include:

- Stairs and elevator on south side of the bridge only, with a signalized mid-block crossing connecting the north and south sidewalks and bike lanes
- Ramps on north and south sides of the bridge and stairs on south side
- Ramp and stairs on south side only, with a signalized mid-block crossing connecting the north and south sidewalks and bike lanes

Constructing the Long-span Alternative (with no temporary bridge) would require an 18-month temporary closure of the floating portion of the Esplanade. The ADA stairs and elevators access options could be built within that same 18-month closure period. However, the ADA access options with ramps would require an additional 2 to 3 years of closure for construction, meaning the Esplanade would be closed for the full duration of bridge construction.

Both options with stairs and an elevator would not require additional physical impacts to the Esplanade compared to those identified with the Long-span Alternative without a temporary bridge. Both options with ramps would require additional impacts including temporary removal and replacement of the structure leading down from the at-grade section to the floating section of the Esplanade.

Because the cost and environmental impacts of the ramp options would be substantially higher than with the elevator/stair options, the Refined Long-span Alternative studied in this SDEIS includes a refined elevator/stair option for direct Esplanade access. This option could apply to other build alternatives as well. Some ADA advocates have expressed concern that such long ramps would be a barrier to many people in wheelchairs or with other mobility requirements. At the same time, other ADA advocates have expressed concern about the safety and reliability of elevators, and bicycle advocates have expressed a preference for the convenience and reliability of ramps over elevators. In addition, the City of Portland has expressed interest in attempting to secure the funding, potentially with other partners, that would be needed to replace its existing stairs with ramps. Such ramps, or any other pedestrian, bicycle, or ADA connection to

the Esplanade, could be implemented as an independent project (with independent purpose) that may or may not occur simultaneously with the EQRB Project. It is possible that the EQRB Project may disconnect and preserve the City's existing stairway and then reconnect it to the new bridge, or it may not provide any direct connection to the Esplanade.

The Refined Long-span Alternative is evaluated with stairs and an elevator on the north and south sides of the bridge connecting to the Esplanade below. As described above, a north and south set of stairs and elevators would have the same construction time as the Draft EIS Long-span Alternative or the Refined Long-span Alternative and would provide better ADA and bicycle access than the City's existing stairway. It is important to note that construction of the existing stairway by the City was approved through a revocable permit that allows the stairway to be removed should that be necessary, for example, for the County to be able to maintain or replace the bridge.

De Minimis Analysis

De minimis impacts on publicly owned parks, recreation areas, and wildlife and waterfowl refuges are defined as those that do not "adversely affect the activities, features, and attributes" of the Section 4(f) property. Even after incorporating all possible efforts to reduce the temporary impacts to the Vera Katz Eastbank Esplanade, closing a large section of it for 18 months would adversely affect recreation and would be considered more than a *de minimis* impact.

Agency Coordination

The project team has met several times with PP&R representatives and the stakeholders with activities or features within the affected area of the Vera Katz Eastbank Esplanade (see Table 1-5).

Table 1-5. Meetings with Parks and Recreation Stakeholders Regarding the Vera Katz Eastbank Esplanade

Stakeholder	Meeting Dates
Portland Parks & Recreation (PP&R)	July 3, 2019 July 31, 2019 October 29, 2019 November 25, 2019 May 21, 2020 May 29, 2020 September 2, 2020
Portland Parks Board	August 6, 2019
PP&R Parks Director	September 13, 2019

Early discussion of potential project impacts, Section 4(f) use, avoidance alternatives, and mitigation have occurred during these meetings. Additional and ongoing coordination will occur. The project team has made design and construction revisions, where possible, to avoid impacts and use while still achieving the necessary earthquake resiliency of the Burnside Bridge, and it is anticipating that agency review of this Section 4(f) Analysis will result in additional suggestions for minimization and mitigation measures. However, it appears unlikely that PP&R would consider the project impacts to either qualify for the

exception to Section 4(f) use under 23 CFR 774.13(d) or that there could be a net benefit to the Vera Katz Eastbank Esplanade.

Preliminary Section 4(f) Use Determination

The Vera Katz Eastbank Esplanade would be subject to a Section 4(f) use from temporary construction activities under all build alternatives with or without the temporary bridge and with any of the Pedestrian/ADA/Bicyclist Access Options to Burnside Bridge.

1.9.1.11 Willamette River Greenway Trail

Enhanced Seismic Retrofit Alternative

The portions of the Willamette River Greenway Trail on the east and west sides of the river within the Boundary of Potential Construction Impacts would be closed to recreation uses for the construction periods shown in Table 1-2. These construction periods are approximately the full duration of expected construction. Several changes to the use of the Willamette River Greenway Trail would occur during construction. Temporary construction easements in and potentially around this area would be necessary. No permanent property acquisition would occur. Because the Willamette River Greenway Trail is co-located with both Gov. Tom McCall Waterfront Park and the Vera Katz Eastbank Esplanade, the temporary construction easements would be from the underlying property ownership.

With all of the build alternatives, (including the refined, narrower alternatives) on the west side, within Waterfront Park, Greenway Trail users would either be flagged through the Boundary of Potential Construction Impacts or would be rerouted around the work site on the east lane of Naito Parkway, currently used for the Better Naito project. At most, the detour routes on the west side of the Willamette River are expected to add 2 minutes of detour travel time for north-south Greenway Trail users. Running and walking events that normally use the Willamette River Greenway Trail could continue to occur but would need to use the detour routes.

On the east side of the river, the Willamette Greenway Trail would experience the same effects described above for the Esplanade. The detour routes cannot entirely replace the recreation experience of using the Greenway Trail and cannot replicate the same safe and inclusive off-road cycling and pedestrian experience, because the detour routes place users adjacent to roadways. The detour routes would not provide a continuous route for running/walking/cycling events that does not need to interact with traffic or intersections and would require additional traffic management effort. PP&R has indicated that many events would be canceled during construction and is concerned the events may relocate away from this facility permanently.

The temporary construction impacts described above do not meet all of the conditions necessary for a Temporary Occupancy to not be considered a Section 4(f) use, as follows:

- **Duration/Ownership: Not Met** – Temporary occupancy of the Boundary of Potential Construction Impacts would last as long as the full construction period on the west side, but not on the east side.

- Permanent Change/Temporary Interference: Not Met – There would be no permanent adverse impacts the trail; however, there would be temporary interference to activities on the trail.

Replacement Alternatives

The temporary construction activities described above for the Retrofit Alternative all apply with all of the replacement alternatives and refined alternatives with a few differences described in this section. On the west side, the Short-span Alternative and its refined version would mean an additional year of closure in the Boundary of Potential Construction Impacts. The same detour restrictions would apply, but for 4.5 years (see Table 1-2). There are differences in pier and column locations, and the Short-span Alternative and Draft EIS Long-span Alternative would not require in-ground improvements (see Table 1-3), but those physical construction actions would not change the Boundary of Potential Construction Impacts that is the overall construction use of the trail.

The Refined Long-span Alternative would have the same construction duration as the Draft EIS Long-span Alternative but would have a reduced Boundary of Potential Construction Impacts area on the south side of the bridge (see Figure 1-10 and Figure 1-11). The reduced construction area restricts trail use across a shorter distance within Gov. Tom McCall Waterfront Park than the other alternatives. The reduced construction impact area also applies to the refined versions of the Short-span and Couch Extension Alternatives.

The Refined Long-span Alternative includes a girder bridge style, which would have two sets of support columns within Waterfront Park. This is fewer supports than the existing structure or Enhanced Seismic Retrofit Alternative (which would have five sets), but it would be one more than the Draft EIS Long-span Alternative with a tied-arch. Fewer bridge supports would provide a more open view for trail users.

On the east side, with the Short-span Alternative (and its refined version), the Willamette River Greenway Trail co-located with the Esplanade would be closed for 30 months, while with the Draft EIS or Refined Long-span Alternatives, the closure would last 18 months (see Table 1-2). Either of the Long-span Alternatives would have the shortest overall closure of the Esplanade compared with the other build alternatives.

Detour routes and out-of-direction travel time and event disruption would be the same as described for the Retrofit Alternative but would last either 34 months or 18 months (Short-span Alternative and Long-span Alternative, respectively).

The temporary construction impacts described above do not meet all of the conditions necessary for a Temporary Occupancy to not be considered a Section 4(f) use, as follows:

- Duration/Ownership: Not Met – Temporary occupancy of the Boundary of Potential Construction Impacts would last as long as the full construction period on the west side, but not on the east side.
- Permanent Change/Temporary Interference: Not Met – There would be no permanent adverse impacts the trail; however, there would be substantial temporary interference to activities on the trail.

Temporary Bridge Option

Any of the build alternatives⁶ with the Temporary Bridge Option would require an additional active construction activity area south of the bridge, shown as an expanded Boundary of Potential Impacts area on Figure 1-8 through Figure 1-12. This would also include a larger temporary construction easement area. However, with or without the temporary bridge west side Willamette Greenway Trail users would either be flagged through the area or would be rerouted around the work site using the east lane of Naito Parkway. Similarly, east side trail users would be offered the same detour with or without the temporary bridge. A temporary bridge would increase the duration of construction time as shown in Table 1-2. Thus, the temporary bridge increases the duration of a temporary adverse use of the Willamette River Greenway Trail.

The temporary construction impacts described above do not meet all of the conditions necessary for a Temporary Occupancy to not be considered a Section 4(f) use, as follows:

- Duration/Ownership: Not Met – Temporary occupancy of the Boundary of Potential Construction Impacts would last as long as the full construction period on the west side, but not on the east side.
- Permanent Change/Temporary Interference: Not Met – There would be no permanent adverse impacts the trail; however, there would be significant temporary interference to activities on the trail.

De Minimis Analysis

De minimis impacts on publicly owned parks, recreation areas, and wildlife and waterfowl refuges are defined as those that do not “adversely affect the activities, features, and attributes” of the Section 4(f) property. The area of temporary impact along the Willamette River Greenway Trail within Gov. Tom McCall Waterfront Park (on the west side of the Willamette River) is small, and a short detour route would be available throughout construction. Because of the short length of the detour, and the fact that the detour only moves users to the west edge of the Waterfront Park, the Section 4(f) temporary occupancy of the Willamette River Greenway Trail is not considered to adversely affect activities, features, or attributes. However, because the Willamette River Greenway Trail on the west side of the river is often used in conjunction with the Willamette River Greenway Trail on the east side of the river as part of loop routes, the potential for a *de minimis* use determination needs to consider both sides together.

On the east side of the river, the portion of trail travels on the Vera Katz Eastbank Esplanade, and though the affected length is small compared to the overall size of the full Greenway Trail, the length of time of recreation use restrictions under any of the alternatives combined with the detour route that takes users away from the waterfront, means that the temporary occupancy that is a Section 4(f) use would adversely affect activities and is not considered to be *de minimis*.

⁶ The Refined Long-span Alternative does not propose a temporary bridge.

Agency Coordination

Agency coordination with PP&R occurred at the same meetings as those identified for Gov. Tom McCall Waterfront Park and the Vera Katz Eastbank Esplanade, above.

Preliminary Section 4(f) Use Determination

The Willamette River Greenway Trail would be subject to a Section 4(f) use from temporary construction activities under all build alternatives with or without the temporary bridge.

1.9.2 Historic Sites

Above-ground cultural resources that qualify as Section 4(f) resources and that have the potential for Section 4(f) use are described in this section. The remainder of the historic above-ground resources discussed in the *EQRB Cultural Resources Technical Report* (Multnomah County 2021d) and *EQRB Cultural Resources Supplemental Memorandum* (Multnomah County 2022a) are not considered likely to be impacted or to have a Section 4(f) use and are not discussed further in this report.

1.9.2.12 Burnside Bridge

No-Build Alternative

There would be no Section 4(f) use of this resource as a result of the No-Build Alternative. However, with no action, in the event of the predicted CSZ earthquake, the existing Burnside Bridge would fail and collapse, and thus would no longer exist as a historic structure.

Enhanced Seismic Retrofit Alternative

The Burnside Bridge would undergo substantial upgrades with the Retrofit Alternative but would retain the bridge type and some of the existing design characteristics of its current condition. However, the Retrofit Alternative would remove and reconstruct Pier 4 approximately 34 feet to the west, which would visually shorten the eastern fixed span. In addition, the retrofit would compromise the bridge's historic integrity by altering the design, materials, workmanship and feeling of the structure. Those changes would alter the historic significance of the bridge to the extent that this Alternative would cause an overall adverse effect under Section 106.

- Permanent Incorporation Use: Yes – Section 106 analysis determined the proposed alteration of the bridge would remove its historic integrity.

Replacement Alternatives

All replacement alternatives, including the Refined Long-span Alternative, would constitute a complete replacement of the current bridge which would be considered a permanent use under Section 4(f).

- Permanent Incorporation Use: Yes – The removal and replacement of the Burnside Bridge would result in an adverse effect under Section 106 and a permanent Section 4(f) use.

Temporary Bridge

The option of using a temporary bridge would not cause a Section 4(f) use of the Burnside Bridge.

De Minimis Analysis

The Retrofit Alternative and all replacement alternatives are expected to have a permanent Section 4(f) use of the Burnside Bridge. The impact is not considered to be *de minimis*.

Programmatic

As discussed in Section 1.6.2, the Programmatic Section 4(f) Evaluation and Approval for FHWA Projects that Necessitate the Use of Historic Bridges is available for projects that necessitate the use of historic bridges. This programmatic approach is only available if the project demonstrates there are no feasible and prudent alternatives to the use of the historic bridge structure and the project includes all possible planning to minimize harm.

According to 23 CFR 774.17, an alternative is not feasible if it cannot be built as a matter of sound engineering judgment, and an alternative is not prudent if:

- It compromises the project to a degree that it is unreasonable to proceed with the project in light of its stated purpose and need;
- It results in unacceptable safety or operational problems;
- After reasonable mitigation, it still causes:
 - Severe social, economic, or environmental impacts;
 - Severe disruption to established communities;
 - Severe disproportionate impacts to minority or low-income populations; or
 - Severe impacts to environmental resources protected under other federal statutes.
- It results in additional construction, maintenance, or operation costs of an extraordinary magnitude;
- It causes other unique problems or unusual factors; or
- It involves multiple factors of the above, that while individually minor, cumulatively cause unique problems or impacts of extraordinary magnitude.

Analysis of the use of this programmatic for Section 4(f) use of Burnside Bridge is provided in Chapter 3.

Agency Coordination

Review of use of the programmatic Section 4(f) evaluation will include FHWA, Multnomah County, ODOT, and Oregon SHPO. Multnomah County has conducted an extensive public outreach and agency coordination program, described in attachments to the Draft EIS. As formal consultation under Section 106 of the NHPA progresses, the programmatic Section 4(f) evaluation will be updated. As part of the Final EIS/Record of

Decision, FHWA will confirm whether the Project meets the five criteria for the application of the Programmatic Section 4(f) Evaluation and Approval for FHWA Projects that Necessitate the Use of Historic Bridges.

Preliminary Section 4(f) Use Determination

The Burnside Bridge would be subject to Section 4(f) use that would be approved under the Nationwide Programmatic Section 4(f) Evaluation for Projects that Necessitate the Use of Historic Bridges for all build alternatives with or without the temporary bridge.

1.9.2.13 Portland Harbor Wall

No-Build Alternative

There would be no Section 4(f) use of the Portland Harbor Wall as a result of the No-Build Alternative. However, with no action, in the event of the predicted CSZ earthquake, the existing Burnside Bridge would fail and collapse, and due to its proximity and adjacent liquefiable soils, the Portland Harbor Wall could be damaged to an extent that it would need to be rebuilt and thus would no longer exist as a historic structure.

Enhanced Seismic Retrofit Alternative

Removal of a 150- to 175-foot segment of the Harbor Wall around Pier 1 is required for the Retrofit Alternative, which represents about 3 percent of the total length of the wall. The removal of the segment of the Harbor Wall is not considered an adverse effect under Section 106. However, the reconstructed portion of the wall would need to be consistent with the remaining portion.

Because the Portland Harbor Wall would not be subject to a Section 4(f) use from permanent or temporary activities, but is adjacent to the Project, whether it is subject to a Section 4(f) constructive use must be considered. The following assessment has determined that there would not be a constructive use:

- Noise: No – The resource is not a noise-sensitive receptor.
- Aesthetics: No – The Harbor Wall would not be affected by aesthetic changes from the project.
- Access: No – The Project would not alter long-term access to the Harbor Wall.
- Vibration: No – The resource is not a historic building susceptible to damage from vibration.

Replacement Alternatives

Removing any portion of the Harbor Wall is not necessary for the replacement alternatives because the piers would not be located at the existing Pier 1. However, in-ground seismic improvements by jet grouting are necessary from the Short-span Alternative (and its refined version) replacement Bent 7 location to and under the Harbor Wall. Potential adverse effects of jet grouting include destruction of any existing buried archaeological resources, as well as damage to and settling of adjacent existing structures. The removal and reconstruction of a segment of the Harbor Wall (in the event

that in-ground seismic improvements cause damage to the wall) is not considered an adverse effect under Section 106. However, the reconstructed portion of the wall would need to be consistent with the remaining portion.

Because the Portland Harbor Wall would not be subject to a Section 4(f) use from permanent or temporary activities, but is adjacent to the Project, whether it is subject to a Section 4(f) constructive use must be considered. The following assessment has determined that there would not be a constructive use:

- Noise: No – The Harbor Wall is not a noise-sensitive receptor.
- Aesthetics: No – The Harbor Wall would not be affected by aesthetic changes from the project.
- Access: No – The Project would not alter long-term access to the Harbor Wall.
- Vibration: No – The Harbor Wall is not a historic building susceptible to damage from vibration.

Temporary Bridge

The Temporary Bridge Option would not affect the potential for a Section 4(f) use of the Harbor Wall.

Agency Coordination

Oregon SHPO has reviewed the *EQRB Cultural Resources Technical Report* (Multnomah County 2021b) and has been in conversations with the project team about effects. Their comments during these interactions support the preliminary determination that the Project would have no adverse Section 106 effect on the Portland Harbor Wall. SHPO will also review the formal Finding of Effect for this resource.

Preliminary Section 4(f) Use Determination

The Portland Harbor Wall would not be subject to a Section 4(f) use under all build alternatives with or without the temporary bridge.

1.9.2.14 Burnside Skatepark

No-Build Alternative

There would be no Section 4(f) use of this resource as a result of the No-Build Alternative. However, with no action, in the event of the predicted CSZ earthquake, the existing Burnside Bridge would fail and collapse, and because the Burnside Skatepark is built into existing bridge components, it would also likely be destroyed and would no longer exist as a historic structure.

Enhanced Seismic Retrofit Alternative

Under the Retrofit Alternative, the Burnside Skatepark would be demolished during construction and not rebuilt. The skatepark is considered a Section 4(f) resource based on its status as eligible for listing on the NRHP and not for its recreation use (because it is not publicly owned and operated). Complete demolition of the skatepark removes its historic significance and would be a Section 106 adverse effect.

The skatepark's historic significance as an existing example of one of the first community-created and self-managed skateparks in the country would be removed and would cause an adverse effect to and Section 4(f) use of Burnside Skatepark.

Replacement Alternatives

Under the Short-span, Refined Short-span, Draft EIS Long-span, and Refined Long-span Alternatives, the Burnside Skatepark would not be demolished and would remain unchanged. However, its use would be intermittently unavailable during construction as shown in Table 1-6.

Table 1-6. Construction Timing at Burnside Skatepark

	Retrofit	Short-Span Alternative	Couch Extension	Draft EIS Long-Span Alternative	Refined Long-Span Alternative
Overall Construction – No Temporary Bridge	3.5 years	4.5 years	4.5 years	4.5 years	4.5 years
Overall Construction – Temporary Bridge	5 years	6.5 years	6.5 years	6.5 years	N/A
Burnside Skatepark Closure – No Temporary Bridge	Permanent	4–8 months	4–8 months	4 months	4 months
Burnside Skatepark Closure – Temporary Bridge	Permanent	8 months	8 months	8 months	N/A

N/A = not applicable

The temporary construction impacts described above meet the conditions necessary for a Temporary Occupancy to not be considered a Section 4(f) use, as follows:

- Duration/Ownership: Met – Impact would be shorter in duration than the full construction time for the Project, and there is no change in ownership.
- Nature/Magnitude: Met – The ultimate condition of the skatepark would be as good or better than its current condition, with no change in footprint, structure, or types of recreation possible.
- Permanent Change/Temporary Interference: Met – There would be no permanent adverse impacts to the skatepark, and there would not be significant interference to activities and purposes of the resource as intermittent interruptions of use are short-term and do not diminish the qualities that make the site eligible for listing on the NRHP.
- Restoration: Met – The skatepark would be returned to as good or better condition after construction was complete.
- Documentation: Coordination with SHPO is necessary to document agreement with this preliminary Section 4(f) determination of Temporary Occupancy. See Appendix B.

As shown above, under the replacement alternatives, the Burnside Skatepark would not be subject to a Section 4(f) use from permanent or temporary activities, but it is adjacent to and beneath the Project, so whether it is subject to a Section 4(f) constructive use

must be considered. The following assessment has determined that there would not be a constructive use:

- Noise: No – The skatepark is not a noise-sensitive receptor.
- Aesthetics: No – The Project would not alter the aesthetics of the skatepark.
- Access: No – The Project would not alter long-term access to the skatepark. Under the Refined Long-span Alternative with the tied-arch option, a bridge support would be constructed on the west side of 2nd Avenue, across the street from the skatepark. Under the Refined Long-span Alternative with the cable-stayed option, no bridge supports would be near the skatepark. Section 106 analysis determined there would be no adverse effects to the resource with any of the options under the Refined Long-span Alternative.
- Vibration: No – The skatepark is not a historic structure susceptible to damage from vibration.

Temporary Bridge Option

For all alternatives with the Temporary Bridge Option, the east end tie-in with the permanent bridge structure would require placement of additional bridge columns within the skatepark, causing damage to the current configuration of the skatepark that would require at least half of the current structure to be repaired or replaced after construction. This is a much more intense use of the skatepark than with the No Temporary Bridge Option. Due to the placement of the temporary bridge columns, the full skatepark would be unavailable for use for 8 months, rather than for 4 to 8 months without a temporary bridge. The southern half of the skatepark would be unavailable for use for the duration of the construction, approximately 5 years. Demolition and reconstruction of a up to half of the skatepark, though a permanent impact to the full integrity of the resource and its listing on the NRHP, is not considered a permanent incorporation of the property.

The temporary construction impacts described above do not meet the conditions necessary for a Temporary Occupancy to not be considered a Section 4(f) use, as follows:

- Duration/Ownership: Not Met – Construction would be approximately the same duration as the full construction time for the Project, but there would be no change in ownership.
- Nature/Magnitude: Not Met – The ultimate condition of the skatepark would be as good or better than its current condition, with no change in footprint or types of recreation possible. However, with half of the skatepark reconstructed, it would lose its historic integrity.
- Permanent Change/Temporary Interference: Not Met – There would be permanent adverse impacts to the skatepark due to half of the site being reconstructed, thus impairing its historic integrity.
- Restoration: Not Met – The skatepark would be returned to as good or better condition after construction was complete; however, it would have significantly reduced historic integrity.

De Minimis Analysis

De minimis impacts related to historic sites are defined as the determination of either “no adverse effect” or “no historic properties affected” in compliance with Section 106 of the NHPA. The Retrofit Alternative is the only alternative that would have a Section 4(f) use. Because the skatepark would be permanently removed with this alternative, the use is not *de minimis*.

Under the Temporary Bridge Option, half of the skatepark would be demolished and reconstructed. Pending a final determination of an adverse effect under Section 106, because of the large proportion of the impact, this use would not be *de minimis*.

Agency Coordination

Representatives from the Burnside Skatepark Board of Directors have been involved in project development through citizen advisory committee meetings and direct outreach. In addition, individual meetings were held with Burnside Skatepark on January 15, 2020, and August 18, 2020. Oregon SHPO has reviewed the *EQRB Cultural Resources Technical Report* (Multnomah County 2021b) and has been in conversations with the Project team about eligibility and Section 106 effects.

Preliminary Section 4(f) Use Determination

The Burnside Skatepark would be subject to the following Section 4(f) use based on the different alternatives and options:

- **Section 4(f) use from the Retrofit Alternative with or without the temporary bridge.**
- **No Section 4(f) use for all replacement alternatives without the temporary bridge based on the exception at 23 CFR 774.13(d).**
- **Section 4(f) use from temporary construction activities for all replacement alternatives with the temporary bridge.**

1.9.2.15 White Stag Sign

No-Build Alternative

There would be no Section 4(f) use of the White Stag sign as a result of the No-Build Alternative. However, with no action, in the event of the predicted CSZ earthquake, the existing Burnside Bridge would fail and collapse, and due to its proximity, the White Stag sign could be damaged to an extent that it would need to be rebuilt and thus would no longer exist as a historic structure.

Enhanced Seismic Retrofit Alternative

No permanent use of the White Stag sign would occur under any of the build alternatives, and it is outside of the Boundary of Potential Construction Impacts. There would be no temporary construction use of the White Stag sign that would constitute a Section 4(f) use.

As shown above, the White Stage sign would not be subject to a Section 4(f) use from permanent or temporary activities, but it is adjacent to the Project, so whether it is

subject to a Section 4(f) constructive use must be considered. The following assessment has determined that there would not be a constructive use:

- Noise: No – The resource is not a noise-sensitive receiver.
- Aesthetics: No – No adverse changes to the aesthetics of the resource or the setting are anticipated.
- Access: No – No permanent access changes are anticipated.
- Vibration: No – The resource is not considered susceptible to construction vibration damage. See Section 1.9.2.20 for vibratory effects on unreinforced masonry buildings, including the one the White Stag sign is attached to.

Replacement Alternatives

The Short-span Alternative, if it included a vertical lift for the movable span, could disrupt views of the White Stag sign from parts of the bridge and from the eastern shoreline south of the bridge. The Long-span Alternative, with above deck superstructure, and with the potential for a vertical lift movable span, would affect views of the White Stag sign from the same locations.

Whether or not the effect on views would be considered an adverse effect will depend on the movable span bridge type selected. Since the bridge type study is in progress, the Draft EIS and this technical analysis assume that the effect would be an adverse effect. Following the bridge type study, this assumption will be updated as necessary in the Final EIS and the Section 106 Agreement. There would be no temporary construction use of the White Stag sign.

As shown above, the White Stage sign would not be subject to a Section 4(f) use from permanent or temporary activities, but it is adjacent to the Project, so whether it is subject to a Section 4(f) constructive use must be considered. The following assessment has determined that there would not be a constructive use:

- Noise: No – The resource is not a noise-sensitive receiver.
- Aesthetics: No – The potential adverse changes to the views of and setting of the resource are not anticipated to rise to the level that would be considered a constructive use. The sign would continue to operate and would continue to be visible from many perspectives.
- Access: No – No permanent access changes are anticipated.
- Vibration: No – The resource is not considered susceptible to construction vibration damage. See Section 1.9.2.20 for vibratory effects on unreinforced masonry buildings, including the one the White Stag Sign is attached to.

Temporary Bridge Option

The Temporary Bridge Option would not affect the potential for a Section 4(f) use of the White Stag sign.

Agency Coordination

Oregon SHPO has reviewed the *EQRB Cultural Resources Technical Report* (Multnomah County 2021b) and has been in conversations with the project team about eligibility and Section 106 effects.

Preliminary Section 4(f) Use Determination

The White Stag Sign would not be subject to Section 4(f) use under all build alternatives with or without the temporary bridge.

1.9.2.16 Ankeny Pump Station

No-Build Alternative

There would be no Section 4(f) use of the pump station as a result of the No-Build Alternative. However, with no action, in the event of the predicted CSZ earthquake, the existing Burnside Bridge would fail and collapse, and due to its proximity, the Ankeny Pump Station could be damaged to an extent that it would need to be rebuilt, and thus would no longer exist as a historic structure.

All Build Alternatives

No permanent use of the Ankeny Pump Station would occur under any of the build alternatives. The pump station building is within the Boundary of Potential Construction Impacts, and temporary construction easement for the project will be necessary, but access for BES activities would be maintained throughout construction. However, in-ground seismic improvements via jet grouting in the area around Pier 1, adjacent to the Ankeny Pump Station, are necessary with the Retrofit Alternative, Short-span Alternative, and Couch Extension Alternative. No in-ground improvements would be necessary near the Ankeny Pump Station under the Long-span Alternative.

Potential adverse effects of jet grouting could include damage to and settling of adjacent existing structures, such as the Ankeny Pump Station. The extent is unknown at this time; however, the Draft EIS and this technical analysis assume there will be no Section 106 adverse effects that would constitute a Section 4(f) use.

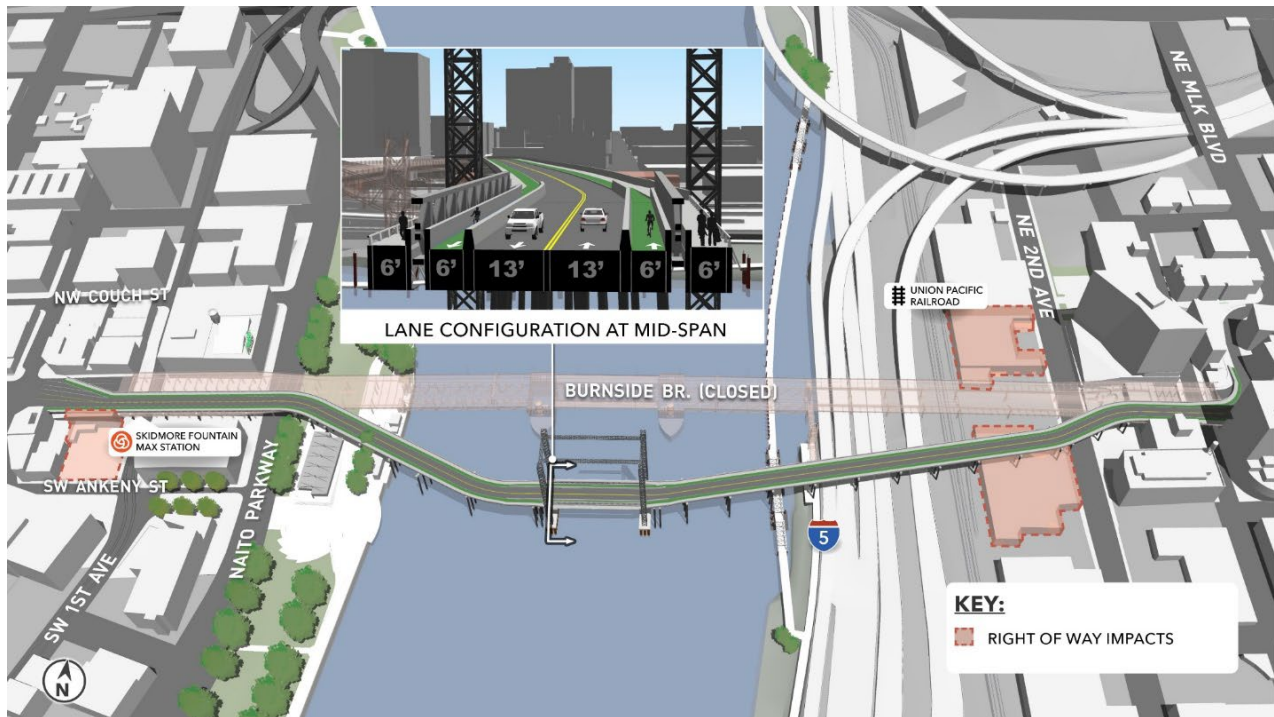
Because the Ankeny Pump Station would not be subject to a Section 4(f) use from permanent or temporary activities, but is adjacent to the Project, whether it is subject to a Section 4(f) constructive use must be considered. The following assessment has determined that there would not be a constructive use:

- Noise: No – The resource is not a noise-sensitive receiver.
- Aesthetics: No – No adverse changes to the aesthetics of the resource or the setting are anticipated.
- Access: No – No permanent access changes are anticipated.
- Vibration: No – The resource is not considered susceptible to construction vibration damage.

Temporary Bridge Option

The location of the temporary bridge shown on Figure 1-16 is conceptual; however, the project team anticipates any temporary bridge would be located on the south side of the Burnside Bridge and would likely pass over the Ankeny Pump Station building. No direct permanent use of the Ankeny Pump Station building or affect its historic integrity would occur, and continued access to the pump station for operations and maintenance would be maintained throughout construction. Thus, no use under Section 4(f) is anticipated.

Figure 1-16. Proposed Temporary Bridge Location



Because the Ankeny Pump Station would not be subject to a Section 4(f) use from permanent or temporary activities, but is adjacent to, and in the case of the Temporary Bridge Option underneath, the Project, whether it is subject to a Section 4(f) constructive use must be considered. The following assessment has determined that there would not be a constructive use:

- Noise: No – The resource is not a noise-sensitive receiver.
- Aesthetics: No – No adverse changes to the aesthetics of the resource or the setting are anticipated.
- Access: No – No permanent access changes are anticipated.
- Vibration: No – The Ankeny Pump Station is not considered susceptible to construction vibration damage.

Agency Coordination

Oregon SHPO has been involved in discussions about the Determination of Eligibility for Ankeny Pump Station and the assessment of Section 106 effects.

Preliminary Section 4(f) Use Determination

The Ankeny Pump Station would not be subject to Section 4(f) use under all build alternatives with or without the temporary bridge.

1.9.2.17 Union Pacific Railroad

No-Build Alternative

There would be no direct Section 4(f) use of this resource as a result of the No-Build Alternative. However, with no action, in the event of the predicted CSZ earthquake, the existing Burnside Bridge would fail and collapse, and due to its proximity, a small portion of the UPRR track could be damaged to an extent that it would need to be rebuilt.

All Build Alternatives

No permanent use of the UPRR track would occur under any of the build alternatives. The tracks are within the Boundary of Potential Construction Impacts, and temporary construction easements across the UPRR property would be necessary;⁷ however, access for UPRR activities and operation would be maintained throughout construction. In-ground seismic improvements via jet grouting in the area around the tracks are necessary with the Retrofit Alternative, Short-span Alternative, and Couch Extension Alternative. No in-ground improvements would be necessary near the UPRR tracks under the Long-span Alternative.

Potential adverse effects of jet grouting could include damage to and settling of adjacent existing structures. The extent is unknown at this time; however, the Draft EIS and this technical analysis assume there will be no Section 106 adverse effects that would constitute a Section 4(f) use.

Because the UPRR tracks would not be subject to a Section 4(f) use from permanent or temporary activities but are adjacent to the Project, whether the tracks are subject to a Section 4(f) constructive use must be considered. The following assessment has determined that there would not be a constructive use:

- Noise: No – The resource is not a noise-sensitive receiver.
- Aesthetics: No – No adverse changes to the aesthetics of the resource or the setting are anticipated.
- Access: No – No permanent access changes are anticipated.
- Vibration: No – The resource is not a historic building susceptible to construction vibration damage.

Temporary Bridge Option

The location of the temporary bridge shown on Figure 1-16 is conceptual; however, the project team anticipates any temporary bridge would be located on the south side of the

⁷ Note that the Couch Extension Alternative would require a permanent easement in addition to temporary construction easements. This permanent easement is not expected to create a Section 106 adverse effect on the UPRR tracks.

Burnside Bridge and would likely pass over UPRR tracks. No direct physical impacts are known at this time that would permanently impact the UPRR tracks or affect the historic integrity, and continued access to the tracks would be maintained throughout construction.

Because the UPRR tracks would not be subject to a Section 4(f) use from permanent or temporary activities but are adjacent to the Project, whether the tracks are subject to a Section 4(f) constructive use must be considered. The following assessment has determined that there would not be a constructive use:

- Noise: No – The resource is not a noise-sensitive receiver.
- Aesthetics: No – No adverse changes to the aesthetics of the resource or the setting are anticipated.
- Access: No – No permanent access changes are anticipated.
- Vibration: No – UPRR tracks are not considered a historic building susceptible to construction vibration damage.

Agency Coordination

No coordination specific to Section 4(f) has occurred with UPRR at this time. Oregon SHPO has reviewed the *EQRB Cultural Resources Technical Report* (Multnomah County 2021b) and has been in conversations with the project team about eligibility and Section 106 effects.

Preliminary Section 4(f) Use Determination

The UPRR would not be subject to Section 4(f) use under all build alternatives with or without the temporary bridge.

1.9.2.18 Frigidaire/Templeton Building

The Frigidaire/Templeton Building was added to this Section 4(f) analysis based on analysis that occurred after the release of the Draft EIS regarding refined information on the cable-stayed and tied-arch bridge type options on the east end of the bridge.

No-Build Alternative

There would be no direct Section 4(f) use of this resource as a result of the No-Build Alternative. However, with no action, in the event of the predicted CSZ earthquake, the existing Burnside Bridge would fail and collapse, and due to its proximity, the Frigidaire/Templeton Building could be damaged to an extent that it would need to be rebuilt.

All Build Alternatives

No permanent use of the Frigidaire/Templeton Building would occur under the Enhanced Seismic Retrofit or Draft EIS replacement alternatives because Section 106 analysis determined that no adverse effect would occur to the resource. The building is outside of the Boundary of Potential Construction Impacts for all build alternatives, so there would be no temporary construction use that would constitute a Section 4(f) use.

Under the Draft EIS Replacement, Refined Long-span, Refined Short-span, and Refined Couch Extension Alternatives, the connection between the bridge sidewalk and the Frigidaire/Templeton Building would be altered. The façade of the building would no longer abut the sidewalk due to the narrower bridge width. An extension from the bridge sidewalk would connect to the building entrance, and a railing would be installed along the bridge sidewalk in front of the remainder of the building façade. Section 106 analysis determined that no adverse effect would occur to the resource due to this change (see Appendix C). Thus, there would be no Section 4(f) use under the Refined Long-span Alternative.

The Frigidaire/Templeton Building would not be subject to a Section 4(f) use from permanent or temporary activities, but it is adjacent to the Project, so whether it is subject to a Section 4(f) constructive use must be considered. The following assessment has determined that there would not be a constructive use:

- Noise: No – The resource is not a noise-sensitive receiver.
- Aesthetics: No – The changes to the aesthetics or setting by separating the bridge sidewalk from the building façade and installing a railing is not considered an adverse effect because the railing can be designed to not block visual access to the building, no changes to the building itself would occur, and pedestrians could still access the building from the bridge if the building makes that entrance available.

Diagonal cables would be placed in the vicinity of the building façade with the cable-stayed bridge type but would not affect access or completely block the view to or from the building. Based on the proposed placement of the cables on the north side of the sidewalk, the visual impact from the cables is considered not adverse.

- Access: No – No permanent access changes are anticipated.
- Vibration: No – The resource is not considered susceptible to construction vibration damage. See Section 1.9.2.20 for vibratory effects on unreinforced masonry buildings.

Agency Coordination

Oregon SHPO has been involved in discussions about the Determination of Eligibility for the Frigidaire/Templeton Building and the assessment of Section 106 effects.

Preliminary Section 4(f) Use Determination

The Frigidaire/Templeton Building would not be subject to Section 4(f) use under all build alternatives with or without the temporary bridge.

1.9.2.19 Bates Building, Burnside Hotel, Salvation Army Building, and Reed Building

The Bates, Salvation Army, and Reed Buildings and the Burnside Hotel were added to this Section 4(f) analysis because the Refined Long-span Alternative would have a slightly different impact on these resources than with the Draft EIS replacement alternatives.

No-Build Alternative

There would be no direct Section 4(f) use of these resources as a result of the No-Build Alternative. However, with no action, in the event of the predicted CSZ earthquake, the existing Burnside Bridge would fail and collapse, and due to their proximity, some of these resources could be damaged.

All Build Alternatives

No permanent use of these buildings would occur under the Enhanced Seismic Retrofit or Draft EIS replacement alternatives because Section 106 analysis determined that no adverse effect would occur to the resources from the separation of the bridge from the buildings. The buildings are outside of the Boundary of Potential Construction Impacts for all build alternatives, so there would be no temporary construction use that would constitute a Section 4(f) use.

Under the refined replacement alternatives, there would be a wider separation between the bridge and these buildings, and views of the buildings based on the location of the bridge would be altered more than under the Draft EIS Build Alternatives. Section 106 analysis determined that no adverse effect would occur to the resources due to these changes (Appendix C). Thus, there would be no Section 4(f) use under the Refined Long-span, Refined Short-span, or Refined Couch Extension Alternatives.

These resources would not be subject to a Section 4(f) use from permanent or temporary activities, but they are adjacent to the Project, so whether they are subject to a Section 4(f) constructive use must be considered. The following assessment has determined that there would not be a constructive use for any of these buildings:

- Noise: No – The resources are not noise-sensitive receivers.
- Aesthetics: No – The changes to the aesthetics or setting by separating the bridge further from the buildings is not considered an adverse effect.
- Access: No – No permanent access changes are anticipated.
- Vibration: No – The resources are not considered susceptible to construction vibration damage. See Section 1.9.2.18 for vibratory effects on unreinforced masonry buildings.

Agency Coordination

Oregon SHPO has been involved in discussions about the Determination of Eligibility for these resources and the assessment of Section 106 effects.

Preliminary Section 4(f) Use Determination

The Bates Building, Burnside Hotel, Salvation Army Building, and Reed Building would not be subject to Section 4(f) use under all build alternatives with or without the temporary bridge.

1.9.2.20 Unreinforced Masonry Historic or NRHP-Eligible Buildings

All the unreinforced masonry buildings in the API that have not had seismic retrofitting, and that are located adjacent or near to proposed bridge demolition and construction

activities, would be subject to potential vibration damage from construction methods and demolition activities. The *EQRB Cultural Resources Technical Report* (Multnomah County 2021b) identifies that unreinforced masonry buildings within 100 feet of construction activities could be affected (see Figure 1-17).

On the west side, there are 19 NRHP-listed or recommended eligible properties within 100 feet of the west approach or W Burnside Street between SW/NW 2nd Avenue and SW/NW 3rd Avenue. Four properties are the Burnside Bridge itself, the White Stag sign, the Harbor Wall, and the Ankeny Pump Station. The remaining properties are buildings that are of unreinforced masonry construction based on available information. Of these 15 buildings, available information indicates that 6 have been seismically retrofitted: 3 buildings that are now elements of the White Stag Block; the Reed Building; the Erickson Saloon; and the Fritz Building. The remaining 9 buildings could therefore be subject to potential damage from demolition/construction activity depending on the equipment used and the distance from the buildings.

Because the identified buildings would not be subject to a Section 4(f) use from permanent or temporary activities but are adjacent to the Project, whether they are subject to a Section 4(f) constructive use must be considered. The following assessment has determined that there would not be a constructive use:

- Noise: No – No long-term traffic noise impacts are identified that would constitute adverse effects to any noise-sensitive receptors at historic buildings.
- Aesthetics: No – No permanent changes to the aesthetics of historic buildings or settings that would constitute an adverse effect are anticipated.
- Access: No – No permanent restrictions to access to historic buildings that would constitute an adverse effect are anticipated.
- Vibration: No – Historic, unreinforced masonry buildings may be susceptible to adverse effects from vibrations due to construction activities. However, impacts to structural integrity would be avoided by (1) monitoring in each potentially affected building during relevant construction activities, and (2) using alternative construction techniques where needed to avoid generating vibration that would cause structural damage.

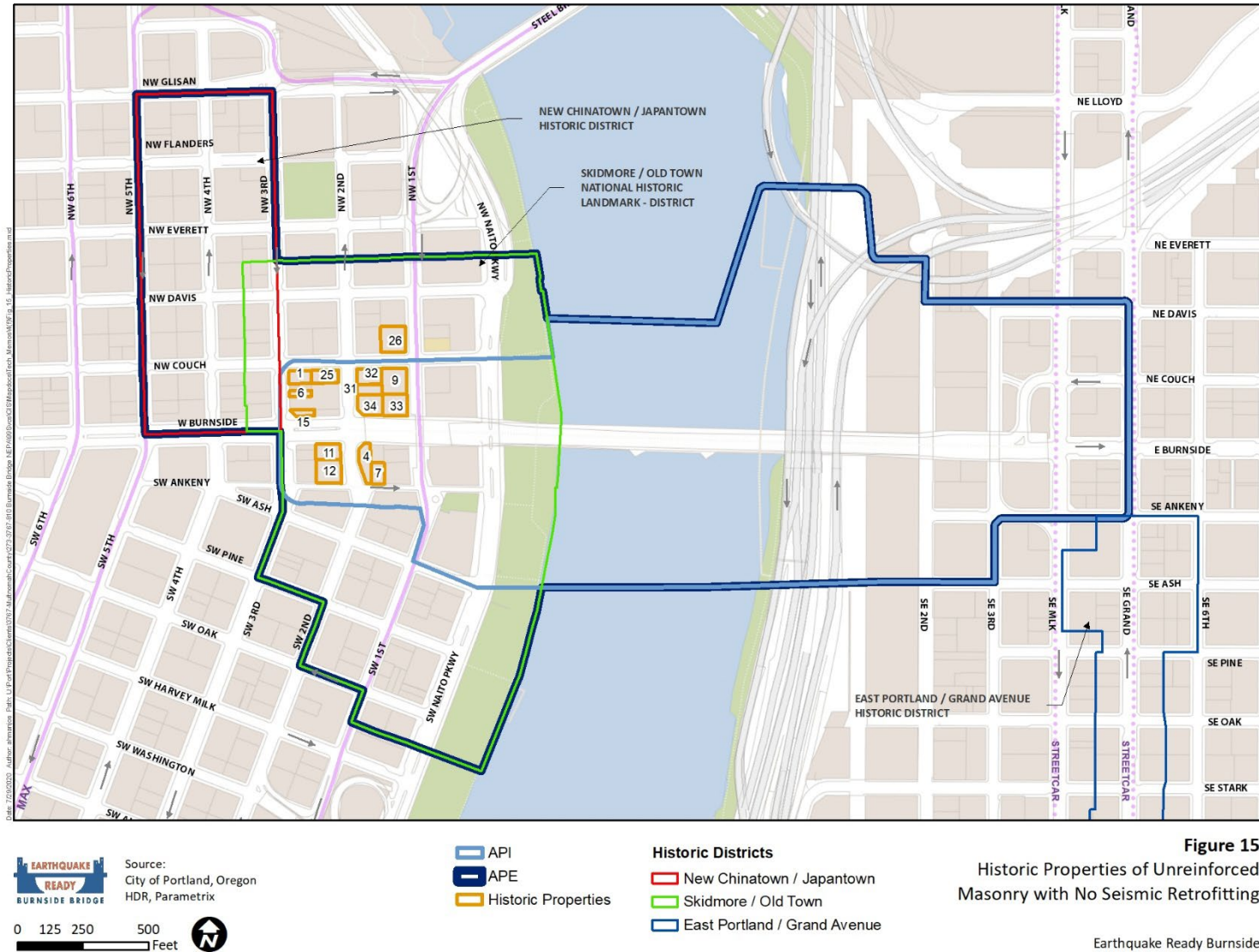
Agency Coordination

Oregon SHPO has reviewed the *EQRB Cultural Resources Technical Report* (Multnomah County 2021b) and has been in conversations with the project team about eligibility and Section 106 effects.

Preliminary Section 4(f) Use Determination

Unreinforced Masonry Historic or NRHP-Eligible Buildings would not be subject to Section 4(f) use under all build alternatives with or without the temporary bridge.

Figure 1-17. Unreinforced Masonry Historic Buildings



Source: City of Portland, HDR, Parametrix

1.9.2.21 Skidmore/Old Town National Historic Landmark District

The Portland Harbor Wall, Ankeny Pump Station, and the White Stag sign are recommended as eligible for listing on the NRHP and are within the Skidmore/Old Town National Historic Landmark District. However, these resources are considered non-contributing because they are outside of the period of significance for the district. Thus, potential Section 4(f) use of the Portland Harbor Wall, Ankeny Pump Station, and the White Stag sign would not constitute a permanent or temporary occupancy use of the district. The White Stag Block, Bates Building, Burnside Hotel, Salvation Army Building, and Reed Building are contributing resources in the District. However, there is no Section 4(f) use of any of these buildings (see Section 1.9.2.19).

There is no permanent or construction activity Section 4(f) use of the district, but as the Project occurs within the district, whether the district is subject to a Section 4(f) constructive use must be considered. The following assessment has determined that there would not be a constructive use:

- Noise: No – No long-term traffic noise impacts are identified that would constitute adverse effects to any noise-sensitive receptors at historic buildings.
- Aesthetics: No – No permanent changes to the aesthetics of historic buildings or settings that would constitute an adverse effect are anticipated. There are two components of the Project that have the potential to affect aesthetics or setting: bridge type for the west approach because it is located in the District, and new ADA pedestrian and bicycle access options from the west end of the bridge to the surface streets within the District.

The west end of the historic Burnside Bridge is within the District (but is not contributing to the district's historic status) and the main span of the bridge is visible from the westernmost historic buildings, so there is potential for the design of the bridge to affect the setting of the district.

- With the Retrofit Alternative, the bridge would have a similar appearance to the current bridge when viewed from the district, so no impact is anticipated.
- With the Draft EIS replacement alternatives, the bridge could have a different appearance depending on the options selected and type of lift span. The tied-arch and cable-stayed bridge options of the Draft EIS Long-span would have tall, modern profiles that would not be compatible with the character and visual appearance of the district and would obstruct historic views from and to the district. This would be an adverse effect that could constitute a Section 4(f) constructive use.
- With the Refined Long-span Alternative, the western approach would be a girder span that maintains the open character of the existing span and maintains existing views to and from the district. The girder span would not have an adverse effect and would not constitute a Section 4(f) constructive use.

ADA access differs between the Draft EIS Build Alternatives and the Refined Long-span Alternative.

- With the Draft EIS Build Alternatives, the design would include a stairs and ramp configuration on the south side of the bridge only. The ramps would not have an above-deck vertical element like the elevator option under the Refined Long-span

Alternative and would have a larger footprint than the Refined Long-span Alternative. These impacts would not constitute an adverse effect on the district.

- With the Refined Long-span Alternative, the design would include stairs and elevators for ADA access on NW/SW 1st Avenue and West Burnside, providing ADA access to the north and south sides of the bridge. The elevators would introduce new visual elements along West Burnside, thus altering a portion of the National Historic Landmark District setting. This change in the setting along West Burnside would most directly affect 4 of the 20 blocks in the district, with few if any effects for a substantial part of the district. Design of the elevators would need to meet the Skidmore/Old Town Historic District Design Guidelines. The footprint would be smaller than the ramps. These impacts would not constitute an adverse effect on the district.
- Access: No – No permanent restrictions to access to historic buildings that would constitute an adverse effect are anticipated.
- Vibration: No – See discussion above for unreinforced masonry buildings.

Agency Coordination

Oregon SHPO has reviewed the *EQRB Cultural Resources Technical Report* (Multnomah County 2021b) and has been in conversations with the project team about eligibility and Section 106 effects.

Preliminary Section 4(f) Use Determination

Skidmore/Old Town National Historic Landmark District would not be subject to Section 4(f) use under the Refined Long-span Alternative.

Skidmore/Old Town National Historic Landmark District would be subject to Section 4(f) constructive use under all Draft EIS replacement alternatives with the cable-stayed or tied-arch options on the west end of the bridge.

1.9.2.22 New Chinatown/Japantown Historic District

No resources contributing to the New Chinatown/Japantown Historic District are anticipated to be impacted or experience a Section 4(f) use, thus no Section 4(f) use of the district is anticipated. However, as the Project occurs adjacent to the district, whether the district is subject to a Section 4(f) constructive use must be considered. The following assessment has determined that there would not be a constructive use:

- Noise: No – No long-term traffic noise impacts are identified that would constitute adverse effects to any noise-sensitive receptors at historic buildings.
- Aesthetics: No – No permanent changes to the aesthetics of historic buildings or settings that would constitute an adverse effect are anticipated. No part of the bridge is within the district, and there is no potential for the design of the bridge to affect the setting of the district.
- Access: No – No permanent restrictions to access to historic buildings that would constitute an adverse effect are anticipated.
- Vibration: No – See discussion above for unreinforced masonry buildings.

Agency Coordination

Oregon SHPO has reviewed the *EQRB Cultural Resources Technical Report* (Multnomah County 2021b) and has been in conversations with the project team about eligibility and Section 106 effects.

Preliminary Section 4(f) Use Determination

New Chinatown/Japantown Historic District would not be subject to Section 4(f) use under all build alternatives with or without the temporary bridge.

1.9.2.23 East Portland Grand Avenue Historic District

No resources contributing to the East Portland Grand Avenue Historic District are anticipated to be impacted or experience a Section 4(f) use, thus no Section 4(f) use of the district is anticipated. However, as the Project occurs adjacent to the district, whether the district is subject to a Section 4(f) constructive use must be considered. The following assessment has determined that there would not be a constructive use:

- Noise: No – No long-term traffic noise impacts are identified that would constitute adverse effects to any noise-sensitive receptors at historic buildings.
- Aesthetics: No – No permanent changes to the aesthetics of historic buildings or settings that would constitute an adverse effect are anticipated. No part of the bridge is within the district, and there is no potential for the design of the bridge to affect the setting of the district.
- Access: No – No permanent restrictions to access to historic buildings that would constitute an adverse effect are anticipated.
- Vibration: No – See discussion above for unreinforced masonry buildings.

Agency Coordination

Oregon SHPO has reviewed the *EQRB Cultural Resources Technical Report* (Multnomah County 2021b) and has been in conversations with the project team about eligibility and Section 106 effects.

Preliminary Section 4(f) Use Determination

East Portland/Grand Avenue Historic District would not be subject to Section 4(f) use under all build alternatives with or without the temporary bridge.

1.9.2.24 Archaeological – Below-Ground Resources

Based on analysis in the *EQRB Cultural Resources Technical Report* (Multnomah County 2021b), there are no archaeological resources in the API that would be subject to Section 4(f), because there has not been a determination, nor is it anticipated, that any of the potential resources warrant in-place conservation.

1.10 Summary of Section 4(f) Preliminary Determinations of Use

Table 1-7 summarizes Section 4(f) uses by resource, alternative, and documentation needed with the Refined Long-span Alternative.

Table 1-7. Summary of Section 4(f) Use Types and Documentation Type by Alternative

	Retrofit	Short-Span Alternative ^a	Couch Extension ^a	Long-Span Alternative (Draft EIS Preferred Alternative)	Temporary Bridge	Refined Long-Span Alternative	Section 4(f) Documentation Type Needed for the Refined Long-Span
Willamette River Water Trail	No Section 4(f) Use (Temporary Construction Activity)	No Section 4(f) Use (Temporary Construction Activity)	No Section 4(f) Use (Temporary Construction Activity)	No Section 4(f) Use (Temporary Construction Activity)	No Section 4(f) Use	No Section 4(f) Use (Temporary Construction Activity)	Temporary Occupancy Letter
Gov. Tom McCall Waterfront Park	Section 4(f) Use (Temporary Construction Easement)	Section 4(f) Use (Temporary Construction Easement)	Section 4(f) Use (Temporary Construction Easement)	Section 4(f) Use (Temporary Construction Easement)	None	Section 4(f) Use (Temporary Construction Easement)	Individual 4(f) Evaluation
Vera Katz Eastbank Esplanade	Section 4(f) Use (Temporary Construction Easement)	Section 4(f) Use (Temporary Construction Easement)	Section 4(f) Use (Temporary Construction Easement)	Section 4(f) Use (Temporary Construction Easement)	None	Section 4(f) Use (Temporary Construction Easement)	Individual 4(f) Evaluation
Willamette River Greenway Trail	Section 4(f) Use (Temporary Construction Easement)	Section 4(f) Use (Temporary Construction Easement)	Section 4(f) Use (Temporary Construction Easement)	Section 4(f) Use (Temporary Construction Easement)	None	Section 4(f) Use (Temporary Construction Easement)	Individual 4(f) Evaluation
Burnside Bridge	Section 4(f) Use (Permanent Incorporation)	Section 4(f) Use (Permanent Incorporation)	Section 4(f) Use (Permanent Incorporation)	Section 4(f) Use (Permanent Incorporation)	No Section 4(f) Use	Section 4(f) Use (Permanent Incorporation)	Historic Bridge Programmatic
Harbor Wall	None	None	None	None	None	None	N/A
Burnside Skatepark	Section 4(f) Use (Permanent Incorporation)	No Section 4(f) Use (Temporary Construction Easement)	No Section 4(f) Use (Temporary Construction Easement)	No Section 4(f) Use (Temporary Construction Easement)	Section 4(f) Use (Temporary Construction Easement)	No Section 4(f) Use (Temporary Construction Easement)	Temporary Occupancy Letter

EARTHQUAKE READY BURNSIDE BRIDGE

	Retrofit	Short-Span Alternative ^a	Couch Extension ^a	Long-Span Alternative (Draft EIS Preferred Alternative)	Temporary Bridge	Refined Long-Span Alternative	Section 4(f) Documentation Type Needed for the Refined Long-Span
Ankeny Pump Station	None	None	None	None	None	None	N/A
UPRR Tracks	None	None	None	None	None	None	N/A
Frigidaire/Templeton Building	None	No Section 4(f) Use	No Section 4(f) Use	No Section 4(f) Use	None	No Section 4(f) Use	None
Bates Building, etc.	None	None	None	None	None	None	N/A
Unreinforced Masonry Historic Buildings	None	None	None	None	None	None	N/A
Skidmore/Old Town National Historic Landmark District	None	Section 4(f) Use (Constructive Use with Cable-stayed or Tied-arch West Approach)	Section 4(f) Use (Constructive Use with Cable-stayed or Tied-arch West Approach)	Section 4(f) Use (Constructive Use with Cable-stayed or Tied-arch West Approach)	None	None	N/A
New Chinatown/Japantown Historic District	None	None	None	None	None	None	N/A
East Portland Grand Avenue Historic District	None	None	None	None	None	None	N/A
Archaeological	None	None	None	None	None	None	N/A

N/A = not applicable

Note: The temporary construction easements required for the Vera Katz Eastbank Esplanade and the Willamette Greenway Trail by all alternatives do not meet the criteria in CFR 23, Section 774.13(d) Temporary occupancies of land that are so minimal as to not constitute a use within the meaning of Section 4(f).

^a The refined versions of the Short-span and Couch Extension Alternatives have the same Section 4(f) use status as reported above.

Chapter 2 – Draft Section 4(f) Evaluation

This Draft Section 4(f) Evaluation has been prepared to be submitted with the Supplemental Draft EIS for the EQRB Project. Project location, purpose, and alternatives are described in Chapter 1 of this draft Section 4(f) Analysis along with a preliminary determination of use for eligible properties.

2.1 Description of Section 4(f) Properties

This section briefly describes the Section 4(f) properties and resources that would be subject to use by any of the project alternatives. Full descriptions and determinations of use are available in Chapter 1 of this report, the *EQRB Parks and Recreation Technical Report* (Multnomah County 2021e), the *EQRB Parks and Recreation Supplemental Memorandum* (Multnomah County 2022d) the *EQRB Cultural Resources Technical Report* (Multnomah County 2021b), and the *EQRB Cultural Resources Supplemental Memorandum* (Multnomah County 2022a).

2.1.1 Parks, Recreation, and Open Space Resources

Table 2-1 identifies publicly owned park, recreation, and open space areas within the API that qualify as Section 4(f) resources and that would be subject to a Section 4(f) use by the Refined Long-span Alternative (also see Figure 1-3, Figure 1-4, and Figure 1-5 in Chapter 1).

Table 2-1. Section 4(f) Parks and Recreation Resources Subject to Use

ID on Figure 1-3	Resource	Ownership (Management)	General Resource Description and Features Within API
1	Gov. Tom McCall Waterfront Park (Figure 2-1)	City of Portland	Waterfront Park is an approximately 36-acre park that stretches between the Willamette River and Downtown Portland that was constructed between 1974 and 1978. The park replaced Harbor Drive to become the city's direct visual and physical access to the Willamette River. Features in the API include the following: <ul style="list-style-type: none"> • Willamette River Greenway Trail • Japanese American Historical Plaza • Ankeny Plaza Structure/Portland Saturday Market Location • The Meadow and Bill Naito Legacy Fountain
2	Vera Katz Eastbank Esplanade (Figure 2-2)	City of Portland – Structure Oregon Division of State Lands – Beds and Banks of River	The 1.5-mile Esplanade extends north from the Hawthorne Bridge, past the Morrison and Burnside Bridges, and terminates at the Steel Bridge, with connections to eastside neighborhoods as well as across the river to Waterfront Park. The City of Portland developed the Esplanade after its completion of the Eastbank Riverfront Park Master Plan in 1994 (City of Portland 1994). Construction was completed in May 2001. Features in the API include the following: <ul style="list-style-type: none"> • Open all hours, all days • Floating walkway • Stairs connecting to Burnside Bridge • Multi-use pedestrian and bicycle trail • Kevin J. Duckworth memorial Dock

ID on Figure 1-3	Resource	Ownership (Management)	General Resource Description and Features Within API
3	Willamette River Greenway Trail (Figure 2-3)	City of Portland (within API)	<p>The Willamette River Greenway Trail is an interconnected network of trails as components of the Willamette River Greenway Program, originated with the Willamette River Greenway Act by the Oregon Legislature in 1967 and guided by Oregon Statewide Planning Goal 15 to preserve natural spaces and public access to the Willamette River. Features in the API include the following:</p> <ul style="list-style-type: none"> • Trail on west side of the river travels within Waterfront Park, adjacent to the seawall where possible within the API. • Trail on east side of the river travels within the Esplanade.

Figure 2-1. Views of Governor Tom McCall Waterfront Park



Figure 2-2. View of the Vera Katz Eastbank Esplanade, Looking South under the Burnside Bridge



Figure 2-3. View of the Willamette River Greenway Trail, West Side, Looking North toward the Burnside Bridge



2.1.2 Historic Sites

Section 4(f) resources either listed or considered eligible for listing on the NRHP within the Area of Potential Effect notable for their proximity to the Burnside Bridge include the Burnside Bridge itself, the White Stag sign, Burnside Skatepark, and Ankeny Pump Station. Of these, the Burnside Bridge and Burnside Skatepark would be subject to Section 4(f) use. Section 4(f) use of the Burnside Bridge is not included in this Section 4(f) Evaluation because it is documented through use of the separate Programmatic Section 4(f) Evaluation and Approval for FHWA Projects that Necessitate the Use of Historic Bridges. As such, Burnside Skatepark is the only historic Section 4(f) site included here. See Table 2-2.

Table 2-2. Section 4(f) Historic Sites Subject to Use

ID on Figure 1-7	Resource	Ownership (Management)	General Resource Description and Features Within API
48	Burnside Skatepark (Figure 2-4)	City of Portland Right-of-Way	<p>The Burnside Skatepark is a poured-concrete skatepark structure. Construction began in 1990 and has continued to evolve in design over time. It is situated on public property underneath the east approach of the Burnside Bridge, but it is not a public park. The skatepark is the first known do-it-yourself (DIY) poured-concrete skatepark built in the United States and was at the forefront of a trend in DIY skatepark design and community. The skatepark known internationally and draws skaters young and old, having built a reputation for its challenging features.</p> <p>The local skater community accepts that the overall design is constantly evolving and appreciates that the park is not an official park. Although sanctioned by the City of Portland in 1992, the skatepark continues to be shaped by the skater community without City involvement (Bredesen 2019; Chemotti 2015). The Burnside Skatepark is recommended to be eligible for listing in the NRHP under Criteria A and C and meets Criteria Consideration G. See the <i>EQRB Cultural Resources Technical Report</i> (Multnomah County 2021b) for details.</p>

Figure 2-4. View of Burnside Skatepark Looking West

Source: City of Portland, HDR, Parametrix; Note: This figure includes all the parks and recreation resources discussed in the *EQRB Parks and Recreation Technical Report* (Multnomah County 2021e).

2.2 Section 4(f) Preliminary Determinations of Use Summary

Table 2-3 summarizes Section 4(f) resources that will have a Section 4(f) use that has been determined to be not *de minimis* and for which a programmatic Section 4(f) approval is not applicable. These resources are included in this Draft Section 4(f) Evaluation. Full details for use determination are available in Chapter 1, Section 4(f) Technical Analysis.

2.3 Alternatives to Avoid Use of Section 4(f) Properties

This section analyzes whether there is an alternative that avoids all Section 4(f) use.

23 CFR 774.3 states FHWA may not approve a Section 4(f) use unless a determination is made that:

- There is no feasible and prudent avoidance alternative, as defined in § 774.17, to the use of land from the property; and
- The action includes all possible planning, as defined in § 774.17, to minimize harm to the property resulting from such use; or
- FHWA determines that the use of the property, including measure(s) to minimize harm (such as any avoidance, minimization, mitigation, or enhancement measures) committed to by the applicant, will have a *de minimis* impact, as defined in § 774.17, on the property.

This section discusses the requirement that there is no feasible and prudent alternative that completely avoids the use of Section 4(f) property.

Chapter 2 of the Draft EIS and the *EQRB Description of Alternatives* (Multnomah County 2021c) describe the process used to identify and screen project concepts through to selecting the alternatives evaluated. That process eliminated alternatives that did not meet the purpose and need of the project and were not feasible or prudent. The No-Build Alternative, build alternatives, and construction alternatives and how they avoid use or minimize harm are described below.

2.3.1 No-Build Alternative

The No-Build Alternative would avoid the Section 4(f) use of the Willamette River Greenway Trail and the Vera Katz Eastbank Esplanade, and would avoid a permanent use of the Burnside Skatepark, but it is not a prudent alternative. It would not meet the purpose and need of the Project because it would not provide an earthquake-resilient Willamette River crossing. Thus, the No-Build Alternative is not considered prudent.

In addition, following a major CSZ earthquake, the No-Build Alternative would result in severe damage and loss of use of the Willamette Greenway Trail, the Esplanade, and the Burnside Skatepark.

Table 2-3. Section 4(f) Resources Covered in the Individual Section 4(f) Evaluation

Resource	Retrofit	Short-Span Alternative ^a	Couch Extension ^a	Long-Span Alternative (Draft EIS Preferred Alternative)	Temporary Bridge	Refined Long-Span Alternative	Section 4(f) Documentation Type Needed for Refined Long-Span Alternative
Gov. Tom McCall Waterfront Park	Section 4(f) Use (Temporary Construction Easement)	Section 4(f) Use (Temporary Construction Easement)	Section 4(f) Use (Temporary Construction Easement)	Section 4(f) Use (Temporary Construction Easement)	No Change	Section 4(f) Use (Temporary Construction Easement)	Individual 4(f) Evaluation
Vera Katz Eastbank Esplanade	Section 4(f) Use (Temporary Construction Easement)	Section 4(f) Use (Temporary Construction Easement)	Section 4(f) Use (Temporary Construction Easement)	Section 4(f) Use (Temporary Construction Easement)	No Change	Section 4(f) Use (Temporary Construction Easement)	Individual 4(f) Evaluation
Willamette River Greenway Trail	Section 4(f) Use (Temporary Construction Easement)	Section 4(f) Use (Temporary Construction Easement)	Section 4(f) Use (Temporary Construction Easement)	Section 4(f) Use (Temporary Construction Easement)	No Change	Section 4(f) Use (Temporary Construction Easement)	Individual 4(f) Evaluation
Burnside Skatepark	Section 4(f) Use (Permanent Incorporation)	No Section 4(f) Use (Temporary Construction Easement)	No Section 4(f) Use (Temporary Construction Easement)	No Section 4(f) Use (Temporary Construction Easement)	Section 4(f) Use (Temporary Construction Easement)	No Section 4(f) Use (Temporary Construction Easement)	Temporary Occupancy Letter

NOTE: The Temporary Construction Easements required for Gov. Tom McCall Waterfront Park, the Vera Katz Eastbank Esplanade, and the Willamette Greenway Trail by all alternatives do not meet the criteria in CFR 23, Section 774.13(d) Temporary occupancies of land that are so minimal as to not constitute a use within the meaning of Section 4(f).

^a The refined versions of the Short-span and Couch Extension Alternatives have the same Section 4(f) use status as reported above.

2.3.2 Build Alternatives

None of the proposed build alternatives avoids all Section 4(f) use. When there is no feasible and prudent avoidance alternative, FHWA may approve only the alternative that causes the least overall harm to Section 4(f) property. See Section 2.4.3 for a discussion determining the alternative with the least overall harm.

2.3.3 Construction Alternatives

Because the Section 4(f) uses are primarily due to construction activities (except for impacts to Burnside Skatepark under the Retrofit Alternative), this section focuses on construction alternatives. During development of the build alternatives, the project team evaluated many approaches to construction access, sequencing, and material storage areas, specifically with the goal of avoiding impacts to Section 4(f) properties. It was determined early on that construction access from the east bank of the Willamette River is not feasible, thus access must be from the west side. To reduce the area needed within Gov. Tom McCall Waterfront Park (and the west side of the Willamette River Greenway Trail), it was assumed that where possible, materials could be delivered by barge rather than assembled within the park adjacent to the bridge. Further reducing the area needed within Waterfront Park was determined to be infeasible because of the need to stage and maneuver equipment and gain access to the adjacent bridge itself as well as the work bridge in the river. Based on that process, the following describes the necessary access and construction actions and infrastructure (see the *EQRB Construction Approach Technical Report* [Multnomah County 2021a]):

- West side site access to bridge – Access to the project area from the west side would likely be from Naito Parkway. The area around the bridge would be a necessary staging area for equipment and materials. The contractor would need a minimum of 40 feet outside the bridge limits on the north side in order to gain access to a work bridge in the river. For equipment and material staging, the contractor would need to use the area encompassing the area under the bridge, and a large area south of the bridge in park property for the Draft EIS Build Alternatives. For the Refined Long-span Alternative, the size of the construction area has been reduced south of the bridge.
- Willamette River west work bridge – The project team assumes that the western river pier (Pier 2/Bent 8 [Bent 7 for the Long-span Alternative]) would be accessed by a work bridge extending from the west bank, just north of the existing bridge. Depending on which alternative is selected, the existing Pier 1 may need to be accessed by a work bridge as well. Work bridge “fingers” would extend around three sides of Pier 2/Bent 8 (Bent 7 for the Long-span Alternative), with the channel side of the pier kept clear for river traffic.
- The Vera Katz Eastbank Esplanade travels directly beneath the east fixed truss of the Burnside Bridge on floating structure and continues north toward Lloyd Boulevard. Where the Esplanade crosses under the bridge, there are several construction activities that would impact the Esplanade, all of them requiring that the floating portion of the Esplanade be shut down, disconnected, and temporarily relocated.

- All build alternatives include some specific actions requiring the temporary relocation of the Esplanade. These include:
 - Bent 10 (or the new Pier 4 in the Retrofit) is within very close proximity to the Esplanade. In order to build the pier (shafts, columns, and cap), the Esplanade would need to be temporarily relocated or shut down to allow for equipment on barges to access the work. If the Long-span Alternative were selected, this impact would not occur.
 - Ground improvements are needed for pier construction directly below the Esplanade. The Esplanade would need to be temporarily relocated or shut down to allow for barge-mounted equipment to perform the work safely. If the Long-span Alternative was selected, this impact would not occur.
 - For the Retrofit Alternative, the east truss would be cut back to the new Pier 4. During truss demolition, the Esplanade would need to be temporarily relocated or shut down due to safety implications.
 - For the Short-span and Couch Extension Alternatives, the east truss would be removed in its entirety. The Esplanade would need to be temporarily moved from its location and/or closed to public access for this operation.
 - For all build alternatives (except the Long-span Alternative), during girder erection over I-5, it is expected that the girders would need to be erected from the river. To do this, the Esplanade would need to be shut down and temporarily relocated to allow barge access close to the east bank.
 - For the Draft EIS and Refined Long-span Alternatives, a temporary tower would likely be erected adjacent to the Esplanade. During erection of the arch pieces and deck, the Esplanade would need to be shut down and temporarily relocated to allow barge access close to the east bank.
 - In order to construct and deconstruct the east work bridge for all build alternatives, the Esplanade would need to be disconnected and temporarily moved out of the way to allow barge equipment to enter the space between the existing Esplanade alignment and the east bank.
- No construction alternatives were identified that would avoid temporary impacts (deconstruction and temporary closure) to the Esplanade or Willamette River Greenway Trail.
- The following describes the necessary access and construction actions and infrastructure related to construction that affects the Burnside Skatepark:
 - Deck demolition (Retrofit)
 - Complete bridge structure demolition while leaving existing Bent 25 in place (all replacement alternatives)
 - Installation of longitudinal bridge struts (Retrofit)
 - Bridge girder erection on east approach (all replacement alternatives)
 - Bridge superstructure construction on east approach (all build alternatives)

- Bridge girder erection on east approach associated with temporary bridge construction (all replacement alternatives with a temporary bridge)
- No construction alternatives were identified that would avoid temporary impacts (temporary closure) to Burnside Skatepark.

2.4 Minimization and Mitigation of Harm

Section 4(f) of the USDOT Act also requires that all possible measures for minimizing or mitigating harm have been incorporated into the project. This section describes those measures for Gov. Tom McCall Waterfront Park, Vera Katz Eastbank Esplanade, Willamette River Greenway Trail, and Burnside Skatepark.

The Project will be required to obtain local permitting approvals through a PP&R Non-Park Use Permit (NPUP) and compliance with City of Portland Title 11 Trees and Title 33 Planning and Zoning standards. The NPUP, Title 11, and Title 33 approvals will incorporate conditions requiring the Project to provide mitigation and meet minimization development standards. The NPUP is also expected to include provision for monetary compensation for loss of park event revenue fees due to project construction effects. The monetary loss is not considered a Section 4(f) use.

2.4.1 Governor Tom McCall Waterfront Park

Options for minimizing harm to Gov. Tom McCall Waterfront Park can include mitigation actions under the National Environmental Policy Act process. Mitigation for temporary, construction-phase impacts would primarily include returning park facilities to their pre-construction (or better) condition. This would require close coordination with PP&R to ensure recreation, operations, and maintenance functions are appropriately replaced, as well as with the Japanese American Museum of Oregon and PSM. Mitigation for restricted use is being provided in the form of detour routes for the Waterfront Trail. Some possible mitigation options for the southern portion of the Japanese American Historical Plaza could include the following:

- Carefully plan deconstruction to facilitate reassembly post-construction.
- Provide for a temporary exhibit in the unimpacted area of the plaza to highlight the information currently provided in the southern half of the memorial.
- Involve the Japanese Consul for replacement of removed ornamental flowering cherry trees.
- Involve memorial designers and stone mason during deconstruction and reconstruction. Coordinate closely with the Japanese American Museum of Oregon on the formation of these and other mitigation solutions.
- The Refined Long-span Alternative reduces the area of construction impact and deconstruction with the Japanese American Historical Plaza.

2.4.2 Vera Katz Eastbank Esplanade

Options for minimizing harm to the Vera Katz Eastbank Esplanade can include mitigation actions under the National Environmental Policy Act process. Mitigation for restricted use

is being provided in the form of detour routes for the Esplanade to ensure the north-south bike and pedestrian connections remain usable while the Esplanade is closed.

Other potential minimization measures include selecting alternatives and/options that have less impact or shorter duration closures of the Esplanade, including:

- The Draft EIS and Refined Long-span Alternatives would reduce the duration of closure by 8 months to 1 year compared to other alternatives.
- The No Temporary Bridge Option would reduce the duration of closure by about 4 months compared to the Temporary Bridge Option.
- Selecting either of the elevator/stair access options to the Burnside Bridge would not increase the duration of the closure over that required by bridge construction (for either the Draft EIS or Refined Long-span Alternative). The ramp options would increase the closure duration by an additional 2 to 3 years.
- The Refined Long-span Alternative would include two sets of stairs and elevators, one each on the north and south sides of the bridge, which would have a smaller footprint impact to the upland portion of the Esplanade and would require the same construction duration as the Draft EIS Long-span Alternative.

2.4.3 Willamette River Greenway Trail

The *EQRB Parks and Recreation Technical Report* (Multnomah County 2021e) and the *EQRB Parks and Recreation Supplemental Memorandum* (Multnomah County 2022d) include mitigation for restricted use in the form of detour routes for the trail to ensure the north-south bike and pedestrian connections remain usable.

2.4.4 Burnside Skatepark

The replacement alternatives with no temporary bridge minimize the impact to the skatepark compared to the Retrofit Alternative or any alternative with a temporary bridge. Beyond that, the construction planning has evolved during the development of alternatives in an effort to minimize impacts allowing for shorter closures of 4 to 8 months of the skatepark, rather than for the full construction period. Construction designs for the replacement alternatives would keep an existing bridge bent incorporated into the Skatepark undisturbed to the extent practicable.

2.4.5 Alternative with the Least Overall Harm

When there is no feasible and prudent avoidance alternative, FHWA may approve only the alternative that causes the least overall harm to Section 4(f) property. All of the build alternatives would permanently use the Burnside Bridge (an historic Section 4(f) resource) reviewed under a programmatic Section 4(f) documentation (see Chapter 3). In addition, the Retrofit Alternative would also permanently use a second Section 4(f) resource – the Burnside Skatepark. The replacement alternatives would have no Section 4(f) use of the skatepark. All other impacts from the build alternatives on Section 4(f) resources would occur during construction activity and would cease thereafter. Based on this, the Retrofit Alternative would not cause the least harm.

The replacement alternatives, with the exception of the refined alternatives, have nearly identical Section 4(f) uses affecting the same properties. The Refined Long-span Alternative (and refined versions of the Short-span and Couch Extension Alternatives) would have a smaller Boundary of Potential Construction Impacts south of the bridge within Gov. Tom McCall Waterfront Park and would disturb less of the Vera Katz Eastbank Esplanade due to the smaller footprint of the stairs and elevator options compared to new ramps. Thus, the refined alternatives would temporarily restrict recreation activities in a smaller area than the other replacement alternatives. The Refined Long-span Alternative additionally includes a girder bridge type at the west approach, which results in no Section 4(f) use of the Skidmore/Old Town National Historic Landmark. Thus, based on area of construction impacts, the Refined Long-span Alternative would be the alternative with least harm.

Because all Section 4(f) uses caused by the replacement alternatives would occur during the construction phase, it is necessary to also compare the durations of construction phase effects on properties determined to experience a Section 4(f) use. The alternative with least overall harm with respect to construction should be the replacement alternative with the shortest overall duration of project construction effects to properties with a Section 4(f) use. The replacement alternatives would have nearly identical construction durations within the various Section 4(f) properties with the exception that the Draft EIS and Refined Long-span Alternatives would have the shortest construction duration and disturbance within the Esplanade (18 months compared to 30 months). In addition, the type of ADA/bicycle/pedestrian connection to the Esplanade also affects closure duration. Selecting either of the elevator/stair access options or reconnecting the existing stairs would not increase the duration of the closure over that required by bridge construction (18 months); whereas the ramp option evaluated in the Draft EIS would increase the closure duration to a total of 3.5 to 4.5 years and would have a larger footprint and greater environmental impacts.

Thus, based on type of use, area of construction impact, and duration of impact, the Refined Long-span Replacement Alternative with no temporary bridge and with an elevator/stair connection (or reconnecting the existing stairway) to the Esplanade would have the least overall harm to Section 4(f) properties.

2.5 Contacts and Coordination

As described above, coordination has occurred with multiple bureaus within the City of Portland with regard to parks resources. Coordination with Oregon SHPO has occurred with respect to cultural resources. As the Section 4(f) process continues, additional discussions are expected. As of the publication of the Draft EIS, the Section 4(f) compliance is only partially complete. Additional steps to complete Section 4(f) compliance will include:

- Secure input on the draft Section 4(f) documentation from the public during the SDEIS comment period in March/April 2022
- Coordinate with the State Office of Parks and Recreation Department regarding a Temporary Occupancy Exception for the Willamette River Water Trail. (October 2021 through February 2022)

- As needed, update the discussion of historic resources use in the Section 4(f) document, based on input received through the Section 106 process from consulting parties, the Oregon State Historic Preservation Office (SHPO), and the Advisory Council on Historic Preservation (ACHP). (December 2020 through February 2021)
- Update the discussion of mitigation for historic resources in the Section 4(f) document, based on input received through the Section 106 process from consulting parties, the Oregon State Historic Preservation Office (SHPO), and the Advisory Council on Historic Preservation (ACHP). (December 2020 through June 2021)
- Publish the Final Section 4(f) Evaluation together with the Final EIS and allow a waiting period before signing the Record of Decision (alternatively, the Final Section 4(f) Evaluation could be published for public review prior to publishing the Final EIS).

Chapter 3 – Draft Nationwide Programmatic

Section 4(f) Evaluation for Projects that Necessitate the Use of Historic Bridges

3.1 Federal Highway Administration Nexus

The Earthquake Ready Burnside Bridge (EQRB) Project (Project) would replace the existing Burnside Bridge. Planning and design costs are entirely locally funded, but the project is pursuing a combination of local, state, and federal funding for the construction costs.

3.2 Description of the Section 4(f) Resource

When it opened to traffic in 1926, the Burnside Bridge, which replaced the original 1892 bridge, was acclaimed for its use of the double-leaf bascule while also employing a concrete deck for the moveable span. The Burnside Bridge remains largely intact and continues to maintain its historic integrity and to convey its period of significance (Kramer 2012). The current bridge initially supported six lanes of traffic, but in 1995, one traffic lane was converted into bicycle lanes. The bridge now has bicycle lanes and sidewalks in both directions, and it has five motor vehicle lanes: two westbound and two eastbound general traffic lanes plus one eastbound transit-only lane. The bridge has had minor modifications since it was constructed: electric streetcar service ended in the late 1940s, lighting and traffic control devices were updated in the 1950s, automobile traffic gates were installed in 1971, and the bascule pier fenders were replaced on the upstream side in 1983. Multiple deck resurfacing 28 projects and expansion joint repairs have been conducted over the years.

The bridge has been the subject of a HAER documentation (Wood Wortman 2006) and is listed individually in the NRHP in 2012 as a part of the Willamette River Highway Bridges Multiple Property District meeting the eligibility requirements under Criterion A and Criterion C (Kramer 2012). The west approach of the bridge is within the Skidmore/Old Town NHL District boundaries. Ira G. Hedrick and Robert E. Kremers produced the initial bridge design for Multnomah County employing a bascule-type patented by Joseph B. Strauss. Noted bridge engineer Gustav Lindenthal replaced the bridge team and completed the work with minor changes to the original design, employing architects Houghtaling and Dougan for consultation of design. Portland Bridge Company completed the construction work.

3.3 National Register Status

The Burnside Bridge was listed individually in the NRHP in 2012 as a part of the Willamette River Highway Bridges Multiple Property District meeting the eligibility requirements under Criterion A and Criterion C. The Burnside Bridge has been determined eligible under Criterion A for its statewide significance for its association with the development of Portland and its transportation network, especially in contributing to the development of central business district since its construction in 1926. The Burnside

Bridge is also of statewide significance under Criterion C as one of the heaviest bascule bridges in the United States and as the first such bridge to rely upon a concrete deck surface for its movable span.

3.4 Project Use of Section 4(f) Resource

The Burnside Bridge would undergo substantial upgrades with the Retrofit Alternative but would retain the bridge type and some of the existing design characteristics of its current condition. However, the Retrofit Alternative would remove and reconstruct Pier 4 approximately 34 feet to the west, which would visually shorten the eastern fixed span. In addition, the retrofit would compromise the bridge's historic integrity by altering the design, materials, workmanship and feeling of the structure. Those changes would alter the historic significance of the bridge to the extent that this alternative would cause an overall adverse effect under Section 106.

The replacement alternatives (including the Refined Long-span Alternative) would constitute a complete replacement of the current bridge which would result in an adverse effect under Section 106 and a permanent Section 4(f) use.

The option of using a temporary bridge would not cause a Section 4(f) use of the Burnside Bridge.

A Section 106 Finding of Effect (FOE), prepared for FHWA by Multnomah County and ODOT, resulted in a finding of "Historic Properties Adversely Affected" for the Project's effects to the Burnside Bridge. The project team has sent the FOE to the Oregon SHPO and anticipates concurrence with the adverse effect finding in winter 2021. This programmatic will be updated with those details prior to the release of the Final EIS. Consequently, the project impacts constitute a Section 4(f) use. To mitigate this adverse effect finding, the project team anticipates FHWA, Multnomah County, and SHPO will execute a Section 106 Programmatic Agreement. The project team is seeking input through the Section 106 process from consulting parties, Oregon SHPO, and the Advisory Council on Historic Preservation (ACHP) through early spring 2021. Mitigation measures and a draft Section 106 Programmatic Agreement are anticipated in summer 2021.

3.5 Alternatives

Per the Programmatic Section 4(f) Evaluation for FHWA Projects that Necessitate the Use of Historic Bridges, the following alternatives avoid any use of the historic bridge:

- Do nothing.
- Build a new structure at a different location without affecting the historic integrity of the old bridge, as determined by procedures implementing the NHPA.
- Rehabilitate the historic bridge without affecting the historic integrity of the structure, as determined by procedures implementing the NHPA.

The EQRB Project conducted multiple project planning and feasibility analyses to evaluate and screen potential alternatives. See the *EQRB Description of Alternatives Technical Report* (Multnomah County 2021c); the narrative below provides a summary of the process and alternatives considered.

3.5.1 Do nothing

This alternative consists of leaving Burnside Bridge in its current condition. Multnomah County first identified the need for seismic resiliency of the Burnside Bridge through the County's Willamette River Bridges Capital Improvement Plan (2015–2034) (CIP). The CIP process notes that the County's four historic movable bridges lack the seismic resiliency to withstand moderate to major earthquakes and identifies that as a component of Metro's Regional Lifeline Route corridor, the Burnside Bridge must meet a higher performance standard than the other three downtown movable bridges (see Figure 3-1). The CIP process determined that the Burnside Bridge should remain fully operational to vehicles and river traffic following a magnitude 9.0 CSZ earthquake, while the other three should meet a seismic standard allowing the bridge superstructure to not collapse during smaller magnitude 4 +/- earthquakes (Multnomah County 2015). A seismically resilient Burnside Bridge, beyond its current capability, would support the region's ability to provide rapid and reliable emergency response, rescue, and evacuation after a major earthquake, as well as enable post-earthquake economic recovery. This is integral to the Project's purpose and need statement and means that taking no action under the do nothing alternative would not fulfill the purpose and need for the Project. Thus, the do nothing alternative is not a prudent alternative.

Per the Programmatic Section 4(f) Evaluation for FHWA Projects that Necessitate the Use of Historic Bridges:

The do nothing alternative has been studied. The do nothing alternative does not correct the situation that causes the bridge to be considered structurally deficient with respect to seismic standards. The do nothing alternative ignores the basic transportation need.

- **Maintenance** – The do nothing alternative does not address the above problem of the need for a seismically sufficient bridge connected to Metro's Regional Lifeline Route corridor. Normal maintenance is not considered adequate to correct the situation.
- **Safety** – The do nothing alternative does not address the above problem of the need for a seismically sufficient bridge connected to Metro's Regional Lifeline Route corridor. Because the bridge deficiencies with respect to seismic standards, it poses unacceptable safety hazards to the traveling public. As such, the do nothing alternative is not considered a feasible and prudent alternative.

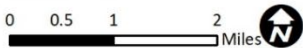
Figure 3-1. Bridge Collapse Potential



Bridge Collapse Potential



Source:
City of Portland, Oregon
Multnomah Co., Parametrix, ODOT



Earthquake Ready Burnside

3.5.2 Build a new structure at a different location without affecting the historic integrity of the old bridge, as determined by procedures implementing the NHPA.

This alternative consists of constructing a new bridge on a different alignment such that it would not affect the historic integrity of the existing bridge. The new bridge would meet all current traffic, load capacity, and safety design standards.

Multnomah County conducted a feasibility analysis, documented in the *EQRB Feasibility Study Report* (Multnomah County 2018) in which the project team analyzed more than 100 Willamette River crossing options. The alternatives development phase included options to attempt to accomplish the purpose and need for the Project in a different location, including nine alternatives for enhancing or replacing a bridge other than the historic Burnside Bridge, including the following:

- Fremont Bridge
- Broadway Bridge
- Steel Bridge
- Morrison Bridge
- Hawthorne Bridge
- Marquam Bridge
- Tilikum Crossing Bridge
- Ross Island Bridge
- Sellwood Bridge

All of these alternative bridge locations, except for the Morrison Bridge, failed Step 1 of the screening process that involved pass/fail criteria reflecting the Project's core intent. Except for the Morrison Bridge, the alternative locations failed each of the 12 criteria. The pass/fail criteria included:

Criterion I. Compatibility with other major infrastructure – This criterion eliminated alternatives that caused prolonged, substantial interruption or degradation of the use or function of adjacent, major public infrastructure.

Criterion II. Seismically resilient and operational Willamette River crossing – This criterion eliminated alternatives that did not meet the project's definition of being "fully functional" following a CSZ 8+ earthquake.

Criterion IIIa. Unobstructed Willamette River crossing lifeline route – This criterion eliminated alternative crossing locations (e.g., the Steel Bridge, Hawthorne Bridge, Tilikum Bridge, and others) that would have two or more earthquake-related blockages (on the access route to and from the Burnside lifeline route).

Criterion IIIb. Rapid emergency response across the Willamette River – This criterion eliminated alternative crossing locations that would add excessive travel time because of distance from the Burnside corridor for emergency vehicles crossing the river and using the Burnside lifeline route.

Criterion IIIc. Congestion avoidance on a Willamette River crossing – This criterion eliminated crossing alternatives that would have too little post-earthquake capacity to allow reliable and rapid emergency response after a major earthquake.

Step 2 used similar criteria to Step 1, focusing on meeting the core intent of the Project, but assigned a scoring system. The Morrison Bridge alternative, the only one left that would enhance a different bridge, received a score of 32 percent of the possible points, and it was determined through input from stakeholders, committees, and the project team that it offers no unique advantages compared to the other alternatives, and it did not perform well enough to advance for further analysis (Multnomah County 2018). In addition, the Morrison Bridge, like the Burnside Bridge, is also listed in the NRHP (as of 2012). Thus, no alternatives that would use a bridge different from the existing Burnside Bridge advanced to the next step of screening, meaning that none was considered a prudent alternative that would adequately fulfill the purpose and need of the Project.

Step 3 evaluated the remaining alternatives with six criteria divided into 17 scored measures. The six topics included:

Topic 1: Seismic Resiliency – Support Reliable and Rapid Emergency Response after an Earthquake

Topic 2: Non-Motorized Transportation – Support Access and Safety for Bicyclists, Pedestrians and People with Disabilities

Topic 3: Connectivity – Support Street System Integration and Function (Affects all Modes)

Topic 4: Equity/Environmental Justice – Minimize Adverse Impacts on Historically Marginalized Communities

Topic 5: Built Environment – Promote Land Use Compatibility and Minimize Impacts on Parks and Historic Resources

Topic 6: Financial Stewardship – Ensure Public Funds are Invested Wisely

Step 3 included 26 alternatives in the location of the Burnside Bridge, including a tunnel option and 12 twin bridge options. Based on criteria and measure evaluation, these options did not move forward in the study.

Per the Programmatic Section 4(f) Evaluation for FHWA Projects that Necessitate the Use of Historic Bridges:

Investigations have been conducted to construct a bridge on a new location or parallel to the old bridge (allowing for a one-way couplet), but, for the following reasons, these alternatives are not feasible and prudent:

- Adverse Social, Economic, or Environmental Effects – Building a new bridge away from the present site would result in social, economic, or environmental impact of extraordinary magnitude.

Through the alternatives screening and evaluation process described above, it was determined that all potential locations away from the present site that did not pass Step 1 or Step 2 screening would result in social, economic, and environmental impacts of extraordinary magnitude because they would not provide a seismically resilient bridge meeting the purpose and need of the project and would leave the

region vulnerable to extreme social, economic, and environmental harm from a major earthquake.

Through the alternatives screening and evaluation process described above, it was determined that all potential locations away from the present site that passed Step 1 and Step 2 in the alternatives screening and could meet the purpose and need for the Project would cause one or more unacceptable effects. These potential locations included a tunnel or one of the twin bridge options. Through Step 3 describe above, it was determined that these options would include displacement of a significant number of businesses, serious disruption of established travel patterns, increased impacts to parks and recreation resources, or adverse effects to historic sites or districts.

- Engineering and Economy – Where difficulty associated with the new location is less extreme than those encountered above, a new site would not be feasible and prudent where cost and engineering difficulties reach extraordinary magnitude.

Estimated cost was evaluated as part of the Step 3 alternatives evaluation. Figure 11 in the 2018 Feasibility Study shows that the tunnel option was expected to be extraordinarily more expensive than the rest of the alternatives. The tunnel option cost estimate was \$3,200 million, which the next most expensive option was \$9 million (costs with detoured traffic).

3.5.3 Rehabilitate the historic bridge without affecting the historic integrity of the structure, as determined by procedures implementing the NHPA.

This alternative would rehabilitate the existing bridge to the extent possible. The Project studied the Enhanced Retrofit Alternative which would make changes to the bridge sufficient to create the seismic stability prescribed by the purpose and need for the project, but would retain as much of the existing bridge as possible. Section 106 analysis found that the Retrofit Alternative would change the bridge to the extent that the bridge would no longer be considered eligible for NRHP listing. The Retrofit Alternative would modify piers, bents, footings, and some of the trusses of the Burnside Bridge, as well as replace other trusses, the bridge deck and mechanical equipment. A retrofit would modify Piers 1 through 3 and construct a new Pier 4. Piers 2 and 3 would be more massive in structure and form both above and below water. The new Pier 4 would be constructed approximately 34 feet west of the existing pier and would consist of a cross beam supported by two columns. It would therefore no longer be a concrete structure and it would no longer have the decorative pier cap also found on Pier 1. The relocation of Pier 4 would alter the original pier symmetry. With these alterations to the bridge's original engineering and design, the Burnside Bridge's integrity would be compromised, and it would no longer be eligible for listing on the NRHP. Thus, this alternative does not offer a feasible and prudent alternative that would not affect the bridge's integrity.

Per the Programmatic Section 4(f) Evaluation for FHWA Projects that Necessitate the Use of Historic Bridges:

Studies have been conducted of rehabilitation measures, but, for the following reason, this alternative is not feasible and prudent:

- Structural Sufficiency – The bridge is so structurally deficient that it cannot be rehabilitated to meet minimum acceptable seismic requirements without affecting the historic integrity of the bridge.

3.6 Measures to Minimize Harm

It has been determined that no feasible and prudent alternatives exist to the full replacement and removal of the Burnside Bridge.

Per the Programmatic Section 4(f) Evaluation for FHWA Projects that Necessitate the Use of Historic Bridges:

This programmatic Section 4(f) evaluation and approval may be used only for projects where the FHWA Division Administrator, in accordance with this evaluation, ensures that the proposed action includes all possible planning to minimize harm. The following apply to this Project:

- For bridges that are to be rehabilitated to the point that the historic integrity is affected or that are to be moved or demolished, the FHWA ensures that, in accordance with the Historic American Engineering Record (HAER) standards, or other suitable means developed through consultation, fully adequate records are made of the bridge;

The Burnside Bridge would be demolished. Fully adequate documentation of the bridge will be defined as part of the Section 106 process which will be completed prior to finalization of the Section 4(f) documentation.

- For bridges that are to be replaced, the existing bridge is made available for an alternative use, provided a responsible party agrees to maintain and preserve the bridge;

The Burnside Bridge would be replaced. Potential reuse of components of the bridge will be explored as part of the Section 106 process which will be completed prior to finalization of the 4(f) documentation. Structural engineers do not believe that any structural components could be reused due to age and design, but non-structural components, such as operator towers and handrail balustrades, are likely feasible to reuse. Reuse of these components has been included as mitigation in the Draft EIS.

