Earthquake Ready Burnside Bridge:
Combined Final Environmental Impact Statement/Record of Decision

Attachment E

Section 106 Programmatic Agreement

For other questions including those related to the Americans with Disabilities Act and Civil Rights Title VI accommodations, call 503-988-5050. You can also call Oregon Relay Service 7-1-1 or email burnsidebridge@multco.us. For information about this project in other languages please call 503-988-5970.

Para obtener información sobre este proyecto en español, ruso u otros idomas, llame al 503-988-5970 o envíe un correo electronico a burnsidebridge@multco.us.

Для получения информации об этом проекте на испанском, русском или других языках, свяжитесь с нами по телефону 503-988-5970 или по электронной почте: burnsidebridge@multco.us.

U.S. Department of Transportation
Federal Highway Administration

Multnomah County

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PROGRAMMATIC AGREEMENT
AMONG
THE FEDERAL HIGHWAY ADMINISTRATION, THE OREGON STATE HISTORIC PRESERVATION OFFICE, THE OREGON DEPARTMENT OF TRANSPORTATION, MULTNOMAH COUNTY, AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
IMPLEMENTING
SECTION 106 OF THE NATIONAL HISTORIC PRESERVATION ACT
FOR THE EARTHQUAKE READY BURNSIDE BRIDGE PROJECT,
PORTLAND, MULTNOMAH COUNTY, OREGON
FHWA FEDERAL-AID NO. C051(111), ODOT KEY NO. 22592, SHPO CASE NO. 18-1479

THIS PROGRAMMATIC AGREEMENT (Agreement) is made and entered into by and between the STATE OF OREGON, acting by and through its Department of Transportation (ODOT); the STATE OF OREGON, acting by and through its State Historic Preservation Office (SHPO); both hereinafter referred to as "State," the UNITED STATES FEDERAL GOVERNMENT, acting by and through the Federal Highway Administration (FHWA); MULTNOMAH COUNTY, acting by and through its Board of County Commissioners (Multnomah County); and the UNITED STATES FEDERAL GOVERNMENT, acting by and through the Advisory Council on Historic Preservation (ACHP); each herein referred to individually as Party or Signatory and all collectively referred to as Parties or Signatories.

WHEREAS, the purpose of this Agreement is to document the Parties' plans and obligations to implement Section 106 of the National Historic Preservation Act (NHPA) for the Earthquake Ready Burnside Bridge Project (Project). The Project consists of replacing the Burnside Bridge No. 00511 and its approaches No. 00511a and 00511b with a new earthquake ready bridge spanning the Willamette River at the same location. Implementing Section 106 obligations includes preconstruction and construction monitoring and archaeological evaluations, as needed, pursuant to the Archaeological Identification, Monitoring, and Treatment Plan (AIMTP) in Attachment 1; minimization efforts for construction vibration pursuant to the guidelines in Attachment 2; and resolution of the adverse effect on the Burnside Bridge No. 00511 and its approaches No. 00511a and 00511b through mitigation described in this Agreement. The Parties intend that the mitigation strategy will meet the requirements of Section 106 of the NHPA, 54 United States Code (USC) § 306108; and

WHEREAS, by the authority granted in Oregon Revised Statute (ORS) 190.110 and 283.110, Oregon state agencies may enter into agreements with units of local government or other state agencies for the performance of any or all functions and activities that a party to the Agreement, its officers, or agents have the authority to perform; and

WHEREAS, FHWA is the lead federal agency for the purposes of Section 106 providing financial assistance for the Project; and

WHEREAS, by the authority granted in ORS 366.558, the State of Oregon may enter into cooperative agreements with the United States Federal Government for the performance of work on improvement projects with the allocation of costs on terms and conditions mutually agreeable to the contracting parties; and

WHEREAS, FHWA requested that ODOT on behalf of FHWA, initiate consultation with SHPO, Federally Recognized Indian Tribes (Tribes), and other interested parties pursuant to 36 CFR § 800.14 and FHWA retains responsibility for consultation with Tribes; and

WHEREAS, the Signatories identified in the preamble of this Agreement include both Signatories and Invited Signatories as identified in 36 Code of Federal Regulations (CFR) § 800.6(c)(1)-(2), and each has the authority to execute, amend, or terminate this Agreement; and

WHEREAS, Multnomah County is the owner of the Burnside Bridge No. 00511 and its approaches No. 00511a and 00511b; and

WHEREAS, FHWA determined that the Project is an Undertaking, as defined in 36 CFR § 800.16(y), subject to review under Section 106 of the NHPA (54 USC § 306108) and its implementing regulations 36 CFR Part 800 (hereinafter referred to as "Section 106"); and

WHEREAS, FHWA defined the Undertaking's Area of Potential Effects (APE) as shown in Figure 1, attached hereto, by this reference made a part hereof of this Agreement and further defined as including the area bounded by an irregular shape starting at the corner of NW 5th Ave and NW Glisan Street south to W Burnside Street, west to NW 3rd Ave, southwest to SW Pine Street, east to SW 2nd Ave southwest to SW Oak Street, east to SW 1st Ave, southwest halfway to SW Harvey Milk Street, east to the bank of the west bank of the Willamette River, north to approximately SW Ash Street, east across the Willamette River to SW 3rd Ave, north to SW Ankeny Street, east to SE grand Ave, north to NE Davis Street, west to SE 2nd Ave, north to approximately NE Everett Street, west to approximately the location of the Union Pacific Railroad, north to approximately the latitude of NE Flanders Street, west to the northwestern corner of the Kevin J. Duckworth Memorial Dock, southwest to approximately the middle of the Willamette River at the latitude of NE Davis Street, west to the western shore of the Willamette River, north to the middle of the block between NW Davis Street and NW Everett Street, west to SW 3rd Ave, north to NW Glisan Street, and west to NW 5th Street, the point of beginning. This APE includes all of the geographic extent of the New Chinatown/Japantown Historic District and the Skidmore/Old Town National Historic Landmark (NHL) District and the area with the potential to be included in construction activities; and

WHEREAS, FHWA, in conjunction with ODOT, consulted with SHPO regarding appropriate levels of effort to identify historic properties in accessible areas of the APE and determined their significance using the National Register Criteria for Evaluation; and

WHEREAS, after assessing the potential direct, indirect, and reasonably foreseeable effects to historic properties in the APE, and after considering alternatives to avoid and minimize adverse effects, FHWA and ODOT, in consultation with and having received the concurrences from SHPO, have agreed that the Undertaking will only have an adverse effect (36 CFR § 800.5(d)(2)) on the Burnside Bridge No. 00511 and its approaches No. 00511a and 00511b through removal of the structures, which are listed in the National Register of Historic Places (NRHP); and

WHEREAS, in accordance with 36 CFR § 800.6(a)(1), FHWA notified the Advisory Council on Historic Preservation (ACHP) of its adverse effect determination on September 13, 2022, with specific

documentation and through its September 19, 2022 response, the ACHP conveyed its decision to participate as a Signatory in the consultation pursuant to 36 CFR § 800.6(a)(1)(iii); and

WHEREAS, ODOT, on behalf of FHWA, and in consultation with SHPO and the Tribes, determined appropriate levels of effort to test and monitor areas with a high probability for containing archaeological resources in the Area of Potential Impact (API), as described in the AIMTP (Attachment 1) and shown on Figure 1; and

WHEREAS, ODOT in consultation with SHPO determined preparation of this Agreement is the appropriate means to establish general agreement and a framework for implementing this Undertaking and to ensure completion of the identification and evaluation of archaeological resources within the APE shown on Figure 1, and to address the potential effects of construction-related vibration and other potential direct effects upon built, above ground historic properties in the APE; and

WHEREAS, FHWA determined that the Project has the potential to affect previously unidentified archaeological resources; but due to the inaccessible nature of unidentified resources, further identification, assessment of effects, and resolution of adverse effects to archaeological resources, shall be phased into the construction program pursuant to the AIMTP in accordance with 36 CFR 800.4(b)(2), 36 CFR 800.5(a)(3) and 36 CFR 800.6(c)(6); and

WHEREAS, the United States Coast Guard (USCG) reviews and approves locations and clearances of bridges and causeways in or over navigable waters consistent with the General Bridge Act of 1946 (33 U.S.C. §§ 525-533) and this approval is considered an Undertaking by the USCG and thus subject to review under Section 106; and

WHEREAS, the United States Army Corps of Engineers (USACE) receives and considers applications for permits under Section 14 of the Rivers and Harbors Act of 1899 (Section 408 as amended and codified under 33 USC § 408) and Section 404 of the Clean Water Act (Section 404) (33 USC § 1251 et seq.) and the USACE has determined the activities that require authorizations under these statutes are an Undertaking and therefore subject to Section 106; and

WHEREAS, USCG and USACE agreed that FHWA will be the lead federal agency for purposes of Section 106 in accordance with 36 CFR § 800.2(a)(2); and

WHEREAS, FHWA invited Multnomah County, the owner of the Burnside Bridge No. 00511 and its approaches No. 00511a and 00511b, to become an Invited Signatory to this Agreement; and

WHEREAS, ODOT, on behalf of FHWA, consulted with the Confederated Tribes of the Grand Ronde Community of Oregon, the Confederated Tribes of Siletz Indians, the Confederated Tribes of the Warm Springs Reservation of Oregon, the Confederated Tribes of the Umatilla Reservation, the Confederated Tribes and Bands of the Yakama Nation, the Nez Perce Tribe, and the Cowlitz Indian Tribe early and throughout the Section 106 process; and

WHEREAS, FHWA, with the support of ODOT, acknowledges its continued responsibility to engage in meaningful consultation with the aforementioned Tribes (See Executive Order 13175, 16 USC §

470a(d)(6)(B), and the November 5, 2009, Presidential Memorandum on Tribal Consultation) throughout the process of carrying out this Agreement; and

WHEREAS, ODOT, on behalf of FHWA, consulted with National Park Service (NPS), the Architectural Heritage Center, the Columbia River Inter-Tribal Fish Commission, HistoricBridges.org, Oregon Black Pioneers, the Oregon Historical Society, the Japanese American History Museum, Restore Oregon, the Willamette Light Brigade, the Historic Bridge Foundation, the Gresham Coalition of Neighborhoods, the Buckman Neighborhood Association, the Central Eastside Industrial Council, and the following interested unaffiliated parties: Edward Wortman, Sharon Wood Wortman, John Czarnecki, and John Weir as part of the Section 106 process; and

WHEREAS, the aforementioned agencies, organizations, unaffiliated parties, and aforementioned Tribes, together, are considered Consulting Parties and hereinafter are referred to as Consulting Parties; and

WHEREAS, the NPS National Historic Landmarks Program is a steward for National Historic Landmarks including the Skidmore / Old Town NHL District which is within the APE of the Undertaking, and NPS has agreed to be a Concurring Party to this Agreement; and

WHEREAS, ODOT and Multnomah County, on behalf of FHWA, conducted public community and stakeholder engagement in the form of public meetings, open houses, and presentations, consistent with 36 CFR § 800.2(d) and in coordination with the National Environmental Policy Act, regarding the effects of the Undertaking on historic properties; and

WHEREAS, execution and implementation of this Agreement evidences that FHWA has satisfied its Section 106 responsibilities for the Project; and

WHEREAS, Multnomah County shall provide sufficient funds to perform the mitigation obligations of this Agreement by allocating a portion of the Project's design phase funding obligated in the 2021-2026 Metropolitan Transportation Improvement Program (MTIP) Current Approved Project List (MTIP ID 71270), the 2018 Regional Transportation Plan Financially Constrained List of Projects and Programs (RTP ID 11129), and the ODOT 2021-2024 Statewide Transportation Improvement Program Active List (STIP Amendment No. 21-24-3027); and

NOW, THEREFORE, FHWA, SHPO, ODOT, Multnomah County, and ACHP agree that the Undertaking shall be implemented in accordance with the following stipulations to account for the effect of the Undertaking on historic properties.