- For bridges that are adversely affected, agreement among the SHPO, ACHP, and FHWA is reached through the Section 106 process of the NHPA on measures to minimize harm and those measures are incorporated into the project. This programmatic Section 4(f) evaluation does not apply to projects where such an agreement cannot be reached.

Response not yet available. A description of measures developed during the Section 106 Programmatic Agreement process will be added when available.

3.7 Coordination

The EQRB Project has coordinated with the SHPO and the *EQRB Cultural Resource Technical Report* (Multnomah County 2021b) has been reviewed by SHPO and City of Portland staff. For broader reach, the project solicited input from the public, various

stakeholders and the Citizens' Task Force during the Feasibility Study and other early scoping work as well as through the public process to identify a recommended preferred alternative. ODOT has consulted with interested Tribes. See the EQRB Round 1 Public Engagement Summary⁸ and EQRB Round 2 Public Engagement Summary⁹ documents for details of coordination with affected parties. A consulting parties meeting was held November 30, 2020, and as part of the Section 106 process additional coordination with consulting parties, Tribes, and others will occur. The project team expects FOE concurrence and first draft of the Section 106 Programmatic Agreement in early spring 2021, with the final completed in late summer 2021.

3.8 Summary

The project meets all criteria included in the Nationwide Programmatic Section 4(f) Evaluation for Projects that Necessitate the Use of Historic Bridges approved on July 5, 1983.

All required alternatives have been evaluated, and the findings made are clearly applicable to this Project. The Project includes all possible planning to minimize harm and assurances that those measures to mitigate for use of the Section 4(f) resource will be completed.

3.9 Approval

FEDERAL HIGHWAY ADMINISTRATION

By: _____ Date: _____

[Name Here]

Oregon Division Administrator

⁸ <https://multco.us/file/87617/download>

⁹ <https://multco.us/file/93292/download>

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Chapter 4 – Preparers

Name	Professional Affiliation	Education	Years of Experience
Jennifer Hughes	Parametrix	Environmental Planner	20

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Chapter 5 – References

Multnomah County.

- 2015. Multnomah County Willamette River Bridges Capital Improvement Plan (2015–2034). <https://multco.us/bridgeplan>.
- 2018. Earthquake Ready Burnside Bridge Feasibility Study Report. <https://multco.us/earthquake-ready-burnside-bridge/feasibility-study-archive>.
- 2021a. EQRB Construction Approach Technical Report. <https://multco.us/earthquake-ready-burnside-bridge/project-library>.
- 2021b. EQRB Cultural Resources Technical Report. <https://multco.us/earthquake-ready-burnside-bridge/project-library>.
- 2021c. EQRB Description of Alternatives. <https://multco.us/earthquake-ready-burnside-bridge/project-library>.
- 2021d. EQRB Noise and Vibration Technical Report. <https://multco.us/earthquake-ready-burnside-bridge/project-library>.
- 2021e. EQRB Parks and Recreation Technical Report. <https://multco.us/earthquake-ready-burnside-bridge/project-library>.
- 2021f. EQRB Vegetation, Wildlife, and Aquatic Species Technical Report. <https://multco.us/earthquake-ready-burnside-bridge/project-library>.
- 2022a. EQRB Cultural Resources Supplemental Memorandum. <https://multco.us/earthquake-ready-burnside-bridge/project-library>.
- 2022b. EQRB Description of Alternatives Supplemental Memorandum. <https://multco.us/earthquake-ready-burnside-bridge/project-library>.
- 2022c. EQRB Noise and Vibration Supplemental Memorandum. <https://multco.us/earthquake-ready-burnside-bridge/project-library>.
- 2022d. EQRB Parks and Recreation Supplemental Memorandum. <https://multco.us/earthquake-ready-burnside-bridge/project-library>.
- 2022e. EQRB Supplemental Draft Environmental Impact Statement. <https://multco.us/earthquake-ready-burnside-bridge/project-library>.

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Appendix A. NRHP-Listed or -Eligible Resources

Table A-1. Listed or Eligible Historic Resources – Section 4(f) Historic Sites

Map ID No. Property Location State ID Common Name (Historic Name)	Construction Date Resource Type	Previous Evaluation National Register Status Local Landmark Status City of Portland Ranking Recommendation	Photograph of Resource
Map ID 1/ 26-32 NW 3rd Ave 1N1E34CA -09600 S. Ban Building (Old Town Café; Aldo Rossi Building)	1894 Richardsonian Romanesque Building; Storefront modifications	Skidmore Old Town Historic District National Landmark – Eligible Contributing No Local Landmark Status Unranked <i>No change in NRHP status recommended</i>	
Map ID 2 30-34 NW 1st Ave 1N1E34DB -00400 Blagen Block	1888 High Victorian Italianate Building - Warren H. Williams, architect and Neils Blagen, builder; Massive cast iron façade; Storefront restoration after 1980 Fire	Skidmore Old Town Historic District National Landmark -Contributing Portland City Landmark Designated <u>No change in NRHP status recommended</u>	
Map ID 3 5 NW Naito Pkwy/ 10-32 NW 1st Ave. 1N1E34DB -00600 (White Stag Block)	1889 Italianate Sullivanesque Building; South Façade modified 1926 for Burnside Bridge Construction, ca. 2006 extensive renovations; consolidated into White Stag Block 2008	Skidmore Old Town Historic District National Landmark -Contributing Portland City Landmark Designated <u>No change in NRHP status recommended</u>	
Map ID 4 134 W. Burnside St/ 20 SW 2nd Ave 1N1E34CD -00300 Salvation Army Building	1905 Twentieth Century Classical Fraternal Building; Corner cut prior to 1925, storefront modifications reversible	Skidmore Old Town Historic District National Landmark -Contributing No Local Landmark Status Rank III <u>No change in NRHP status recommended</u>	
Map ID 5 25-33 NW Naito Pkwy (also 5 NW Front St) 1N1E34DB -00600 Bickel Block (White Stag Block)	1883 High Victorian Italianate Building with Cast Iron Storefront - Justus Krumbein, architect; Extensive renovations ca. 2006; Building consolidated 2008 with Skidmore Block and White Stag Building	Skidmore Old Town Historic District National Landmark –Contributing No Local Landmark Status Unranked <i>No change in NRHP status recommended</i>	




Map ID No. Property Location State ID Common Name (Historic Name)	Construction Date Resource Type	Previous Evaluation National Register Status Local Landmark Status City of Portland Ranking Recommendation	Photograph of Resource
Map ID 6 14-18 NW 3rd Ave 1N1E34CA -09900 Glade Hotel	1900 Twentieth Century Romanesque Building; First floor cornice removed and storefront some modifications	Skidmore Old Town Historic District National Landmark –Contributing No Local Landmark Status Unranked <i>No change in NRHP status recommended</i>	
Map ID 7 131 SW Ankeny St 1N1E34CD -00200 Young's Marble Works (Salvation Army Building)	1880 Brick Utilitarian Building; Modification of stucco application and some storefront modifications	Skidmore Old Town Historic District National Landmark –Contributing No Local Landmark Status Unranked <i>No change in NRHP status recommended</i>	
Map ID 9 31 NW 1st Ave 1N1E34DB -01000 Norton House	ca. 1875 Italianate Building; Third floor destroyed by fire; 1977- 78 modifications include storefront modifications and replacing shed roof canopy with metal structure	Skidmore Old Town Historic District National Landmark -Contributing No Local Landmark Status Unranked <i>No change in NRHP status recommended</i>	
Map ID 11 9-11 SW 2nd Ave 1N1E34CD -00400 Holm Hotel	ca. 1890 Italianate Commercial Building; Façade alterations likely from time of Burnside Street widening; storefront modifications ca. 1985.	Skidmore Old Town Historic District National Landmark -Contributing No Local Landmark Status Unranked <i>No change in NRHP Status Recommended</i>	
Map ID 12 15-27 SW 2nd Ave Western Rooms	1906 Second Renaissance Revival Commercial Building; Some alterations to storefronts	Skidmore Old Town Historic District National Landmark -Contributing No Local Landmark Status Unranked <i>No change in NRHP status recommended</i>	

Map ID No. Property Location State ID Common Name (Historic Name)	Construction Date Resource Type	Previous Evaluation National Register Status Local Landmark Status City of Portland Ranking Recommendation	Photograph of Resource
Map ID 13 16-28 SW 1st Ave 1N1E34DC -90000 Reed Building (Packer-Scott Building, Skidmore Fountain Building)	1890 Richardsonian Romanesque Commercial Building - Whidden & Lewis Architects; Floor added in 1996; Addition (east) added ca. 2008	Skidmore Old Town Historic District National Landmark -Contributing Portland Historical Landmark Unranked <i>No change in NRHP status recommended</i>	
Map ID 14 223-225 SW Ash St 1N1E34CD -01700 Bickel Building (Wachsmuth Building)	1892 Italianate Commercial Building with ca. 1920 Commercial Addition	Skidmore Old Town Historic District National Landmark -Contributing Portland Historical Landmark Unranked <i>No change in NRHP status recommended</i>	
Map ID 15 219 W Burnside St 1N1E34CA -10100 Wax Building (United Clothing Building)	1926 Commercial Building - Harold Marsh, architect	Skidmore Old Town Historic District National Landmark -Contributing No Local Landmark Status Unranked <i>No change in NRHP status recommended</i>	
Map ID 18 67 W Burnside St White Stag Sign	1940 Former White Stag Sign, Object – Ramsay Sign Co., Builder	Skidmore Old Town Historic District National Landmark -Non- Contributing (outside period of significance) Portland Historic Landmark Unranked <i>Recommended individually NRHP-eligible</i>	
Map ID 19 67 W Burnside St Willamette Tent & Awning	1907 Brick Utilitarian Building; Altered in 1926 for construction of Burnside Bridge; Fifth floor addition; Rehabilitation of façade and storefronts	Skidmore Old Town Historic District National Landmark -Contributing Portland Historic Landmark Unranked <i>No change in NRHP status recommended</i>	
Map ID 21 100 SW Ankeny St Skidmore Fountain	1887 Classical granite and bronze fountain (Object) – Olin L. Warner, sculptor and J.M. Wells, architect; Restoration in 2005	Skidmore Old Town Historic District National Landmark -Contributing Portland City Landmark Unranked <i>No change in NRHP status recommended</i>	

Map ID No. Property Location State ID Common Name (Historic Name)	Construction Date Resource Type	Previous Evaluation National Register Status Local Landmark Status City of Portland Ranking Recommendation	Photograph of Resource
Map ID 22 9-15 SW 2nd Ave Thru-block building facing NW Second and Third 1N1E34CA -09400 Erickson's Saloon / Pomona Hotel / Fritz Hotel	1912 Twentieth Century Classical Building – Aaron H. Gould, architect; Rehabilitation ca. 1985 (Erickson's Saloon / Pomona Hotel) ca. 1985 Rehabilitation; 2015 Rehabilitation (Fritz Hotel)	Skidmore Old Town Historic District National Landmark -Contributing No Local Landmark Status Unranked <i>No change in NRHP status recommended</i>	
Map ID 23 55 SW Ash St 1N1E34DC -01400 Central Fire Station & Fire Museum	1952 Modern Building – Jones and Marsh, architects; Renovation and seismic upgrade 2008	Skidmore Old Town Historic District National Landmark -Non- Contributing (Out of Period) No Local Landmark Status Unranked <i>Recommendation of NRHP Eligibility under Criteria A and C.</i>	
Map ID 24 0 W Burnside St Burnside Bridge	1924-1926 Bascule Bridge, Structure – Kendrick/Kremers/Lindenthal	National Register No Local Landmark Status Rank II <i>No change recommended in NRHP status</i>	
Map ID 25 27-33 NW 2nd Ave Couch Street Building (Jazz De Opus Building)	1912 Commercial Building; Addition of some incompatible doors and windows in 1972	Skidmore Old Town Historic District National Landmark -Contributing No Local Landmark Status Unranked <i>No change to NRHP status recommended</i>	
Map ID 26 107 NW Couch St Fleischner Building (Norcrest China Co.)	1906 Twentieth Century Romanesque Building – Edgar Lazarus, architect; Renovations and signage mid-1980s	Skidmore Old Town Historic District National Landmark -Contributing No Local Landmark Status Unranked <i>No change to NRHP status recommended</i>	
Map ID 27 50 SW 2nd Ave 1N1E34DC -01100 New Market Theater	1872 High Victorian Italianate Building – Piper and Burton, architects; Sheldon/Eggleson/Reddick Architects 1982	Skidmore Old Town Historic District National Landmark -Contributing Portland Historic Landmark Unranked <i>No change to NRHP status recommended</i>	

Map ID No. Property Location State ID Common Name (Historic Name)	Construction Date Resource Type	Previous Evaluation National Register Status Local Landmark Status City of Portland Ranking Recommendation	Photograph of Resource
Map ID 28 205 NW Couch St 1N1E34CA -08500 Rich Hotel / Rich Block	1914 Commercial Building	Skidmore Old Town Historic District National Landmark -Contributing No Local Landmark Status Unranked <i>No change to NRHP status recommended</i>	
Map ID 31 32 NW 2nd Ave 1N1E34CA -09100 Skidmore Development Company	1913 Commercial Building; Storefront modifications reversible, historical character intact	Skidmore Old Town Historic District National Landmark -Contributing No Landmark Status Unranked <i>No change to NRHP status recommended</i>	
Map ID 32 14-32 NW 2nd Ave 1N1E34CA -09100 Philips Hotel (Captain Couch Square / Couch Block Building)	1904/1913 Commercial Building; Minor modifications to storefront	Skidmore Old Town Historic District National Landmark -Contributing No Landmark Status Unranked <i>No change to NRHP status recommended</i>	
Map ID 33 101-117 W Burnside St Bates Building	ca. 1885 Nineteenth Century Utilitarian Commercial Building; 1925 modifications, other storefront alterations reversible	Skidmore Old Town Historic District National Landmark -Contributing No Local Landmark Status Unranked <i>No change to NRHP status recommended</i>	
Map ID 34 2-12 NW 2nd Ave 1N1E34CA -09200 Burnside Hotel (Shoreline Hotel)	ca. 1901 Twentieth Century Commercial building; 1926 Modifications to façade and corner canted; storefront modifications reversible	Skidmore Old Town Historic District National Landmark -Contributing No Local Landmark Status Unranked <i>No change to NRHP status recommended</i>	
Map ID 36 Naito Pkwy Harbor Wall	1929 Wood and concrete harbor wall, structure	Skidmore Old Town Historic District National Landmark -Non- Contributing (outside period of significance) No Local Landmark Status Unranked <i>Recommended Eligible for listing in NRHP under Criteria A, B, and C</i>	

Map ID No. Property Location State ID Common Name (Historic Name)	Construction Date Resource Type	Previous Evaluation National Register Status Local Landmark Status City of Portland Ranking Recommendation	Photograph of Resource
Map ID 37 30 SW Naito Pkwy 1N1E34DC-00100 Ankeny Pumping Station	1929/1951 Art Deco Concrete Building; Ornamental fencing in 2007	Skidmore Old Town Historic District National Landmark -Non- Contributing (outside period of significance) No Local Landmark Status Unranked <i>Recommended Eligible for listing in the NRHP under Criteria A, B and C</i>	
Map ID 40 205 SE Ankeny St / 17 SE 3rd Ave 1N1E34DD -00800 Blake-McFall Company Building / Emmett Building	1915 Conventional Commercial Brick Warehouse Building MacNaughton & Raymond Architects	NRHP Individually Listed Portland Historical Landmark Rank III <i>No change to NRHP status recommended</i>	
Map ID 42 131 NE MLK Blvd 1N1E34DA -03100 Jackson Apartments (Union Arms Apartments)	1911 Late Nineteenth Century.- Early Twentieth Century Commercial Apartment Building; Claussen & Claussen Architects; G.W. Jackson Contractor/Owner; 20 ft. of east façade removed during 1930 Union Ave. widening, commercial spaces and storefronts reconfigured into apartments	Not Eligible/Not Contributing, 2002 Section 106 Evaluation No Local Landmark Status Unranked <i>Recommended Eligible for listing in the NRHP under Criteria A and C</i>	
Map ID 43 107 NE Grand Ave 1N1E35CB -03900 Stark's	1922 Commercial Building; Stucco, brick, and concrete building; Newer storefront windows	Not Eligible/Not Contributing, 2001 Section 106 Evaluation No Local Landmark Status Unranked <i>Recommended Eligible for listing in the NRHP under Criteria A and C</i>	
Map ID 44 230 E Burnside St 1N1E34DD -00700 Frigidaire Building (R.J. Templeton Building)	1929 Commercial Building – Knighton & Howell, architects	NRHP Individually Listed No Local Landmark Status Unranked <i>No change to NRHP status recommended</i>	
Map ID 45 100 NE MLK Blvd 1N1E35CB -03800 Alco Apartments (Vivian Apartments)	1912 Commercial Building – MacNaughton & Raymond, architects; 1939 remodel Currently under renovation (2019)	NRHP Individually Listed No Local Landmark Status Unranked <i>No change to NRHP status recommended</i>	

Map ID No. Property Location State ID Common Name (Historic Name)	Construction Date Resource Type	Previous Evaluation National Register Status Local Landmark Status City of Portland Ranking Recommendation	Photograph of Resource
Map ID 46 123 NE 3rd Ave 1N1E34DA -02800 Eastside Exchange (Ira F. Powers Warehouse & Factory)	1925 Commercial Building with Modernist Influences – Claussen & Claussen, architects	NRHP Individually Listed No Local Landmark Status Unranked <i>No change to NRHP status recommended</i>	
Map ID 47 UPRR (Oregon & California / Southern Pacific East- Side Division Railroad)	1868/1887 Railroad alignment (structure)	No Previous Evaluation No Local Landmark Status Unranked <i>Recommended Eligible for listing in the NRHP under Criterion A and B</i>	
Map ID 48 Burnside Skatepark	1990 Concrete Skatepark, (structure)	No Previous Evaluation No Local Landmark Status Unranked <i>Recommended Eligible for listing in the NRHP under Criterion A, C and Criterion Consideration G</i>	

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Appendix B. Temporary Occupancy Exemption – Burnside Skatepark

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Oregon

Kate Brown, Governor

Department of Transportation

Region 1

123 NW Flanders St.

Portland, OR 97209-4012

(503) 731-8200

Fax: (503) 731-8259

December 29, 2020

FILE CODE:

Christine Curran
Deputy State Historic Preservation Officer
Oregon State Historic Preservation Office
725 Summer Street NE, Suite C
Salem, OR 97310-1271

**Subject: Section 4(f) No Use of Section 4(f) Resources—Temporary Occupancy
Burnside Skatepark
Earthquake Ready Burnside Bridge Project
Portland, Multnomah County, Oregon
ODOT Key No. TBD
Federal-Aid No. C051(111)
SHPO Case No. 18-1479**

Dear Ms. Curran:

The Earthquake Ready Burnside Bridge Project may be constructed in part with Federal Highway Administration (FHWA) funds. The Oregon Department of Transportation (ODOT) is acting as an agent of FHWA in ensuring that the project proponent, Multnomah County, complies with relevant federal regulations. Among them, ODOT must ensure that the project satisfies Section 4(f) of the Department of Transportation Act of 1966. Therefore, ODOT is seeking written concurrence from the Oregon State Historic Preservation Office (Oregon SHPO) to confirm that a Section 4(f) use will not occur in the Burnside Skatepark, a historic site, based on the project satisfying all temporary occupation exception conditions contained in 23 CFR 774.13(d). The following information provides the justification for this assertion. (Figure 1 shows the location of Burnside Skatepark on the east side of Second Avenue under the Burnside Bridge; Figure 2 is a photograph of the Burnside Skatepark.)

Section 4(f) of the United States Department of Transportation Act (DOT Act) of 1966 (49 U.S.C. 303(c)) requires that the proposed *use* of any land from a significant historic site be given particular attention. The Burnside Skatepark is a significant historic site under Section 4(f) because it is eligible for the National Register of Historic Places. The Burnside Skatepark is not a publicly owned park, recreation area or wildlife and waterfowl refuge under Section 4(f) because it has not received official designation as such by a Federal, State, or local agency. "Use" of a Section 4(f) resource, defined in 23 CFR 774.17(p), occurs in the following circumstances:

1. When land is permanently incorporated into a transportation facility;
2. When there is a temporary occupancy of Section 4(f) property that is adverse in terms of the statute's preservationist purpose; or

3. When there is a constructive use of land, which occurs when the transportation project does not incorporate land, but its proximity substantially impairs the activities, features, or attributes that qualify a resource for protection under Section 4(f). A determination of constructive use is based on the criteria in 23 CFR 774.15.

Although the proposed Earthquake Ready Burnside Bridge Project will not require the incorporation of the Burnside Skatepark into a transportation facility, nor will there be any permanent impacts to the historic site, there will be a temporary occupancy of a portion of the historic site during the project. The Section 4(f) legislation states that if the five conditions in 23 CFR 774.13(d), commonly known as the “temporary occupation exception criteria,” are met, then the temporary occupancy is not adverse in terms of the Section 4(f) statute’s preservationist purpose and therefore it does not constitute a “use” as defined under Section 4(f).

This letter provides findings with respect to the five conditions (temporary occupation exception criteria) and concludes that all conditions are met, thereby resulting in a determination that there will be no Section 4(f) “use” of the Burnside Skatepark resulting from the Earthquake Ready Burnside Bridge Project. Your concurrence is requested with these findings.

FINDINGS—TEMPORARY OCCUPATION EXCEPTION CRITERIA (23 CFR 774.13(d)(1) through (5))

(1) 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;

Finding: Construction of the Earthquake Ready Burnside Bridge Preferred Alternative (the Long-span Alternative), will take approximately 4.5 years. Because the Burnside Skatepark is located directly beneath the bridge, it will need to be closed for safety reasons several times during that period. The total cumulative duration of closure will be 4 to 8 months. Temporary skatepark closures are needed to ensure safety during overhead demolition of the existing bridge and occasional periods of overhead construction of the new bridge. There will be no change in ownership of the Burnside Skatepark property.

While the project proponent is committed to a maximum duration of skatepark closure, the project proponent will coordinate the exact timing of those closures and specific conditions with the Burnside Skatepark Board after a contractor is hired. The project proponent, through coordination with the Burnside Skatepark Board, has identified the following measures to minimize impacts to skatepark users:

- Provide the Burnside Skatepark Board with advanced notice regarding the timing of Burnside Skatepark closures.

- Maintain adequate user access to the Burnside Skatepark when it is not closed. The southern access is the most important. When and if the southern access is closed while the skatepark is open, provide alternate access to the skatepark from the north.
- Provide, or support the Burnside Skatepark Board in providing, signage for skatepark users regarding the timing of temporary closures, and regarding any revisions to access locations to the skatepark.
- If existing Burnside Skatepark lighting is unusable during bridge demolition or construction, provide temporary replacement lighting, particularly during winter months.
- When possible, avoid closing the Burnside Skatepark during the skatepark's annual Halloween event.
- During bridge construction and when the Burnside Skatepark is open, ensure that there is occasional vehicle access to the north side of the skatepark adjacent to the Yard building to allow the Burnside Skatepark Board or other volunteers to deliver materials and equipment that may be needed for occasional skatepark maintenance. Coordinate with the Burnside Skatepark Board on the timing of such maintenance.
- When not necessary, avoid using parking spaces adjacent to the Burnside Skatepark to store bridge construction equipment while the skatepark is open.

(2) Scope of the work must be minor, i.e., both the nature and the magnitude of the changes to the Section 4(f) resource are minimal;

Finding: The Earthquake Ready Burnside Bridge Preferred Alternative will cause no long-term or permanent changes to the Burnside Skatepark but it could cause inadvertent damage to skatepark surfaces during bridge demolition or construction of the new bridge. Any such damage is expected to be minor and the project will repair the damage (see repair protocol in Condition 4, below). There will be no change to the intended use of the Section 4(f) resource.

(3) 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;

Finding: The Earthquake Ready Burnside Bridge Preferred Alternative will have no permanent impacts to the Burnside Skatepark. As noted above in Condition 1, temporary skatepark closures will be necessary for safety, but these will not diminish the qualities that make the Burnside Skatepark eligible for listing on the National Register of Historic Places, and thus eligible for Section 4(f) protection as a historic site.

(4) The land being used must be fully restored, i.e., the resource must be returned to a condition which is at least as good as that which existed prior to the project; and

Finding: At the Burnside Skatepark Board's request, Multnomah County has agreed that if there is incidental damage to the Burnside Skatepark during construction of the Earthquake Ready Burnside Bridge Preferred Alternative, the County will provide necessary repair materials or funds to the Burnside Skatepark Board to make the repairs prior to reopening the skatepark.

(5) There must be documented agreement of the appropriate Federal, State, or local officials having jurisdiction over the resource regarding the above conditions.

Finding: This letter serves as documented agreement by the Oregon SHPO that the above conditions have been met.

Please respond to this request for concurrence in writing at your earliest convenience and return the concurrence to me at the address listed in the letterhead.

Please contact me at (503) 731-8239 or at robert.w.hadlow@odot.state.or.us if you would like additional information or if you have any concerns. Thank you for your consideration of this proposal.

Sincerely,



Robert W. Hadlow, Ph.D.
Senior Historian

The Oregon SHPO, as the official with jurisdiction for the Burnside Skatepark, concurs with the assessment that a Section 4(f) use will not occur at the historic site based on the Earthquake Ready Burnside Bridge Project satisfying all five conditions (the temporary occupation exception criteria) contained in Section 23 Code of Federal Regulations (CFR) 774.13(d).

Signature: 
Oregon SHPO official
Oregon SHPO

Date: 1/6/2021

Comment: Please revise and resubmit this temporary occupancy finding if a different alternative than the preferred alternative is forwarded for construction.

Copies to:

Emily Cline, Environmental Program Manager, FHWA—Oregon Division, Salem
Denis Reich, Environmental Manager, ODOT Region 1, Portland
Roy Watters, Archaeologist, ODOT, Salem
Megan Neill, Engineering Services Manager, Multnomah County
Jeff Buckland, Environmental Project Manager, ODOT Region 1, Portland
ODOT File Type E

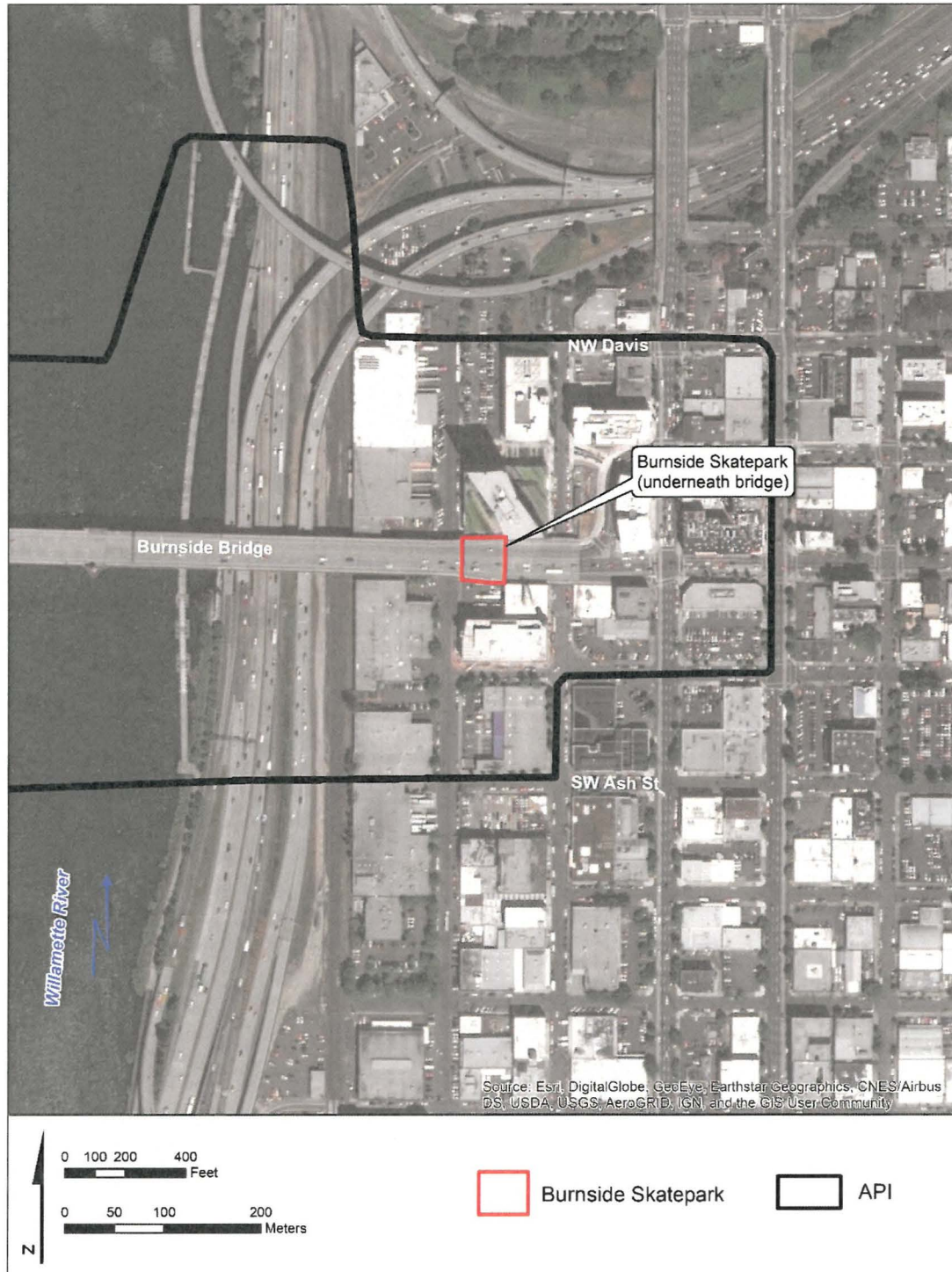


Figure 1. Location of the Burnside Skatepark (beneath the Burnside Bridge).



Figure 2. Looking northeast into the Burnside Skatepark.

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Appendix C. Findings of Effect

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**ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM**

Agency/Project: Oregon Department of Transportation/Earthquake Ready Burnside Bridge		
ODOT Key Number: :XXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))		
Property Name: Ankeny Pumping Station (Ankeny Pump Station)	Street Address: 30 NW Naito Parkway	
City, County: Portland, Multnomah	Latitude: 45.522743 Longitude: (-)122.669336	
Surveyor: Elizabeth O'Brien	Affiliation: WillametteCRA	Date Recorded: 07/12/2019

Photo:



Photo Caption: Ankeny Pump Station, facing southwest from the Burnside Bridge (Elizabeth O'Brien, 2019).

Preliminary Finding of Effect:

☐ No Historic Properties Affected
 ☒ No Historic Properties Adversely Affected
 ☐ Historic Properties Adversely Affected

State Historic Preservation Office Comments:

☐ Concur
 ☐ Do Not Concur:
 ☐ No Historic Properties Affected
 ☐ No Historic Properties Adversely Affected
 ☐ Historic Properties Adversely Affected

Signed: _____ Date: _____

Comments:



ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))	
Property Name: Ankeny Pumping Station (Ankeny Pump Station)	
Street Address: 30 NW Naito Parkway	City, County: Portland, Multnomah

Provide written description of the project, and its potential effects on the subject property per 36 CFR 800. The project and findings, as per instructions, should include:

1. Introduction

This statement of finding of effect discusses the effect of the proposed Earthquake Ready Burnside Bridge (EQRB) Project in Portland, Oregon. Willamette Cultural Resources Associates (WillametteCRA) has recommended the Ankeny Pump Station as individually eligible for listing on the National Register of Historic Places. Multnomah County is the project proponent with support from the Oregon Department of Transportation (ODOT) on behalf of the Federal Highway Administration (FHWA). It is the finding of WillametteCRA, on behalf of ODOT, that the proposed project will have no adverse effect on the Ankeny Pump Station. This statement of finding of effect is made pursuant to the requirements of the National Historic Preservation Act of 1966 (36 CFR 800), Executive Order 11593, and the National Environmental Policy Act of 1969.

2. Project Description

The proposed project is to establish a Burnside Bridge that would survive a major Cascadia Subduction Zone (CSZ) earthquake. The existing bridge would fail in such an earthquake. The Refined Long Span alternative would require replacing the existing bridge with a new bridge, known as the Long Span option. The Long Span alternative would construct a new bridge on the same alignment as the current bridge. The existing approach span would be a girder. The number of bents on the western approach in Waterfront Park would be reduced from four to two (existing bents would be removed only to ground level). The Ankeny Pumping Station is immediately adjacent to the bridge's Pier 1. The Refined Long Span alternative would reinforce Pier 1 through the use of jet grouting as it is situated on and in soils subject to liquefaction in an earthquake. Other than demolition of the current approach span and construction of a new span (which includes reinforcement of Pier 1), no other activities are proposed at this time in the vicinity of the Ankeny Pumping Station.

3. Identification and Description of the Historic Resource

The Ankeny Pumping Station is a poured concrete pumping station building constructed in 1927-1929 as a part of the Front Street Intercepting Sewer project along Portland's waterfront. The project consisted of building a mile-long seawall along the Willamette River harbor line and an accompanying sewer system running from Jefferson Street to Glisan Street.

The purpose of the intercepting sewer project was to consolidate sewage outflow to the river from downtown Portland, with the seawall serving to minimize the threat of flooding in the city's central business district. The pumping station is situated on public property at the base of SW Ankeny Street, just south of the Burnside Bridge in Section 3, Township 1 North, Range 3 East, Willamette Meridian. The concrete building is situated next to the Willamette River and the Harbor Wall, which was constructed at the same time as the pumping station. Today, the pumping station is incorporated into Tom McCall Waterfront Park (built 1974) and is bordered by a concrete retaining wall and walkway within the park.

The building was constructed in the Art Deco style expressed through vertical pilasters defining each bay and rising above the roofline topped by pyramidal caps. Each pilaster has a single rectilinear flute and base. The building is organized by a center mass slightly elevated above two flanking three-bay wings. The center mass



ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))	
Property Name: Ankeny Pumping Station (Ankeny Pump Station)	
Street Address: 30 NW Naito Parkway	City, County: Portland, Multnomah

projects westward in a third wing added in 1952. The central bay is framed by corner pilasters rising above the roof, subdivided into three bays defined by slightly smaller pilasters.

Large, metal multi-light window bays rest on a continuous concrete sill. Some of the windows may be replacements but are similar in design to the original. Period (likely 1950s) metal-bracketed sconces with hanging acorn globes hang from each pilaster.

The building's original footprint measured approximately 100' x 20' with an approximate height of 30'. The 1929 building was constructed of poured concrete with a "4 foot concrete slab floor" resting on timber piles driven into a timber crib structure, "capped with a 2 foot concrete seal" (Laurgaard 1933). The pumping station was built into the harbor wall bulkhead and considered as an "integral" part of the seawall (Laurgaard 1933:17). The pump room is situated below ground level, and the main floor originally divided into three rooms. A comfort station was planned for the north room and the others devoted to electrical equipment and a control room (Laurgaard 1933:17). Five pumps were installed into the building operated by automatic "float controlled switches" (Laurgaard 1933:18).

The east façade is divided by the center bay and three-bay wide wings. Most of the detailing is original except for a metal retractable door in the north bay adjacent to the center bay. A pedestrian door is situated in the adjacent bay. Lighting sconces hang from each pilaster, near the top of the wing windows. Several of the windows have metal vents that do not appear in a 1928 photograph. The center bay is inscribed above the second-floor windows with "MUNICIPAL SEWAGE PUMPING PLANT" and below "1929 AD."

The west primary façade is oriented towards SW Naito Parkway. A center projecting wing, constructed in 1952, is three bays in width, and the recessed north and south wings are two bays wide. The center bay is slightly elevated and subdivided into three bays with similar pilasters as the east façade. Multi-light windows light the first and second levels of the center bay. Modern steel fencing secures the space between the north and south wings.

The north façade consists of the single bay wide south wing and the single bay wide west wing. Each bay features double doors at the ground level and above metal multi-light transom windows. Modern metal fencing protects the area north of the building.

The south façade is a single bay wide with tall, metal double doors with four-light windows. Tall corner pilasters frame the south bay. The west projecting wing's south façade has a metal clad shed roof canopy protecting a pedestrian entry. Poured concrete walls topped by metal fencing enclose a service yard. The yard is accessed by massive metal, hinged gates. The west projecting wing was added in the early 1950s and completed in 1952, designed much in the manner as the original building. New equipment was added to meet the growing demands on the system and to pump sewage to a pumping station and sewage treatment plant on the east side of the Willamette River (*Oregonian* 1952:14). Other unspecified modifications occurred in the 1960s and 1990s. More recent changes are to the exterior setting of fencing (2007) and retaining wall in front of the building. Tice Electric Company replaced the interior electrical system in 2017. Catena Consulting Engineers completed a recent seismic upgrade (Catena 2019).



ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))	
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One of only two remaining segments of the original Harbor Wall railing extend along the river face of the Ankeny Pump Station enclosure.

There are currently six pumps, two 250HP and four 200HP, housed in the pumping station (Tice Electric Company 2019). The Pump Station has been seismically retrofitted.

The Ankeny Pump Station has been recommended eligible for listing in the National Register under Criteria A and C. It is recommended eligible under Criterion A for its pivotal role in the Front Street Interceptor Project, one of the City's first major efforts to address pollution of the Willamette River, as well as redevelopment of the waterfront in the city center. Under Criterion C, the Pump Station is an important contribution for both its Art Deco style and as an engineering facility that continues to serve its original purpose.

4. Undertaking Options Considered

A total of six (6) alternatives have been considered for this undertaking: two (2) no-build alternatives and four (4) build alternatives. The four (4) build alternatives included an Enhanced Seismic Retrofit Alternative and three (3) replacement alternatives. Extensive discussion and analysis of these alternatives is contained in the Supplemental Draft Environmental Impact Statement (SDEIS) of 2021. The following is a synopsis of the alternatives considered for this undertaking.

a. No-Build Alternative

Two (2) no-build alternatives were considered for this undertaking. These no-build alternatives assume that all other programmed and planned projects move forward and that the Burnside Bridge would remain seismically at risk. The first no-build scenario considered was the "No-Build Pre-Earthquake" alternative, which analyzed no-build conditions prior to a CSZ seismic event. The second no-build scenario considered was the "No-Build Post-Earthquake," which analyzed no-build conditions after a CSZ seismic event. The authors of the SDEIS concluded that the no-build alternatives would not address the acute seismic vulnerability of the existing Burnside Bridge, which is expected to be heavily damaged or completely collapse during a CSZ seismic event. The collapse of the Burnside Bridge would very likely result in a significant loss of life to people on or under the bridge during a CSZ seismic event. The loss of the Burnside Bridge would sever downtown Portland from the rest of the city on the east side of the Willamette River and would prevent emergency responders from being able to cross the river. Additionally, debris from the collapse of the Burnside Bridge would block all travel by land and water under the bridge. The loss of the Burnside Bridge due to a CSZ seismic event would hamper the long-term recovery of the city and surrounding region during the months following a major earthquake, and the potential adverse economic effects would likely persist for years.

b. Avoidance Alternative

The environmental team considered one (1) avoidance alternative. An Enhanced Seismic Retrofit Alternative was considered in lieu of the wholesale replacement of the Burnside Bridge. This alternative would partially retrofit the existing bridge and replace major structural components of the bridge to meet seismic design criteria. In this scenario, the retrofitted structural elements would be visually similar to the existing structure of the bridge, but the replacement approaches would be substantially different in appearance compared with the existing bridge. Under this scenario, the width of the bridge would be



ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))	
Property Name: Ankeny Pumping Station (Ankeny Pump Station)	
Street Address: 30 NW Naito Parkway	City, County: Portland, Multnomah

unchanged, and the modal connections at each end of the bridge would also not change. The environmental team made a preliminary analysis of potential effects to the NRHP-listed Burnside Bridge due to the Enhanced Seismic Retrofit Alternative scope of work. The team applied the Section 106 criteria of adverse effect and found that this potential scope of work would result in adverse effects to the NRHP-listed Burnside Bridge.

c. Proposed Undertaking

Three (3) build alternatives were considered for the proposed undertaking. Of these three alternatives, the preferred alternative would replace the existing bridge with a new bridge, known as the Long Span option.

The Long Span alternative would construct a new bridge on the same alignment as the current bridge, which would necessitate the demolition of the existing Burnside Bridge.

5. Evaluation of Effects

The proposed Refined Long Span alternative would involve construction of a new bridge on the same alignment of the current bridge. The adjacent Pier 1 would be removed and the existing four bents would be replaced by two bents in Waterfront Park. According to 36 CFR Part 800.5(a)(1), adverse effects occur when an undertaking directly or indirectly alters characteristics of a historic property that qualify it for inclusion in the NRHP; future and cumulative effects of the undertaking also need to be considered. An example listed in 800.5(a)(2) is “visual, atmospheric, or audible intrusions” (36 CFR 800.5).

The undertaking will not affect the integrity of location, design, materials, workmanship, feeling, and association of the Ankeny Pumping Station. Replacing four bents with two and removal of Pier 1 would alter the setting, providing a more open view from the Station to the north and northwest. The current Burnside Bridge had been constructed three years before the Pumping Station. Pier 1 and the existing bents were therefore present when the Pumping Station was constructed. There is no evidence, however, that the bridge defined or influenced either the location or design of the Pumping Station. This change in setting is therefore not considered so substantial as to adversely affect the Pumping Station’s eligibility for listing on the NRHP. In sum, the project will have a No Adverse Effect on the Ankeny Pumping Station historic property

6. Coordination and Public Output

The Earthquake Ready Burnside Bridge Project has been the subject of public meetings since 2016. Multnomah County has established a Community Task Force in October 2018, which continues to meet regularly. Meetings of Section 106 Consulting Parties have been meeting regularly since December 2020. Draft technical reports to address NHPA and NEPA requirements have been circulated for review by representatives of the SHPO, City of Portland, and ODOT. There has also been coordination with the Portland Historic Landmarks Commission, which is a CLG.

7. Conclusion

It is the recommendation of WillametteCRA, on behalf of ODOT, that the proposed Refined Long Span alternative would not adversely affect the Ankeny Pump Station’s eligibility for listing under Criteria A and C nor its integrity. WillametteCRA recommends a Finding of No Adverse Effect for this historic property.



ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
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Property Name: Ankeny Pumping Station (Ankeny Pump Station)	
Street Address: 30 NW Naito Parkway	City, County: Portland, Multnomah

8. Sources

Catena

2019 Ankeny Pump Station. Electronic document, <https://www.catenaengineers.com/project.php?id=202>, accessed July 25, 2019.

Laurgaard, Olaf

1933 *Treatise on the Design, Test & Construction of the Front St. Intercepting Sewer and Drainage System in Portland, Oregon, Including Intercepting Sewer, Pumping Plant, & Concrete Bulkhead-Wall on Gravel filled Timber Cribs*. American Society of Civil Engineers, New York.

Oregonian [Portland, Oregon]

1952 Pipe Starts Beneath Willamette to Carry Sewage. 18 July:14.

Tice Electronic Company

2019 Ankeny Pump Station Upgrade. Electronic document, <https://ticeelectric.com/project/ankeney/>, accessed July 25, 2019.

**ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet**

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

ODOT Key Number: XXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))

Property Name: Ankeny Pumping Station (Ankeny Pump Station)

Street Address: 30 NW Naito Parkway

City, County: Portland, Multnomah

Maps and Figures

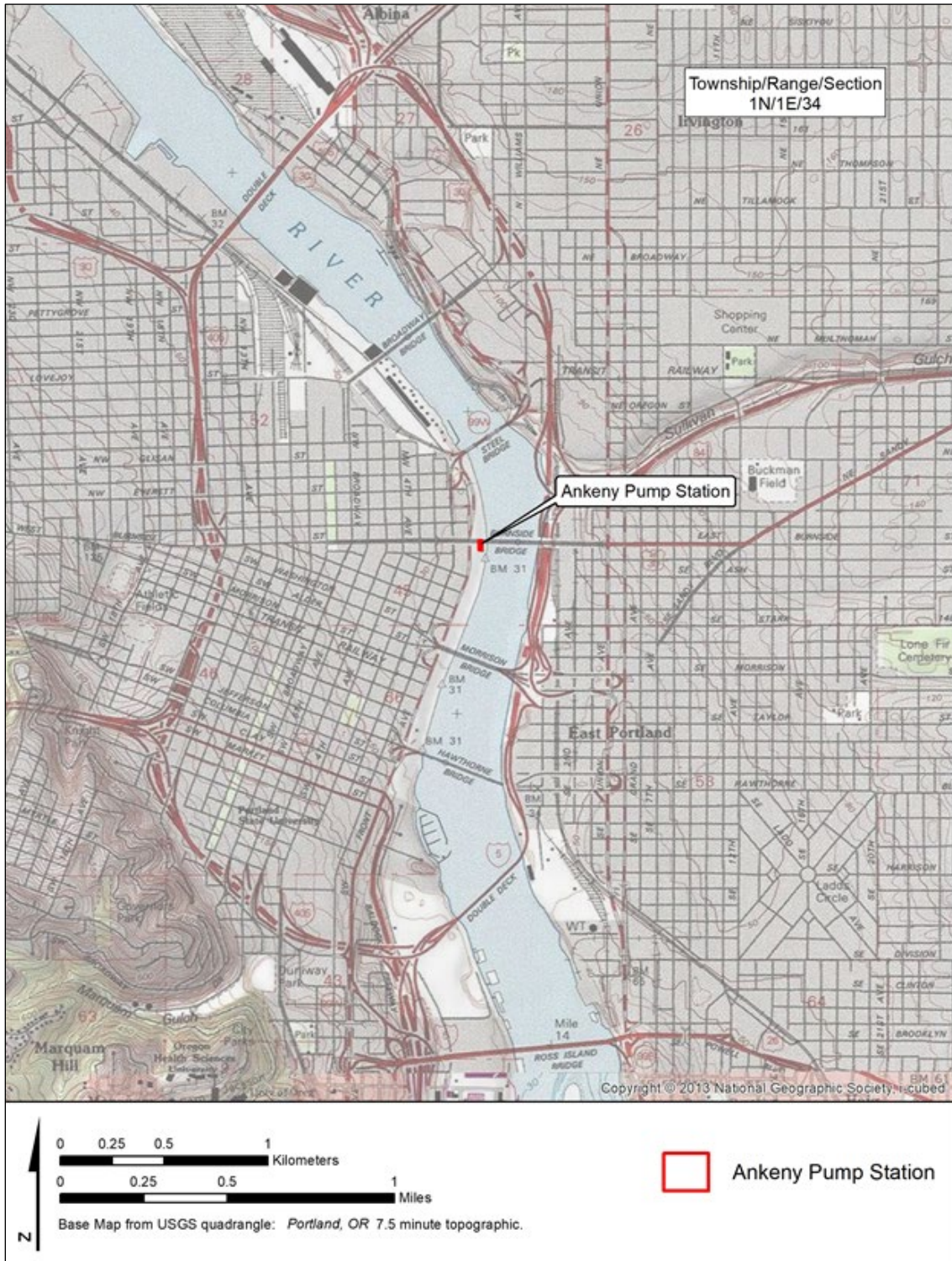


Figure 1. Location map.



ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
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ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
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Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))

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Street Address: 30 NW Naito Parkway

City, County: Portland, Multnomah

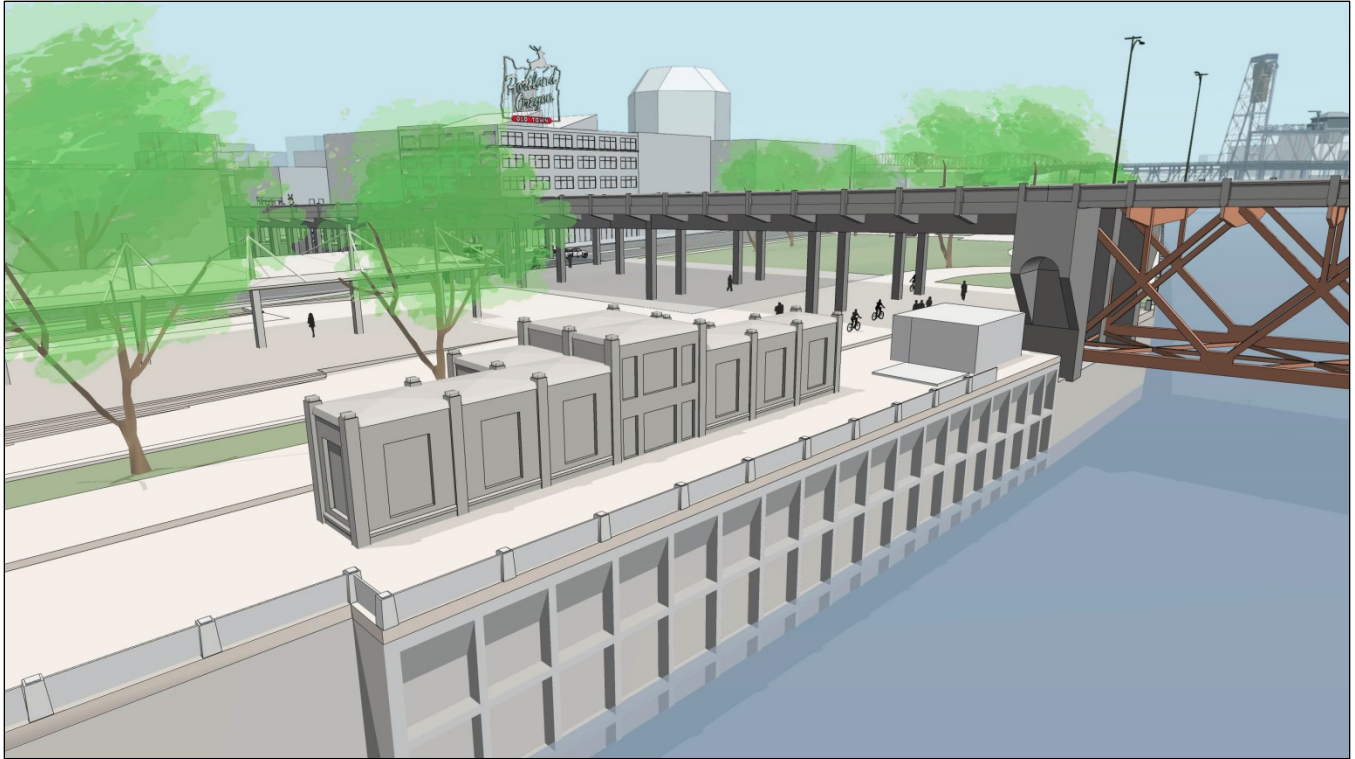


Figure 3. Ankeny Pumping Station, artist's rendering of existing conditions (Fat Pencil Studio, 2021), oblique view looking northwest.

ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))

Property Name: Ankeny Pumping Station (Ankeny Pump Station)

Street Address: 30 NW Naito Parkway

City, County: Portland, Multnomah

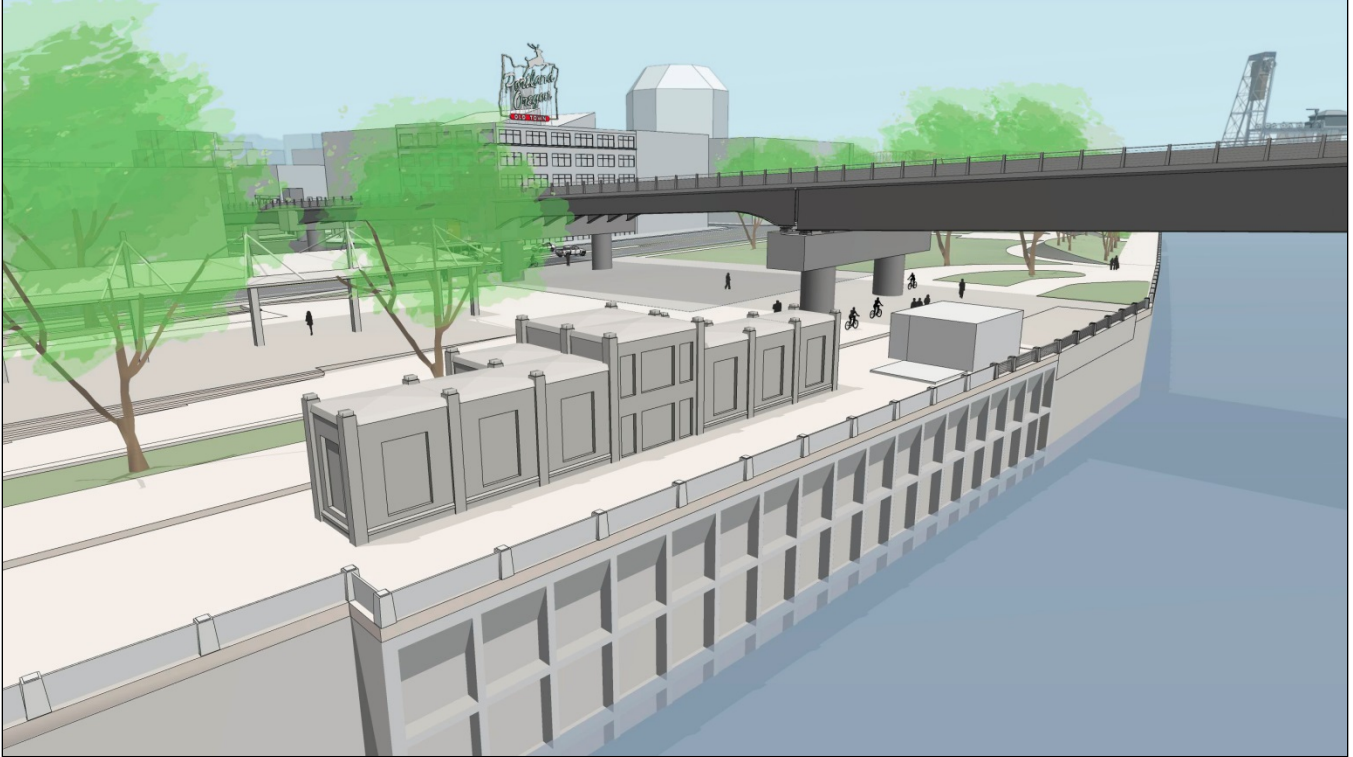


Figure 4. Ankeny Pumping Station, artist's rendering (Fat Pencil Studio, 2021), oblique view looking northwest. This figure illustrates the setting of the Pump Station after demolition of the existing Burnside Bridge, removal of Pier 1, and replacement of the west approach with a girder span.

ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))

Property Name: Ankeny Pumping Station (Ankeny Pump Station)

Street Address: 30 NW Naito Parkway

City, County: Portland, Multnomah



Figure 5. Ankeny Pumping Station on the right, artist's rendering of existing conditions (Fat Pencil Studio, 2021), looking north.

ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))

Property Name: Ankeny Pumping Station (Ankeny Pump Station)

Street Address: 30 NW Naito Parkway

City, County: Portland, Multnomah



Figure 6. Ankeny Pumping Station on the right, artist's rendering (Fat Pencil Studio, 2021) of altered setting with demolition of the existing Burnside Bridge and columns for the new girder span. Looking north.

ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))	
Property Name: Ankeny Pumping Station (Ankeny Pump Station)	
Street Address: 30 NW Naito Parkway	City, County: Portland, Multnomah

Photographs



Figure 7. Ankeny Pump Station, facing east (Elizabeth O'Brien, 2019).

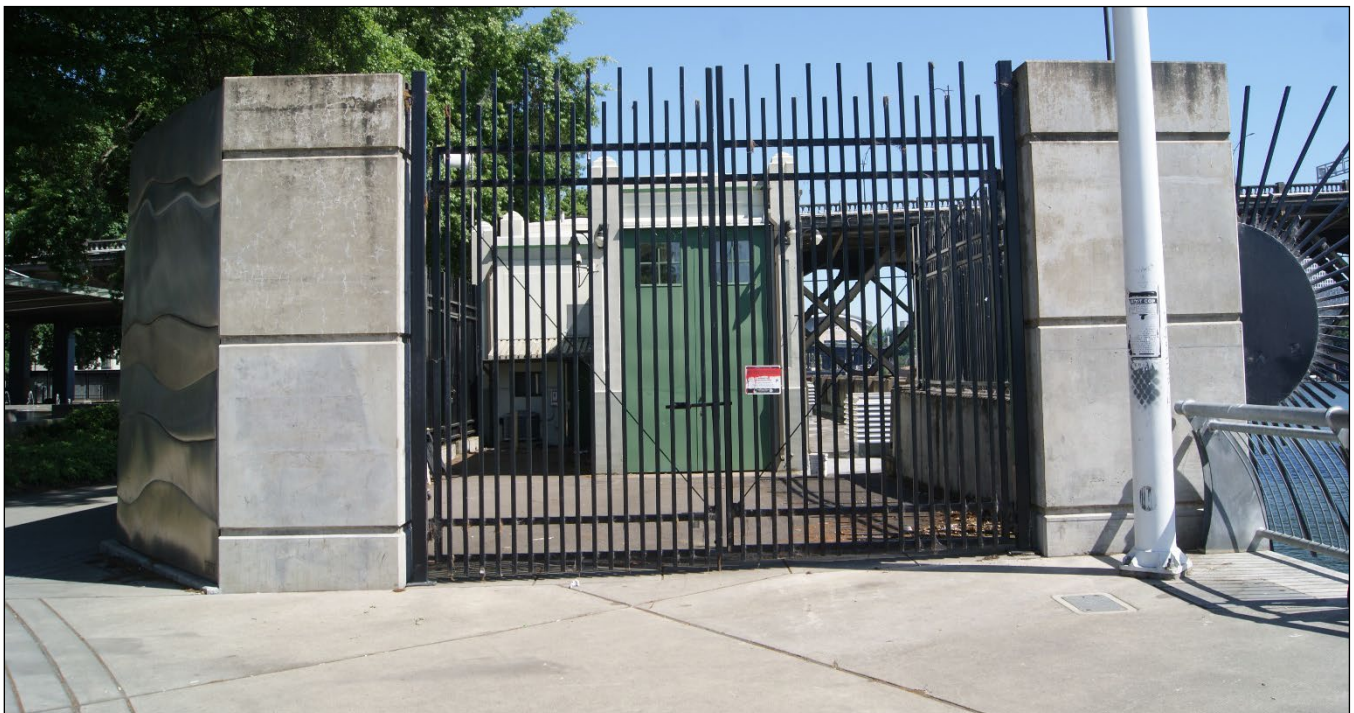


Figure 8. Ankeny Pump Station, facing north (Elizabeth O'Brien, 2019).

ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))

Property Name: Ankeny Pumping Station (Ankeny Pump Station)

Street Address: 30 NW Naito Parkway

City, County: Portland, Multnomah



Figure 9. Ankeny Pump Station on the right; Pier 1 and existing Bent 19 on the left, facing east (David V. Ellis, 2021).

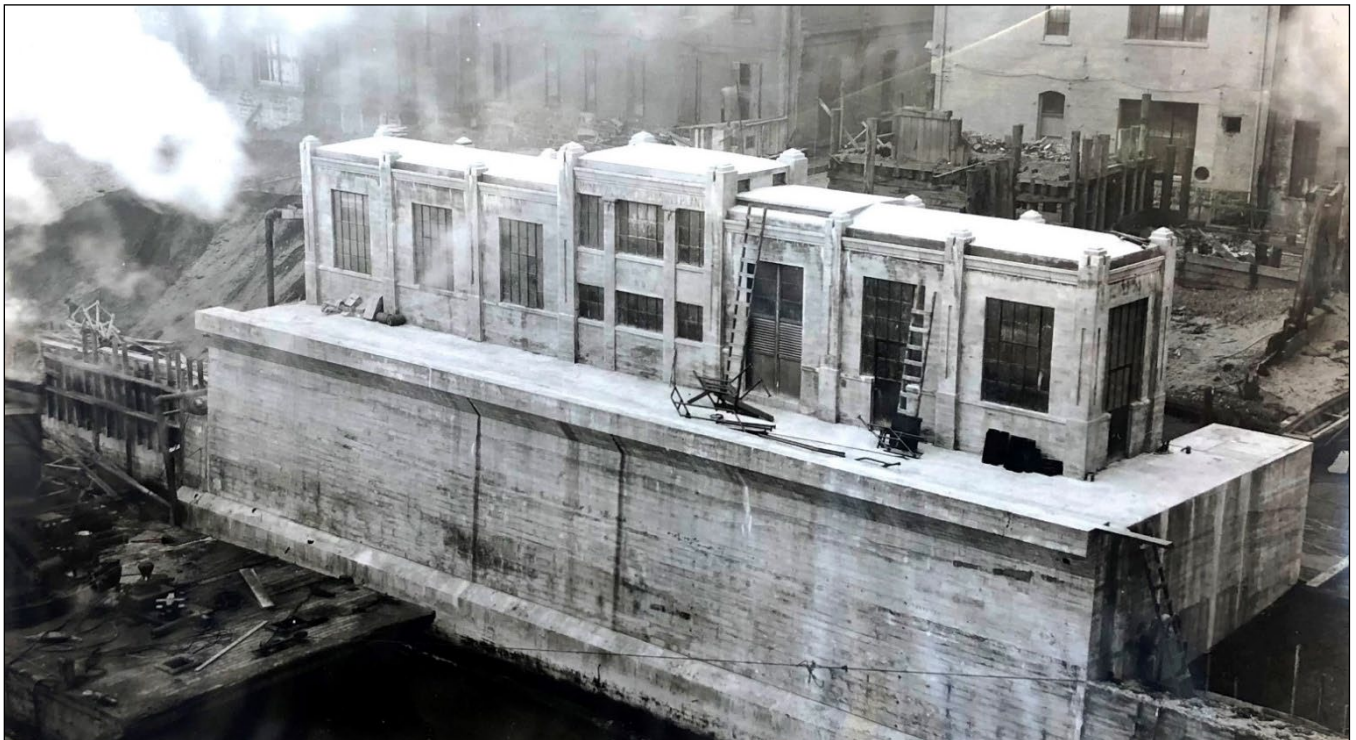


Figure 10. Final construction of the Ankeny Pump Station in 1929, looking southwest (Portland City Archives).

**ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM**

Agency/Project: Oregon Department of Transportation/Earthquake Ready Burnside Bridge		
ODOT Key Number: :XXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge [Federal-Aid No. C051(111)]		
Property Name: Bates Building	Street Address: 101-117 West Burnside Street	
City, County: Portland, Multnomah	Latitude: 45.523244 Longitude: (-) 122.671636	
Surveyor: Adam S. Alsobrook	Affiliation: WillametteCRA	Date Recorded: 08/25/2021

Photo:



Photo Caption: Bates Building, looking northwest (Elizabeth O'Brien, 2019)

Preliminary Finding of Effect:

☐ No Historic Properties Affected
 ☒ No Historic Properties Adversely Affected
 ☐ Historic Properties Adversely Affected

State Historic Preservation Office Comments:

☐ Concur
 ☐ Do Not Concur:
 ☐ No Historic Properties Affected
 ☐ No Historic Properties Adversely Affected
☐ Historic Properties Adversely Affected

Signed: _____ Date: _____

Comments:



ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge [Federal-Aid No. C051(111)]	
Property Name: Bates Building	
Street Address: 101-117 West Burnside Street	City, County: Portland, Multnomah

Provide written description of the project, and its potential effects on the subject property per 36 CFR 800. The project and findings, as per instructions, should include:

1. Introduction

This statement of finding of effect discusses the effect of the proposed Earthquake Ready Burnside Bridge (EQRB) Project in Portland, Oregon. The Bates Building at 101-117 West Burnside Street is a contributing resource in the Skidmore/Old Town Historic District, which was listed in the National Register of Historic Places (NRHP) in 1975 and designated as a National Historic Landmark (NHL) in 1977. Multnomah County is the project proponent with support from the Oregon Department of Transportation (ODOT) on behalf of the Federal Highway Administration (FHWA). Historical Research Associates, Inc. (HRA) prepared the original findings that have since been updated by WillametteCRA with the current Alignment Alternatives information on behalf of the Oregon Department of Transportation (ODOT). It is the finding of WillametteCRA, on behalf of ODOT, that the proposed project will have no adverse effect on the Bates Building. This statement of finding of effect is made pursuant to the requirements of the National Historic Preservation Act of 1966 (36 CFR 800), Executive Order 11593, and the National Environmental Policy Act of 1969.

2. Project Description

The proposed project is to establish a Burnside Bridge that would survive a major Cascadia Subduction Zone (CSZ) earthquake. The existing bridge would fail in such an earthquake. The Refined Long-span alternative would replace the existing bridge with a new bridge on the same alignment as the current bridge.

3. Identification and Description of the Historic Resource

The Bates Building is addressed as 101-117 West Burnside Street and is located at the north side of the west approach of the Burnside Bridge and on the west side of NW First Avenue (Portland Maps) (Figures 1 through 4). The Bates Building was designed by an unknown architect and constructed in 1885. It was originally used as a hotel. It is a three-story, brick masonry commercial block designed in a utilitarian style. The building was extensively altered in 1925 to make way for the construction of the west approach of the Burnside Bridge (NRHP 2008:23:24). The storefront level has large display windows and an arched central entrance. Other alterations were made to the building in 1981; some windows were replaced in 2003. The Bates Building was not included in the City of Portland Historic Resource Inventory of 1984 and was originally classified as not contributing to the significance of the Skidmore/Old Town Historic District. However, this classification has been changed to contributing. The alterations of the storefront are deemed reversible and other character-defining features of the building are intact.

The existing west approach of the Burnside Bridge will be removed and replaced with a new west approach span as part of the proposed undertaking. The westernmost edge of the existing west approach span is located immediately to the south of the Bates Building, and a bulkhead retaining wall is located underneath the span on the west side of First Avenue (Figures 5 through 11). The overall configuration, width, and slope of the road prism along the south façade of the Bates Building will not change as part of the proposed undertaking. The existing concrete sidewalk will be replaced with a concrete sidewalk with the same elevation and slope along the south façade of the Bates Building (Figures 12 through 19).



ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge [Federal-Aid No. C051(111)]	
Property Name: Bates Building	
Street Address: 101-117 West Burnside Street	City, County: Portland, Multnomah

4. Undertaking Options Considered

A total of six (6) alternatives have been considered for this undertaking: two (2) no-build alternatives and four (4) build alternatives. The four (4) build alternatives included an Enhanced Seismic Retrofit Alternative and three (3) replacement alternatives. Extensive discussion and analysis of these alternatives is contained in the Supplemental Draft Environmental Impact Statement (SDEIS) of 2021. The following is a synopsis of the alternatives considered for this undertaking.

a. No-Build Alternative

Two (2) no-build alternatives were considered for this undertaking. These no-build alternatives assume that all other programmed and planned projects move forward and that the Burnside Bridge would remain seismically at risk. The first no-build scenario considered was the “No-Build Pre-Earthquake” alternative, which analyzed no-build conditions prior to a CSZ seismic event. The second no-build scenario considered was the “No-Build Post-Earthquake,” which analyzed no-build conditions after a CSZ seismic event. The authors of the SDEIS concluded that the no-build alternatives would not address the acute seismic vulnerability of the existing Burnside Bridge, which is expected to be heavily damaged or completely collapse during a CSZ seismic event. The collapse of the Burnside Bridge would very likely result in a significant loss of life to people on or under the bridge during a CSZ seismic event. The loss of the Burnside Bridge would sever downtown Portland from the rest of the city on the east side of the Willamette River and would prevent emergency responders from being able to cross the river. Additionally, debris from the collapse of the Burnside Bridge would block all travel by land and water under the bridge. The loss of the Burnside Bridge due to a CSZ seismic event would hamper the long-term recovery of the city and surrounding region during the months following a major earthquake, and the potential adverse economic effects would likely persist for years.

b. Avoidance Alternative

The environmental team considered one (1) avoidance alternative. An Enhanced Seismic Retrofit Alternative was considered in lieu of the wholesale replacement of the Burnside Bridge. This alternative would partially retrofit the existing bridge and replace major structural components of the bridge to meet seismic design criteria. In this scenario, the retrofitted structural elements would be visually similar to the existing structure of the bridge, but the replacement approaches would be substantially different in appearance compared with the existing bridge. Under this scenario, the width of the bridge would be unchanged, and the modal connections at each end of the bridge would also not change. The environmental team made a preliminary analysis of potential effects to the NRHP-listed Burnside Bridge due to the Enhanced Seismic Retrofit Alternative scope of work. The team applied the Section 106 criteria of adverse effect and found that this potential scope of work would result in adverse effects to the NRHP-listed Burnside Bridge.

c. Proposed Undertaking

Three (3) build alternatives were considered for the proposed undertaking. Of these three alternatives, the preferred alternative would replace the existing bridge with a new bridge, known as the Long Span option. The Refined Long-span Alternative would construct a new bridge on the same alignment as the current bridge, which would necessitate the demolition of the existing Burnside Bridge.



ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge [Federal-Aid No. C051(111)]	
Property Name: Bates Building	
Street Address: 101-117 West Burnside Street	City, County: Portland, Multnomah

5. Evaluation of Effects

Location: The proposed replacement of the Burnside Bridge will not require the Bates Building to be relocated or removed, therefore, the undertaking will have no effect to the resource's integrity of location.

Setting: The proposed replacement of the Burnside Bridge will not alter the current relationship of the Bates Building to the sidewalk level along the north side of the west approach span or at the west side of NW First Avenue. Concrete sidewalks will be replaced in kind with concrete sidewalks. Therefore, the setting of the Bates Building would not be adversely affected by the proposed undertaking.

Design: The proposed replacement of the Burnside Bridge will not alter the physical form, structure, and style of the Bates Building; therefore, the undertaking will have no effect to the resource's integrity of design.

Materials: The proposed replacement of the Burnside Bridge will not damage, remove, or destroy physical elements of the Bates Building, therefore, the undertaking will have no effect to the resource's integrity of materials.

Workmanship: The proposed replacement of the Burnside Bridge will not damage, remove, or destroy physical evidence of the historic construction techniques used to build the Bates Building, therefore, the undertaking will have no effect to the resource's integrity of workmanship.

Feeling: The proposed replacement of the Burnside Bridge will not alter the physical features which collectively convey the historic character of the Bates Building; therefore, the undertaking will have no effect to the resource's integrity of feeling.

Association: The proposed replacement of the Burnside Bridge will not diminish or eliminate the direct link that the Bates Building has to important historic events or persons significant to our past, therefore, the undertaking will have no effect to the resource's integrity of association.

6. Coordination and Public Output

The Earthquake Ready Burnside Bridge project has been the subject of public meetings since 2016. Multnomah County has established a Community Task Force in October 2018, which continues to meet regularly. Meetings of the Section 106 Consulting Parties have been meeting regularly since December 2020. Draft technical reports to address NHPA and NEPA requirements have been circulated for review by representatives of the SHPO, City of Portland, and ODOT. There has also been coordination with the Portland Historic Landmarks Commission, which is a CLG.

7. Conclusion

In summary, the Refined Long-span alternative would necessitate the complete replacement of the existing Burnside Bridge with new approach and main spans. The replacement of the existing west approach span of the Burnside Bridge would have no adverse effect to the Bates Building for either direct or indirect effects.



ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge [Federal-Aid No. C051(111)]	
Property Name: Bates Building	
Street Address: 101-117 West Burnside Street	City, County: Portland, Multnomah

8. Sources

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2008 National Historic Landmark Nomination (Revised Documentation), Skidmore/Old Town Historic District, Portland, Multnomah County, Oregon. Oregon Historic Sites Database. Electronic resource, <https://heritagedata.prd.state.or.us/historic/>, accessed August 2021.

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1935a "Aerial of Downtown Portland including Burnside, Steel and Broadway Bridges." City of Portland Auditor's Office, Archives and Records Management, PARC Accession Number A2005-005.1449.10, Record Number AP/476. Electronic resource, <https://efiles.portlandoregon.gov/Record/2043501/>, accessed August 2021.

1935b "Aerial view of the downtown waterfront near the Burnside and Steel Bridges." City of Portland Auditor's Office, Archives and Records Management, PARC Accession Number 2000-03, Record Number AP/666. Electronic resource, <https://efiles.portlandoregon.gov/Record/2298287/>, accessed August 2021.

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1908a Sanborn Fire Insurance Map from Portland, Multnomah County, Oregon. Volume 1, 1908-1909 (1908), Sheet 74. Electronic resource, https://www.loc.gov/item/sanborn07439_006/, accessed August 2021.
1908b Sanborn Fire Insurance Map from Portland, Multnomah County, Oregon. Volume 1, 1908-1909 (1908), Sheet 75. Electronic resource, https://www.loc.gov/item/sanborn07439_006/, accessed August 2021.
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1950b Sanborn Fire Insurance Map from Portland, Multnomah County, Oregon. Volume 1, 1908-April 1950, Sheet 75. Electronic resource, https://www.loc.gov/item/sanborn07439_021/, accessed August 2021.

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**ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet**

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

ODOT Key Number: XXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge [Federal-Aid No. C051(111)]

Property Name: Bates Building

Street Address: 101-117 West Burnside Street

City, County: Portland, Multnomah

Maps and Figures

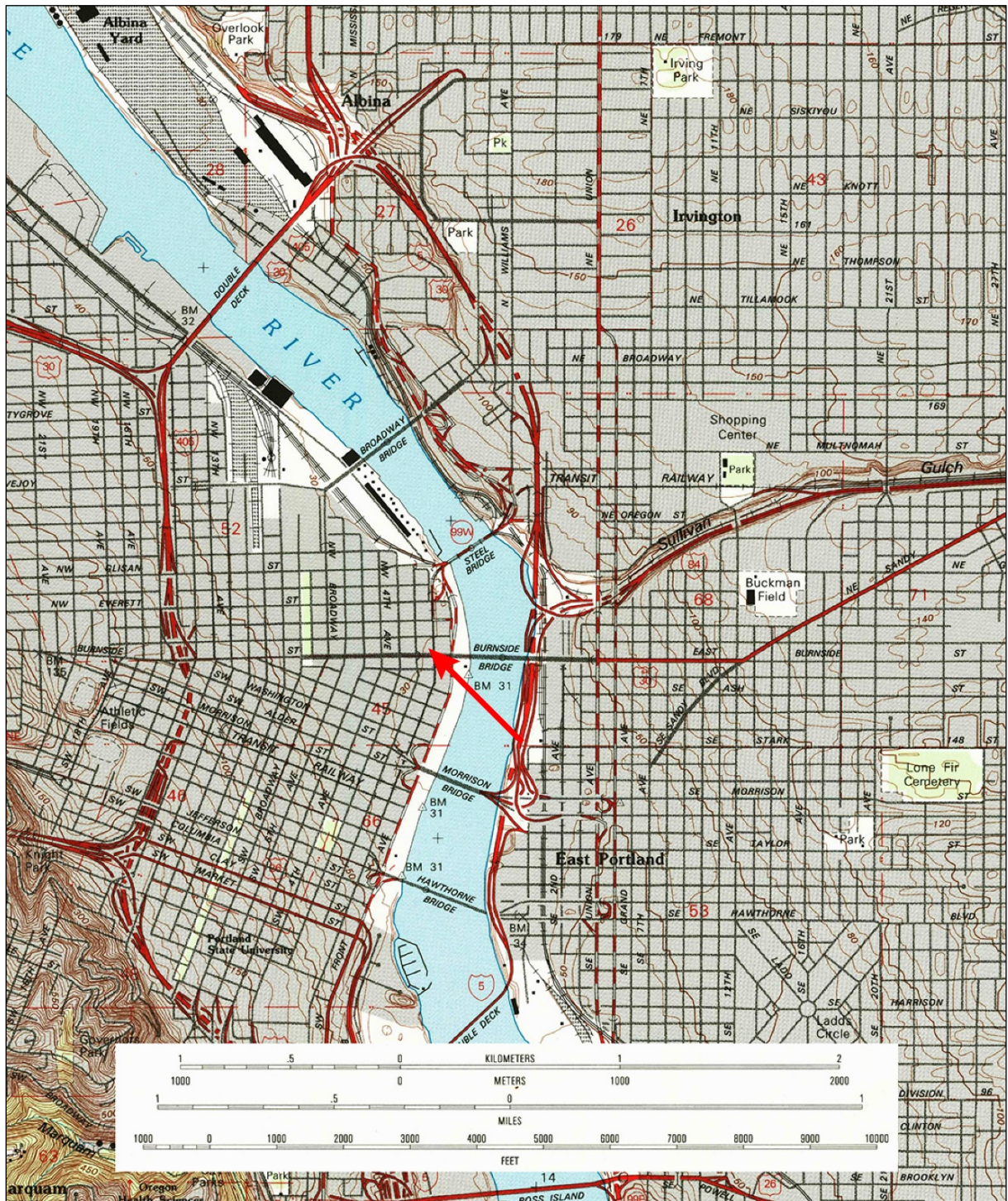


Figure 1: USGS, Portland, OR Quadrangle, 7.5 Minute, 1990. Red arrow indicates location of the Bates Building (USGS).

ODOT INVENTORY OF HISTORIC PROPERTIES SECTION 106 LEVEL OF EFFECT FORM Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge [Federal-Aid No. C051(111)]

Property Name: Bates Building

Street Address: 101-117 West Burnside Street

City, County: Portland, Multnomah

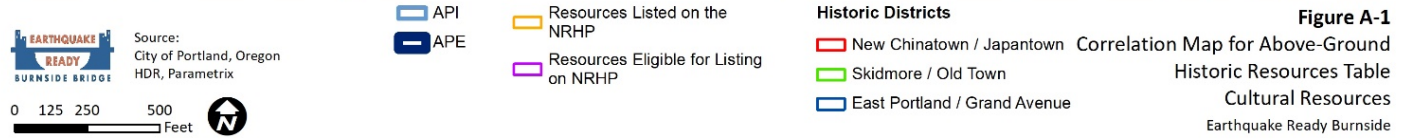
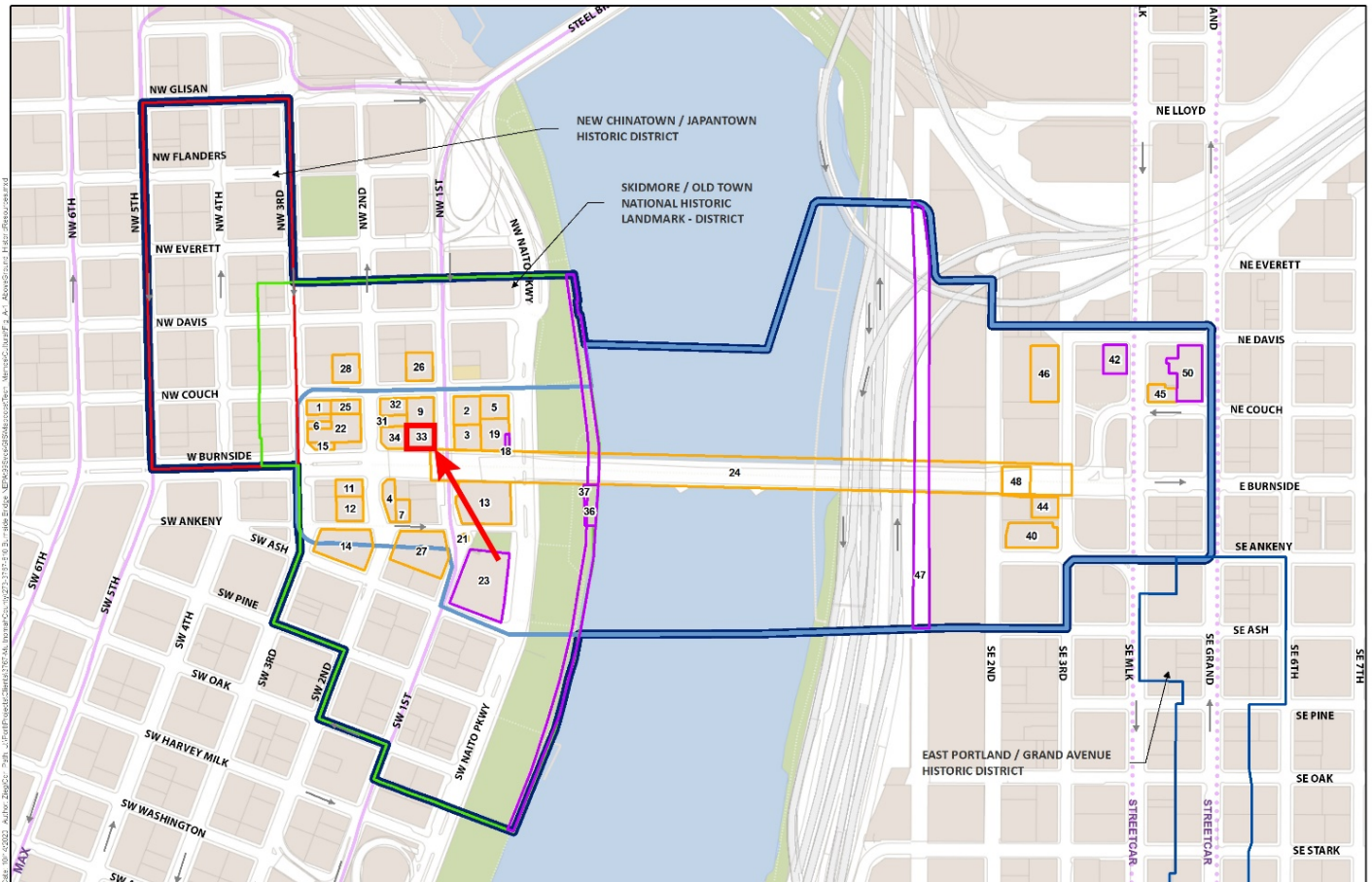


Figure 2: Map of the Area of Potential Effect (APE) with locations of NRHP-listed and NRHP-eligible resources within the APE. Red arrow indicates location of the Bates Building, which is outlined in red.



ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge [Federal-Aid No. C051(111)]

Property Name: Bates Building

Street Address: 101-117 West Burnside Street

City, County: Portland, Multnomah



Figure 3: Aerial photograph with location of the Bates Building indicated by red line (Google Earth).



ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge [Federal-Aid No. C051(111)]

Property Name: Bates Building

Street Address: 101-117 West Burnside Street

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Figure 4: 1951 aerial photograph with location of the Bates Building indicated by red line (USGS EarthExplorer).

**ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet**

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

ODOT Key Number: XXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge [Federal-Aid No. C051(111)]

Property Name: Bates Building

Street Address: 101-117 West Burnside Street

City, County: Portland, Multnomah

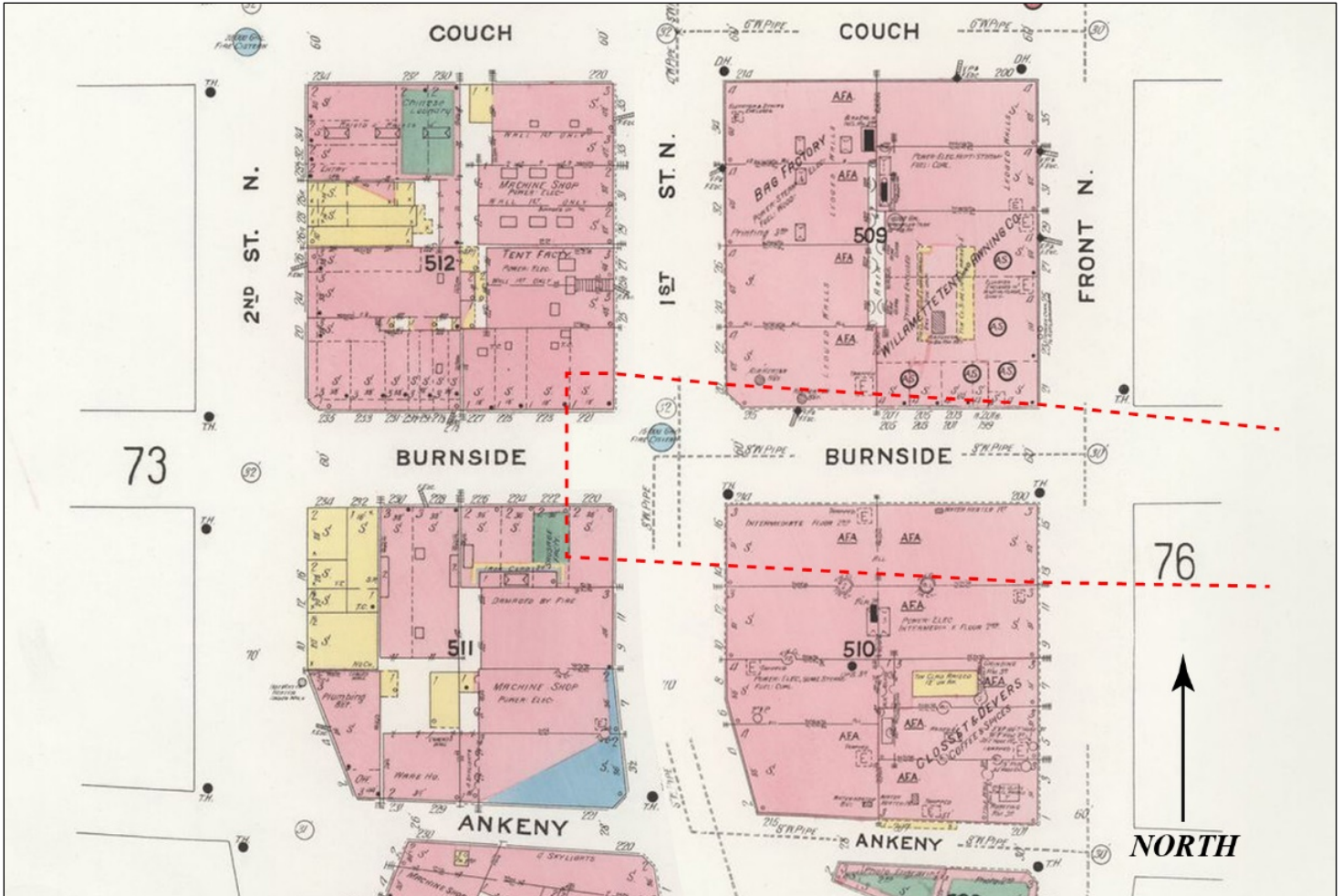


Figure 5: Sanborn maps, Volume 1, 1908. Mosaic of Sheet 74 (left two blocks) and Sheet 75 (right two blocks). Dashed red line indicates footprint of existing Burnside Bridge (Library of Congress).

**ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet**

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

ODOT Key Number: XXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge [Federal-Aid No. C051(111)]

Property Name: Bates Building

Street Address: 101-117 West Burnside Street

City, County: Portland, Multnomah

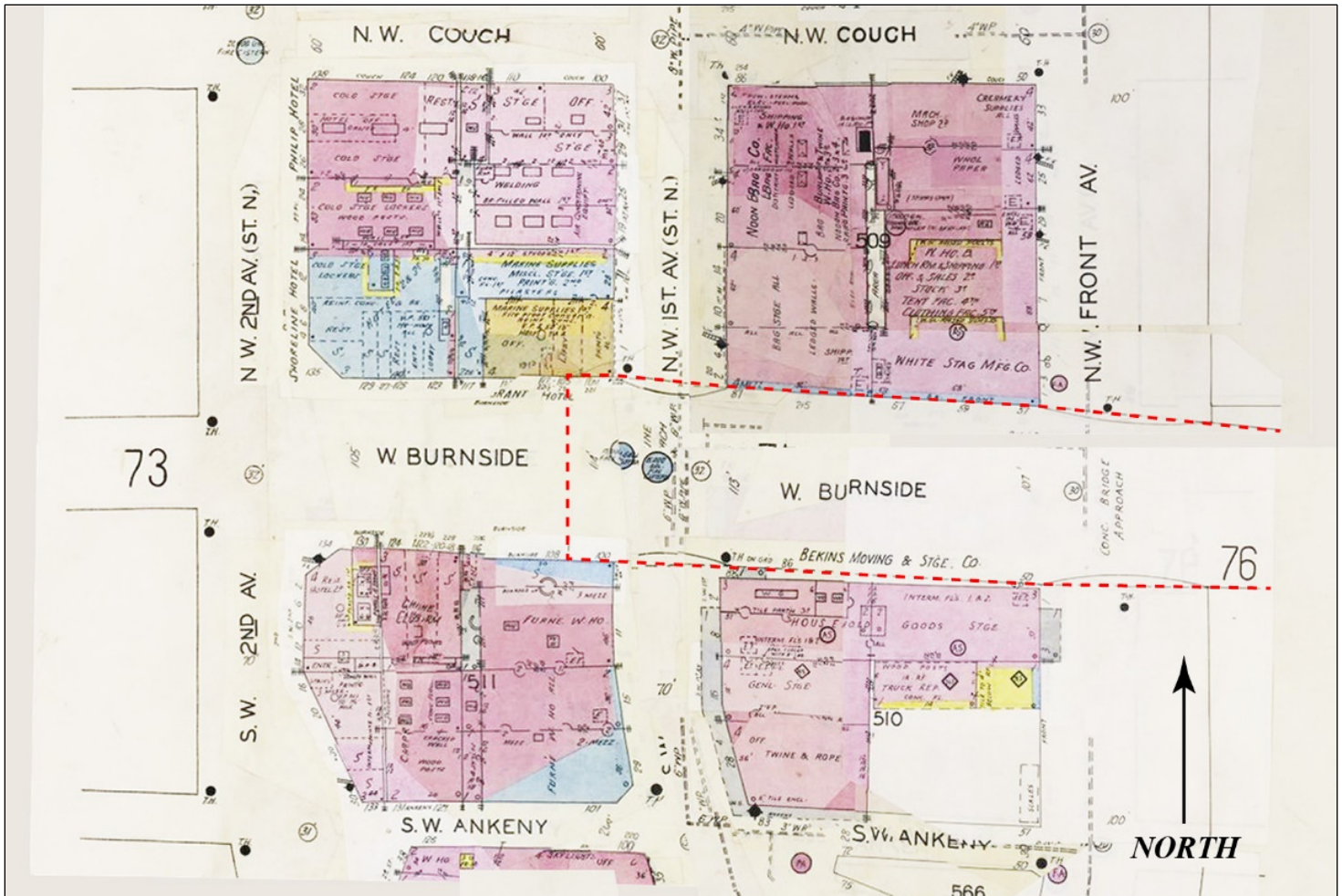


Figure 6: Sanborn maps, Volume 1, 1950. Mosaic of Sheet 74 (left two blocks) and Sheet 75 (right two blocks). Dashed red line indicates footprint of existing Burnside Bridge (Library of Congress).

ODOT INVENTORY OF HISTORIC PROPERTIES
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Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

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Property Name: Bates Building

Street Address: 101-117 West Burnside Street

City, County: Portland, Multnomah

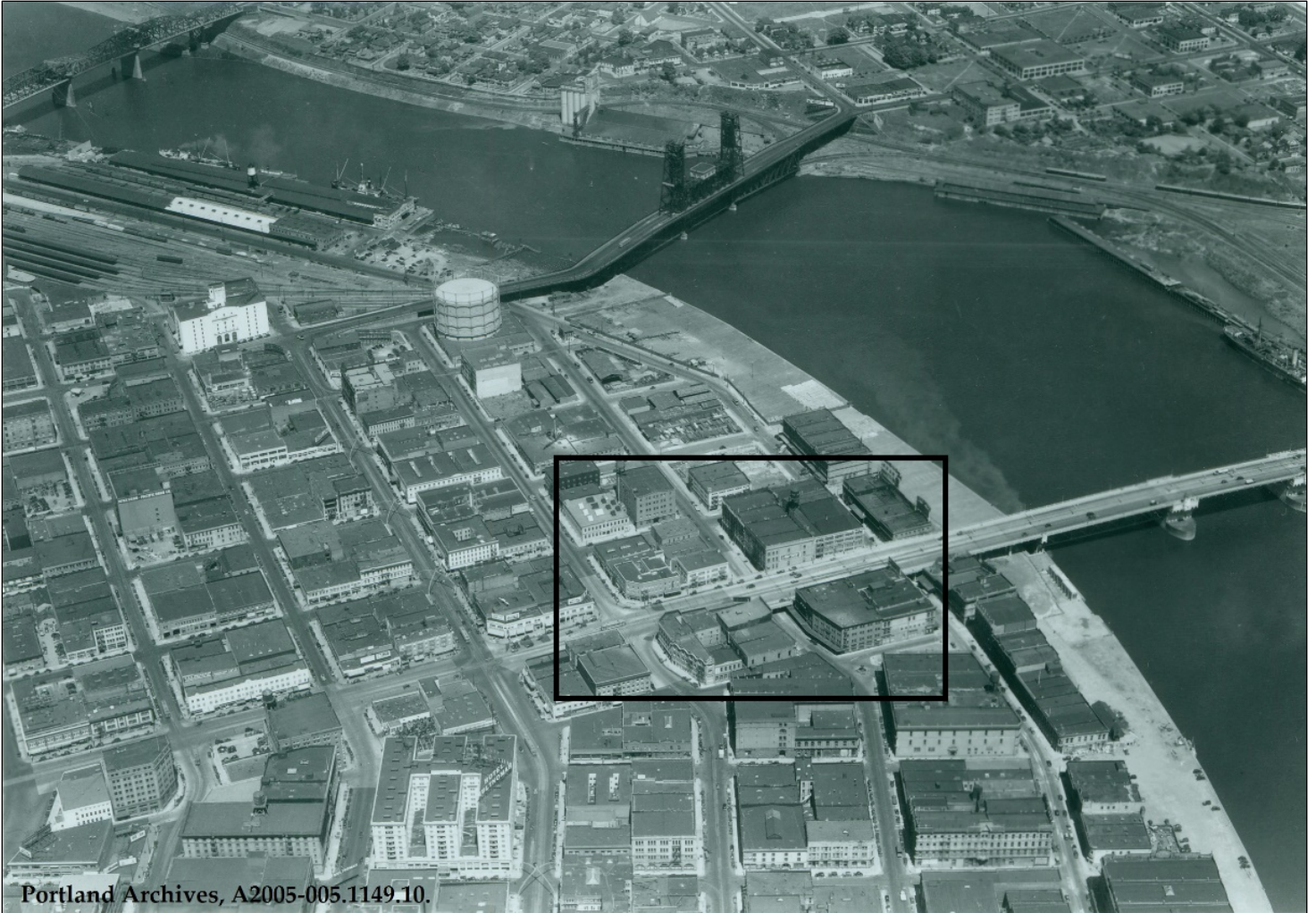


Figure 7: Aerial of downtown Portland including Burnside, Steel, and Broadway Bridges, December 31, 1935. Black box indicates excerpt in Figure 8 below (Portland Archives, A2005-005.1149.10).

**ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet**

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

ODOT Key Number: XXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge [Federal-Aid No. C051(111)]

Property Name: Bates Building

Street Address: 101-117 West Burnside Street

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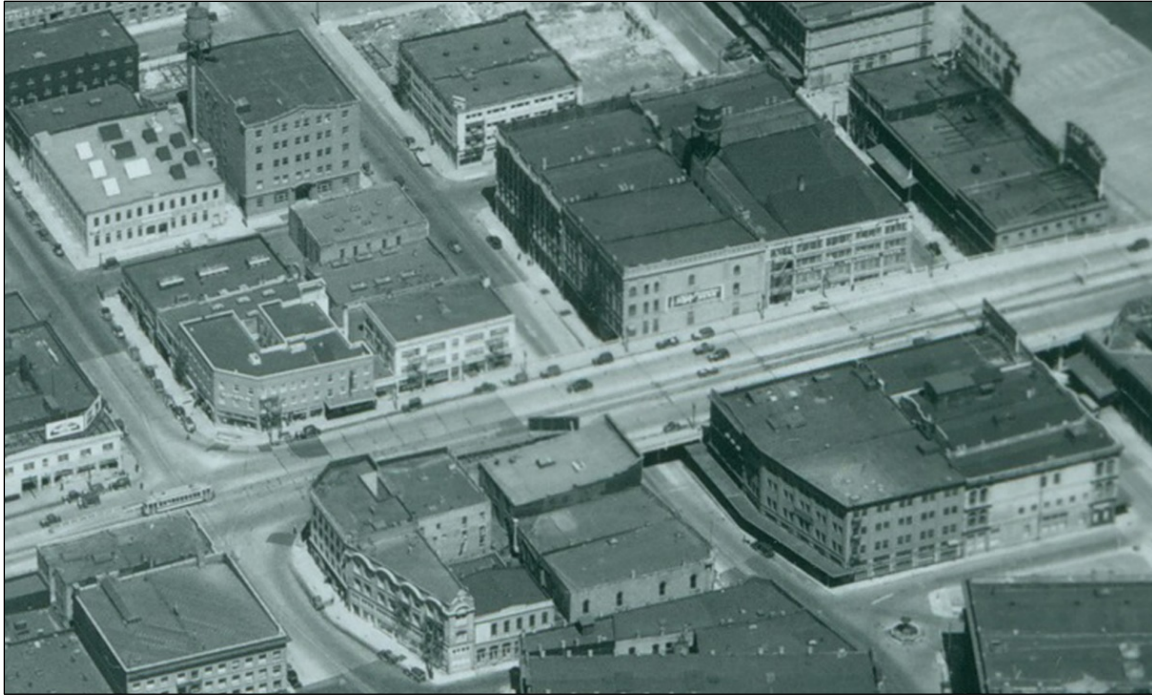


Figure 8: Aerial of downtown Portland including Burnside, Steel, and Broadway Bridges, December 31, 1935. Excerpt of Figure 7 above (Portland Archives, A2005-005.1149.10).



Figure 9: Aerial view of the downtown waterfront near the Burnside and Steel Bridges, December 31, 1935 (Portland Archives, 2000-03).



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Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

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Property Name: Bates Building

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Figure 10: Footprint of the Bates Building superimposed on property line map (Portland Maps/WillametteCRA).

**ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet**

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge [Federal-Aid No. C051(111)]	
Property Name: Bates Building	
Street Address: 101-117 West Burnside Street	City, County: Portland, Multnomah

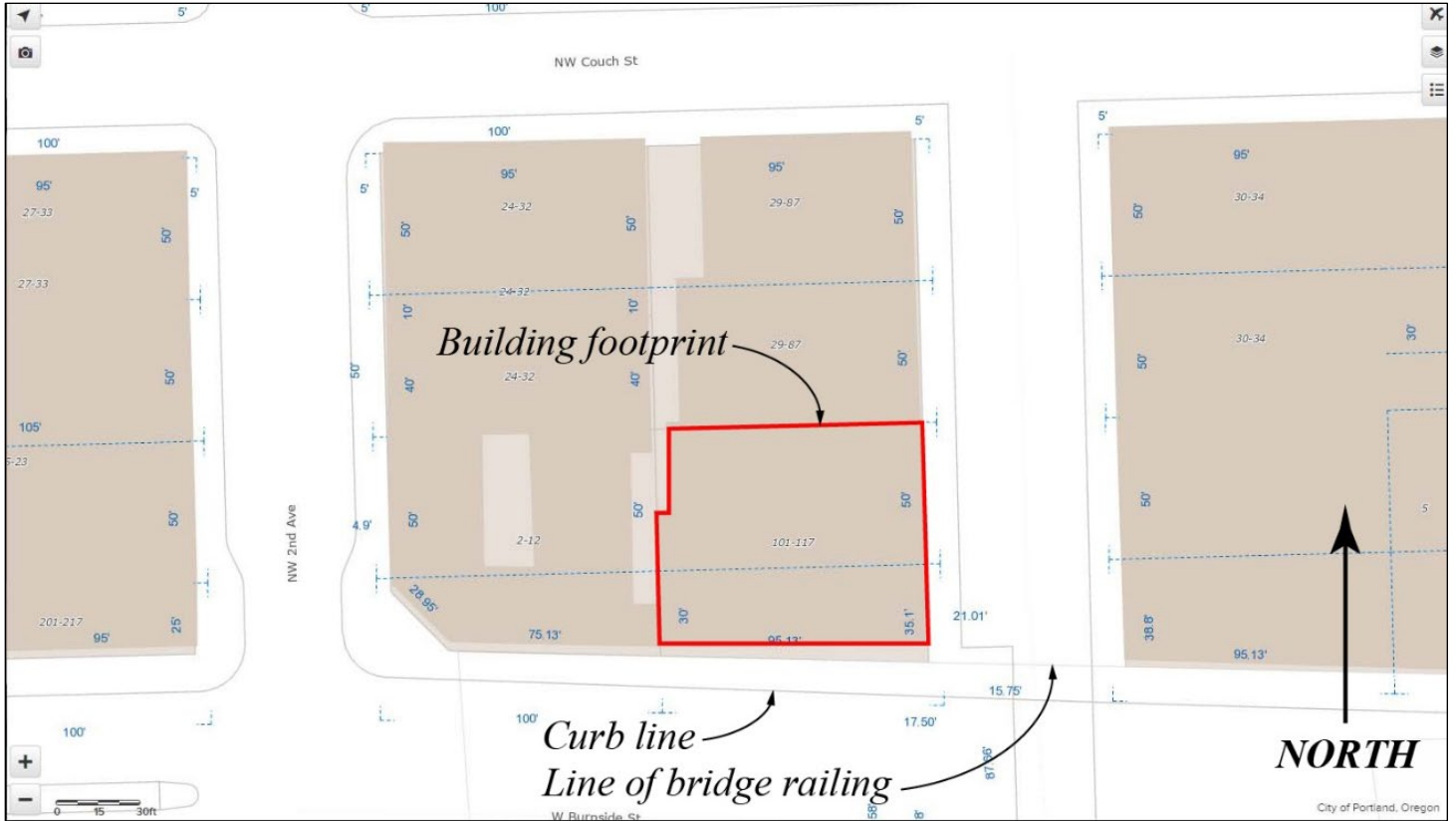


Figure 11: Footprint of the Bates Building superimposed on property line map, with elements of existing Burnside Bridge indicated (Portland Maps/WillametteCRA).

**ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet**

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge [Federal-Aid No. C051(111)]

Property Name: Bates Building

Street Address: 101-117 West Burnside Street

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Photographs



Figure 12: Bates Building, view looking north (Elizabeth O'Brien, 2019).



Figure 13: Bates Building, detail of entry at sidewalk, view looking northwest (David Ellis, 2021).

ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

ODOT Key Number: XXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge [Federal-Aid No. C051(111)]

Property Name: Bates Building

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Figure 14: Bates Building, section of sidewalk and balustrade at west approach to east, view looking north (Elizabeth O'Brien, 2019).



Figure 15: Bates Building, east façade and sidewalk, view looking south (David Ellis, 2021).

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SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet**

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

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Figure 16: Bates Building, artist's rendering of existing condition of west approach, aerial view looking northwest (Fat Pencil Studio, 2021).



Figure 17: Bates Building, artist's rendering of replacement west approach span, including proposed elevator; aerial view looking northwest (Fat Pencil Studio, 2021).

**ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet**

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

ODOT Key Number: XXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge [Federal-Aid No. C051(111)]

Property Name: Bates Building

Street Address: 101-117 West Burnside Street

City, County: Portland, Multnomah



Figure 18: Bates Building, artist's rendering of existing condition of west approach, aerial view looking northeast (Fat Pencil Studio, 2021).

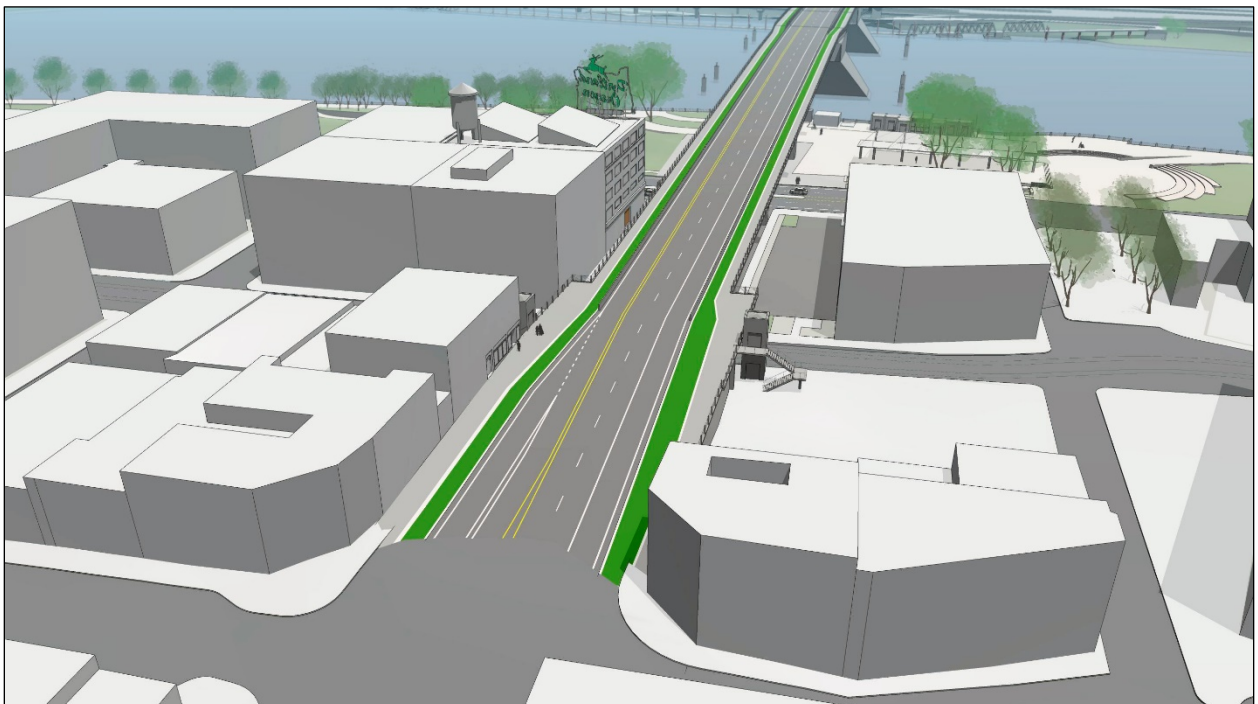


Figure 19: Bates Building, artist's rendering of replacement west approach span, aerial view looking northwest (Fat Pencil Studio, 2021).

**ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM**

Agency/Project: Oregon Department of Transportation/Earthquake Ready Burnside Bridge		
ODOT Key Number: :XXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge [Federal-Aid No. C051(111)]		
Property Name: Burnside Bridge		Street Address: West Burnside Street
City, County: Portland, Multnomah		Latitude: 45.523042 Longitude: (-) 122.667545
Surveyor: Adam S. Alsobrook	Affiliation: WillametteCRA	Date Recorded: 08/10/2021

Photo:



Photo Caption: Burnside Bridge, aerial photograph looking southwest (Multnomah County)

Preliminary Finding of Effect:

☐ No Historic Properties Affected
 ☐ No Historic Properties Adversely Affected
 ☒ Historic Properties Adversely Affected

State Historic Preservation Office Comments:

☐ Concur
 ☐ Do Not Concur:
 ☐ No Historic Properties Affected
 ☐ No Historic Properties Adversely Affected
 ☐ Historic Properties Adversely Affected

Signed: _____ Date: _____

Comments:



ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge [Federal-Aid No. C051(111)]	
Property Name: Burnside Bridge	
Street Address: West Burnside Street	City, County: Portland, Multnomah

Provide written description of the project, and its potential effects on the subject property per 36 CFR 800. The project and findings, as per instructions, should include:

1. Introduction

This statement of finding of effect discusses the effect of the proposed Earthquake Ready Burnside Bridge (EQRB) Project in Portland, Oregon. The Burnside Bridge was listed in the National Register of Historic Places (NRHP) on November 14, 2012. Multnomah County is the project proponent with support from the Oregon Department of Transportation (ODOT) on behalf of the Federal Highway Administration (FHWA). Historical Research Associates, Inc. (HRA) prepared the original findings that have since been updated by WillametteCRA with the current Alignment Alternatives information on behalf of the Oregon Department of Transportation (ODOT). It is the finding of WillametteCRA, on behalf of ODOT, that the proposed project will have an adverse effect on the Burnside Bridge. This statement of finding of effect is made pursuant to the requirements of the National Historic Preservation Act of 1966 (36 CFR 800), Executive Order 11593, and the National Environmental Policy Act of 1969.

2. Project Description

The proposed project is to establish a Burnside Bridge that would survive a major Cascadia Subduction Zone (CSZ) earthquake. The existing bridge would fail in such an earthquake. The Refined Long-span alternative would replace the existing bridge with a new bridge on the same alignment as the current bridge, which necessitates the demolition of the existing Burnside Bridge.

3. Identification and Description of the Historic Resource

The Burnside Bridge spans the Willamette River at River Mile 12.7 in downtown Portland. The bridge is located at the geographic center of the city and connects West Burnside Street and East Burnside Street. It is the second bridge at this location, and the Burnside Bridge serves as an important transportation corridor linking Portland's downtown core on the west bank of the Willamette River with business and residential districts in East Portland. The Burnside Bridge was listed in the NRHP on November 14, 2012, as part of the *Willamette River Highway Bridges of Portland, Oregon* Multiple Property Documentation.

During the planning of the second Burnside Bridge, Portland citizens pressed the authorities to make the bridge and approaches more ornamental and less utilitarian. In July 1923, Multnomah County Commissioners hired Portland architects Chester A. Houghtaling and Leigh L. Dougan to cooperate with the bridge engineers and devote their attention to the outward aesthetic appearance of the bridge. The architects were paid \$10,000 (about \$155,000 in 2021 dollars) to design the features of the structure most visible to the public, such as the operator towers and catwalks, kiosks, pylons, handrails, light fixtures, trolley poles, and the outer faces of the piers, abutments, and bridge spans. The architects were also asked to make provisions for future aesthetic treatments should funding not be available. Artistic renderings of the proposed bridge design were published in the *Oregonian* newspaper on January 1, 1924. These renderings included details such as the decorative treatments of the interior piers, the configuration of the operator towers, the appearance of the light fixtures, and the arrangement of trolley poles along the centerline of the bridge deck. Interestingly, the rendering of the bridge shows the two fixed main spans as concrete arch structures instead of steel trusses.



ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
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Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
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Street Address: West Burnside Street	City, County: Portland, Multnomah

The current Burnside Bridge was originally designed by engineers Ira G. Hedrick and Robert E. Kremers, who were both dismissed from the project following a complex political controversy over the initial contract award by the Multnomah County Commissioners in April 1924. Hedrick and Kremers were paid \$25,000 (about \$374,000 in 2021 dollars) to release the rights to their designs. Noted bridge engineer Gustav Lindenthal was hired to alter their plans and direct the construction of the bridge, which was completed in May 1926 for a total cost of \$4.5 million, or about \$67.3 million in 2021 dollars. This construction cost included both the main spans of the bridge and the approach spans on the east and west banks of the Willamette River.

The three (3) main spans of the Burnside Bridge measure 788 feet long between abutment walls. The central span of the bridge is a double leaf Strauss bascule that measures 252 feet between the trunnions. Each leaf is 126 feet long and constructed of riveted steel members, topped with a 4.75" concrete road deck. An ornamental cast-steel and cast-iron railing is located on both sides of each operable leaf. Each leaf weighs about 930 tons, with each leaf balanced with a counterweight of 1,700 tons. This operable central span provides approximately 200 feet of horizontal clearance when open. The Burnside Bridge is noted as one of the heaviest lift bridges in the United States. When it was completed in May 1926, it was also the largest double-leaf bascule bridge that had ever been constructed.

The central operable span is flanked on each side by massive interior piers constructed of reinforced concrete. Each of these interior piers was constructed *in situ* using large timber caissons measuring 78 feet by 68 feet and over 80 feet tall. The caissons for the abutment piers measured 68 feet by 36 feet and were 55 feet tall. Each caisson was built on the riverbank and then towed into the Willamette River, where they were sunk to the riverbed, which allowed for the underwater excavation of the bridge pier foundations. The upper section of each interior pier features machicolations supported by corbelled arches, which project from both the north (downriver) and south (upriver) sides of each interior pier. Rectangular recessions in the wall surface above the machicolations are centered on the arches below and create false windows. An octagonal-plan operator tower is located on the upriver side of each interior pier. The towers are situated above three of the corbelled supports which project outward from the face of the interior pier. The faces of the abutment piers that face upriver and downriver also feature details similar to those of the interior piers, such as the corbelled supports, cast concrete moldings, corbelled arches, and machicolations. The picturesque, almost castle-like design of the abutment and interior piers illustrate the profound influence that the architects Houghtaling and Dougan exerted over the appearance of the Burnside Bridge.

The central operable span is flanked by two (2) steel deck truss side spans. Each of these 268-foot-long side spans are double-intersection Warren trusses, which are also known as lattice trusses. These trusses are subdivided by vertical posts from the top chords of the truss to the diagonal intersections, creating sub-vertical elements. These truss spans have been noted as an extremely rare type of truss in Oregon, with the Ross Island and Sellwood Bridges, also in Portland and designed by Gustav Lindenthal, comprising two additional examples of this rare truss type. An ornate cast concrete spindle-type railing is located along each side of the road deck and sidewalks on the side spans. There are also a total of thirty-four (34) approach spans. These include nineteen (19) reinforced concrete spans on the west approach to the main spans; and seven (7) concrete and eight (8) steel spans on the east approach. Even though these approach spans tie the three (3) main spans of the bridge to the adjacent surface streets, they are not considered part of the main bridge structure.



ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge [Federal-Aid No. C051(111)]	
Property Name: Burnside Bridge	
Street Address: West Burnside Street	City, County: Portland, Multnomah

4. Undertaking Options Considered

A total of six (6) alternatives have been considered for this undertaking: two (2) no-build alternatives and four (4) build alternatives. The four (4) build alternatives included an Enhanced Seismic Retrofit Alternative and three (3) replacement alternatives. Extensive discussion and analysis of these alternatives is contained in the Supplemental Draft Environmental Impact Statement (SDEIS) of 2021. The following is a synopsis of the alternatives considered for this undertaking.

a. No-Build Alternative

Two (2) no-build alternatives were considered for this undertaking. These no-build alternatives assume that all other programmed and planned projects move forward and that the Burnside Bridge would remain seismically at risk. The first no-build scenario considered was the “No-Build Pre-Earthquake” alternative, which analyzed no-build conditions prior to a CSZ seismic event. The second no-build scenario considered was the “No-Build Post-Earthquake,” which analyzed no-build conditions after a CSZ seismic event. The authors of the SDEIS concluded that the no-build alternatives would not address the acute seismic vulnerability of the existing Burnside Bridge, which is expected to be heavily damaged or completely collapse during a CSZ seismic event. The collapse of the Burnside Bridge would very likely result in a significant loss of life to people on or under the bridge during a CSZ seismic event. The loss of the Burnside Bridge would sever downtown Portland from the rest of the city on the east side of the Willamette River and would prevent emergency responders from being able to cross the river. Additionally, debris from the collapse of the Burnside Bridge would block all travel by land and water under the bridge. The loss of the Burnside Bridge due to a CSZ seismic event would hamper the long-term recovery of the city and surrounding region during the months following a major earthquake, and the potential adverse economic effects would likely persist for years.

b. Avoidance Alternative

The environmental team considered one (1) avoidance alternative. An Enhanced Seismic Retrofit Alternative was considered in lieu of the wholesale replacement of the Burnside Bridge. This alternative would partially retrofit the existing bridge and replace major structural components of the bridge to meet seismic design criteria. In this scenario, the retrofitted structural elements would be visually similar to the existing structure of the bridge, but the replacement approaches would be substantially different in appearance compared with the existing bridge. Under this scenario, the width of the bridge would be unchanged, and the modal connections at each end of the bridge would also not change. The environmental team made a preliminary analysis of potential effects to the NRHP-listed Burnside Bridge due to the Enhanced Seismic Retrofit Alternative scope of work. The team applied the Section 106 criteria of adverse effect and found that this potential scope of work would result in adverse effects to the NRHP-listed Burnside Bridge.

c. Proposed Undertaking

Three (3) build alternatives were considered for the proposed undertaking. Of these three alternatives, the Refined Long-span alternative would replace the existing bridge with a new bridge, which would necessitate the demolition of the existing Burnside Bridge.



ODOT INVENTORY OF HISTORIC PROPERTIES
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Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge [Federal-Aid No. C051(111)]	
Property Name: Burnside Bridge	
Street Address: West Burnside Street	City, County: Portland, Multnomah

5. Evaluation of Effects

As it currently exists, the Burnside Bridge is located in its original alignment and remains on its original abutment and interior piers. The bridge is substantially “as-built,” and the original steel and concrete structural character defining features of the structure remain intact. The Burnside Bridge also possesses integrity of feeling and association, and the original character, design, and appearance of the structure clearly conveys its relationship to the history of Portland.

Location: The demolition of the Burnside Bridge would destroy the structure’s integrity of location and would therefore constitute an adverse effect to this NRHP-listed structure.

Setting: Removal of the Burnside Bridge would permanently destroy the structure’s integrity of setting and would therefore constitute an adverse effect to this NRHP-listed structure.

Design: Demolition of the Burnside Bridge would permanently remove the combination of structural elements which create the overall form, structure, and style of the structure, and this loss of design integrity would therefore constitute an adverse effect to this NRHP-listed structure.

Materials: The original concrete and steel materials of the Burnside Bridge were combined by the designers in a certain manner to create the structure, and the complete removal of all these character defining features would destroy the structure’s integrity of materials. This complete loss of material integrity would constitute an adverse effect to this NRHP-listed structure.

Workmanship: The Burnside Bridge represents the skillful work of several distinct building trades who worked in concert to create the structure and all its component parts. One example of a particular type of workmanship on this bridge would be the riveted steel members of the distinctive trusses which carry the bridge deck between Piers 1 and 2 and Piers 3 and 4. Riveting is a labor-intensive process and is practically never used in construction anymore, so the riveted steel trusses are physical representations of bridge-building technology at the time the bridge was constructed. Removing all the character defining features of the structure in a manner which removes evidence of particular skills or construction techniques would therefore destroy the bridge’s integrity of workmanship, which would constitute an adverse effect to this NRHP-listed structure.

Feeling: The character defining features of the Burnside Bridge express the particular historic period of time during which the bridge was constructed, and removal of these features adversely affects the ability of the structure to convey the relationship that the bridge has to the broader patterns of our collective history. Therefore, demolition would destroy the structure’s integrity of feeling, which would constitute an adverse effect to this NRHP-listed structure.

Association: The demolition of the Burnside Bridge would destroy the ability of the structure to serve as an overall representation of the bridge designer's talent and the skill of the workers who built it. Permanently severing the relationship of the historic structure with the people who designed and built it destroys the integrity of association of the bridge, which would therefore constitute an adverse effect to this NRHP-listed structure.



ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge [Federal-Aid No. C051(111)]	
Property Name: Burnside Bridge	
Street Address: West Burnside Street	City, County: Portland, Multnomah

6. Coordination and Public Output

The Earthquake Ready Burnside Bridge project has been the subject of public meetings since 2016. Multnomah County has established a Community Task Force in October 2018, which continues to meet regularly. Meetings of the Section 106 Consulting Parties have been meeting regularly since December 2020. Draft technical reports to address NHPA and NEPA requirements have been circulated for review by representatives of the SHPO, City of Portland, and ODOT. There has also been coordination with the Portland Historic Landmarks Commission, which is a CLG.

7. Conclusion

In summary, the Refined Long-span option would necessitate complete removal of the existing Burnside Bridge, which is listed in the NRHP. The demolition of the Burnside Bridge would constitute an adverse effect on this NRHP-listed resource.

8. Sources

Google Earth

2021 "Burnside Bridge." Electronic resource, <https://earth.google.com/web/>, accessed August 2021.

Multnomah County

2021 Draft Environmental Impact Statement for the Earthquake Ready Burnside Bridge. Electronic resource, <https://www.multco.us/earthquake-ready-burnside-bridge/project-library>, accessed August 2021.

Oregonian newspaper. Electronic resource, <https://multcolib.org/resource/historical-oregonian-1861-1987>, accessed March 2021.

1923 "Morrison Bridge Held Safe as Any." 7 June:13.

1923 "Beautiful Bridge Assured by Board." 26 July:11.

1924 "Multnomah County's \$5,000,000 Bridge Programme." 1 January:37.

1924 "Engineer's New Drawing of Burnside Bridge Gives Idea of How Impressive Span Will Look When Draw Is Open for Ships." 23 November:24.

1925 "City of Portland to Spend \$6,437,000 for Three New Bridges." 1 January:44.

National Register of Historic Places (NRHP)

2012 National Register of Historic Places Registration Form for the Burnside Bridge. Oregon Historic Sites Database. Electronic resource, <http://heritagedata.prd.state.or.us/historic/>, accessed August 2021.

United States Geological Survey (USGS)

1990 "Portland, OR Quadrangle, 7.5 Minute." TopoView. Electronic resource, <https://ngmdb.usgs.gov/topoview/>, accessed August 2021.

**ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet**

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

ODOT Key Number: XXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge [Federal-Aid No. C051(111)]

Property Name: Burnside Bridge

Street Address: West Burnside Street

City, County: Portland, Multnomah

Maps and Figures

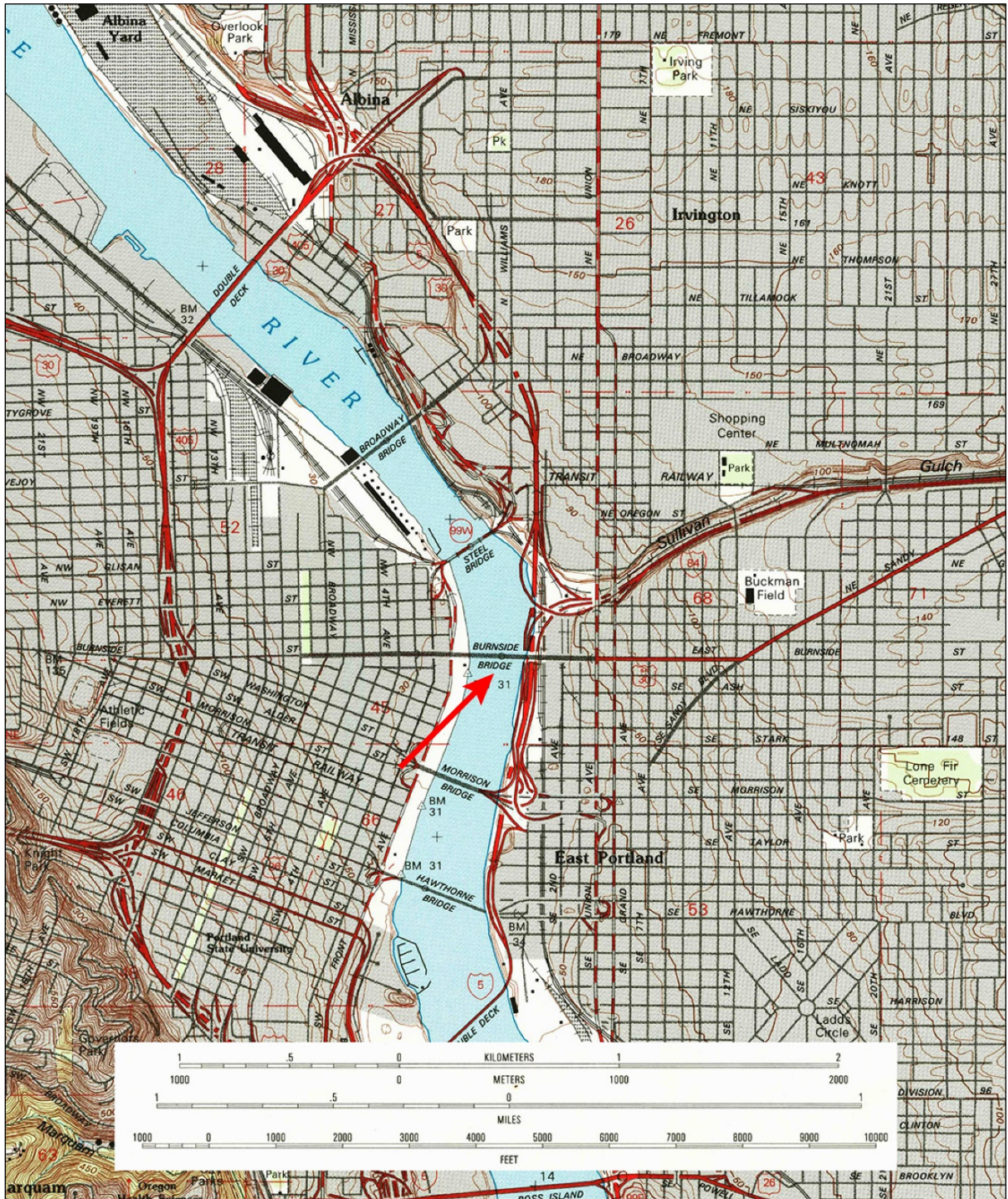


Figure 1: USGS, Portland, OR Quadrangle, 7.5 Minute, 1990. Red arrow indicates location of Burnside Bridge (USGS).



ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge [Federal-Aid No. C051(111)]

Property Name: Burnside Bridge

Street Address: West Burnside Street

City, County: Portland, Multnomah

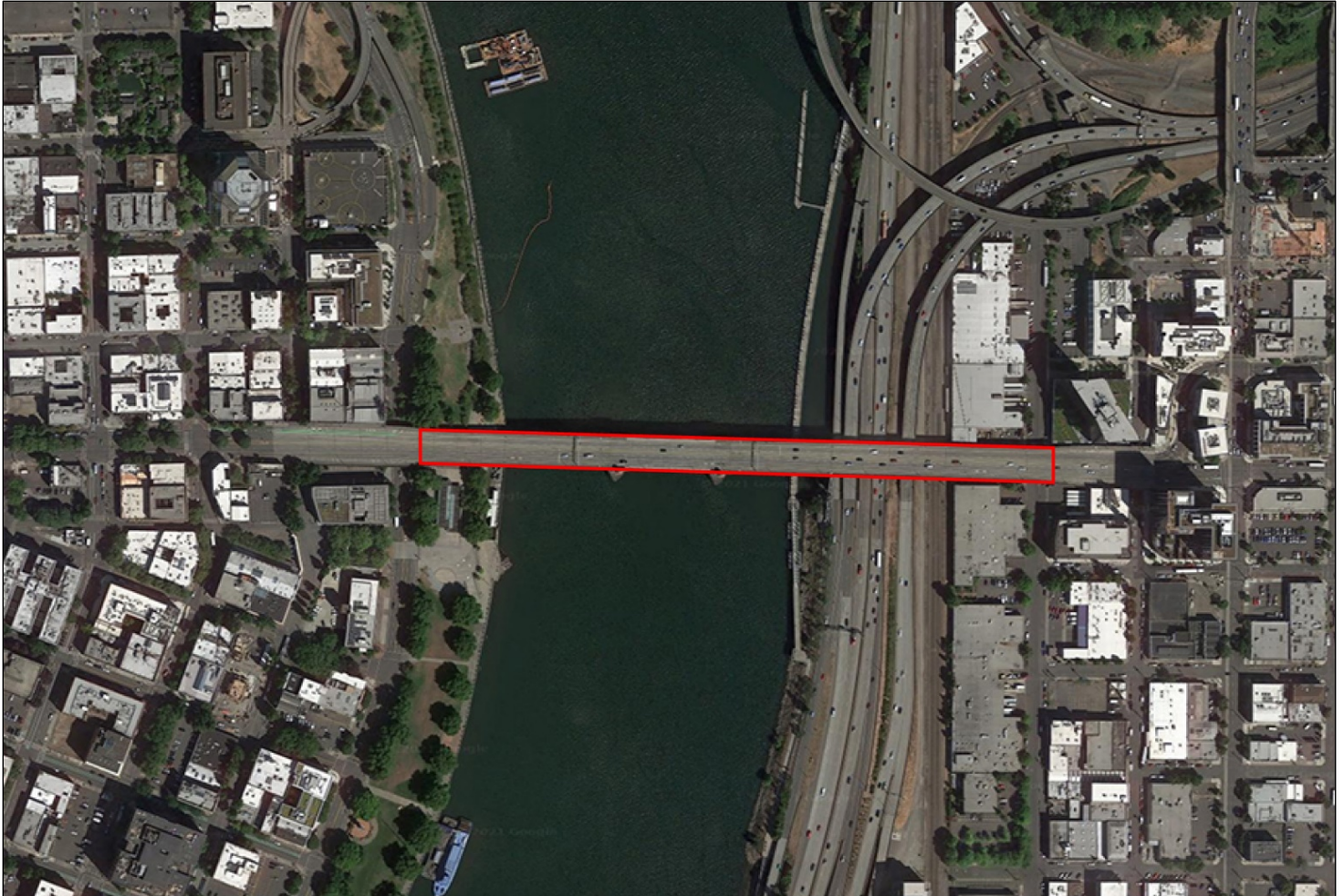


Figure 3: 2021 aerial photograph with Burnside Bridge NRHP designation boundary indicated by red line (Google Earth; NRHP 2012).

ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

ODOT Key Number: XXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge [Federal-Aid No. C051(111)]

Property Name: Burnside Bridge

Street Address: West Burnside Street

City, County: Portland, Multnomah

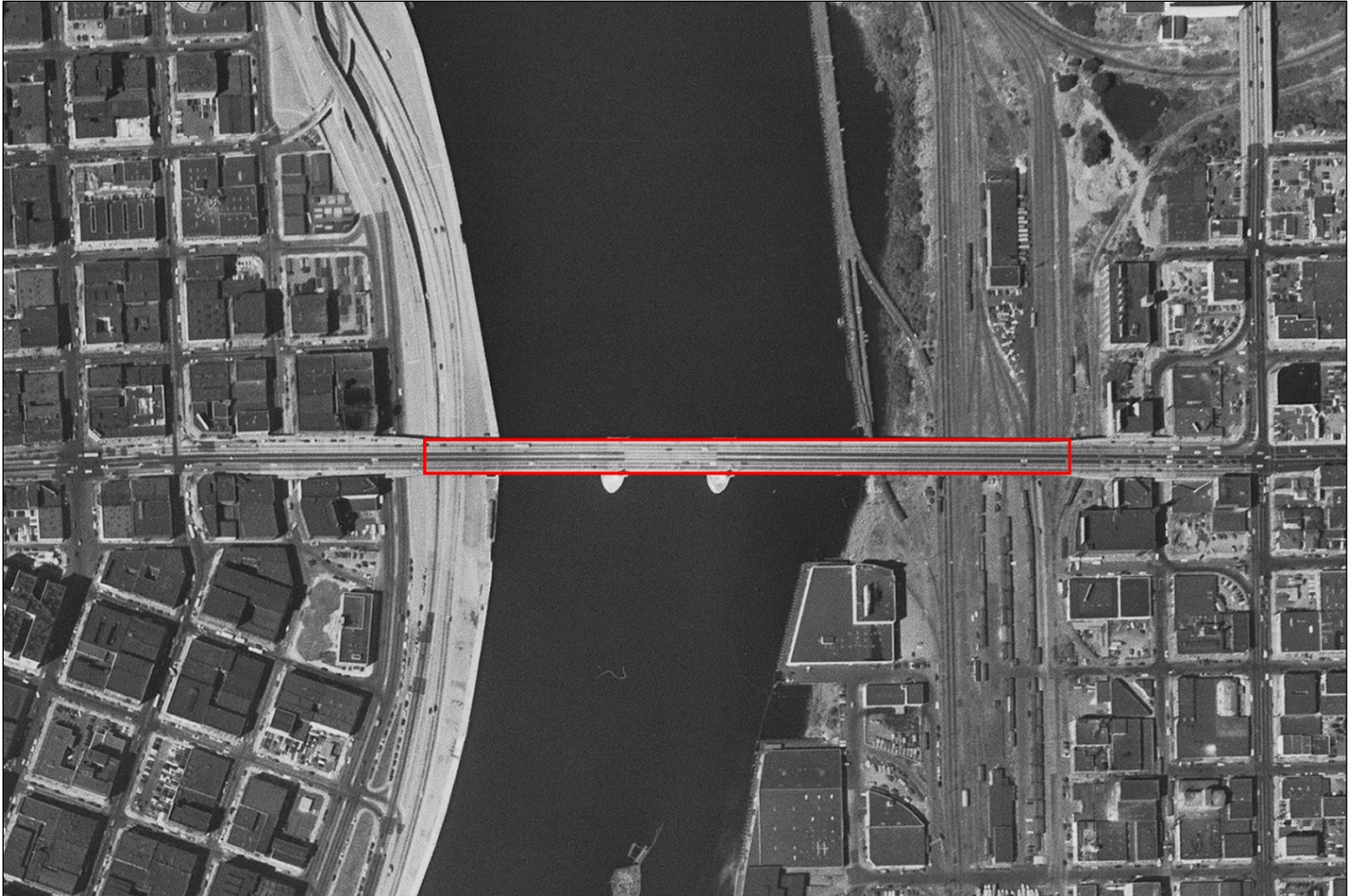


Figure 4: 1951 aerial photograph with Burnside Bridge NRHP designation boundary indicated by red line (USGS EarthExplorer; NRHP 2012).

ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge [Federal-Aid No. C051(111)]	
Property Name: Burnside Bridge	
Street Address: West Burnside Street	City, County: Portland, Multnomah

Photographs



Figure 5: Burnside Bridge, Portland, Ore., circa 1926-1949 postcard by Cross & Dimmitt, collection of Adam Alsobrook.



Figure 6: Burnside Bridge, Portland, Oregon, circa 1926-1942, postcard by Eddy, collection of Adam Alsobrook.

ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

ODOT Key Number: XXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge [Federal-Aid No. C051(111)]

Property Name: Burnside Bridge

Street Address: West Burnside Street

City, County: Portland, Multnomah



Figure 7: Fire boat passing through the Burnside Bridge, Willamette River, Portland, Oregon, circa 1926-1942, postcard by Sawyer Scenic Photos, collection of Adam Alsobrook.

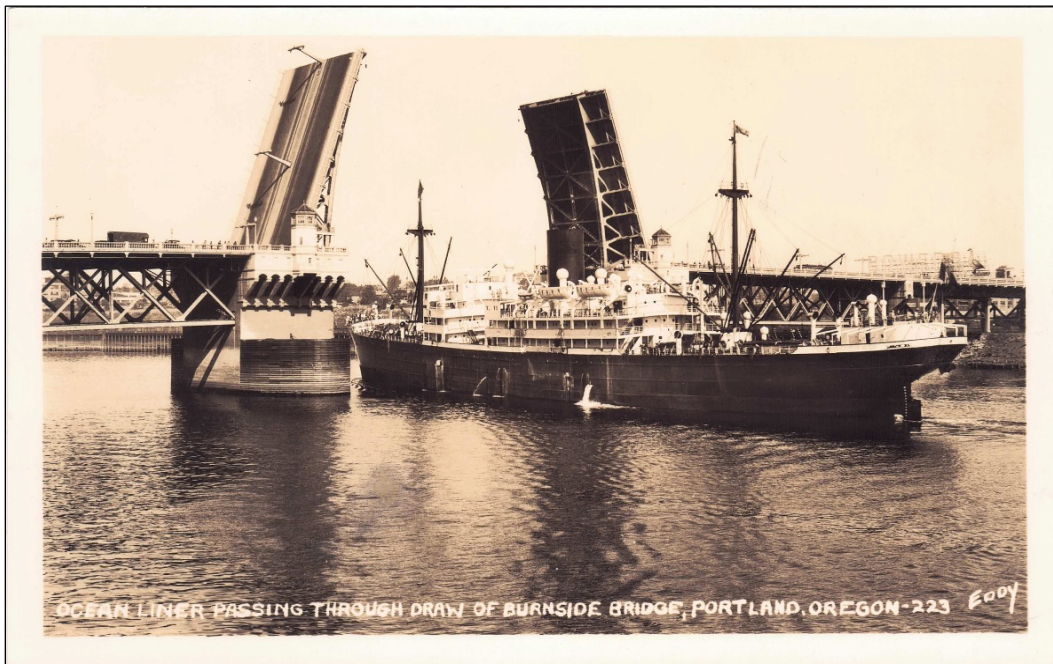


Figure 8: Ocean liner passing through draw of Burnside Bridge, Portland, Oregon, circa 1930-1950, postcard by Eddy, collection of Adam Alsobrook.

**ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet**

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge [Federal-Aid No. C051(111)]

Property Name: Burnside Bridge

Street Address: West Burnside Street

City, County: Portland, Multnomah



Figure 9: General perspective of Burnside Bridge, looking northeast. Burnside Bridge, Spanning Willamette River at Burnside Street, Portland, Multnomah County, OR. Photos from Survey HAER OR-101 (Library of Congress).



Figure 10: General view of double leaf bascule drawspan of Burnside Bridge, looking northeast. Burnside Bridge, Spanning Willamette River at Burnside Street, Portland, Multnomah County, Oregon. Photos from Survey HAER OR-101 (Library of Congress).

ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

ODOT Key Number: XXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge [Federal-Aid No. C051(111)]

Property Name: Burnside Bridge

Street Address: West Burnside Street

City, County: Portland, Multnomah



Figure 11: Detail of the operator's houses and drawspans of Burnside Bridge, looking northeast. Burnside Bridge, Spanning Willamette River at Burnside Street, Portland, Multnomah County, Oregon. Photos from Survey HAER OR-101 (Library of Congress).



Figure 12: General view of Burnside Bridge, looking northwest. Burnside Bridge, Spanning Willamette River at Burnside Street, Portland, Multnomah County, OR. Photos from Survey HAER OR-101 (Library of Congress).

**ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM**

Agency/Project: Oregon Department of Transportation/Earthquake Ready Burnside Bridge		
ODOT Key Number: :XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge [Federal-Aid No. C051(111)]		
Property Name: Burnside Hotel		Street Address: 2-12 NW 2nd Avenue
City, County: Portland, Multnomah		Latitude: 45.523306 Longitude: (-) 122.672469
Surveyor: Adam S. Alsobrook	Affiliation: WillametteCRA	Date Recorded: 08/25/2021

Photo:



Photo Caption: Burnside Hotel, looking north (Elizabeth O'Brien, 2019).

Preliminary Finding of Effect:

☐ No Historic Properties Affected
 ☒ No Historic Properties Adversely Affected
 ☐ Historic Properties Adversely Affected

State Historic Preservation Office Comments:

☐ Concur
 ☐ Do Not Concur:
 ☐ No Historic Properties Affected
 ☐ No Historic Properties Adversely Affected
 ☐ Historic Properties Adversely Affected

Signed: _____

Date: _____

Comments:



ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge [Federal-Aid No. C051(111)]	
Property Name: Burnside Hotel	
Street Address: 2-12 NW 2nd Avenue	City, County: Portland, Multnomah

Provide written description of the project, and its potential effects on the subject property per 36 CFR 800. The project and findings, as per instructions, should include:

1. Introduction

This statement of finding of effect discusses the effect of the proposed Earthquake Ready Burnside Bridge (EQRB) Project in Portland, Oregon. The Burnside Hotel at 2-12 NW 2nd Avenue is a contributing resource in the Skidmore/Old Town Historic District, which was listed in the National Register of Historic Places (NRHP) in 1975 and designated as a National Historic Landmark (NHL) in 1977. Multnomah County is the project proponent with support from the Oregon Department of Transportation (ODOT) on behalf of the Federal Highway Administration (FHWA). Historical Research Associates, Inc. (HRA) prepared the original findings that have since been updated by WillametteCRA with the current Alignment Alternatives information on behalf of the Oregon Department of Transportation (ODOT). It is the finding of WillametteCRA, on behalf of ODOT, that the proposed project will have no adverse effect on the Burnside Hotel. This statement of finding of effect is made pursuant to the requirements of the National Historic Preservation Act of 1966 (36 CFR 800), Executive Order 11593, and the National Environmental Policy Act of 1969.

2. Project Description

The proposed project is to establish a Burnside Bridge that would survive a major Cascadia Subduction Zone (CSZ) earthquake. The existing bridge would fail in such an earthquake. The Refined Long-span alternative would replace the existing bridge with a new bridge on the same alignment as the current bridge.

3. Identification and Description of the Historic Resource

The Burnside Hotel is addressed as 2-12 NW 2nd Avenue and is located at the northeast corner of NW 2nd Avenue and West Burnside Street (Portland Maps) (Figures 1 through 4). The Burnside Hotel is a three-story, utilitarian style, brick masonry commercial building constructed circa 1901. It was originally constructed with just two stories; the third floor was probably added in 1925-1926 when the building was reconstructed in association with construction of the Burnside Bridge. The building was later known as the Burnside Lodging House and the Burnside Rooming House. The building was extensively altered in 1925 to make way for the construction of the west approach of the Burnside Bridge. In 1928, the building became the S.P. Hotel and was owned by Japanese-Americans. The Burnside Hotel was not included in the City of Portland Historic Resource Inventory of 1984 and was originally classified as not contributing to the significance of the Skidmore/Old Town Historic District. However, this classification has been changed to contributing. (NRHP 2008:17:18).

There are storefront windows along the south, southwest, and west facades of the building which have been altered from their original condition (NRHP 2008:18). The existing west approach of the Burnside Bridge will be removed and replaced with a new west approach span as part of the proposed undertaking. The overall configuration, width, and slope of the road prism in the section of West Burnside Street adjacent to the Burnside Hotel will not change as part of the proposed undertaking (Figures 5 through 10). The existing concrete sidewalk will be replaced with a concrete sidewalk with the same elevation and slope along the south, southwest, and west facades of the Burnside Hotel building (Figures 11 through 18).



ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge [Federal-Aid No. C051(111)]	
Property Name: Burnside Hotel	
Street Address: 2-12 NW 2nd Avenue	City, County: Portland, Multnomah

4. Undertaking Options Considered

A total of six (6) alternatives have been considered for this undertaking: two (2) no-build alternatives and four (4) build alternatives. The four (4) build alternatives included an Enhanced Seismic Retrofit Alternative and three (3) replacement alternatives. Extensive discussion and analysis of these alternatives is contained in the Supplemental Draft Environmental Impact Statement (SDEIS) of 2021. The following is a synopsis of the alternatives considered for this undertaking.

a. No-Build Alternative

Two (2) no-build alternatives were considered for this undertaking. These no-build alternatives assume that all other programmed and planned projects move forward and that the Burnside Bridge would remain seismically at risk. The first no-build scenario considered was the “No-Build Pre-Earthquake” alternative, which analyzed no-build conditions prior to a CSZ seismic event. The second no-build scenario considered was the “No-Build Post-Earthquake,” which analyzed no-build conditions after a CSZ seismic event. The authors of the SDEIS concluded that the no-build alternatives would not address the acute seismic vulnerability of the existing Burnside Bridge, which is expected to be heavily damaged or completely collapse during a CSZ seismic event. The collapse of the Burnside Bridge would very likely result in a significant loss of life to people on or under the bridge during a CSZ seismic event. The loss of the Burnside Bridge would sever downtown Portland from the rest of the city on the east side of the Willamette River and would prevent emergency responders from being able to cross the river. Additionally, debris from the collapse of the Burnside Bridge would block all travel by land and water under the bridge. The loss of the Burnside Bridge due to a CSZ seismic event would hamper the long-term recovery of the city and surrounding region during the months following a major earthquake, and the potential adverse economic effects would likely persist for years.

b. Avoidance Alternative

The environmental team considered one (1) avoidance alternative. An Enhanced Seismic Retrofit Alternative was considered in lieu of the wholesale replacement of the Burnside Bridge. This alternative would partially retrofit the existing bridge and replace major structural components of the bridge to meet seismic design criteria. In this scenario, the retrofitted structural elements would be visually similar to the existing structure of the bridge, but the replacement approaches would be substantially different in appearance compared with the existing bridge. Under this scenario, the width of the bridge would be unchanged, and the modal connections at each end of the bridge would also not change. The environmental team made a preliminary analysis of potential effects to the NRHP-listed Burnside Bridge due to the Enhanced Seismic Retrofit Alternative scope of work. The team applied the Section 106 criteria of adverse effect and found that this potential scope of work would result in adverse effects to the NRHP-listed Burnside Bridge.

c. Proposed Undertaking

Three (3) build alternatives were considered for the proposed undertaking. Of these three alternatives, the Refined Long-span alternative would replace the existing bridge with a new bridge. The Refined Long-span alternative would construct a new bridge on the same alignment as the current bridge, which would necessitate the demolition of the existing Burnside Bridge.



ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge [Federal-Aid No. C051(111)]	
Property Name: Burnside Hotel	
Street Address: 2-12 NW 2nd Avenue	City, County: Portland, Multnomah

5. Evaluation of Effects

Location: The proposed replacement of the Burnside Bridge will not require the Burnside Hotel to be relocated or removed, therefore, the undertaking will have no effect to the resource's integrity of location.

Setting: The proposed replacement of the Burnside Bridge will not alter the current relationship of the Burnside Hotel to the sidewalk level along West Burnside Street and NW 2nd Avenue. Concrete sidewalks will be replaced in kind with concrete sidewalks with a slightly different cross-section that the current cross-section but otherwise unchanged. Therefore, the setting of the Burnside Hotel would not be adversely affected by the proposed undertaking.

Design: The proposed replacement of the Burnside Bridge will not alter the physical form, structure, and style of the Burnside Hotel; therefore, the undertaking will have no effect to the resource's integrity of design.

Materials: The proposed replacement of the Burnside Bridge will not damage, remove, or destroy physical elements of the Burnside Hotel, therefore, the undertaking will have no effect to the resource's integrity of materials.

Workmanship: The proposed replacement of the Burnside Bridge will not damage, remove, or destroy physical evidence of the historic construction techniques used to build the Burnside Hotel, therefore, the undertaking will have no effect to the resource's integrity of workmanship.

Feeling: The proposed replacement of the Burnside Bridge will not alter the physical features which collectively convey the historic character of the Burnside Hotel; therefore, the undertaking will have no effect to the resource's integrity of feeling.

Association: The proposed replacement of the Burnside Bridge will not diminish or eliminate the direct link that the Burnside Hotel has to important historic events or persons significant to our past, therefore, the undertaking will have no effect to the resource's integrity of association.

6. Coordination and Public Output

The Earthquake Ready Burnside Bridge project has been the subject of public meetings since 2016. Multnomah County has established a Community Task Force in October 2018, which continues to meet regularly. Meetings of the Section 106 Consulting Parties have been meeting regularly since December 2020. Draft technical reports to address NHPA and NEPA requirements have been circulated for review by representatives of the SHPO, City of Portland, and ODOT. There has also been coordination with the Portland Historic Landmarks Commission, which is a CLG.

7. Conclusion

In summary, the Refined Long-span alternative would necessitate the complete replacement of the existing Burnside Bridge with new approach and main spans. The replacement of the existing west approach span of the Burnside Bridge would have no adverse effect to the Burnside Hotel for either direct or indirect effects.



ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge [Federal-Aid No. C051(111)]	
Property Name: Burnside Hotel	
Street Address: 2-12 NW 2nd Avenue	City, County: Portland, Multnomah

8. Sources

EarthExplorer

1951 Aerial Photograph, Entity ID 1QO0000020014, 25 October. United States Geological Survey. Electronic resource, <https://earthexplorer.usgs.gov/>, accessed August 2021.

Google Earth

2021 "Burnside Bridge." Electronic resource, <https://earth.google.com/web/>, accessed August 2021.

National Register of Historic Places (NRHP)

2008 National Historic Landmark Nomination (Revised Documentation), Skidmore/Old Town Historic District, Portland, Multnomah County, Oregon. Oregon Historic Sites Database. Electronic resource, <https://heritagedata.prd.state.or.us/historic/>, accessed August 2021.

Portland Archives

1935a "Aerial of Downtown Portland including Burnside, Steel and Broadway Bridges." City of Portland Auditor's Office, Archives and Records Management, PARC Accession Number A2005-005.1449.10, Record Number AP/476. Electronic resource, <https://efiles.portlandoregon.gov/Record/2043501/>, accessed August 2021.

1935b "Aerial view of the downtown waterfront near the Burnside and Steel Bridges." City of Portland Auditor's Office, Archives and Records Management, PARC Accession Number 2000-03, Record Number AP/666. Electronic resource, <https://efiles.portlandoregon.gov/Record/2298287/>, accessed August 2021.

Portland Maps

2021 "101-117 W Burnside St." Electronic resource, https://www.portlandmaps.com/detail/property/101-117-W-BURNSIDE-ST/R140343_did/, accessed August 2021.

Sanborn Map Company (Sanborn)

1908a Sanborn Fire Insurance Map from Portland, Multnomah County, Oregon. Volume 1, 1908-1909 (1908), Sheet 74. Electronic resource, https://www.loc.gov/item/sanborn07439_006/, accessed August 2021.
1908b Sanborn Fire Insurance Map from Portland, Multnomah County, Oregon. Volume 1, 1908-1909 (1908), Sheet 75. Electronic resource, https://www.loc.gov/item/sanborn07439_006/, accessed August 2021.
1950a Sanborn Fire Insurance Map from Portland, Multnomah County, Oregon. Volume 1, 1908-April 1950, Sheet 74. Electronic resource, https://www.loc.gov/item/sanborn07439_021/, accessed August 2021.
1950b Sanborn Fire Insurance Map from Portland, Multnomah County, Oregon. Volume 1, 1908-April 1950, Sheet 75. Electronic resource, https://www.loc.gov/item/sanborn07439_021/, accessed August 2021.

United States Geological Survey (USGS)

1990 "Portland, OR Quadrangle, 7.5 Minute." TopoView. Electronic resource, <https://ngmdb.usgs.gov/topoview/>, accessed August 2021.

**ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet**

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge [Federal-Aid No. C051(111)]

Property Name: Burnside Hotel

Street Address: 2-12 NW 2nd Avenue

City, County: Portland, Multnomah

Maps and Figures

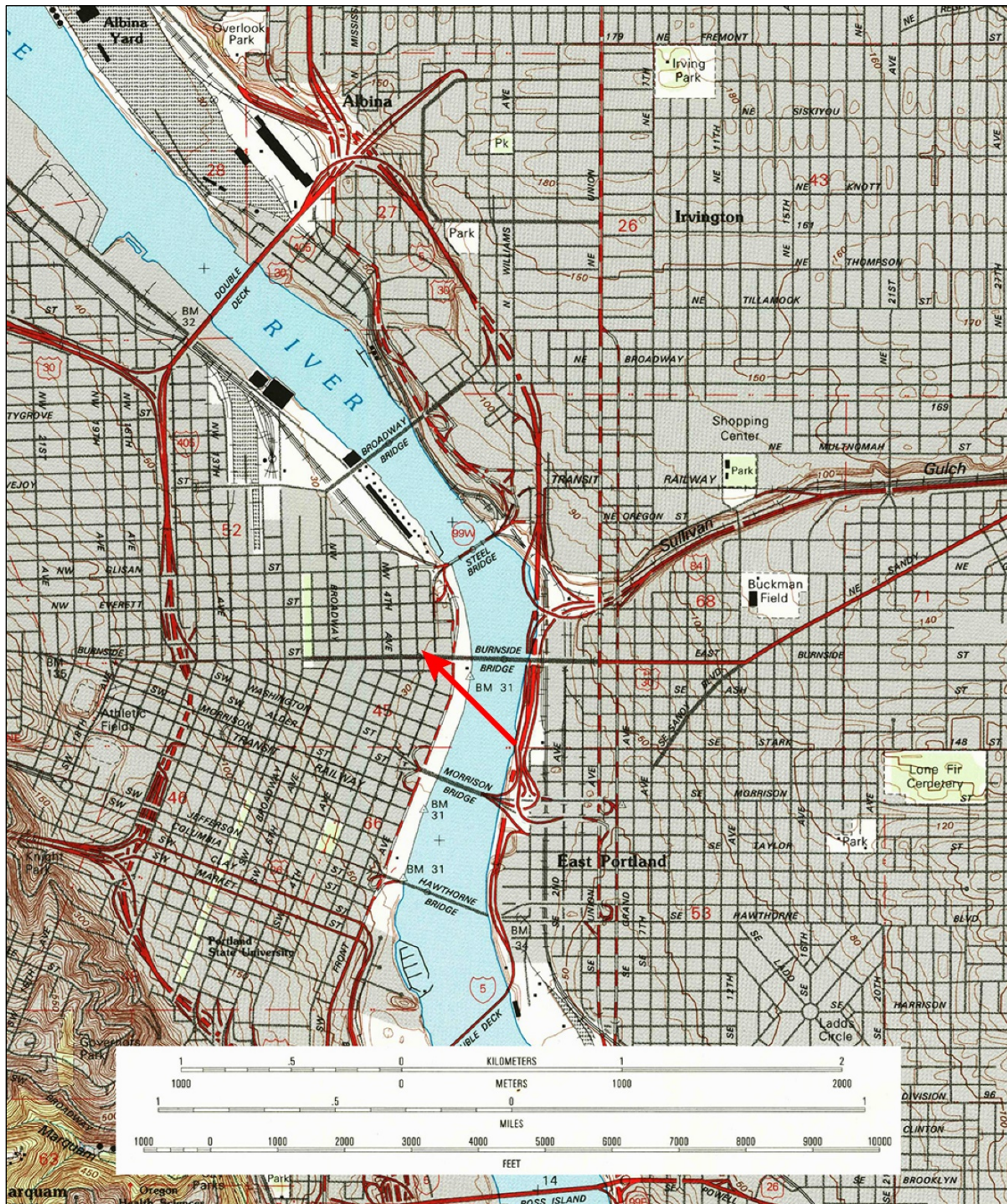


Figure 1: USGS, Portland, OR Quadrangle, 7.5 Minute, 1990. Red arrow indicates location of the Burnside Hotel (USGS).

ODOT INVENTORY OF HISTORIC PROPERTIES SECTION 106 LEVEL OF EFFECT FORM Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

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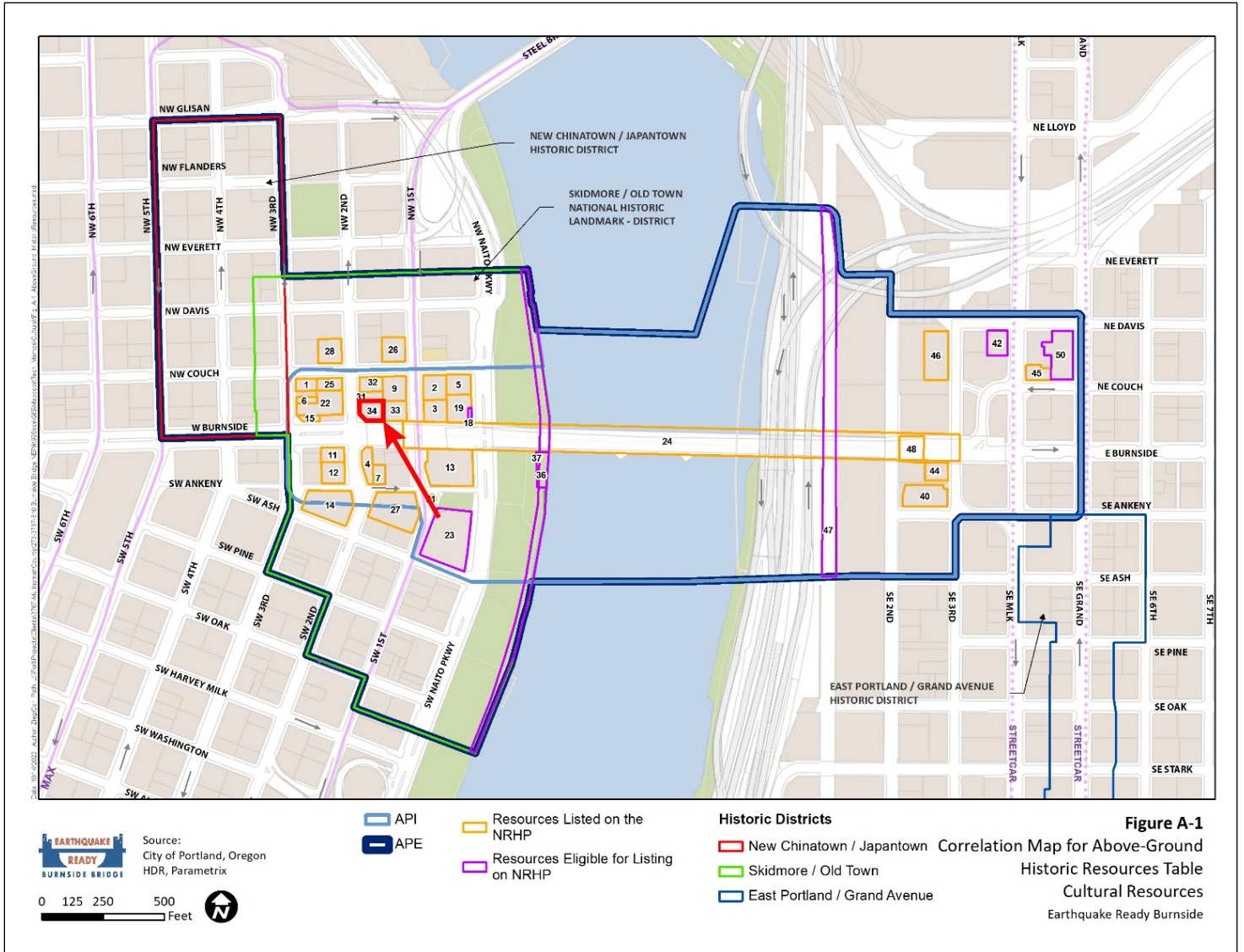


Figure 2: Map of the Area of Potential Effect (APE) with locations of NRHP-listed and NRHP-eligible resources within the APE. Red arrow indicates location of the Burnside Hotel, which is outlined in red.



ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

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Figure 3: Aerial photograph with location of the Burnside Hotel indicated by red line (Google Earth).



ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

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Figure 4: 1951 aerial photograph with location of the Burnside Hotel indicated by red line (USGS EarthExplorer).

**ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet**

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

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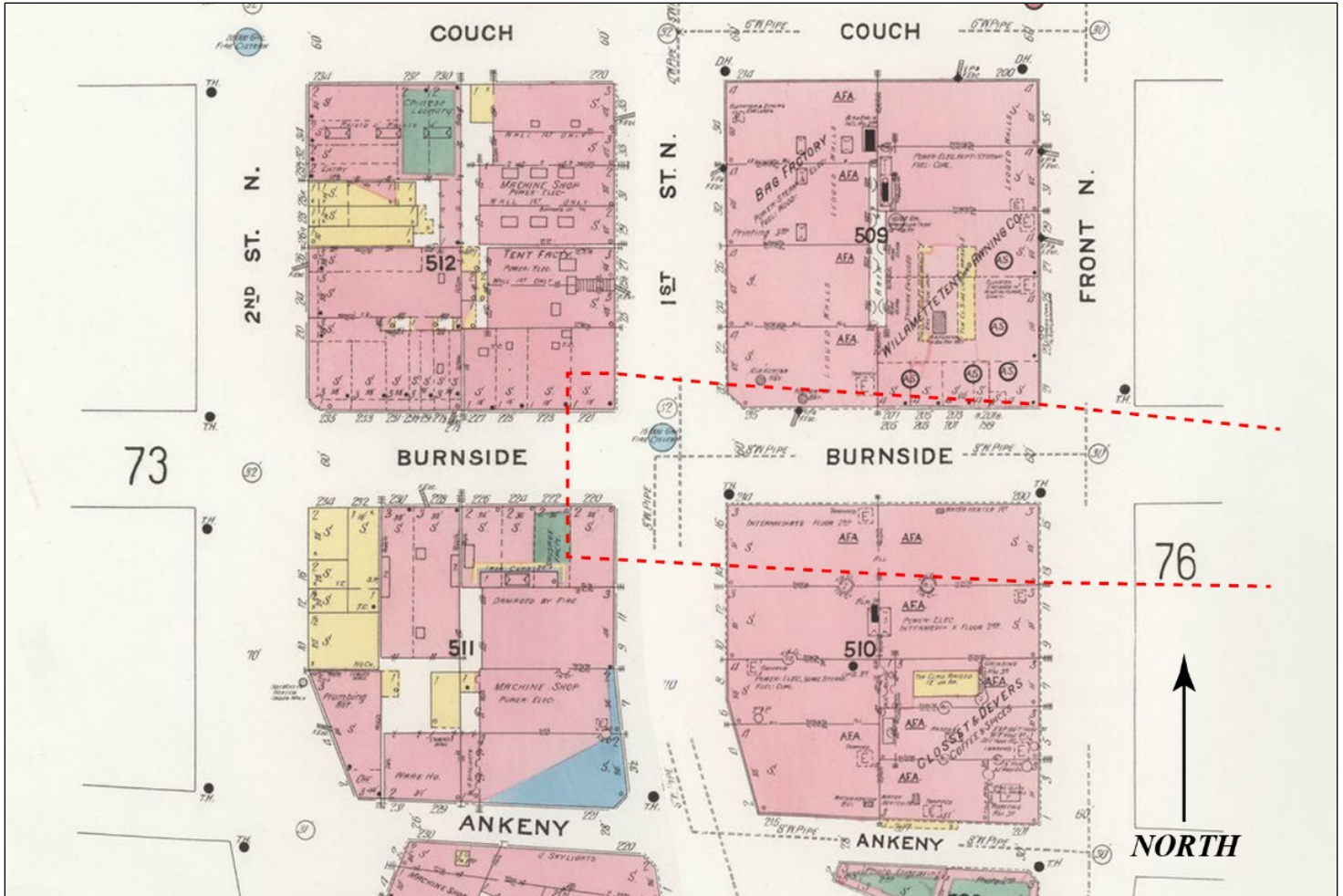


Figure 5: Sanborn maps, Volume 1, 1908. Mosaic of Sheet 74 (left two blocks) and Sheet 75 (right two blocks). Dashed red line indicates footprint of existing Burnside Bridge (Library of Congress).

**ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet**

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

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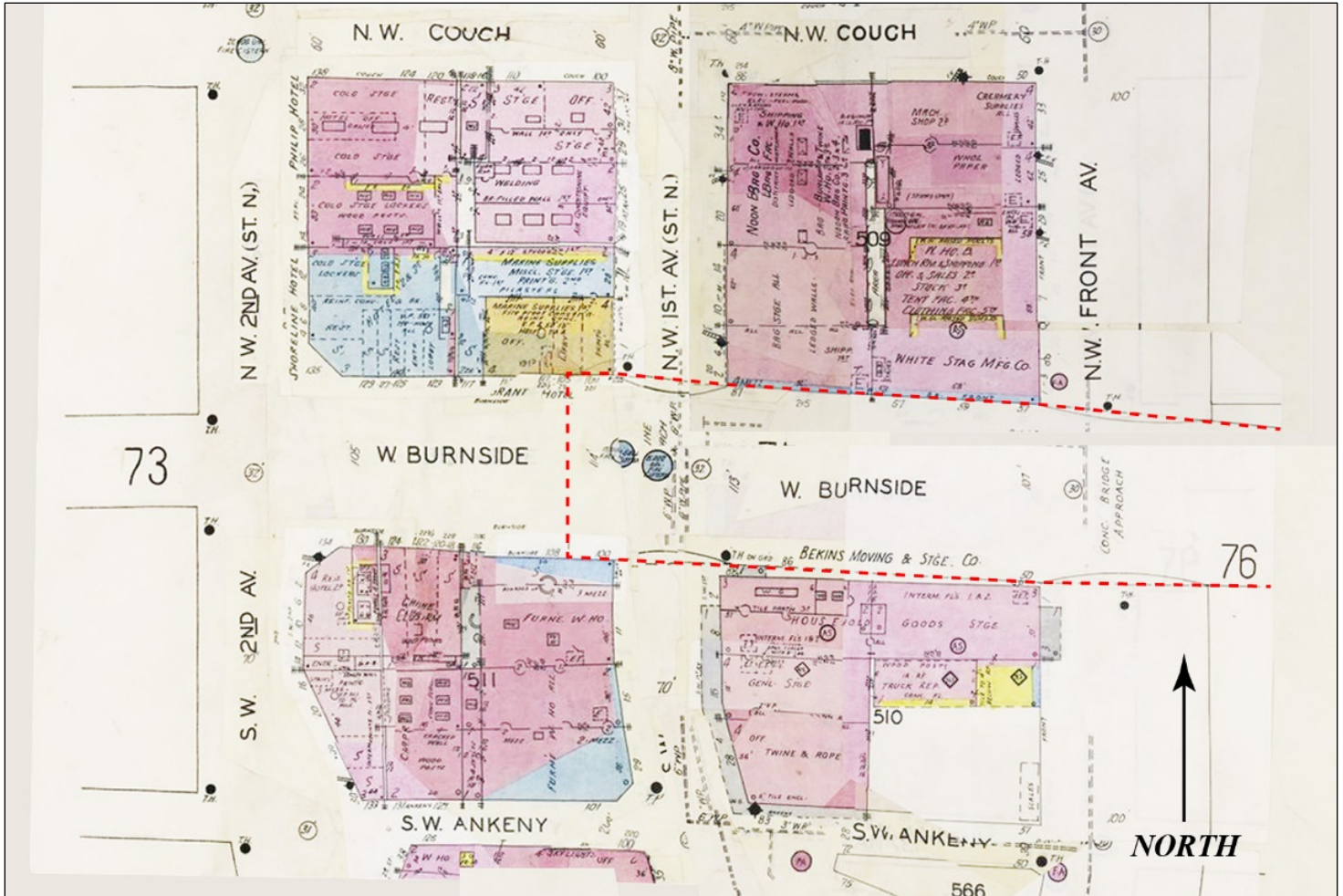


Figure 6: Sanborn maps, Volume 1, 1950. Mosaic of Sheet 74 (left two blocks) and Sheet 75 (right two blocks). Dashed red line indicates footprint of existing Burnside Bridge (Library of Congress).

ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

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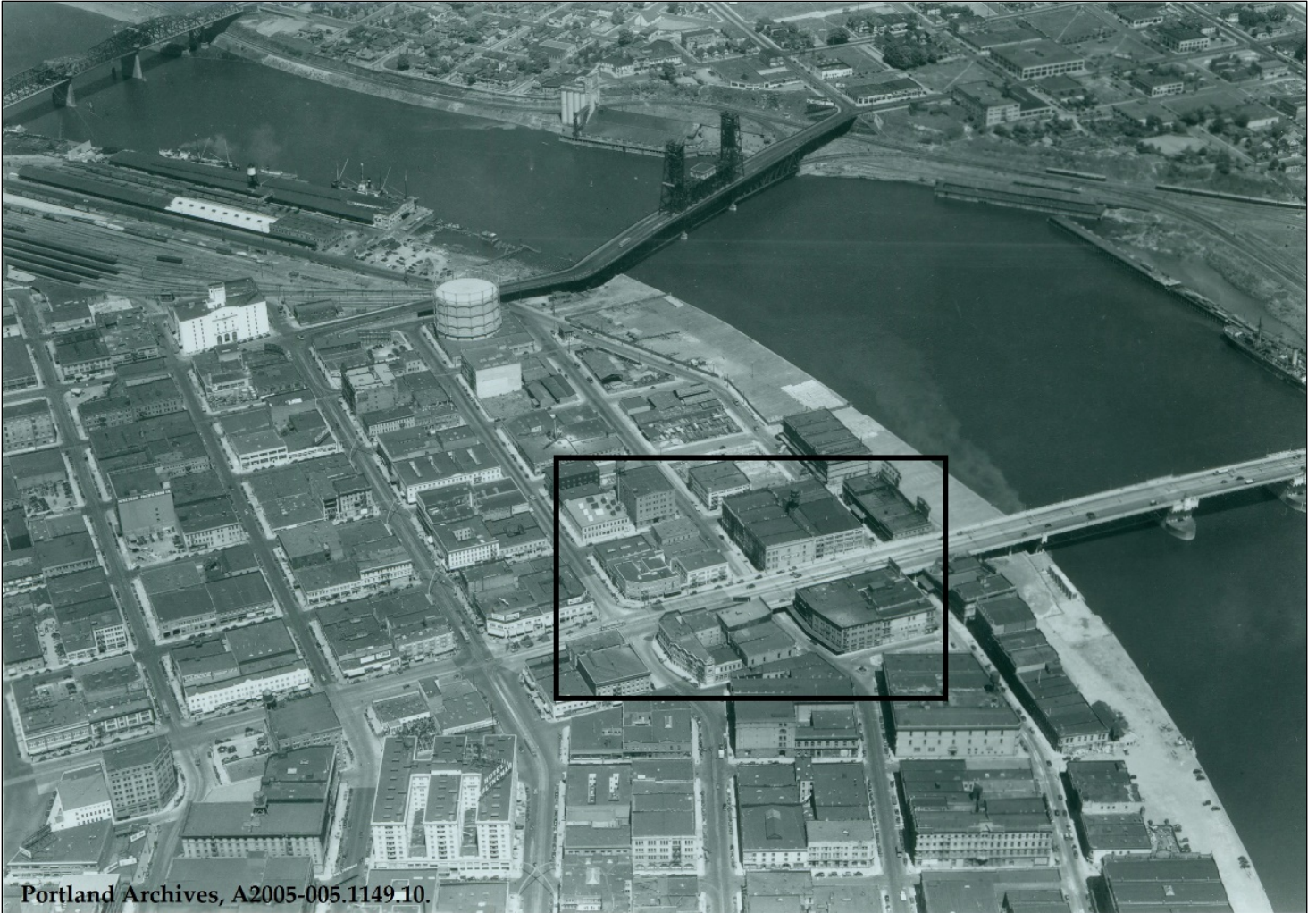


Figure 7: Aerial of downtown Portland including Burnside, Steel, and Broadway Bridges, December 31, 1935. Black box indicates excerpt in Figure 8 below (Portland Archives, A2005-005.1149.10).

**ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
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Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

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Figure 8: Aerial of downtown Portland including Burnside, Steel, and Broadway Bridges, December 31, 1935. Excerpt of Figure 7 above (Portland Archives, A2005-005.1149.10).



ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge [Federal-Aid No. C051(111)]	
Property Name: Burnside Hotel	
Street Address: 2-12 NW 2nd Avenue	City, County: Portland, Multnomah



Figure 9: Footprint of the Burnside Hotel superimposed on property line map (Portland Maps/WillametteCRA).

**ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet**

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
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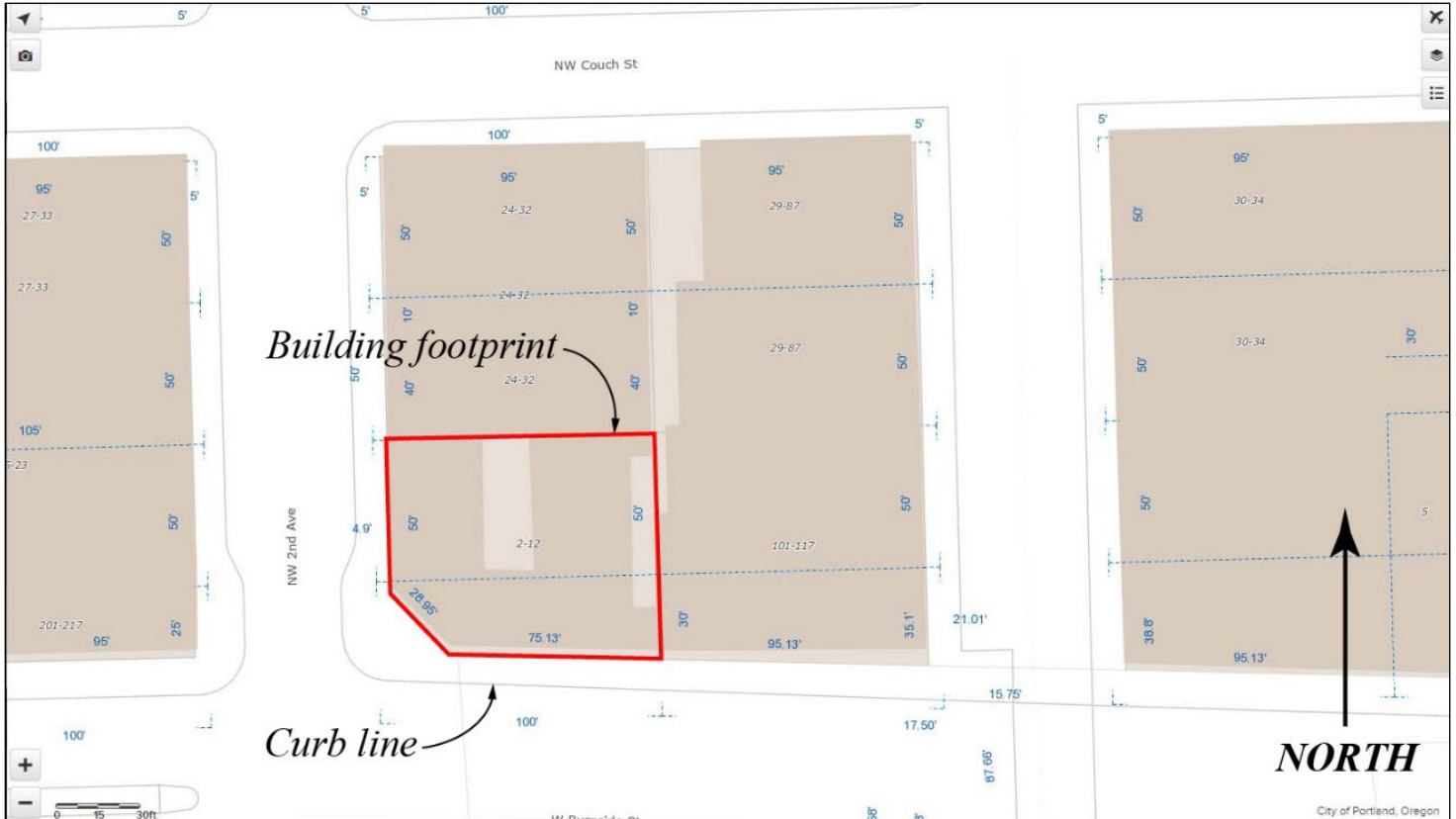


Figure 10: Footprint of the Burnside Hotel superimposed on property line map, with elements of existing Burnside Bridge indicated (Portland Maps/WillametteCRA).

ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
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Photographs



Figure 11: Burnside Hotel, view looking north (Elizabeth O'Brien, 2019).



Figure 12: Burnside Hotel, view looking northeast (Elizabeth O'Brien, 2019).

ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
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Figure 13: Burnside Hotel, view looking north (Elizabeth O'Brien, 2019).



Figure 14: Burnside Hotel, view looking east (Elizabeth O'Brien, 2019).

ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

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Property Name: Burnside Hotel

Street Address: 2-12 NW 2nd Avenue

City, County: Portland, Multnomah



Figure 15: Burnside Hotel, view along sidewalk at south façade, view looking east (Elizabeth O'Brien, 2019).



Figure 16: Burnside Hotel, view along sidewalk at south façade, view looking west (David Ellis, 2021).

ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

ODOT Key Number: XXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge [Federal-Aid No. C051(111)]

Property Name: Burnside Hotel

Street Address: 2-12 NW 2nd Avenue

City, County: Portland, Multnomah



Figure 17: Burnside Hotel, artist's rendering of existing condition of west approach, aerial view looking northeast (Fat Pencil Studio, 2021).

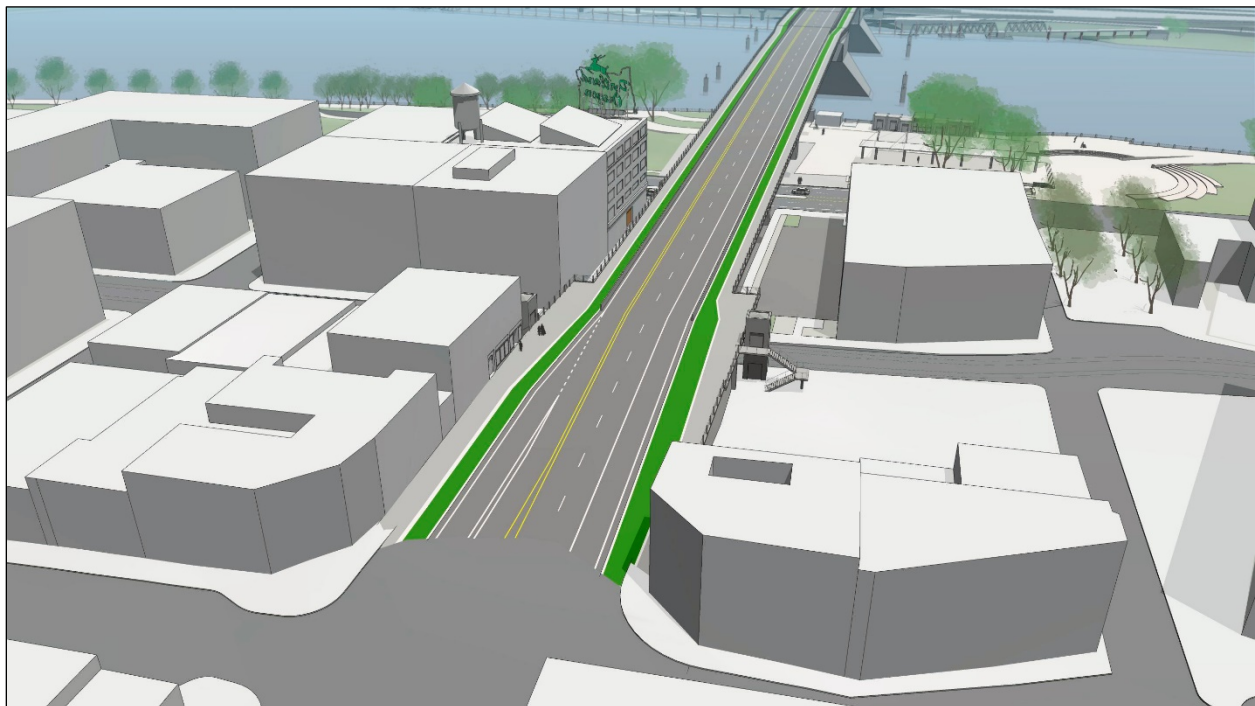


Figure 18: Burnside Hotel, artist's rendering of replacement west approach span, aerial view looking northwest (Fat Pencil Studio, 2021).

**ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM**

Agency/Project: Oregon Department of Transportation/Earthquake Ready Burnside Bridge		
ODOT Key Number: :XXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))		
Property Name: Burnside Skatepark	Street Address: E. Burnside and E. 2nd Avenue	
City, County: Portland, Multnomah	Latitude: 45.522965 Longitude: (-)122.66345	
Surveyor: Elizabeth O'Brien	Affiliation: WillametteCRA	Date Recorded: 07/12/2019

Photo:



Photo Caption: Burnside Skatepark, facing northeast from East Second Avenue (Elizabeth O'Brien, 2019).

Preliminary Finding of Effect:

☐ No Historic Properties Affected
 ☒ No Historic Properties Adversely Affected
 ☐ Historic Properties Adversely Affected

State Historic Preservation Office Comments:

☐ Concur
 ☐ Do Not Concur:
 ☐ No Historic Properties Affected
 ☐ No Historic Properties Adversely Affected
 ☐ Historic Properties Adversely Affected

Signed: _____ Date: _____

Comments:



ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))	
Property Name: Burnside Skatepark	
Street Address: E. Burnside and E. 2nd Avenue	City, County: Portland, Multnomah

Provide written description of the project, and its potential effects on the subject property per 36 CFR 800. The project and findings, as per instructions, should include:

1. Introduction

This statement of finding of effect discusses the effect of the proposed Earthquake Ready Burnside Bridge (EQRB) Project in Portland, Oregon. Willamette Cultural Resources Associates (WillametteCRA) has recommended the Burnside Skatepark as individually eligible for listing on the National Register of Historic Places. Multnomah County is the project proponent with support from the Oregon Department of Transportation (ODOT) on behalf of the Federal Highway Administration (FHWA). It is the finding of WillametteCRA, on behalf of ODOT, that the proposed project will have no adverse effect on the Burnside Skatepark. This statement of finding of effect is made pursuant to the requirements of the National Historic Preservation Act of 1966 (36 CFR 800), Executive Order 11593, and the National Environmental Policy Act of 1969.

2. Project Description

The proposed project is to establish a Burnside Bridge that would survive a major Cascadia Subduction Zone (CSZ) earthquake. The existing bridge would fail in such an earthquake. The Refined Long-span alternative would require replacing the existing bridge with a new bridge on the same alignment as the current bridge. The number of bents on the eastern approach would be reduced (existing bents would be removed only to ground level). The uppermost portion of the existing bent in the Burnside Skatepark would be removed; the remainder of the bent would continue to be used as a feature in the Skatepark. No new bents would be placed in the Skatepark. The Skatepark would be closed for approximately four months during construction and there may be additional limited access during other stages of demolition of the eastern approach span and construction. No other activities are proposed at this time in the vicinity of the Burnside Skatepark.

3. Identification and Description of the Historic Resource

The Burnside Skatepark is a poured concrete skatepark structure. Construction began in 1990 and has continued to evolve in design over time. It is situated on City of Portland property underneath the east side of the Burnside Bridge in Section 34, Township 1 South, Range 3 East, Willamette Meridian. The Skatepark occupies approximately 7,000 square feet. A concrete wall at the rear of the park faces NE/SE Second Avenue and a series of features such as bowls, banks, etc. The space below the bridge was completely built up by 1997. Since then, many of the features have been replaced since the park was first constructed excluding the concrete wall facing Second Avenue. Although situated on City land, the Skatepark is not a City park. The Burnside Skatepark is recommended as eligible for the NRHP under Criteria A and C and Criteria Consideration G. Its significance lies in its influence at a national and international scale in the design of both do-it-yourself (DIY) skateparks and public skateparks that have been constructed to reflect features found at Burnside Skatepark. Burnside Skatepark is noteworthy under Criterion C for its early use of concrete and for its evolving and dynamic physical character as elements are continually modified. The Skatepark is the responsibility of a core group of active skaters, many of whom consider it to be a sacred space. "Burnside's unique growth and evolution—through the sweat and blood of a handful of dedicated individuals—have matured into one of the best skateparks in the world. Burnside and its creators are true pioneers, setting the stage for community built skateparks across the country" (SKATEPARK.com 2020).



ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))	
Property Name: Burnside Skatepark	
Street Address: E. Burnside and E. 2nd Avenue	City, County: Portland, Multnomah

4. Undertaking Options Considered

A total of six (6) alternatives have been considered for this undertaking: two (2) no-build alternatives and four (4) build alternatives. The four (4) build alternatives included an Enhanced Seismic Retrofit Alternative and three (3) replacement alternatives. Extensive discussion and analysis of these alternatives is contained in the Supplemental Draft Environmental Impact Statement (SDEIS) of 2021. The following is a synopsis of the alternatives considered for this undertaking.

a. No-Build Alternative

Two (2) no-build alternatives were considered for this undertaking. These no-build alternatives assume that all other programmed and planned projects move forward and that the Burnside Bridge would remain seismically at risk. The first no-build scenario considered was the “No-Build Pre-Earthquake” alternative, which analyzed no-build conditions prior to a CSZ seismic event. The second no-build scenario considered was the “No-Build Post-Earthquake,” which analyzed no-build conditions after a CSZ seismic event. The authors of the SDEIS concluded that the no-build alternatives would not address the acute seismic vulnerability of the existing Burnside Bridge, which is expected to be heavily damaged or completely collapse during a CSZ seismic event. The collapse of the Burnside Bridge would very likely result in a significant loss of life to people on or under the bridge during a CSZ seismic event. The loss of the Burnside Bridge would sever downtown Portland from the rest of the city on the east side of the Willamette River and would prevent emergency responders from being able to cross the river. Additionally, debris from the collapse of the Burnside Bridge would block all travel by land and water under the bridge. The loss of the Burnside Bridge due to a CSZ seismic event would hamper the long-term recovery of the city and surrounding region during the months following a major earthquake, and the potential adverse economic effects would likely persist for years.

b. Avoidance Alternative

The environmental team considered one (1) avoidance alternative. An Enhanced Seismic Retrofit Alternative was considered in lieu of the wholesale replacement of the Burnside Bridge. This alternative would partially retrofit the existing bridge and replace major structural components of the bridge to meet seismic design criteria. In this scenario, the retrofitted structural elements would be visually similar to the existing structure of the bridge, but the replacement approaches would be substantially different in appearance compared with the existing bridge. Under this scenario, the width of the bridge would be unchanged, and the modal connections at each end of the bridge would also not change. The environmental team made a preliminary analysis of potential effects to the NRHP-listed Burnside Bridge due to the Enhanced Seismic Retrofit Alternative scope of work. The team applied the Section 106 criteria of adverse effect and found that this potential scope of work would result in adverse effects to the NRHP-listed Burnside Bridge. This alternative would have no effect on the Skatepark.

c. Proposed Undertaking

Three (3) build alternatives were considered for the proposed undertaking. Of these three alternatives, the Refined Long-span alternative would replace the existing bridge with a new bridge on the same alignment as the current bridge, which would necessitate the demolition of the existing Burnside Bridge. The Refined Long-span alternative includes two options for the eastern approach, cable-stayed or tied arch spans.



ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))	
Property Name: Burnside Skatepark	
Street Address: E. Burnside and E. 2nd Avenue	City, County: Portland, Multnomah

5. Evaluation of Effects

The proposed Refined Long-span alternative would involve construction of a new bridge on the same alignment of the current bridge. Only the uppermost portion of the existing bent in the Skatepark below the bridge deck would be removed. The rest of that bent would remain in place; Skatepark features include that bent. The cable-stayed option would place new columns some distance west of the Skatepark. The tied arch span would place new columns on the west side of NE/SE 2nd Avenue opposite the Skatepark. These columns would constitute a slight change in the setting of the Skatepark. In addition, the Skatepark would be closed for a short period of time during construction and there may other times in which there may be limited access. According to 36 CFR Part 800.5(a)(1), adverse effects occur when an undertaking directly or indirectly alters characteristics of a historic property that qualify it for inclusion in the NRHP; future and cumulative effects of the undertaking also need to be considered. An example listed in 800.5(a)(2) is “visual, atmospheric, or audible intrusions” (36 CFR 800.5).

The placement of new columns would introduce a new element to the setting. The setting of the Skatepark is industrial and is a defining element of its setting. In addition, following demolition of the existing approach span and during construction of the new span the Skatepark would be open to the sky for relatively short periods of time. These exposures would potentially constitute visual and atmospheric intrusions with temporary effects on feeling and setting. However, there would be no long-term effects of these aspects of integrity or on location, design, materials, workmanship, and association of the Burnside Skatepark. The Skatepark would maintain its NRHP eligibility. The project will therefore have No Adverse Effect on the Burnside Skatepark historic property.

6. Coordination and Public Output

The Earthquake Ready Burnside Bridge Project has been the subject of public meetings since 2016. Multnomah County has established a Community Task Force in October 20 representative of 18, which continues to meet regularly. A representative of Burnside Skatepark serves on the Community Task Force, and there have been two separate meetings with Skatepark Board representatives to discuss project effects on the Skatepark. Meetings of Section 106 Consulting Parties have been meeting regularly since December 2020. Draft technical reports to address NHPA and NEPA requirements have been circulated for review by representatives of the SHPO, City of Portland, and ODOT. There has also been coordination with the Portland Historic Landmarks Commission, which is a CLG.

7. Conclusion

It is the recommendation of WillametteCRA, on behalf of ODOT, that the proposed Refined Long-span alternative would not adversely affect the Burnside Skatepark’s eligibility for listing under Criteria A and C and its integrity. WillametteCRA recommends a Finding of No Adverse Effect for this historic property.

8. Sources

SKATEPARK.com
2020 Burnside Skatepark. Electronic document,
<http://skatepark.com/skateparks/Portland/Oregon/Burnside+Skatepark/497>, accessed October 25, 2020.



ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))

Property Name: Burnside Skatepark

Street Address: E. Burnside and E. 2nd Avenue

City, County: Portland, Multnomah

Maps and Figures

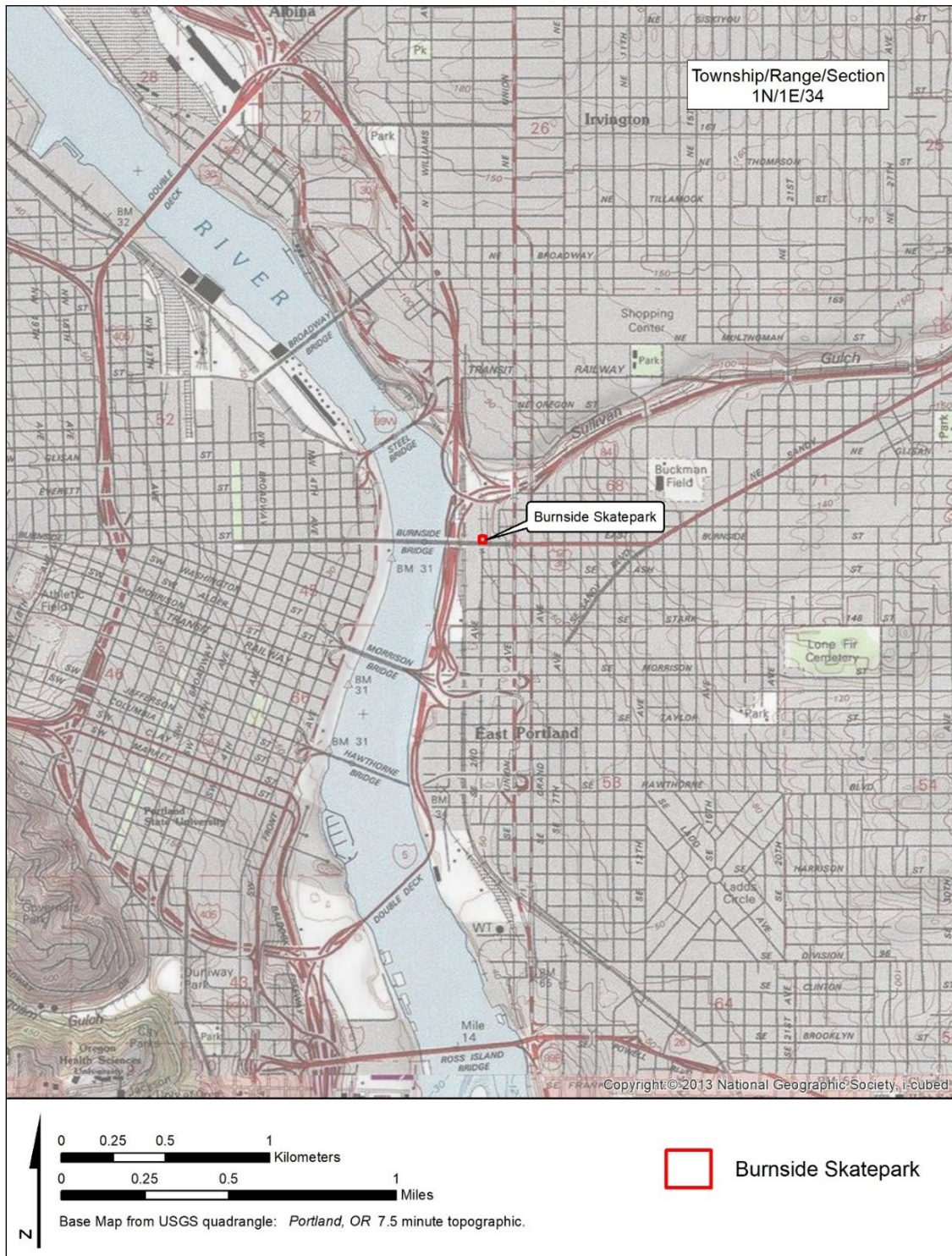


Figure 1. Location map.

**ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet**

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))

Property Name: Burnside Skatepark

Street Address: E. Burnside and E. 2nd Avenue

City, County: Portland, Multnomah



Figure 2. Overview of Burnside Skate Park.

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SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))

Property Name: Burnside Skatepark

Street Address: E. Burnside and E. 2nd Avenue

City, County: Portland, Multnomah

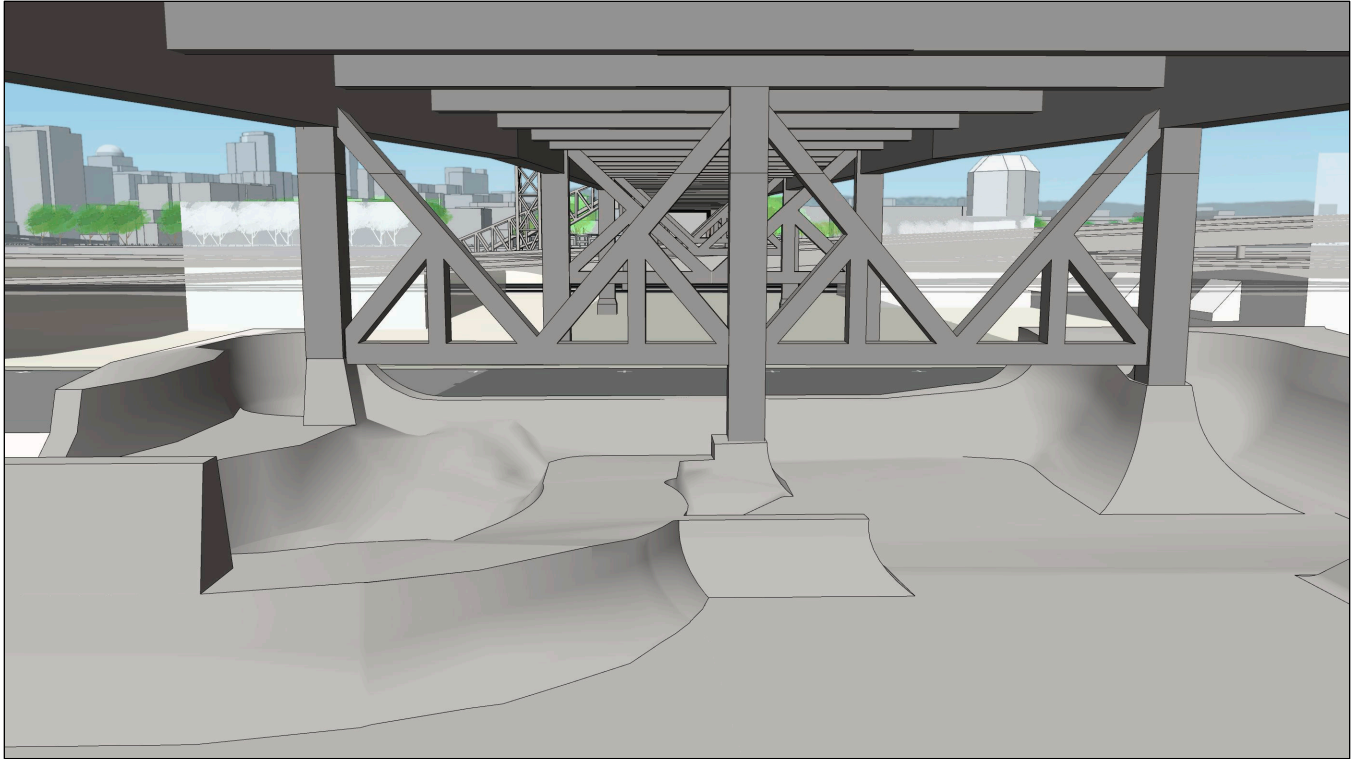


Figure 3. Burnside Skatepark, artist's rendering (Fat Pencil Studio, 2021), existing conditions showing Bent 27 in the Skatepark. View looking west.

ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))

Property Name: Burnside Skatepark

Street Address: E. Burnside and E. 2nd Avenue

City, County: Portland, Multnomah

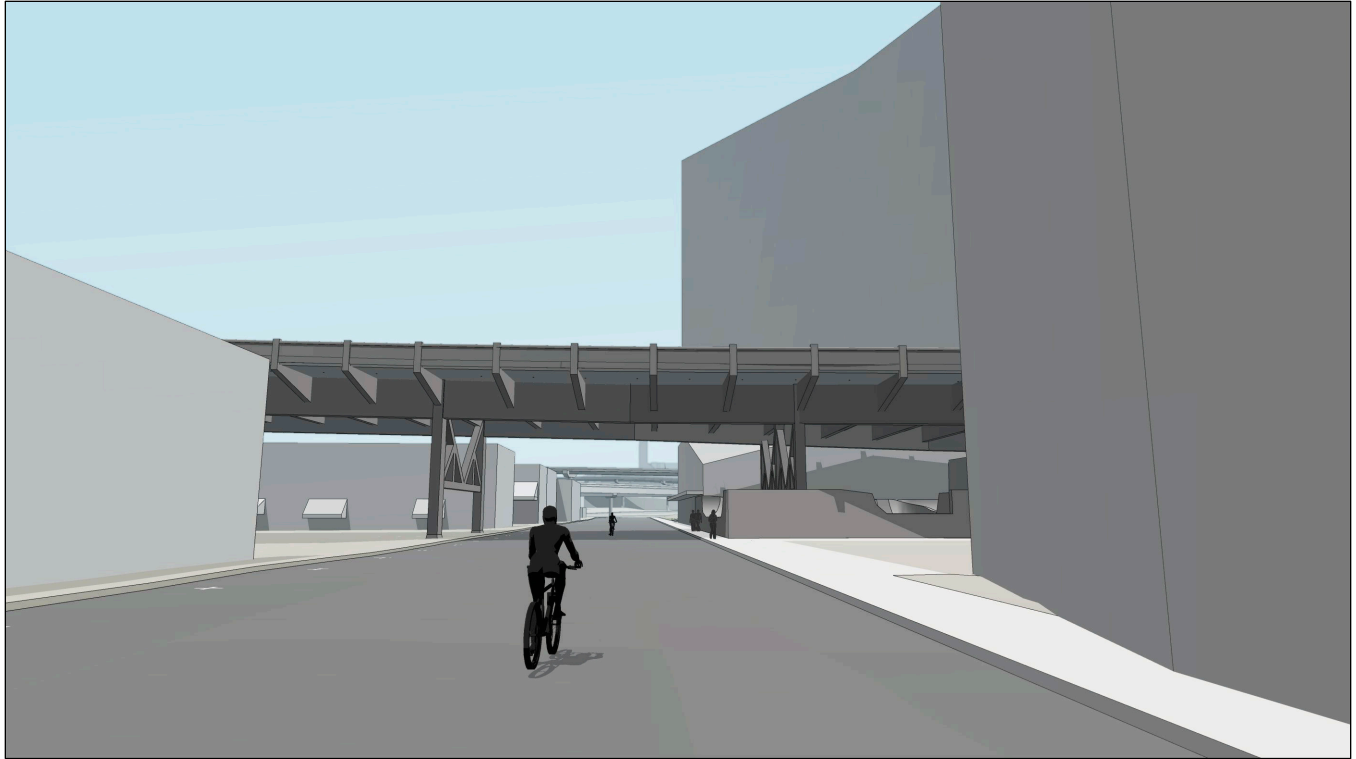


Figure 4. Burnside Skatepark, artist's rendering (Fat Pencil Studio, 2021), existing condition.

**ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet**

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))	
Property Name: Burnside Skatepark	
Street Address: E. Burnside and E. 2nd Avenue	City, County: Portland, Multnomah



Figure 5. Burnside Skatepark, artist's rendering (Fat Pencil Studio, 2021), proposed conditions with a tied arch span. Existing Bent 27 would be truncated at the top and two new columns placed on the west side of NE/SE 2nd opposite the Skatepark. View looking northeast.

ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))	
Property Name: Burnside Skatepark	
Street Address: E. Burnside and E. 2nd Avenue	City, County: Portland, Multnomah

Photographs

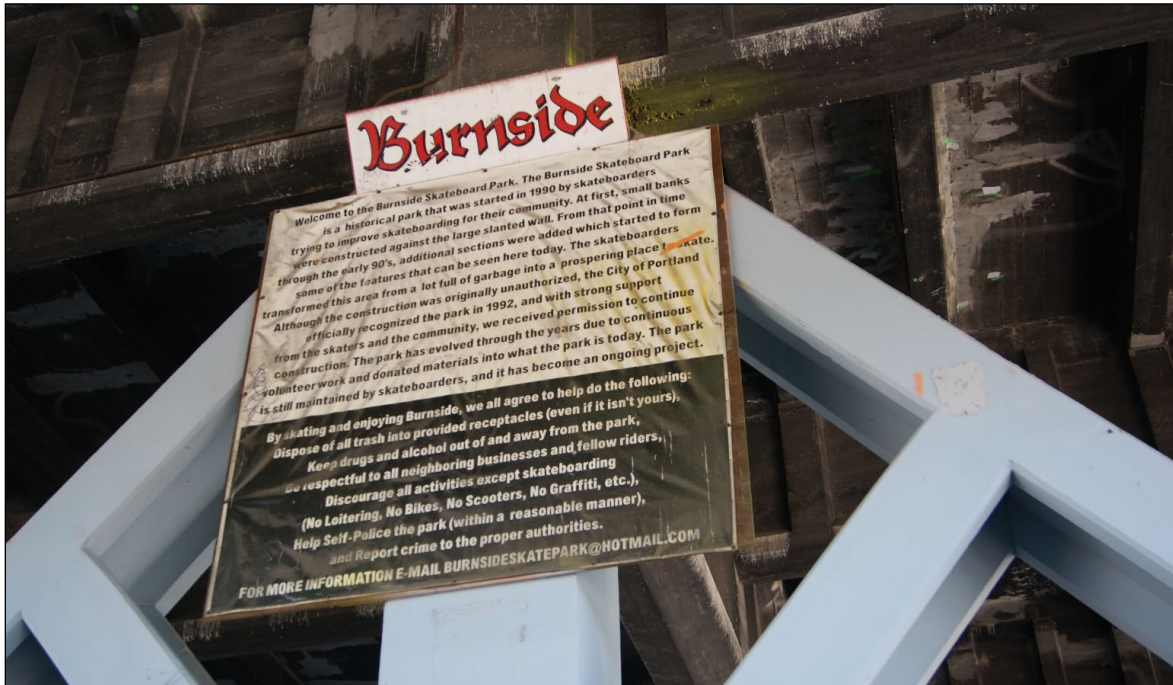


Figure 6. Posted Burnside Skatepark “rules,” facing east (Elizabeth O’Brien 2019).



Figure 7. Burnside Skatepark showing incorporation of bridge bents into Skatepark design, facing northeast (Elizabeth O’Brien, 2019).

ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))

Property Name: Burnside Skatepark

Street Address: E. Burnside and E. 2nd Avenue

City, County: Portland, Multnomah



Figure 8. Burnside Skatepark, facing northeast from SE Second Avenue (Elizabeth O'Brien, 2019).



Figure 9. Early DIY construction at the Burnside Skatepark, circa 1990-1993, looking south along SE 2nd Avenue (Photo courtesy www.burnsideproject.org, used with permission).

ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))	
Property Name: Burnside Skatepark	
Street Address: E. Burnside and E. 2nd Avenue	City, County: Portland, Multnomah



Figure 10. Past example of Skatepark art. The view is towards the east (photo courtesy of Burnside Skatepark Facebook).

**ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM**

Agency/Project: Oregon Department of Transportation/Earthquake Ready Burnside Bridge		
ODOT Key Number: :XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))		
Property Name: Frigidaire Building	Street Address: 230 East Burnside Street	
City, County: Portland, Multnomah	Latitude: 45.522926 Longitude: (-) 122.662582	
Surveyor: Adam S. Alsobrook	Affiliation: WillametteCRA	Date Recorded: 09/17/2021

Photo:



Photo Caption: Frigidaire Building, looking southwest (Elizabeth O'Brien, 2019)

Preliminary Finding of Effect:

☐ No Historic Properties Affected
 ☒ No Historic Properties Adversely Affected
 ☐ Historic Properties Adversely Affected

State Historic Preservation Office Comments:

☐ Concur
 ☐ Do Not Concur:
 ☐ No Historic Properties Affected
 ☐ No Historic Properties Adversely Affected
 ☐ Historic Properties Adversely Affected

Signed: _____ Date: _____

Comments:



ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))	
Property Name: Frigidaire Building	
Street Address: 230 East Burnside Street	City, County: Portland, Multnomah

Provide written description of the project, and its potential effects on the subject property per 36 CFR 800. The project and findings, as per instructions, should include:

1. Introduction

This statement of finding of effect discusses the effect of the proposed Earthquake Ready Burnside Bridge (EQRB) Project in Portland, Oregon. The Frigidaire Building at 230 East Burnside Street was listed in the National Register of Historic Places (NRHP) on March 8, 1989 (Figures 1 through 4). Multnomah County is the project proponent with support from the Oregon Department of Transportation (ODOT) on behalf of the Federal Highway Administration (FHWA). Historical Research Associates, Inc. (HRA) prepared the original findings that have since been updated by WillametteCRA with the current Alignment Alternatives information on behalf of the Oregon Department of Transportation (ODOT). It is the finding of WillametteCRA, on behalf of ODOT, that the proposed project will have *no adverse effect* on the Frigidaire Building. This statement of finding of effect is made pursuant to the requirements of the National Historic Preservation Act of 1966 (36 CFR 800), Executive Order 11593, and the National Environmental Policy Act of 1969.

2. Project Description

The proposed project is to establish a Burnside Bridge that would survive a major Cascadia Subduction Zone (CSZ) earthquake. The existing bridge would fail in such an earthquake. The preferred alternative would replace the existing bridge with a new bridge, known as the Long Span option. The Long Span alternative would construct a new bridge on the same alignment as the current bridge. The East Approach Span of the current Burnside Bridge features reinforced concrete sidewalks and balustrades along the north and south side of the bridge deck (Figures 5, 6, 7, 8, 9, 15, 16, 18, 21, 24, and 27). The sidewalk on the south side of the bridge deck directly abuts the north façade of the Frigidaire Building. The elevation of the sidewalk along the north façade of the Frigidaire Building slopes from a high point at the northwest corner of the building to a low point at the northeast corner. The sidewalk is also sloped slightly away from the north building façade toward the bridge deck to allow water to drain off the walking surface. The sidewalk provided pedestrian access to the recessed public entry and former retail showroom spaces, though the recessed entry is currently fenced off to prevent unauthorized entry or occupation (Figure 17).

3. Identification and Description of the Historic Resource

The Burnside Bridge was completed in May 1926 (NRHP 2012). Sections of the reinforced concrete balustrades were omitted along the south side of the east approach in anticipation of future development on the vacant lots located to the east and west of present-day SE Third Avenue. Historic photographs show temporary guardrails with horizontal bars or pipes installed at the gaps in the reinforced concrete balustrades (Figures 5, 6, 7, 8, and 11).

In January 1929, the Frigidaire Company announced their plans to construct a new warehouse and office building to house their growing sales of refrigerators in Portland (*Oregonian* 1929a). By March 1929, the architectural firm of Knighton & Howell were preparing plans for a 100-foot by 82-foot, three-story concrete and steel building (*Oregonian* 1929b, 1929c). A building permit was issued to Oscar E. Heintz in mid-April 1929 to construct the building at 11 East Third Street North (present-day SE Third Avenue) (*Oregonian* 1929d). Less than two weeks later the \$38,000 (about \$608,000 in 2021 dollars) construction contract was officially awarded to the Anderson Construction Company (*Oregonian* 1929e).



ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
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Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))	
Property Name: Frigidaire Building	
Street Address: 230 East Burnside Street	City, County: Portland, Multnomah

The Frigidaire Building was officially opened for business on September 1, 1929 (*Oregonian* 1929f). Oscar E. Heintz owned the building, which he leased to the Frigidaire Company (*Oregonian* 1929f). According to the *Oregonian* newspaper, the building “abuts the east approach to the Burnside bridge [sic] only the upper story faces the street, the other two being below the level of the bridge” (*Oregonian* 1929f).

In July 1933, Frigidaire shifted from direct retail sales to offering their products through selected dealers. Portland’s Sunset Electric Company became wholesale distributor of Frigidaire residential refrigerators and commercial refrigeration equipment and moved Frigidaire sales and service to their existing location at 937 NW Glisan Street (*Oregonian* 1933). After Frigidaire vacated the premises, George L. Sammis, vice president and general manager of the Sunset Electric Company, was selected as the administrator of the Oregon Liquor Control Commission (*Oregonian* 1934a). Not long after, the Commission began using the lower levels of the building as a liquor distribution warehouse and opened a retail liquor store on the uppermost level of the building (*Oregonian* 1934b, 1934c, 1934d). The Oregon Liquor Control Board occupied the building until the 1940s (NRHP 1989). Ronald J. Templeton, an auto parts dealer, was associated with the building from 1959 until 1997, when he sold it to Joanne M. Ferrero and Warren H. Lawson (Portland Business Journal 2004; Multnomah County Assessor 2021). Artiste Lofts LLC purchased the building in 2004, and the property ownership changed three more times between 2004 and 2012 (Multnomah County Assessor 2021).

The Frigidaire Building is rectangular in plan and is two stories tall over a raised basement. The building footprint measures approximately 100 feet by 82 feet with the long axis of the building oriented in an east west direction. The structure of the building is concrete on steel frame. The basement level of the building is accessible from SE 2nd Avenue to the west and the main level of the building is accessible from SE 3rd Avenue to the east. The uppermost level of the building is accessible from the sidewalk along the south side of the East Approach Span of the Burnside Bridge.

The primary façade of the building faces north toward the East Approach Span of the Burnside Bridge. The upper portion of the primary façade above the sidewalk level is clad with Willamina brick and has a centrally located recessed entry with a scribed concrete floor surface. Painted concrete pilasters are located to each side of the entry and feature shallow scrolled brackets at the underside of the lintel over the entrance opening. A cast concrete recessed sign panel is located on the upper portion of the façade over the recessed entry. The 1989 NRHP nomination noted that the building name was inscribed in this panel, but this feature is no longer extant. A cast concrete cornice above the sign panel projects slightly from the face of the building. This cornice is capped with a symmetrical cast concrete decorative design of acroteria and curvilinear scrollwork flanking a centrally located square element topped with a finial.

A painted wood storefront system wraps along the three walls inside the recessed entry, and a pair of painted wood double doors with single-light vision panels is centrally located within the recessed entry. There is a large single-light transom above the double doors. Two equally sized, wood framed storefront windows flank the double doors. These large panes of glass are mounted above bulkheads clad with black glazed ceramic tile that has a horizontal ceramic tile pencil line detail inset below the uppermost course of field tiles. A band of painted wood sash transom windows above the storefront doors and windows spans the full width of the recessed entry. Equally spaced, painted wood turned spindles are mounted on the outside of the upper band of transom windows and form a decorative grille. The west and east walls of the recessed entry have storefront window arrangements identical to those of the south wall. There are two painted wood storefront display



ODOT INVENTORY OF HISTORIC PROPERTIES
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Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))	
Property Name: Frigidaire Building	
Street Address: 230 East Burnside Street	City, County: Portland, Multnomah

windows located on each side of the centrally located recessed entry. These storefront display windows are all equally sized and feature details identical to the storefront windows located inside the recessed front entry, such as the black glazed ceramic tile bulkheads, large plate glass display windows, and painted wood sash transoms with a decorative grille of painted wood turned spindles.

The lower level of the primary façade below the sidewalk level is constructed of painted board form concrete. There are two large window openings located at this façade toward the northeast corner of the building. Each of these steel sash windows has a five-equal-light wide by five-equal-light tall configuration. Each of these windows has a center pivot operable sash that is three-lights-wide by two-lights-tall. There may have once been other window or door openings at this level, but these openings have been blocked up at some point.

The east façade is clad with a painted stucco plaster pargecoat over an unknown substrate. has a small, recessed double door entry at ground level near the southeast corner of the building. However, this entry appears to be a modification and enlargement of an original loading door opening. There are nine steel sash windows at the ground level of the east façade, and eight of these windows have their headers aligned. There are two steel sash windows mounted in the wall above the recessed entry. Each of these windows features a four-equal-light-wide by two-equal-light tall configuration. Four larger steel sash windows in a four-equal-light wide by six-equal-light tall configuration are located to the north of the recessed entry. Each of these windows has a center pivot operable sash that is two-lights-wide by two-lights-tall. There are two additional steel sash windows to the north of the four taller windows, and each of these windows is four-equal-lights wide by three-equal-lights tall. There is another steel sash window mounted lower in the east façade which has a five-equal-light wide by two-equal-light high configuration. A single entrance door is located between this window and the northeast corner of the building. It appears that this window and door were once located underneath a stairway mounted on the east façade of the building which connected the sidewalk along SE 3rd Avenue with the sidewalk on the south side of the East Approach Span of the Burnside Bridge above. There are eight equally sized window openings at the uppermost level of the east façade, and each of these window openings is centered on the eight equally spaced windows at the ground level façade. Each of these windows is identical size and has operable double hung sashes with transom sashes above. All the sashes have a three-equal-vertical-light configuration. There is a storefront display window at the northeast corner of the building at the uppermost level, and the design and configuration of this window is almost identical to the storefront windows along the north façade of the building, with the exception of not having a black glazed ceramic tile bulkhead underneath.

The south façade of the building is completely obscured by an adjacent taller building to the south of the Frigidaire Building. The west façade is clad with a painted stucco plaster pargecoat over an unknown substrate. There are large loading door openings and steel sash windows at the lowest (basement) level of the west building façade, though these window and door openings are almost constantly concealed by parked vehicles. The next level above the basement features ten identical, equally spaced steel sash windows, each in a four-equal-light wide by six-equal-light tall configuration. Each of these windows has a center pivot operable sash that is two-lights-wide by two-lights-tall. The windows at the uppermost level of the west façade appear to be a mirror image of the corresponding windows on the east façade of the building. Like the corresponding windows on the east façade, these windows are also centered above the windows beneath them.



ODOT INVENTORY OF HISTORIC PROPERTIES
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Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))	
Property Name: Frigidaire Building	
Street Address: 230 East Burnside Street	City, County: Portland, Multnomah

4. Undertaking Options Considered

A total of six (6) alternatives have been considered for this undertaking: two (2) no-build alternatives and four (4) build alternatives. The four (4) build alternatives included an Enhanced Seismic Retrofit Alternative and three (3) replacement alternatives. Extensive discussion and analysis of these alternatives is contained in the Supplemental Draft Environmental Impact Statement (SDEIS) of 2021. The following is a synopsis of the alternatives considered for this undertaking.

a. No-Build Alternative

Two (2) no-build alternatives were considered for this undertaking. These no-build alternatives assume that all other programmed and planned projects move forward and that the Burnside Bridge would remain seismically at risk. The first no-build scenario considered was the “No-Build Pre-Earthquake” alternative, which analyzed no-build conditions prior to a CSZ seismic event. The second no-build scenario considered was the “No-Build Post-Earthquake,” which analyzed no-build conditions after a CSZ seismic event. The authors of the SDEIS concluded that the no-build alternatives would not address the acute seismic vulnerability of the existing Burnside Bridge, which is expected to be heavily damaged or completely collapse during a CSZ seismic event. The collapse of the Burnside Bridge would very likely result in a significant loss of life to people on or under the bridge during a CSZ seismic event. The loss of the Burnside Bridge would sever downtown Portland from the rest of the city on the east side of the Willamette River and would prevent emergency responders from being able to cross the river. Additionally, debris from the collapse of the Burnside Bridge would block all travel by land and water under the bridge. The loss of the Burnside Bridge due to a CSZ seismic event would hamper the long-term recovery of the city and surrounding region during the months following a major earthquake, and the potential adverse economic effects would likely persist for years.

b. Avoidance Alternative

The environmental team considered one (1) avoidance alternative. An Enhanced Seismic Retrofit Alternative was considered in lieu of the wholesale replacement of the Burnside Bridge. This alternative would partially retrofit the existing bridge and replace major structural components of the bridge to meet seismic design criteria. In this scenario, the retrofitted structural elements would be visually similar to the existing structure of the bridge, but the replacement approaches would be substantially different in appearance compared with the existing bridge. Under this scenario, the width of the bridge would be unchanged, and the modal connections at each end of the bridge would also not change. The environmental team made a preliminary analysis of potential effects to the NRHP-listed Burnside Bridge due to the Enhanced Seismic Retrofit Alternative scope of work. The team applied the Section 106 criteria of adverse effect and found that this potential scope of work would result in adverse effects to the NRHP-listed Burnside Bridge.

c. Proposed Undertaking

Three (3) build alternatives were considered for the proposed undertaking. Of these three alternatives, the Refined Long-span alternative would replace the existing bridge with a new bridge the same alignment as the current bridge, which would necessitate the demolition of the existing Burnside Bridge.



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5. Evaluation of Effects

The team applied the Section 106 criteria of adverse effect (36 CFR 800.5) to assess the potential direct and indirect effects of the proposed Long Span option on the Frigidaire Building, which was listed in the NRHP in 1989. According to the criteria, “An adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property’s location, design, setting, materials, workmanship, feeling, or association. Consideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property’s eligibility for the National Register. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative.”

Note: The structure of the replacement east approach span has not yet been finalized. The replacement east approach span will be either a tied arch structure or cable-stayed structure.

Location: The Frigidaire Building is not being moved or removed, so the integrity of location would not be affected by the undertaking (Figures 18 through 31).

Setting: The reinforced concrete sidewalk and balustrades along the south side of the East Approach Span bridge deck are historic features that contribute to the historic setting of the Frigidaire Building. When the Burnside Bridge is replaced, the building will be permanently disconnected from the bridge structure, and the historic sidewalk and balustrades will be permanently removed. A walkway will be constructed to connect the main entrance to the new sidewalk. Removal of these features would somewhat alter the building’s integrity of setting, however, not to such an extent that the undertaking would constitute an adverse effect to this NRHP-listed resource (Figures 19, 20, 22, 23, 25, 26, 28, 29, and 31).

Furthermore, the introduction of diagonal cable-stay structural elements along the north side of the Frigidaire Building would constitute *no adverse effect* to this NRHP-listed resource, provided that the cable-stay structural elements are placed as far away from the building façade as possible, such as between the north side of the new sidewalk and the new travel lanes (Figures 20, 23, 26, and 29).

Design: The overall integrity of form, plan, internal space, structure, and style of the Frigidaire Building will not be altered by the removal of the East Approach Span of the Burnside Bridge. However, removal of the historic reinforced concrete sidewalk and balustrades connected to the Frigidaire Building will alter the relationship that the upper-level north façade of the building has with the adjacent public sidewalk space. Removal of the sidewalk would result in the storefront windows and entrance no longer having the same spatial relationship to the adjacent public right-of-way space that they have had for the past ninety years. However, the effects of this alteration are mitigated by the potential transparency of the new railing along the south edge of the sidewalk, which will allow pedestrians to see into the display windows of the Frigidaire Building. Therefore, it is recommended that the undertaking would constitute *no adverse effect* to this NRHP-listed building, provided that the new sidewalk railing design is as transparent as possible without compromising safety (Figures 19, 20, 22, 23, 25, 26, 28, 29, and 31).



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Materials: The removal of the East Approach Span of the Burnside Bridge would not damage or remove the physical elements of the Frigidaire Building considered character defining features integral to the historic nature of the building. Therefore, the proposed undertaking would not adversely affect the historic material integrity of this NRHP-listed resource.

Workmanship: Care must be taken during demolition of the East Approach Span to protect the examples of fine craftsmanship evident in the Frigidaire Building, such as the woodwork grille of the transoms above the storefront windows, the glazed ceramic tile bulkhead, and the Willamina face brick masonry. However, since these character defining features will remain intact, the proposed undertaking would not adversely affect the integrity of the historic workmanship evident in this NRHP-listed resource.

Feeling: The upper level of the Frigidaire Building features large storefront windows along the entire north façade of the building, which were used historically to display goods offered for sale inside the upper-level showroom. Domestic refrigeration equipment was displayed while Frigidaire occupied the building, and alcoholic beverages were displayed when the Oregon Liquor Control Board used the building. These storefront windows are positioned so users of the East Approach Span sidewalk had an excellent view of the goods on display. The removal of the continuous concrete sidewalk along the north façade of the building would somewhat alter the historic sense of the period of time when the building was used for the sales of goods and also somewhat alter the ability of the public to appreciate the design, materials, and workmanship of the prominent storefront windows. However, the effects of this alteration are mitigated by the potential transparency of the new railing along the south edge of the sidewalk, which will allow pedestrians to see into the display windows of the Frigidaire Building. Therefore, it is recommended that the undertaking would constitute *no adverse effect* to this NRHP-listed building, provided that the new sidewalk railing design is as transparent as possible without compromising safety (Figures 19, 20, 22, 23, 25, 26, 28, 29, and 31).

Furthermore, the introduction of diagonal cable-stay structural elements along the north side of the Frigidaire Building would constitute *no adverse effect* to this NRHP-listed resource, provided that the cable-stay structural elements are placed as far away from the building façade as possible, such as between the north side of the new sidewalk and the new travel lanes (Figures 20, 23, 26, and 29).

Association: The removal of the East Approach Span of the Burnside Bridge will not diminish or eliminate the direct link that the Frigidaire Building has to important historic events or persons significant to our past, so the integrity of association would not be affected by the undertaking.

6. Coordination and Public Output

The Earthquake Ready Burnside Bridge project has been the subject of public meetings since 2016. Multnomah County has established a Community Task Force in October 2018, which continues to meet regularly. Meetings of the Section 106 Consulting Parties have been meeting regularly since December 2020. Draft technical reports to address NHPA and NEPA requirements have been circulated for review by representatives of the SHPO, City of Portland, and ODOT. There has also been coordination with the Portland Historic Landmarks Commission, which is a CLG.



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7. Conclusion

In summary, the Refined Long-span alternative would necessitate the complete replacement of the existing Burnside Bridge with new approach and main spans. The removal of the existing historic east approach span and construction of a new east approach span with either a tied arch or cable-stayed structure would constitute *no adverse effect* to the NRHP-listed Frigidaire Building, provided that the cable-stay structural elements are placed as far away from the building façade as possible, and also provided that the new sidewalk railing design is as transparent as possible without compromising safety.

8. Sources

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2000 Burnside Bridge, Willamette River Bridges Recording Project, Spanning the Willamette River at Burnside Street, Portland, Multnomah County, Oregon. Photographs, Paper Copies of Color Transparencies, and Written Historical and Descriptive Data. HAER No. OR-101. Electronic resource, <https://tile.loc.gov/storage-services/master/pnp/habshaer/or/or0400/or0470/data/or0470data.pdf>, accessed September 2021.

Multnomah County

2021 Multnomah County, Oregon Survey and Assessor Image Locator (SAIL). Electronic resource, <https://multco.us/surveyor>, accessed August 2021.

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2012 National Register of Historic Places Registration Form for the Burnside Bridge. Oregon Historic Sites Database. Electronic resource, <http://heritagedata.prd.state.or.us/historic/>, accessed August 2021.

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1926a "Business Building Added." 10 January:30.

1926b "New Bridge Spans East Third Street with Attractive Viaduct." 8 February:7.

1926c "Burnside Street Undergoes Change." 30 May:18.

1926d "Hotel Bridgeport." 20 June:38.

1929a "Frigidaire Plans Building." 6 January:20.

1929b "Frigidaire to Get Home." 14 March:9.

1929c "'Frigidaire' Will Build." 17 March:26.



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1929d "Daily City Statistics." 18 April:16.
1929e "Contracts Closed for Two Buildings." 21 April:22.
1929f "Frigidaire Branch Formally Opened." 8 September:20.
1929g "Frigidaire Moves Into New Home Here." 8 September:20.
1933 "The Sunset Electric Company." 5 July:2.
1934a "Sammis Chosen as Liquor Boss." 7 January:1.
1934b "Liquor Commission to Move." 20 February:12.
1934c "Liquor Office Moved." 23 February:14.
1934d "Liquor Offices Moved." 24 February:2.

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1926 "East Burnside Bridge looking east to Union Ave, bridge almost completed." City of Portland Auditor's Office, Archives and Records Management, PARC Accession Number A2204-002, Record Number AP/7921. Electronic resource, <https://efiles.portlandoregon.gov/Record/2955593/>, accessed August 2021.

1932 "East side of Burnside Bridge." City of Portland Auditor's Office, Archives and Records Management, PARC Accession Number A2004-001.622, Record Number AP/10236. Electronic resource, <https://efiles.portlandoregon.gov/Record/3040583/>, accessed August 2021.

1939a "East end of the Burnside Bridge looking east." City of Portland Auditor's Office, Archives and Records Management, PARC Accession Number A2005-001.130, Record Number AP/5917. Electronic resource, <https://efiles.portlandoregon.gov/Record/2767936/>, accessed August 2021.

1939b "NE Union Ave [Martin Luther King Jr Blvd], NE Grand Ave and E Burnside St looking northwest." City of Portland Auditor's Office, Archives and Records Management, PARC Accession Number A2005-001.668, Record Number AP/6015. Electronic resource, <https://efiles.portlandoregon.gov/Record/2769551/>, accessed August 2021.

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Maps and Figures

Include aerial or sketch map delineating the property boundary and the locations of all contributing and non-contributing features within the property boundary and maps showing the location of proposed project actions. These can include available engineering drawings or plans, preferably on aerial maps.

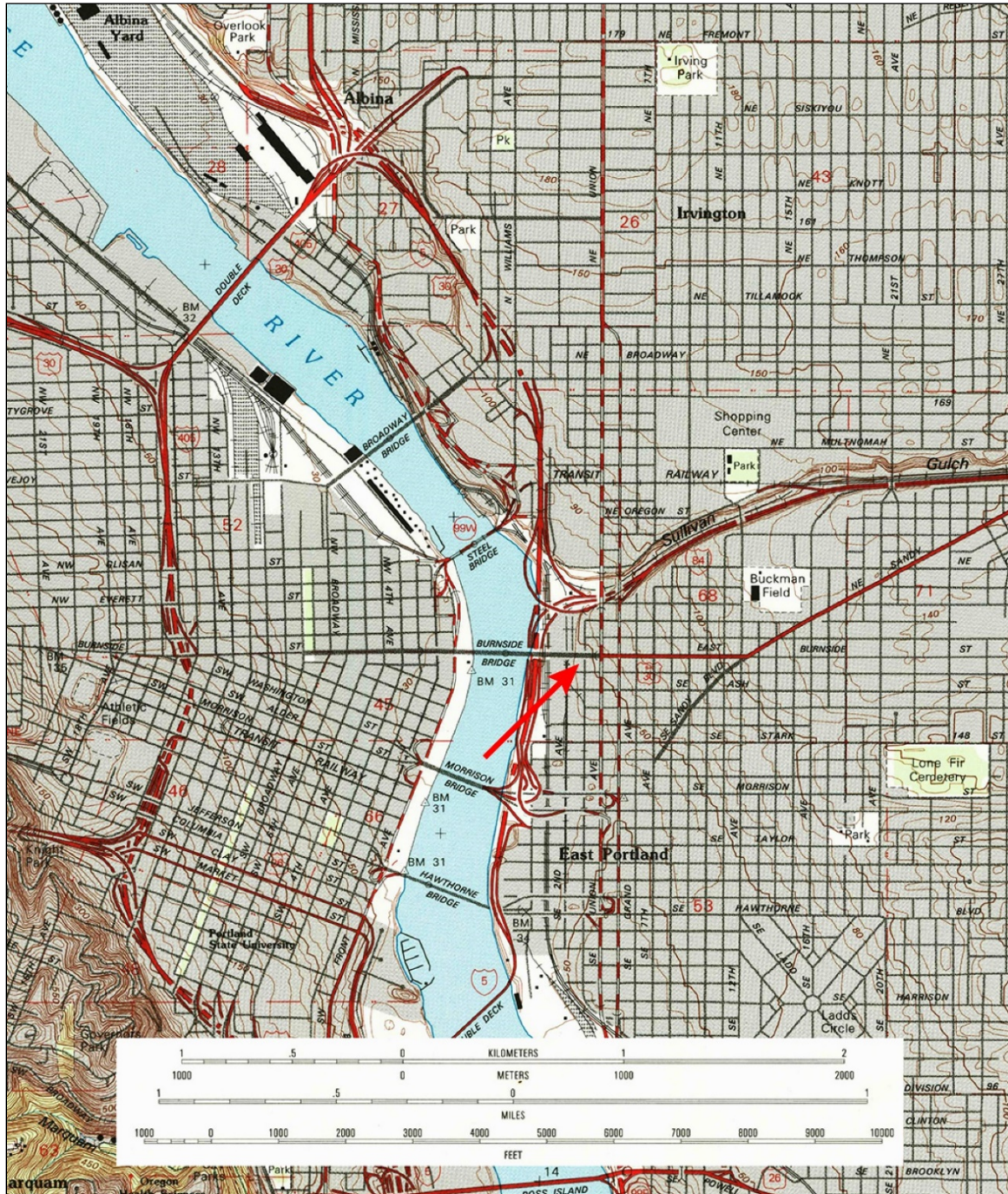


Figure 1: USGS, Portland, OR Quadrangle, 7.5 Minute, 1990. Red arrow indicates location of Frigidaire Building (USGS).

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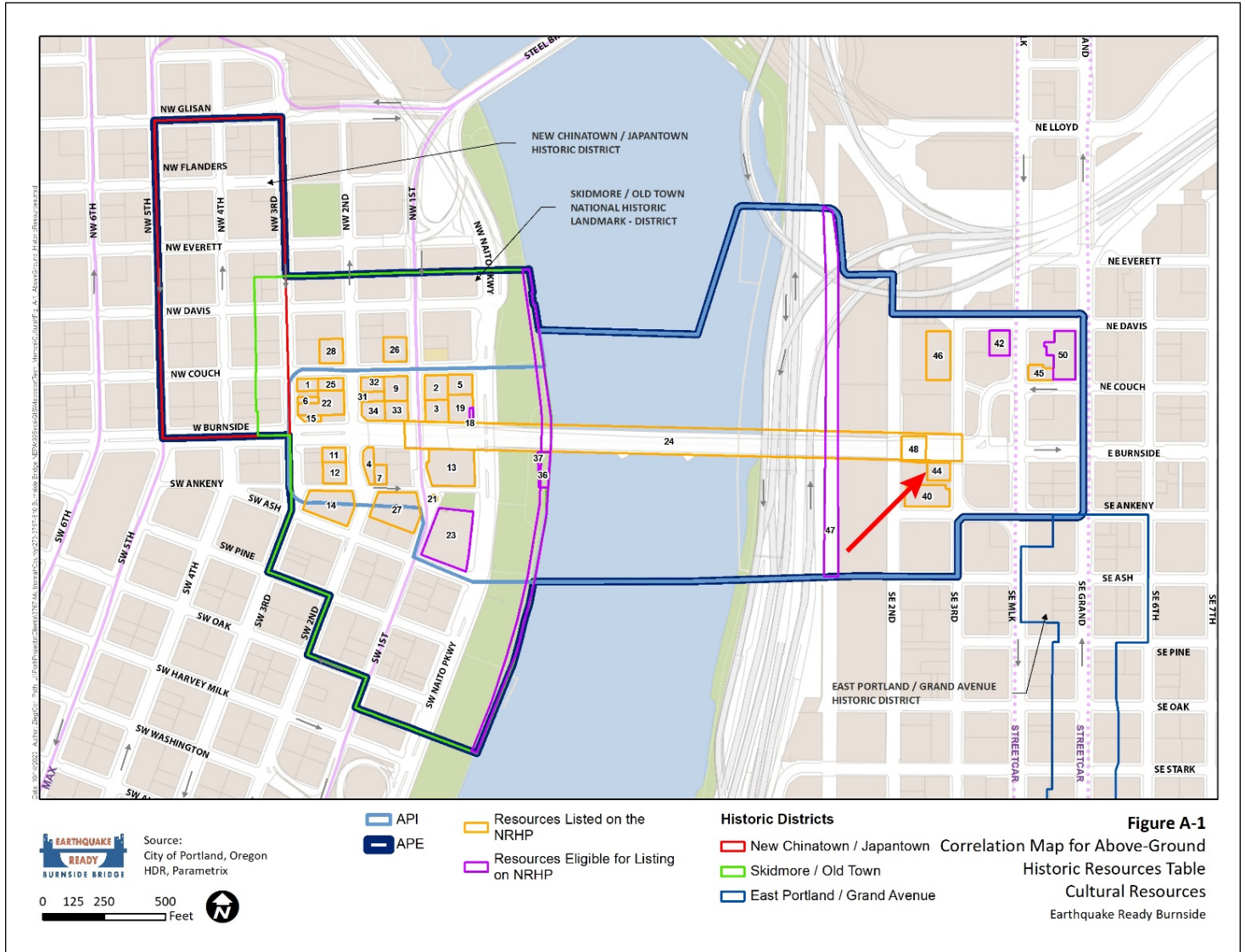


Figure 2: Map of the Area of Potential Effect (APE) with locations of NRHP-listed and NRHP-eligible resources within the APE. Red arrow indicates location of Frigidaire Building.



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Figure 3: Aerial photograph with location of Frigidaire Building indicated by red line (Google Earth).

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Figure 4: 1951 aerial photograph with location of Frigidaire Building indicated by red line (USGS EarthExplorer).

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Photographs

Provide multiple images of the property that highlight where project actions may be occurring. Depending on the scope and scale of the project, this could include photos of contributing features, non-contributing features, and/or the overall setting of the property. Provide captions under each image with the following format: Property name, facing [direction] (Photographer, YYYY).

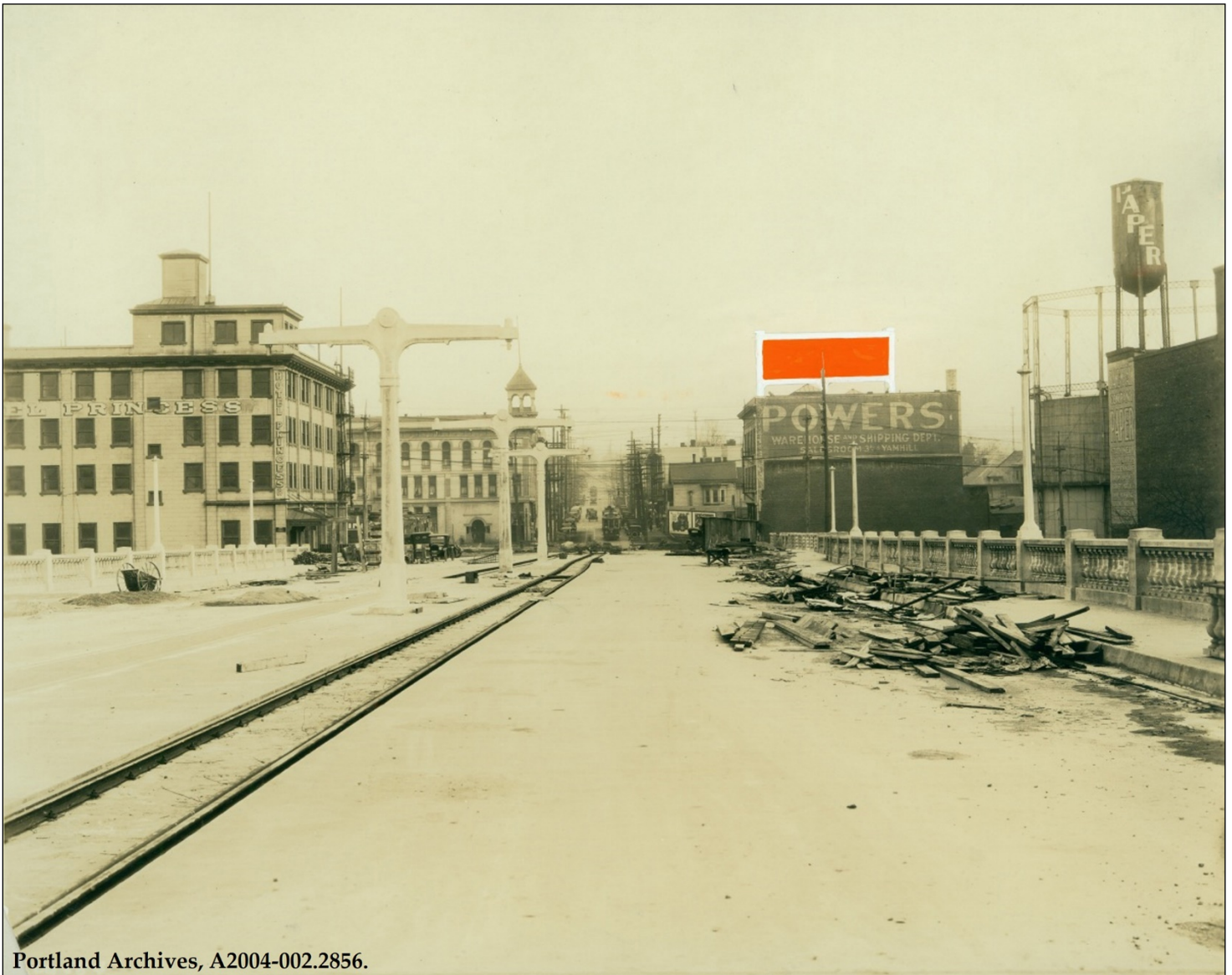


Figure 5: East Burnside Bridge looking east to Union Ave bridge almost completed. Note the section of guardrail on the right side of image that is different than the concrete balustrade of the east approach, which is where the Frigidaire Building was built in 1929 (Portland Archives, A2004-002.2856). [NOTE: The Portland Archives dates this photo as December 31, 1926. However, based on the almost-finished condition of the bridge, this image was likely taken between February and May 1926. Also, the Hotel Princess became the Bridgeport Hotel between May and June 1926, which further reinforces the likely date of the image (*Oregonian* 1926a, 1926c, 1926d).

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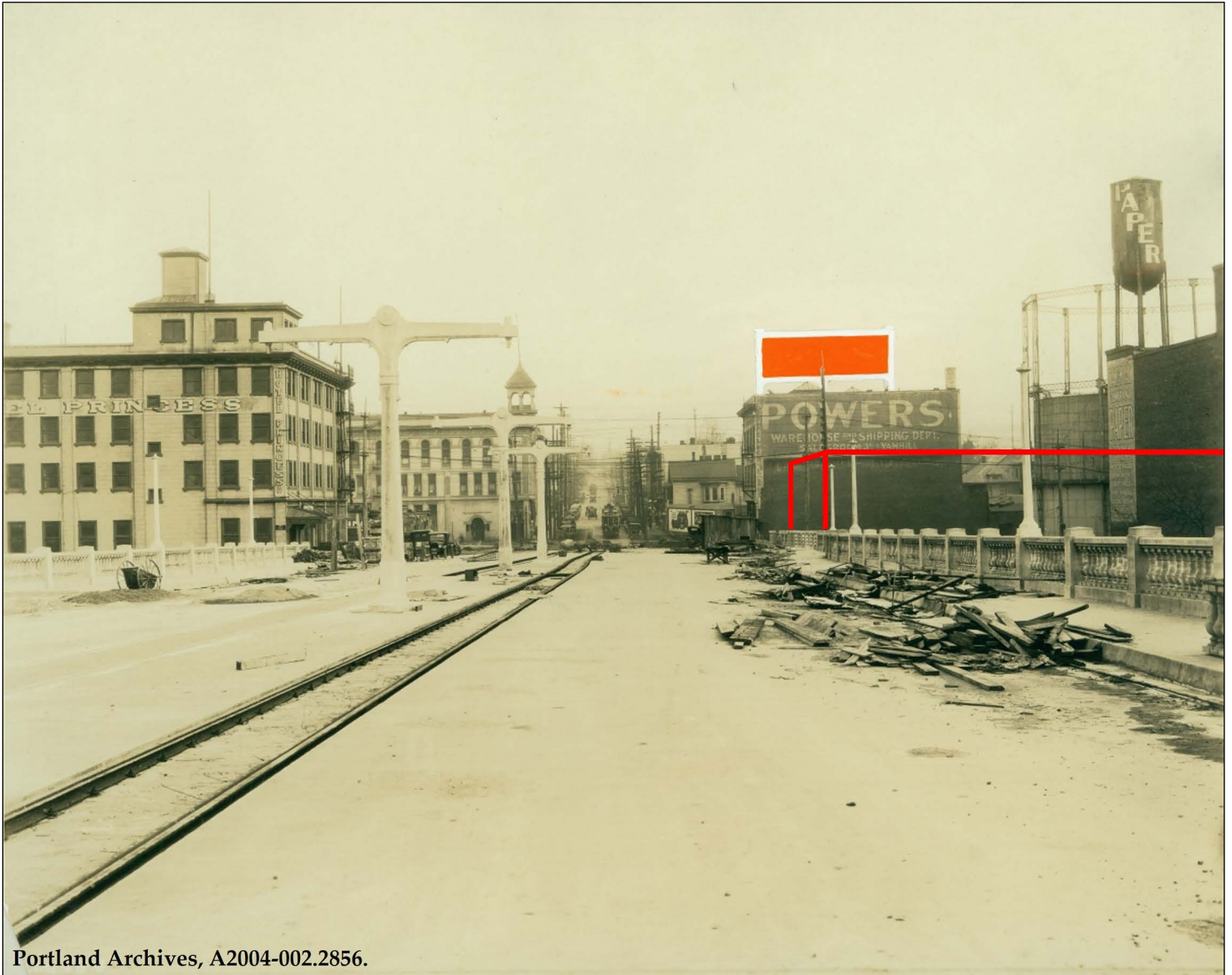
Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

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Portland Archives, A2004-002.2856.

Figure 6: East Burnside Bridge looking east to Union Ave bridge almost completed, May 1926 (see note in Figure 5 caption regarding the date of this image). Red lines indicate present-day location of the Frigidaire Building, which was constructed in 1929 (Portland Archives, A2004-002.2856).

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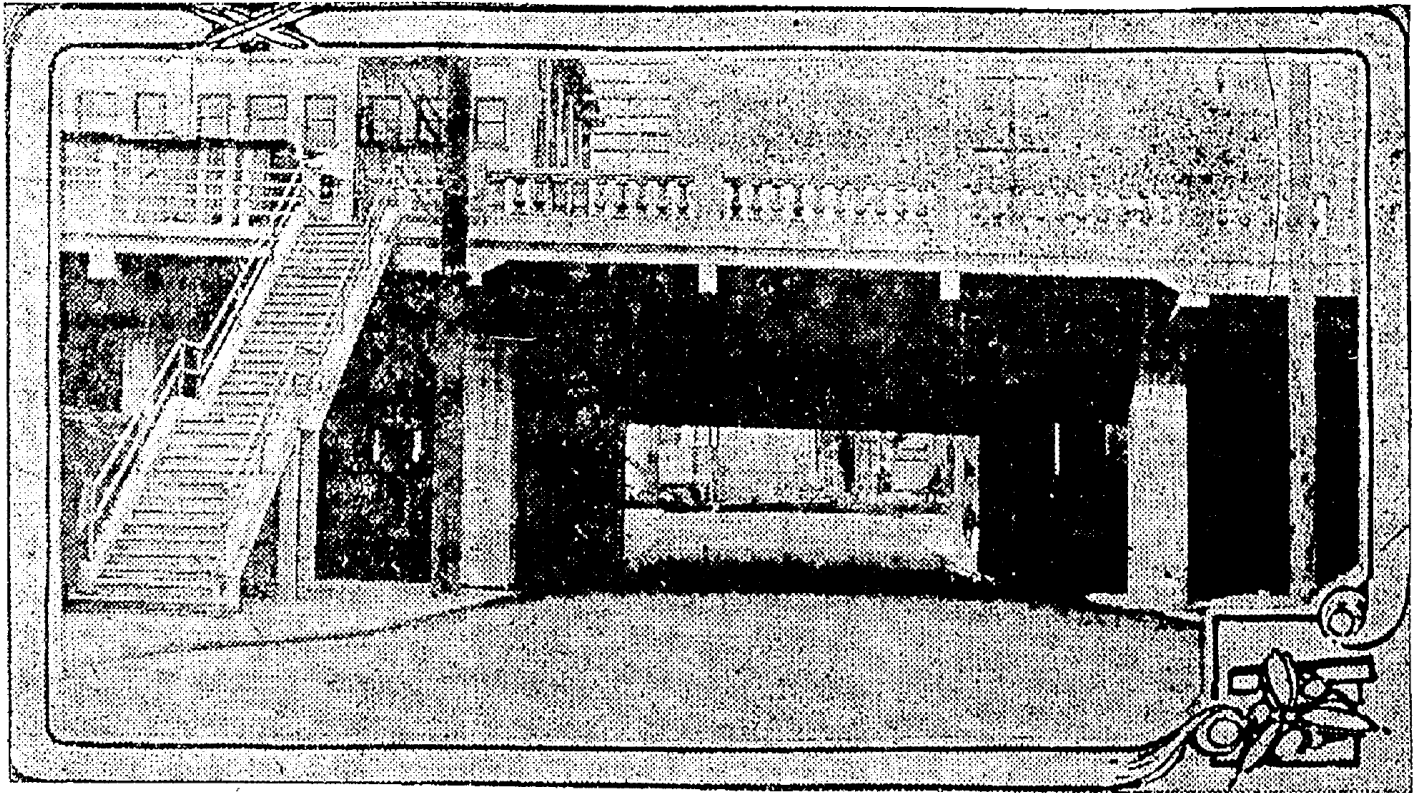
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NEW BRIDGE SPANS EAST THIRD STREET WITH ATTRACTIVE VIADUCT



VIEW OF HUGE SPAN SHOWING METHOD USED IN CLEARING EAST SIDE DRIVEWAY.

The new Burnside bridge, which is now getting along toward completion, spans East Third street with an attractive viaduct. Similar viaducts, it was announced, will be used in construction of the west side approach in spanning Front and First streets.

A photograph of the viaduct over East Third street which was taken yesterday by The Oregonian's staff photographer gives some idea of the tremendous size of the new bridge and the splendid workmanship used in building the understructure of the great span.

An attractive stairway of concrete leads from the sidewalk on the west side of East Third street onto the bridge.

East Third street where it extends under the bridge has recently been paved to connect with the paved driveway to the south.

Figure 7: Photograph from the February 8, 1926, issue of the *Oregonian* newspaper. The Frigidaire Building is located to the left of the stairway. Note the section of guardrail to the left of the stair that is different than the concrete balustrade of the east approach (*Oregonian* 1926b).

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Figure 8: Photograph of Trolley Poles and Trolleys on the Burnside Bridge, circa 1926, courtesy Steve Dotterer. Note the section of guardrail to the west of the stair that is different than the concrete balustrade of the east approach. The Frigidaire Building was constructed immediately to the west of the stairway down to SE Third Avenue. (Historic American Engineering Record 1990).

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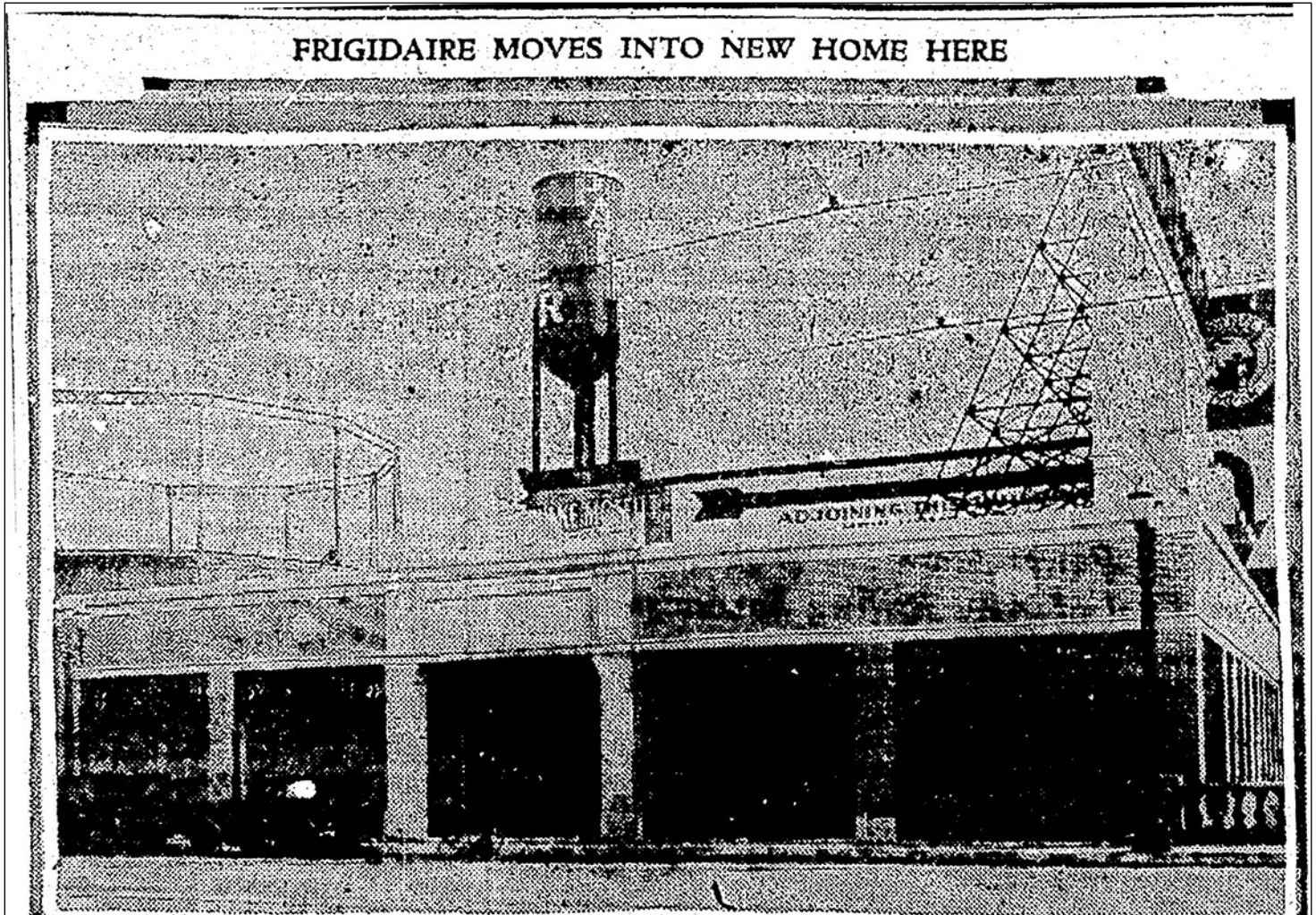


Figure 9: Photograph from the September 8, 1929, issue of the *Oregonian* newspaper showing the recently completed Frigidaire Building. Note the section of balustrade to the west of the building (*Oregonian* 1929g).

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Figure 10: Photograph from the September 8, 1929, issue of the *Oregonian* newspaper showing the recently completed Frigidaire Building (*Oregonian* 1929g).

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Figure 11: East side of Burnside Bridge, January 4, 1932. Red arrow indicates the Frigidaire Building. Note the section of concrete balustrade immediately to the east of the Frigidaire Building and the different section of horizontal guardrail along the north side of the vacant lot on the east side of SE Third Avenue that can be seen in Figure 12 and 13 (Portland Archives A2004-001.622).

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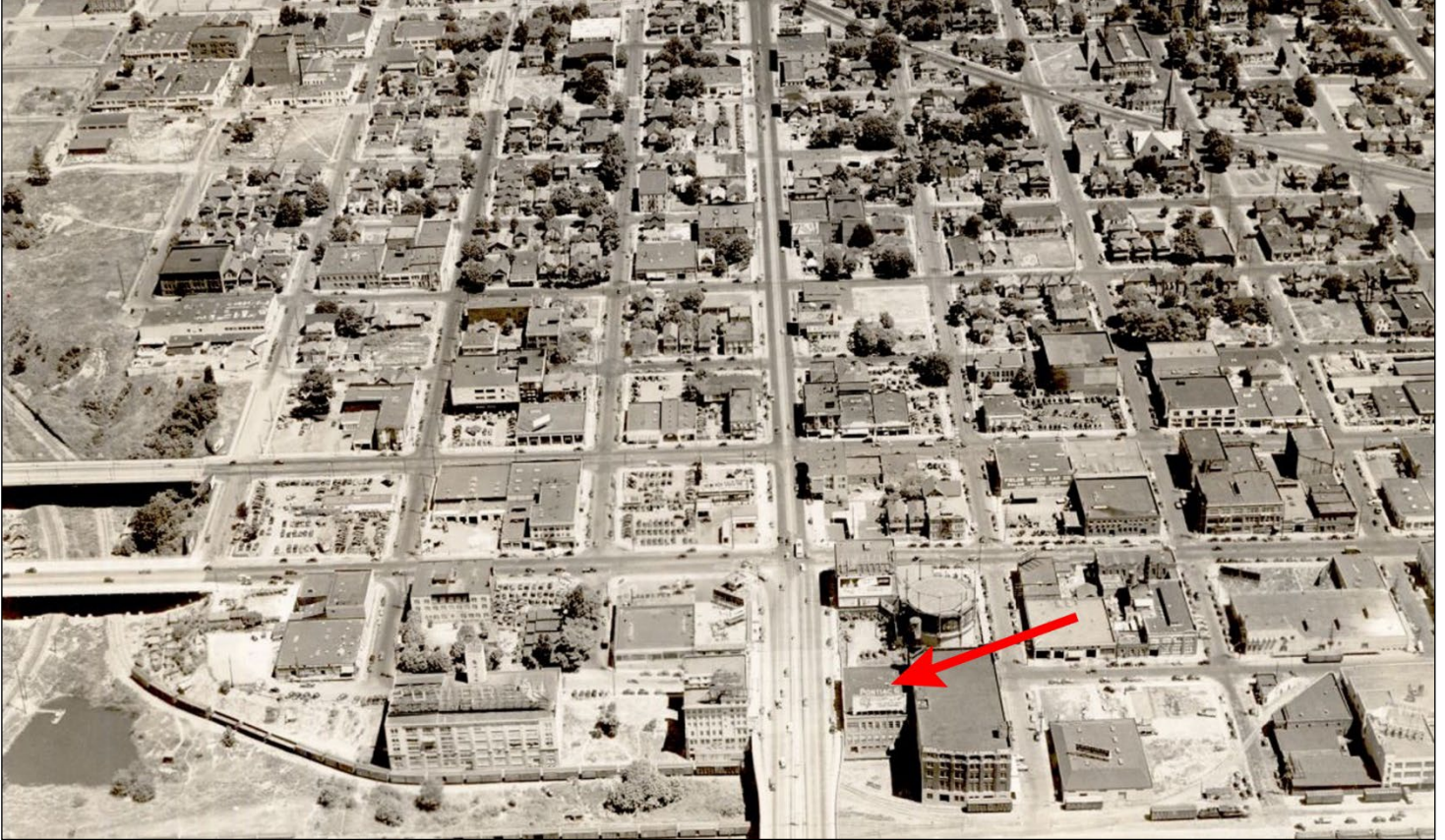


Figure 12: East end of the Burnside Bridge looking east, December 31, 1939. Red arrow indicates the Frigidaire Building (Portland Archives, A2005-001.130).

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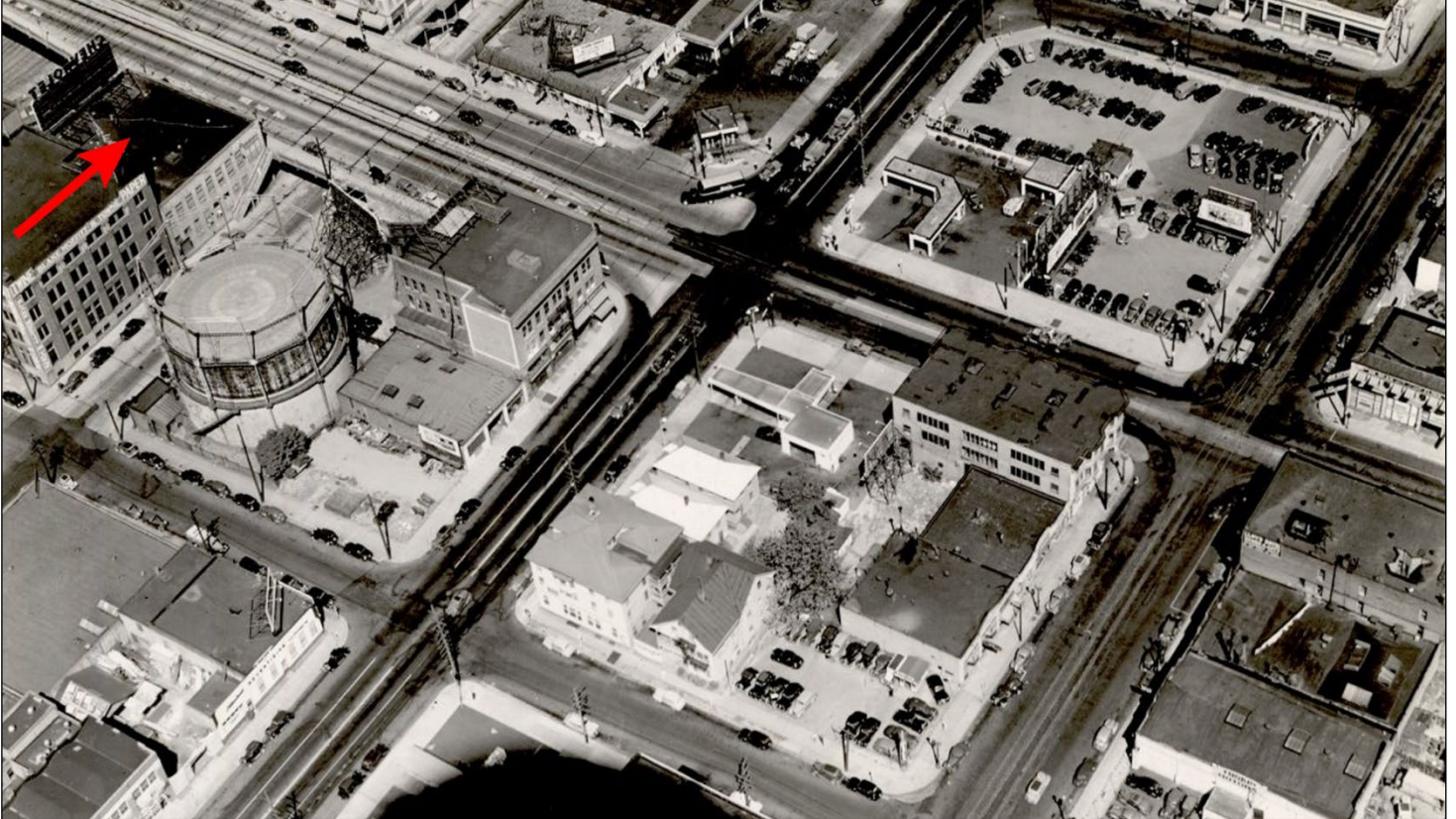


Figure 13: NE Union Avenue (Martin Luther King Jr Blvd) NE Grand Ave and E Burnside St looking northwest, December 31, 1939. Red arrow indicates the Frigidaire Building (Portland Archives, A2005-001.668).

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Figure 14: Burnside Bridge westbound, December 31, 1963. Red arrow indicates the Frigidaire Building (Portland Archives A2005-001.106).

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Figure 15: Frigidaire Building, north and west facades, oblique view looking southeast (Elizabeth O'Brien, 2019).

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Figure 16: Frigidaire Building, east and north facades, oblique view looking southwest (Elizabeth O'Brien, 2019).

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Figure 17: Frigidaire Building, detail of entrance, view looking southwest (Elizabeth O'Brien, 2019).

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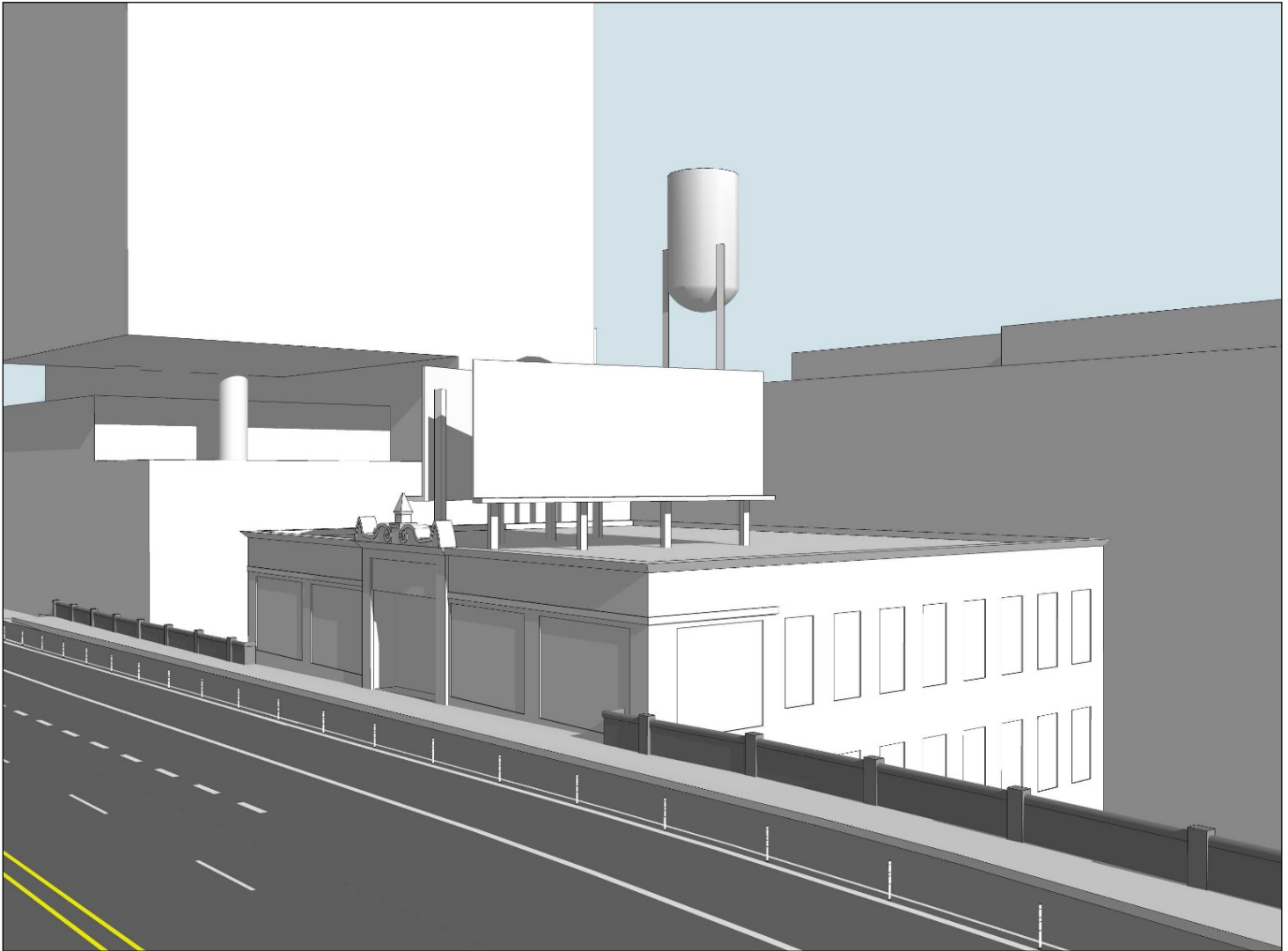


Figure 18: Frigidaire Building, artist's rendering of existing conditions (Fat Pencil Studio, 2021), oblique view looking southeast.

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Property Name: Frigidaire Building	
Street Address: 230 East Burnside Street	City, County: Portland, Multnomah

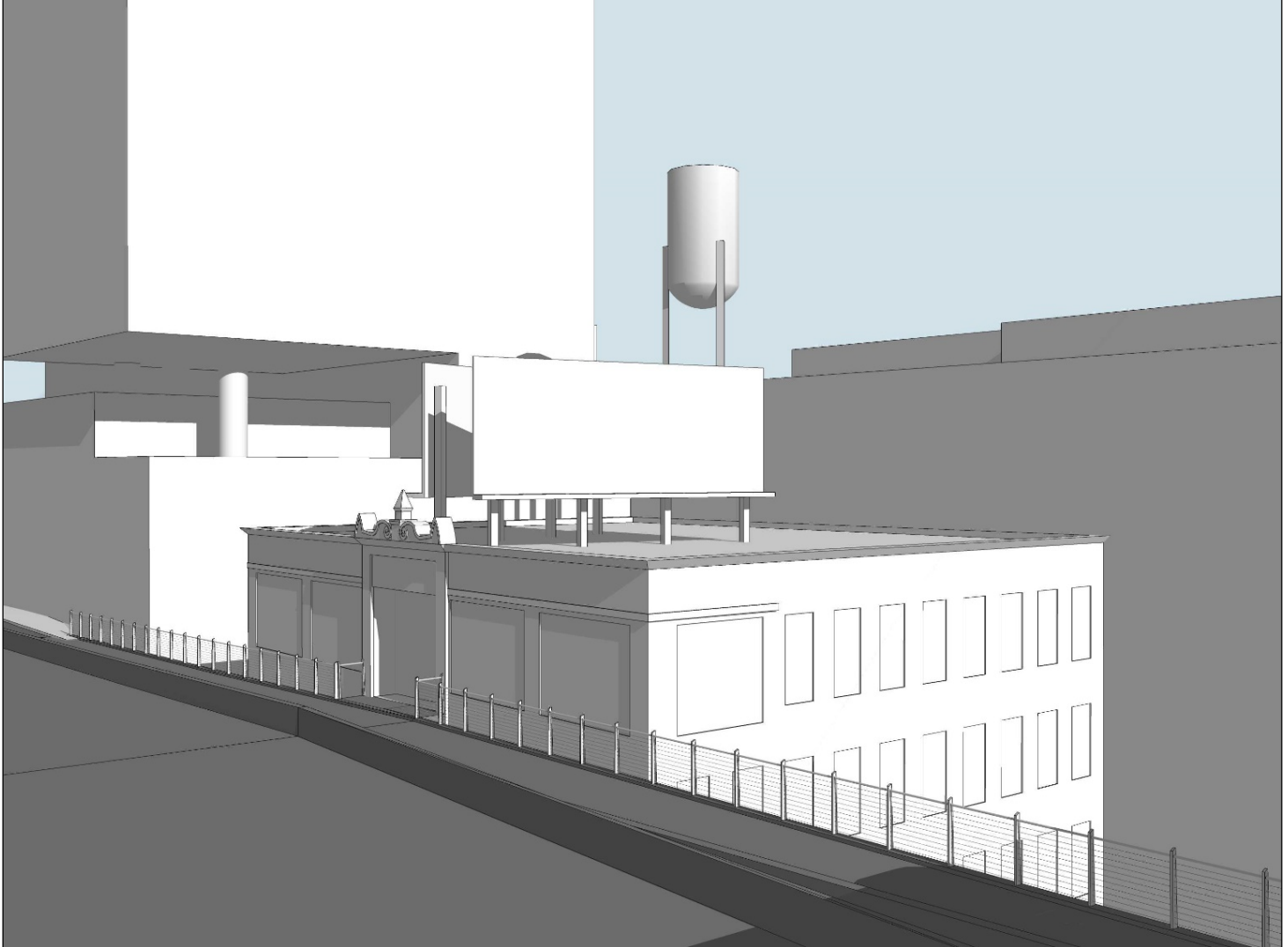


Figure 19: Frigidaire Building, artist's rendering (Fat Pencil Studio, 2021), oblique view looking southeast. This figure illustrates the condition of the building after demolition of the existing Burnside Bridge and the construction of the replacement east approach span (tied arch option).

**ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet**

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))	
Property Name: Frigidaire Building	
Street Address: 230 East Burnside Street	City, County: Portland, Multnomah

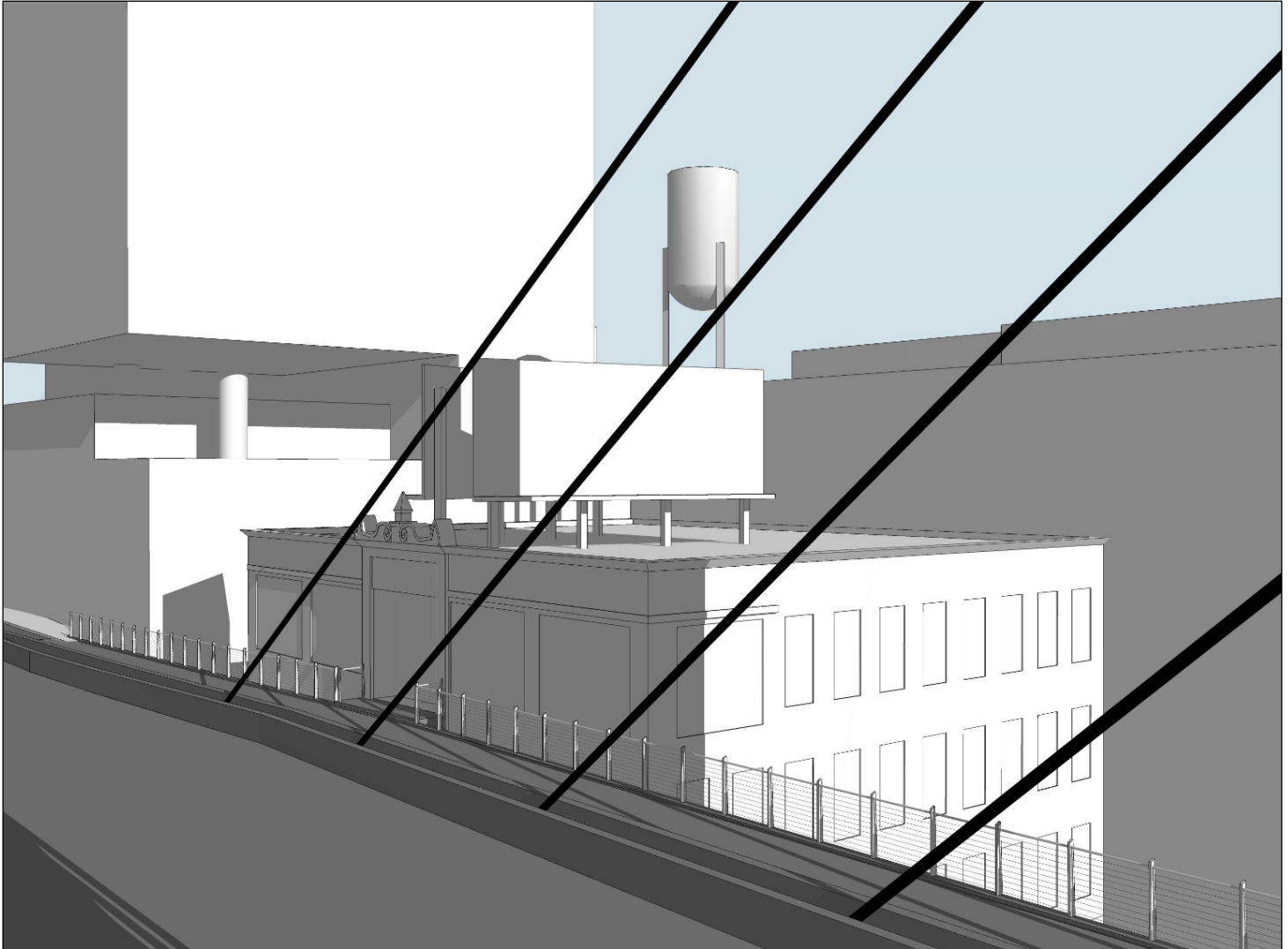


Figure 20: Frigidaire Building, artist's rendering (Fat Pencil Studio, 2021), oblique view looking southeast. This figure illustrates the condition of the building after demolition of the existing Burnside Bridge and the construction of the replacement east approach span (cable-stayed option).

**ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet**

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))	
Property Name: Frigidaire Building	
Street Address: 230 East Burnside Street	City, County: Portland, Multnomah



Figure 21: Frigidaire Building, artist's rendering of existing conditions (Fat Pencil Studio, 2021), oblique view looking southwest.

**ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet**

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))	
Property Name: Frigidaire Building	
Street Address: 230 East Burnside Street	City, County: Portland, Multnomah



Figure 22: Frigidaire Building, artist's rendering (Fat Pencil Studio, 2021), oblique view looking southwest. This figure illustrates the condition of the building after demolition of the existing Burnside Bridge and the construction of the replacement east approach span (tied arch option).

**ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet**

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))	
Property Name: Frigidaire Building	
Street Address: 230 East Burnside Street	City, County: Portland, Multnomah

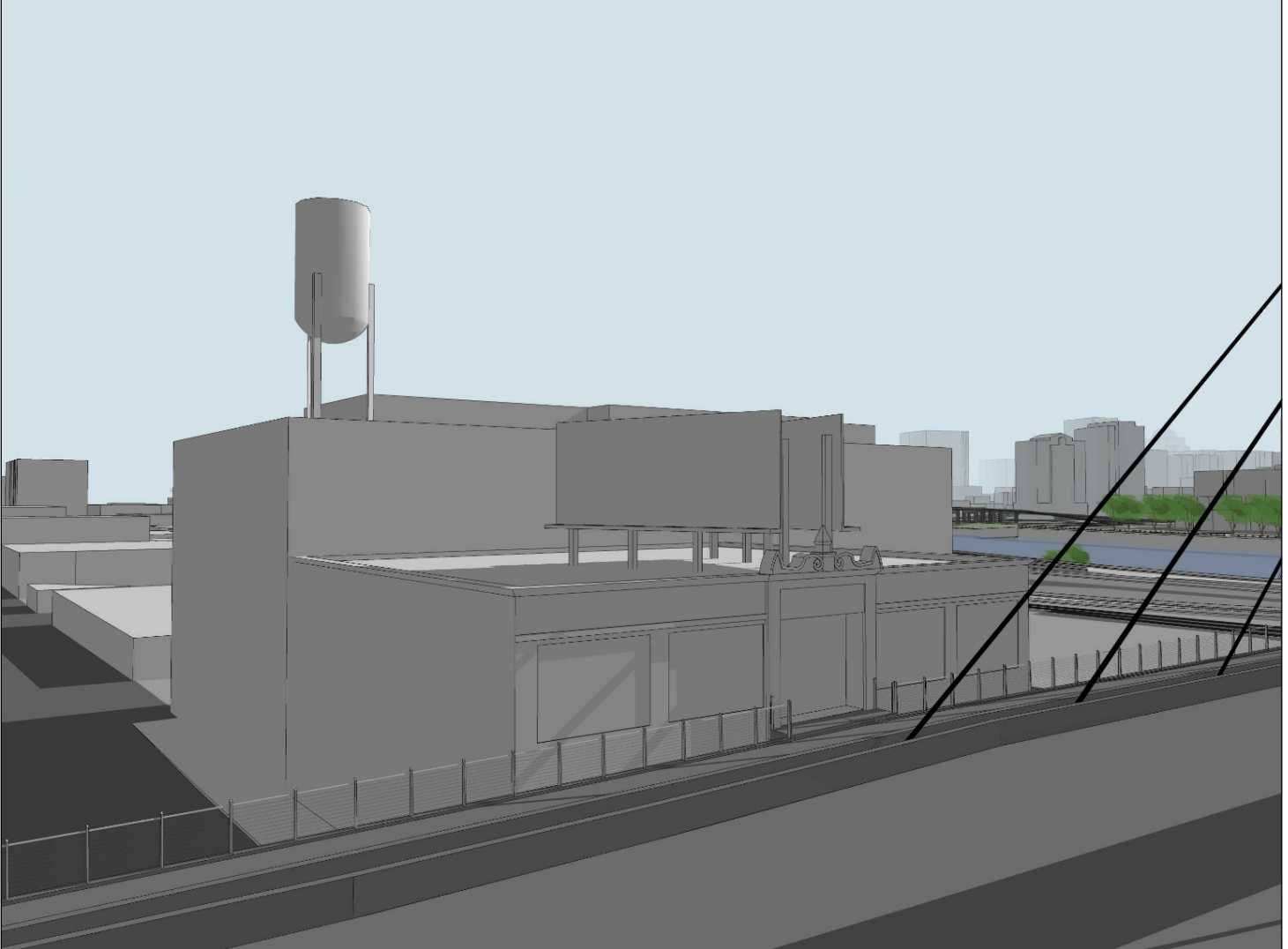


Figure 23: Frigidaire Building, artist's rendering (Fat Pencil Studio, 2021), oblique view looking southwest. This figure illustrates the condition of the building after demolition of the existing Burnside Bridge and the construction of the replacement east approach span (cable-stayed option).

ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))

Property Name: Frigidaire Building

Street Address: 230 East Burnside Street

City, County: Portland, Multnomah

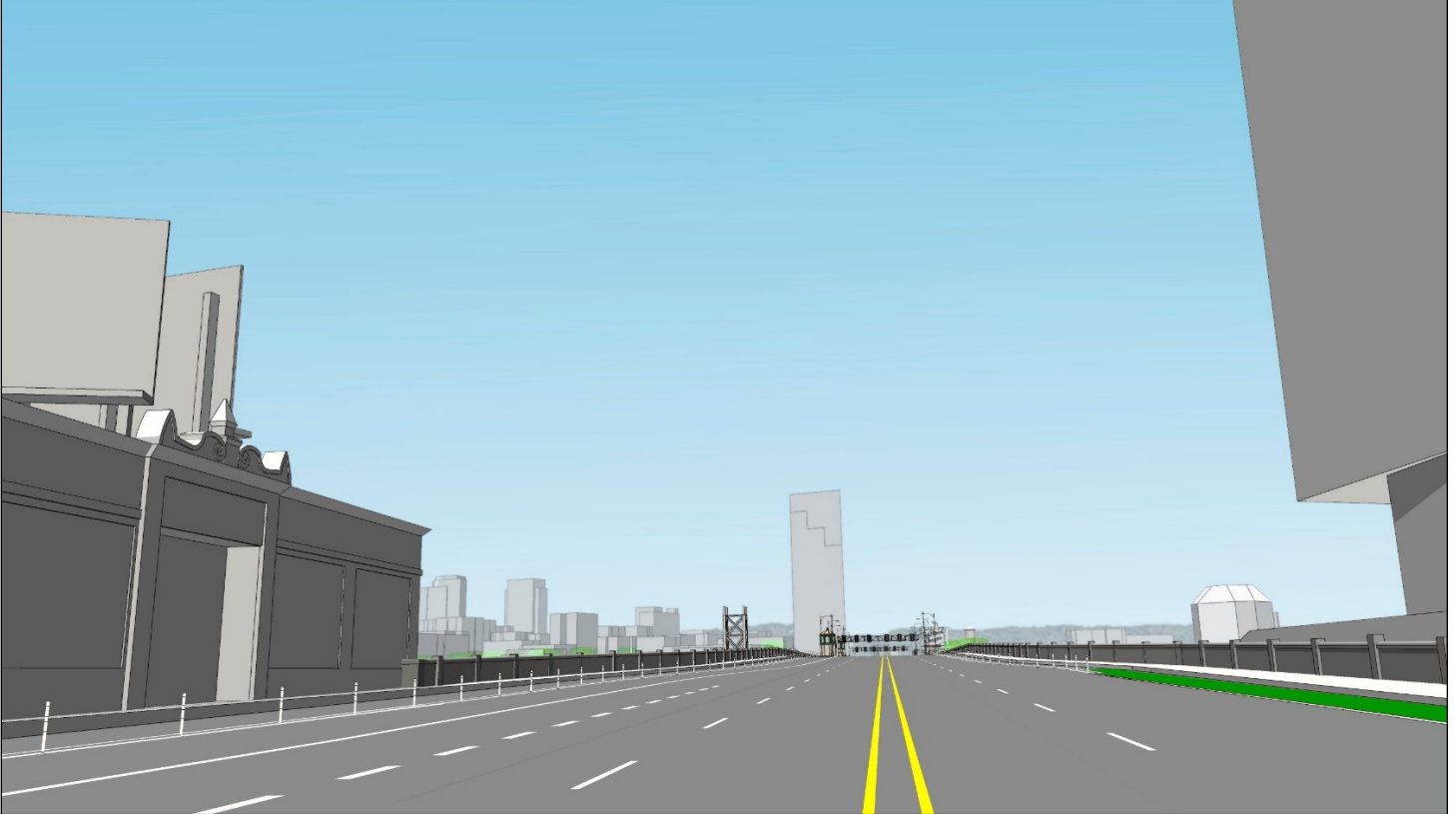


Figure 24: Frigidaire Building, artist's rendering of existing conditions (Fat Pencil Studio, 2021), view looking west.

**ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet**

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))	
Property Name: Frigidaire Building	
Street Address: 230 East Burnside Street	City, County: Portland, Multnomah



Figure 25: Frigidaire Building, artist's rendering (Fat Pencil Studio, 2021), view looking west. This figure illustrates the condition of the building after demolition of the existing Burnside Bridge and the construction of the replacement east approach span (tied arch option).

**ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet**

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))	
Property Name: Frigidaire Building	
Street Address: 230 East Burnside Street	City, County: Portland, Multnomah



Figure 26: Frigidaire Building, artist's rendering (Fat Pencil Studio, 2021), view looking west. This figure illustrates the condition of the building after demolition of the existing Burnside Bridge and the construction of the replacement east approach span (cable-stayed option).

**ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet**

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))	
Property Name: Frigidaire Building	
Street Address: 230 East Burnside Street	City, County: Portland, Multnomah

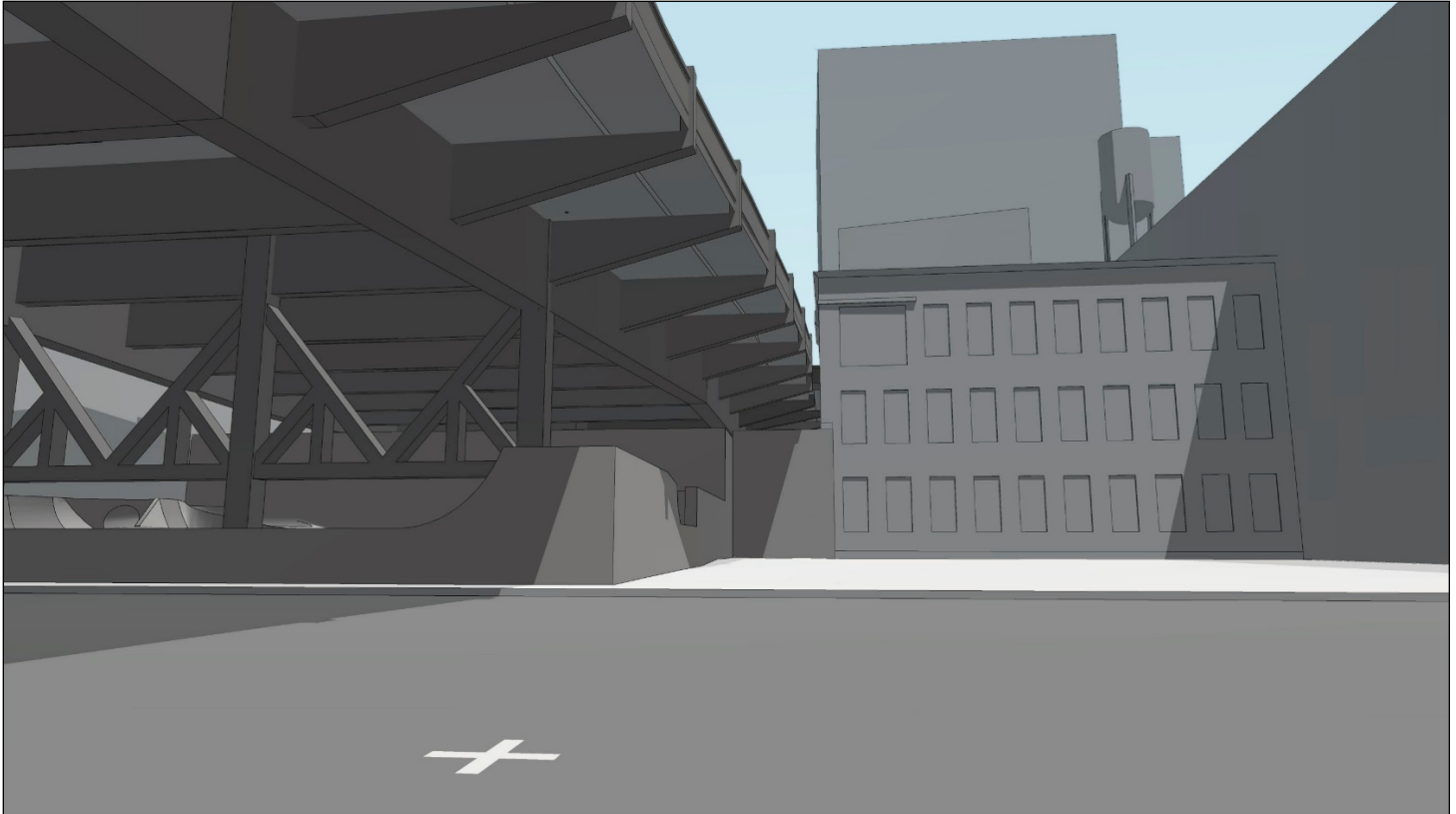


Figure 27: Frigidaire Building, artist's rendering of existing conditions (Fat Pencil Studio, 2021), view looking east.

**ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet**

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))	
Property Name: Frigidaire Building	
Street Address: 230 East Burnside Street	City, County: Portland, Multnomah

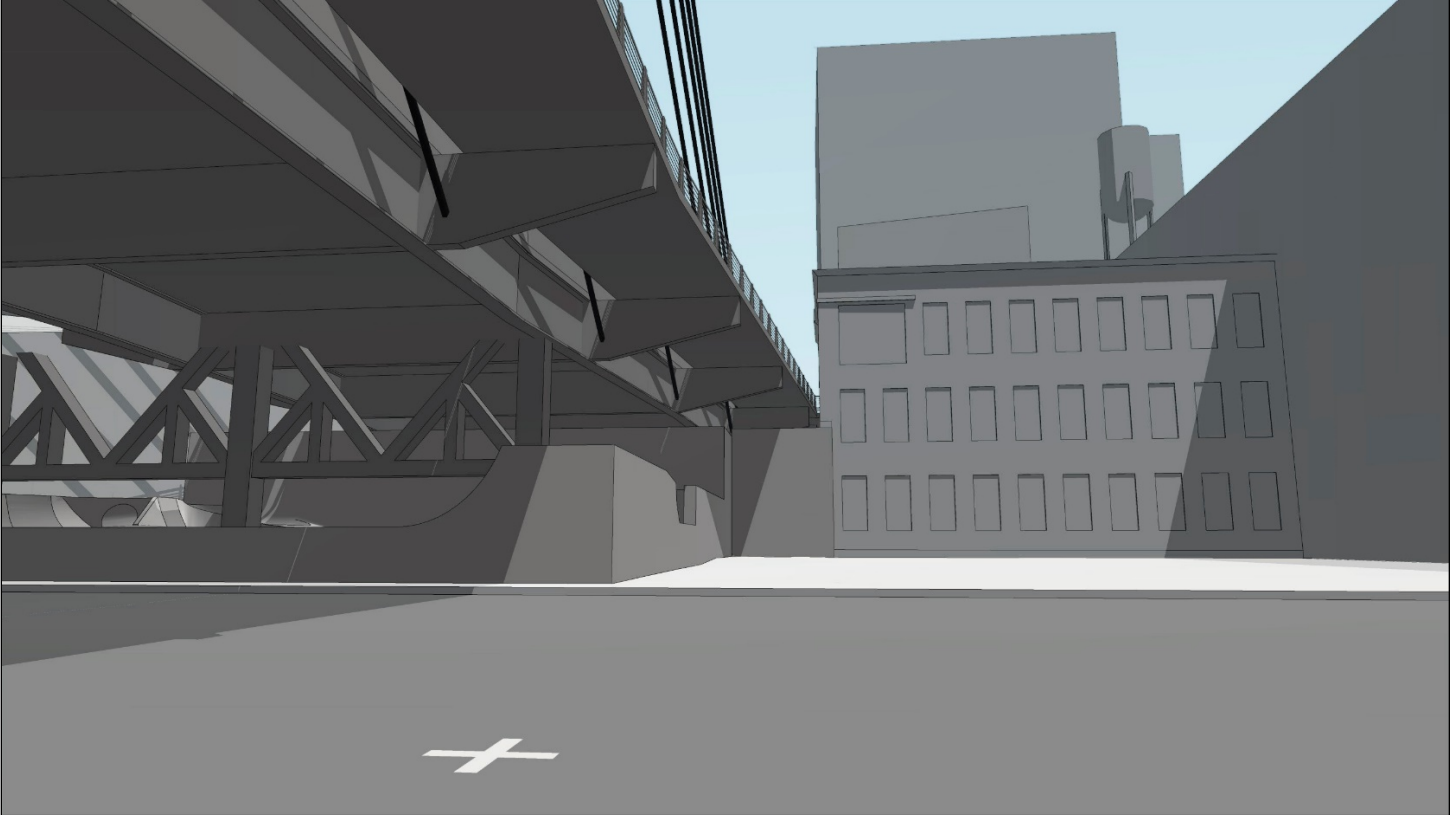


Figure 28: Frigidaire Building, artist's rendering (Fat Pencil Studio, 2021), view looking east. This figure illustrates the condition of the building after demolition of the existing Burnside Bridge and the construction of the replacement east approach span (cable-stayed option).

**ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet**

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))	
Property Name: Frigidaire Building	
Street Address: 230 East Burnside Street	City, County: Portland, Multnomah

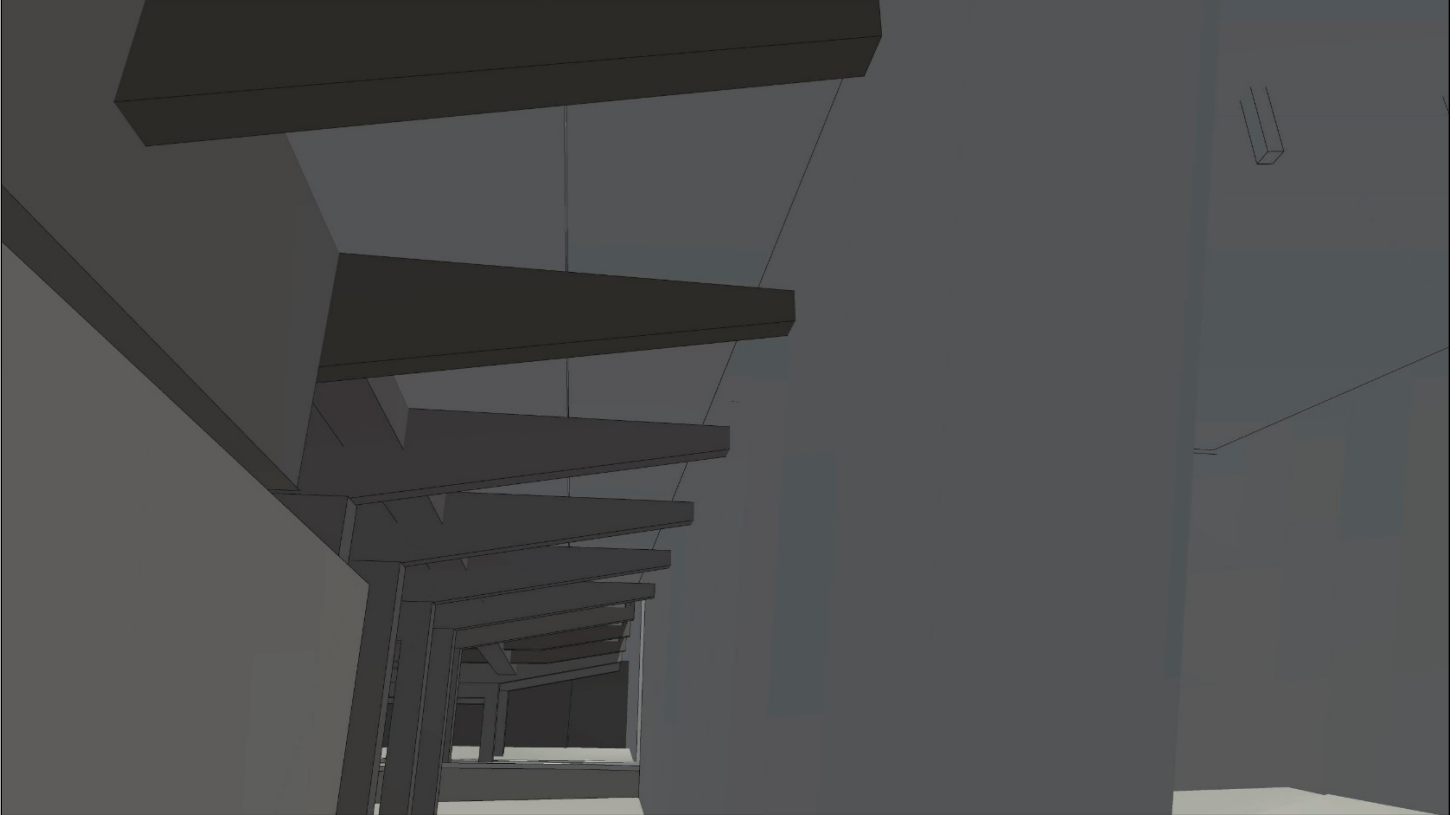


Figure 29: Frigidaire Building, artist's rendering of existing conditions (Fat Pencil Studio, 2021), view looking east.

**ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet**

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))	
Property Name: Frigidaire Building	
Street Address: 230 East Burnside Street	City, County: Portland, Multnomah



Figure 30: Frigidaire Building, artist's rendering (Fat Pencil Studio, 2021), view looking east. This figure illustrates the condition of the building after demolition of the existing Burnside Bridge and the construction of the replacement east approach span using either the tied arch or cable-stayed structure.



ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))	
Property Name: Portland Harbor Wall/Seawall	
Street Address: Foot of SW Jefferson to Foot of NW Glisan	City, County: Portland, Multnomah

Provide written description of the project, and its potential effects on the subject property per 36 CFR 800. The project and findings, as per instructions, should include:

1. Introduction

This statement of finding of effect discusses the effect of the proposed Earthquake Ready Burnside Bridge (EQRB) Project in Portland, Oregon. Willamette Cultural Resources Associates (WillametteCRA) has recommended the Portland Harbor Wall as individually eligible for listing on the National Register of Historic Places. Multnomah County is the project proponent with support from the Oregon Department of Transportation (ODOT) on behalf of the Federal Highway Administration (FHWA). It is the finding of WillametteCRA, on behalf of ODOT, that the proposed project will have no adverse effect on the Portland Harbor Wall. This statement of finding of effect is made pursuant to the requirements of the National Historic Preservation Act of 1966 (36 CFR 800), Executive Order 11593, and the National Environmental Policy Act of 1969.

2. Project Description

The proposed project is to establish a Burnside Bridge that would survive a major Cascadia Subduction Zone (CSZ) earthquake. The existing bridge would fail in such an earthquake. The Refined Long-span alternative would require replacing the existing bridge with a new bridge on the same alignment as the current bridge. The number of bents on the western approach in Waterfront Park would be reduced from four to two (existing bents would be removed only to ground level). The Portland Harbor Wall is immediately adjacent to the bridge's Pier 1. The Refined Long-span alternative would remove the uppermost portion of Pier 1. The opening left by that removal would be covered with a paved surface. This pavement would extend to the top of the riverbank, which would match the alignment of the rest of the Harbor Wall. The original Harbor Wall railing consisting of concrete panels around Pier 1 would also be removed. Other than demolition of the current approach span and construction of a new span (which includes removal of Pier 1), no other activities are proposed at this time in the vicinity of the Portland Harbor Wall.

3. Identification and Description of the Historic Resource

The Harbor Wall extends from NW Glisan Street, south to SW Jefferson Street, measuring approximately 5400-feet long. Constructed by the City of Portland in 1929, the Wall faces directly on the river except for where it was constructed around Burnside Bridge Pier 1 (constructed in 1924-1926). Regularly spaced concrete battered piers are spaced between steel railings. Wood 12" x 12" timber fenders protect the Harbor Wall from marine vessels anchored along the waterfront. Originally, concrete panels with vertical scoring and above diamond shaped impressions fit between the piers. Built by Works Progress Administration (WPA) workers in the 1930s, the concrete rails were replaced with a metal railing in the 1970s as a part of Portland's Waterfront Plan. Short stretches of the original concrete panels remain at the Ankeny Pumping Station and around Pier 1. The Harbor Wall's substructure is poured concrete and rests on a timber crib structure "filled with coarse river sand and gravel" and secured by piling (Laurgaard 1933:5). When the wall was constructed, it was built around the massive concrete pier of Burnside Bridge (Pier 1). At this location, the wall and rails retain most of their original appearance including the concrete panels, railing and a small concrete structure situated at the north corner of the wall where the wall begins to project around Pier 1. The concrete structure sits atop a massive pipe that descends into the water. The bulkhead wall was an integral part of constructing a



ODOT INVENTORY OF HISTORIC PROPERTIES
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Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))	
Property Name: Portland Harbor Wall/Seawall	
Street Address: Foot of SW Jefferson to Foot of NW Glisan	City, County: Portland, Multnomah

gravity-fed sewer and stormwater line along the waterfront, part of the interceptor plan allowing the gravity-fed line to flow in high flood stages rather than water backing up into the city business district (Hillegas-Elting 2018:39-40; Laurgaard 1933). Portland Harbor Wall is recommended eligible under Criterion A for its associations with events that have made a significant contribution to the broad patterns of our history as an important feature of the interceptor sewer system and the overall redevelopment of Portland's west waterfront during the 1920s. Completed in 1929, Portland's Harbor Wall continues to function as it was intended. The Harbor Wall is also recommended as eligible under Criterion C as an important engineering project and one of the most notable City projects associated with Portland City Engineer, Olaf Laurgaard, and also associated with his proposal known as the Laurgaard Plan that was pivotal in the redevelopment of Portland's waterfront. Portland Harbor Wall embodies distinctive characteristics of a type, methods of construction and engineering as applied by Olaf Laurgaard.

4. Undertaking Options Considered

A total of six (6) alternatives have been considered for this undertaking: two (2) no-build alternatives and four (4) build alternatives. The four (4) build alternatives included an Enhanced Seismic Retrofit Alternative and three (3) replacement alternatives. Extensive discussion and analysis of these alternatives is contained in the Supplemental Draft Environmental Impact Statement (SDEIS) of 2021. The following is a synopsis of the alternatives considered for this undertaking.

a. No-Build Alternative

Two (2) no-build alternatives were considered for this undertaking. These no-build alternatives assume that all other programmed and planned projects move forward and that the Burnside Bridge would remain seismically at risk. The first no-build scenario considered was the "No-Build Pre-Earthquake" alternative, which analyzed no-build conditions prior to a CSZ seismic event. The second no-build scenario considered was the "No-Build Post-Earthquake," which analyzed no-build conditions after a CSZ seismic event. The authors of the SDEIS concluded that the no-build alternatives would not address the acute seismic vulnerability of the existing Burnside Bridge, which is expected to be heavily damaged or completely collapse during a CSZ seismic event. The collapse of the Burnside Bridge would very likely result in a significant loss of life to people on or under the bridge during a CSZ seismic event. The loss of the Burnside Bridge would sever downtown Portland from the rest of the city on the east side of the Willamette River and would prevent emergency responders from being able to cross the river. Additionally, debris from the collapse of the Burnside Bridge would block all travel by land and water under the bridge. The loss of the Burnside Bridge due to a CSZ seismic event would hamper the long-term recovery of the city and surrounding region during the months following a major earthquake, and the potential adverse economic effects would likely persist for years.

b. Avoidance Alternative

The environmental team considered one (1) avoidance alternative. An Enhanced Seismic Retrofit Alternative was considered in lieu of the wholesale replacement of the Burnside Bridge. This alternative would partially retrofit the existing bridge and replace major structural components of the bridge to meet seismic design criteria. In this scenario, the retrofitted structural elements would be visually similar to the existing structure of the bridge, but the replacement approaches would be substantially different in appearance compared with the existing bridge. Under this scenario, the width of the bridge would be unchanged, and the modal connections at each end of the bridge would also not change. The



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Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))	
Property Name: Portland Harbor Wall/Seawall	
Street Address: Foot of SW Jefferson to Foot of NW Glisan	City, County: Portland, Multnomah

environmental team made a preliminary analysis of potential effects to the NRHP-listed Burnside Bridge due to the Enhanced Seismic Retrofit Alternative scope of work. The team applied the Section 106 criteria of adverse effect and found that this potential scope of work would result in adverse effects to the NRHP-listed Burnside Bridge.

c. Proposed Undertaking

Three (3) build alternatives were considered for the proposed undertaking. Of these three alternatives, the Refined Long-span alternative would replace the existing bridge with a new bridge. This would necessitate the demolition of the existing Burnside Bridge.

5. Evaluation of Effects

The proposed Refined Long-span alternative would involve construction of a new bridge on the same alignment of the current bridge. The uppermost portion of the adjacent Pier 1 would be removed. The associated sunken area would be capped but would otherwise be left open under the cap. This would affect approximately 150 linear feet of the Harbor Wall, or approximately 3% of the entire Harbor Wall. Although this is the only portion of the Harbor Wall that deviates from the linear character of the rest of the wall, it is not an essential design element but was constructed only to address the “obstruction” of Pier 1. According to 36 CFR Part 800.5(a)(1), adverse effects occur when an undertaking directly or indirectly alters characteristics of a historic property that qualify it for inclusion in the NRHP; future and cumulative effects of the undertaking also need to be considered. An example listed in 800.5(a)(2) is “visual, atmospheric, or audible intrusions” (36 CFR 800.5). The undertaking will not affect the integrity of location, design, materials, feeling, workmanship, and association of the Portland Harbor Wall. Removal of Pier 1 would make the Harbor Wall constructed around the pier more visible. Replacing four bents with two would alter the setting, providing a more open view from Harbor Wall to the west. In sum, the project will have No Adverse Effect on the Portland Harbor Wall historic property.

6. Coordination and Public Output

The Earthquake Ready Burnside Bridge Project has been the subject of public meetings since 2016. Multnomah County has established a Community Task Force in October 2018, which continues to meet regularly. Meetings of Section 106 Consulting Parties have been meeting regularly since December 2020. Draft technical reports to address NHPA and NEPA requirements have been circulated for review by representatives of the SHPO, City of Portland, and ODOT. There has also been coordination with the Portland Historic Landmarks Commission, which is a CLG.

7. Conclusion

It is the recommendation of WillametteCRA, on behalf of ODOT, that the proposed Refined Long-span alternative would not adversely affect the Portland Harbor Wall’s eligibility for listing under Criteria A and C nor its integrity. WillametteCRA recommends a Finding of No Adverse Effect for this historic property.

8. Sources

Laurgaard, Olaf

1933 *Treatise on the Design, Test & Construction of the Front St. Intercepting Sewer and Drainage System in Portland, Oregon, Including Intercepting Sewer, Pumping Plant, & Concrete Bulkhead-Wall on Gravel filled Timber Cribs*. American Society of Civil Engineers, New York.



ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
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Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

ODOT Key Number: XXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))

Property Name: Portland Harbor Wall/Seawall

Street Address: Foot of SW Jefferson to Foot of NW Glisan

City, County: Portland, Multnomah

Maps and Figures

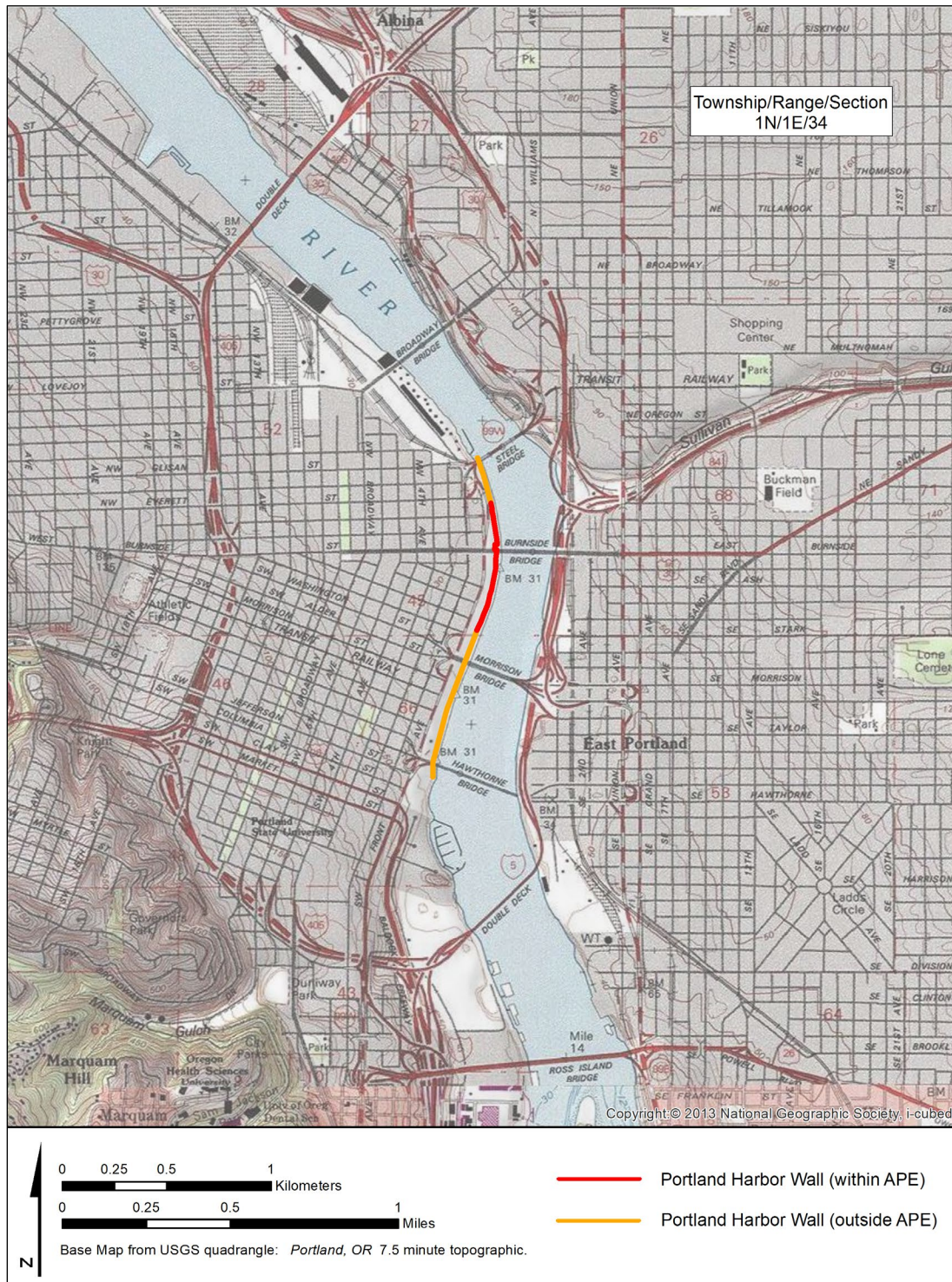


Figure 1. Location map.

**ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet**

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))

Property Name: Portland Harbor Wall/Seawall

Street Address: Foot of SW Jefferson to Foot of NW Glisan

City, County: Portland, Multnomah

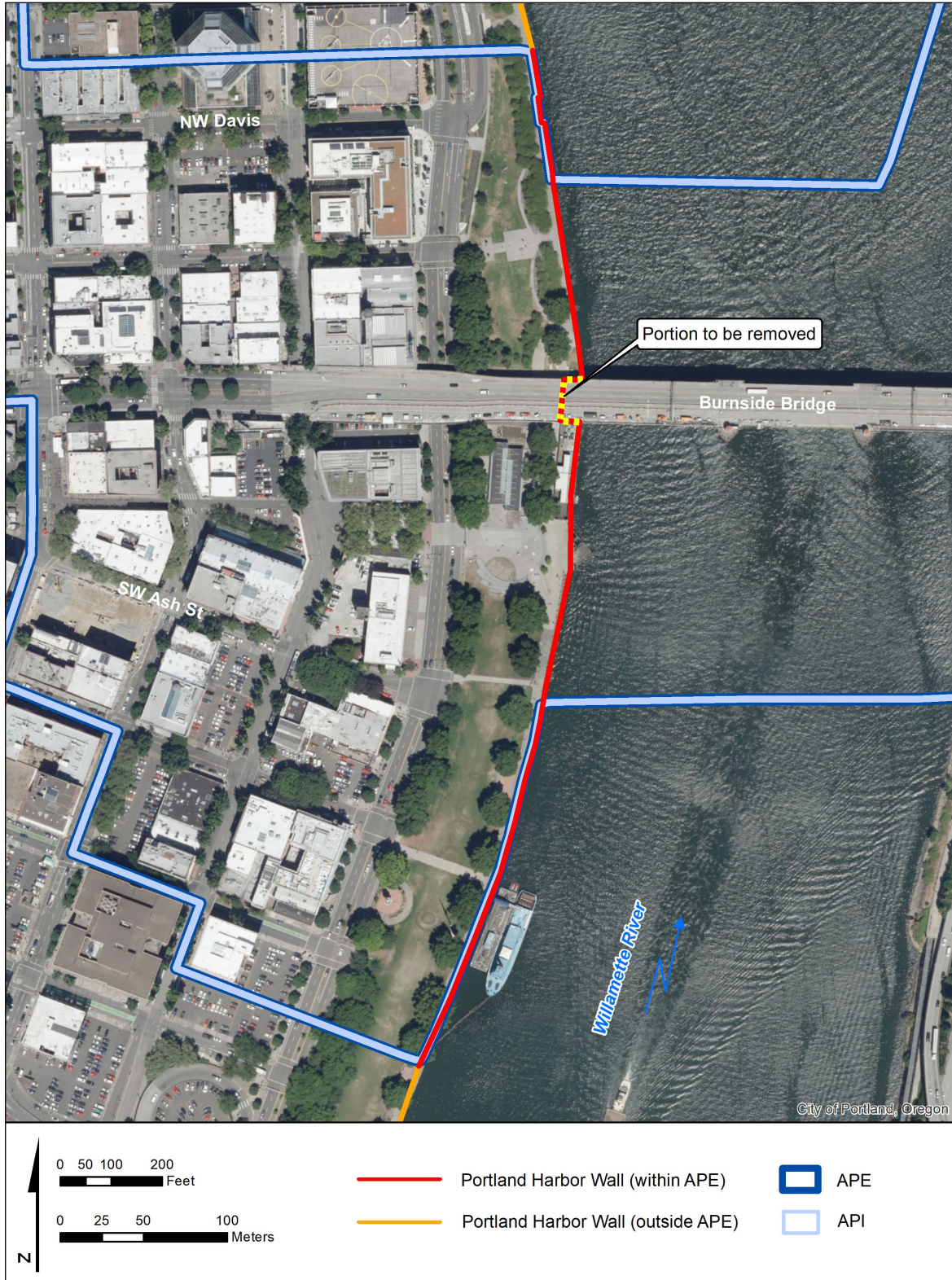


Figure 2. Portland Harbor Wall within the EQRB API & APE.

ODOT INVENTORY OF HISTORIC PROPERTIES
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Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))

Property Name: Portland Harbor Wall/Seawall

Street Address: Foot of SW Jefferson to Foot of NW Glisan

City, County: Portland, Multnomah

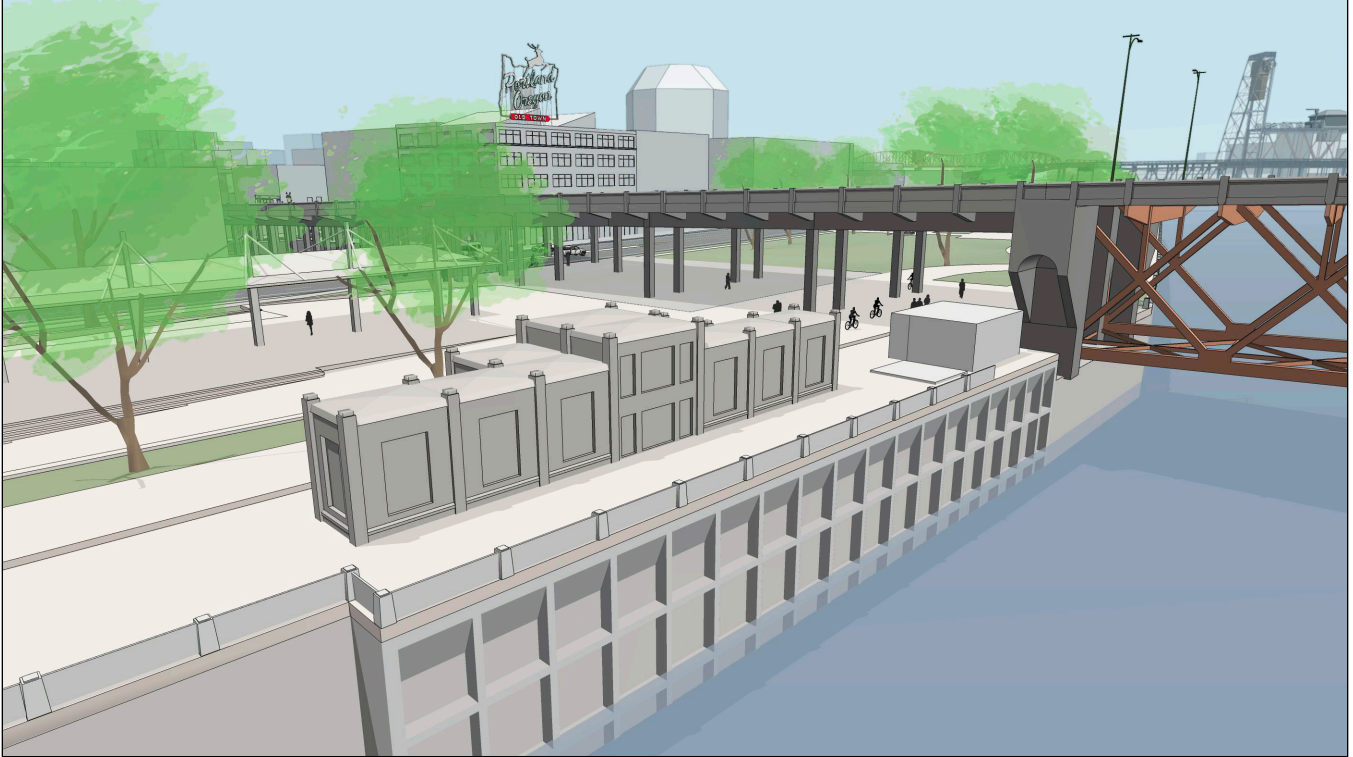


Figure 3. Portland Harbor Wall, artist's rendering of existing conditions (Fat Pencil Studio, 2021), oblique view looking northwest.

**ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet**

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))

Property Name: Portland Harbor Wall/Seawall

Street Address: Foot of SW Jefferson to Foot of NW Glisan

City, County: Portland, Multnomah

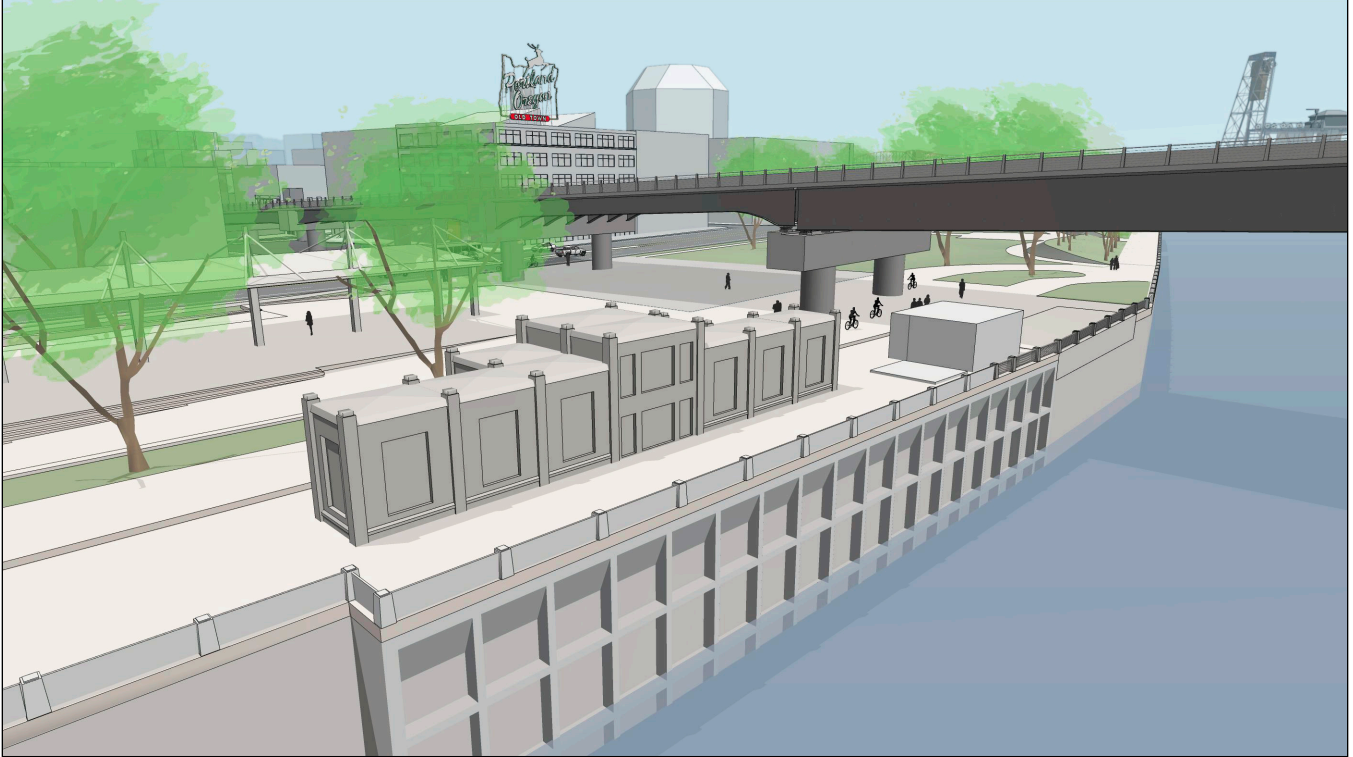


Figure 4. Portland Harbor Wall, artist's rendering (Fat Pencil Studio, 2021), oblique view looking northwest. This figure illustrates the condition of the Portland Harbor Wall after demolition of the existing Burnside Bridge, removal of Pier 1, and replacement of the west approach with a girder span.

ODOT INVENTORY OF HISTORIC PROPERTIES
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Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))	
Property Name: Portland Harbor Wall/Seawall	
Street Address: Foot of SW Jefferson to Foot of NW Glisan	City, County: Portland, Multnomah

Photographs



Figure 5. Portland Harbor Wall, facing north from the Burnside Bridge, with the current railings (David Ellis, 2021).



Figure 6. Portland Harbor Wall, facing south from the Burnside Bridge (David Ellis, 2021).

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Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))

Property Name: Portland Harbor Wall/Seawall

Street Address: Foot of SW Jefferson to Foot of NW Glisan

City, County: Portland, Multnomah



Figure 8. Harbor Wall under construction in 1929, looking north to the Burnside Bridge (Portland City Archives).



Figure 9. The Harbor Wall looking north to the Burnside Bridge. Although undated, it is probably from early 1930s before railings were installed (Oregon Historical Society: Oregon Journal Negative Collection; Org. Lot 1368; Box 371; 0371N5334).

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SECTION 106 LEVEL OF EFFECT FORM
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Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))

Property Name: Portland Harbor Wall/Seawall

Street Address: Foot of SW Jefferson to Foot of NW Glisan

City, County: Portland, Multnomah



Figure 10. Harbor Wall reinforced in response to the June 1948 flood, looking north to the Burnside Bridge (Portland City Archives).



Figure 11. Portland Harbor Wall constructed around Burnside Bridge Pier 1, facing southeast. The original concrete railing panels surround Pier 1 (Elizabeth O'Brien, 2019).

**ODOT INVENTORY OF HISTORIC PROPERTIES
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Agency/Project: Oregon Department of Transportation/Earthquake Ready Burnside Bridge		
ODOT Key Number: :XXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))		
Property Name: Reed Building	Street Address: 16-28 SW First Avenue/45 SW Ankeny Street	
City, County: Portland, Multnomah	Latitude: 45.522554 Longitude: (-) 122.671297	
Surveyor: Adam S. Alsobrook	Affiliation: WillametteCRA	Date Recorded: 08/25/2021

Photo:



Photo Caption: Reed Building, view looking northeast (Elizabeth O'Brien, 2019).

Preliminary Finding of Effect:

☐ No Historic Properties Affected
 ☒ No Historic Properties Adversely Affected
 ☐ Historic Properties Adversely Affected

State Historic Preservation Office Comments:

☐ Concur
 ☐ Do Not Concur:
 ☐ No Historic Properties Affected
 ☐ No Historic Properties Adversely Affected
☐ Historic Properties Adversely Affected

Signed: _____ Date: _____

Comments:



ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))	
Property Name: Reed Building	
Street Address: 45 SW Ankeny Street	City, County: Portland, Multnomah

Provide written description of the project, and its potential effects on the subject property per 36 CFR 800. The project and findings, as per instructions, should include:

1. Introduction

This statement of finding of effect discusses the effect of the proposed Earthquake Ready Burnside Bridge (EQRB) Project in Portland, Oregon. The Reed Building (also known as the Packer-Scott Building) at 16-28 SW First Avenue/45 SW Ankeny Street is a contributing resource in the Skidmore/Old Town Historic District, which was listed in the National Register of Historic Places (NRHP) in 1975 and designated as a National Historic Landmark (NHL) in 1977. Multnomah County is the project proponent with support from the Oregon Department of Transportation (ODOT) on behalf of the Federal Highway Administration (FHWA). Historical Research Associates, Inc. (HRA) prepared the original findings that have since been updated by WillametteCRA with the current Alignment Alternatives information on behalf of the Oregon Department of Transportation (ODOT). It is the finding of WillametteCRA, on behalf of ODOT, that the proposed project will have no adverse effect on the Reed Building. This statement of finding of effect is made pursuant to the requirements of the National Historic Preservation Act of 1966 (36 CFR 800), Executive Order 11593, and the National Environmental Policy Act of 1969.

2. Project Description

The proposed project is to establish a Burnside Bridge that would survive a major Cascadia Subduction Zone (CSZ) earthquake. The existing bridge would fail in such an earthquake. The Refined Long-span alternative would replace the existing bridge with a new bridge on the same alignment as the current bridge.

3. Identification and Description of the Historic Resource

The Reed Building (also known as the Packer-Scott Building) at 16-28 SW First Avenue/45 SW Ankeny Street is located at the northeast corner of SW First Avenue and SW Ankeny Street (Portland Maps) (Figures 1 through 4). The four-story, brick and stone masonry building was designed by architects Whidden & Lewis in the Richardsonian Romanesque style and constructed in 1890. The building was constructed for use as a wholesale warehouse. Two other buildings were once located to the north of the Reed Building along the south side of the west approach span of the Burnside Bridge, however, these buildings were removed between 1960 and 1970. A surface parking lot is currently located on the site of these two buildings (Figures 5, 6, 10, 11, and 12). An addition was constructed on the east side of the Reed Building in 2008. The north facades of the original 1890 Reed Building and the 2008 Mercy Corps addition are located approximately 25 feet to the south of the existing west approach span of the Burnside Bridge. The southernmost edge of the replacement west approach span will be located approximately 10 to 15 feet to the north of the present south guardrail of the bridge, which will increase the existing separation between the buildings and the west approach span (Figures 13 through 22).

4. Undertaking Options Considered

A total of six (6) alternatives have been considered for this undertaking: two (2) no-build alternatives and four (4) build alternatives. The four (4) build alternatives included an Enhanced Seismic Retrofit Alternative and three (3) replacement alternatives. Extensive discussion and analysis of these alternatives is contained in the Supplemental Draft Environmental Impact Statement (SDEIS) of 2021. The following is a synopsis of the alternatives considered for this undertaking.



ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))	
Property Name: Reed Building	
Street Address: 45 SW Ankeny Street	City, County: Portland, Multnomah

a. No-Build Alternative

Two (2) no-build alternatives were considered for this undertaking. These no-build alternatives assume that all other programmed and planned projects move forward and that the Burnside Bridge would remain seismically at risk. The first no-build scenario considered was the “No-Build Pre-Earthquake” alternative, which analyzed no-build conditions prior to a CSZ seismic event. The second no-build scenario considered was the “No-Build Post-Earthquake,” which analyzed no-build conditions after a CSZ seismic event. The authors of the SDEIS concluded that the no-build alternatives would not address the acute seismic vulnerability of the existing Burnside Bridge, which is expected to be heavily damaged or completely collapse during a CSZ seismic event. The collapse of the Burnside Bridge would very likely result in a significant loss of life to people on or under the bridge during a CSZ seismic event. The loss of the Burnside Bridge would sever downtown Portland from the rest of the city on the east side of the Willamette River and would prevent emergency responders from being able to cross the river. Additionally, debris from the collapse of the Burnside Bridge would block all travel by land and water under the bridge. The loss of the Burnside Bridge due to a CSZ seismic event would hamper the long-term recovery of the city and surrounding region during the months following a major earthquake, and the potential adverse economic effects would likely persist for years.

b. Avoidance Alternative

The environmental team considered one (1) avoidance alternative. An Enhanced Seismic Retrofit Alternative was considered in lieu of the wholesale replacement of the Burnside Bridge. This alternative would partially retrofit the existing bridge and replace major structural components of the bridge to meet seismic design criteria. In this scenario, the retrofitted structural elements would be visually similar to the existing structure of the bridge, but the replacement approaches would be substantially different in appearance compared with the existing bridge. Under this scenario, the width of the bridge would be unchanged, and the modal connections at each end of the bridge would also not change. The environmental team made a preliminary analysis of potential effects to the NRHP-listed Burnside Bridge due to the Enhanced Seismic Retrofit Alternative scope of work. The team applied the Section 106 criteria of adverse effect and found that this potential scope of work would result in adverse effects to the NRHP-listed Burnside Bridge.

c. Proposed Undertaking

Three (3) build alternatives were considered for the proposed undertaking. Of these three alternatives, the Refined Long-span alternative would replace the existing bridge with a new bridge on the same alignment as the current bridge. This would necessitate the demolition of the existing Burnside Bridge.

5. Evaluation of Effects

Location: The proposed replacement of the Burnside Bridge will not require the Reed Building to be relocated or removed, therefore, the undertaking will have no effect to the resource’s integrity of location.

Setting: The proposed new approach span will be more distant from the north face of the Reed Building but will not otherwise alter the setting as that span will be on the same alignment and at the same elevation as the current span. Therefore, the setting of the Reed Building would not be adversely affected by the proposed undertaking.



ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))	
Property Name: Reed Building	
Street Address: 45 SW Ankeny Street	City, County: Portland, Multnomah

Design: The proposed replacement of the Burnside Bridge will not alter the physical form, structure, and style of the Reed Building; therefore, the undertaking will have no effect to the resource's integrity of design.

Materials: The proposed replacement of the Burnside Bridge will not damage, remove, or destroy physical elements of the Reed Building, therefore, the undertaking will have no effect to the resource's integrity of materials.

Workmanship: The proposed replacement of the Burnside Bridge will not damage, remove, or destroy physical evidence of the historic construction techniques used to build the Reed Building, therefore, the undertaking will have no effect to the resource's integrity of workmanship.

Feeling: The proposed replacement of the Burnside Bridge will not alter the physical features which collectively convey the historic character of the Reed Building; therefore, the undertaking will have no effect to the resource's integrity of feeling.

Association: The proposed replacement of the Burnside Bridge will not diminish or eliminate the direct link that the Reed Building has to important historic events or persons significant to our past, therefore, the undertaking will have no effect to the resource's integrity of association.

6. Coordination and Public Output

The Earthquake Ready Burnside Bridge project has been the subject of public meetings since 2016. Multnomah County has established a Community Task Force in October 2018, which continues to meet regularly. Meetings of the Section 106 Consulting Parties have been meeting regularly since December 2020. Draft technical reports to address NHPA and NEPA requirements have been circulated for review by representatives of the SHPO, City of Portland, and ODOT. There has also been coordination with the Portland Historic Landmarks Commission, which is a CLG.

7. Conclusion

In summary, the Refined Long-span alternative would necessitate the complete replacement of the existing Burnside Bridge with new approach and main spans. The replacement of the existing west approach span of the Burnside Bridge would have no adverse effect to the Reed Building for either direct or indirect effects.

8. Sources

EarthExplorer

1951 Aerial Photograph, Entity ID 1QO0000020014, 25 October. United States Geological Survey. Electronic resource, <https://earthexplorer.usgs.gov/>, accessed August 2021.

Google Earth

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ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))	
Property Name: Reed Building	
Street Address: 45 SW Ankeny Street	City, County: Portland, Multnomah

National Register of Historic Places (NRHP)

2008 National Historic Landmark Nomination (Revised Documentation), Skidmore/Old Town Historic District, Portland, Multnomah County, Oregon. Oregon Historic Sites Database. Electronic resource, <https://heritagedata.prd.state.or.us/historic/>, accessed August 2021.

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1935a “Aerial of Downtown Portland including Burnside, Steel and Broadway Bridges.” City of Portland Auditor’s Office, Archives and Records Management, PARC Accession Number A2005-005.1449.10, Record Number AP/476. Electronic resource, <https://efiles.portlandoregon.gov/Record/2043501/>, accessed August 2021.

1935b “Aerial view of the downtown waterfront near the Burnside and Steel Bridges.” City of Portland Auditor’s Office, Archives and Records Management, PARC Accession Number 2000-03, Record Number AP/666. Electronic resource, <https://efiles.portlandoregon.gov/Record/2298287/>, accessed August 2021.

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2021 “101-117 W Burnside St.” Electronic resource, https://www.portlandmaps.com/detail/property/101-117-W-BURNSIDE-ST/R140343_did/, accessed August 2021.

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1908a Sanborn Fire Insurance Map from Portland, Multnomah County, Oregon. Volume 1, 1908-1909 (1908), Sheet 74. Electronic resource, https://www.loc.gov/item/sanborn07439_006/, accessed August 2021.

1908b Sanborn Fire Insurance Map from Portland, Multnomah County, Oregon. Volume 1, 1908-1909 (1908), Sheet 75. Electronic resource, https://www.loc.gov/item/sanborn07439_006/, accessed August 2021.

1950a Sanborn Fire Insurance Map from Portland, Multnomah County, Oregon. Volume 1, 1908-April 1950, Sheet 74. Electronic resource, https://www.loc.gov/item/sanborn07439_021/, accessed August 2021.

1950b Sanborn Fire Insurance Map from Portland, Multnomah County, Oregon. Volume 1, 1908-April 1950, Sheet 75. Electronic resource, https://www.loc.gov/item/sanborn07439_021/, accessed August 2021.

United States Geological Survey (USGS)

1990 “Portland, OR Quadrangle, 7.5 Minute.” TopoView. Electronic resource, <https://ngmdb.usgs.gov/topoview/>, accessed August 2021.

**ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet**

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))

Property Name: Reed Building

Street Address: 45 SW Ankeny Street

City, County: Portland, Multnomah

Maps and Figures

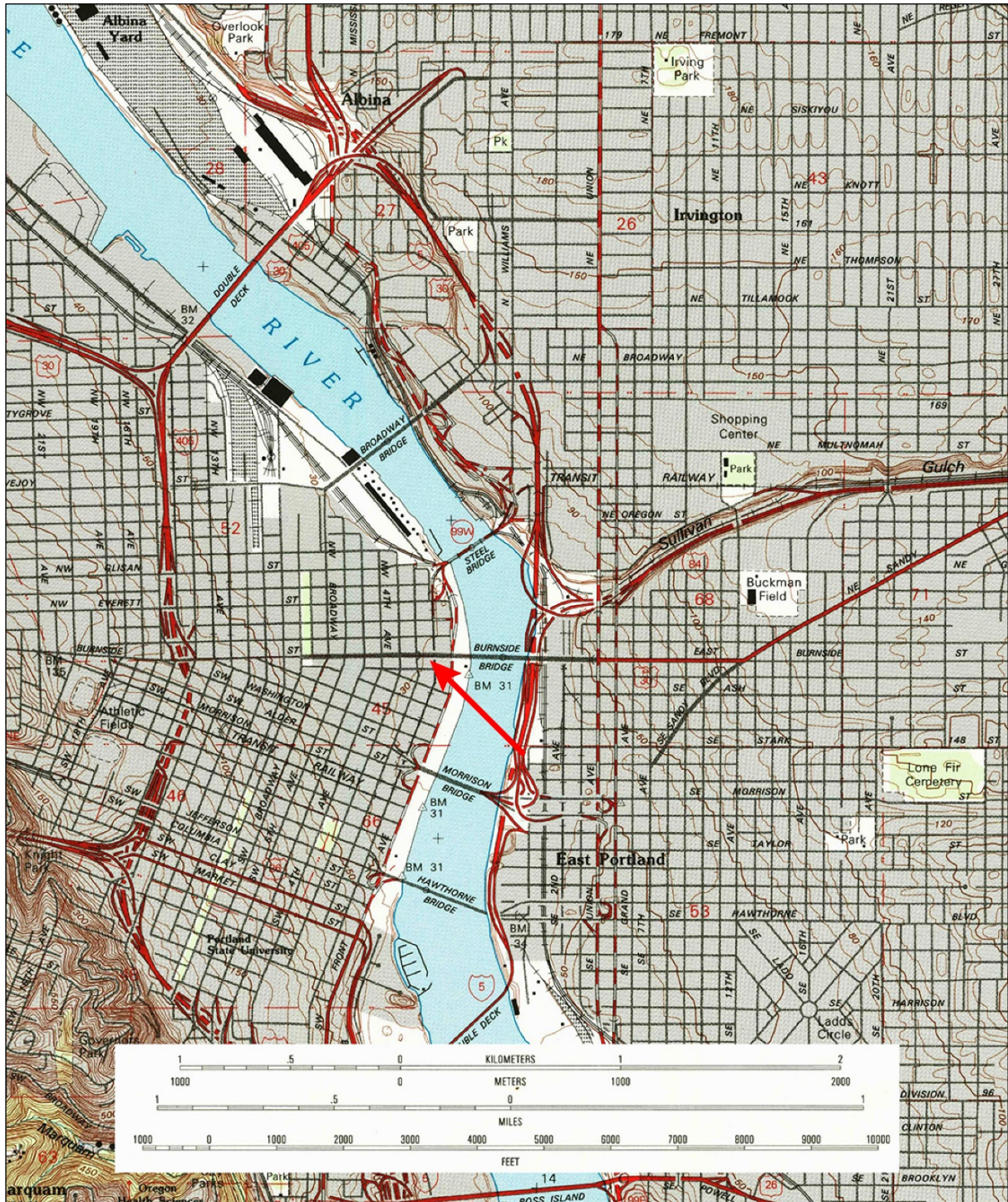


Figure 1: USGS, Portland, OR Quadrangle, 7.5 Minute, 1990. Red arrow indicates location of the Reed Building (USGS).



ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))

Property Name: Reed Building

Street Address: 45 SW Ankeny Street

City, County: Portland, Multnomah



Figure 3: Aerial photograph with location of the Reed Building indicated by red line (Google Earth).



ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))

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Street Address: 45 SW Ankeny Street

City, County: Portland, Multnomah



Figure 4: 1951 aerial photograph with location of the Reed Building indicated by red line (USGS EarthExplorer).

**ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet**

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

ODOT Key Number: XXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))

Property Name: Reed Building

Street Address: 45 SW Ankeny Street

City, County: Portland, Multnomah

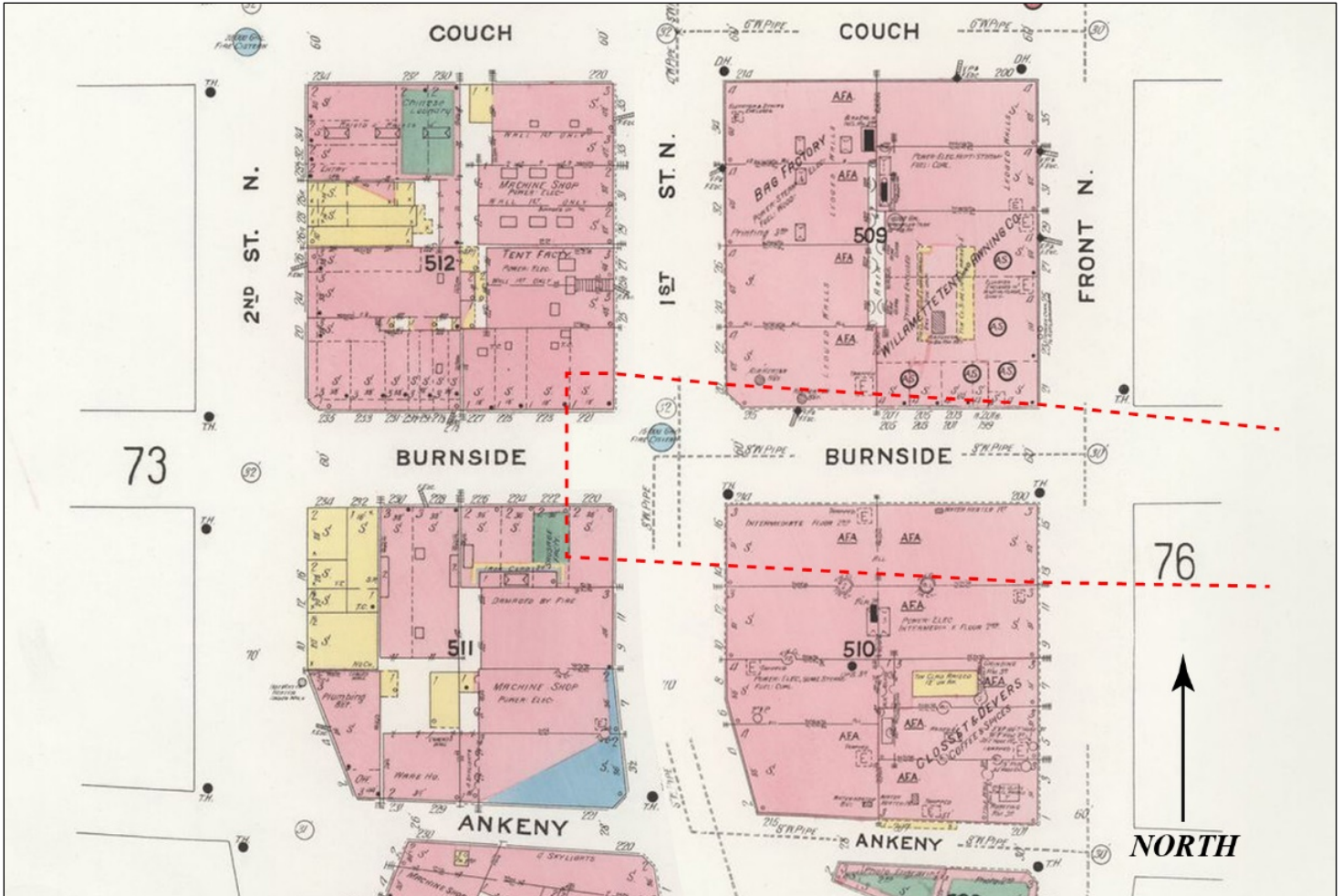


Figure 5: Sanborn maps, Volume 1, 1908. Mosaic of Sheet 74 (left two blocks) and Sheet 75 (right two blocks). Dashed red line indicates footprint of existing Burnside Bridge (Library of Congress).

**ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet**

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))

Property Name: Reed Building

Street Address: 45 SW Ankeny Street

City, County: Portland, Multnomah

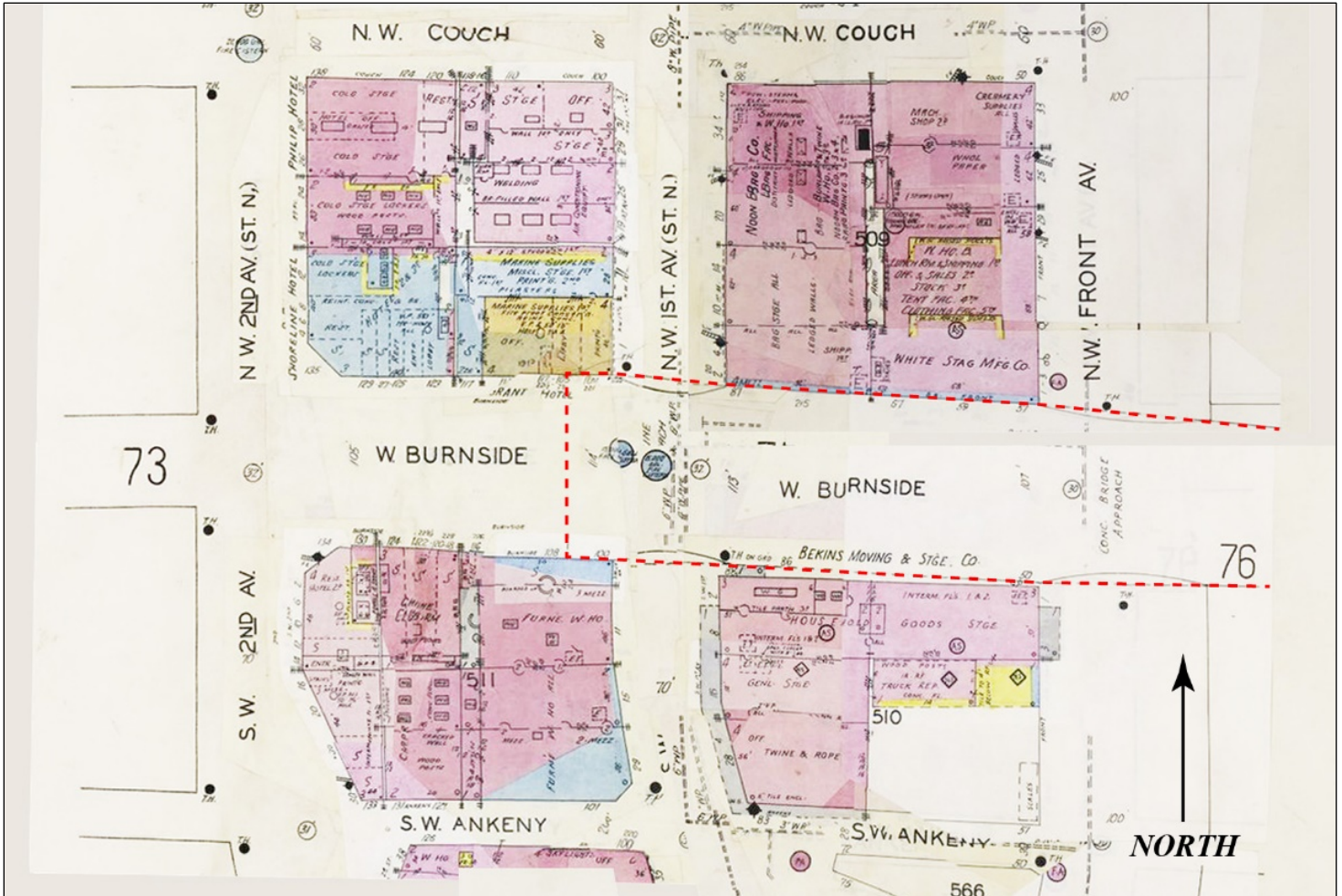


Figure 6: Sanborn maps, Volume 1, 1950. Mosaic of Sheet 74 (left two blocks) and Sheet 75 (right two blocks). Dashed red line indicates footprint of existing Burnside Bridge (Library of Congress).

ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))

Property Name: Reed Building

Street Address: 45 SW Ankeny Street

City, County: Portland, Multnomah

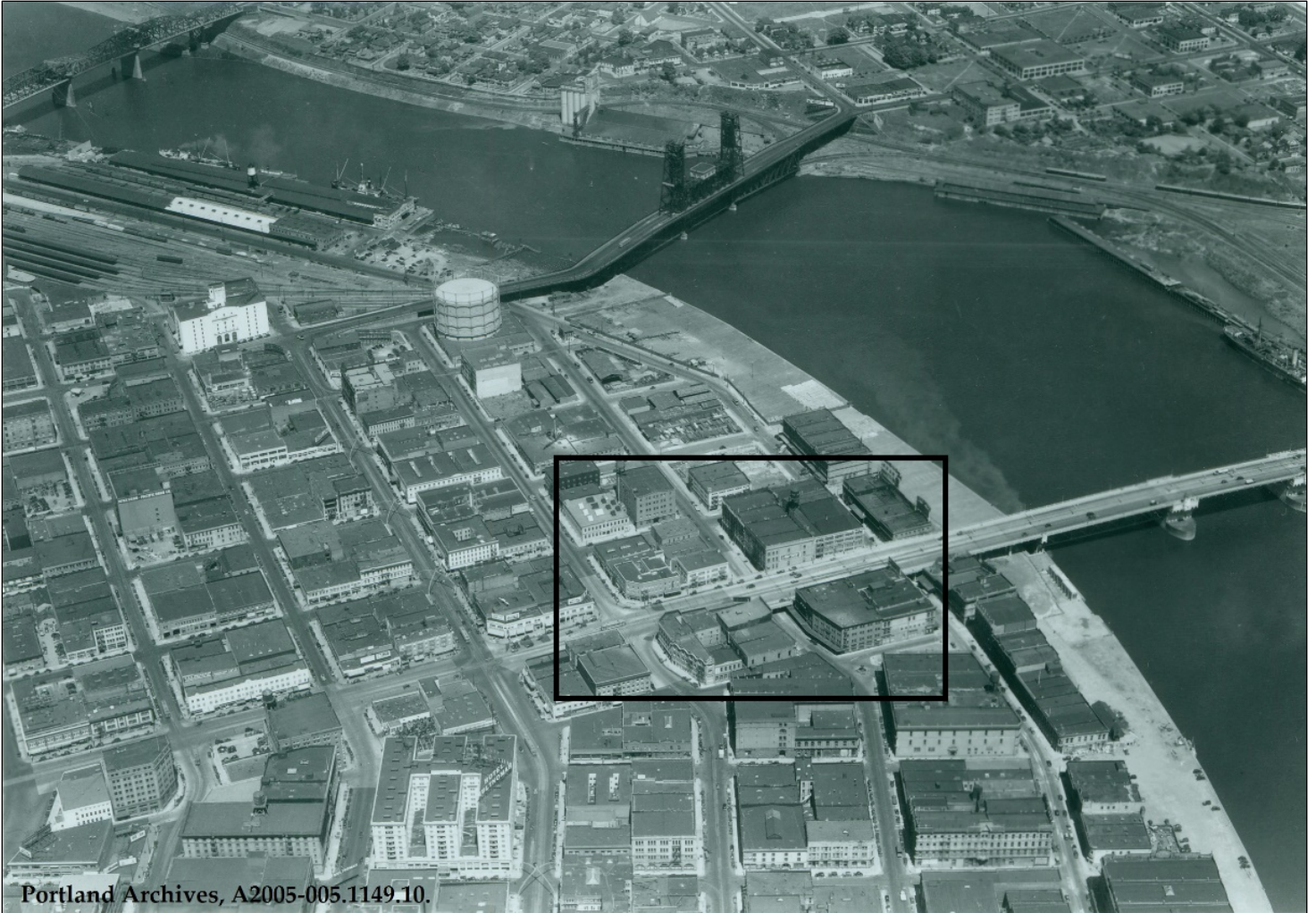


Figure 7: Aerial of downtown Portland including Burnside, Steel, and Broadway Bridges, December 31, 1935. Black box indicates excerpt in Figure 8 below (Portland Archives, A2005-005.1149.10).

ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))

Property Name: Reed Building

Street Address: 45 SW Ankeny Street

City, County: Portland, Multnomah



Figure 8: Aerial of downtown Portland including Burnside, Steel, and Broadway Bridges, December 31, 1935. Excerpt of Figure 7 above (Portland Archives, A2005-005.1149.10).



Figure 9: Aerial view of the downtown waterfront near the Burnside and Steel Bridges, December 31, 1935 (Portland Archives, 2000-03).

ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))

Property Name: Reed Building

Street Address: 45 SW Ankeny Street

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Figure 10: Photo of the Reed Building from the City of Portland, Oregon Historic Resource Inventory, 1984 (OR SHPO).

**ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet**

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))	
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Street Address: 45 SW Ankeny Street	City, County: Portland, Multnomah



Figure 11: Footprint of the Reed Building superimposed on property line map (Portland Maps/WillametteCRA, 2021).

**ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet**

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))	
Property Name: Reed Building	
Street Address: 45 SW Ankeny Street	City, County: Portland, Multnomah

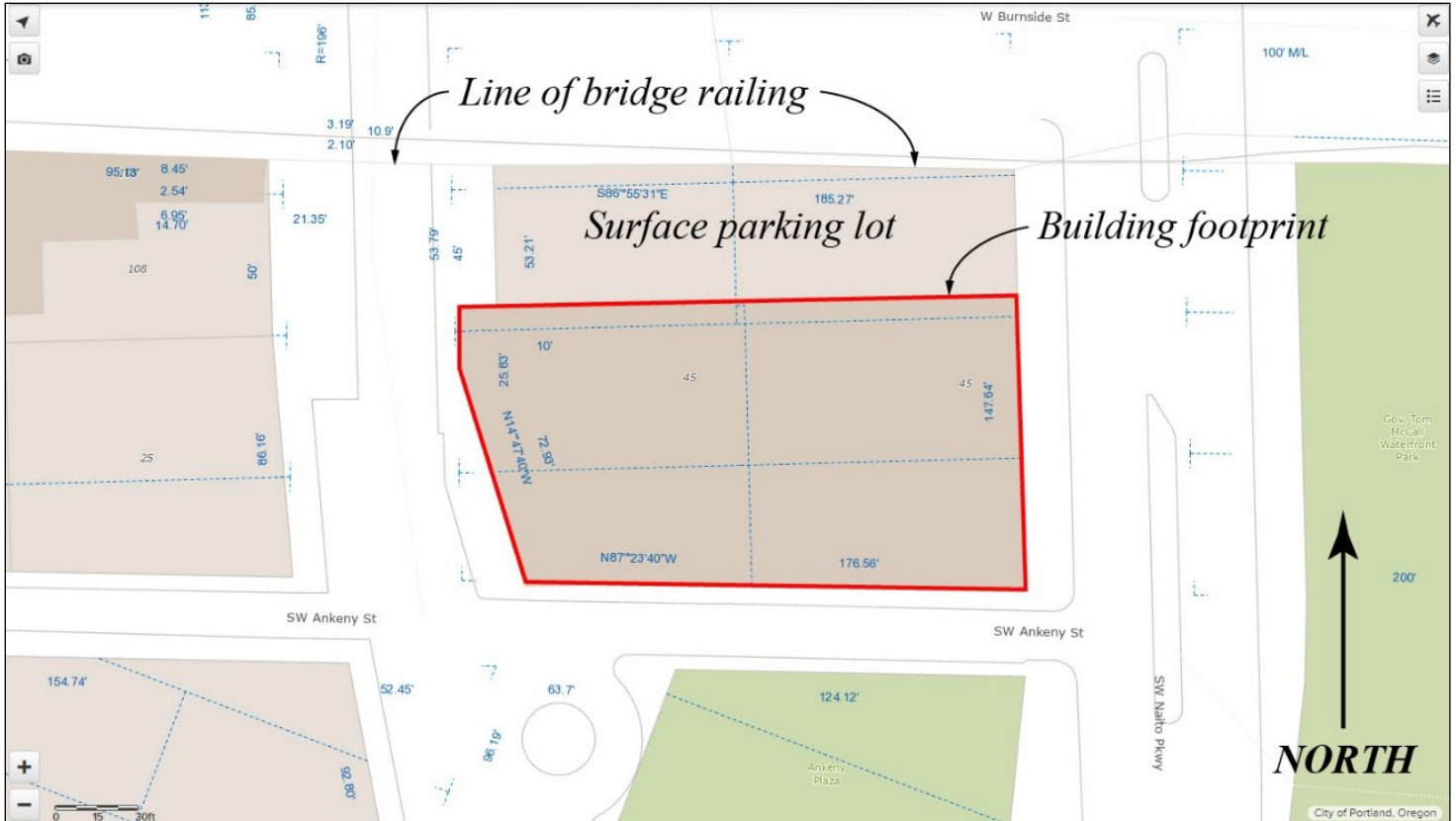


Figure 12: Footprint of the Reed Building superimposed on property line map, with elements of existing Burnside Bridge indicated (Portland Maps/WillametteCRA, 2021).

ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))	
Property Name: Reed Building	
Street Address: 45 SW Ankeny Street	City, County: Portland, Multnomah

Photographs



Figure 13: Reed Building, view looking northeast (Elizabeth O'Brien, 2019).



Figure 14: Mercy Corps (modern addition to the east end of Reed Building), view looking northwest (Elizabeth O'Brien, 2019).

ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))

Property Name: Reed Building

Street Address: 45 SW Ankeny Street

City, County: Portland, Multnomah



Figure 15: Reed Building and surface parking lot to the north, view looking southwest (Elizabeth O'Brien, 2019).

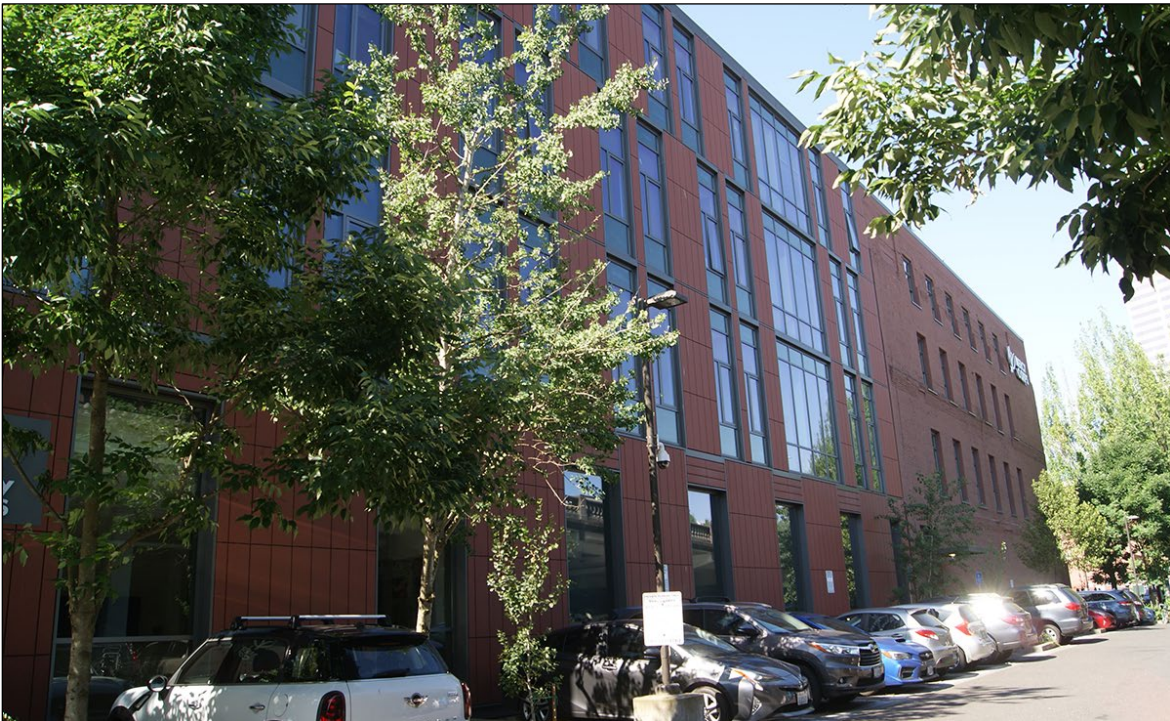


Figure 16: Mercy Corps (modern addition to the east end of Reed Building) and surface parking lot to the north, view looking southwest (Elizabeth O'Brien, 2019).

**ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet**

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

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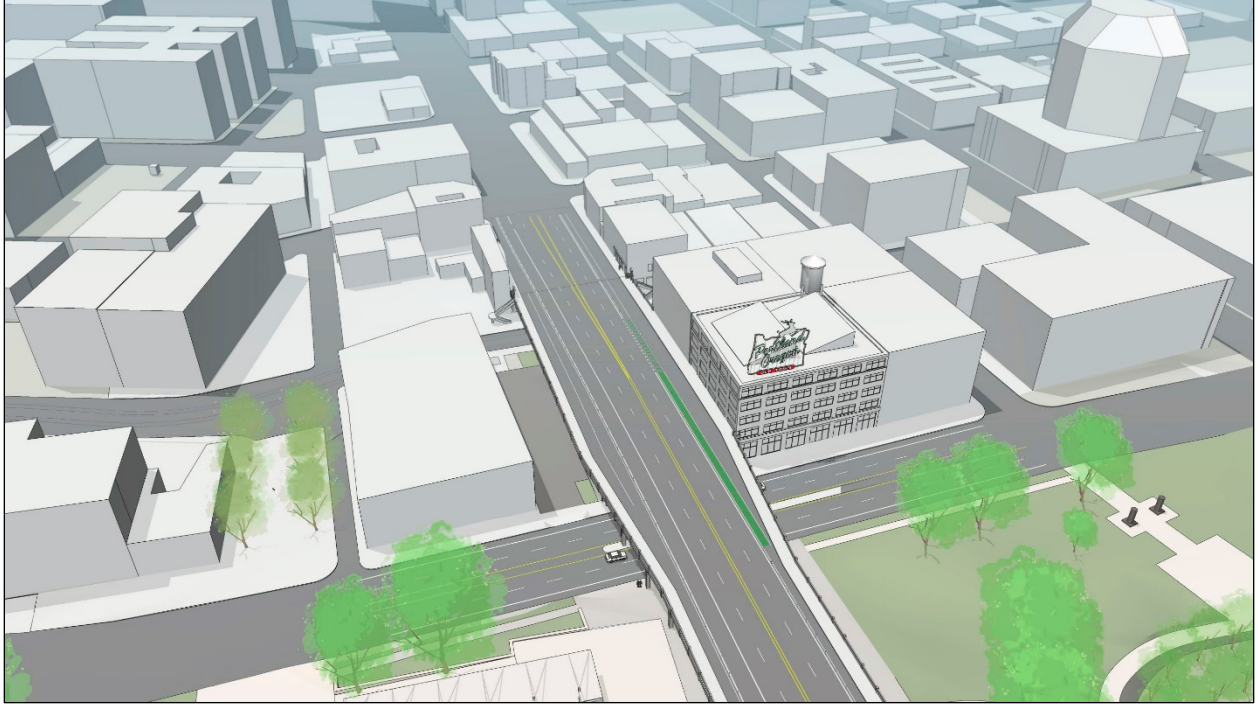


Figure 17: Reed Building, artist's rendering of existing condition of west approach, aerial view looking northwest (Fat Pencil Studio, 2021).

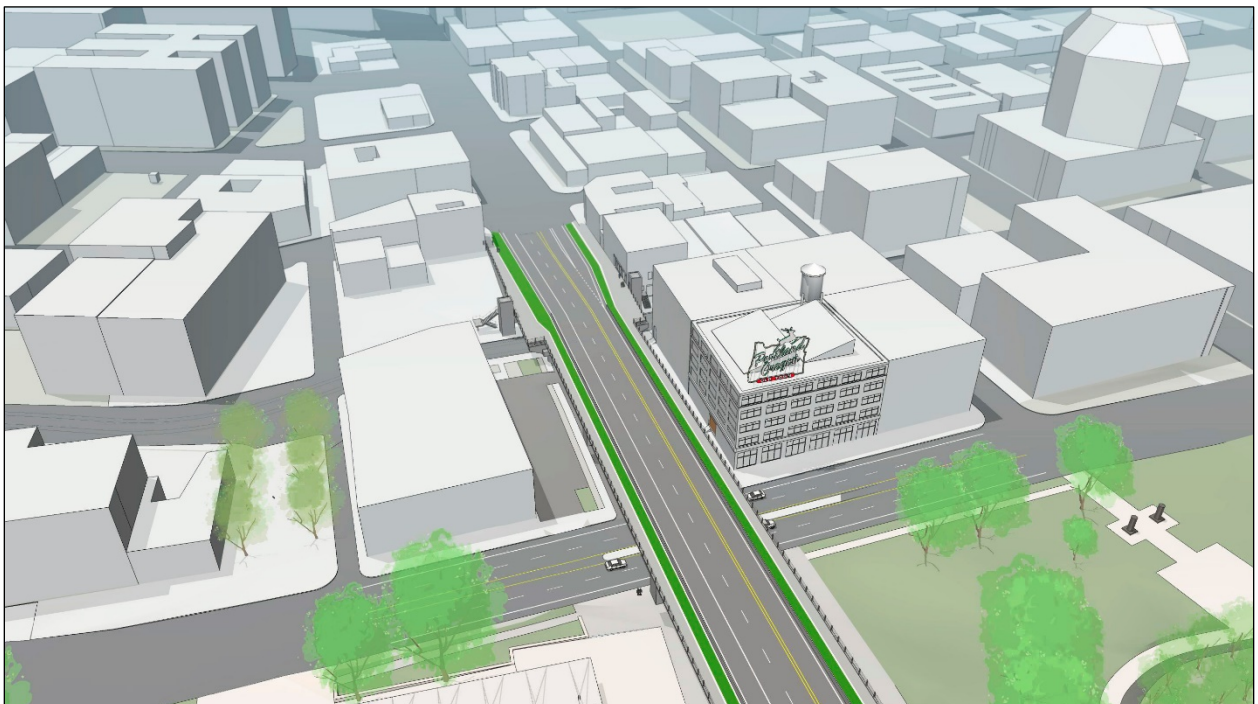


Figure 18: Reed Building, artist's rendering of replacement west approach span, aerial view looking northwest (Fat Pencil Studio, 2021).

**ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet**

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))

Property Name: Reed Building

Street Address: 45 SW Ankeny Street

City, County: Portland, Multnomah



Figure 19: Reed Building, artist's rendering of existing condition of west approach, aerial view looking northeast (Fat Pencil Studio, 2021).

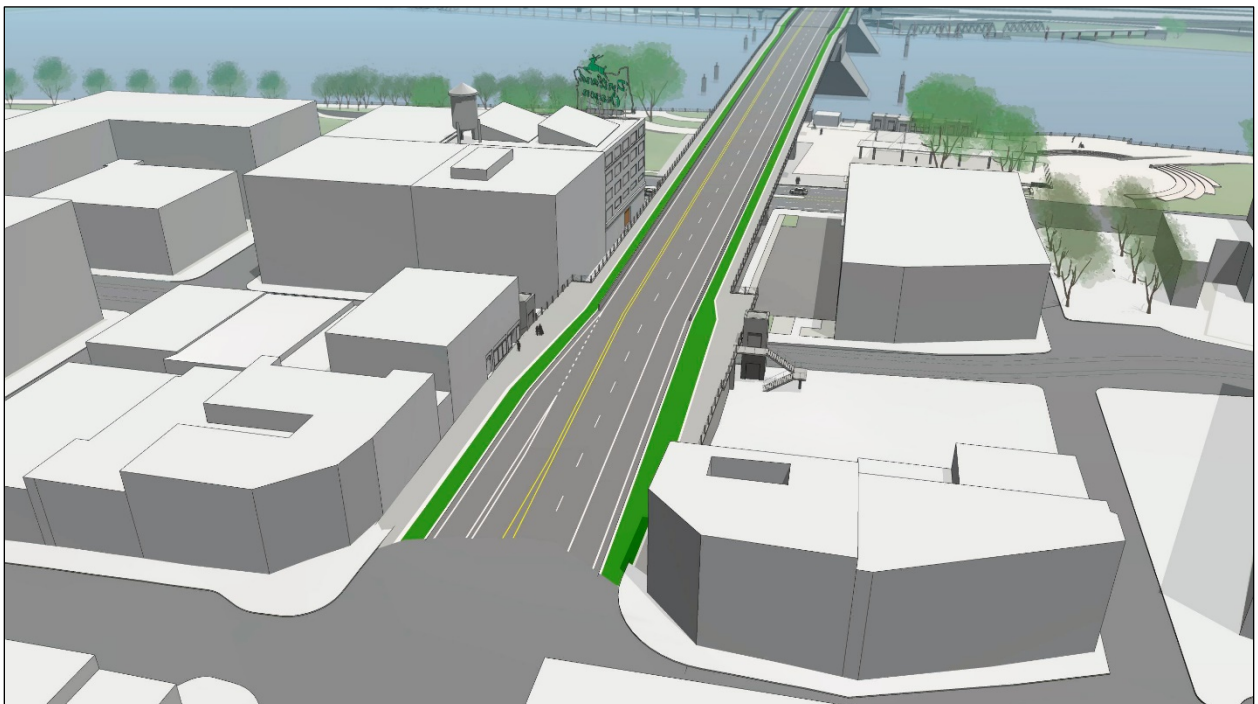


Figure 20: Reed Building, artist's rendering of replacement west approach span, aerial view looking northwest (Fat Pencil Studio, 2021).

**ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet**

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))

Property Name: Reed Building

Street Address: 45 SW Ankeny Street

City, County: Portland, Multnomah

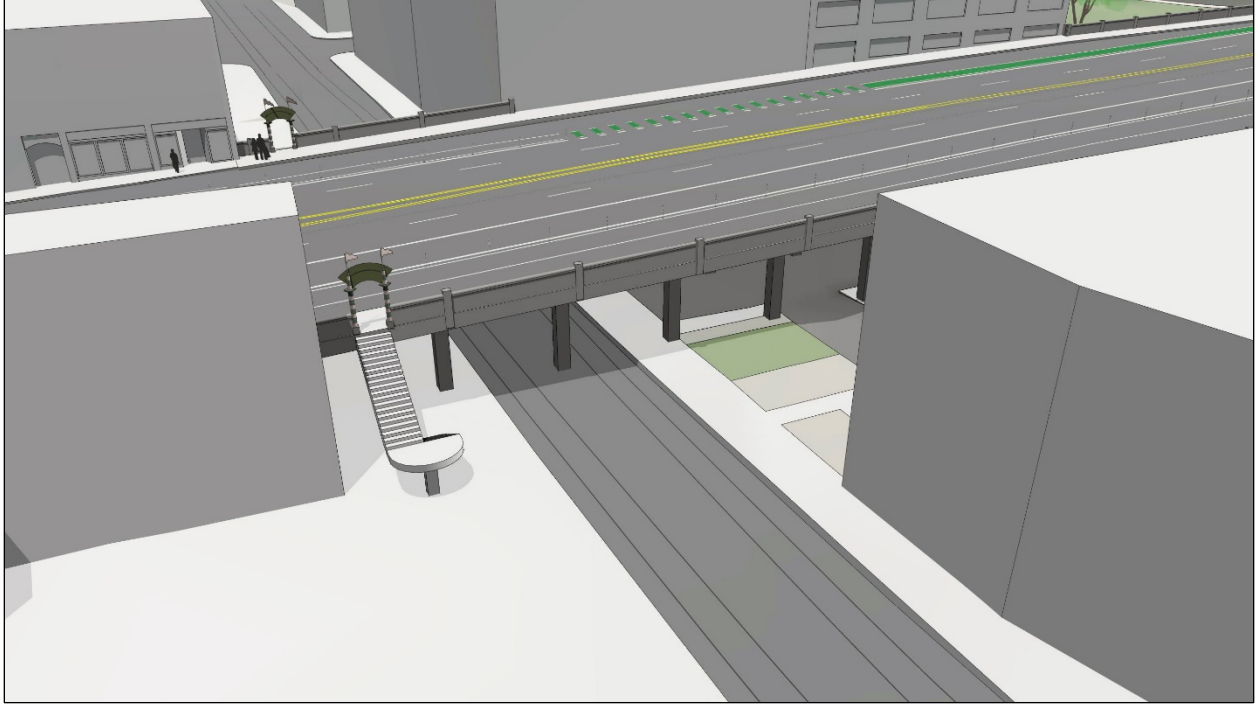


Figure 21: Reed Building, artist's rendering of existing condition of west approach, aerial view looking northeast (Fat Pencil Studio, 2021).



Figure 22: Reed Building, artist's rendering of replacement west approach span, aerial view looking northeast (Fat Pencil Studio, 2021).

**ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM**

Agency/Project: Oregon Department of Transportation/Earthquake Ready Burnside Bridge		
ODOT Key Number: :XXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge [Federal-Aid No. C051(111)]		
Property Name: Salvation Army	Street Address: 134 West Burnside Street	
City, County: Portland, Multnomah	Latitude: 45.522969 Longitude: (-) 122.672437	
Surveyor: Adam S. Alsobrook	Affiliation: WillametteCRA	Date Recorded: 08/25/2021

Photo:



Photo Caption: Salvation Army Building, view looking southeast (Elizabeth O'Brien, 2019)

Preliminary Finding of Effect:

☐ No Historic Properties Affected
 ☒ No Historic Properties Adversely Affected
 ☐ Historic Properties Adversely Affected

State Historic Preservation Office Comments:

☐ Concur
 ☐ Do Not Concur:
 ☐ No Historic Properties Affected
 ☐ No Historic Properties Adversely Affected
 ☐ Historic Properties Adversely Affected

Signed: _____ Date: _____

Comments:



ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge [Federal-Aid No. C051(111)]	
Property Name: Salvation Army	
Street Address: 134 West Burnside Street	City, County: Portland, Multnomah

Provide written description of the project, and its potential effects on the subject property per 36 CFR 800. The project and findings, as per instructions, should include:

1. Introduction

This statement of finding of effect discusses the effect of the proposed Earthquake Ready Burnside Bridge (EQRB) Project in Portland, Oregon. The Salvation Army Building at 134 West Burnside Street is a contributing resource in the Skidmore/Old Town Historic District, which was listed in the National Register of Historic Places (NRHP) in 1975 and designated as a National Historic Landmark (NHL) in 1977. Multnomah County is the project proponent with support from the Oregon Department of Transportation (ODOT) on behalf of the Federal Highway Administration (FHWA). Historical Research Associates, Inc. (HRA) prepared the original findings that have since been updated by WillametteCRA with the current Alignment Alternatives information on behalf of the Oregon Department of Transportation (ODOT). It is the finding of WillametteCRA, on behalf of ODOT, that the proposed project will have no adverse effect on the Salvation Army Building. This statement of finding of effect is made pursuant to the requirements of the National Historic Preservation Act of 1966 (36 CFR 800), Executive Order 11593, and the National Environmental Policy Act of 1969.

2. Project Description

The proposed project is to establish a Burnside Bridge that would survive a major Cascadia Subduction Zone (CSZ) earthquake. The existing bridge would fail in such an earthquake. The Refined Long-span alternative would replace the existing bridge with a new bridge on the same alignment as the current bridge.

3. Identification and Description of the Historic Resource

The Salvation Army Building is addressed as 134 West Burnside Street and is located at the southeast corner of NW 2nd Avenue and West Burnside Street (Portland Maps) (Figures 1 through 4). The Salvation Army Building is a four-story, irregularly shaped, brick masonry building constructed in an early 20th century classical style. The building was extensively altered in 1925 to make way for the construction of the west approach of the Burnside Bridge. These 1925 alterations included a new façade. The Salvation Army Building was not included in the City of Portland Historic Resource Inventory of 1984 and was originally classified as not contributing to the significance of the Skidmore/Old Town Historic District. However, this classification has been changed to contributing. (NRHP 2008:24).

There are storefront openings along the north, northwest, and west facades of the building which have been altered from their original condition (NRHP 2008:24). The existing west approach of the Burnside Bridge will be removed and replaced with a new west approach span as part of the proposed undertaking. The overall configuration, width, and slope of the road prism in the section of West Burnside Street adjacent to the Salvation Army Building will not change as part of the proposed undertaking (Figures 5 through 10). The existing concrete sidewalk will be replaced with a concrete sidewalk with the same elevation and slope along the north and northwest facades of the Salvation Army Building (Figures 11 through 16).

4. Undertaking Options Considered

A total of six (6) alternatives have been considered for this undertaking: two (2) no-build alternatives and four (4) build alternatives. The four (4) build alternatives included an Enhanced Seismic Retrofit Alternative and three (3) replacement alternatives. Extensive discussion and analysis of these alternatives is contained in the



ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge [Federal-Aid No. C051(111)]	
Property Name: Salvation Army	
Street Address: 134 West Burnside Street	City, County: Portland, Multnomah

Supplemental Draft Environmental Impact Statement (SDEIS) of 2021. The following is a synopsis of the alternatives considered for this undertaking.

a. No-Build Alternative

Two (2) no-build alternatives were considered for this undertaking. These no-build alternatives assume that all other programmed and planned projects move forward and that the Burnside Bridge would remain seismically at risk. The first no-build scenario considered was the “No-Build Pre-Earthquake” alternative, which analyzed no-build conditions prior to a CSZ seismic event. The second no-build scenario considered was the “No-Build Post-Earthquake,” which analyzed no-build conditions after a CSZ seismic event. The authors of the SDEIS concluded that the no-build alternatives would not address the acute seismic vulnerability of the existing Burnside Bridge, which is expected to be heavily damaged or completely collapse during a CSZ seismic event. The collapse of the Burnside Bridge would very likely result in a significant loss of life to people on or under the bridge during a CSZ seismic event. The loss of the Burnside Bridge would sever downtown Portland from the rest of the city on the east side of the Willamette River and would prevent emergency responders from being able to cross the river. Additionally, debris from the collapse of the Burnside Bridge would block all travel by land and water under the bridge. The loss of the Burnside Bridge due to a CSZ seismic event would hamper the long-term recovery of the city and surrounding region during the months following a major earthquake, and the potential adverse economic effects would likely persist for years.

b. Avoidance Alternative

The environmental team considered one (1) avoidance alternative. An Enhanced Seismic Retrofit Alternative was considered in lieu of the wholesale replacement of the Burnside Bridge. This alternative would partially retrofit the existing bridge and replace major structural components of the bridge to meet seismic design criteria. In this scenario, the retrofitted structural elements would be visually similar to the existing structure of the bridge, but the replacement approaches would be substantially different in appearance compared with the existing bridge. Under this scenario, the width of the bridge would be unchanged, and the modal connections at each end of the bridge would also not change. The environmental team made a preliminary analysis of potential effects to the NRHP-listed Burnside Bridge due to the Enhanced Seismic Retrofit Alternative scope of work. The team applied the Section 106 criteria of adverse effect and found that this potential scope of work would result in adverse effects to the NRHP-listed Burnside Bridge.

c. Proposed Undertaking

Three (3) build alternatives were considered for the proposed undertaking. Of these three alternatives, the Refined Long-span alternative would replace the existing bridge with a new bridge on the same alignment as the current bridge. This would necessitate the demolition of the existing Burnside Bridge.

5. Evaluation of Effects

Location: The proposed replacement of the Burnside Bridge will not require the Salvation Army Building to be relocated or removed, therefore, the undertaking will have no effect to the resource’s integrity of location.

Setting: The proposed replacement of the Burnside Bridge will not alter the current relationship of the Salvation Army Building to the sidewalk level along West Burnside Street and NW 2nd Avenue. Concrete



ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge [Federal-Aid No. C051(111)]	
Property Name: Salvation Army	
Street Address: 134 West Burnside Street	City, County: Portland, Multnomah

sidewalks will be replaced in kind with concrete sidewalks with a slightly different cross-section that the current cross-section but otherwise unchanged. Therefore, the setting of the Salvation Army Building would not be adversely affected by the proposed undertaking.

Design: The proposed replacement of the Burnside Bridge will not alter the physical form, structure, and style of the Salvation Army Building; therefore, the undertaking will have no effect to the resource's integrity of design.

Materials: The proposed replacement of the Burnside Bridge will not damage, remove, or destroy physical elements of the Salvation Army Building, therefore, the undertaking will have no effect to the resource's integrity of materials.

Workmanship: The proposed replacement of the Burnside Bridge will not damage, remove, or destroy physical evidence of the historic construction techniques used to build the Salvation Army Building, therefore, the undertaking will have no effect to the resource's integrity of workmanship.

Feeling: The proposed replacement of the Burnside Bridge will not alter the physical features which collectively convey the historic character of the Salvation Army Building; therefore, the undertaking will have no effect to the resource's integrity of feeling.

Association: The proposed replacement of the Burnside Bridge will not diminish or eliminate the direct link that the Salvation Army Building has to important historic events or persons significant to our past, therefore, the undertaking will have no effect to the resource's integrity of association.

6. Coordination and Public Output

The Earthquake Ready Burnside Bridge project has been the subject of public meetings since 2016. Multnomah County has established a Community Task Force in October 2018, which continues to meet regularly. Meetings of the Section 106 Consulting Parties have been meeting regularly since December 2020. Draft technical reports to address NHPA and NEPA requirements have been circulated for review by representatives of the SHPO, City of Portland, and ODOT. There has also been coordination with the Portland Historic Landmarks Commission, which is a CLG.

7. Conclusion

In summary, the Refined Long-span alternative, which would necessitate the complete replacement of the existing Burnside Bridge with new approach and main spans. The replacement of the existing west approach span of the Burnside Bridge would have no adverse effect to the Salvation Army Building for either direct or indirect effects.

8. Sources

EarthExplorer

1951 Aerial Photograph, Entity ID 1QO0000020014, 25 October. United States Geological Survey.

Electronic resource, <https://earthexplorer.usgs.gov/>, accessed August 2021.



ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge [Federal-Aid No. C051(111)]	
Property Name: Salvation Army	
Street Address: 134 West Burnside Street	City, County: Portland, Multnomah

Google Earth

2021 "Burnside Bridge." Electronic resource, <https://earth.google.com/web/>, accessed August 2021.

National Register of Historic Places (NRHP)

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1908a Sanborn Fire Insurance Map from Portland, Multnomah County, Oregon. Volume 1, 1908-1909 (1908), Sheet 74. Electronic resource, https://www.loc.gov/item/sanborn07439_006/, accessed August 2021.
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**ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet**

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

ODOT Key Number: XXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge [Federal-Aid No. C051(111)]

Property Name: Salvation Army

Street Address: 134 West Burnside Street

City, County: Portland, Multnomah

Maps and Figures

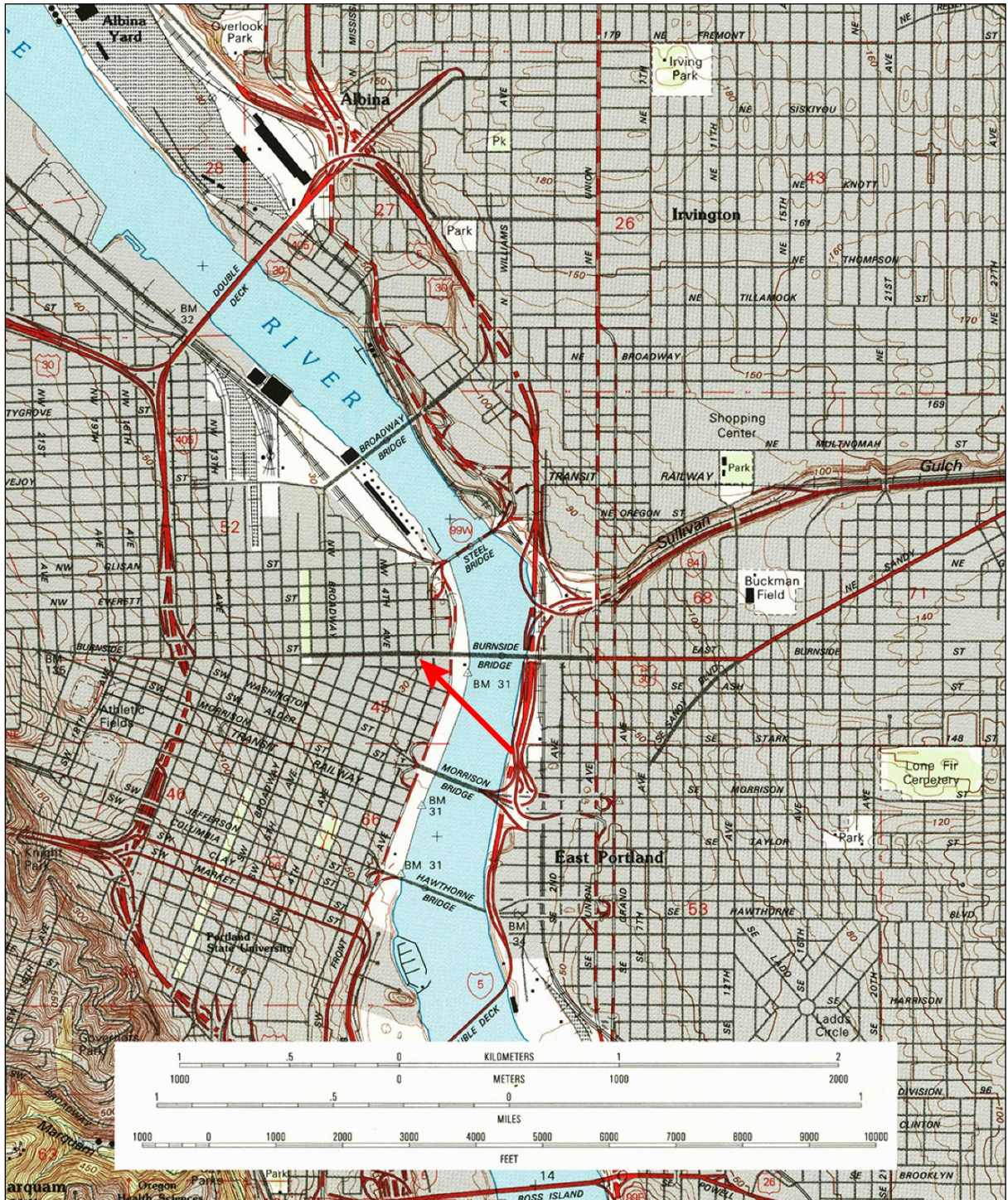


Figure 1: USGS, Portland, OR Quadrangle, 7.5 Minute, 1990. Red arrow indicates location of the Salvation Army Building (USGS).



ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

ODOT Key Number: XXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge [Federal-Aid No. C051(111)]

Property Name: Salvation Army

Street Address: 134 West Burnside Street

City, County: Portland, Multnomah



Figure 3: Aerial photograph with location of the Salvation Army Building indicated by red line (Google Earth).



ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge [Federal-Aid No. C051(111)]

Property Name: Salvation Army

Street Address: 134 West Burnside Street

City, County: Portland, Multnomah



Figure 4: 1951 aerial photograph with location of the Salvation Army Building indicated by red line (USGS EarthExplorer).

**ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet**

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

ODOT Key Number: XXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge [Federal-Aid No. C051(111)]

Property Name: Salvation Army

Street Address: 134 West Burnside Street

City, County: Portland, Multnomah

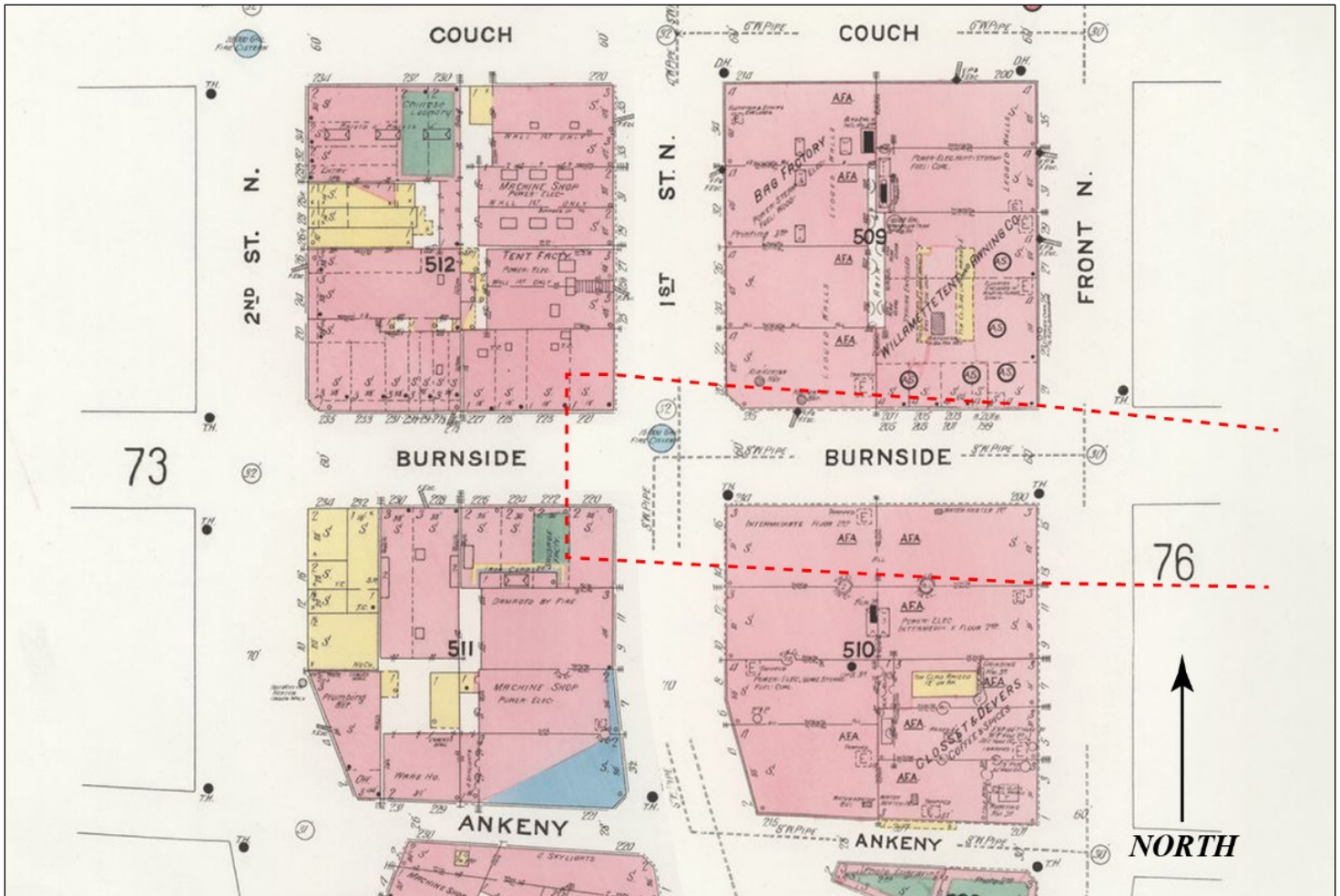


Figure 5: Sanborn maps, Volume 1, 1908. Mosaic of Sheet 74 (left two blocks) and Sheet 75 (right two blocks). Dashed red line indicates footprint of existing Burnside Bridge (Library of Congress).

**ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet**

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

ODOT Key Number: XXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge [Federal-Aid No. C051(111)]

Property Name: Salvation Army

Street Address: 134 West Burnside Street

City, County: Portland, Multnomah

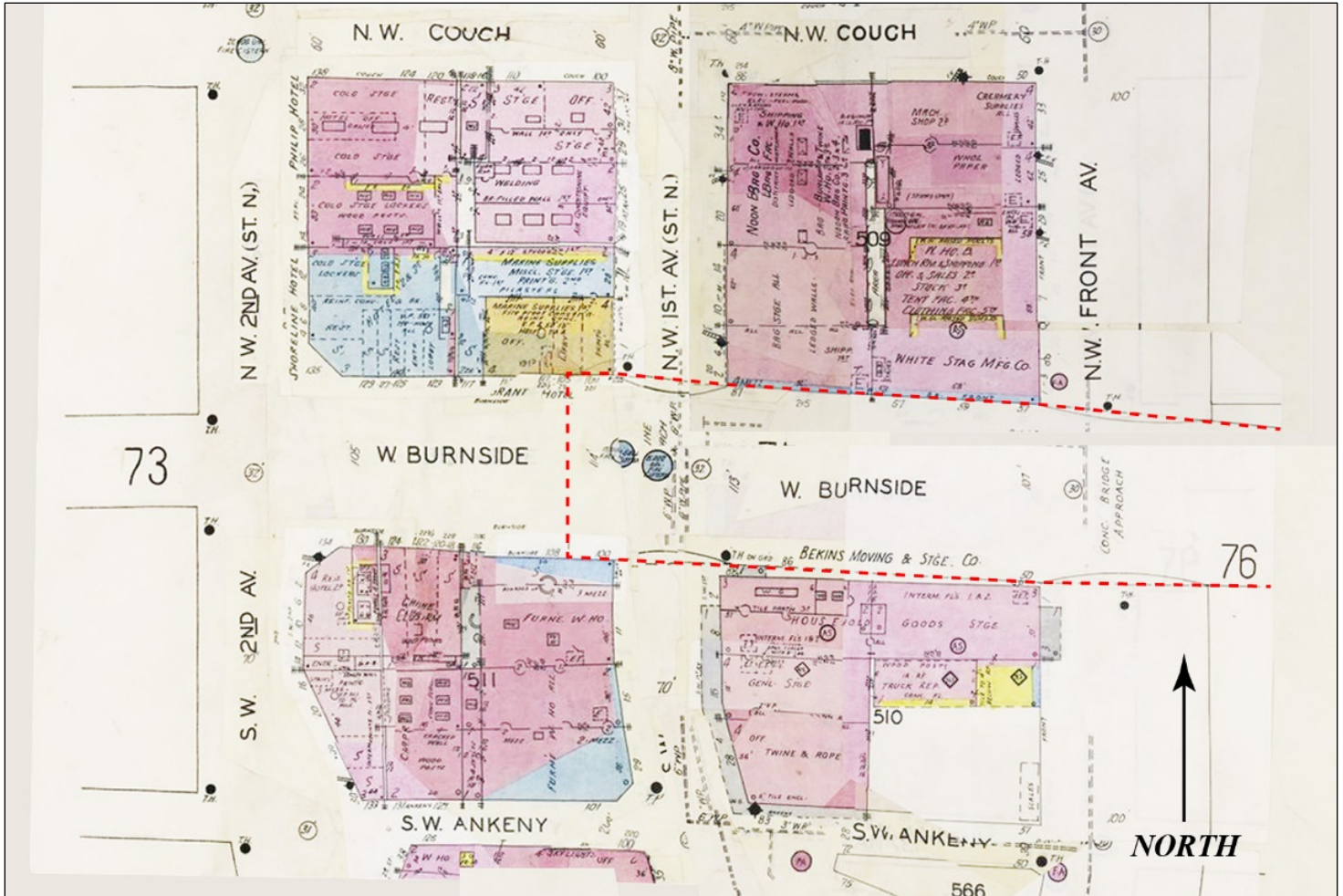


Figure 6: Sanborn maps, Volume 1, 1950. Mosaic of Sheet 74 (left two blocks) and Sheet 75 (right two blocks). Dashed red line indicates footprint of existing Burnside Bridge (Library of Congress).

ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

ODOT Key Number: XXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge [Federal-Aid No. C051(111)]

Property Name: Salvation Army

Street Address: 134 West Burnside Street

City, County: Portland, Multnomah

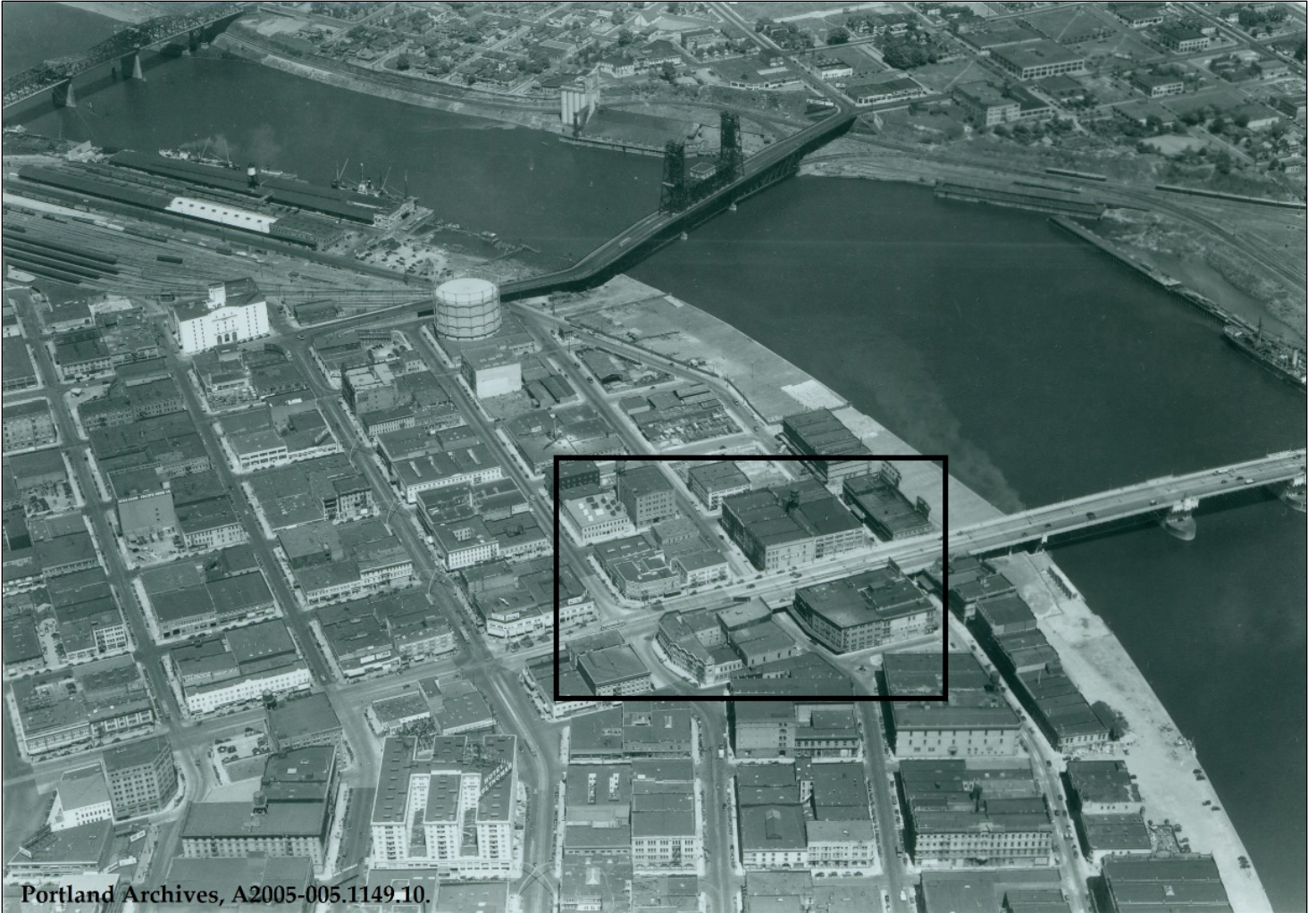


Figure 7: Aerial of downtown Portland including Burnside, Steel, and Broadway Bridges, December 31, 1935. Black box indicates excerpt in Figure 8 below (Portland Archives, A2005-005.1149.10).

ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge [Federal-Aid No. C051(111)]

Property Name: Salvation Army

Street Address: 134 West Burnside Street

City, County: Portland, Multnomah

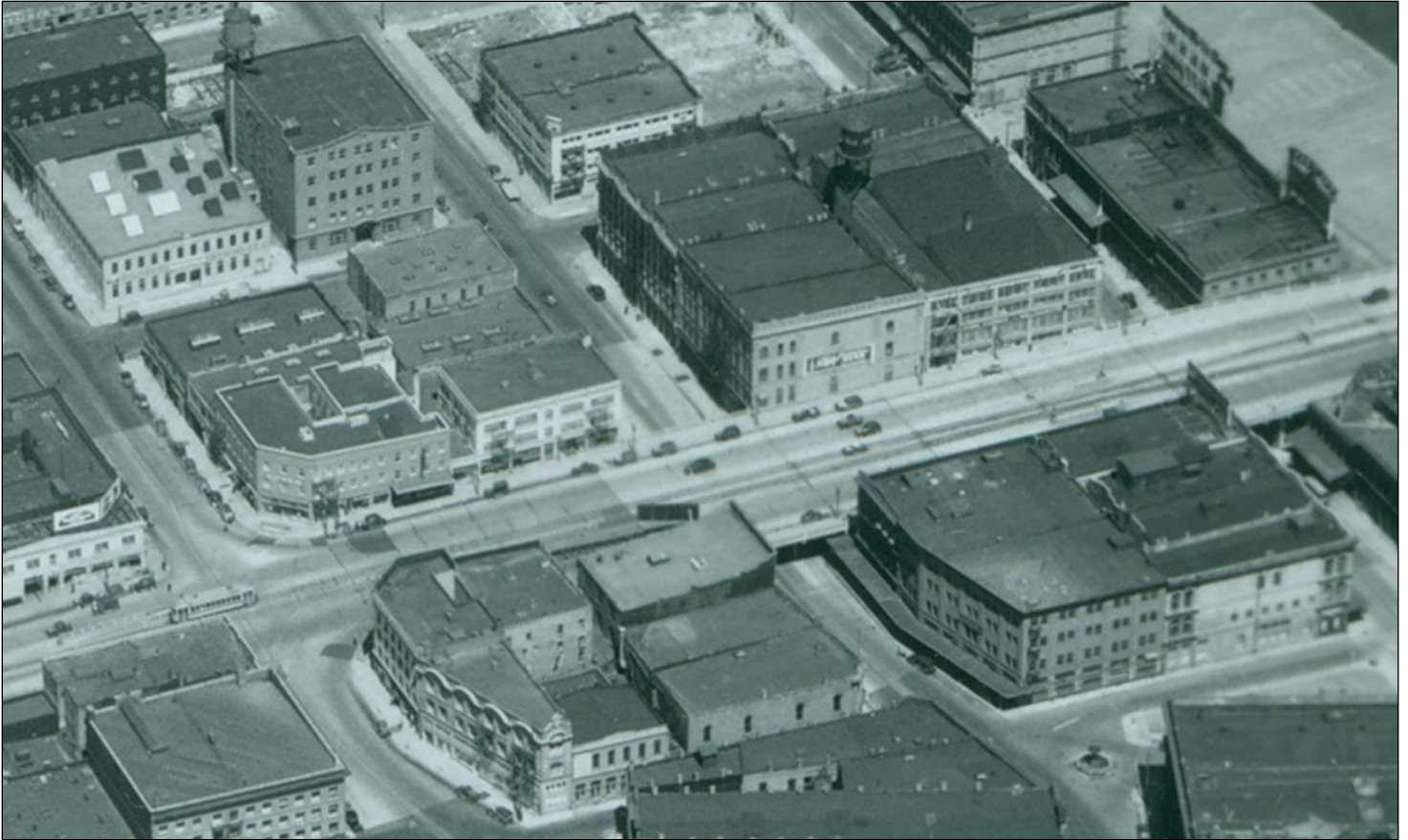


Figure 8: Aerial of downtown Portland including Burnside, Steel, and Broadway Bridges, December 31, 1935. Excerpt of Figure 7 above (Portland Archives, A2005-005.1149.10).



ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge [Federal-Aid No. C051(111)]

Property Name: Salvation Army

Street Address: 134 West Burnside Street

City, County: Portland, Multnomah



Figure 9: Footprint of the Salvation Army Building superimposed on property line map (Portland Maps/WillametteCRA).

**ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet**

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge [Federal-Aid No. C051(111)]	
Property Name: Salvation Army	
Street Address: 134 West Burnside Street	City, County: Portland, Multnomah

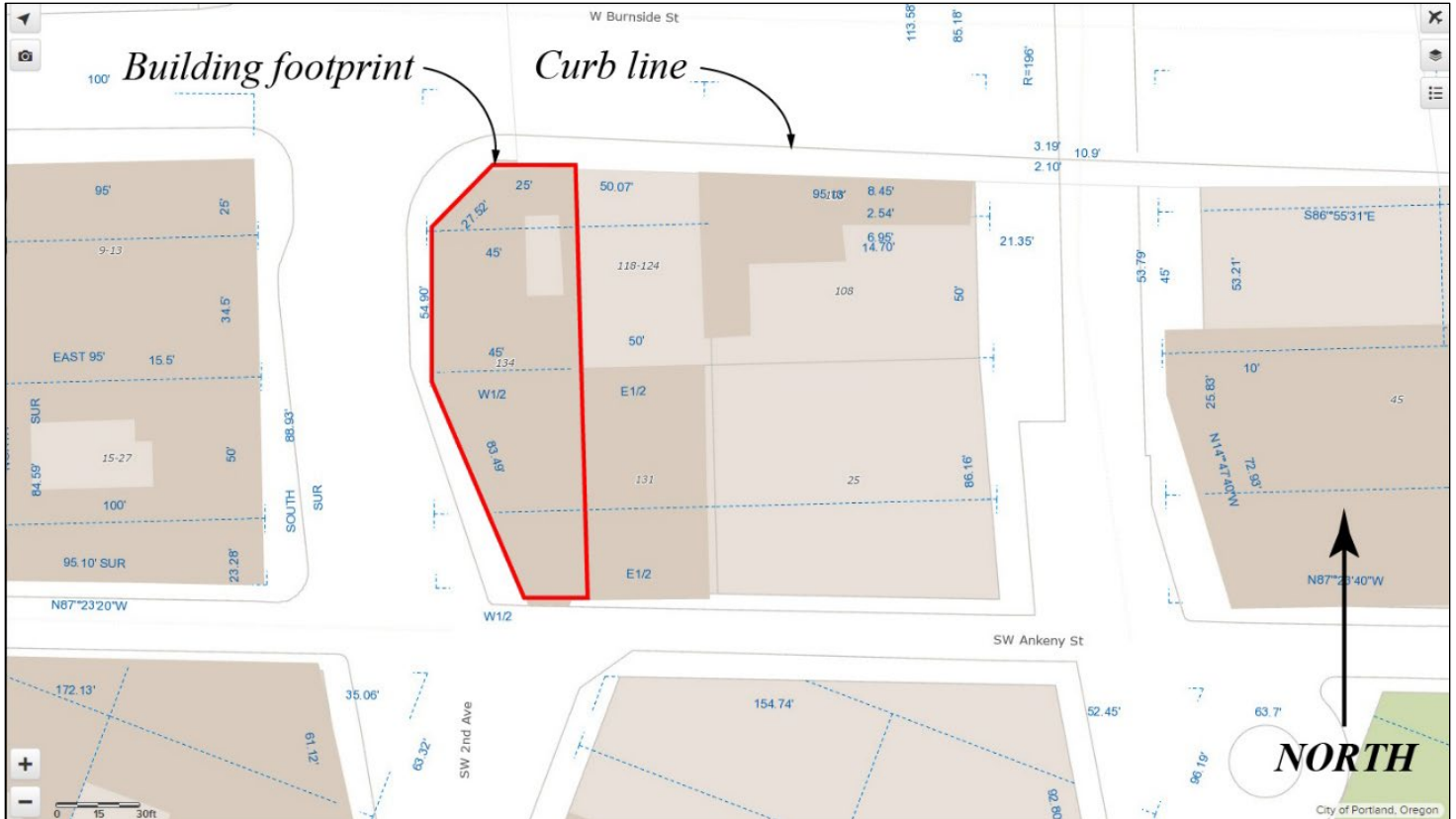


Figure 10: Footprint of the Salvation Army Building superimposed on property line map, with elements of existing Burnside Bridge indicated (Portland Maps/WillametteCRA).

ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge [Federal-Aid No. C051(111)]	
Property Name: Salvation Army	
Street Address: 134 West Burnside Street	City, County: Portland, Multnomah

Photographs



Figure 11: Salvation Army Building, view looking southeast (Elizabeth O'Brien, 2019).



Figure 12: Salvation Army Building, view looking southeast (Elizabeth O'Brien, 2019).

ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge [Federal-Aid No. C051(111)]

Property Name: Salvation Army

Street Address: 134 West Burnside Street

City, County: Portland, Multnomah



Figure 13: Salvation Army Building, view looking southwest (Elizabeth O'Brien, 2019).



Figure 14: Salvation Army Building, view looking west (David Ellis, 2021).

**ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet**

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

ODOT Key Number: XXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge [Federal-Aid No. C051(111)]

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Street Address: 134 West Burnside Street

City, County: Portland, Multnomah

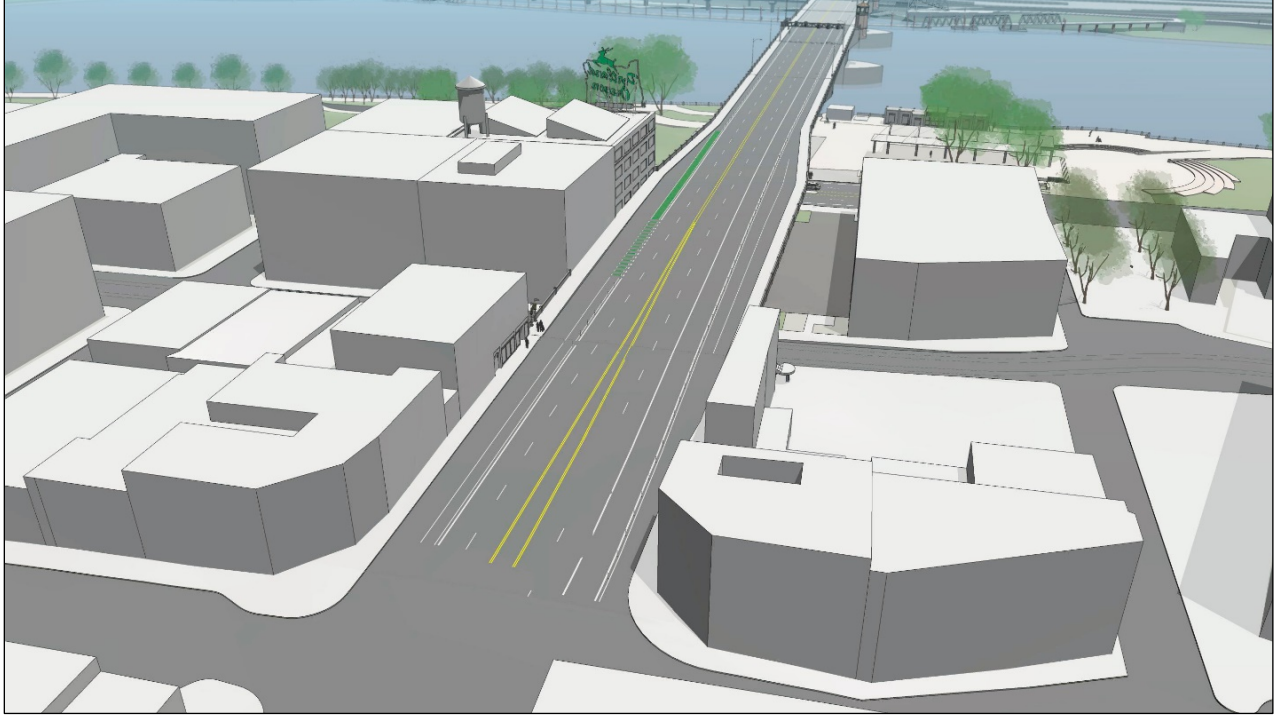


Figure 15: Salvation Army Building, artist's rendering of existing condition of west approach, aerial view looking northeast (Fat Pencil Studio, 2021).

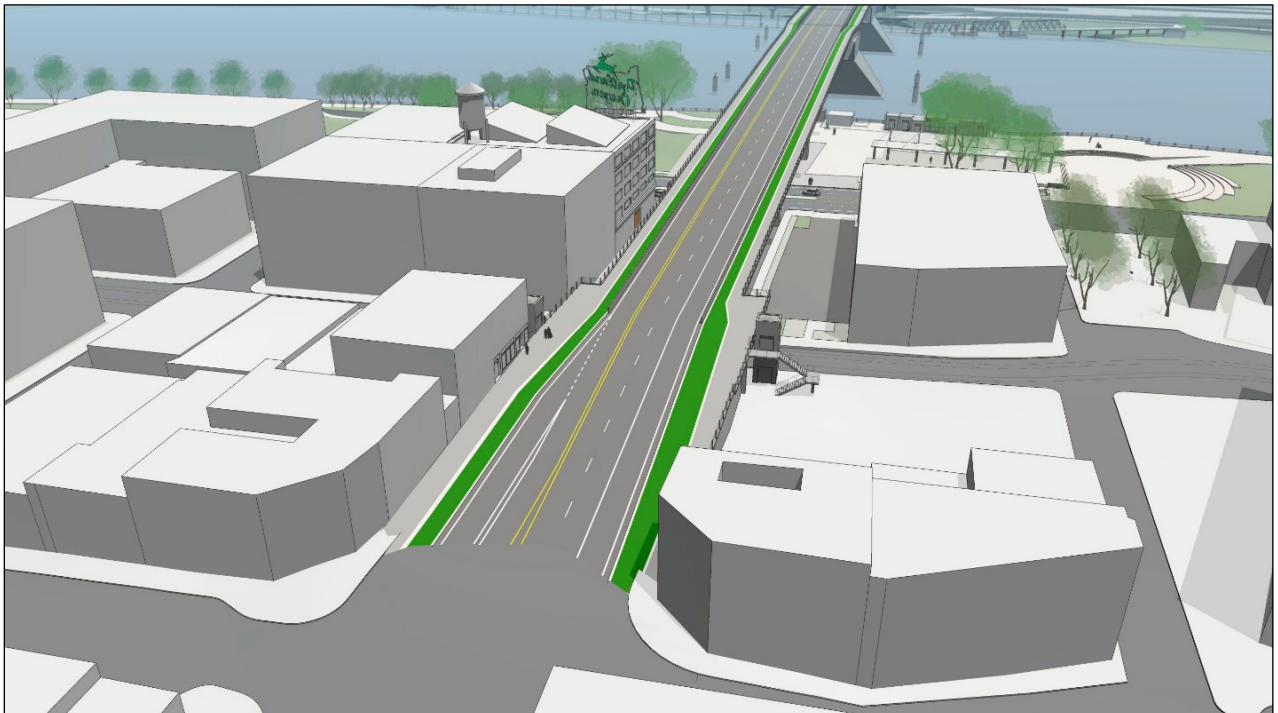


Figure 16: Salvation Army Building, artist's rendering of replacement west approach span, aerial view looking northwest (Fat Pencil Studio, 2021).

**ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet**

Agency/Project: Oregon Department of Transportation/Earthquake Ready Burnside Bridge		
ODOT Key Number: :XXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))		
Property Name: Skidmore/Old Town Historic District (NHL)		Street Address:
City, County: Portland, Multnomah		Latitude: Longitude:
Surveyor: Adam S. Alsobrook	Affiliation: WillametteCRA	Date Recorded: 08/27/2021

Photo:



Photo Caption: Burnside Bridge with Skidmore/Old Town Historic District in background, aerial photograph looking southwest (Multnomah County, 2021).

Preliminary Finding of Effect:

☐ No Historic Properties Affected
 ☒ No Historic Properties Adversely Affected
 ☒ Historic Properties Adversely Affected

State Historic Preservation Office Comments:

☐ **Concur**
 ☐ **Do Not Concur:**
 ☐ No Historic Properties Affected
 ☐ No Historic Properties Adversely Affected
☐ Historic Properties Adversely Affected

Signed: _____ Date: _____

Comments:



ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))	
Property Name: Skidmore/Old Town Historic District (NHL)	
Street Address: Multiple	City, County: Portland, Multnomah

Provide written description of the project, and its potential effects on the subject property per 36 CFR 800. The project and findings, as per instructions, should include:

1. Introduction

This statement of finding of effect discusses the effect of the proposed Earthquake Ready Burnside Bridge (EQRB) Project on the Portland Skidmore/Old Town Historic District. Multnomah County is the project proponent with support from the Oregon Department of Transportation (ODOT) on behalf of the Federal Highway Administration (FHWA). Historical Research Associates, Inc. (HRA) prepared the original findings that have since been updated by WillametteCRA with the current Alignment Alternatives information on behalf of the Oregon Department of Transportation (ODOT).

2. Project Description

The proposed project is to establish a Burnside Bridge that would survive a major Cascadia Subduction Zone (CSZ) earthquake. The existing bridge would fail in such an earthquake. The Refined Long-span alternative would replace the existing bridge with a new bridge on the same alignment as the current bridge.

3. Identification and Description of the Historic Resource

The Portland Skidmore/Old Town Historic District is located on the west bank of the Willamette River in the Central City area of Portland, Multnomah County, Oregon. The district is where the streets of the original 1845 Portland townsite, oriented to magnetic north and the flow of the Willamette River, meet the streets of Couch's Addition plat of 1850, which are oriented to true north, creating an offset of about 20 degrees. West Burnside Street bisects the district and divides the west side of Portland into northwest and southwest quadrants (Figures 1 through 4).

The Portland Skidmore/Old Town Historic District was listed in the National Register of Historic Places (NRHP) on December 6, 1975. The Skidmore/Old Town Historic District was designated as a National Historic Landmark (NHL) on May 5, 1977. The original 1975 NRHP nomination for the district and the subsequent 1977 NHL nomination were revised with supplemental documentation in 2008. The Portland Skidmore/Old Town Historic District is nationally significant for its historical associations with the early development and economic growth of Portland, which was the Pacific Northwest's most important urban center during the latter half of the nineteenth century. The district is equally significant for its exceptional inventory of mid- and late-nineteenth-century cast-iron commercial buildings, which is considered one of the finest collections of such buildings in the nation and one of the most outstanding in the Far Western United States.

The boundaries of the Portland Skidmore/Old Town Historic District were drawn to include the significant concentration of historic buildings from the late nineteenth and early twentieth centuries, many of which possess a high level of integrity. The period of significance for the district begins in 1857, which was when the oldest extant resource in the district was constructed, and ends in 1929, when the Willamette River seawall system was completed. There are 101 recorded resources in the district, including 57 contributing and 44 non-contributing resources. The 57 contributing properties located within the NHL boundaries include 55 buildings, 1 structure, and 1 object.

ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))	
Property Name: Skidmore/Old Town Historic District (NHL)	
Street Address: Multiple	City, County: Portland, Multnomah

The west approach span of the Burnside Bridge is located within the boundaries of Portland Skidmore/Old Town Historic District. The Burnside Bridge was completed in May 1926, which is within the period of significance for the NHL district, but the bridge was not included as a contributing structure in the district since it was a “physical disruption” to the “regularity and connectivity provided by the street grid [that] has been altered by major public interventions.” The nomination documentation also refers to the Burnside Bridge as “just the first of a wave of large-scale public works projects and accompanying building demolitions that significantly altered the physical and economic fabric of the district.” Despite this exclusion from the historic district nomination, the Burnside Bridge was listed in the NRHP on November 14, 2012 (Figures 5 through 11).

4. Undertaking Options Considered

A total of six (6) alternatives have been considered for this undertaking: two (2) no-build alternatives and four (4) build alternatives. The four (4) build alternatives included an Enhanced Seismic Retrofit Alternative and three (3) replacement alternatives. Extensive discussion and analysis of these alternatives is contained in the Supplemental Draft Environmental Impact Statement (SDEIS) of 2021. The following is a synopsis of the alternatives considered for this undertaking.

a. No-Build Alternative

Two (2) no-build alternatives were considered for this undertaking. These no-build alternatives assume that all other programmed and planned projects move forward and that the Burnside Bridge would remain seismically at risk. The first no-build scenario considered was the “No-Build Pre-Earthquake” alternative, which analyzed no-build conditions prior to a CSZ seismic event. The second no-build scenario considered was the “No-Build Post-Earthquake,” which analyzed no-build conditions after a CSZ seismic event. The authors of the SDEIS concluded that the no-build alternatives would not address the acute seismic vulnerability of the existing Burnside Bridge, which is expected to be heavily damaged or completely collapse during a CSZ seismic event. The collapse of the Burnside Bridge would very likely result in a significant loss of life to people on or under the bridge during a CSZ seismic event. The loss of the Burnside Bridge would sever downtown Portland from the rest of the city on the east side of the Willamette River and would prevent emergency responders from being able to cross the river. Additionally, debris from the collapse of the Burnside Bridge would block all travel by land and water under the bridge. The loss of the Burnside Bridge due to a CSZ seismic event would hamper the long-term recovery of the city and surrounding region during the months following a major earthquake, and the potential adverse economic effects would likely persist for years.

b. Avoidance Alternative

The environmental team considered one (1) avoidance alternative. An Enhanced Seismic Retrofit Alternative was considered in lieu of the wholesale replacement of the Burnside Bridge. This alternative would partially retrofit the existing bridge and replace major structural components of the bridge to meet seismic design criteria. In this scenario, the retrofitted structural elements would be visually similar to the existing structure of the bridge, but the replacement approaches would be substantially different in appearance compared with the existing bridge. Under this scenario, the width of the bridge would be unchanged, and the modal connections at each end of the bridge would also not change. The environmental team made a preliminary analysis of potential effects to the NRHP-listed Burnside Bridge due to the Enhanced Seismic Retrofit Alternative scope of work. The team applied the Section 106 criteria

ODOT INVENTORY OF HISTORIC PROPERTIES
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Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))	
Property Name: Skidmore/Old Town Historic District (NHL)	
Street Address: Multiple	City, County: Portland, Multnomah

of adverse effect and found that this potential scope of work would result in adverse effects to the NRHP-listed Burnside Bridge.

c. Proposed Undertaking

Three (3) build alternatives were considered for the proposed undertaking. Of these three alternatives, the Refined Long-span alternative would replace the existing bridge with a new bridge on the same alignment as the current bridge. This would necessitate the demolition of the existing Burnside Bridge.

5. Evaluation of Effects

The proposed Refined Long-span alternative would involve construction of a new bridge on the same alignment of the existing Burnside Bridge. According to 36 CFR Part 800.5(a)(1), adverse effects to NRHP-eligible or NRHP-listed properties occur when an undertaking directly or indirectly alters the characteristics of a historic property that qualify it for inclusion in the NRHP. In addition to direct effects, both future and cumulative effects of the undertaking also need to be considered. An example listed in 800.5(a)(2) is “visual, atmospheric, or audible intrusions” (36 CFR 800.5).

Direct Effects to the Skidmore/Old Town Historic District

The following NRHP-listed resources are located within the Area of Potential Effect (APE) for direct effects of the proposed undertaking:

- Bates Building, 101-117 West Burnside Street (Figure 13)
- Burnside Hotel, 2-12 NW Second Avenue (Figure 14)
- Reed Building, 16-28 SW First Avenue (Figure 16)
- Salvation Army Building, 134 West Burnside Street (Figure 15)
- White Stag Block, 5 NW Naito Parkway (Figure 12)

The assessments of potential direct effects to these resources are contained in the ODOT Section 106 Level of Effect Forms which have been prepared for each of these resources (Figures 29 through 32). In summary, it is the recommendation of WillametteCRA, on behalf of ODOT, that the proposed replacement of the Burnside Bridge would have *no adverse direct effect* to the Bates Building, the Burnside Hotel, the Reed Building, the Salvation Army Building, and the White Stag Block.

Direct and Indirect Effects to the Skidmore/Old Town Historic District

Furthermore, two new pedestrian access structures will be constructed at the west approach of the replacement Burnside Bridge. Each of these structures will have an accessible elevator and stair to connect the sidewalks of the west approach with the street level of NW First Avenue below. One of these structures will be located on the north side of the west approach on the west side of NW First Avenue, and the other structure will be located on the south side of the west approach on the west side of NW First Avenue. The design and construction of these new structures are subject to review by the City of Portland Historic Landmarks Commission. The assessment of effects for this select portion of the undertaking is based on the assumption that both structures would meet the Skidmore/Old Town Historic District Design Guidelines and would be approved by the Historic Landmarks Commission (Figures 17 through 28). In summary, it is the recommendation of WillametteCRA, on behalf of ODOT, that the proposed construction of the two pedestrian access structures would have *no adverse direct or indirect effect* to the Skidmore/Old Town Historic District.

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))	
Property Name: Skidmore/Old Town Historic District (NHL)	
Street Address: Multiple	City, County: Portland, Multnomah

Indirect Effects to the Portland Skidmore/Old Town Historic District: The exact configuration of approach spans and central operable span has not yet been finalized for the Refined Long-span alternative. The new east approach span may be either tied arch or cable supported structures and the central operable span may be either a bascule or vertical lift. The following is an evaluation of potential indirect adverse effects of the various Refined Long-span bridge span combinations currently being considered, pursuant to 36 CFR 800.5(a)(2):

Span Combination 1

Girder West Approach Span, Bascule Central Span, Tied Arch East Approach Span:

The girder west approach span of this option would be located within the Portland Skidmore/Old Town Historic District, and the new bascule central span would be located in the approximate location of the existing bascule span in middle of the Willamette River. The girder west approach span and bascule central span most closely approximates the current visual signature, or “eyeprint” of the existing Burnside Bridge and would not introduce additional visual intrusions within the NHL district (Figures 33, 34, 38, 39, 43, 44, 48, 49, 53, 54, 58, 59, 63, 64, and 69). It is the recommendation of WillametteCRA, on behalf of ODOT, that the proposed construction of this particular combination of bridge structures would have *no adverse indirect effect* to the Skidmore/Old Town Historic District.

Span Combination 2

Girder West Approach Span, Vertical Lift Central Span, Tied Arch East Approach Span:

The girder west approach span of this option would be located within the Portland Skidmore/Old Town Historic District, and the new vertical lift central span would be located in the approximate location of the existing bascule span in middle of the Willamette River. The girder west approach span most closely approximates the current visual signature, or “eyeprint” of the existing Burnside Bridge and would not introduce additional visual intrusions within the NHL district. However, the new vertical lift central span would introduce a visual intrusion to the NHL district, particularly in the bridge viewshed from the NRHP-listed buildings on the west side of the Tom McCall Waterfront Park (Figures 33, 35, 38, 40, 43, 45, 48, 50, 53, 55, 58, 60, 63, 65, 68, and 70). It is the recommendation of WillametteCRA, on behalf of ODOT, that the proposed construction of this particular combination of bridge structures would constitute an *adverse indirect visual effect* to the Skidmore/Old Town Historic District.

Span Combination 3

Girder West Approach Span, Bascule Central Span, Cable Supported East Approach Span:

The girder west approach span of this option would be located within the Portland Skidmore/Old Town Historic District, and the new bascule central span would be located in the approximate location of the existing bascule span in middle of the Willamette River. The girder west approach span and bascule central span most closely approximates the current visual signature, or “eyeprint” of the existing Burnside Bridge and would not introduce additional visual intrusions within the NHL district (Figures 33, 36, 38, 41, 43, 46, 48, 51, 53, 56, 58, 61, 63, 66, 68, and 69). It is the recommendation of WillametteCRA, on behalf of ODOT, that the proposed construction of this particular combination of bridge structures would have *no adverse indirect effect* to the Skidmore/Old Town Historic District.

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))	
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Street Address: Multiple	City, County: Portland, Multnomah

Span Combination 4

Girder West Approach Span, Vertical Lift Central Span, Cable Supported East Approach Span:

The girder west approach span of this option would be located within the Portland Skidmore/Old Town Historic District, and the new vertical lift central span would be located in the approximate location of the existing bascule span in middle of the Willamette River. The girder west approach span most closely approximates the current visual signature, or “eyepoint” of the existing Burnside Bridge and would not introduce additional visual intrusions within the NHL district. However, the new vertical lift central span would introduce a visual intrusion to the NHL district, particularly in the bridge viewshed from the NRHP-listed buildings on the west side of the Tom McCall Waterfront Park (Figures 33, 37, 38, 42, 43, 47, 48, 52, 53, 57, 58, 62, 63, 67, 68, and 70). It is the recommendation of WillametteCRA, on behalf of ODOT, that the proposed construction of this particular combination of bridge structures would constitute an *adverse indirect visual effect* to the Skidmore/Old Town Historic District.

6. Coordination and Public Output

The Earthquake Ready Burnside Bridge project has been the subject of public meetings since 2016. Multnomah County has established a Community Task Force in October 2018, which continues to meet regularly. Meetings of the Section 106 Consulting Parties have been meeting regularly since December 2020. Draft technical reports to address NHPA and NEPA requirements have been circulated for review by representatives of the SHPO, City of Portland, and ODOT. There has also been coordination with the Portland Historic Landmarks Commission, which is a CLG.

7. Conclusion

It is the recommendation of WillametteCRA, on behalf of ODOT, that the proposed replacement of the Burnside Bridge would constitute *no direct or indirect adverse effects* to the Skidmore/Old Town Historic District. Furthermore, Long Span combination 2 and 4 would diminish the integrity of setting and feeling of the district and constitute *adverse indirect visual effects* to the Skidmore/Old Town Historic District. Finally, Long Span combination 1 and 3 would constitute *no adverse indirect visual effects* to the Skidmore/Old Town Historic District.

8. Sources

EarthExplorer

1951 Aerial Photograph, Entity ID 1QO0000020014, 25 October. United States Geological Survey. Electronic resource, <https://earthexplorer.usgs.gov/>, accessed August 2021.

Google Earth

2021 “Burnside Bridge.” Electronic resource, <https://earth.google.com/web/>, accessed August 2021.

National Register of Historic Places (NRHP)

2008 National Historic Landmark Nomination (Revised Documentation), Skidmore/Old Town Historic District, Portland, Multnomah County, Oregon. Oregon Historic Sites Database. Electronic resource, <https://heritagedata.prd.state.or.us/historic/>, accessed August 2021.

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SECTION 106 LEVEL OF EFFECT FORM

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
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Property Name: Skidmore/Old Town Historic District (NHL)	
Street Address: Multiple	City, County: Portland, Multnomah

Portland Archives

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1935a "Aerial of Downtown Portland including Burnside, Steel and Broadway Bridges." City of Portland Auditor's Office, Archives and Records Management, PARC Accession Number A2005-005.1449.10, Record Number AP/476. Electronic resource, <https://efiles.portlandoregon.gov/Record/2043501/>, accessed August 2021.

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Portland Maps

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Sanborn Map Company (Sanborn)

1908a Sanborn Fire Insurance Map from Portland, Multnomah County, Oregon. Volume 1, 1908-1909 (1908), Sheet 74. Electronic resource, https://www.loc.gov/item/sanborn07439_006/, accessed August 2021.

1908b Sanborn Fire Insurance Map from Portland, Multnomah County, Oregon. Volume 1, 1908-1909 (1908), Sheet 75. Electronic resource, https://www.loc.gov/item/sanborn07439_006/, accessed August 2021.

1950a Sanborn Fire Insurance Map from Portland, Multnomah County, Oregon. Volume 1, 1908-April 1950, Sheet 74. Electronic resource, https://www.loc.gov/item/sanborn07439_021/, accessed August 2021.

1950b Sanborn Fire Insurance Map from Portland, Multnomah County, Oregon. Volume 1, 1908-April 1950, Sheet 75. Electronic resource, https://www.loc.gov/item/sanborn07439_021/, accessed August 2021.

United States Geological Survey (USGS)

1990 "Portland, OR Quadrangle, 7.5 Minute." TopoView. Electronic resource, <https://ngmdb.usgs.gov/topoview/>, accessed August 2021.

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Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

ODOT Key Number: XXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))

Property Name: Skidmore/Old Town Historic District (NHL)

Street Address: Multiple

City, County: Portland, Multnomah

Maps and Figures

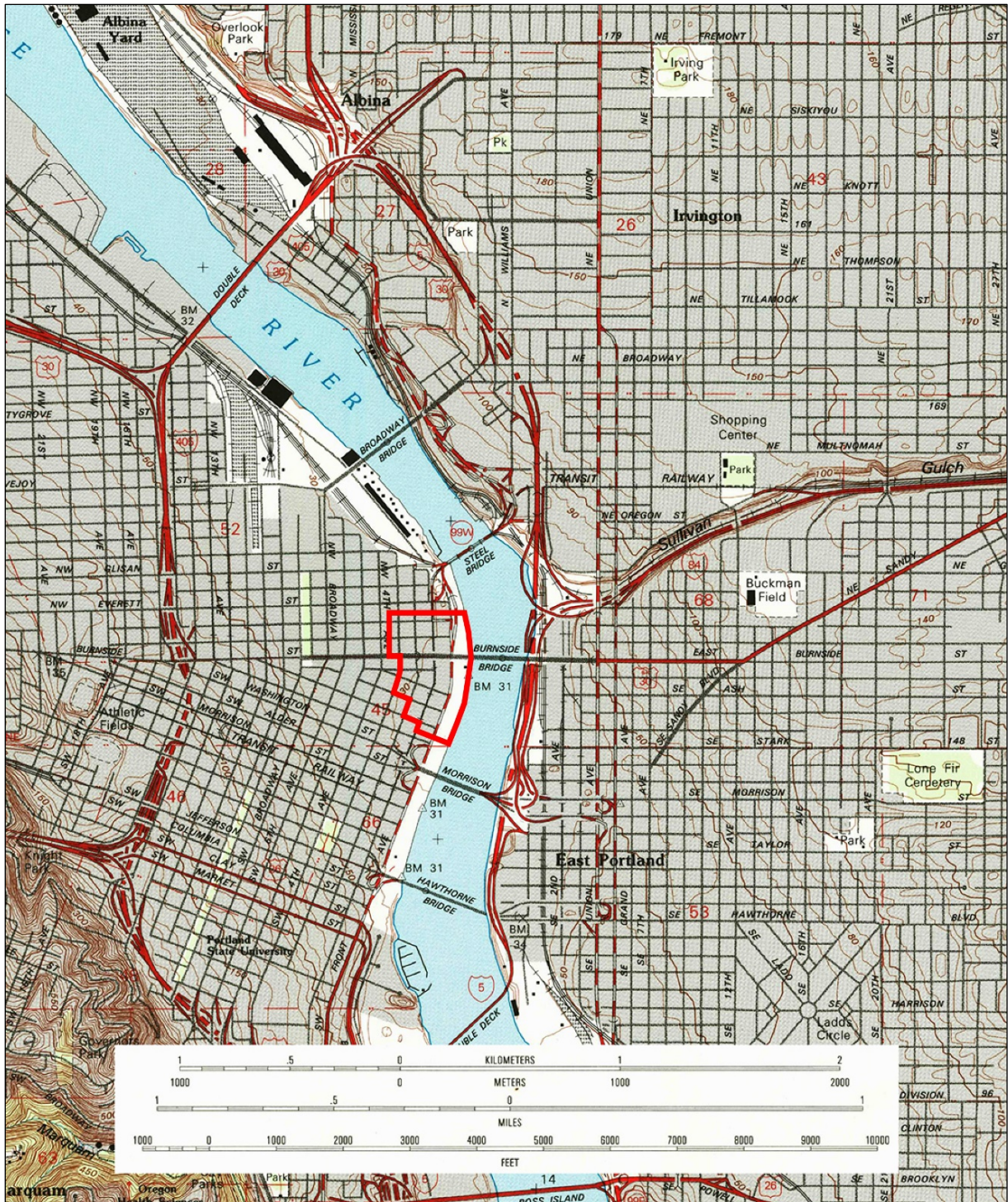


Figure 1: USGS, Portland, OR Quadrangle, 7.5 Minute, 1990. The Skidmore/Old Town Historic District is outlined in red (USGS).

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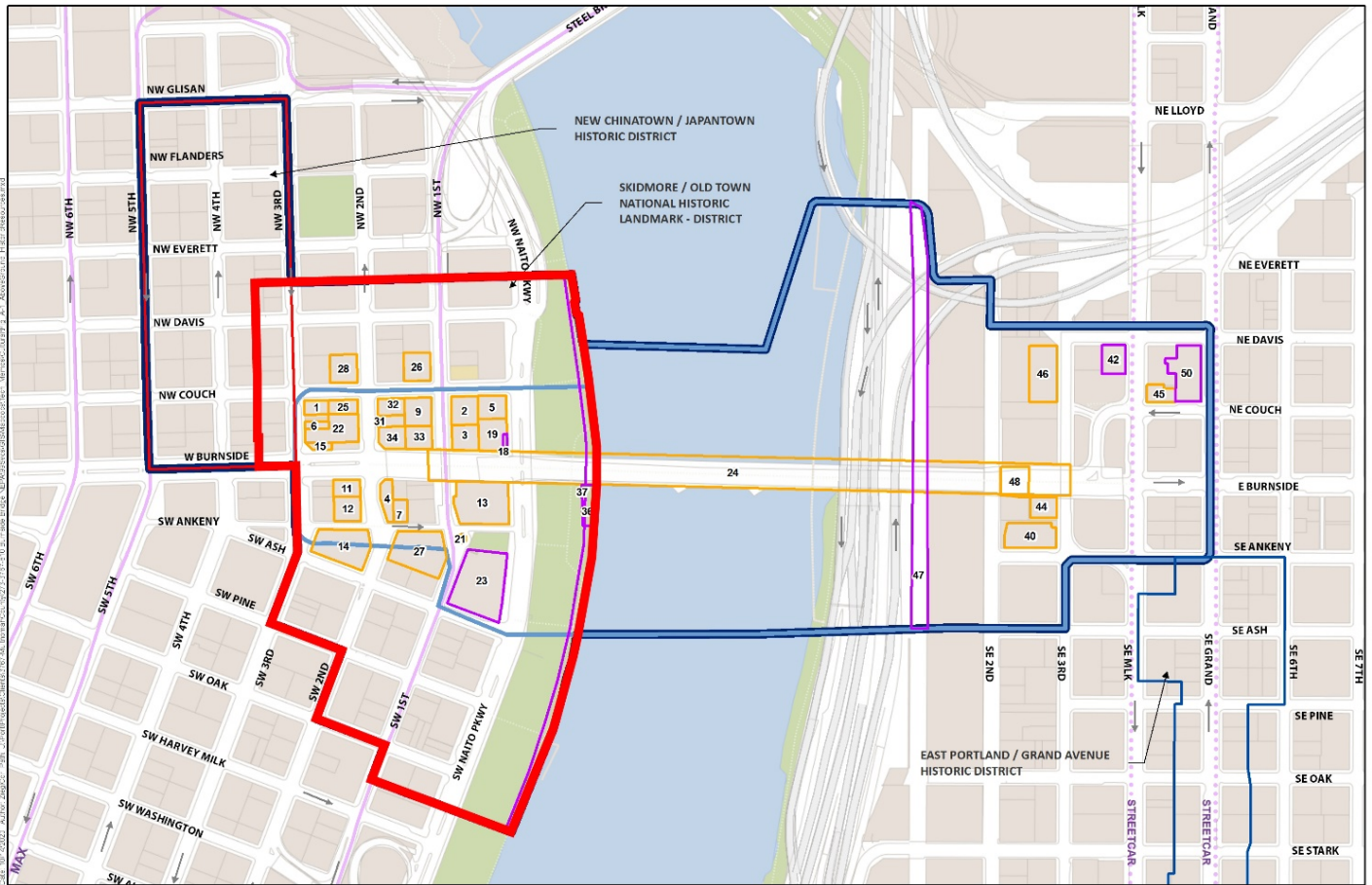


Figure A-1
Correlation Map for Above-Ground
Historic Resources Table
Cultural Resources
Earthquake Ready Burnside

Figure 2: Map of the Area of Potential Effect (APE) with locations of NRHP-listed and NRHP-eligible resources within the APE. The Skidmore/Old Town Historic District is outlined in red.

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Figure 3: Aerial photograph with the Skidmore/Old Town Historic District outlined in red (Google Earth).

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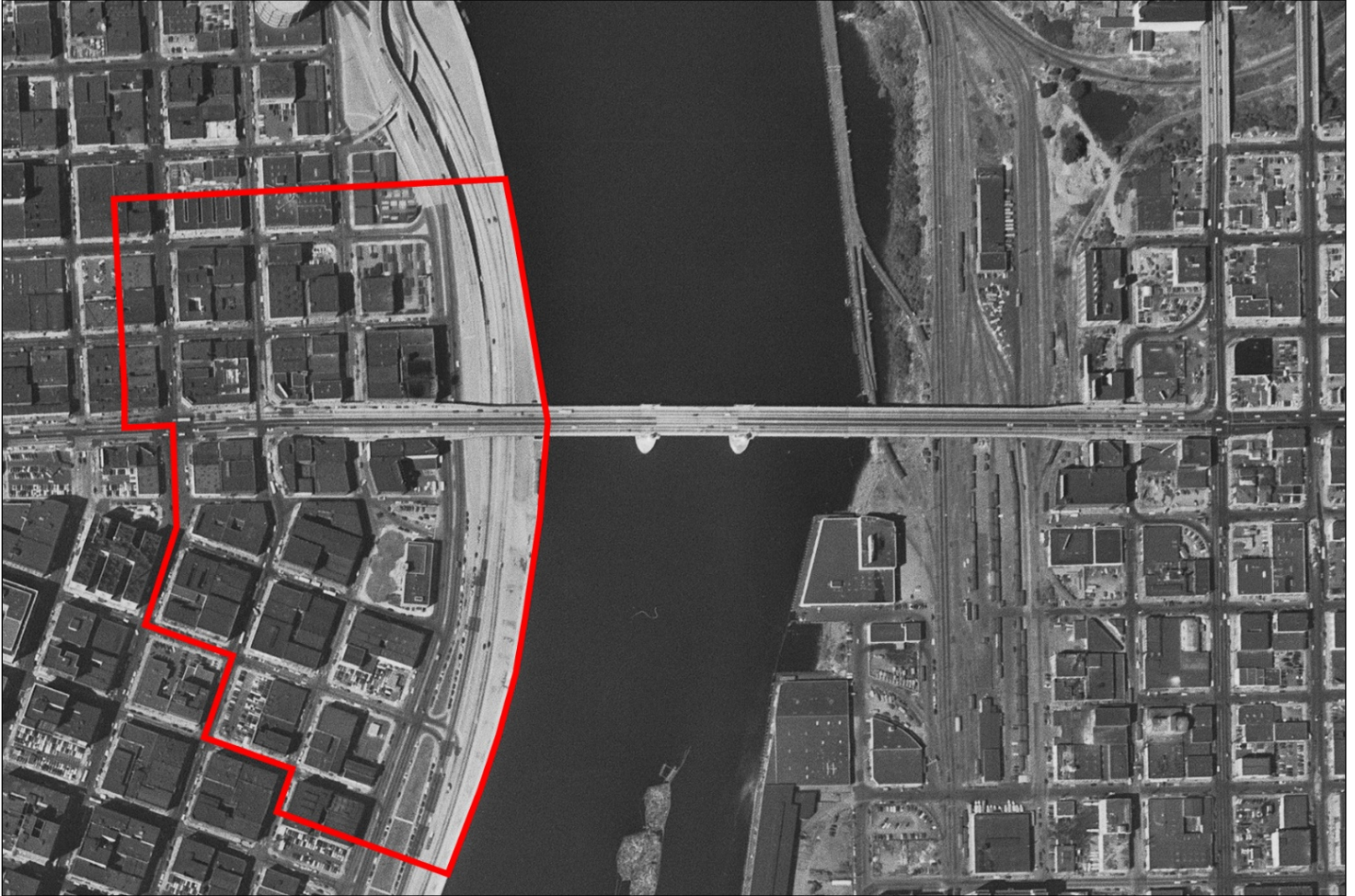


Figure 4: 1951 aerial photograph with the Skidmore/Old Town Historic District outlined in red (USGS EarthExplorer).

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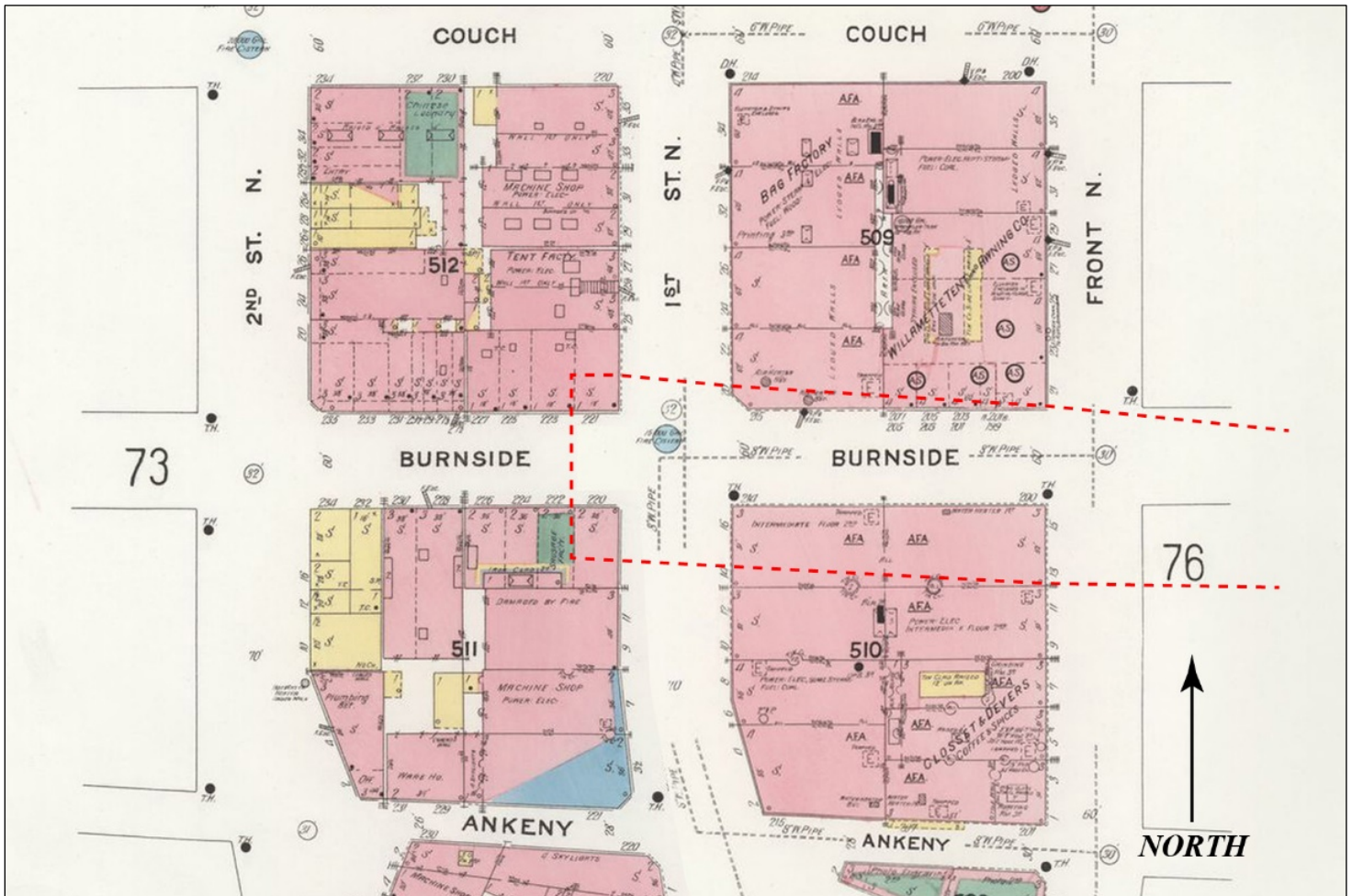


Figure 5: Sanborn maps, Volume 1, 1908. Mosaic of Sheet 74 (left two blocks) and Sheet 75 (right two blocks). Dashed red line indicates footprint of existing Burnside Bridge (Library of Congress).

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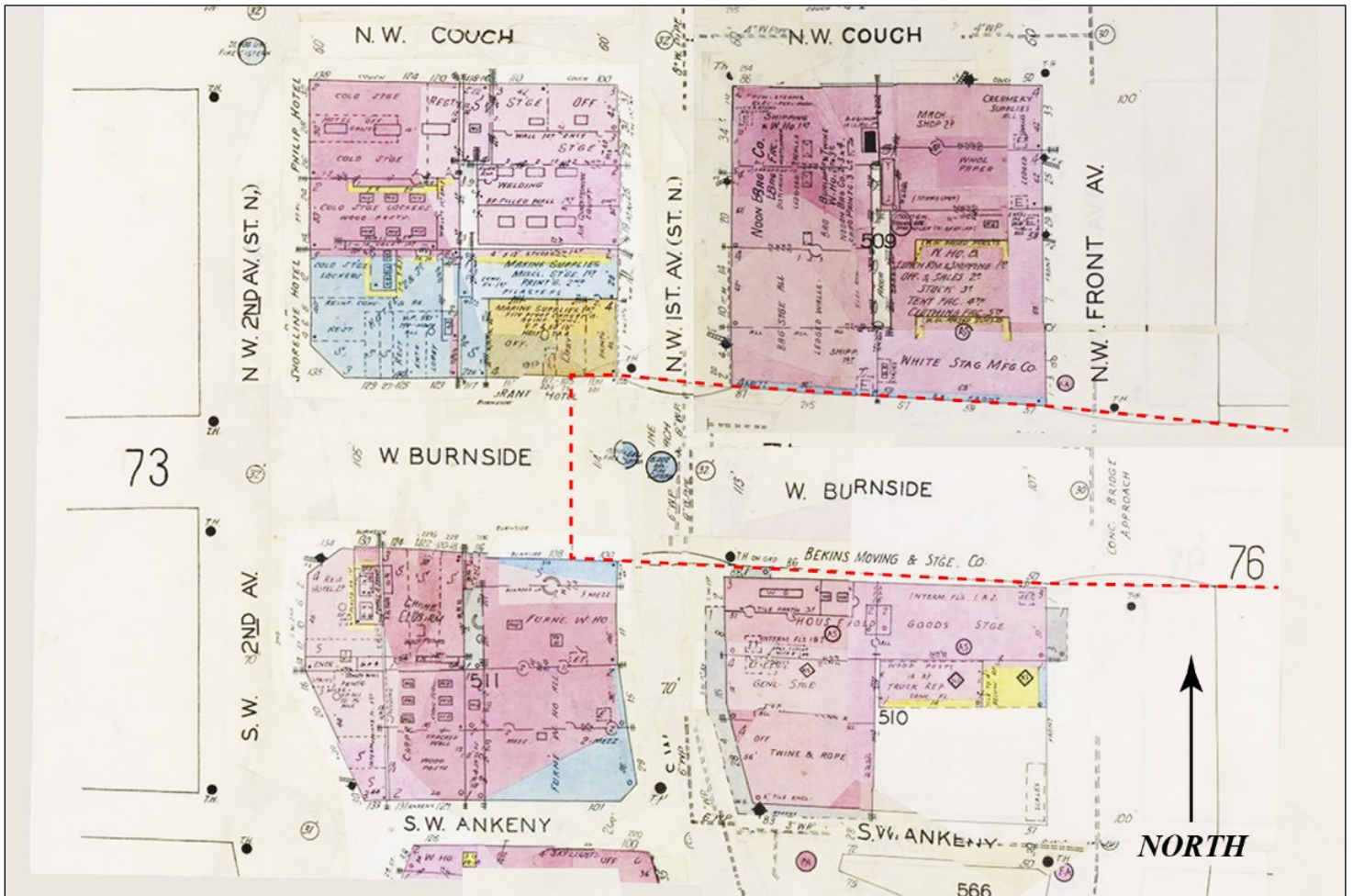


Figure 6: Sanborn maps, Volume 1, 1950. Mosaic of Sheet 74 (left two blocks) and Sheet 75 (right two blocks). Dashed red line indicates footprint of existing Burnside Bridge (Library of Congress).

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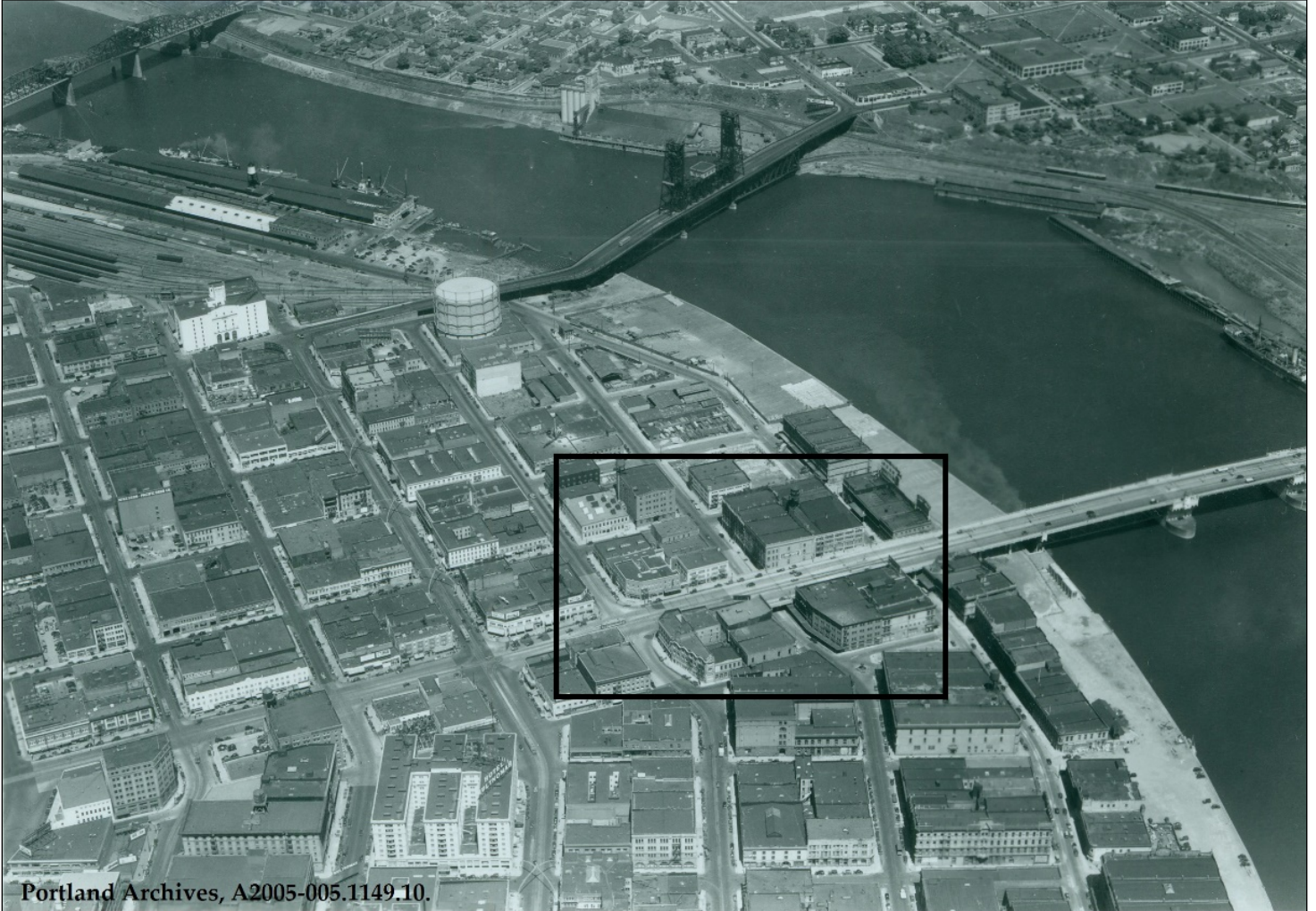


Figure 7: Aerial of downtown Portland including Burnside, Steel, and Broadway Bridges, December 31, 1935. Black box indicates excerpt in Figure 8 below (Portland Archives, A2005-005.1149.10).

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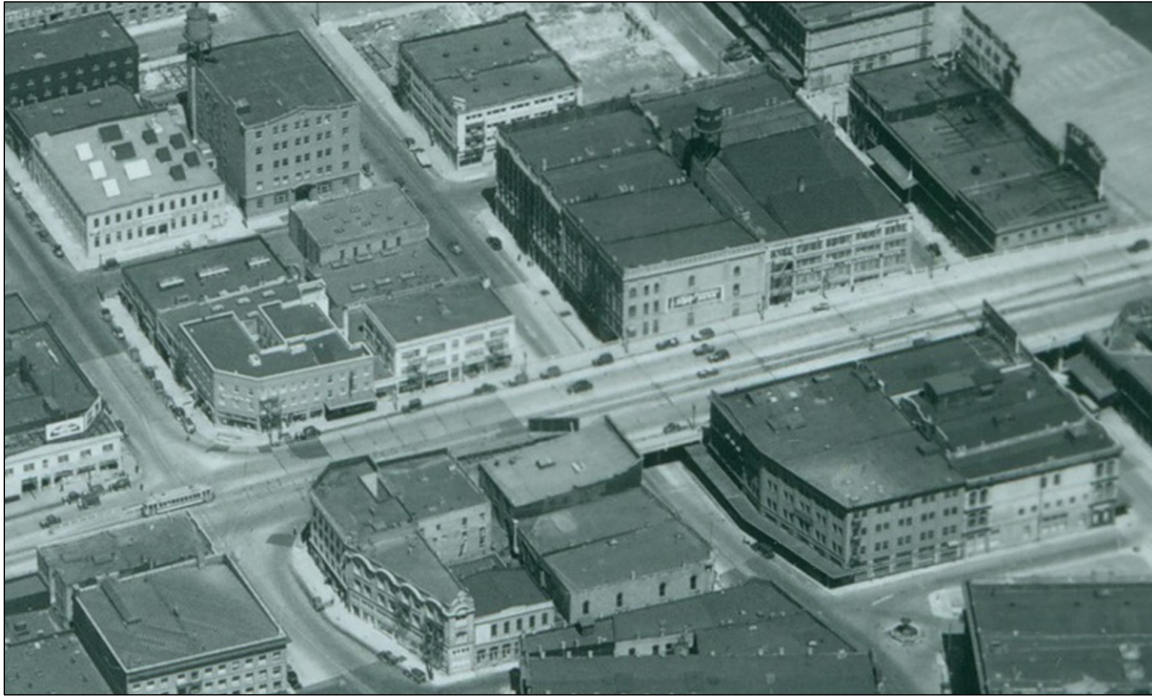


Figure 8: Aerial of downtown Portland including Burnside, Steel, and Broadway Bridges, December 31, 1935. Excerpt of Figure 7 above (Portland Archives, A2005-005.1149.10).



Figure 9: Aerial view of the downtown waterfront near the Burnside and Steel Bridges, December 31, 1935 (Portland Archives, 2000-03).

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Figure 10: Aerial view of completed Harbor Wall take from above the Burnside Bridge looking west, January 31, 1929 (Portland Archives, A1999-004.54).

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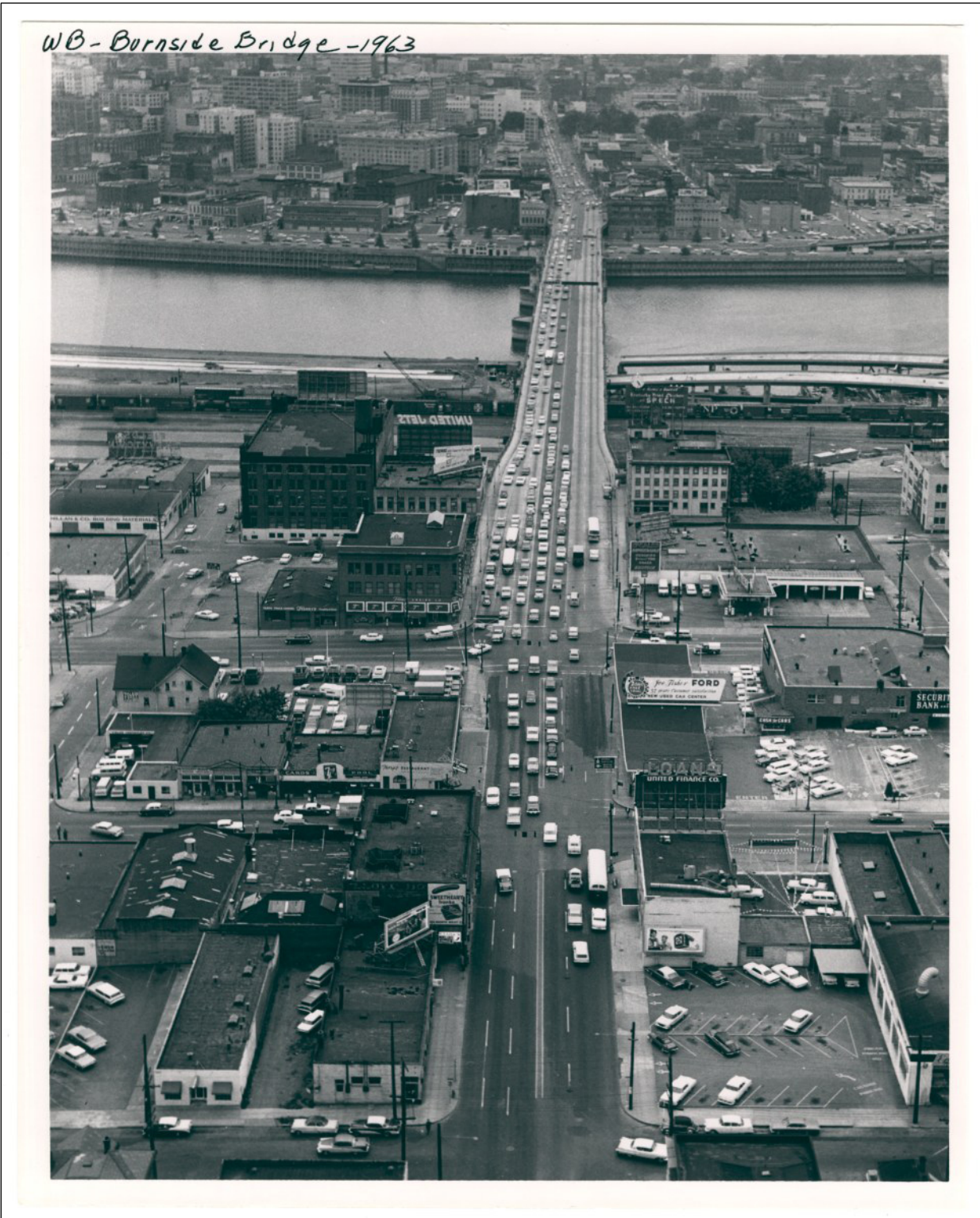


Figure 11: Burnside Bridge westbound, 1963 (Portland Archives A2005-001.106).

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Photographs



Figure 12: White Stag Block, looking northeast (Elizabeth O'Brien, 2019; photo mosaic Adam S. Alsobrook, 2021).



Figure 13: Bates Building, view looking northwest (Elizabeth O'Brien, 2019).

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Figure 14: Burnside Hotel, view looking northeast (Elizabeth O'Brien, 2019).



Figure 15: Salvation Army Building, view looking southeast (Elizabeth O'Brien, 2019).

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Figure 16: Reed Building, looking southwest (Elizabeth O'Brien, 2019).



Figure 17: Existing pedestrian access at north side of west approach, view looking north (Elizabeth O'Brien, 2019).

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Figure 18: Existing pedestrian access at north side of west approach, view looking south (David Ellis, 2021).



Figure 19: Existing pedestrian access at south side of west approach, view looking south (Elizabeth O'Brien, 2019).

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Figure 20: Existing pedestrian access at south side of west approach, view looking north (David Ellis, 2021).

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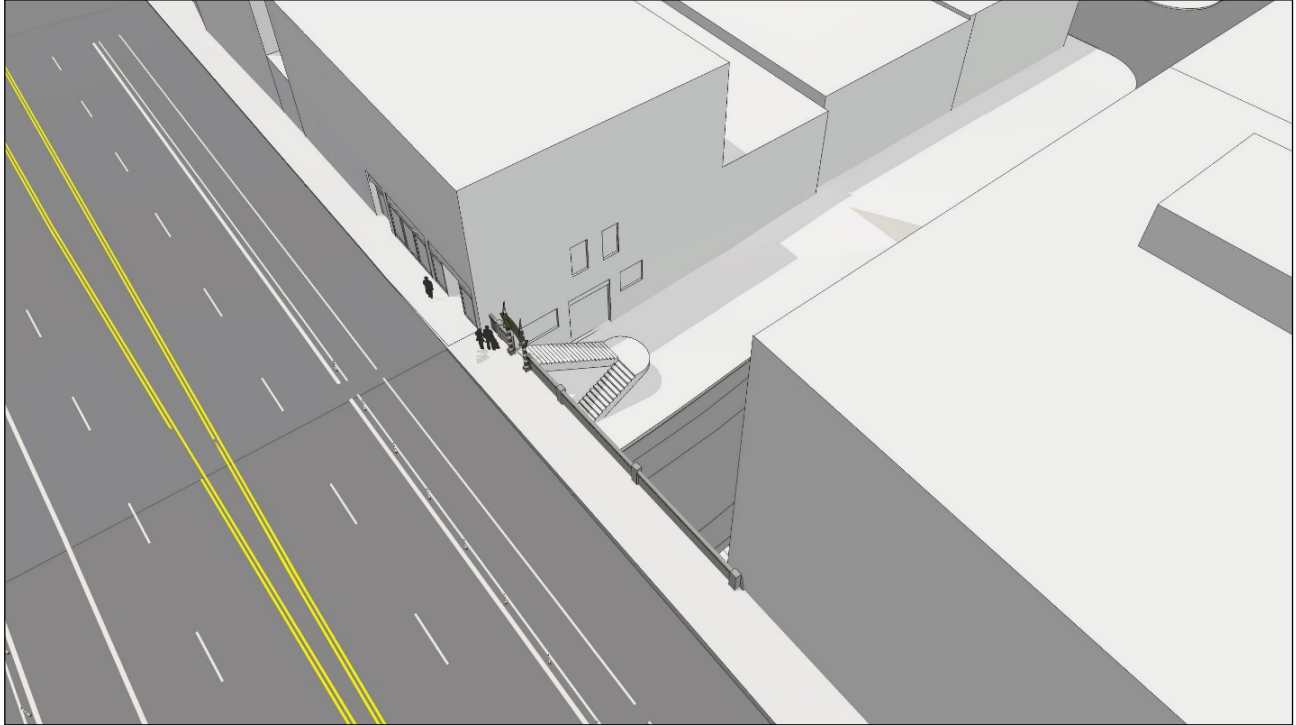


Figure 21: Existing pedestrian access at north side of west approach, artist's rendering, aerial view looking northwest (Fat Pencil Studio, 2021).

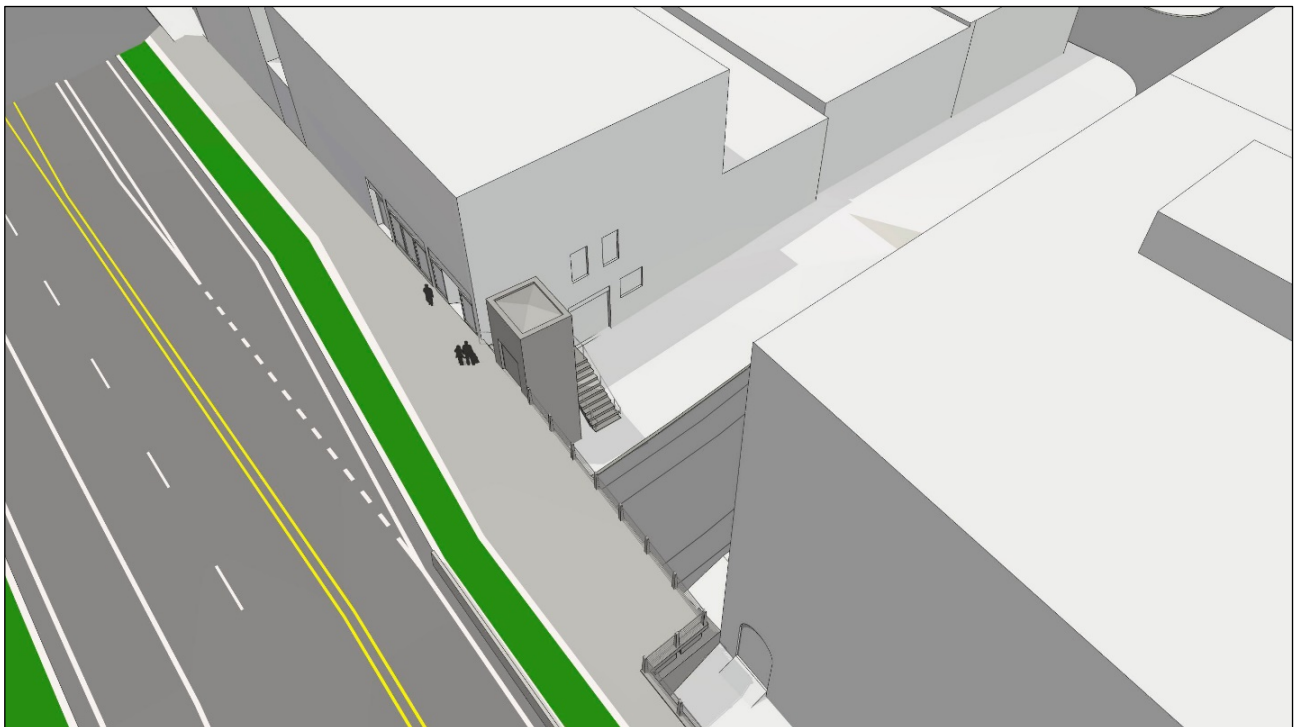


Figure 22: Proposed new pedestrian access at north side of west approach, artist's rendering, aerial view looking northwest (Fat Pencil Studio, 2021).

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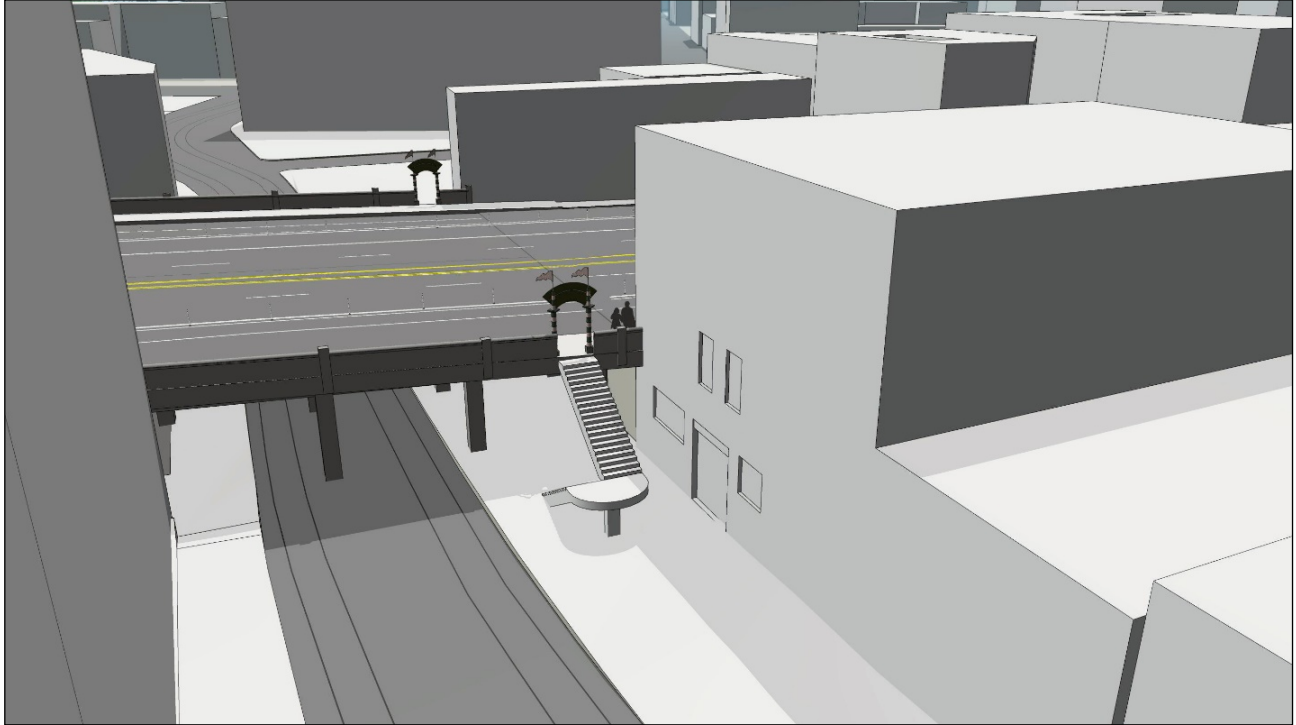


Figure 23: Existing pedestrian access at north side of west approach, artist's rendering, aerial view looking southwest (Fat Pencil Studio, 2021).

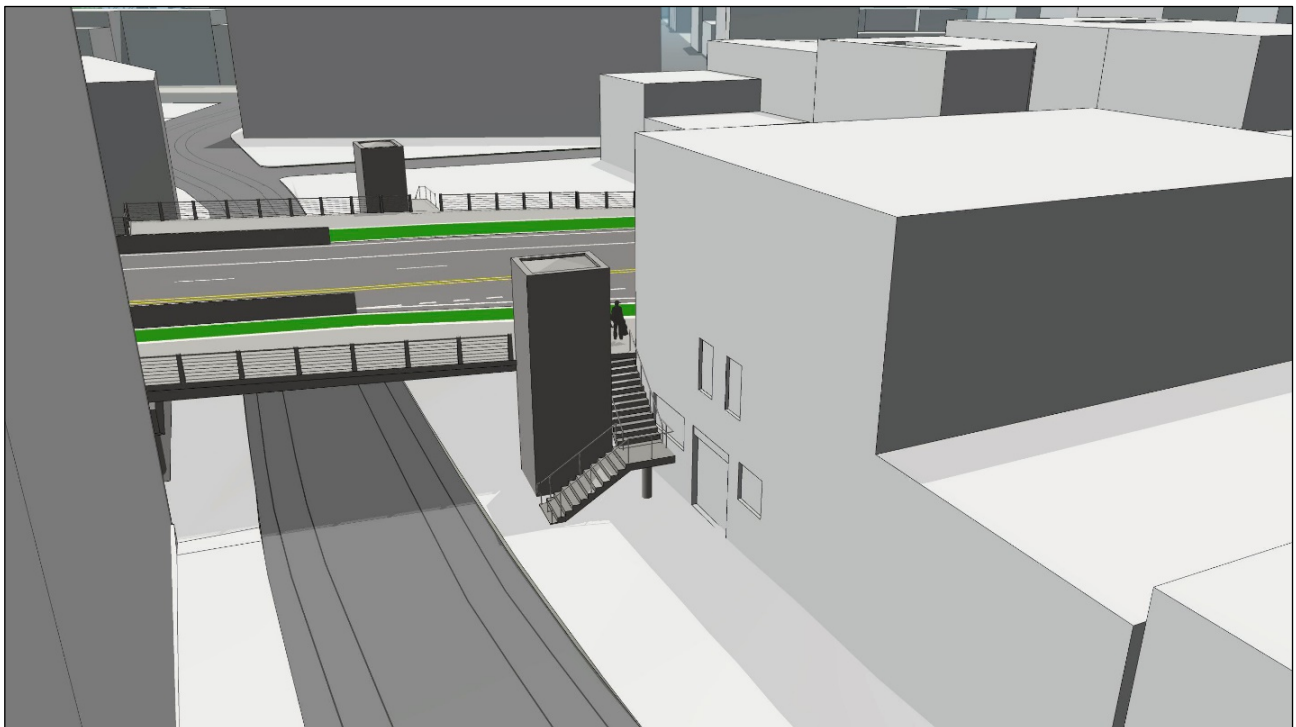


Figure 24: Proposed new pedestrian access at north side of west approach, artist's rendering, aerial view looking southwest (Fat Pencil Studio, 2021).

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Figure 25: Existing pedestrian access at north side of west approach, artist's rendering, aerial view looking northwest (Fat Pencil Studio, 2021).



Figure 26: Proposed new pedestrian access at north side of west approach, artist's rendering, aerial view looking northwest (Fat Pencil Studio, 2021).

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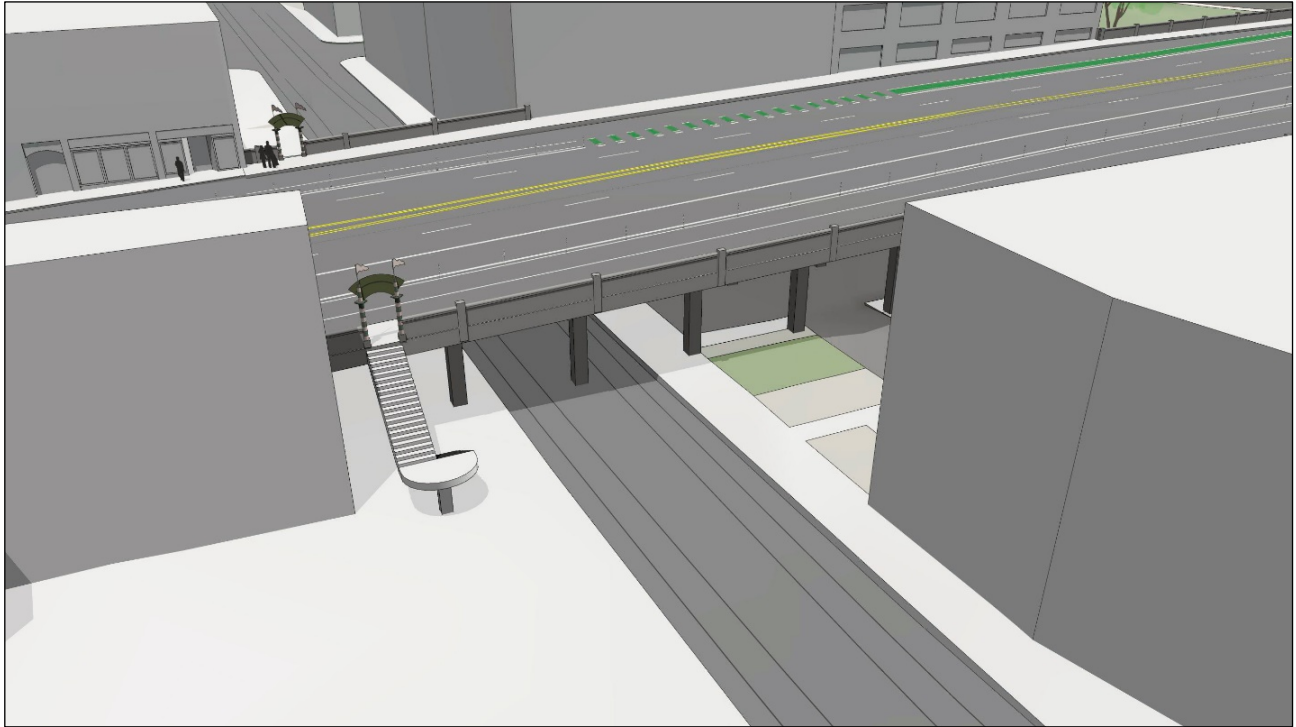


Figure 27: Existing pedestrian access at south side of west approach, artist's rendering, aerial view looking northeast (Fat Pencil Studio, 2021).



Figure 28: Proposed new pedestrian access at south side of west approach, artist's rendering, aerial view looking northeast (Fat Pencil Studio, 2021).

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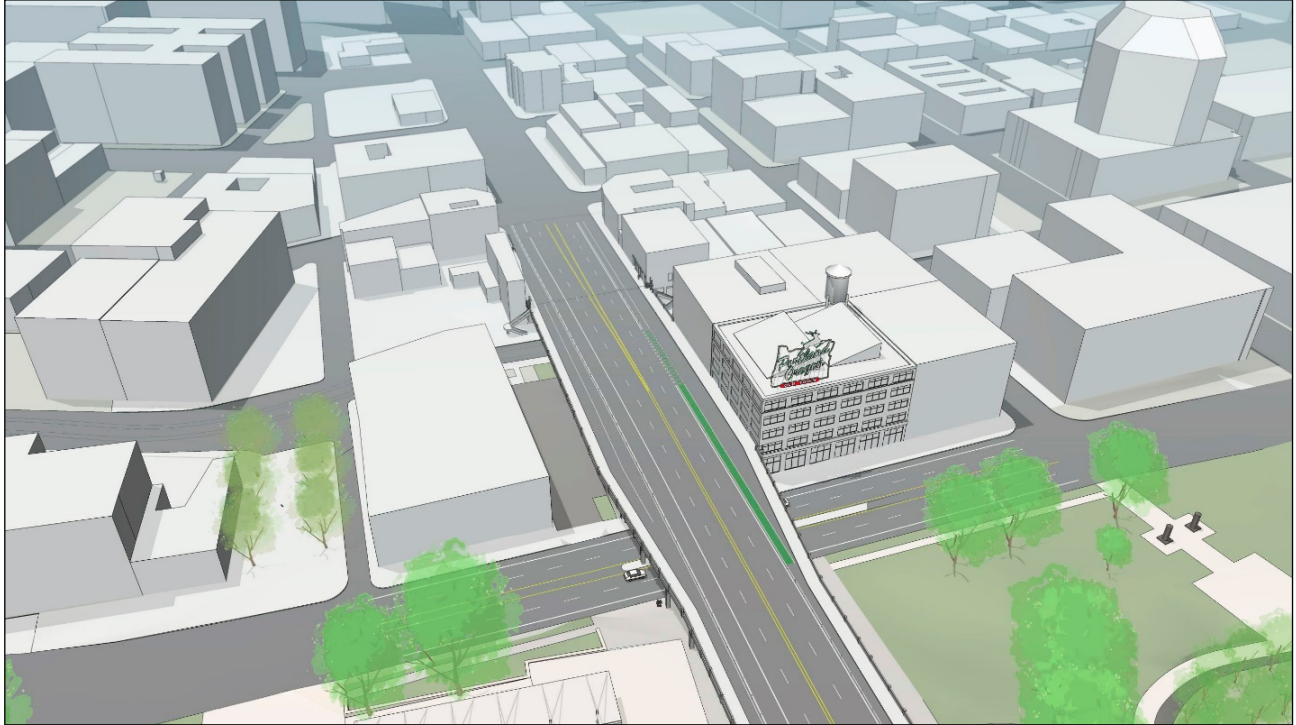


Figure 29: Artist's rendering of existing condition of west approach, aerial view looking northwest (Fat Pencil Studio, 2021).