-STIPULATIONS-

I. GENERAL REQUIREMENTS AND STANDARDS

1. FHWA, in coordination with ODOT, shall provide oversight to ensure that the provisions of this Agreement are carried out.

2. As a recipient of assistance under the Federal-Aid Highway Program, ODOT and Multnomah County shall carry out its assigned duties under this Agreement and comply with all applicable state and federal laws.

3. Signatories agree to keep sensitive cultural resources information confidential to the extent allowed by state and federal statutes and regulations, including but not limited to ORS 192.311 to 192.401, 36 CFR § 800.6(a)(5), 36 CFR § 800.11(c), and 36 CFR § 296.18.

4. All activities carried out pursuant to this Agreement shall meet the Secretary of the Interior's *Standards and Guidelines for Archaeology and Historic Preservation* (See 36 CFR Part 61 and 48 FR 44716, as revised) as well as existing standards and guidelines for archaeology and historic preservation activities established by SHPO.

5. FHWA, ODOT, and Multnomah County will ensure that all work carried out under this Agreement is conducted by or under direct supervision of a person or persons meeting the Secretary of the Interior's Professional Qualifications Standards (36 CFR Part 61, Appendix A).

6. Execution of this Agreement by FHWA, SHPO, ODOT, Multnomah County, and ACHP and implementation of its terms evidences that FHWA accounted for the effects of the Undertaking on historic properties and afforded the ACHP an opportunity to comment.

II. MITIGATION OF ADVERSE EFFECTS TO BURNSIDE BRIDGE

1. ODOT shall ensure that the mitigation is performed by Multnomah County as specified in this Stipulation II.

2. Multnomah County shall resolve the adverse effects to the Burnside Bridge by implementing and funding the following mitigation measures:

   i. ARCHIVAL RECORDS

      (a) Multnomah County shall compile an inventory of manuscript and photographic holdings from local repositories of written records and visual materials (*e.g.*, photographs, drawings, plans) pertaining to the construction, maintenance, and social and civic importance of the 1894 Burnside Bridge and the 1926 Burnside Bridge and determine which have not been digitized and of those which should be digitized and made available to the public. Multnomah County shall then arrange for digitizing those records to archival standards, with the Project paying to the repositories the copying fees for digitizing the records.

      (b) Multnomah County shall coordinate with the repositories to make newly digitized materials available to the public through established online digital collections or new online digital collections established for the Burnside Bridge. The digitized records shall also be offered to Northwest Digital Heritage, an online portal established by the Oregon Heritage Commission, the State Library of Oregon, and the Washington State Library. These digitized records may also be used in other mitigation and documentation efforts for the Project.

(c) The local repositories include, but are not limited to, the Oregon Historical Society, the Multnomah County Central Library (Wilson Room), the Portland Archives and Records Center, the Multnomah County Archives, the Oregon State Archives, the ODOT Library, the University of Oregon Libraries - Special Collections and University Archives, and the Oregon State University Libraries - Special Collections and Archives Research Center.

(d) Multnomah County shall have the selected manuscript and photographic holdings scanned and made available online within three (3) years of obligation of construction phase funding.

ii. DOCUMENTATION

(a) In consultation with the Consulting Parties, Multnomah County shall prepare Historic American Engineering Record (HAER) documentation for the Burnside Bridge prior to the demolition of the bridge. Multnomah County shall contact NPS Northwest Region Office (NPS-PNWRO) and obtain a Stipulation Letter from NPS-PNWRO detailing the appropriate level of HAER documentation.

(b) The Burnside Bridge property, including all extant contributing features included in the 2012 National Register of Historic Places nomination, will be documented for submittal to HAER.

(i) The work will be conducted by a professional meeting appropriate *Secretary of the Interior's Professional Qualification Standards*.

(ii) Documentation will fully adhere to current NPS HAER Guidelines for the field survey format as agreed upon by Multnomah County, SHPO, and Consulting Parties, as appropriate.

(iii) Draft documentation will be submitted to SHPO and NPS for review and approval. Multnomah County will assure that any required modifications or revisions necessary for NPS approval of HAER submittal are accomplished within thirty (30) days of a receipt.

(iv) Once NPS has reviewed and accepted the final documentation, it will be duplicated electronically and Multnomah County shall supply a copy for addition to the public record to NPS, SHPO, the Oregon Historical Society, the University of Oregon Knight Library Special Collections, ODOT Library, City of Portland Archives and Records Center, Oregon Historical Society, Multnomah County Library, Portland State University, Portland Community College, and Oregon State University Libraries – Special Collections and Archives Research Center. If the listed repositories cannot accept the document, SHPO and Multnomah County will work together to find alternative repositories.

(v) Final documentation will also be hosted on Multnomah County's website for a period of at least two (2) years.

(vi) Proof of submittal of the NPS-approved HAER documentation to each of the above repositories is required before the stipulation will be considered complete.

(c) Multnomah County shall complete the HAER documentation within three (3) years of obligation of construction phase funding and prior to demolition of the bridge.

iii. PUBLICATION

(a) Multnomah County shall commission an illustrated publication of scholarly quality and a minimum of 150 pages in length on the history of lower Willamette River crossings from Willamette Falls to the mouth, including Sauvie Island Bridge over Multnomah Channel. The publication shall address precontact crossing points, ferries, and bridges. In addition, it shall include a discussion of navigation on the lower Willamette River below Willamette Falls. The publication shall include contemporary photographs from the HAER documentation of the Burnside Bridge, historical images obtained from repositories (with their associated permissions), oral history interviews (10-15 individuals including Tribal members, engineers, bridge operators, and other users), historic maps, and other applicable materials.

(b) The publication shall also include historical context for these crossings that covers the geographic area, historical themes, and major chronological periods. For the Burnside Bridge specifically, the publication shall include documentation of the bridge's social and civic importance. Research shall also seek to identify and use documentary and/or archival sources as well as existing oral histories that discuss historically underrepresented communities and/or resources to provide a more inclusive history of the river crossings and river navigation from the precontact period to the present. Text within the publication shall include the results of this research. Multnomah County shall complete the publication within four (4) years of obligation of construction phase funding.

(c) Multnomah County shall distribute one (1) hard copy and one (1) digital copy of this publication to each of the following institutions: SHPO, Oregon Historical Society, Oregon Museum of Science and Industry, Multnomah County Library, City of Portland Archives and Record Center, Multnomah County Archives, State Library of Oregon, Oregon State Archives, Museum of the Oregon Territory, Oregon City Library, Portland State University Library, Portland Community College Library, Clackamas Community College Library, Oregon State University Libraries – Special Collections and Archives Research Center, and University of Oregon Libraries – Special Collections and University Archives. The USACE, USCG, ODOT, Multnomah County Transportation, and Tribes shall also receive one (1) hard copy and one (1) digital copy. Multnomah County shall have the publication available for the public to order at the cost of publication for 10 years and shall retain the original print ready

version stored with Multnomah County should the publication ever require revision and/or reprint. The publication shall also be publicly available free of charge on the websites of Multnomah County and ODOT for a period of five (5) years starting from the date that the publication is posted online.

iv. VIDEO DOCUMENTATION

(a) Multnomah County shall contract with an experienced videography firm or utilize existing Multnomah County videographers to film a series of related narrated videos of the Burnside Bridge to be approximately one (1) hour each including:

(i) video of the bridge opening and closing.

(ii) video of the bridge cab interior during opening and closing, with narration from the operator explaining the process of opening and closing the bridge.

(iii) video of the internal bridge machinery during the opening and closing sequence.

(iv) video record of bridge demolition/deconstruction.

(b) Multnomah County shall complete the first three (3) videos prior to the commencement of any demolition-associated actions at the bridge. Multnomah County shall complete the fourth video within six (6) months of bridge demolition. Multnomah County shall post all four (4) videos on the County's transportation program website during Project construction for a minimum of three (3) years or the duration of Project construction, whichever is longer. Multnomah County shall promote the videos through public affairs outlets. After construction, Multnomah County shall archive the videos in the County's permanent records management system and make them available to the public upon request. Multnomah County shall make the videos available to the Consulting Parties.

v. INTERPRETIVE DISPLAYS

Multnomah County shall contract with an experienced firm for the graphic design, display design, and fabrication of three (3) permanent outdoor interpretive displays, consisting of not more than two (2) panels each depicting the Burnside Bridge and its history and significance, including the bridge's social and civic importance. Multnomah County shall install the panels on the new Burnside Bridge. These panels may either be identical in content or encourage users to explore different aspects of the area's history. Multnomah County shall install the interpretive panels no later than the time of bridge opening and shall maintain the panels for a minimum of 10 years in the event the displays are vandalized or weather prematurely.

vi. THREE-DIMENSIONAL MODEL

Multnomah County shall contract with a firm experienced in the construction of three-dimensional models in the architecture industry to create a model of the 1926 Burnside Bridge. The model of the existing Burnside Bridge shall be developed in consultation with an individual or firm with experience in the design and documentation of historic bridges. The consultant shall meet the Secretary of the Interior's Professional Qualifications Standards for Architectural History or History. The model shall be constructed of durable materials at a scale of 1:500. The model shall be designed for public display during the Project's construction phase in the lobby of a Multnomah County facility. Upon completion of the Project, Multnomah County shall donate the model to an external party with a demonstrated capability for long-term display, such as a local museum, library, architectural heritage center, archive, or other interested parties. The model shall be completed and placed on public display within three (3) years of obligation of construction phase funding.

vii. THREE-DIMENSIONAL SCANNING

Multnomah County shall make a three-dimensional scan of the Burnside Bridge available to Consulting Parties and the public through the County website and upon request during construction. Upon completion of the Project, Multnomah County shall archive the data in the County's permanent electronic records management system.

viii. WIKIPEDIA ENTRY

Multnomah County shall contract with an experienced individual, institution, or firm knowledgeable with the history of the Burnside Bridge to update the Wikipedia entry on the Burnside Bridge. The update will include placing the bridge into a broader social and cultural context; updating photographs and citations; repairing broken links; and ensuring the entry meets Wikipedia core content policies. The post shall include a link to the Multnomah County Burnside Bridge website where readers will find information about all mitigation efforts described in this Programmatic Agreement. Multnomah County shall post the updated Wikipedia entry within one (1) year of completed construction of the new Burnside Bridge. Multnomah County shall monitor the Wikipedia entry for accuracy annually for five (5) years.

ix. OREGON ENCYCLOPEDIA ENTRY

Multnomah County shall, in cooperation with the Oregon Encyclopedia, develop an online entry on the history and significance of the Burnside Bridge, including information on the role of the Burnside Bridge and its significance to the Portland region and the Willamette River. Content will be submitted to SHPO and Consulting Parties, as appropriate, for review and approval prior to submittal to the Oregon