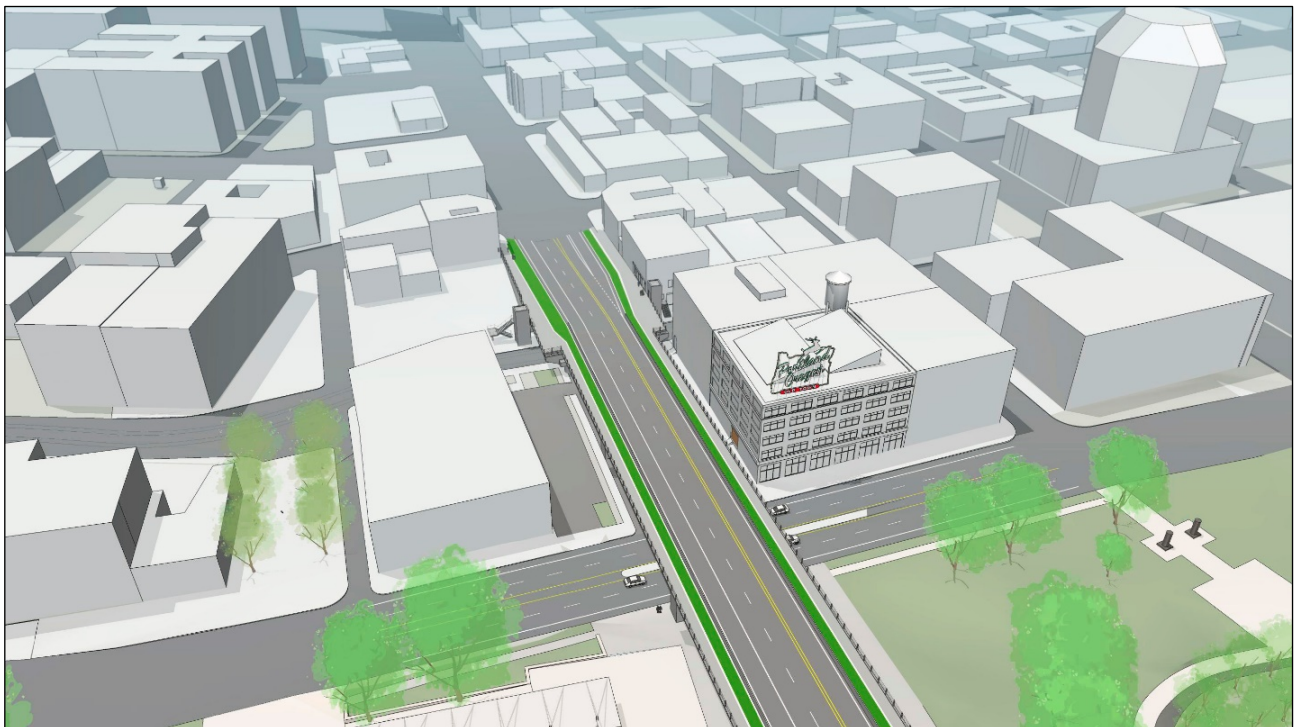


Figure 30: Artist's rendering of replacement west approach span, aerial view looking northwest (Fat Pencil Studio, 2021).

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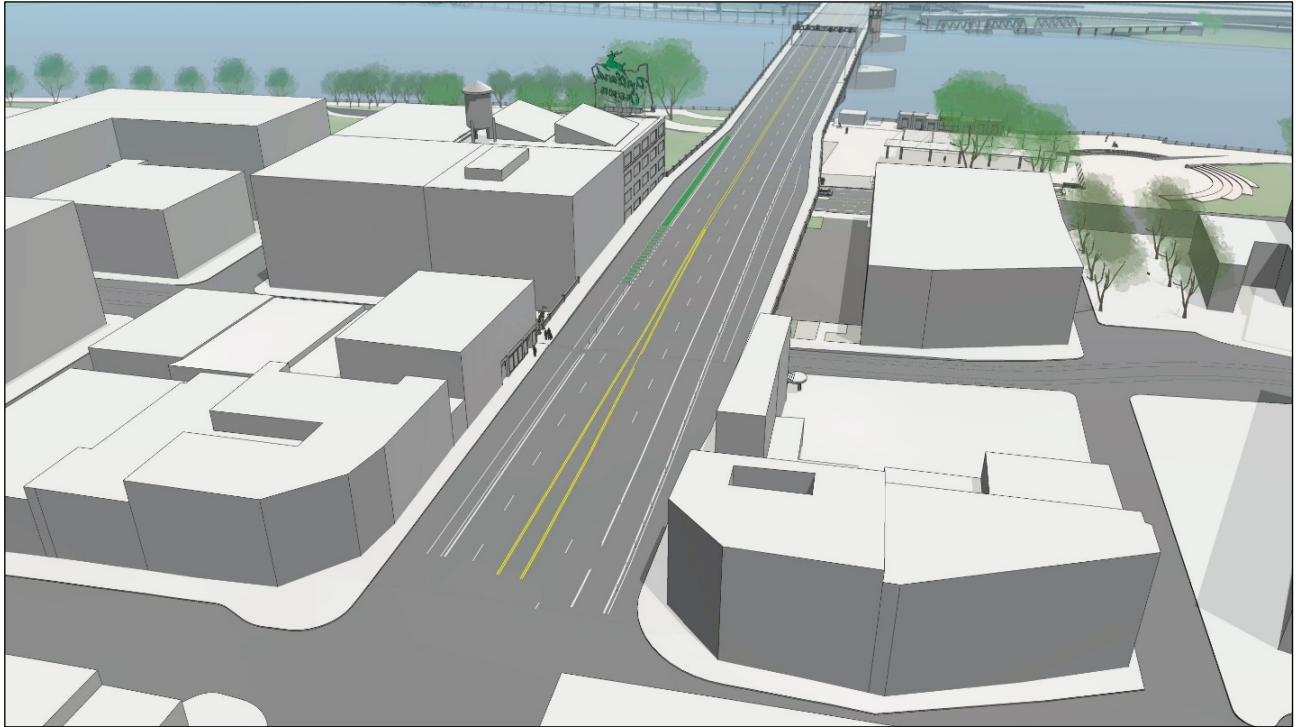


Figure 31: Artist's rendering of existing condition of west approach, aerial view looking northeast (Fat Pencil Studio, 2021).

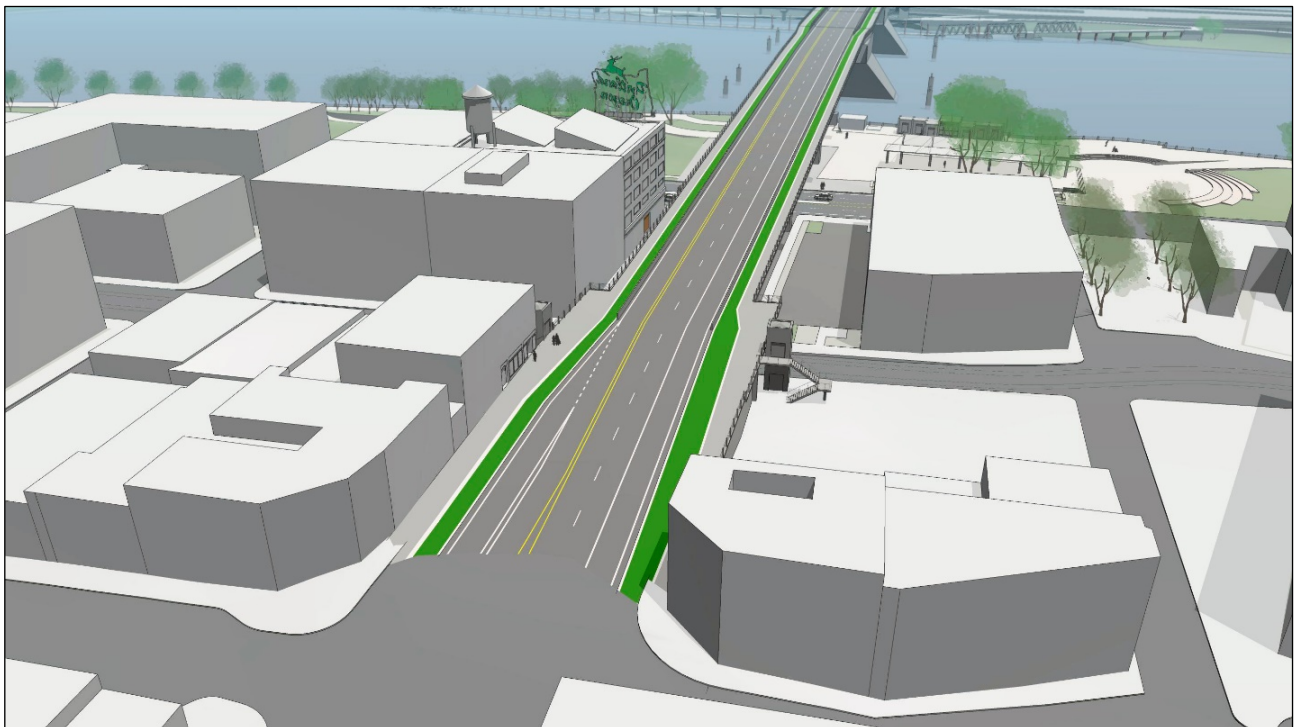


Figure 32: Artist's rendering of replacement west approach span, aerial view looking northwest (Fat Pencil Studio, 2021).

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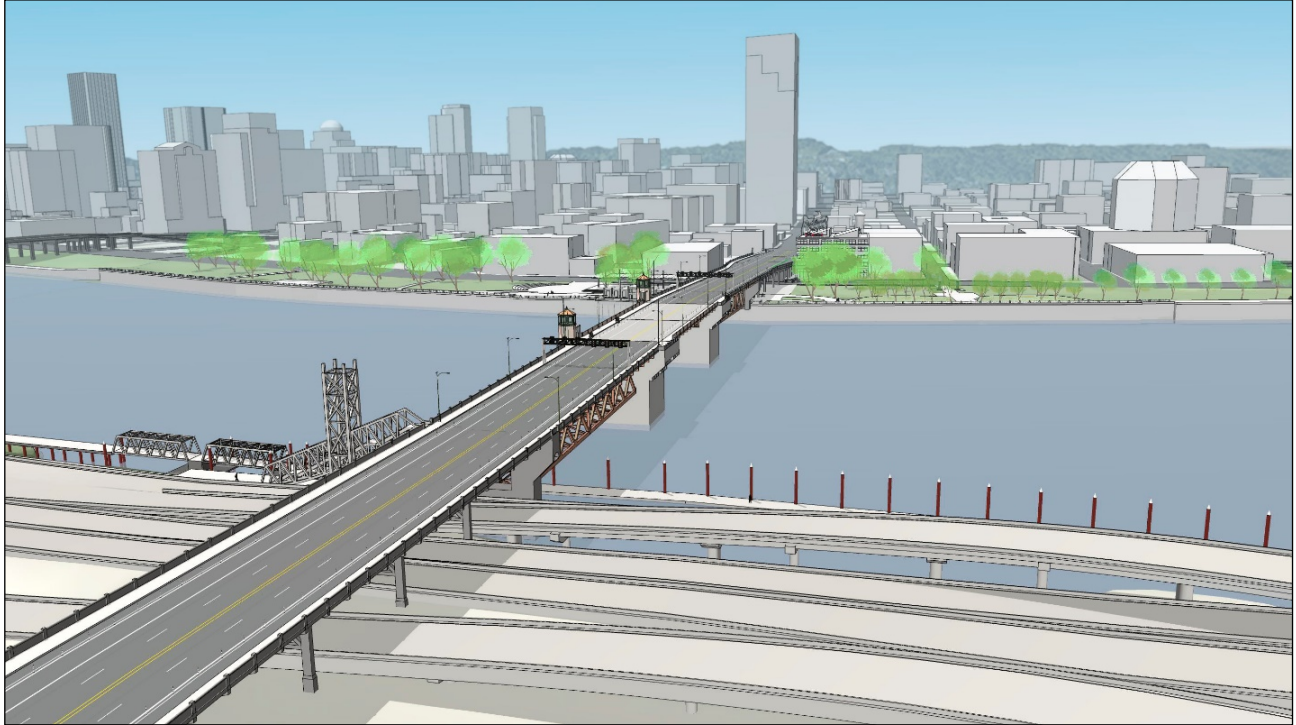


Figure 33: Artist's rendering of existing condition of the Burnside Bridge, aerial view looking southwest (Fat Pencil Studio, 2021).

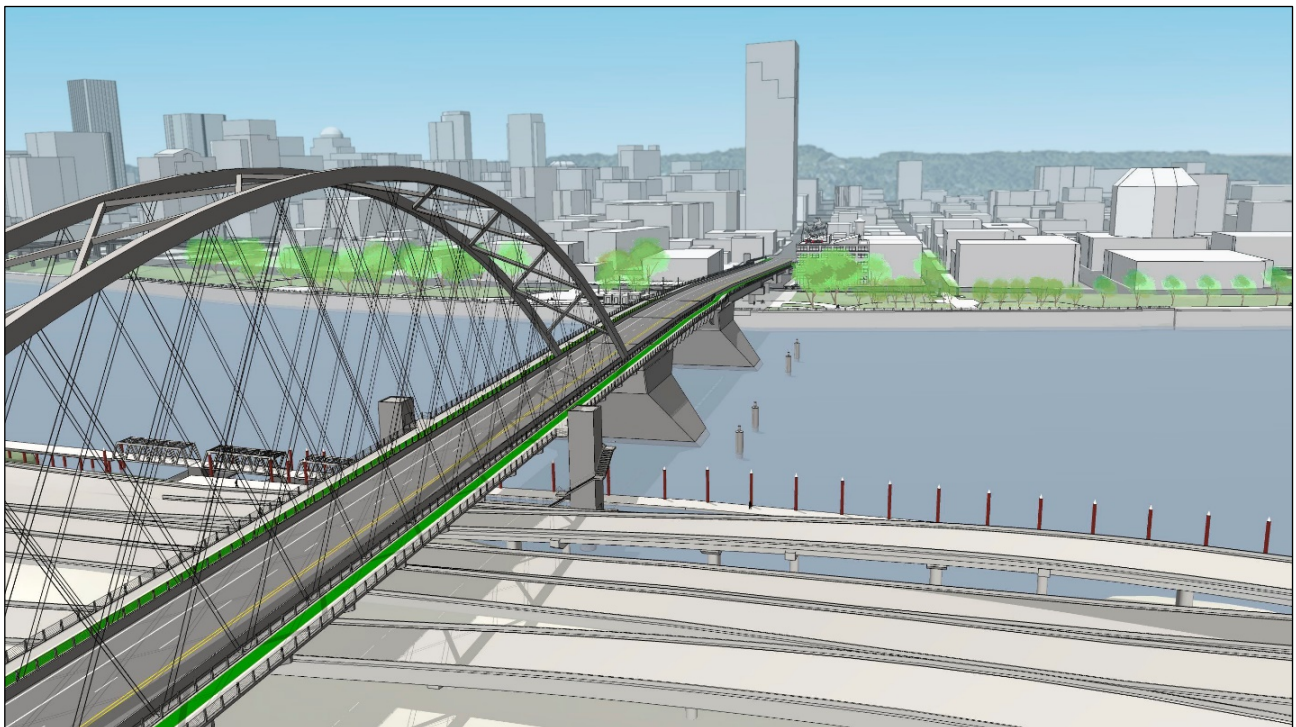


Figure 34: Span Combination 1 (girder west approach, bascule central span, tied arch east approach), artist's rendering, view looking southwest (Fat Pencil Studio, 2021).

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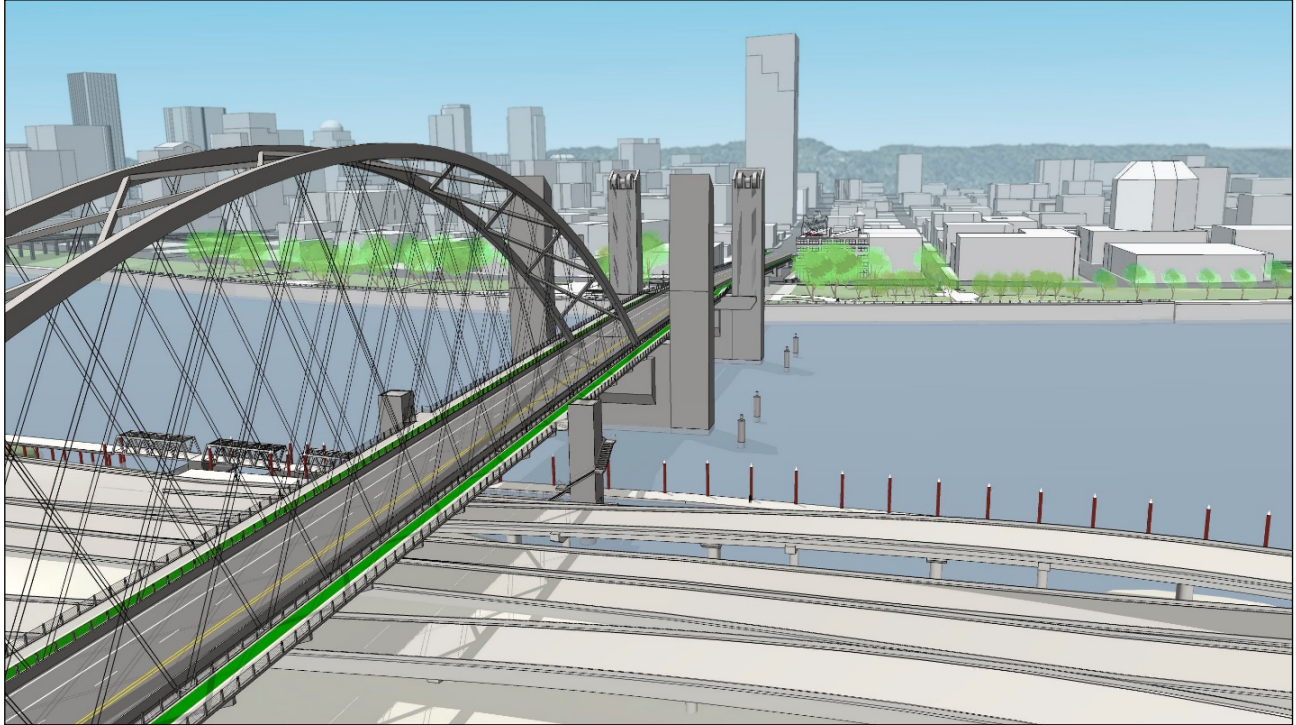


Figure 35: Span Combination 2 (girder west approach, vertical lift central span, tied arch east approach), artist's rendering, view looking southwest (Fat Pencil Studio, 2021).

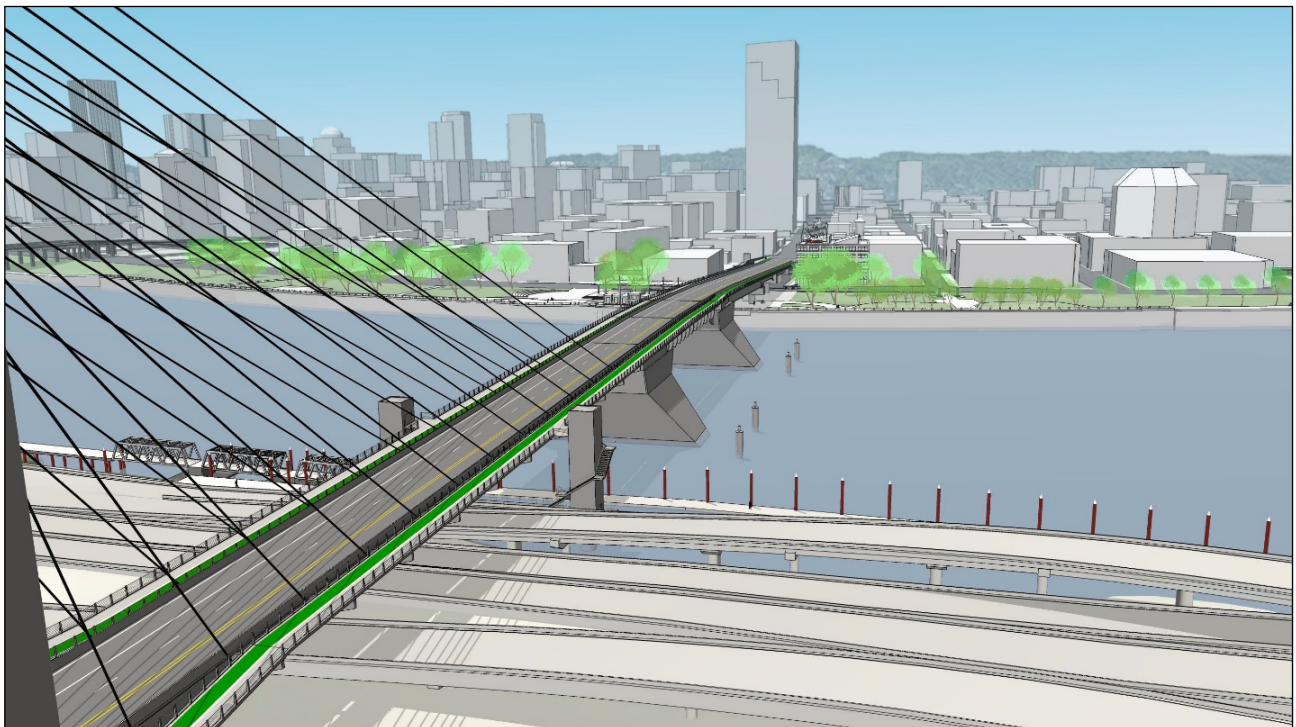


Figure 36: Span Combination 3 (girder west approach, bascule central span, cable supported east approach), artist's rendering, view looking southwest (Fat Pencil Studio, 2021).

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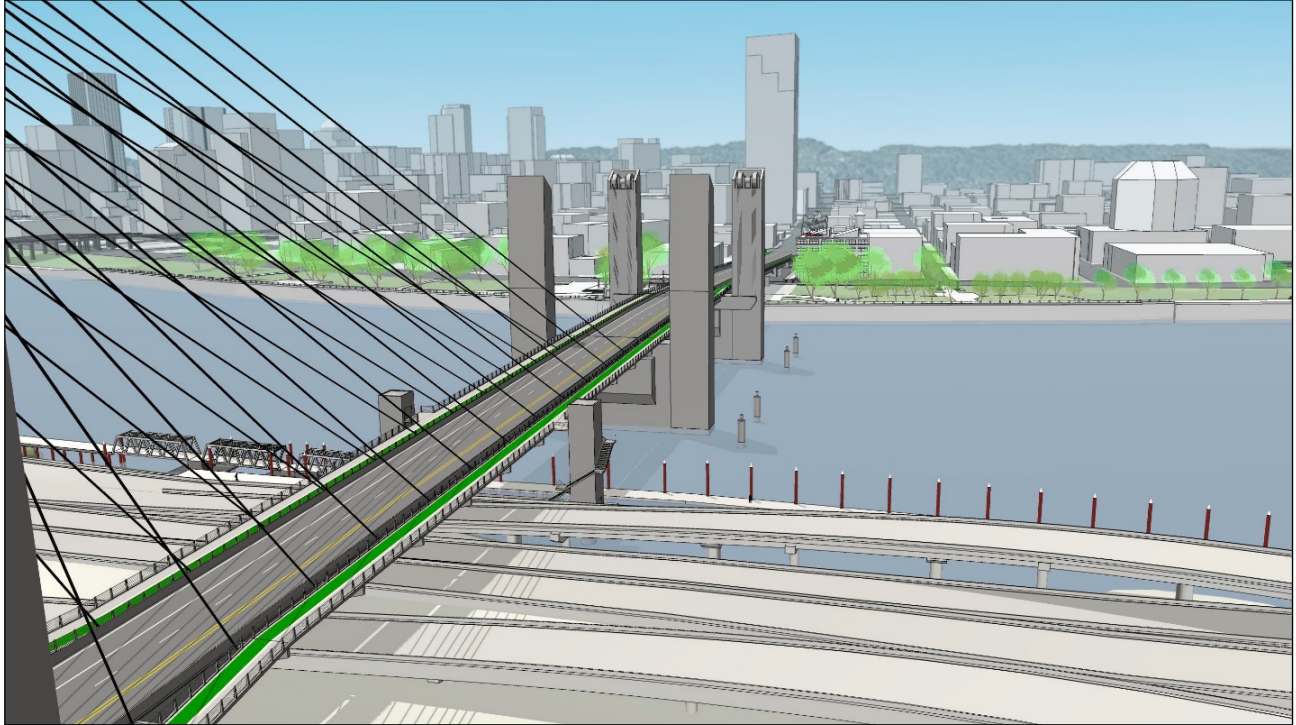


Figure 37: Span Combination 4 (girder west approach, vertical lift central span, cable supported east approach), artist's rendering, view looking southwest (Fat Pencil Studio, 2021).



Figure 38: Artist's rendering of existing condition of the Burnside Bridge, view looking south (Fat Pencil Studio, 2021).

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Figure 39: Span Combination 1 (girder west approach, bascule central span, tied arch east approach), artist's rendering, view looking south (Fat Pencil Studio, 2021).



Figure 40: Span Combination 2 (girder west approach, vertical lift central span, tied arch east approach), artist's rendering, view looking south (Fat Pencil Studio, 2021).

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Figure 41: Span Combination 3 (girder west approach, bascule central span, cable supported east approach), artist's rendering, view looking south (Fat Pencil Studio, 2021).



Figure 42: Span Combination 4 (girder west approach, vertical lift central span, cable supported east approach), artist's rendering, view looking southwest (Fat Pencil Studio, 2021).

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Figure 43: Artist's rendering of existing condition of the Burnside Bridge, view looking north (Fat Pencil Studio, 2021).



Figure 44: Span Combination 1 (girder west approach, bascule central span, tied arch east approach), artist's rendering, view looking north (Fat Pencil Studio, 2021).

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Figure 45: Span Combination 2 (girder west approach, vertical lift central span, tied arch east approach), artist's rendering, view looking north (Fat Pencil Studio, 2021).



Figure 46: Span Combination 3 (girder west approach, bascule central span, cable supported east approach), artist's rendering, view looking north (Fat Pencil Studio, 2021).

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Figure 47: Span Combination 4 (girder west approach, vertical lift central span, cable supported east approach), artist's rendering, view looking southwest (Fat Pencil Studio, 2021).



Figure 48: Artist's rendering of existing condition of the Burnside Bridge, view looking southeast (Fat Pencil Studio, 2021).

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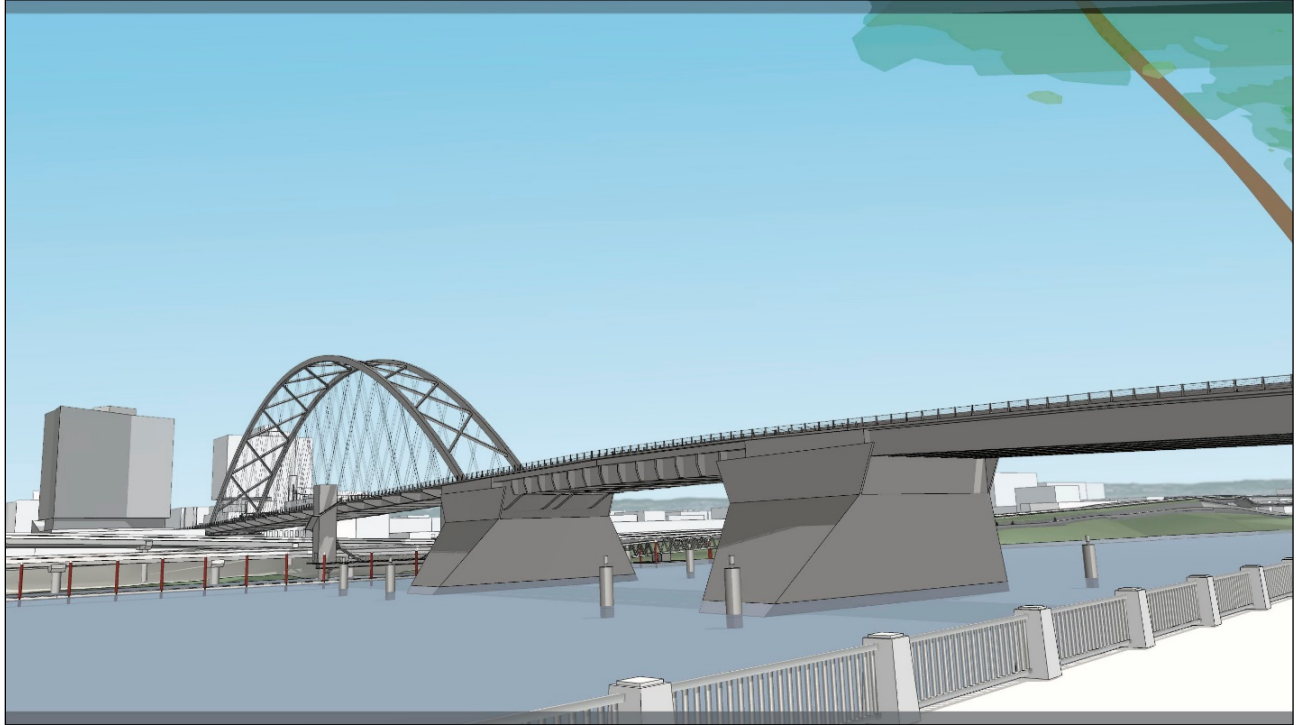


Figure 49: Span Combination 1 (girder west approach, bascule central span, tied arch east approach), artist's rendering, view looking southeast (Fat Pencil Studio, 2021).

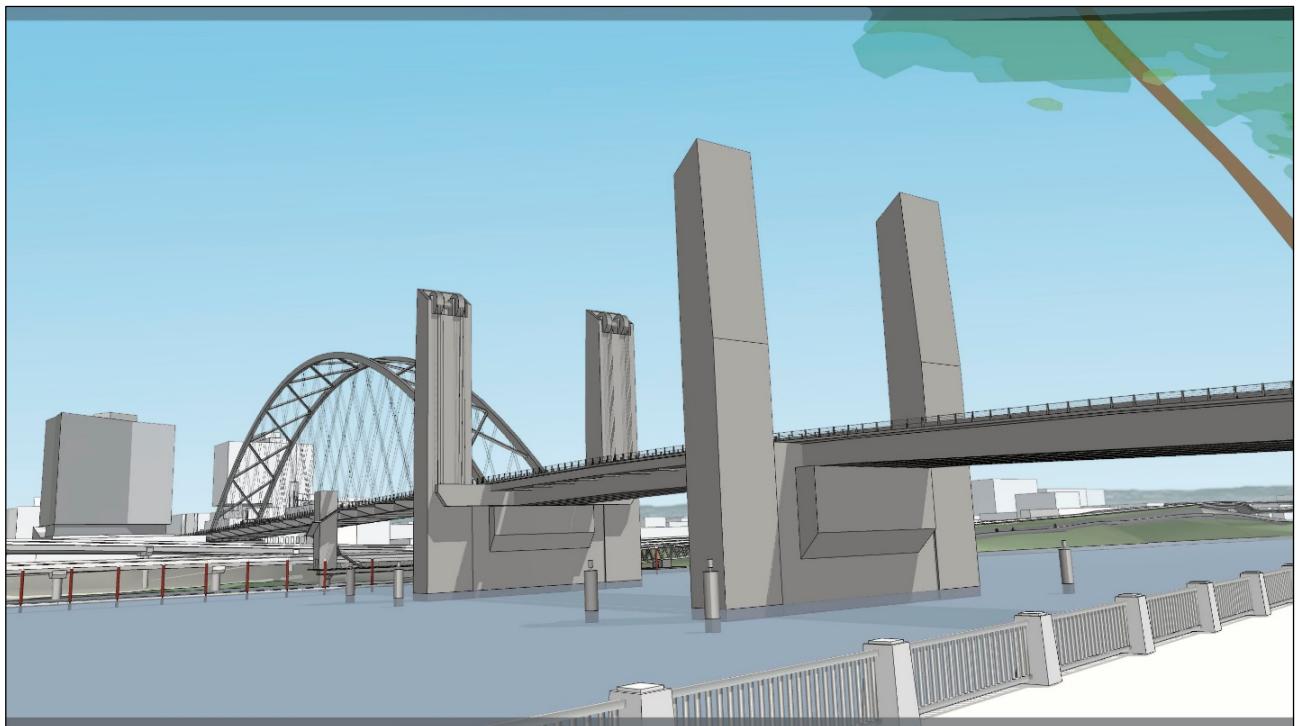


Figure 50: Span Combination 2 (girder west approach, vertical lift central span, tied arch east approach), artist's rendering, view looking southeast (Fat Pencil Studio, 2021).

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Figure 51: Span Combination 3 (girder west approach, bascule central span, cable supported east approach), artist's rendering, view looking southeast (Fat Pencil Studio, 2021).



Figure 52: Span Combination 4 (girder west approach, vertical lift central span, cable supported east approach), artist's rendering, view looking southeast (Fat Pencil Studio, 2021).

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Figure 53: Artist's rendering of existing condition of the Burnside Bridge, aerial view looking east (Fat Pencil Studio, 2021).



Figure 54: Span Combination 1 (girder west approach, bascule central span, tied arch east approach), artist's rendering, view looking east (Fat Pencil Studio, 2021).

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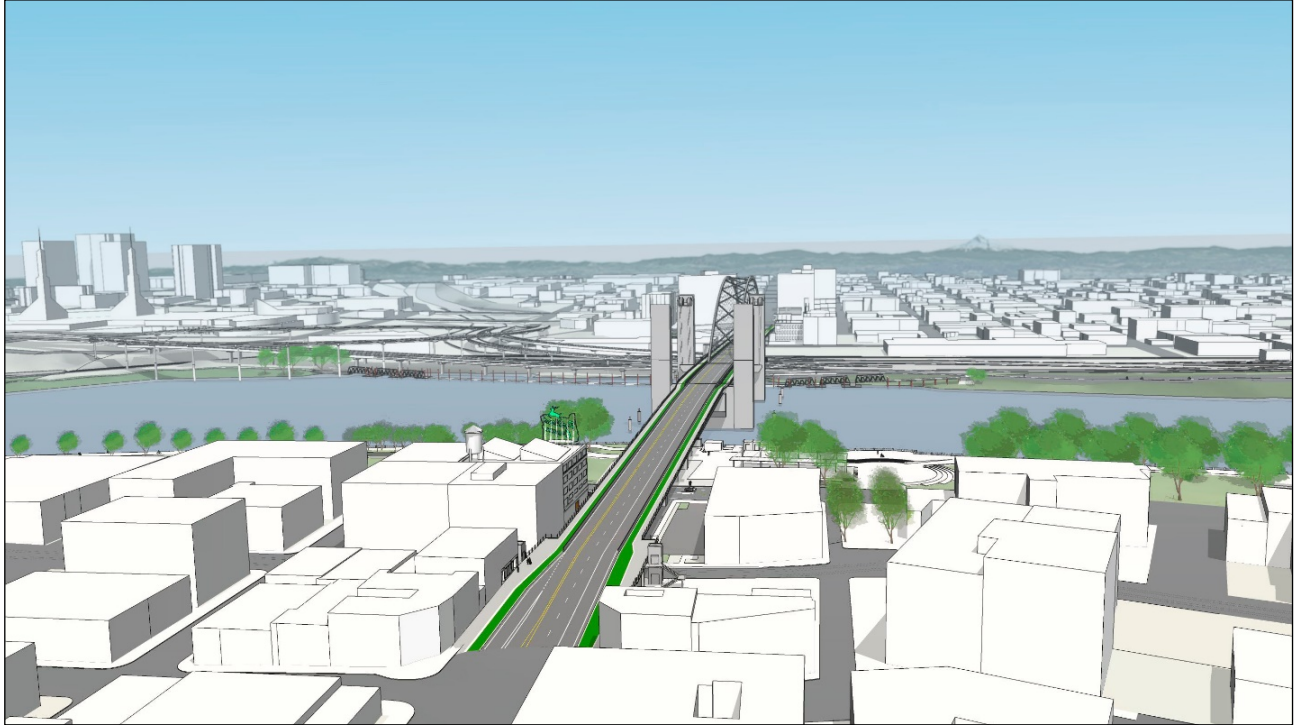


Figure 55: Span Combination 2 (girder west approach, vertical lift central span, tied arch east approach), artist's rendering, view looking east (Fat Pencil Studio, 2021).



Figure 56: Span Combination 3 (girder west approach, bascule central span, cable supported east approach), artist's rendering, view looking east (Fat Pencil Studio, 2021).

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ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))	
Property Name: Skidmore/Old Town Historic District (NHL)	
Street Address: Multiple	City, County: Portland, Multnomah

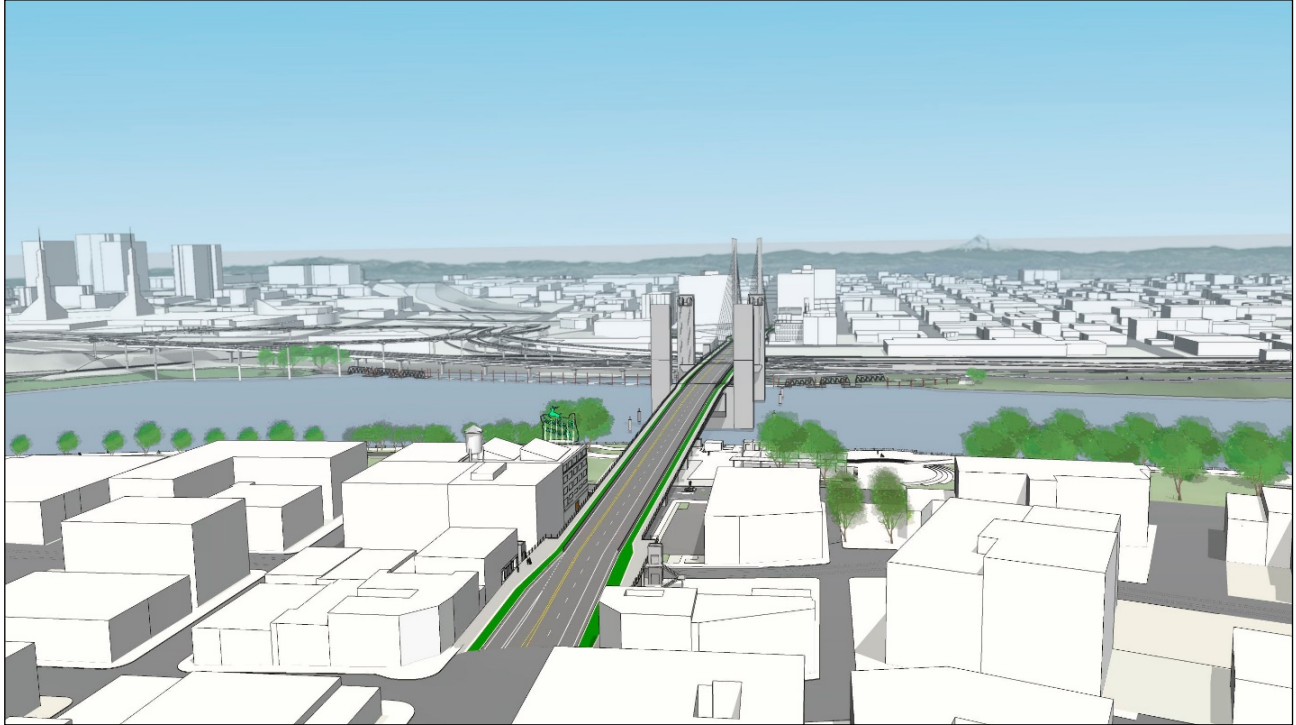


Figure 57: Span Combination 4 (girder west approach, vertical lift central span, cable supported east approach), artist's rendering, view looking east (Fat Pencil Studio, 2021).

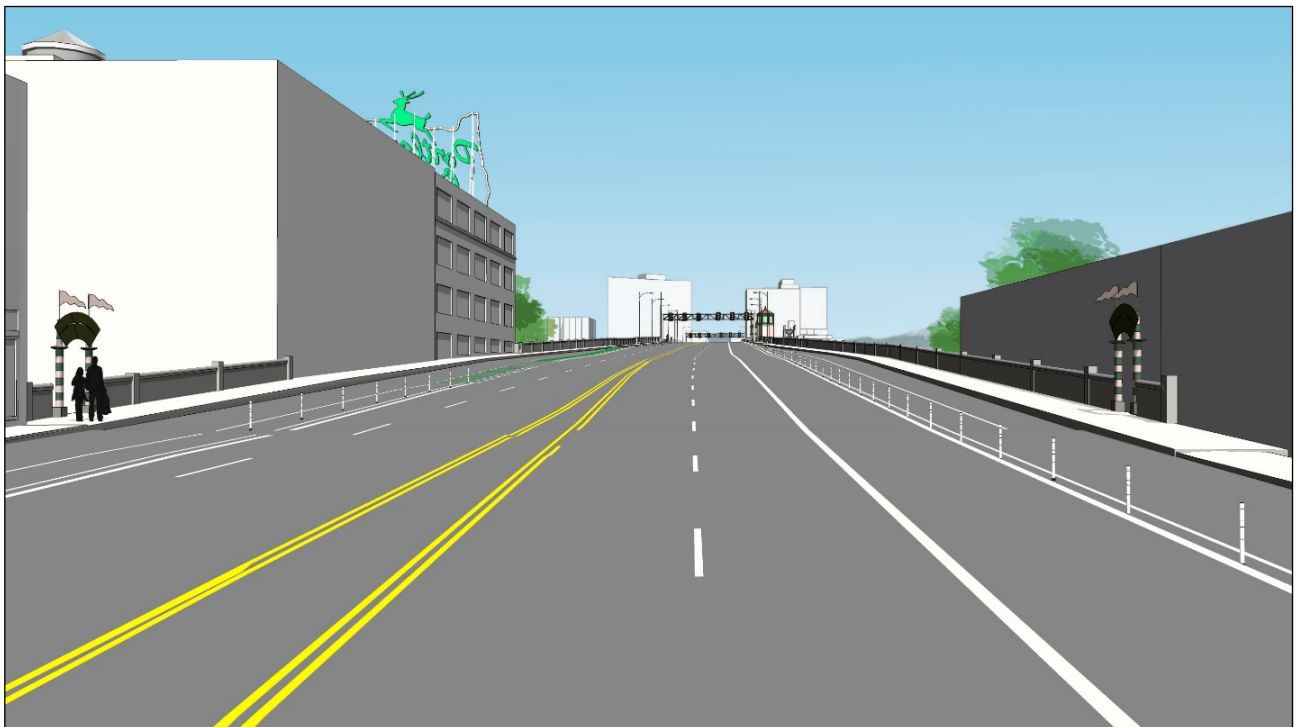


Figure 58: Artist's rendering of existing condition of the Burnside Bridge, view looking east (Fat Pencil Studio, 2021).

ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))	
Property Name: Skidmore/Old Town Historic District (NHL)	
Street Address: Multiple	City, County: Portland, Multnomah



Figure 59: Span Combination 1 (girder west approach, bascule central span, tied arch east approach), artist's rendering, view looking east (Fat Pencil Studio, 2021).



Figure 60: Span Combination 2 (girder west approach, vertical lift central span, tied arch east approach), artist's rendering, view looking east (Fat Pencil Studio, 2021).

ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))	
Property Name: Skidmore/Old Town Historic District (NHL)	
Street Address: Multiple	City, County: Portland, Multnomah

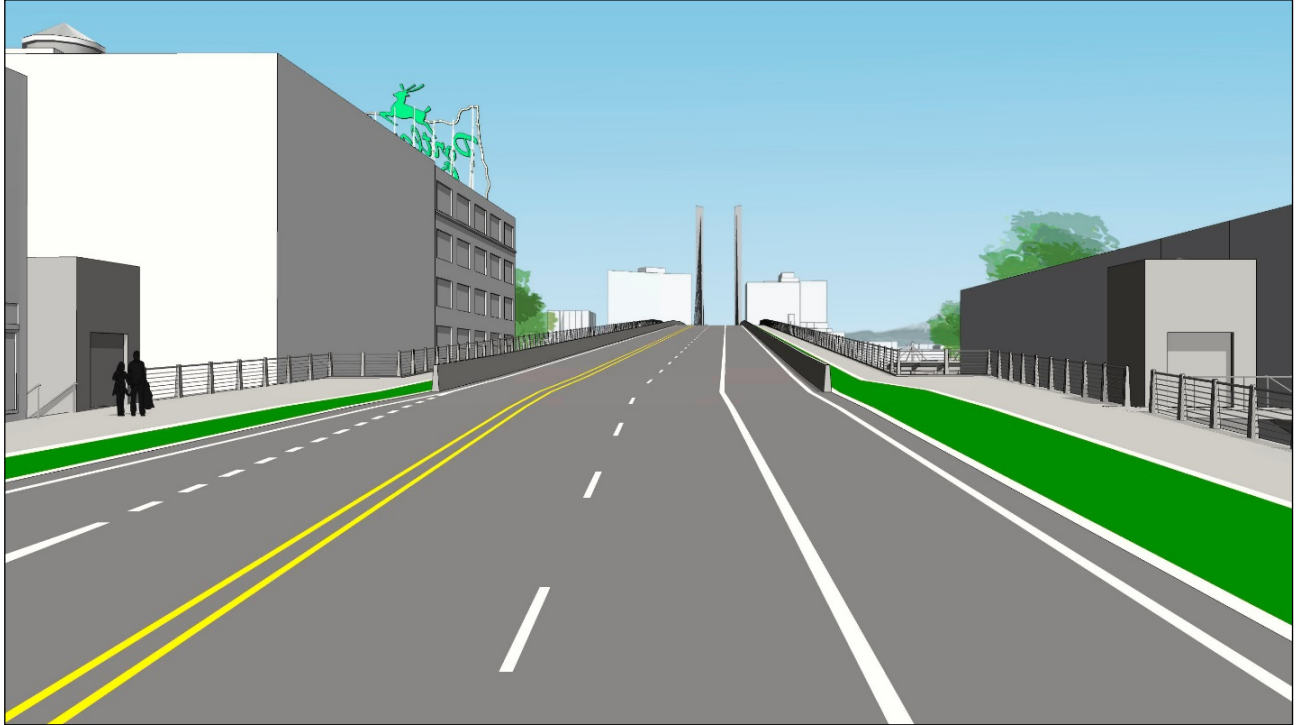


Figure 61: Span Combination 3 (girder west approach, bascule central span, cable supported east approach), artist's rendering, view looking east (Fat Pencil Studio, 2021).

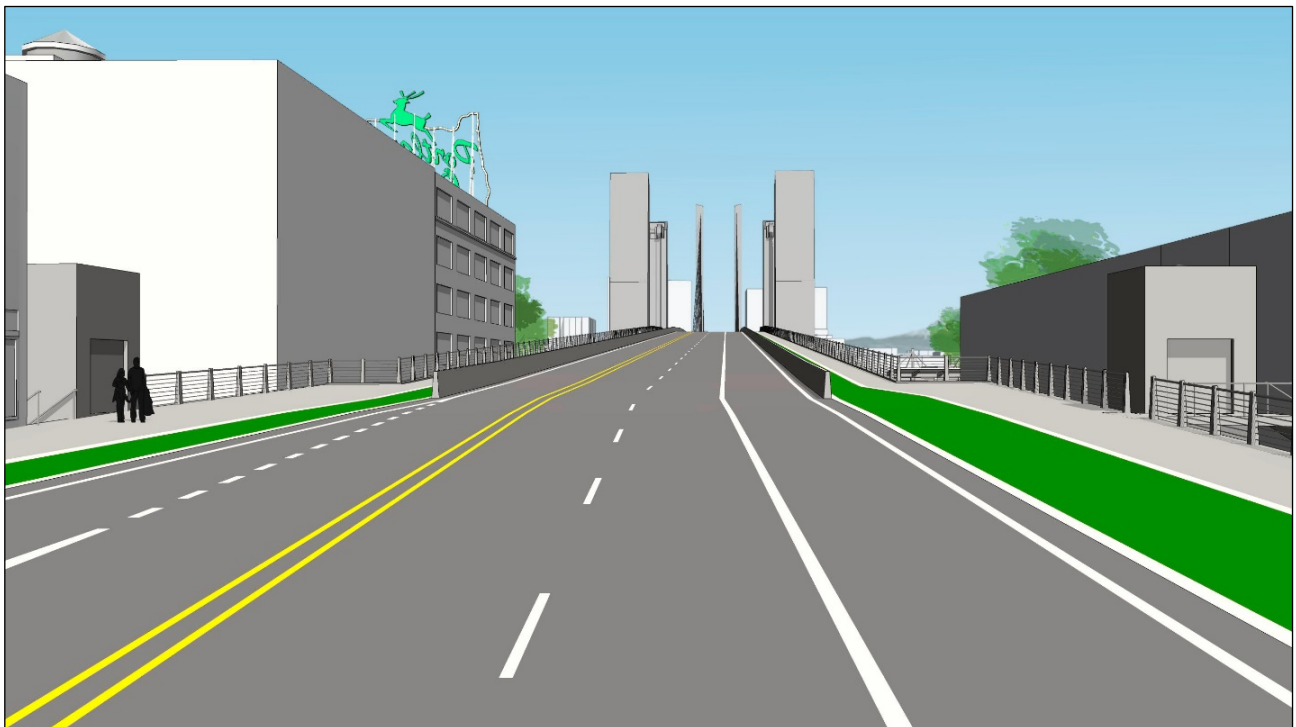


Figure 62: Span Combination 4 (girder west approach, vertical lift central span, cable supported east approach), artist's rendering, view looking east (Fat Pencil Studio, 2021).

**ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM**

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))	
Property Name: Skidmore/Old Town Historic District (NHL)	
Street Address: Multiple	City, County: Portland, Multnomah



Figure 63: Artist's rendering of existing condition of the Burnside Bridge, view looking east (Fat Pencil Studio, 2021).

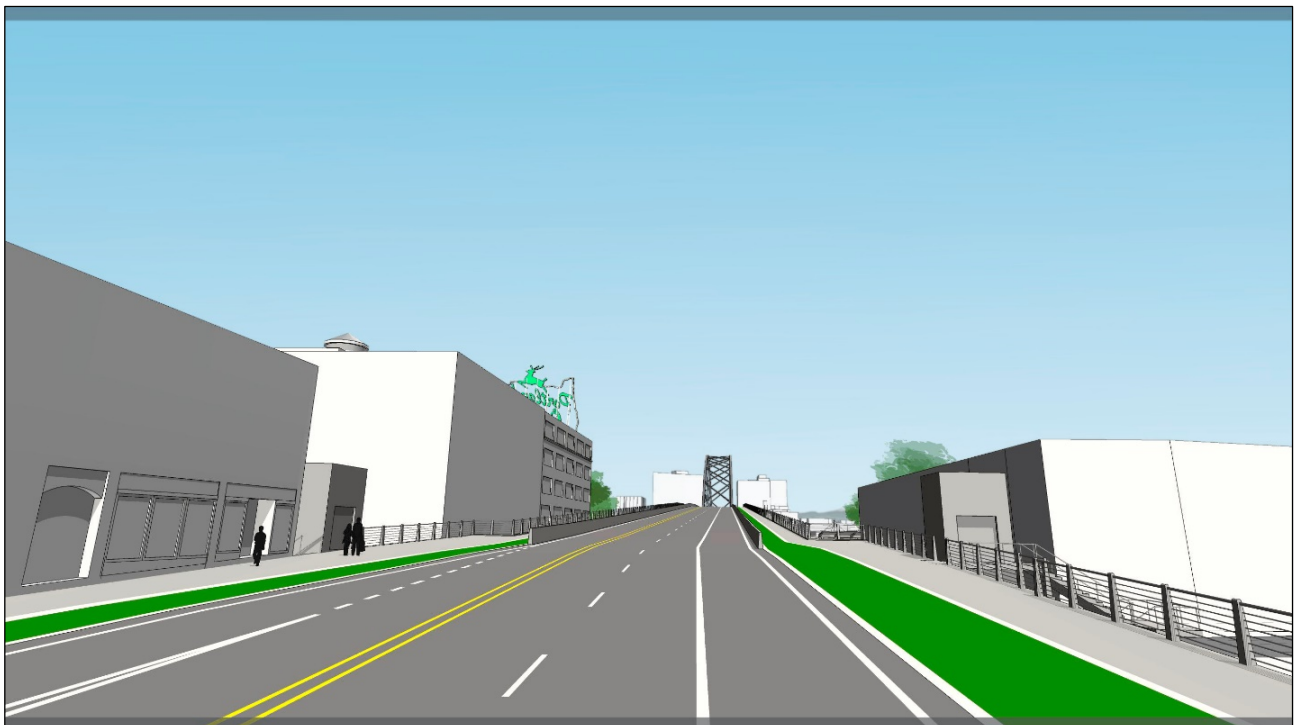


Figure 64: Span Combination 1 (girder west approach, bascule central span, tied arch east approach), artist's rendering, view looking east (Fat Pencil Studio, 2021).

ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))	
Property Name: Skidmore/Old Town Historic District (NHL)	
Street Address: Multiple	City, County: Portland, Multnomah



Figure 65: Span Combination 2 (girder west approach, vertical lift central span, tied arch east approach), artist's rendering, view looking east (Fat Pencil Studio, 2021).

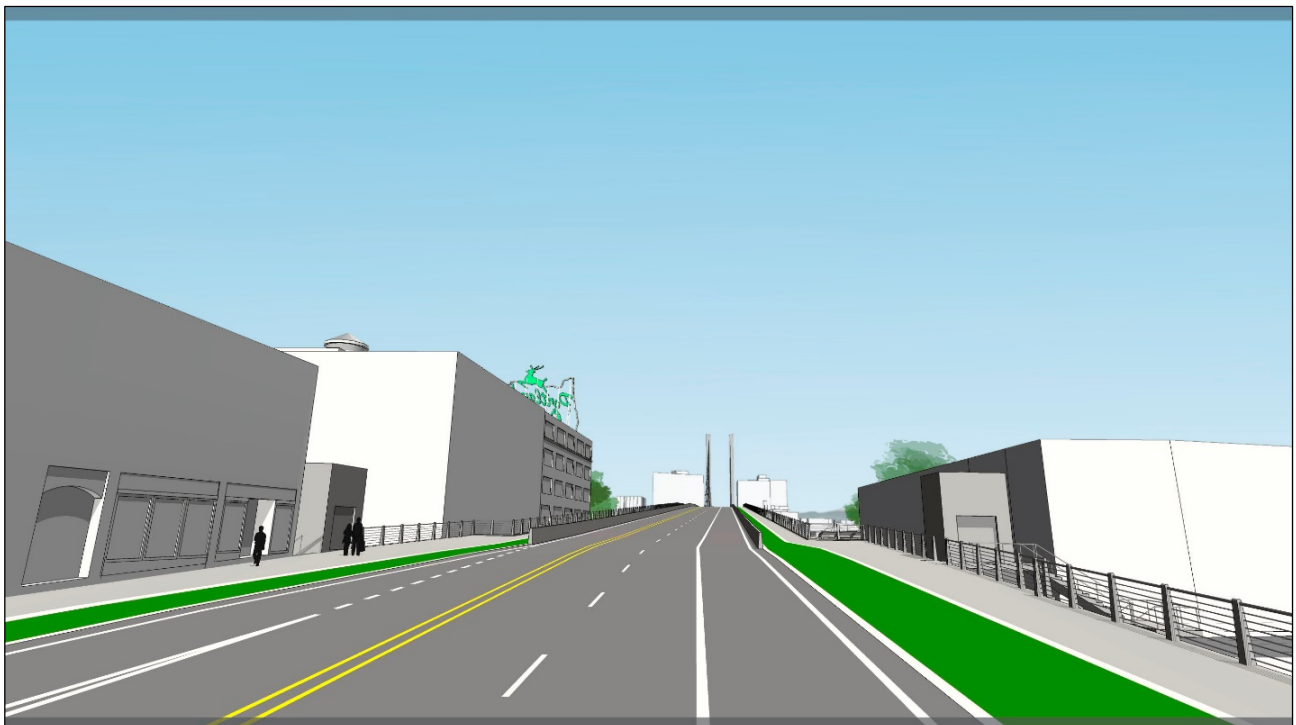


Figure 66: Span Combination 3 (girder west approach, bascule central span, cable supported east approach), artist's rendering, view looking east (Fat Pencil Studio, 2021).

ODOT INVENTORY OF HISTORIC PROPERTIES
SECTION 106 LEVEL OF EFFECT FORM

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))	
Property Name: Skidmore/Old Town Historic District (NHL)	
Street Address: Multiple	City, County: Portland, Multnomah



Figure 67: Span Combination 4 (girder west approach, vertical lift central span, cable supported east approach), artist's rendering, view looking east (Fat Pencil Studio, 2021).



Figure 68: Artist's rendering of existing condition of the Burnside Bridge, view looking west (Fat Pencil Studio, 2021).

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SECTION 106 LEVEL OF EFFECT FORM**

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))	
Property Name: Skidmore/Old Town Historic District (NHL)	
Street Address: Multiple	City, County: Portland, Multnomah

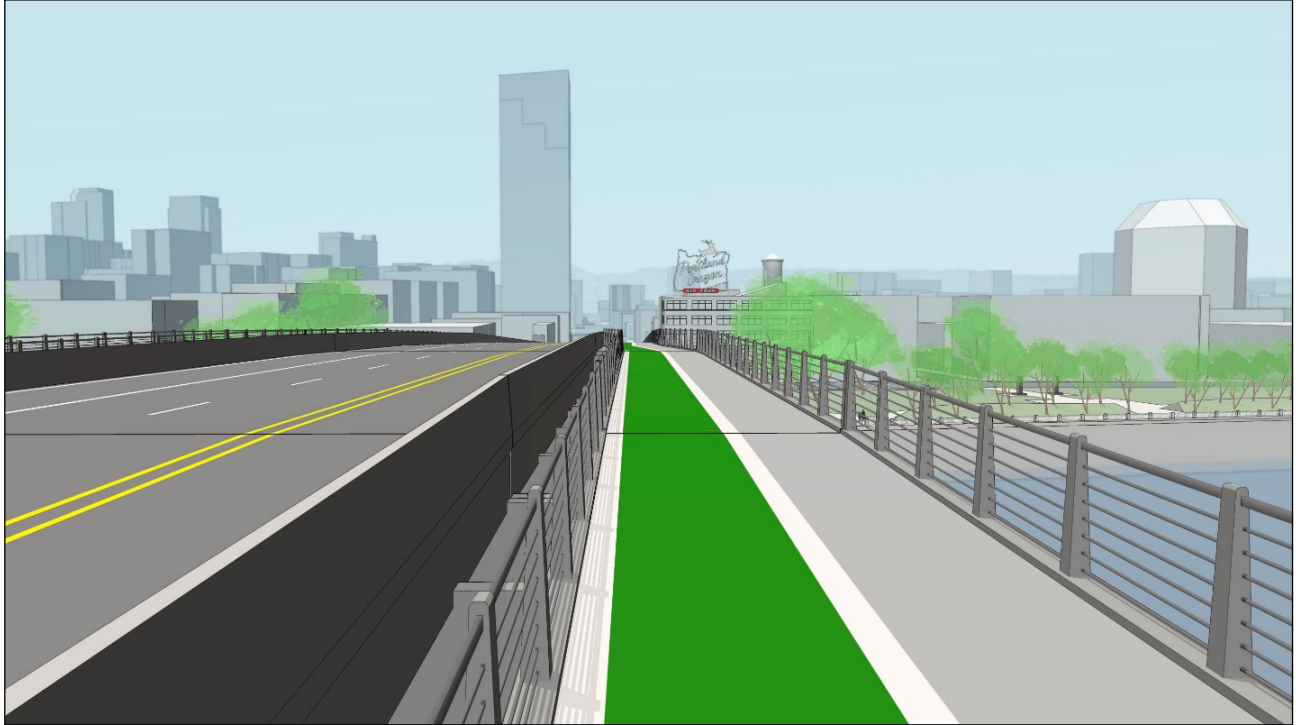


Figure 69: Artist's rendering of replacement center span (basculer option), view looking west (Fat Pencil Studio, 2021).

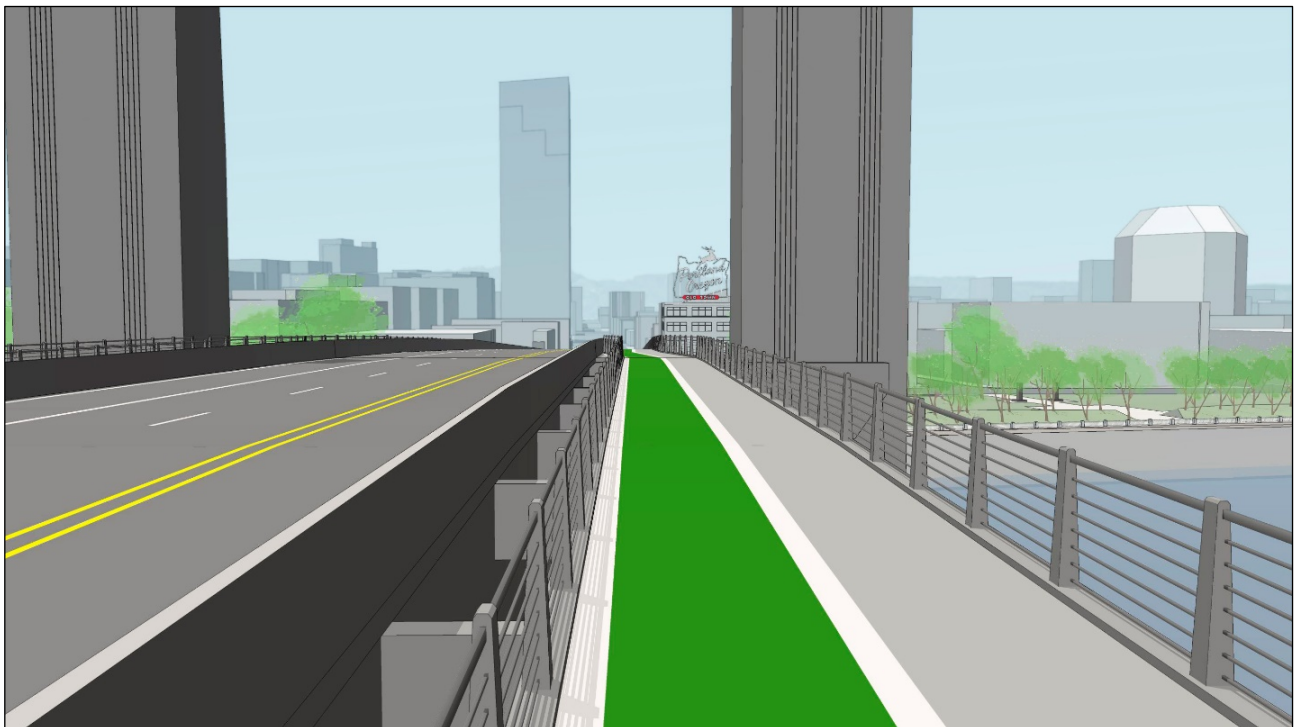


Figure 70: Artist's rendering of replacement center span (vertical lift option), view looking west (Fat Pencil Studio, 2021).



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Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))	
Property Name: Oregon & California Railroad/Union Pacific Railroad (UPRR)	
Street Address:	City, County: Portland, Multnomah

Provide written description of the project, and its potential effects on the subject property per 36 CFR 800. The project and findings, as per instructions, should include:

1. Introduction

This statement of finding of effect discusses the effect of the proposed Earthquake Ready Burnside Bridge (EQRB) Project in Portland, Oregon. Willamette Cultural Resources Associates (WillametteCRA) has recommended the Oregon & California Railroad (UPRR) as individually eligible for listing on the National Register of Historic Places. Multnomah County is the project proponent with support from the Oregon Department of Transportation (ODOT) on behalf of the Federal Highway Administration (FHWA). It is the finding of WillametteCRA, on behalf of ODOT, that the proposed project will have no adverse effect on the Oregon & California Railroad (UPRR). This statement of finding of effect is made pursuant to the requirements of the National Historic Preservation Act of 1966 (36 CFR 800), Executive Order 11593, and the National Environmental Policy Act of 1969.

2. Project Description

The proposed project is to establish a Burnside Bridge that would survive a major Cascadia Subduction Zone (CSZ) earthquake. The existing bridge would fail in such an earthquake. The Refined Long-span alternative would require replacing the existing bridge with a new bridge on the same alignment as the current bridge. The number of bents on the eastern approach would be reduced from five to one in the viewshed of the UPRR (existing bents would be removed only to ground level). Other than demolition of the current approach span and construction of a new span, no other activities are proposed at this time in the vicinity of the Oregon & California Railroad (UPRR).

3. Identification and Description of the Historic Resource

The UPRR within the APE/API extends from the intersection of I-5 and I-84 south to the hypothetical extension of SE Ash Street west of SE 1st Avenue (a distance of approximately 1,200 feet). Constructed in 1868 as the Oregon & California Railroad, it was the first major north-south railroad in Oregon. It was incorporated into the Southern Pacific Railroad system in the 1880s; the Southern Pacific system was acquired by the Union Pacific RR in 1996.

Initiated as the Oregon & California Railroad (O&C) or East Side Company, the rail line was planned for construction on the east bank of the Willamette River in competition with its rival, the West Side Company. The two companies fought to obtain land rights approval and a grant from the Oregon State Legislature. After considerable political maneuvering and legal battles, the East Side Company with its leader Ben Holladay built the east side railroad (Cain 2003; Ganoe 1924). Construction began in 1868 and continued in several phases. It reached Roseburg in 1872 and connected to the Southern Pacific rail line in Ashland in 1887 and eventually absorbed into the Southern Pacific Railroad (Corning 1989).

An 1879 panoramic view of Portland, Oregon depicts the railroad not more than a decade after it was built. The railroad was then situated on the west boundary of the East Portland plat on First Avenue near the water's edge. At that time, the rail line was built up on what appears to be a raised berm and in other places a timber trestle. The line was noted as the "Oregon & California R.R." at that time (Glover 1879). The 1889 Sanborn Map shows the railroad running along First Avenue, the immediate area not yet built up and the waterline not more than a block away (Sanborn Map 1889). In the 1920s, a number of tracks, including



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Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
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spurs and sidelines, paralleled the early alignment from First to Second Avenues serving local businesses and industry (Sanborn Maps Sanborn Map 1924-1928).

Benjamin Holiday was influential in the initial stages of building the Oregon & California Railroad. Before coming to Portland, he built successful businesses supplying and freighting goods. He took on the East Side Railroad to see it built (Oregon Historical Society 2019). Known for questionable business practices and reckless spending, he eventually lost his interest in the railroad, but was unquestionably influential in the early railroad development of Oregon.

The Oregon & California RR/UPRR is recommended eligible for listing in the NRHP under Criteria A and B.

4. Undertaking Options Considered

A total of six (6) alternatives have been considered for this undertaking: two (2) no-build alternatives and four (4) build alternatives. The four (4) build alternatives included an Enhanced Seismic Retrofit Alternative and three (3) replacement alternatives. Extensive discussion and analysis of these alternatives is contained in the Supplemental Draft Environmental Impact Statement (SDEIS) of 2021. The following is a synopsis of the alternatives considered for this undertaking.

a. No-Build Alternative

Two (2) no-build alternatives were considered for this undertaking. These no-build alternatives assume that all other programmed and planned projects move forward and that the Burnside Bridge would remain seismically at risk. The first no-build scenario considered was the “No-Build Pre-Earthquake” alternative, which analyzed no-build conditions prior to a CSZ seismic event. The second no-build scenario considered was the “No-Build Post-Earthquake,” which analyzed no-build conditions after a CSZ seismic event. The authors of the SDEIS concluded that the no-build alternatives would not address the acute seismic vulnerability of the existing Burnside Bridge, which is expected to be heavily damaged or completely collapse during a CSZ seismic event. The collapse of the Burnside Bridge would very likely result in a significant loss of life to people on or under the bridge during a CSZ seismic event. The loss of the Burnside Bridge would sever downtown Portland from the rest of the city on the east side of the Willamette River and would prevent emergency responders from being able to cross the river. Additionally, debris from the collapse of the Burnside Bridge would block all travel by land and water under the bridge. The loss of the Burnside Bridge due to a CSZ seismic event would hamper the long-term recovery of the city and surrounding region during the months following a major earthquake, and the potential adverse economic effects would likely persist for years.

b. Avoidance Alternative

The environmental team considered one (1) avoidance alternative. An Enhanced Seismic Retrofit Alternative was considered in lieu of the wholesale replacement of the Burnside Bridge. This alternative would partially retrofit the existing bridge and replace major structural components of the bridge to meet seismic design criteria. In this scenario, the retrofitted structural elements would be visually similar to the existing structure of the bridge, but the replacement approaches would be substantially different in appearance compared with the existing bridge. Under this scenario, the width of the bridge would be unchanged, and the modal connections at each end of the bridge would also not change. The environmental team made a preliminary analysis of potential effects to the NRHP-listed Burnside Bridge



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Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))	
Property Name: Oregon & California Railroad/Union Pacific Railroad (UPRR)	
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due to the Enhanced Seismic Retrofit Alternative scope of work. The team applied the Section 106 criteria of adverse effect and found that this potential scope of work would result in adverse effects to the NRHP-listed Burnside Bridge.

c. Proposed Undertaking

Three (3) build alternatives were considered for the proposed undertaking. Of these three alternatives, the Refined Long-span alternative would replace the existing bridge with a new bridge on the same alignment as the current bridge. This would necessitate the demolition of the existing Burnside Bridge.

5. Evaluation of Effects

The proposed Refined Long-span alternative would involve construction of a new bridge on the same alignment of the current bridge. The railroad is presently framed by two bents supporting the eastern approach of the Burnside Bridge (Figure 3). The Refined Long-span alternative would eliminate the bents on both sides of the UPRR. The tied-arch span would construct a bent along NE/SE 2nd Avenue, some distance to the east. The cable-stayed span would construct massive support towers to the east (Figures 4 and 5). According to 36 CFR Part 800.5(a)(1), adverse effects occur when an undertaking directly or indirectly alters characteristics of a historic property that qualify it for inclusion in the NRHP; future and cumulative effects of the undertaking also need to be considered. An example listed in 800.5(a)(2) is “visual, atmospheric, or audible intrusions” (36 CFR 800.5). The undertaking will not affect the integrity of location, design, materials, feeling, workmanship, and association of the Oregon & California Railroad (UPRR). Elimination of the existing bents would alter the setting, providing a more open view. The current setting is entirely dominated by transportation features and structures. Reduction of the number of bents would not alter this setting. In sum, the project will have a No Adverse Effect on the Oregon & California RR (UPRR) historic property.

6. Coordination and Public Output

The Earthquake Ready Burnside Bridge Project has been the subject of public meetings since 2016. Multnomah County has established a Community Task Force in October 2018, which continues to meet regularly. Meetings of Section 106 Consulting Parties have been meeting regularly since December 2020. Draft technical reports to address NHPA and NEPA requirements have been circulated for review by representatives of the SHPO, City of Portland, and ODOT. There has also been coordination with the Portland Historic Landmarks Commission, which is a CLG..

7. Conclusion

It is the recommendation of WillametteCRA, on behalf of ODOT, that the proposed Refined Long-span alternative would not adversely affect the Oregon & California Railroad (UPRR)’s eligibility for listing under Criteria A and B nor its integrity. WillametteCRA recommends a Finding of No Adverse Effect for this historic property.

8. Sources

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SECTION 106 LEVEL OF EFFECT FORM
Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))	
Property Name: Oregon & California Railroad/Union Pacific Railroad (UPRR)	
Street Address:	City, County: Portland, Multnomah

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Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))

Property Name: Oregon & California Railroad/Union Pacific Railroad (UPRR)

Street Address:

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Maps and Figures

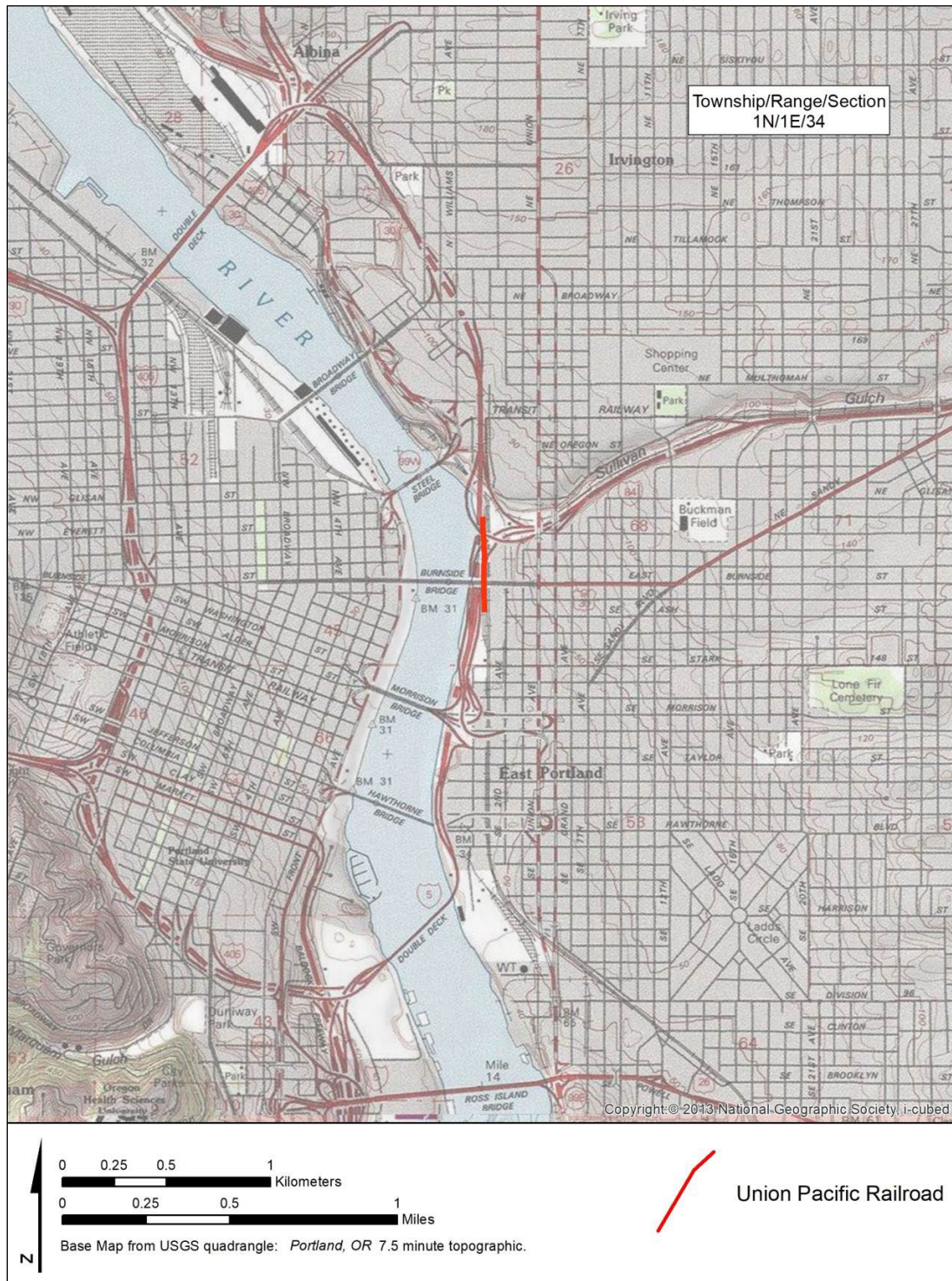


Figure 1. Location map.

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Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

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Property Name: Oregon & California Railroad/Union Pacific Railroad (UPRR)

Street Address:

City, County: Portland, Multnomah

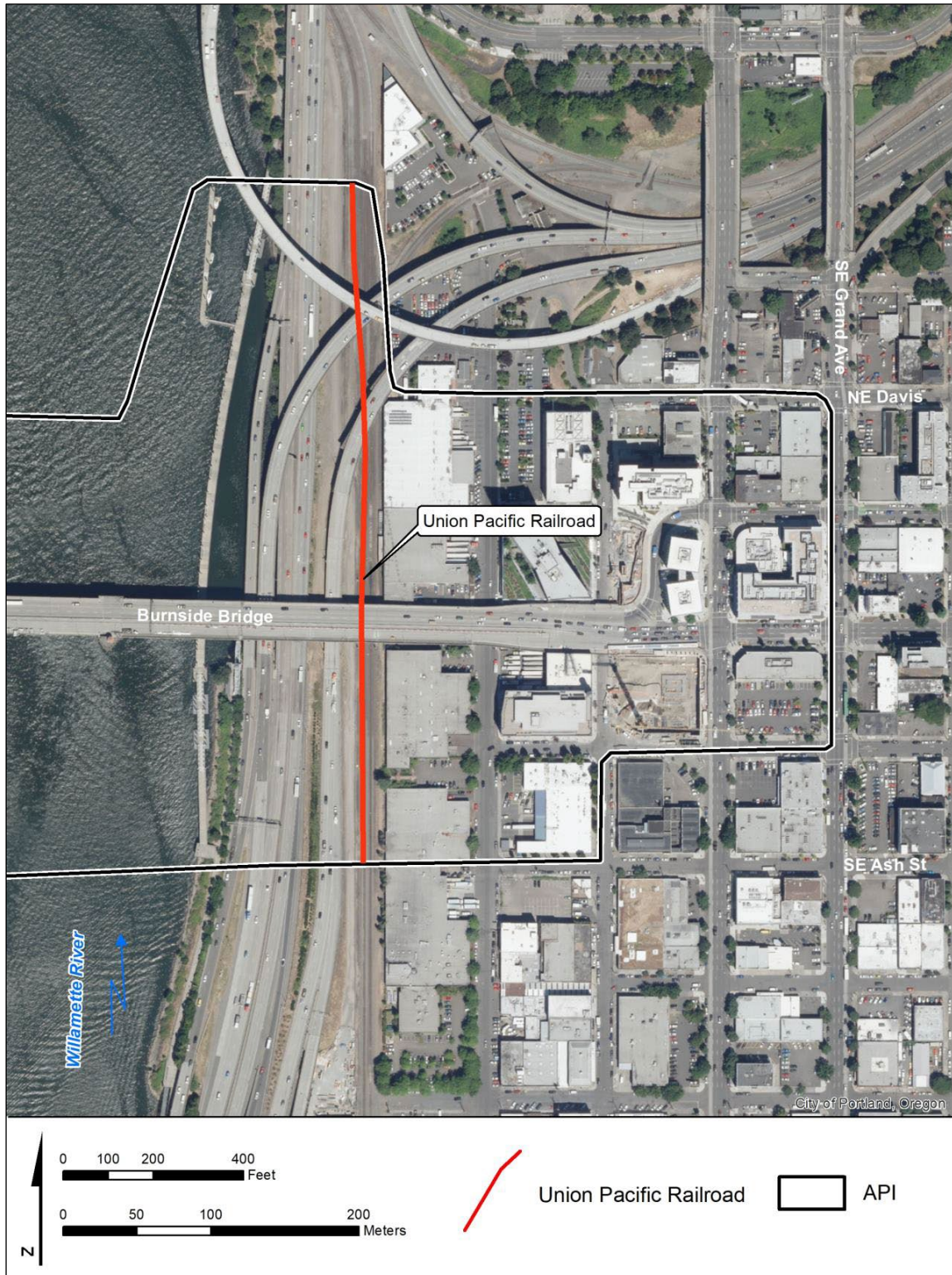


Figure 2. Oregon & California RR (UPRR) within the EQRB API & APE.



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Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

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Property Name: Oregon & California Railroad/Union Pacific Railroad (UPRR)

Street Address:

City, County: Portland, Multnomah

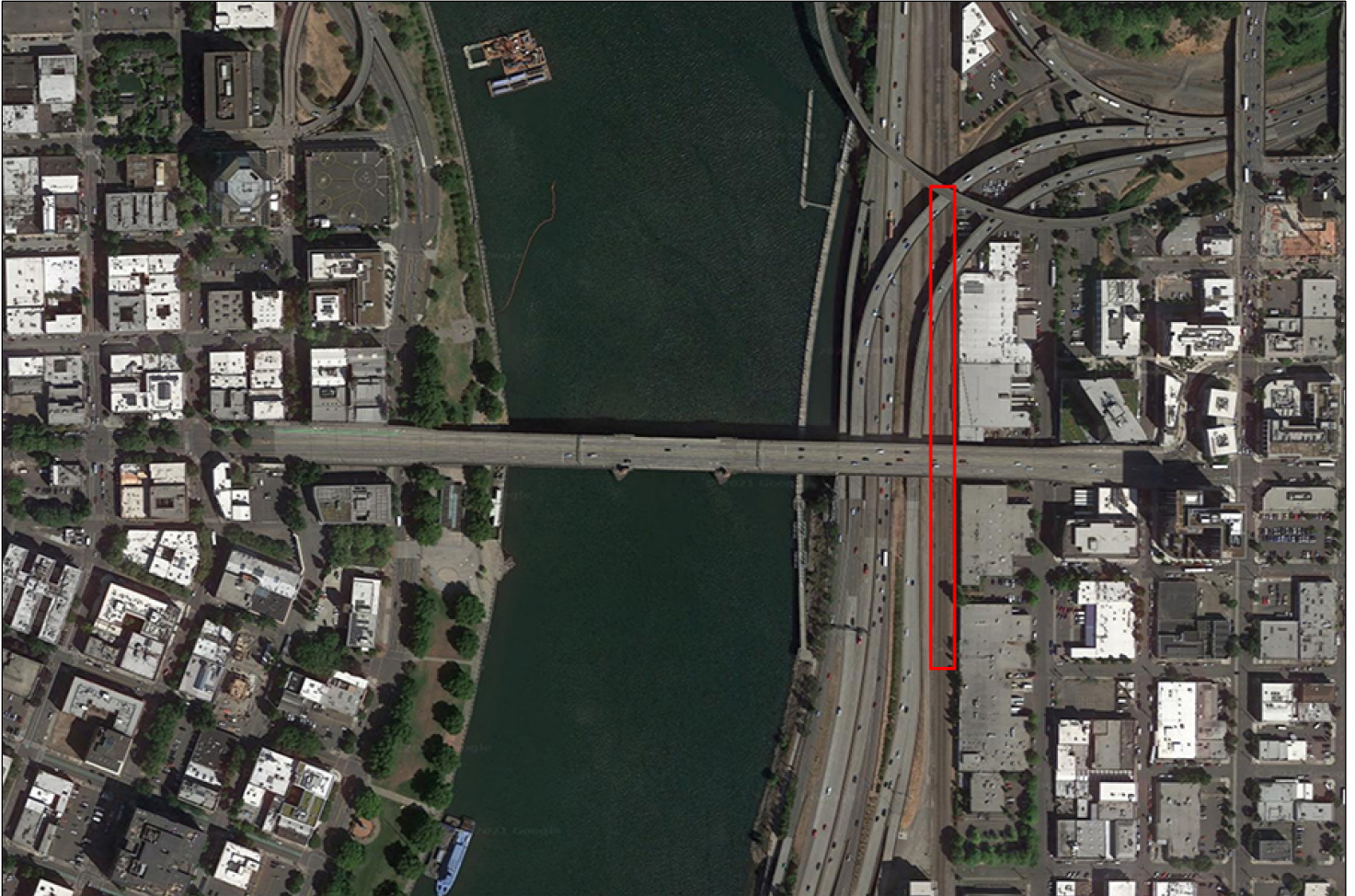


Figure 3. Aerial photograph with location of Oregon & California Railroad (UPRR) right-of-way indicated by red outline (Google Earth).

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Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

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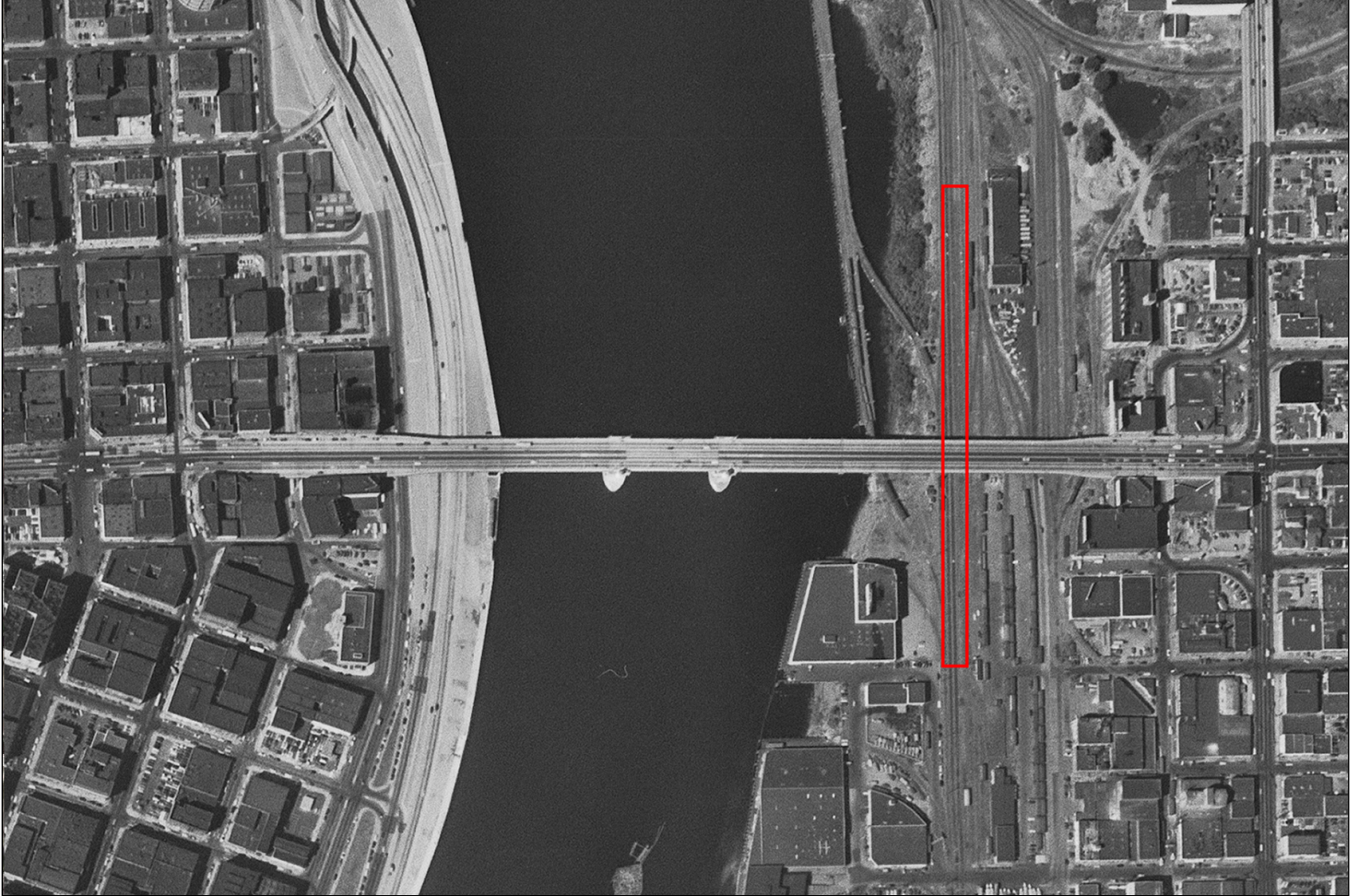


Figure 4. 1951 aerial photograph with location of Oregon & California Railroad (UPRR) right-of-way indicated by red outline (USGS EarthExplorer).

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Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))

Property Name: Oregon & California Railroad/Union Pacific Railroad (UPRR)

Street Address:

City, County: Portland, Multnomah

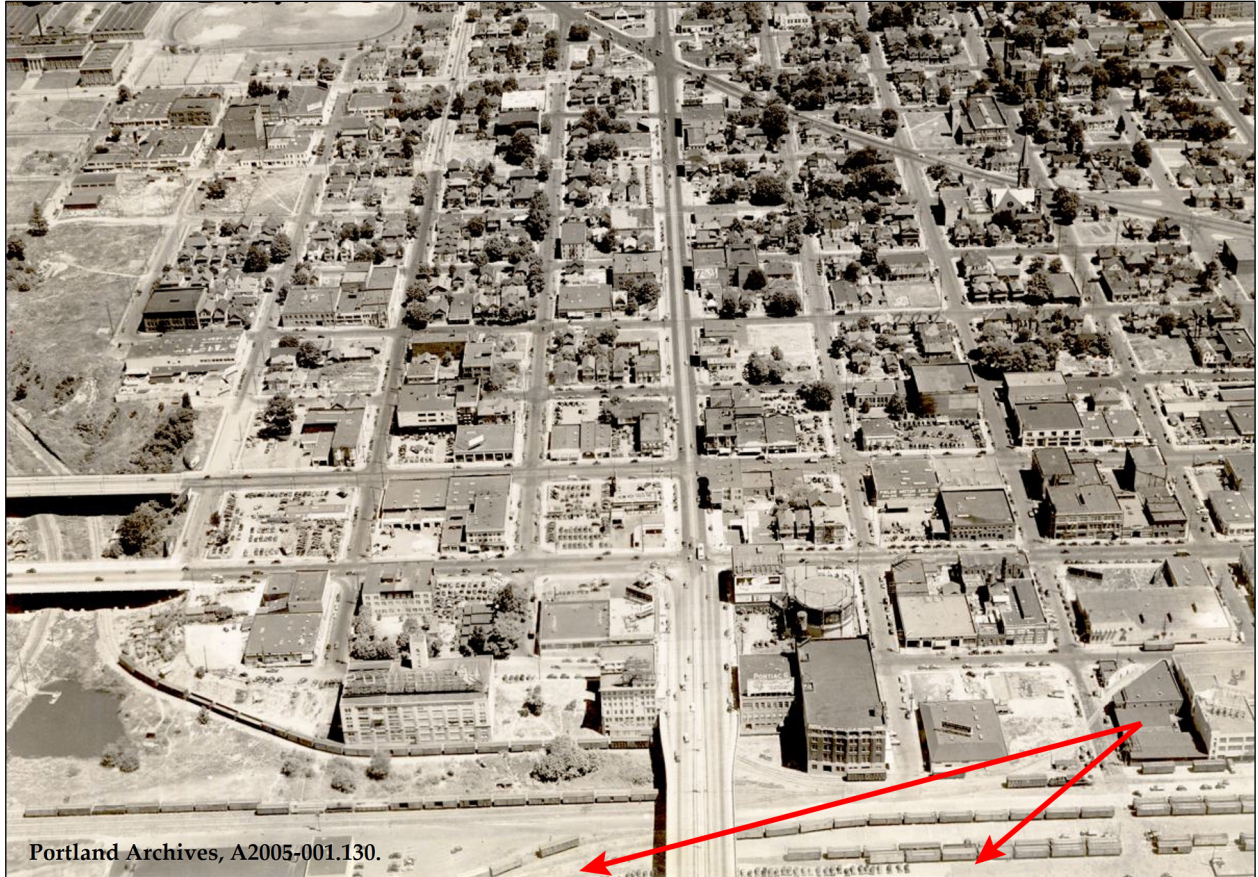


Figure 5. East end of the Burnside Bridge looking east, December 31, 1939. Red arrows indicate the Oregon & California Railroad (UPRR) right-of-way at the extreme bottom edge of the image (Portland Archives, A2005-001.130).

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Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))

Property Name: Oregon & California Railroad/Union Pacific Railroad (UPRR)

Street Address:

City, County: Portland, Multnomah

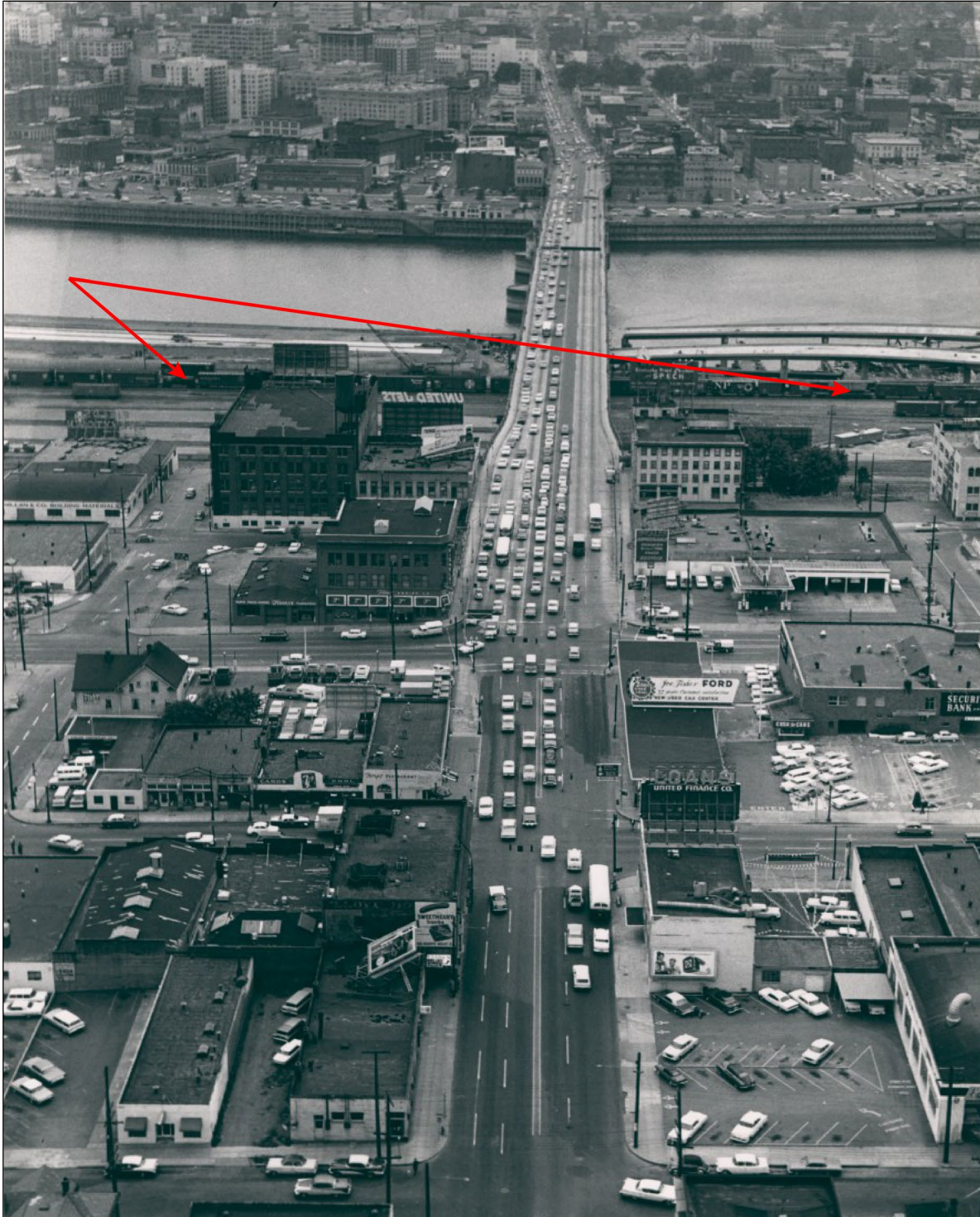


Figure 6. Burnside Bridge westbound, December 31, 1963. Red arrows indicate the Oregon & California Railroad (UPRR) right-of-way (Portland Archives A2005-001.106).

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Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
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Property Name: Oregon & California Railroad/Union Pacific Railroad (UPRR)	
Street Address:	City, County: Portland, Multnomah



Figure 7. Oregon & California RR (UPRR) alignment looking north toward the Burnside Bridge undercrossing, artist's rendering of existing conditions (Fat Pencil Studio, 2021).