Encyclopedia for its own internal editorial process. The entry will be developed in accordance with Oregon Encyclopedia's editorial policy. Proof of Oregon Encyclopedia approval of the submitted material will be submitted to SHPO in order to complete this stipulation. If the article is not accepted into the Oregon Encyclopedia, SHPO, ODOT, and Multnomah County will consult to find an alternative stipulation, similar in nature.

x. BOOK UPDATE

Multnomah County shall prepare an online pamphlet focusing on the replacement of the Burnside Bridge. The design and layout of the pamphlet shall be compatible with the format of *The Big and Awesome Bridges of Portland & Vancouver* book (Wood Wortman and Wortman, 2014). Multnomah County shall make a camera-ready digital file of the pamphlet available to the public, including regional educators.

xi. PUBLIC EVENT

Multnomah County shall host a half-day event for the public at a date preceding the first phase of demolition of the Burnside Bridge. The event will celebrate and acknowledge the history of the existing bridge. A photographic and videographic record will be made of the event. Records from the event will be archived in Multnomah County's permanent records management system and made available to the public upon request. The event shall be held no later than 30 days before initiation of bridge demolition.

xii. SALVAGE AND REUSE

Multnomah County shall explore options for salvage and reuse of existing features of the Burnside Bridge, including railings, mechanical components, and the operator towers.

III. PRECONSTRUCTION AND CONSTRUCTION MONITORING AND ARCHAEOLOGICAL IDENTIFICATION AND EVALUATION

1. ODOT, in consultation with the Consulting Parties designated strategies and processes to identify, evaluate and mitigate impacts to archaeological historic properties before and during the Project. An AIMTP was prepared in compliance with Section 106 outlining the process to identify, evaluate, and treat archaeological discoveries or human remains that could result from Project implementation. *See* Attachment 1. The AIMTP outlines the details of a rapid identification process to identify resources just prior to construction where possible and the methods that will be used for more traditional archaeological construction monitoring in most other direct impact areas. Moreover, the AIMTP outlines a standardized procedure for identifying and assessing the significance and integrity of historic-era deposits that are eligible for listing on the NRHP.

2. The ODOT archaeologist shall ensure that contractors involved in the implementation of all phases of the Project are aware of, and comply with, the AIMTP. Compliance with the AIMTP is required as part of the Project Undertaking and will be written into Project contracts. Multnomah County, construction contractors and sub-contractors, archaeological monitors and the ODOT archaeologist shall ensure the terms of the AIMTP are implemented for all relevant pre-construction and construction activities. Multnomah County shall provide copies of the AIMTP to all construction contractors and sub-contractors and shall reference the AIMTP in bid and contracting materials and other relevant Project materials.

3. The AIMTP requirements include, but are not limited to:

    i. Multnomah County shall undertake a program of rapid, focused archaeological investigation of places where ground disturbing construction is planned within the API and identified in the AIMTP, that likely contain significant archaeological deposits.

    ii. Multnomah County shall undertake traditional archaeological monitoring of those areas where construction related ground disturbance is planned, where the rapid identification does not occur.

    iii. The AIMTP outlines a process of rapid evaluation of historic-era deposits. This process shall be used for both the preliminary rapid identification program and during more traditional archaeological monitoring of construction. Rapid evaluation is a standardized procedure for quickly assessing the significance and integrity of historic-era deposits as they are uncovered and to identify those deposits that are eligible for listing on the NRHP. All precontact, ethnohistoric-era deposits, or historic-era materials used or repurposed by Native peoples will be considered significant. Significant deposits will be the focus of immediate data recovery, allowing construction to proceed when archaeological work is completed.

    iv. Multnomah County shall provide the suitable construction equipment (e.g., backhoe) and qualified personnel needed to help the archaeologists complete the rapid identification process.

    v. Multnomah County shall plan for and provide adequate time for the rapid evaluation process during construction activities and shall provide the equipment and personnel needed to support data recovery excavations.

    vi. The procedure outlined in the AIMTP for Archaeological Discovery shall be followed. The results of construction monitoring investigations shall be summarized in an abbreviated determination of eligibility form sent daily to the ODOT Archaeologist, who will route the forms to SHPO and Tribes as detailed in the AIMTP.

    vii. The procedure outlined in the AMITP for Other Inadvertent Discoveries shall be followed. If any Project worker suspects that they have uncovered an archaeological artifact or other potential archaeological resource, they shall immediately notify the ODOT archaeologist or monitoring archaeologist. All work adjacent to the discovery shall cease immediately as detailed in the AIMTP.

viii. The procedure outlined in the AMITP for Human Skeletal Material shall be followed. If Native American ancestral remains (and all other human remains), funerary objects, sacred objects, and objects of cultural patrimony are discovered during the proposed work, they shall be treated with respect, secured, and protected until such time as the appropriate action has been determined. The monitoring archaeologist shall immediately notify the ODOT archaeologist and construction supervisor of the discovery. All work adjacent to the discovery shall cease immediately and the appropriate Tribes and agencies shall be notified as detailed in the AIMTP.

4. Archaeological Resources Mitigation

i) If ODOT determines an adverse effect to an archaeological historic property identified during construction, Multnomah County shall do the following: Attempt to redesign the Undertaking to avoid or minimize an adverse effect to the historic property; or if redesign is not possible to resolve the adverse effect, ODOT shall consult with Multnomah County, SHPO, FHWA, and the Tribes to propose mitigation compensatory to the adverse effect to the historic property and shall follow Stipulation III, paragraphs 4.ii – 4.iv.

(1) ODOT shall consult with NPS on any adverse effects to archaeological historic properties within the Skidmore/Old Town Historic District NHL.

ii) If ODOT determines the Undertaking has an adverse effect on an archaeological historic property, mitigation options may include, but are not limited to, data recovery, interpretive signage, video and/or web-based documentation, public interpretive program, etc. as detailed in the Section 6 of the AIMTP.

iii) ODOT shall document the outcome of consultation with SHPO, FHWA, and the Tribes in a finding of effect provided to SHPO for review and concurrence.

iv) ODOT shall revise the Project-wide finding of adverse effect and submit the revised finding and supporting documentation to SHPO and the Tribes for review and concurrence.

IV. MINIMIZATION EFFORTS FOR CONSTRUCTION VIBRATION

1. Multnomah County shall avoid or minimize the effects from construction-related vibration on built historic properties, their materials, and their workmanship. If it is projected that construction-related vibration will exceed certain thresholds (0.2 in/sec for transient and 0.1 in/sec for continuous vibration) within the applicable screening distance (approximately 500 feet from construction-related vibrations), Multnomah County shall undertake measures to avoid or minimize vibration near these built historic properties. Attachment 3 provides a list of historic unreinforced masonry properties located within 500 feet of construction-related vibration activities currently known. This is list subject to change, and Multnomah County shall provide ODOT, SHPO, NPS, and other Consulting Parties with an updated list as well as anticipated levels of vibration and the proposed measures that will be taken to monitor potential impacts. These measures will include pre- and post-construction condition assessments; on-site monitoring during construction; and stop work authorization if vibration

thresholds exceed limits suitable for the building materials, conditions, and soil types. SHPO, NPS, and interested Consulting Parties shall also be afforded the opportunity to review and comment on the pre- and post-construction building condition assessments. Multnomah County shall provide on-site monitoring updates to ODOT, SHPO, and NPS weekly.

2. If the Project's construction-related vibrations affect built historic properties within the Project's APE, ODOT shall notify SHPO and Consulting Parties and prepare a Treatment Plan consistent with all appropriate standards and treatments of the Secretary of the Interior's *Standards for the Treatment of Historic Properties,* the Secretary of the Interior's *Standards for Rehabilitation*, and all relevant NPS *Preservation Briefs*, especially *Preservation Brief 43, the Preparation and Use of Historic Structure Reports* and thus consistent with the requirements of 36 CFR 800.5(b), to make the applicable repairs to affected built historic properties. The Treatment Plan shall be prepared by Secretary of the Interior-qualified personnel and included with the 100 percent (100%) design package. The Treatment Plan shall be sent to SHPO for review and approval and NPS for review, with comments due within thirty (30) calendar days of transmittal. ODOT shall send the final Treatment Plan to interested Consulting Parties and the Treatment Plan will be the subject of a briefing meeting with interested Consulting Parties.

V. STIPULATIONS FOR THE IDENTIFICATION, PROTECTION, AND TREAMENT OF BUILT HISTORIC RESOURCES DURING THE RESONSTRUCTION OF THE BURNSIDE BRIDGE

1. ODOT and Multnomah County, in consultation with the Consulting Parties identified and evaluated potential impacts to built historic resources during the Project and shall follow the guidelines in Attachment 2, Identification, Protection, and Treatment of Built Historic Resources During the Reconstruction of the Burnside Bridge, for the identification, protection, and treatment of built historic resources. Attachment 2 to this Agreement describes the identified built historic resources, provides general guidelines for construction in the Skidmore/Old Town Historic District NHL, provides guidelines for new bridge components within the Skidmore/Old Town Historic District NHL, and provides guidelines for protection of historic features during demolition and construction. *See* Attachment 2.

2. Multnomah County shall provide copies of full final design plan sets to all Signatories.

3. Multnomah County shall explore options for salvage and reuse of the existing concrete panel Harbor Wall railings around Pier 1, which is owned by the City of Portland.

4. Artifacts collected as part of the Project from publicly owned lands must be transferred to the Oregon Museum of Natural and Cultural History. The Project shall provide an opportunity for salvage of material not otherwise designated for curation at the museum by interested Consulting Parties.

5. Multnomah County shall undertake outreach to Tribes and other communities with traditional and continuing associations with the Burnside Bridge and bridge location in the selection of design elements of the new bridge as practicable.

6. Multnomah County shall convene an advisory group for interested Consulting Party members and representatives of Signatories whose purpose is to provide comments on the implementation of the mitigation for the adverse effect to the Burnside Bridge described in Stipulation II and to provide comments on design developments as they relate to the NHL District. The advisory group will be convened no later than six (6) months after the National Environmental Policy Act Record of Decision for the Undertaking is signed. The role of the advisory group will be outlined in a charter established once the group is convened and approved by ODOT and Multnomah County. Multnomah County shall distribute minutes from the advisory group meetings to all Consulting Parties to communicate progress and decisions regarding mitigation actions.

VI. DURATION

This Agreement shall become effective on the date all required signatures are obtained and will remain in effect until all obligations under this Agreement are complete or ten (10) years from the date all required signatures are obtained, whichever occurs sooner. Prior to the expiration of this Agreement, FHWA may consult with the other Signatories to amend the terms of this Agreement in accordance with Stipulation VIII below.

VII. DISPUTE RESOLUTION

1. The Signatories shall attempt in good faith to resolve any dispute arising out of this Agreement.
2. Should any Signatory to this Agreement object at any time to any actions proposed or the manner in which the terms of this Agreement are implemented, FHWA shall consult with the objecting Signatory to resolve the objection. If FHWA determines, within thirty (30) days, that such objections cannot be resolved, FHWA will:
    a. Forward all documentation relevant to the dispute, including the FHWA's proposed resolution, to the ACHP in accordance with 36 CFR 800.2(b)(2). The ACHP will provide FHWA with its advice on the resolution of the objection within thirty (30) days of receiving adequate documentation. If ACHP does not provide its advice regarding the dispute within the thirty-day (30) time period, FHWA may proceed without it.
    b. FHWA shall then prepare a written response that takes into account any timely comments regarding the dispute from the Signatories and Concurring Parties to the Agreement and provide them and ACHP with a copy of such written response. FHWA will then recommend the best course of action to resolve the dispute.
    c. All other actions subject to the terms of this Agreement that are not the subject of the dispute will remain unchanged.
3. If the Signatories fail to resolve the dispute using the process set forth in Stipulation VII, paragraph 2 above, the Signatories may agree to utilize a jointly selected mediator or arbitrator (for non-binding arbitration) to resolve this dispute short of litigation.