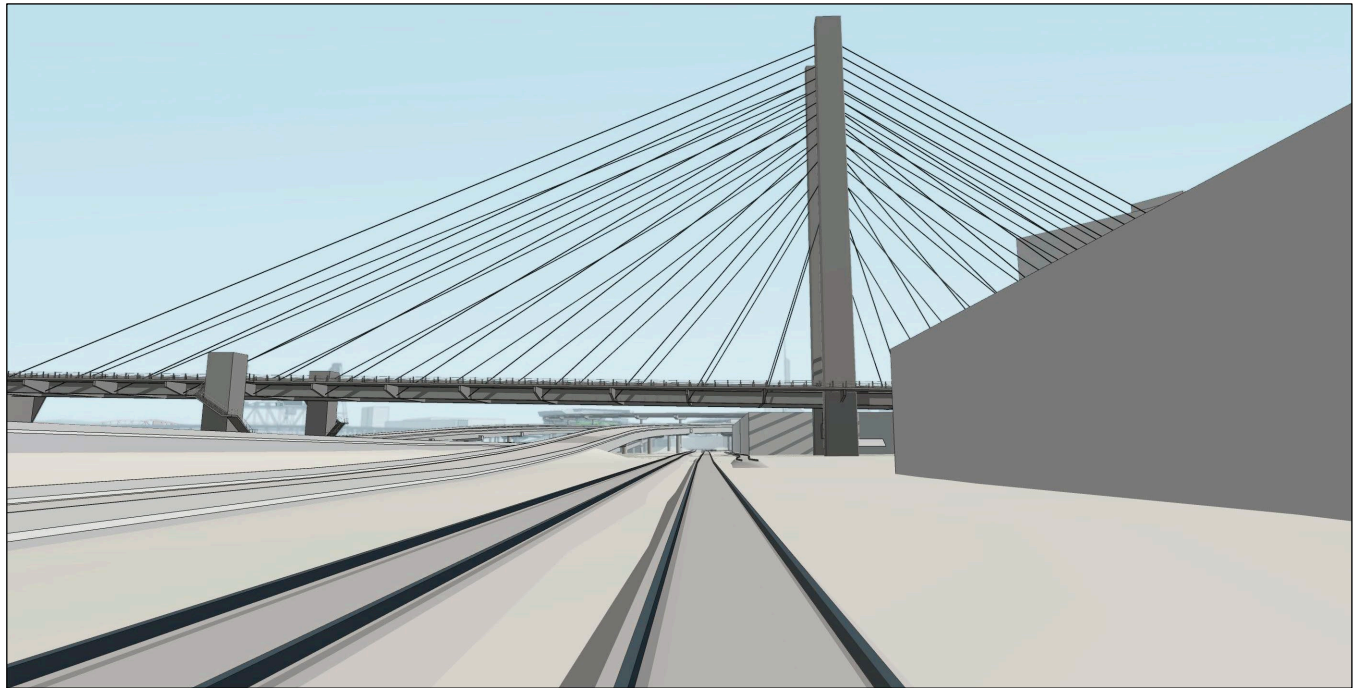


Figure 8. Oregon & California RR (UPRR) alignment looking north toward the Burnside Bridge undercrossing, artist's rendering of proposed new eastern approach with cable-stayed structure (Fat Pencil Studio, 2021).

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Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge

ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge (Federal-Aid No. C051(111))

Property Name: Oregon & California Railroad/Union Pacific Railroad (UPRR)

Street Address:

City, County: Portland, Multnomah

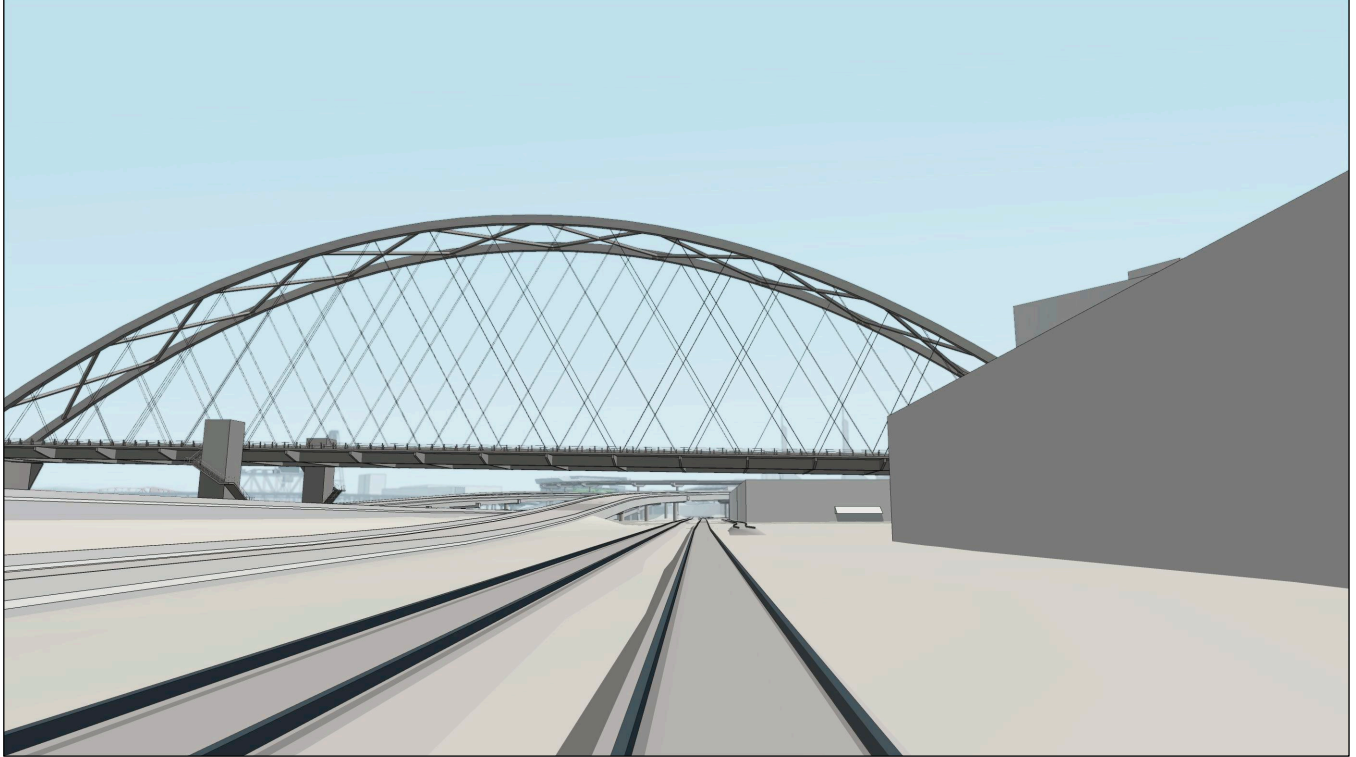


Figure 9. Oregon & California RR (UPRR) alignment looking north toward the Burnside Bridge undercrossing, artist's rendering of proposed new eastern approach with tied-arch structure (Fat Pencil Studio, 2021).

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Agency/Project: Oregon Department of Transportation/Earthquake Ready Burnside Bridge		
ODOT Key Number: :XXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge [Federal-Aid No. C051(111)]		
Property Name: White Stag Block	Street Address: 5 NW Naito Parkway	
City, County: Portland, Multnomah	Latitude: 45.523486 Longitude: (-) 122.672966	
Surveyor: Adam S. Alsobrook	Affiliation: WillametteCRA	Date Recorded: 08/23/2021

Photo:



Photo Caption: Photomosaic of White Stag Block (by Adam S. Alsobrook, 2021), looking northeast (photos taken by Elizabeth O'Brien, 2019).

Preliminary Finding of Effect:

☐ No Historic Properties Affected
 ☒ No Historic Properties Adversely Affected
 ☐ Historic Properties Adversely Affected

State Historic Preservation Office Comments:

☐ Concur
 ☐ Do Not Concur:
 ☐ No Historic Properties Affected
 ☐ No Historic Properties Adversely Affected
☐ Historic Properties Adversely Affected

Signed: _____ Date: _____

Comments:



ODOT INVENTORY OF HISTORIC PROPERTIES
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Continuation Sheet

Agency/Project: Oregon Department of Transportation/ Earthquake Ready Burnside Bridge	
ODOT Key Number: XXXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge [Federal-Aid No. C051(111)]	
Property Name: White Stag Block	
Street Address: 5 NW Naito Parkway	City, County: Portland, Multnomah

Provide written description of the project, and its potential effects on the subject property per 36 CFR 800. The project and findings, as per instructions, should include:

1. Introduction

This statement of finding of effect discusses the effect of the proposed Earthquake Ready Burnside Bridge (EQRB) Project in Portland, Oregon. The White Stag Block at 5 NW Naito Parkway is the common name for a collection of three buildings, all of which are contributing resources in the Skidmore/Old Town Historic District, which was listed in the National Register of Historic Places (NRHP) in 1975 and designated as a National Historic Landmark (NHL) in 1977. Multnomah County is the project proponent with support from the Oregon Department of Transportation (ODOT) on behalf of the Federal Highway Administration (FHWA). Historical Research Associates, Inc. (HRA) prepared the original findings that have since been updated by WillametteCRA with the current Alignment Alternatives information on behalf of the Oregon Department of Transportation (ODOT). It is the finding of WillametteCRA, on behalf of ODOT, that the proposed project will have no adverse effect on the White Stag Block. This statement of finding of effect is made pursuant to the requirements of the National Historic Preservation Act of 1966 (36 CFR 800), Executive Order 11593, and the National Environmental Policy Act of 1969.

2. Project Description

The proposed project is to establish a Burnside Bridge that would survive a major Cascadia Subduction Zone (CSZ) earthquake. The existing bridge would fail in such an earthquake. The Refined Long-span alternative would replace the existing bridge with a new bridge on the same alignment as the current bridge.

3. Identification and Description of the Historic Resource

The White Stag Block is the common name for a collection of three buildings located in the Skidmore/Old Town NHL in Portland, Multnomah County, Oregon. The White Stag Block is addressed as 5 NW Naito Parkway and is located at the north side of the existing west approach of the Burnside Bridge between NW First Avenue and NW Naito Parkway (Portland Maps 2021) (Figures 1 through 4). The Bickel Block at 25-33 NW Naito Parkway was designed by noted Portland architect Justus Krumbein and constructed in 1883 (NRHP 2008:22) (Figure 19). The Skidmore Block at 10-32 NW First Avenue was designed by an unknown architect and constructed in 1889 (NRHP 2008:16) (Figures 14, 16, 20, and 21). The Willamette Tent and Awning/Hirsch-Weis Building at 5 NW Naito Parkway/67 West Burnside Street was designed by an unknown architect and constructed in 1907 (NRHP 2008:23) (Figures 15 and 18). These three buildings were consolidated onto one tax lot in 2008 (NRHP 2008:16) (Figures 11 and 12).

The south facades of the Skidmore Block and the Willamette Tent and Awning/Hirsch-Weis Building face the west approach of the Burnside Bridge (Figures 13 through 17). Both of these building facades were extensively modified in 1925 to make way for the construction of the Burnside Bridge, which was completed in 1926 (*Oregonian* 1925) (Figures 5 through 10). The reinforced concrete structure of the west approach was built right up against both building facades, leaving a gap of just a few inches (Figures 22 through 28). This existing condition is undesirable from a structural engineering standpoint, since seismic forces could be transferred from the bridge structure to the White Stag Block during an earthquake.

The existing west approach of the Burnside Bridge will be removed and replaced with a new west approach span as part of the proposed undertaking. The new west approach span will be narrower than the existing



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span, and there will be a separation of approximately 20 to 25 feet between the northernmost edge of the new west approach span and the south facades of the White Stag Block (Figures 29 through 36). This is a positive change from the existing condition of the bridge structure and south facades of the White Stag Block, since the new configuration of the west approach span will provide sufficient room for the buildings and bridge structure to respond separately to seismic forces.

4. Undertaking Options Considered

A total of six (6) alternatives have been considered for this undertaking: two (2) no-build alternatives and four (4) build alternatives. The four (4) build alternatives included an Enhanced Seismic Retrofit Alternative and three (3) replacement alternatives. Extensive discussion and analysis of these alternatives is contained in the Draft Environmental Impact Statement (DEIS) of 2021. The following is a synopsis of the alternatives considered for this undertaking.

a. No-Build Alternative

Two (2) no-build alternatives were considered for this undertaking. These no-build alternatives assume that all other programmed and planned projects move forward and that the Burnside Bridge would remain seismically at risk. The first no-build scenario considered was the “No-Build Pre-Earthquake” alternative, which analyzed no-build conditions prior to a CSZ seismic event. The second no-build scenario considered was the “No-Build Post-Earthquake,” which analyzed no-build conditions after a CSZ seismic event. The authors of the DEIS concluded that the no-build alternatives would not address the acute seismic vulnerability of the existing Burnside Bridge, which is expected to be heavily damaged or completely collapse during a CSZ seismic event. The collapse of the Burnside Bridge would very likely result in a significant loss of life to people on or under the bridge during a CSZ seismic event. The loss of the Burnside Bridge would sever downtown Portland from the rest of the city on the east side of the Willamette River and would prevent emergency responders from being able to cross the river. Additionally, debris from the collapse of the Burnside Bridge would block all travel by land and water under the bridge. The loss of the Burnside Bridge due to a CSZ seismic event would hamper the long-term recovery of the city and surrounding region during the months following a major earthquake, and the potential adverse economic effects would likely persist for years.

b. Avoidance Alternative

The environmental team considered one (1) avoidance alternative. An Enhanced Seismic Retrofit Alternative was considered in lieu of the wholesale replacement of the Burnside Bridge. This alternative would partially retrofit the existing bridge and replace major structural components of the bridge to meet seismic design criteria. In this scenario, the retrofitted structural elements would be visually similar to the existing structure of the bridge, but the replacement approaches would be substantially different in appearance compared with the existing bridge. Under this scenario, the width of the bridge would be unchanged, and the modal connections at each end of the bridge would also not change. The environmental team made a preliminary analysis of potential effects to the NRHP-listed Burnside Bridge due to the Enhanced Seismic Retrofit Alternative scope of work. The team applied the Section 106 criteria of adverse effect and found that this potential scope of work would result in adverse effects to the NRHP-listed Burnside Bridge.



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c. Proposed Undertaking

Three (3) build alternatives were considered for the proposed undertaking. Of these three alternatives, the Refined Long-span alternative would replace the existing bridge with a new bridge on the same alignment as the current bridge. This would necessitate the demolition of the existing Burnside Bridge.

5. Evaluation of Effects

Note: For clarity, the common name “White Stag Block” is used in this section to refer collectively to the three historic buildings of which it is comprised: the Bickel Block (1883), the Skidmore Block (1889), and the Willamette Tent and Awning/Hirsch-Weis Building (1907). The Skidmore Block and the Willamette Tent and Awning/Hirsch-Weis Buildings both currently abut the west approach of the 1926 Burnside Bridge.

Location: The proposed replacement of the Burnside Bridge will not require the White Stag Block to be relocated or removed, therefore, the undertaking will have no effect to the resource’s integrity of location.

Setting: The proposed replacement of the Burnside Bridge will alter the current relationship of the second level of the White Stag Block to the sidewalk level of the west approach of the bridge. However, the nomination for the Skidmore/Old Town Historic District notes that the 1926 Burnside Bridge was an intrusion into the historic fabric of the neighborhood (NRHP 2008:40:41:70:71). The construction of the west approach span of the Burnside Bridge created an artificial relationship between the White Stag Block and the surrounding streetscape. The removal of the bridge structure abutting the building will restore the original historic relationship of the ground level of the White Stag Block to the surrounding streetscape. The new approach span would be at the same elevation as the existing span and would therefore maintain the vertical relationship between the White Stag Block and the bridge. The northernmost edge of the new west approach span will be approximately 20 to 25 feet south of the south facades of the White Stag Block. This will allow for the buildings and bridge structure to independently react to ground motion during a seismic event and also allow visibility of the ground level of the White Stag Block for the first time since it was modified in 1925 to make way for the Burnside Bridge. The new separation between the bridge structure and the south facades will also allow for light and air through the window openings on the south façade of the White Stag Block. Therefore, the setting of the White Stag Block would not be adversely affected by the proposed undertaking.

Design: The proposed replacement of the Burnside Bridge will not alter the physical form, structure, and style of the White Stag Block; therefore, the undertaking will have no effect to the resource’s integrity of design.

Materials: The proposed replacement of the Burnside Bridge will not damage, remove, or destroy physical elements of the White Stag Block, therefore, the undertaking will have no effect to the resource’s integrity of materials.

Workmanship: The proposed replacement of the Burnside Bridge will not damage, remove, or destroy physical evidence of the historic construction techniques used to build the White Stag Block, therefore, the undertaking will have no effect to the resource’s integrity of workmanship.

Feeling: The proposed replacement of the Burnside Bridge will not alter the physical features which collectively convey the historic character of the White Stag Block; therefore, the undertaking will have no effect to the resource’s integrity of feeling.



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Association: The proposed replacement of the Burnside Bridge will not diminish or eliminate the direct link that the White Stag Block has to important historic events or persons significant to our past, therefore, the undertaking will have no effect to the resource's integrity of association.

6. Coordination and Public Output

The Earthquake Ready Burnside Bridge project has been the subject of public meetings since 2016. Multnomah County has established a Community Task Force in October 2018, which continues to meet regularly. Meetings of the Section 106 Consulting Parties have been meeting regularly since December 2020. Draft technical reports to address NHPA and NEPA requirements have been circulated for review by representatives of the SHPO, City of Portland, and ODOT. There has also been coordination with the Portland Historic Landmarks Commission, which is a CLG.

7. Conclusion

In summary, the Refined Long-span alternative would necessitate the complete replacement of the existing Burnside Bridge with new approach and main spans. The replacement of the existing east and west approach spans and center span of the Burnside Bridge would have no adverse effect to the White Stag Block for either direct or indirect effects.

8. Sources

EarthExplorer

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Oregonian (Portland, Oregon). Electronic resource, <https://multcolib.org/resource/historical-oregonian-1861-1987>, accessed August 2021.

1925 "Old Picturesque Burnside Street Yields Place to New Thoroughfare Where Workmen in Dust and Confusion Clear Way for Bridge Approach." *Oregonian*, 2 November:6.

1934a "Safety Islands Decried." *Oregonian*, 14 September:6.

1934b "Week's Worst Accident Stresses 'Let's Quit Killing' – Safety Island Crash on Burnside Bridge Claims Two Lives." *Oregonian*, 16 September:43.

Portland Archives

1935a "Aerial of Downtown Portland including Burnside, Steel and Broadway Bridges." City of Portland Auditor's Office, Archives and Records Management, PARC Accession Number A2005-005.1449.10, Record Number AP/476. Electronic resource, <https://efiles.portlandoregon.gov/Record/2043501/>, accessed August 2021.



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1935b “Aerial view of the downtown waterfront near the Burnside and Steel Bridges.” City of Portland Auditor’s Office, Archives and Records Management, PARC Accession Number 2000-03, Record Number AP/666. Electronic resource, <https://efiles.portlandoregon.gov/Record/2298287/>, accessed August 2021.

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2021 “5 NW Naito Pkwy.” Electronic resource, https://www.portlandmaps.com/detail/property/5-NW-NAITO-PKWY/R140324_did/, accessed August 2021.

Sanborn Map Company (Sanborn)

1908a Sanborn Fire Insurance Map from Portland, Multnomah County, Oregon. Volume 1, 1908-1909 (1908), Sheet 74. Electronic resource, https://www.loc.gov/item/sanborn07439_006/, accessed August 2021.
1908b Sanborn Fire Insurance Map from Portland, Multnomah County, Oregon. Volume 1, 1908-1909 (1908), Sheet 75. Electronic resource, https://www.loc.gov/item/sanborn07439_006/, accessed August 2021.
1950a Sanborn Fire Insurance Map from Portland, Multnomah County, Oregon. Volume 1, 1908-April 1950, Sheet 74. Electronic resource, https://www.loc.gov/item/sanborn07439_021/, accessed August 2021.
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United States Geological Survey (USGS)

1990 “Portland, OR Quadrangle, 7.5 Minute.” TopoView. Electronic resource, <https://ngmdb.usgs.gov/topoview/>, accessed August 2021.

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Maps and Figures

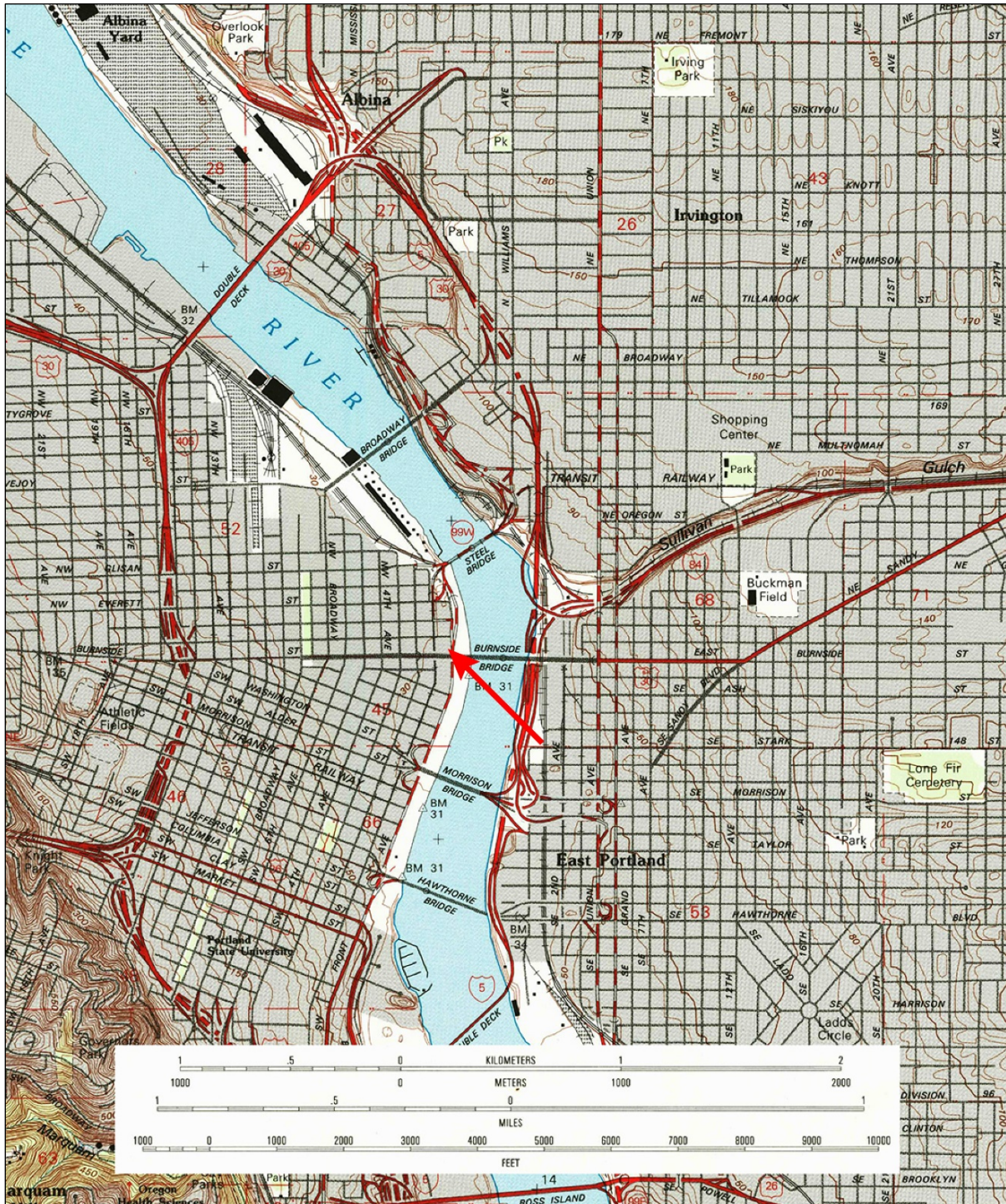


Figure 1: USGS, Portland, OR Quadrangle, 7.5 Minute, 1990. Red arrow indicates location of the White Stag Block (USGS).

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Figure 3: Aerial photograph with location of the White Stag Block indicated by red line (Google Earth).



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Figure 4: 1951 aerial photograph with location of the White Stag Block indicated by red line (USGS EarthExplorer).

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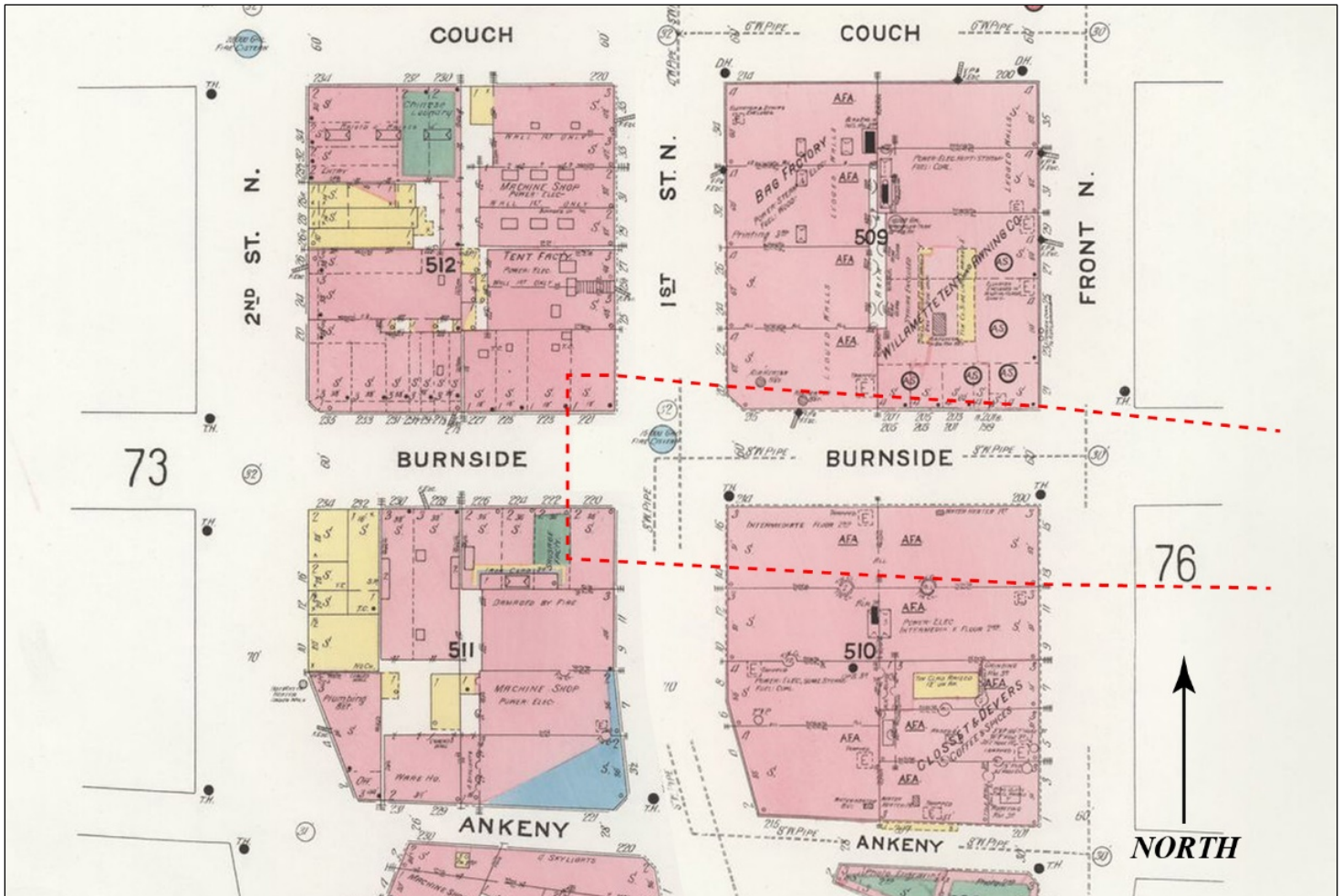


Figure 5: Sanborn maps, Volume 1, 1908. Mosaic of Sheet 74 (left two blocks) and Sheet 75 (right two blocks). Dashed red line indicates footprint of existing Burnside Bridge (Library of Congress).

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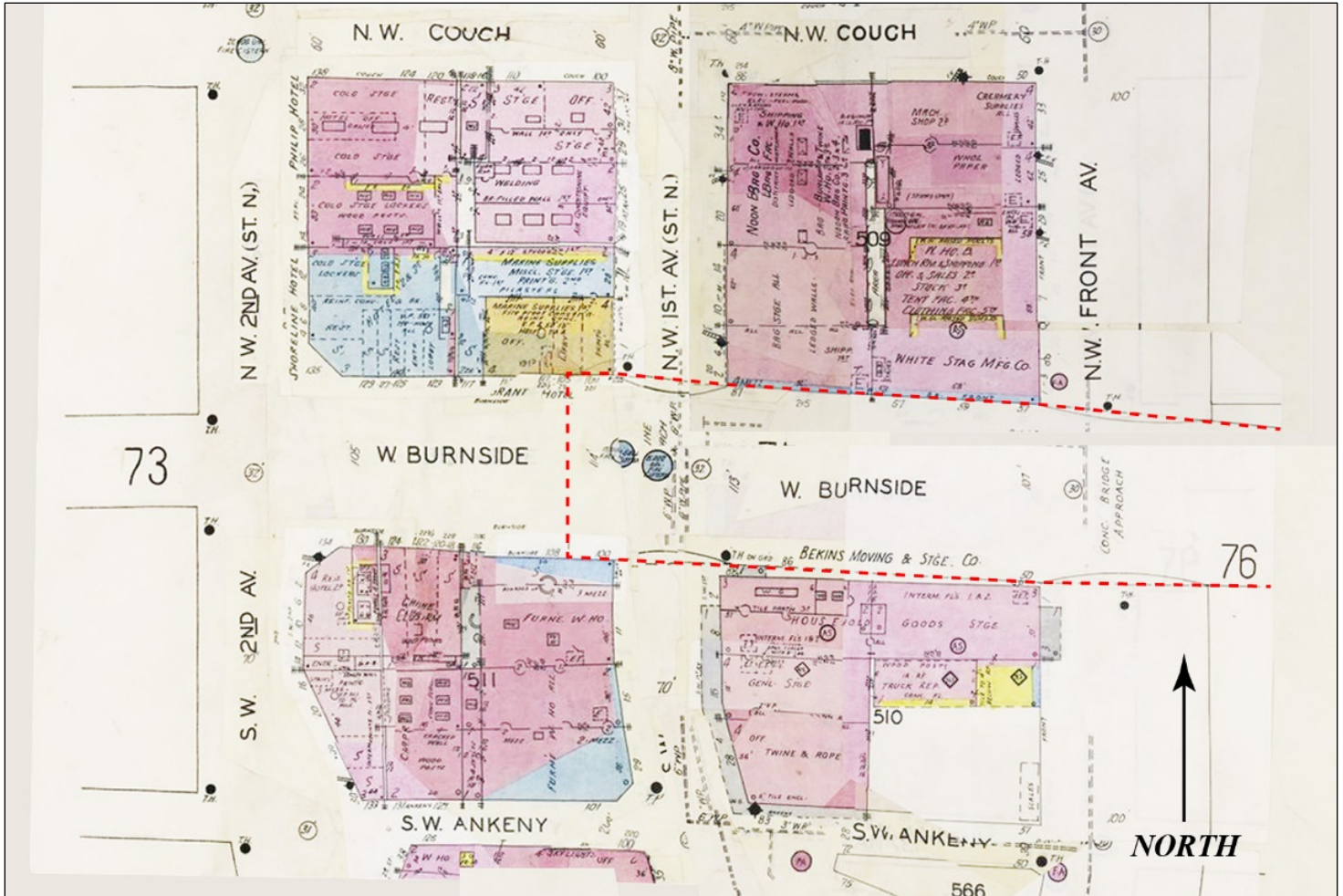


Figure 6: Sanborn maps, Volume 1, 1950. Mosaic of Sheet 74 (left two blocks) and Sheet 75 (right two blocks). Dashed red line indicates footprint of existing Burnside Bridge (Library of Congress).

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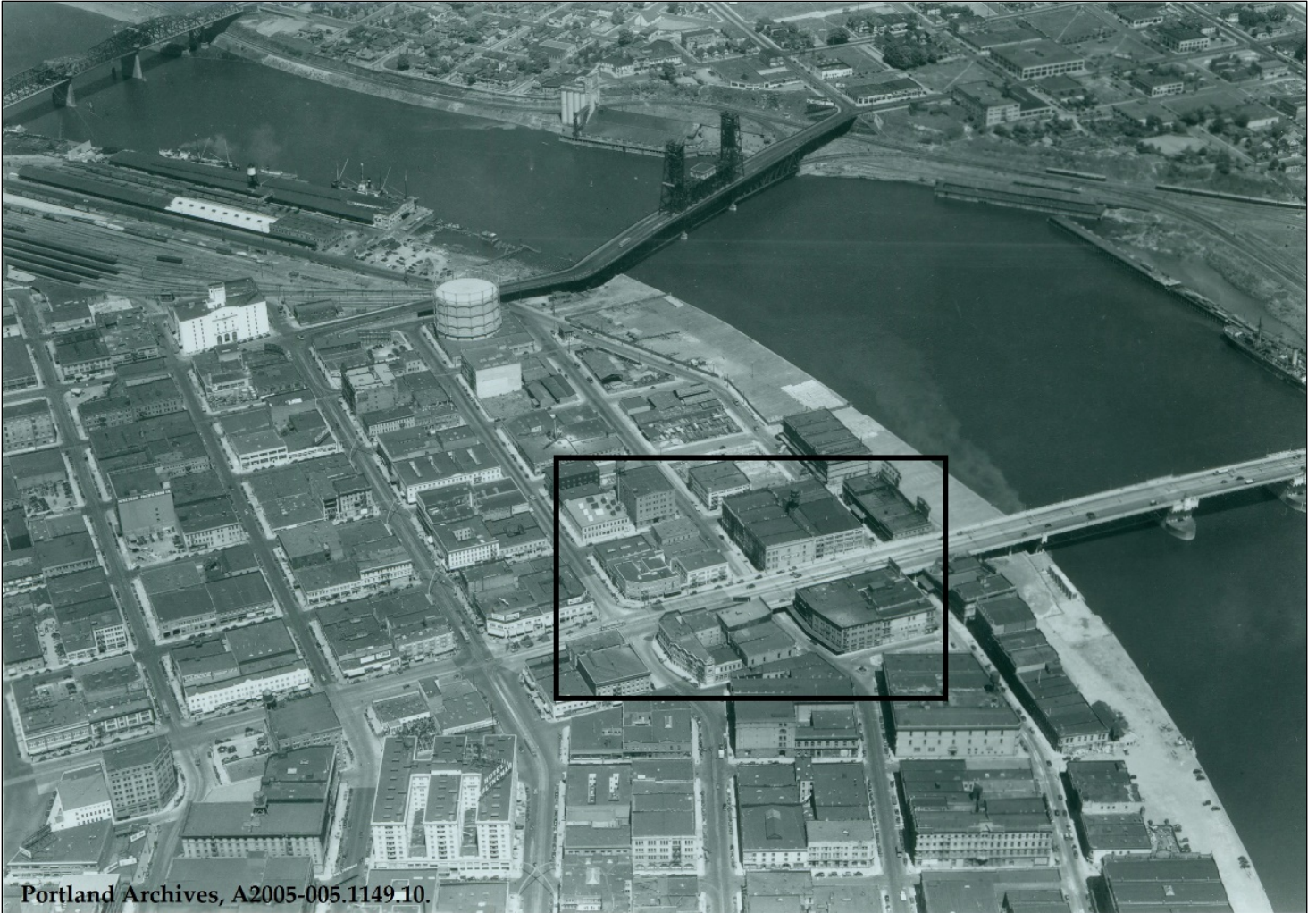


Figure 7: Aerial of downtown Portland including Burnside, Steel, and Broadway Bridges, December 31, 1935. Black box indicates excerpt in Figure 8 below (Portland Archives, A2005-005.1149.10).

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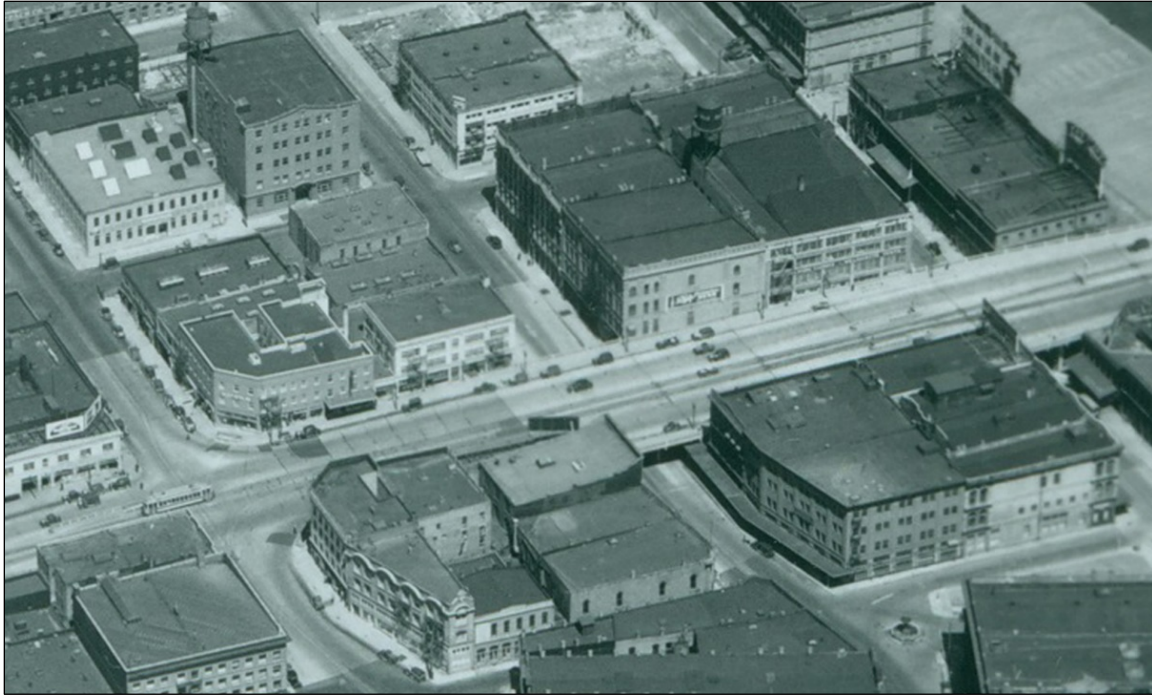


Figure 8: Aerial of downtown Portland including Burnside, Steel, and Broadway Bridges, December 31, 1935. Excerpt of Figure 7 above (Portland Archives, A2005-005.1149.10).



Figure 9: Aerial view of the downtown waterfront near the Burnside and Steel Bridges, December 31, 1935 (Portland Archives, 2000-03).

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Figure 10: West approach of Burnside Bridge with White Stag Block in background, looking northwest (*Oregonian*, September 14, 1934).

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Figure 11: Footprint of White Stag Block superimposed on property line map (Portland Maps/WillametteCRA).

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Photographs



Figure 13: White Stag Block, Skidmore Building at left and Willamette Tent & Awning Building at right, view looking northeast (Elizabeth O'Brien, 2019).



Figure 14: White Stag Block (Skidmore Building), view looking northeast (Elizabeth O'Brien, 2019).

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Figure 15: White Stag Block (Willamette Tent & Awning Building), view looking northeast (Elizabeth O'Brien, 2019).

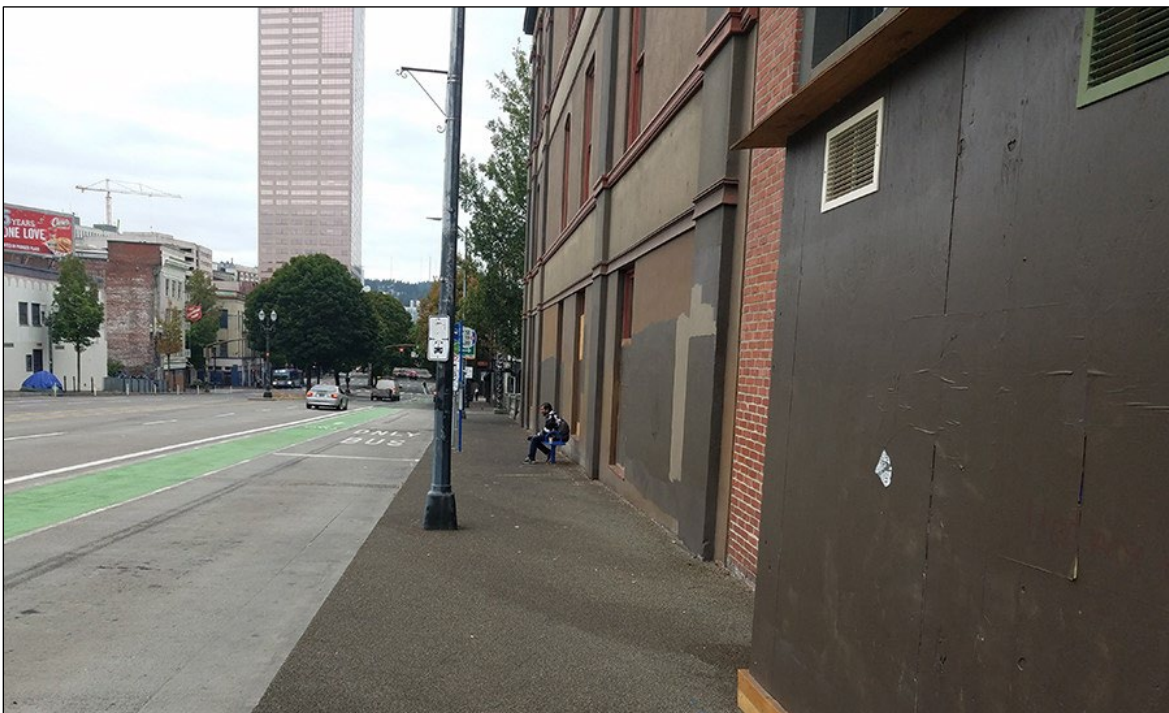


Figure 16: White Stag Block (Skidmore Building), south façade, looking west (David Ellis, 2021).

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Figure 17: White Stag Block (Willamette Tent & Awning Building), south façade, view looking west (David Ellis, 2021)



Figure 18: White Stag Block (Willamette Tent & Awning Building), east façade, view looking southwest (Elizabeth O'Brien, 2019).

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Figure 19: White Stag Block (Bickel Block), east façade, view looking southwest (Elizabeth O'Brien, 2019).



Figure 20: White Stag Block (Skidmore Building), west façade, view looking southeast (Elizabeth O'Brien, 2019).

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Figure 21: White Stag Block (Skidmore Building), detail of west façade, view looking southeast (Elizabeth O'Brien, 2019).



Figure 22: White Stag Block (Skidmore Building), detail of west façade, view looking southeast (Elizabeth O'Brien, 2019).

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Figure 23: White Stag Block (Skidmore Building), southwest corner of building at Burnside Bridge, view looking northeast (Elizabeth O'Brien, 2019).



Figure 24: White Stag Block (Skidmore Building), south façade of building under west approach of Burnside Bridge, view looking north (David Ellis, 2021).

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Figure 25: White Stag Block (Skidmore Building), detail of south façade of building under west approach of Burnside Bridge, view looking east (David Ellis, 2021).



Figure 26: White Stag Block (Skidmore Building), detail of south façade of building under west approach of Burnside Bridge, view looking up (David Ellis, 2021).

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Figure 27: White Stag Block (Skidmore Building), detail of south façade of building under west approach of Burnside Bridge, view looking up (David Ellis, 2021).



Figure 28: White Stag Block (Willamette Tent & Awning Building), detail of south façade of building under west approach of Burnside Bridge, view looking north (Elizabeth O'Brien, 2019).

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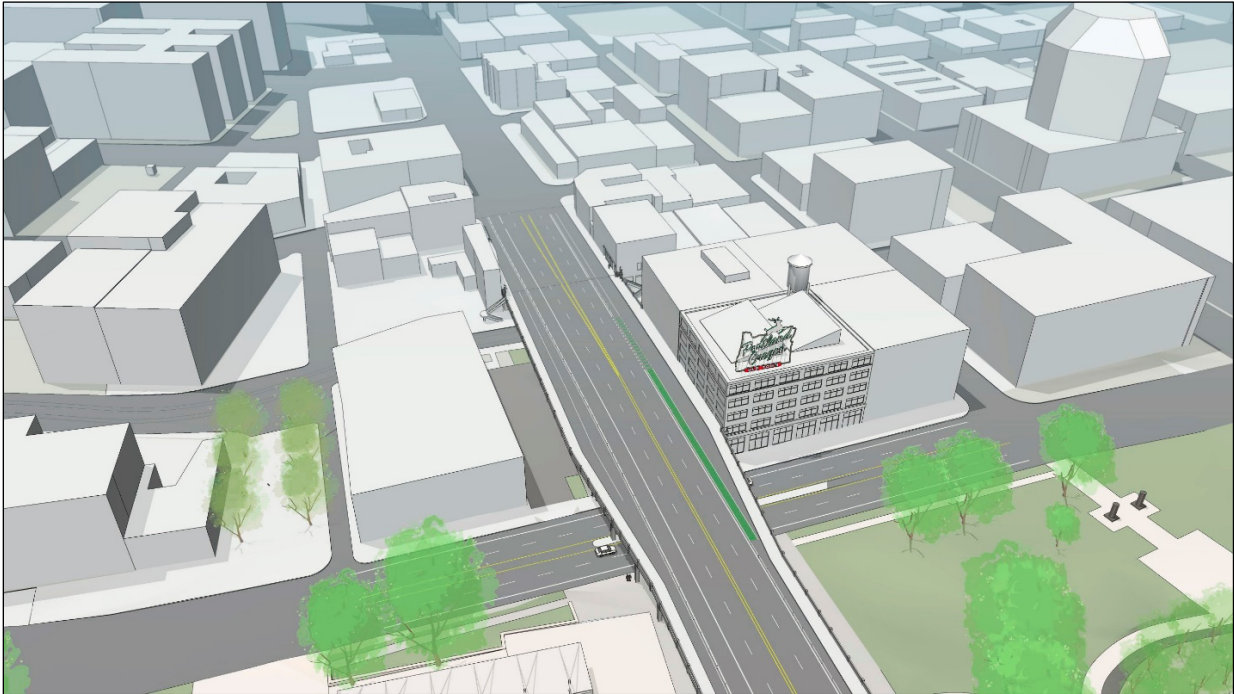


Figure 29: White Stag Block, artist's rendering of existing condition of west approach (Fat Pencil Studio, 2021), aerial view looking northwest.

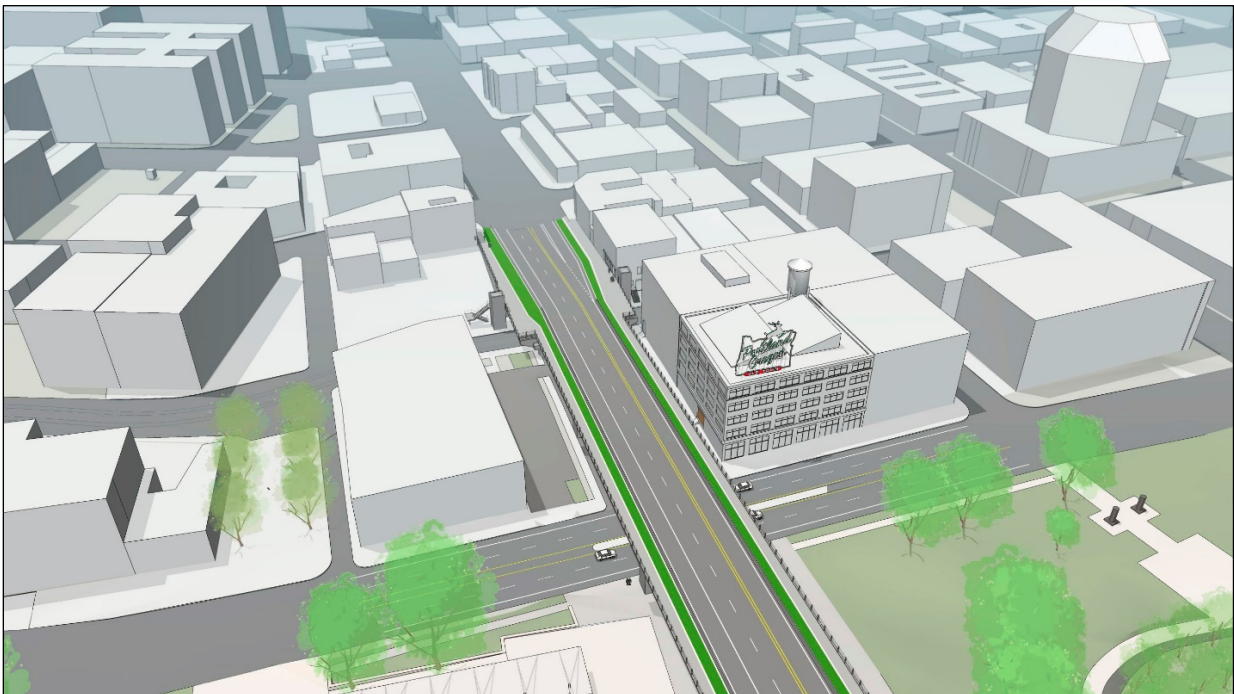


Figure 30: White Stag Block, artist's rendering of replacement west approach span (Fat Pencil Studio, 2021), aerial view looking northwest.

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Figure 31: White Stag Block, artist's rendering of existing condition of west approach (Fat Pencil Studio, 2021), aerial view looking northeast.

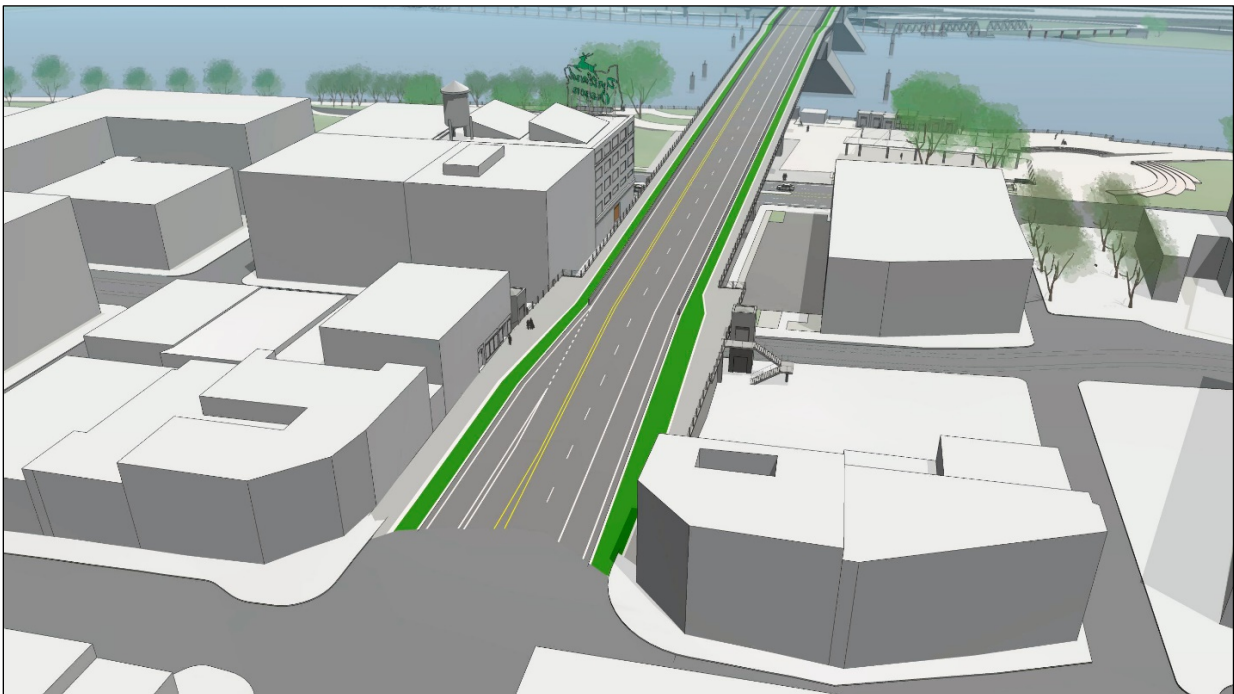


Figure 32: White Stag Block, artist's rendering of replacement west approach span (Fat Pencil Studio, 2021), aerial view looking northwest.

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Figure 33: White Stag Block, artist's rendering of existing condition of west approach (Fat Pencil Studio, 2021), view looking west.



Figure 34: White Stag Block, artist's rendering of replacement west approach span (Fat Pencil Studio, 2021), view looking west.

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Figure 35: White Stag Block, artist's rendering of existing condition of west approach (Fat Pencil Studio, 2021), view looking west.



Figure 36: White Stag Block, artist's rendering of replacement west approach span (Fat Pencil Studio, 2021), view looking west.

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Property Name: White Stag Sign	Street Address: 67 West Burnside Street	
City, County: Portland, Multnomah	Latitude: 45.523043 Longitude: (-) 122.671620	
Surveyor: Adam S. Alsobrook	Affiliation: WillametteCRA	Date Recorded: 08/18/2021

Photo:



Photo Caption: White Stag Sign, looking southwest (Elizabeth O'Brien, 2019).

Preliminary Finding of Effect:

☐ No Historic Properties Affected
 ☒ No Historic Properties Adversely Affected
 ☐ Historic Properties Adversely Affected

State Historic Preservation Office Comments:

☐ Concur
 ☐ Do Not Concur:
 ☐ No Historic Properties Affected
 ☐ No Historic Properties Adversely Affected
 ☐ Historic Properties Adversely Affected

Signed: _____ Date: _____

Comments:



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ODOT Key Number: XXXXX, Federal Agency: Federal Highway Administration/Burnside Bridge [Federal-Aid No. C051(111)]	
Property Name: White Stag Sign	
Street Address: 67 West Burnside Street	City, County: Portland, Multnomah

Provide written description of the project, and its potential effects on the subject property per 36 CFR 800. The project and findings, as per instructions, should include:

1. Introduction

This statement of finding of effect discusses the effect of the proposed Earthquake Ready Burnside Bridge (EQRB) Project in Portland, Oregon. The White Stag Sign at 5 NW Naito Parkway was determined as individually eligible for listing in the National Register of Historic Places (NRHP) by the Oregon State Historic Preservation Office (OR SHPO) on December 21, 2020. Multnomah County is the project proponent with support from the Oregon Department of Transportation (ODOT) on behalf of the Federal Highway Administration (FHWA). Historical Research Associates, Inc. (HRA) prepared the original findings that have since been updated by WillametteCRA with the current Alignment Alternatives information on behalf of the Oregon Department of Transportation (ODOT). It is the finding of WillametteCRA, on behalf of ODOT, that the proposed project will have no adverse effect on the White Stag Sign. This statement of finding of effect is made pursuant to the requirements of the National Historic Preservation Act of 1966 (36 CFR 800), Executive Order 11593, and the National Environmental Policy Act of 1969.

2. Project Description

The proposed project is to establish a Burnside Bridge that would survive a major Cascadia Subduction Zone (CSZ) earthquake. The existing bridge would fail in such an earthquake. The preferred alternative would replace the existing bridge with a new bridge, known as the Long Span option. The Long Span alternative would construct a new bridge on the same alignment as the current bridge.

3. Identification and Description of the Historic Resource

The White Stag Sign is located on the roof of the Willamette Tent and Awning building at 67 West Burnside Street, Portland, Multnomah County, Oregon. This metal-framed roof sign measures approximately 50 feet long by 50 feet high. The White Stag Sign is situated at southeast corner of the building's roof, with the primary face of the sign facing east. The sign graphics are created with a combination of neon tubes and electric lamps.

When it was completed in November 1940, the present-day White Stag Sign advertised the "White Satin"-brand sugar produced by the Amalgamated Sugar Company (*Oregonian* 1940c). In the fall of 1938, Amalgamated Sugar opened a new \$2.5 million (about \$48.4 million in 2021 dollars) beet sugar processing plant at Nyssa, Oregon, which processed over 70 million pounds of refined sugar during the plant's first seasonal production run of about 115 days (*Nyssa Gate City Journal* 1939). Due to the record success of the new plant, Amalgamated Sugar hired the food brokers Mailliard and Schmiedell as sales representatives to market their "White Satin" sugar to consumers in Oregon and Washington (*Oregonian* 1939). "White Satin" sugar was dubbed "Oregon's Own and Only Sugar" in newspaper advertisements, and this slogan was also used on the original version of the White Stag Sign (*Oregonian* 1940b, 1940c).

The White Satin Sugar rooftop sign was constructed by A. Young & Son for the Ramsay Sign Company at a cost of \$4,000 (about \$78,000 in 2021 dollars) (*Oregonian* 1940a, 1940c). The Hirsch-Weis Manufacturing Company, makers of "White Stag"-brand ski clothing, owned the building when the sign was constructed (*Oregonian* 1937, 1940c). As originally constructed, the sign measured 50 feet long and 40 feet high. Eleven tons of steel were used to build the structure for the electric sign, which used 1100 feet of neon tubing and 550



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incandescent lamps to spell out the message: “White Satin Sugar, Oregon’s Own and Only.” This message was gradually revealed in a five-step illumination process and animated with a pouring sack of sugar (*Oregonian* 1940c). A neon-illuminated outline of the State of Oregon surrounded the advertising message (O’Brien 2020).

By 1947, the original 1940 advertising message had been replaced with a circular “White Satin Sugar” corporate logo, which was centered within the Oregon-shaped neon-illuminated border. In 1951, the sign was remodeled again, and the main sign message within the Oregon-shaped border was changed to read: “It’s White Satin Sugar,” and the slogan “Oregon’s Own and Only” was added to a panel mounted above the top of the border. The Hirsch-Weis Manufacturing Company acquired the sign in 1957, and it was once again remodeled. The “White Satin Sugar” lettering was removed and the neon-illuminated Oregon-shaped outline remained. “White Stag” was spelled out in bold letters within the border, with the leaping white stag corporate logo mounted above the primary lettering and the word “Sportswear” added below. A neon red nose was added to the white stag in 1959 at the suggestion of Elizabeth Blair Hirsch, Harold Hirsch’s wife. The red nose on the white stag “Rudolph” reappeared during subsequent holiday seasons and this feature of the sign is much beloved by the residents of Portland (O’Brien 2020).

The Hirsch-Weis Manufacturing Company moved out of the building in 1973, though the company agreed to maintain both the sign and seasonal red nose feature. In October 1977, the Portland Historic Landmarks Commission voted unanimously to designate the White Stag sign as a city landmark. Disagreements over the maintenance of the sign arose during the mid-1990s. However, in 1996 a maintenance agreement was reached between sign owner Ramsay Sign Company and the H. Naito Corporation, the building owner. H. Naito removed the “White Stag” sign lettering within the Oregon-shaped neon border and replaced it with the words “Made in Oregon.” The company also replaced the “Sportswear” lettering at the base of the sign with the words “Old Town,” in reference to the Skidmore/Old Town National Historic Landmark district in which the Willamette Tent and Awning building is located. Despite these changes, the seasonal red nose for “Rudolph” was retained. In 2010, the Ramsay Sign Company donated the White Stag sign to the City of Portland. Art DeMuro, then the owner of the Willamette Tent and Awning building, contributed \$200,000 toward the replacement of the “Made in Oregon” lettering with a new “Portland, Oregon” message (O’Brien 2020).

The White Stag sign was originally constructed in 1940 and is therefore outside of the historical period of significance of the Skidmore/Old Town National Historic Landmark district, which spans the years between 1857 and 1929 (NRHP 2008). However, the Oregon SHPO determined that the White Stag sign was individually eligible for listing on the NRHP on December 21, 2020.

4. Undertaking Options Considered

A total of six (6) alternatives have been considered for this undertaking: two (2) no-build alternatives and four (4) build alternatives. The four (4) build alternatives included an Enhanced Seismic Retrofit Alternative and three (3) replacement alternatives. Extensive discussion and analysis of these alternatives is contained in the Supplemental Draft Environmental Impact Statement (SDEIS) of 2021. The following is a synopsis of the alternatives considered for this undertaking.



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a. No-Build Alternative

Two (2) no-build alternatives were considered for this undertaking. These no-build alternatives assume that all other programmed and planned projects move forward and that the Burnside Bridge would remain seismically at risk. The first no-build scenario considered was the “No-Build Pre-Earthquake” alternative, which analyzed no-build conditions prior to a CSZ seismic event. The second no-build scenario considered was the “No-Build Post-Earthquake,” which analyzed no-build conditions after a CSZ seismic event. The authors of the SDEIS concluded that the no-build alternatives would not address the acute seismic vulnerability of the existing Burnside Bridge, which is expected to be heavily damaged or completely collapse during a CSZ seismic event. The collapse of the Burnside Bridge would very likely result in a significant loss of life to people on or under the bridge during a CSZ seismic event. The loss of the Burnside Bridge would sever downtown Portland from the rest of the city on the east side of the Willamette River and would prevent emergency responders from being able to cross the river. Additionally, debris from the collapse of the Burnside Bridge would block all travel by land and water under the bridge. The loss of the Burnside Bridge due to a CSZ seismic event would hamper the long-term recovery of the city and surrounding region during the months following a major earthquake, and the potential adverse economic effects would likely persist for years.

b. Avoidance Alternative

The environmental team considered one (1) avoidance alternative. An Enhanced Seismic Retrofit Alternative was considered in lieu of the wholesale replacement of the Burnside Bridge. This alternative would partially retrofit the existing bridge and replace major structural components of the bridge to meet seismic design criteria. In this scenario, the retrofitted structural elements would be visually similar to the existing structure of the bridge, but the replacement approaches would be substantially different in appearance compared with the existing bridge. Under this scenario, the width of the bridge would be unchanged, and the modal connections at each end of the bridge would also not change. The environmental team made a preliminary analysis of potential effects to the NRHP-listed Burnside Bridge due to the Enhanced Seismic Retrofit Alternative scope of work. The team applied the Section 106 criteria of adverse effect and found that this potential scope of work would result in adverse effects to the NRHP-listed Burnside Bridge.

c. Proposed Undertaking

Three (3) build alternatives were considered for the proposed undertaking. Of these three alternatives, the Refined Long-span alternative would replace the existing bridge with a new bridge on the same alignment as the current bridge. This would necessitate the demolition of the existing Burnside Bridge.

5. Evaluation of Effects

Note: The structure of the operable center span of the new replacement bridge has not yet been finalized. The center span will be either a bascule or vertical lift structure. A bascule lift center span would not have any direct effects to the White Stag Sign, and this option would also not have any indirect visual effects to the viewshed of the sign (Figures 15 and 16). The four towers of a vertical lift center span would not have any direct effects to the White Stag Sign, and while there would be the potential for slight visual effects to the viewshed of the sign, these appear to be slight enough to not rise to the level of an adverse effect (Figures 15 and 17).



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Location: The proposed replacement of the Burnside Bridge will not require the White Stag Sign to be relocated or removed, therefore, the undertaking will have no effect to the sign's integrity of location (Figures 6, 7, and 9).

Setting:

Discussion of Direct Effects:

The immediate physical environment of the White Stag Sign is the rooftop of the Willamette Tent and Awning building (Figures 6 and 7). The sign location is bounded by an adjacent building to the north, NW Naito Parkway and Tom McCall Waterfront Park to the east, the west approach span of the Burnside Bridge to the south, and an adjacent building to the west. The proposed replacement of the Burnside Bridge will not alter or destroy the immediate setting of the White Stag Sign and therefore the undertaking will have no adverse effect to the sign's integrity of setting.

Discussion of Indirect Effects:

The principal viewshed of the White Stag Sign is along the east west axis of the existing alignment of the Burnside Bridge (Figures 8, 9, 10, 11, and 12). Many, if not most, contemporary photographic views of the White Stag Sign are taken from locations to the east of the sign either along the Burnside Bridge or slightly to the north of the bridge span. The relatively flat, wide, and visually open character of the existing road deck of the Burnside Bridge is conducive to unimpeded views of the sign and thus a popular vantage point for both amateur and professional photographers.

The girder option for the replacement west approach span would not have an effect on the primary viewshed of the White Stag Sign, since it closely approximates the character of the existing Burnside Bridge (Figures 13 and 14). Also, the bascule option for the operable center span would not have an effect on the viewshed of the sign for reasons similar to the girder structure (Figures 15 and 16). However, the vertical lift option for the operable center span would have a slight effect on the White Stag Sign viewshed, since the four vertical towers would partially or completely block views of the sign from certain points along the sidewalks and road deck of the new Burnside Bridge (Figures 15 and 17). However, other views of the White Stag Sign would remain unaffected by the proposed placement of the vertical lift towers. Since the potential for indirect effects to the setting of the sign by the vertical lift towers is slight, the vertical lift center span option would constitute no adverse effect to the White Stag Sign for indirect effects.

Design: The proposed replacement of the Burnside Bridge will not alter the physical form, structure, and style of the White Stag Sign, therefore, the undertaking will have no effect to the sign's integrity of design.

Materials: The proposed replacement of the Burnside Bridge will not damage, remove, or destroy physical elements of the White Stag Sign, therefore, the undertaking will have no effect to the sign's integrity of materials.

Workmanship: The proposed replacement of the Burnside Bridge would not damage, remove, or destroy physical evidence of the historic construction techniques used to build the White Stag Sign, therefore, the undertaking will have no effect to the sign's integrity of workmanship.



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Feeling: The proposed replacement of the Burnside Bridge would not alter the physical features which collectively convey the historic character of the White Stag Sign, therefore the undertaking will have no effect to the sign's integrity of feeling.

Association: The proposed replacement of the Burnside Bridge would not diminish or eliminate the direct link that the sign has to important historic events or persons significant to our past, therefore, the undertaking will have no effect to the sign's integrity of association.

6. Coordination and Public Output

The Earthquake Ready Burnside Bridge project has been the subject of public meetings since 2016. Multnomah County has established a Community Task Force in October 2018, which continues to meet regularly. Meetings of the Section 106 Consulting Parties have been meeting regularly since December 2020. Draft technical reports to address NHPA and NEPA requirements have been circulated for review by representatives of the SHPO, City of Portland, and ODOT. There has also been coordination with the Portland Historic Landmarks Commission, which is a CLG.

7. Conclusion

In summary, the Refined Long-span alternative would necessitate the complete replacement of the existing Burnside Bridge with new approach and main spans. The replacement of the existing east and west approach spans and center span of the Burnside Bridge would have no adverse effect to the White Stag Sign for either direct or indirect effects.

8. Sources

O'Brien, Elizabeth

2020 Oregon Inventory of Historic Properties, Section 106 Determination of Eligibility Form, White Satin Sugar/White Stag Sign, 5 NW Naito Parkway, Portland, Multnomah County, Oregon. Earthquake Ready Burnside Bridge, Draft Environmental Impact Statement, Attachment F: Agency Letters. Electronic resource, <https://www.multco.us/earthquake-ready-burnside-bridge/draft-environmental-impact-statement>, accessed August 2021.

Historic Resource Inventory

1984 City of Portland Historic Resource Inventory Form for the White Stag Sign, 67 West Burnside Street, ID 0-125-00067. Oregon Historic Sites Database. Electronic resource, <http://heritagedata.prd.state.or.us/historic/>, accessed August 2021.

National Register of Historic Places

2008 Revised Documentation, National Register of Historic Places Registration Form for the Skidmore/Old Town Historic District, 6 October. Oregon Historic Sites Database. Electronic resource, <http://heritagedata.prd.state.or.us/historic/>, accessed August 2021.

The Nyssa Gate City Journal [Nyssa, Oregon]

1939 "Oregon's New Sugar Refinery Establishes Production Record and Exceed [sic] Estimated Season Output." *The Nyssa Gate City Journal* [Nyssa, Oregon], 26 January:1. Electronic resource, <https://oregonnews.uoregon.edu/newspapers/>, accessed August 2021.



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Oregonian newspaper. Electronic resource, <https://multcolib.org/resource/historical-oregonian-1861-1987>, accessed August 2021.

1937 "Hirsch-Weis Adds 48 New Machines; Goods in Demand." *Oregonian*, 3 October:12.

1939 "Group Off to View Nyssa Sugar Plant." *Oregonian*, 14 December:8.

1940a "Building Permits." *Oregonian*, 21 September:10.

1940b "Oregon's Own and Only Sugar Salutes Portland." *Oregonian*, 1 November:28.

1940c "Huge Sign Sugar Ad." *Oregonian*, 3 November:59.

Oregon State Historic Preservation Office (OR SHPO)

2020 Letter from Sarah Jalving to John Raasch, SHPO Case No. 18-1479, 21 December. Earthquake Ready Burnside Bridge, Draft Environmental Impact Statement, Attachment F: Agency Letters. Electronic resource, <https://www.multco.us/earthquake-ready-burnside-bridge/draft-environmental-impact-statement>, accessed August 2021.

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Maps and Figures

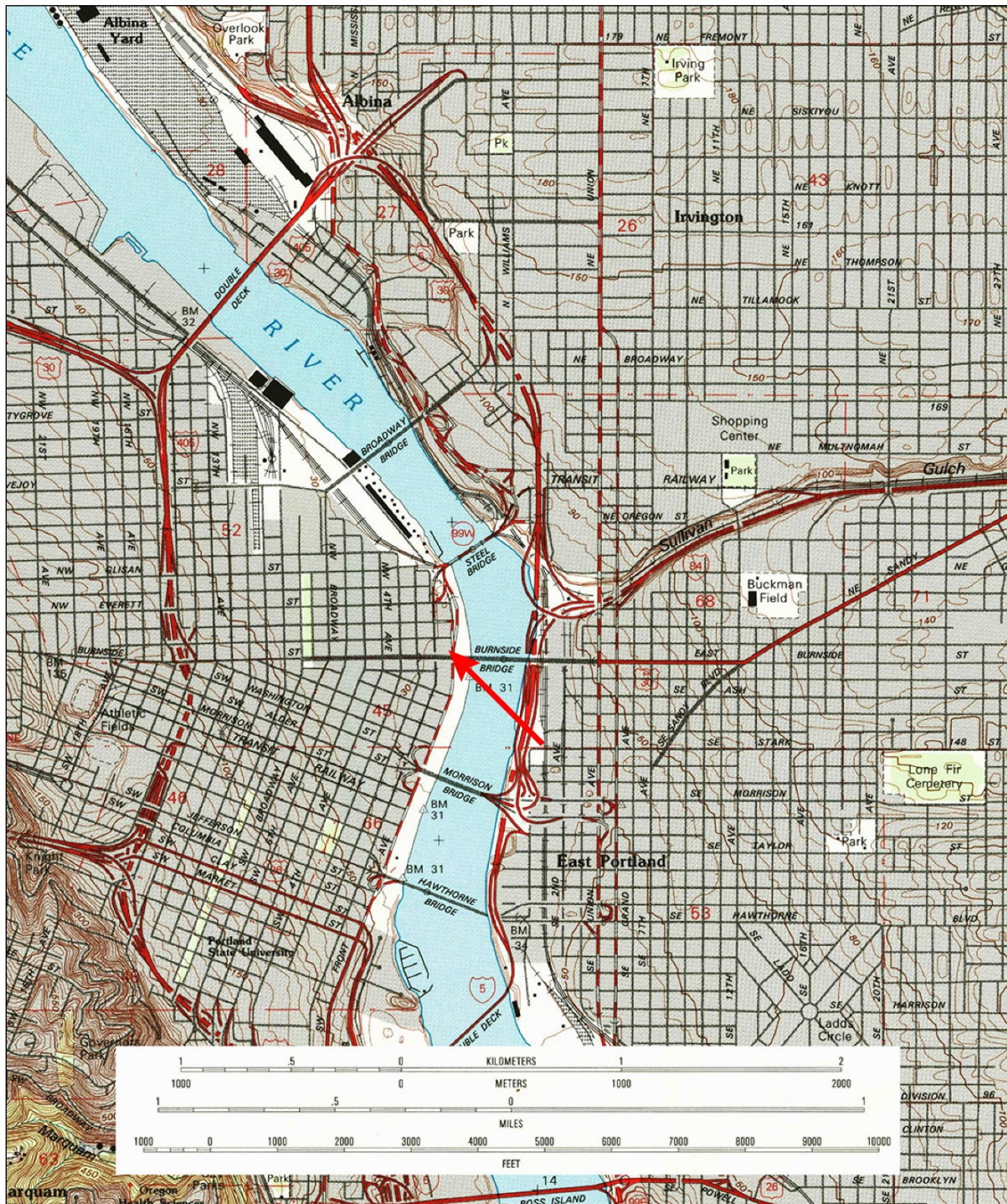


Figure 1: USGS, Portland, OR Quadrangle, 7.5 Minute, 1990. Red arrow indicates location of the White Stag Sign (USGS).

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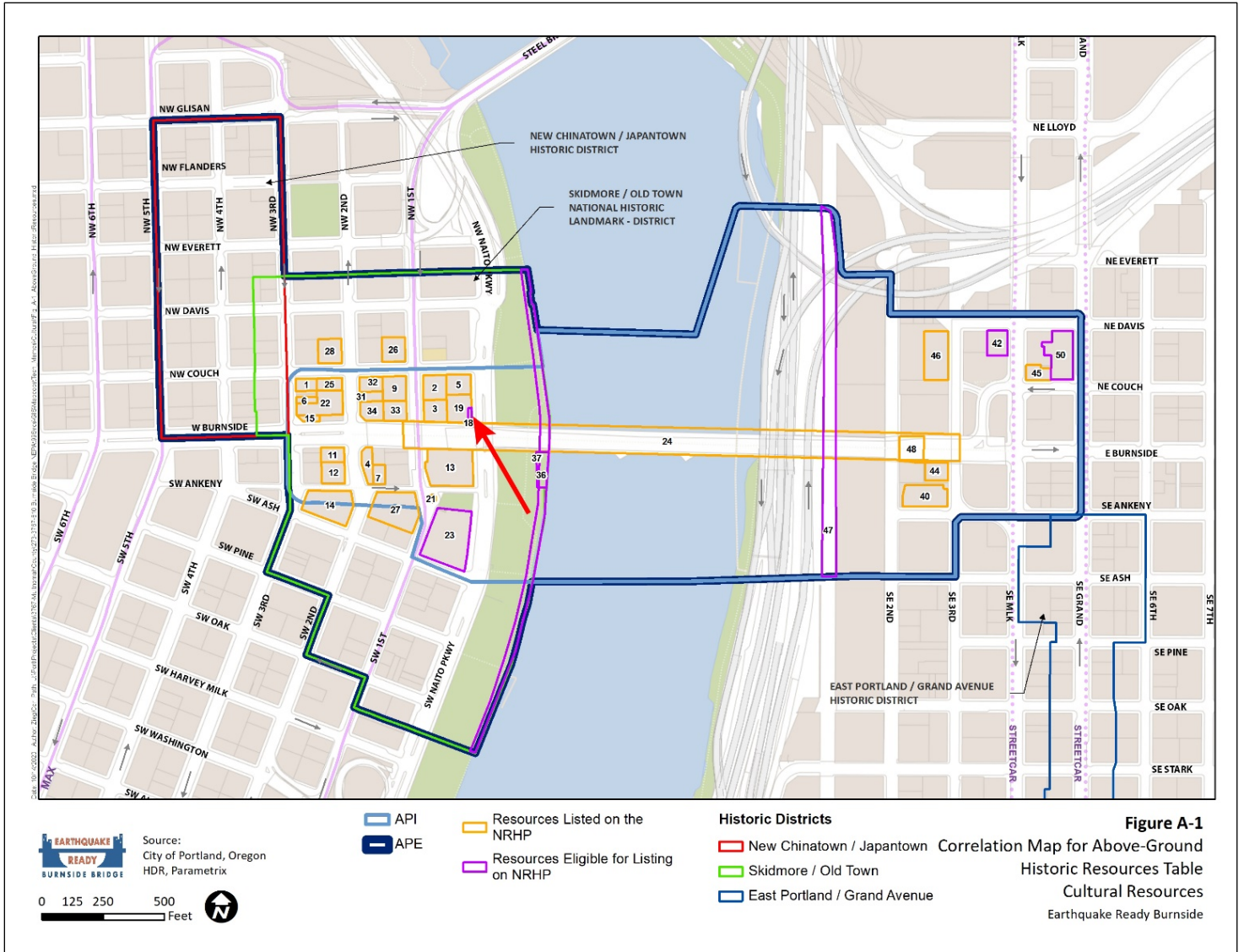


Figure 2: Map of the Area of Potential Effect (APE) with locations of NRHP-listed and NRHP-eligible resources within the APE. Red arrow indicates location of the White Stag Sign.

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Figure 3: Aerial photograph with location of the White Stag Sign indicated by red line (Google Earth).

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Photographs



Figure 4: 1951 aerial photograph with location of the White Stag Sign indicated by red line (USGS EarthExplorer).

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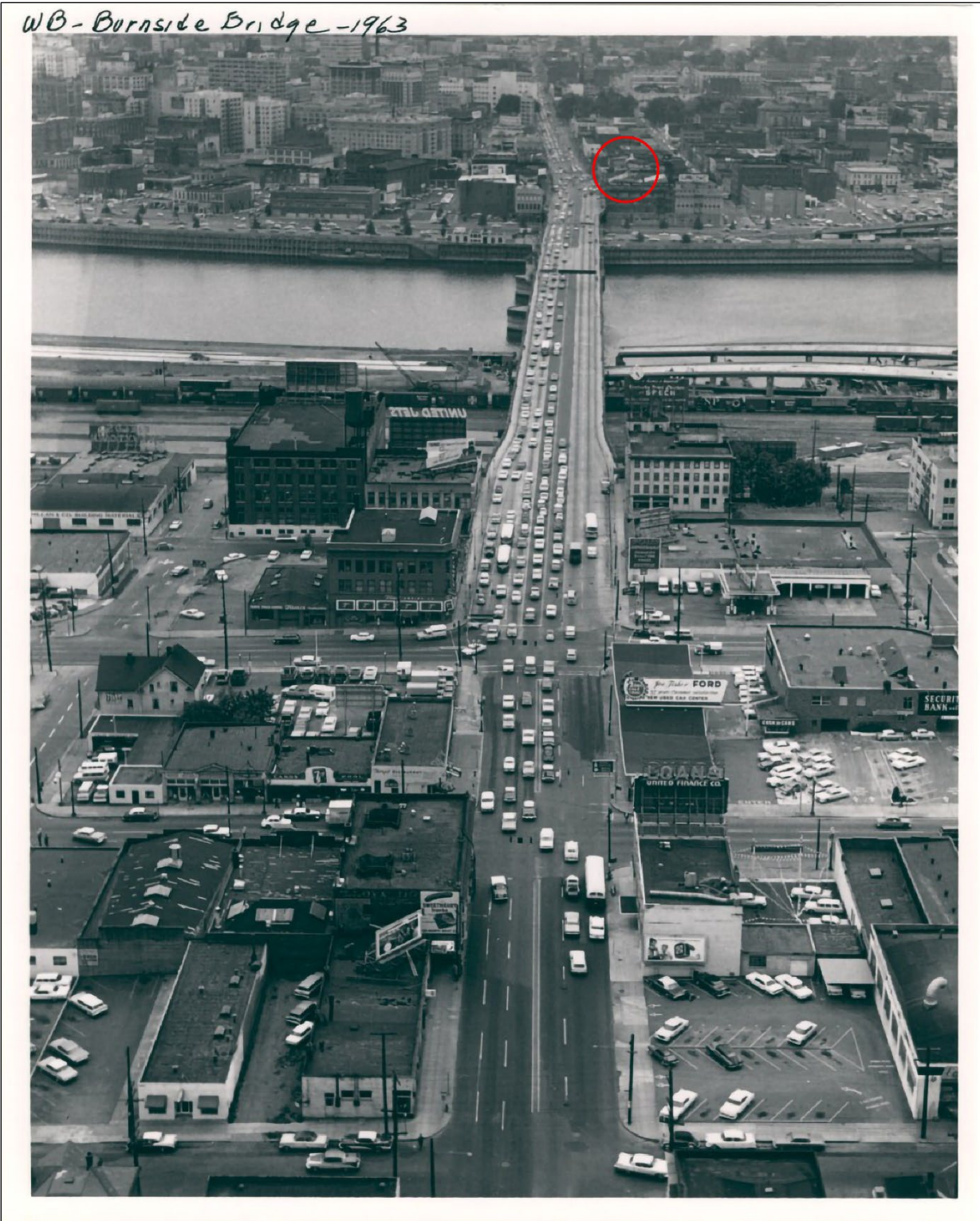


Figure 5: Burnside Bridge westbound, 1963, location of White Stag sign indicated by red circle (Portland Archives A2005-001.106).

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Figure 6: Photograph of the White Stag Sign from the City of Portland, Oregon Historic Resource Inventory, 1984 (OR SHPO).



Figure 7: White Stag Sign, looking up toward the roof of the Willamette Tent and Awning building (Elizabeth O'Brien, 2019)

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Figure 8: White Stag Sign, looking west from west approach of Burnside Bridge (David Ellis, 2021).



Figure 9: White Stag Sign, looking northwest from west approach of Burnside Bridge (David Ellis, 2021).

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Figure 10: White Stag Sign, looking west from west approach of Burnside Bridge (David Ellis, 2021).



Figure 11: White Stag Sign, looking west from west approach of Burnside Bridge (David Ellis, 2021).

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Figure 12: White Stag Sign, looking west from center span of Burnside Bridge (Elizabeth O'Brien, 2019).

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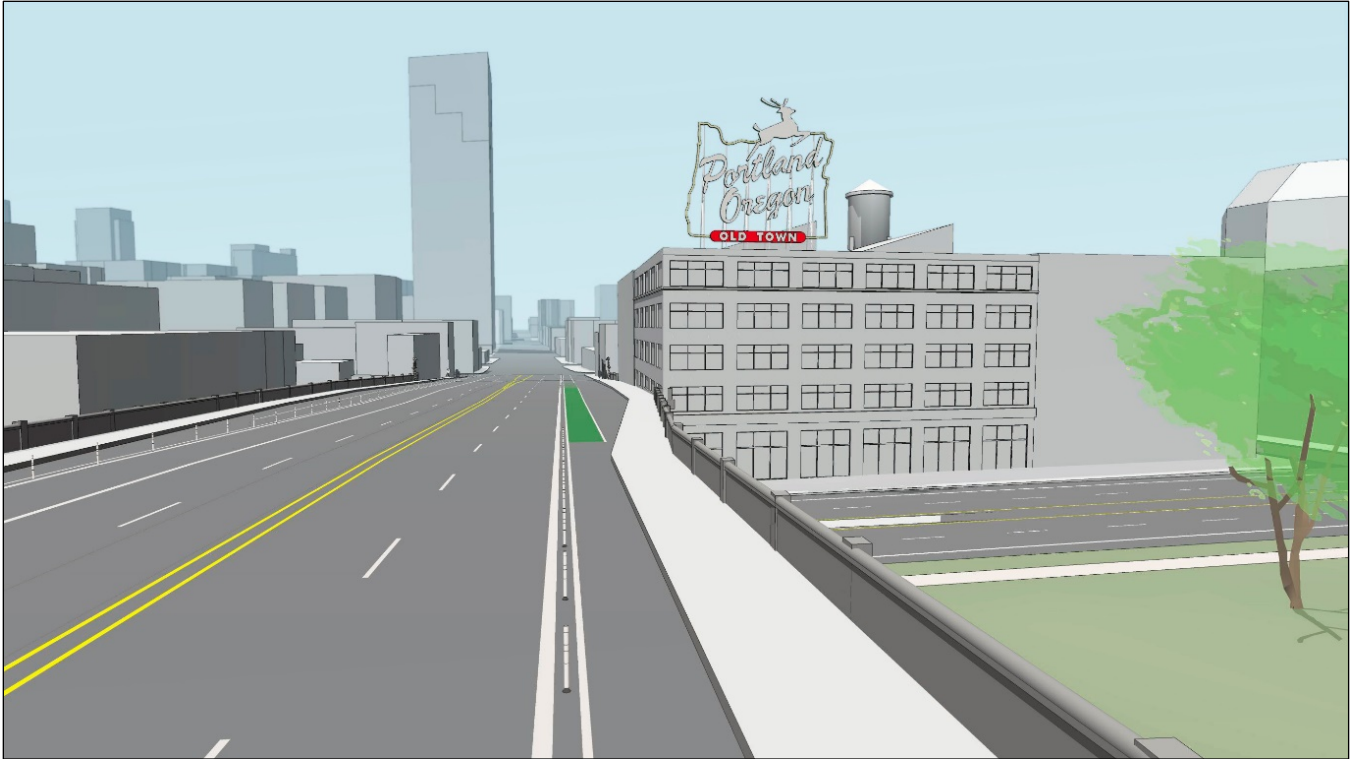


Figure 13: White Stag Sign, artist's rendering of existing condition of west approach (Fat Pencil Studio, 2021), view looking west.

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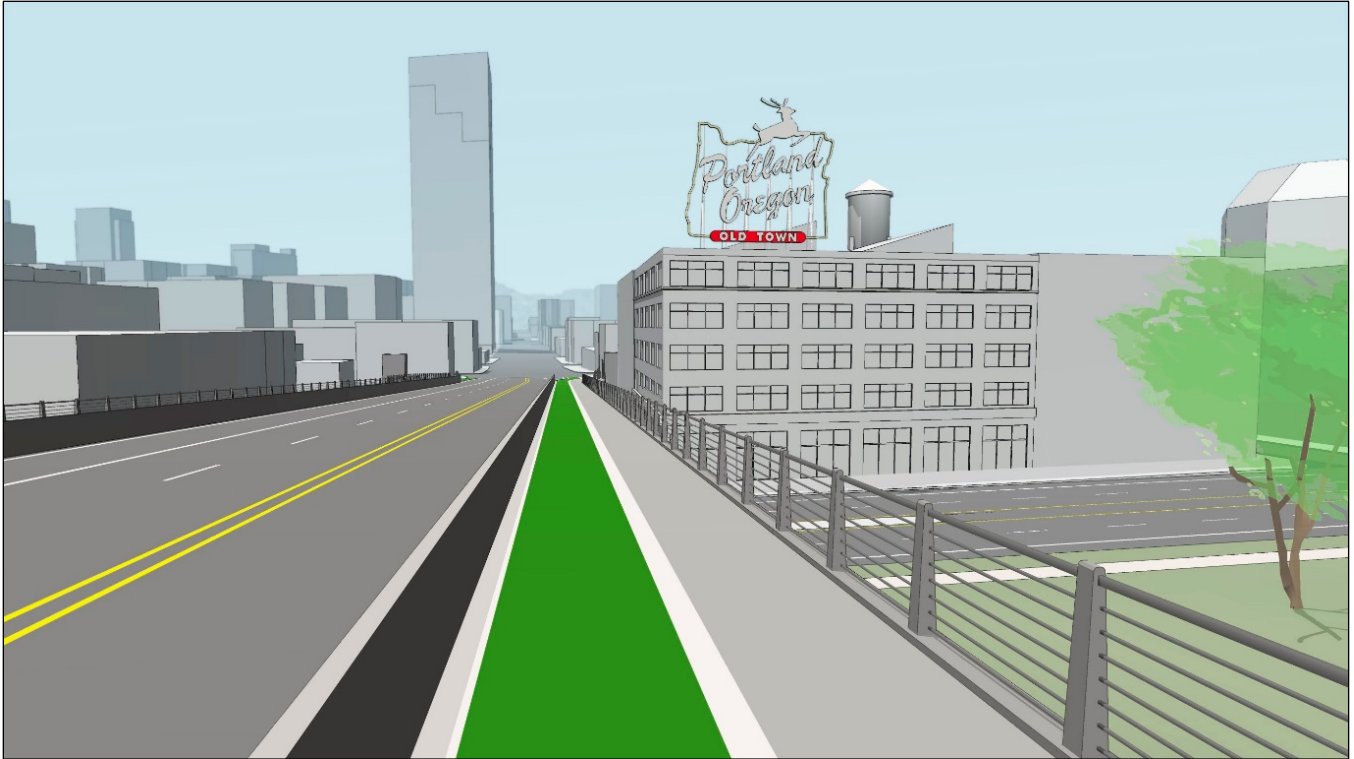


Figure 14: White Stag Sign, artist's rendering of replacement west approach span, view looking west (Joel Newman, Fat Pencil Studio, 08/17/2021).

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Figure 15: White Stag Sign, artist's rendering of existing condition of center span, view looking west (Joel Newman, Fat Pencil Studio, 08/17/2021).

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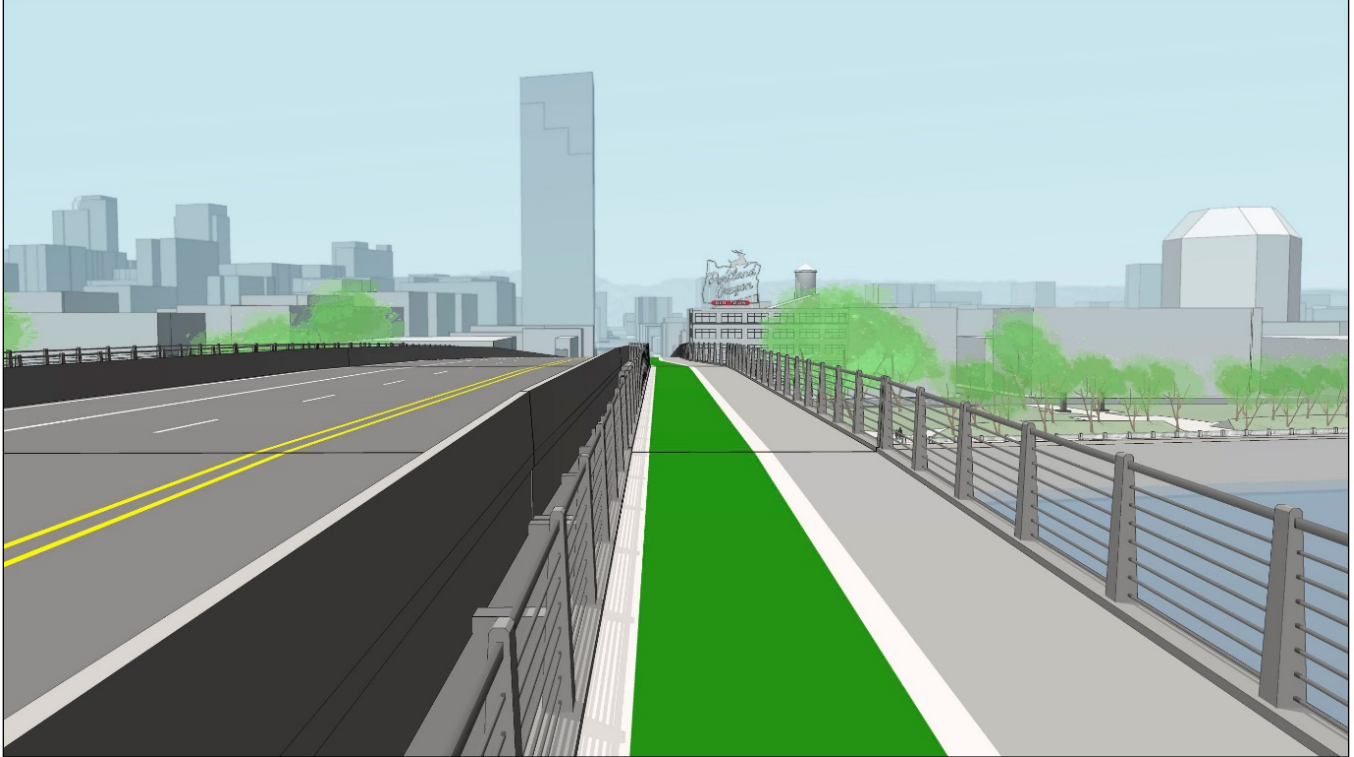


Figure 16: White Stag Sign, artist's rendering of replacement center span (bascule option), view looking west (Joel Newman, Fat Pencil Studio, 08/17/2021).

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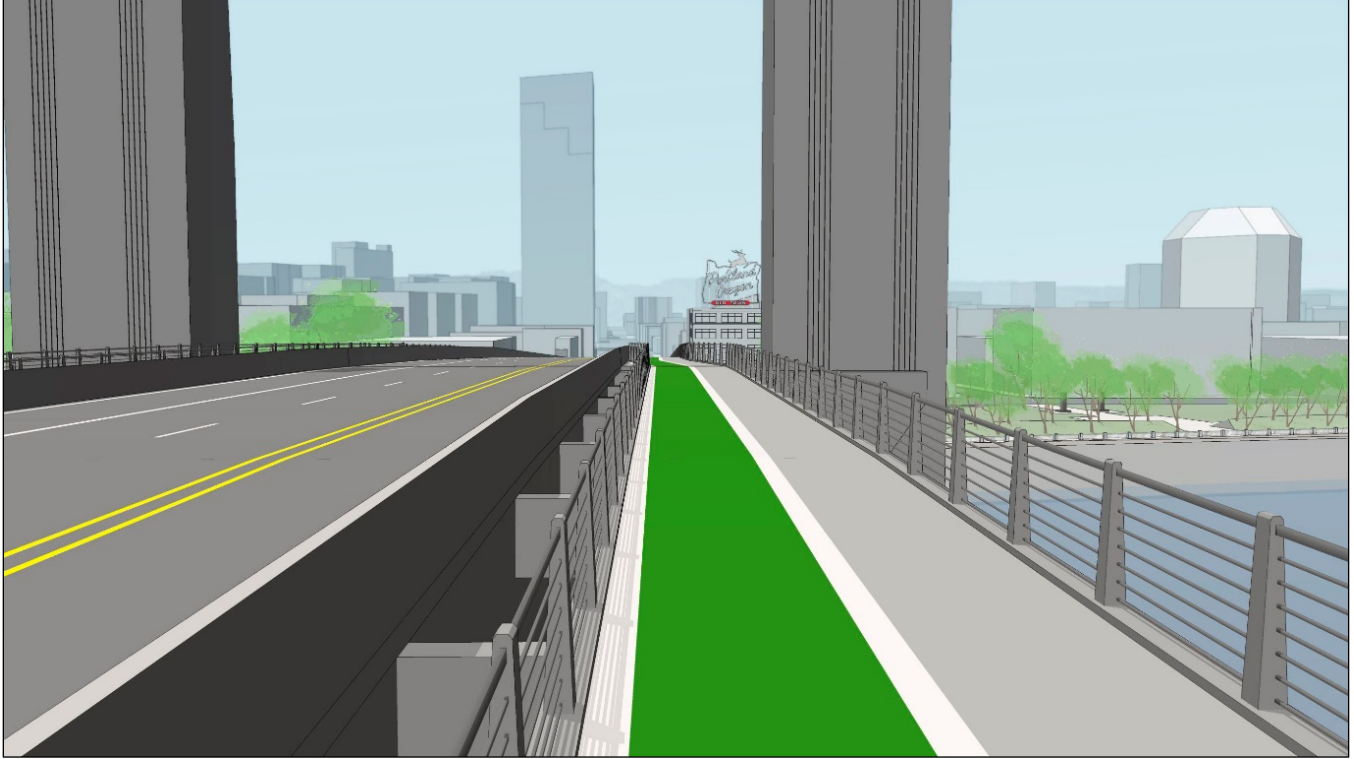


Figure 17: White Stag Sign, artist's rendering of replacement center span (vertical lift option), view looking west (Joel Newman, Fat Pencil Studio, 08/17/2021).