VIII. AMENDMENTS

Any Signatory wishing to amend this Agreement must submit the text of the proposed amendment in writing to all Signatories. Signatories shall have thirty (30) days to either agree to the amendment in writing or provide written comments describing their objections to the amendment. The amendment will be effective when signed by all Signatories.

IX. TERMINATION

1. If any Signatory of this Agreement determines that its terms will not or cannot be carried out, that Signatory shall immediately consult with the other Signatories to attempt to develop an amendment per Stipulation VIII, above. If, within thirty (30) days (or another time period agreed to by all Signatories in writing), an amendment cannot be reached, any Signatory may terminate the Agreement upon written notification to the other Signatories.

2. Once the Agreement is terminated, and prior to work continuing on the Undertaking, FHWA must either (a) execute a new Agreement pursuant to 36 CFR § 800.6 or (b) request, take into account, and respond to the comments of the ACHP under 36 CFR § 800.7. FHWA will notify the Signatories of the course of action it will pursue.

X. CONTRIBUTION

1. Contribution between FHWA and State:

    a. FHWA shall be responsible to the extent permitted by the Federal Tort Claims Act only for the acts, omissions, or negligence of its own officers, employees, or agents. The State (ODOT and SHPO) shall be responsible to the extent permitted by Article XI, Section 7 of the Oregon Constitution and by the Oregon Tort Claims Act (ORS 30.260 – 30.300) only for the acts, omissions, or negligence of its own officers, employees, or agents.

    b. Notwithstanding the foregoing defense obligations under Paragraph X.1.a, neither FHWA nor the State nor any attorney engaged by either FHWA or the State shall defend any claim in the name of the other Party or any agency/department/division of such other Party, nor purport to act as legal representative of the other Party or any of its agencies/departments/divisions, without the prior written consent of the legal counsel of such other party. Each Party may, at any time at its election assume its own defense and settlement in the event that it determines that the other Party is prohibited from defending it, or that other Party is not adequately defending its interests, or that an important governmental principle is at issue or that it is in the best interests of the Party to do so. Each Party reserves all rights to pursue any claims it may have against the other if it elects to assume its own defense.

2. Contribution between State of Oregon Agencies:

    a. ODOT and SHPO agree that any tort liability, claim, suit, or loss resulting from or arising out of the Parties' performance of and activities under this Agreement shall be allocated, as between ODOT and SHPO, in accordance with law by Oregon Department of Administrative Services' (DAS) Risk Management, for purposes of their respective loss experiences and subsequent allocation of self-insurance assessments under ORS 278.435. ODOT and SHPO each agree to notify the DAS Risk Management Division and the other state agency in the

event it receives notice or knowledge of any claims arising out of the performance of, or the state agencies' activities under this Agreement.

b. ODOT and SHPO understand that each is insured with respect to tort liability by the State of Oregon Insurance Fund, a statutory system of self-insurance established by ORS Chapter 278, and subject to the Oregon Tort Claims Act (ORS 30.260-30.300). ODOT and SHPO each agrees to accept that coverage as adequate insurance of the other with respect to personal injury and property damage.

3. Contribution between the State of Oregon and Multnomah County:

a. If any third party makes any claim or brings any action, suit or proceeding alleging a tort as now or hereafter defined in ORS 30.260 ("Third Party Claim") against State of Oregon (the State) or Multnomah County with respect to which the other Party may have liability, the notified Party must promptly notify the other Party in writing of the Third Party Claim and deliver to the other Party a copy of the claim, process, and all legal pleadings with respect to the Third Party Claim. Each Party is entitled to participate in the defense of a Third Party Claim, and to defend a Third Party Claim with counsel of its own choosing. Receipt by a Party of the notice and copies required in this paragraph and meaningful opportunity for the Party to participate in the investigation, defense, and settlement of the Third Party Claim with counsel of its own choosing are conditions precedent to that Party's liability with respect to the Third Party Claim.

b. With respect to a Third Party Claim for which the State is jointly liable with Multnomah County (or would be if joined in the Third Party Claim), the State shall contribute to the amount of expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred and paid or payable by Multnomah County in such proportion as is appropriate to reflect the relative fault of the State on the one hand and of Multnomah County on the other hand in connection with the events which resulted in such expenses, judgments, fines or settlement amounts, as well as any other relevant equitable considerations. The relative fault of the State on the one hand and of Multnomah County on the other hand shall be determined by reference to, among other things, the Parties' relative intent, knowledge, access to information and opportunity to correct or prevent the circumstances resulting in such expenses, judgments, fines, or settlement amounts. The State's contribution amount in any instance is capped to the same extent it would have been capped under Oregon law, including the Oregon Tort Claims Act, ORS 30.260 to 30.300, if the State had sole liability in the proceeding.

c. With respect to a Third Party Claim for which Multnomah County is jointly liable with the State (or would be if joined in the Third Party Claim), Multnomah County shall contribute to the amount of expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred and paid or payable by the State in such proportion as is appropriate to reflect the relative fault of Multnomah County on the one hand and of the State on the other hand in connection with the events which resulted in such expenses, judgments, fines or settlement amounts, as well as any other relevant equitable considerations. The relative fault of Multnomah County on the one hand and of the State on the other hand shall be determined by reference to, among other things, the Parties' relative intent, knowledge, access to information and opportunity to correct or prevent the circumstances resulting in such expenses, judgments, fines, or settlement

amounts. Multnomah County's contribution amount in any instance is capped to the same extent it would have been capped under Oregon law, including the Oregon Tort Claims Act, ORS 30.260 to 30.300, if it had sole liability in the proceeding.

4. Stipulation X, Contribution, shall survive the termination of this Agreement.

XI. COMPLIANCE WITH LAW

Each Signatory agrees to comply with all federal, state, and local laws, regulations, executive orders and ordinances applicable to the work under this Agreement, including, without limitation, the provisions of Oregon Revised Statutes (ORS) Chapters 279A, 279B, and 279C, incorporated herein by reference and made a part hereof. Without limiting the generality of the foregoing, the Signatories expressly agree to comply with (i) Title VI of Civil Rights Act of 1964; (ii) Title V and Section 504 of the Rehabilitation Act of 1973; (iii) the Americans with Disabilities Act of 1990 as amended and ORS 659A.142; (iv) all regulations and administrative rules established pursuant to the foregoing laws; and (v) all other applicable requirements of federal and state civil rights and rehabilitation statutes, rules and regulations

XII. ATTACHMENTS AND FIGURES

Figure 1 and Attachments 1, 2, and 3 are attached and are hereby incorporated into this Agreement by reference.

XIII. CONTACT PERSONS

1. ODOT's contact for this Agreement is Tobin Bottman, Cultural Resources Program Manager, Oregon Department of Transportation, 4040 Fairview Industrial Drive SE, Salem, OR 97302, 503-986-3783, tobin.c.bottman@odot.oregon.gov, or assigned designee upon individual's absence. ODOT shall notify the other Signatories in writing of any contact information changes during the term of this Agreement.

2. FHWA's contact for this Agreement is Shaneka Odom, Operations Engineer, FHWA – Oregon Division, 530 Center Street NE, Suite 420, Salem, OR 97301, 503-316-2553, shaneka.odom@dot.gov, or assigned designee upon individual's absence. FHWA shall notify the other Signatories in writing of any contact information changes during the term of this Agreement.

3. SHPO's contact for this Agreement is Christine Curran, Deputy SHPO, Oregon State Historic Preservation Office, 725 Summer St., Suite C, Salem, OR 97301, 503-986-0684 chrissy.curran@oprd.oregon.gov, or assigned designee upon individual's absence. SHPO shall notify the other Signatories in writing of any contact information changes during the term of this Agreement.

4. Multnomah County's contact for this Agreement is Megan Neill, PE, Engineering Services Manager, Multnomah County Division of Transportation – Bridges, 503-988-0437, megan.neill@multco.us, or assigned designee upon individual's absence. Multnomah County shall notify the other Signatories in writing of any contact information changes during the term of this Agreement.

5. ACHP's contact for this Agreement is Mandy Ranslow, Program Analyst/FHWA Liaison, Advisory Council on Historic Preservation, 401 F Street NW, Suite 308, Washington, DC 20001, 202-517-0218, mranslow@achp.gov, or assigned designee upon individual's absence. ACHP shall notify the other Signatories in writing of any contact information changes during the term of this Agreement.

6. As a Concurring Party, NPS's contact for this Agreement is Elaine Jackson-Retondo, Ph.D., Region Preservation Partnerships and History Programs Manager, Interior Regions 8, 9 10, and 12, National Park Service, 333 Bush Street, Suite 500, San Francisco, CA 94104, 510-410-2315, Elaine_Jackson-Retondo@nps.gov, or assigned designee upon individual's absence. NPS shall notify the Signatories in writing of any contact information changes during the term of this Agreement.

Signature Page to Follow

PROGRAMMATIC AGREEMENT
AMONG
THE FEDERAL HIGHWAY ADMINISTRATION, THE OREGON STATE HISTORIC PRESERVATION OFFICE, THE OREGON DEPARTMENT OF TRANSPORTATION, MULTNOMAH COUNTY, AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
IMPLEMENTING
SECTION 106 OF THE NATIONAL HISTORIC PRESERVATION ACT
FOR THE EARTHQUAKE READY BURNSIDE BRIDGE PROJECT,
PORTLAND, OREGON
FHWA FEDERAL-AID NO. C051(111), ODOT KEY NO. 22592, SHPO CASE NO. 18-1479

SIGNATORY:

DocuSigned by:
By Keith Lynch, FHWA Date 5/16/2023
6FB033F61E74416...
Keith Lynch, Division Administrator, Federal Highway Administration

DocuSigned by:
By Christine Curran Date 5/12/2023
923E95573B504D1...
Christine Curran, Deputy Director State Historic Preservation Officer, Oregon State Historic Preservation Office

DocuSigned by:
By Denis Reich Date 5/1/2023
FC58651A06E1480...
Denis A. Reich, Region 1 Environmental Manager, Oregon Department of Transportation

DocuSigned by:
By Jon Henrichsen, Multnomah County Date 5/1/2023
EAB61697BA5E4D5...
Jon P. Henrichsen, County Engineer, Multnomah County

By Reid Nelson Date 6.13.2023
Reid Nelson, Executive Director, Advisory Council on Historic Preservation

APPROVED AS TO LEGAL SUFFICIENCY FOR ODOT AND SHPO

By **Jennifer O'Brien via email** Date **4/12/2023**
Jennifer O'Brien, Assistant Attorney General

PROGRAMMATIC AGREEMENT
AMONG
THE FEDERAL HIGHWAY ADMINISTRATION, THE OREGON STATE HISTORIC PRESERVATION OFFICE, THE OREGON DEPARTMENT OF TRANSPORTATION, MULTNOMAH COUNTY, AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
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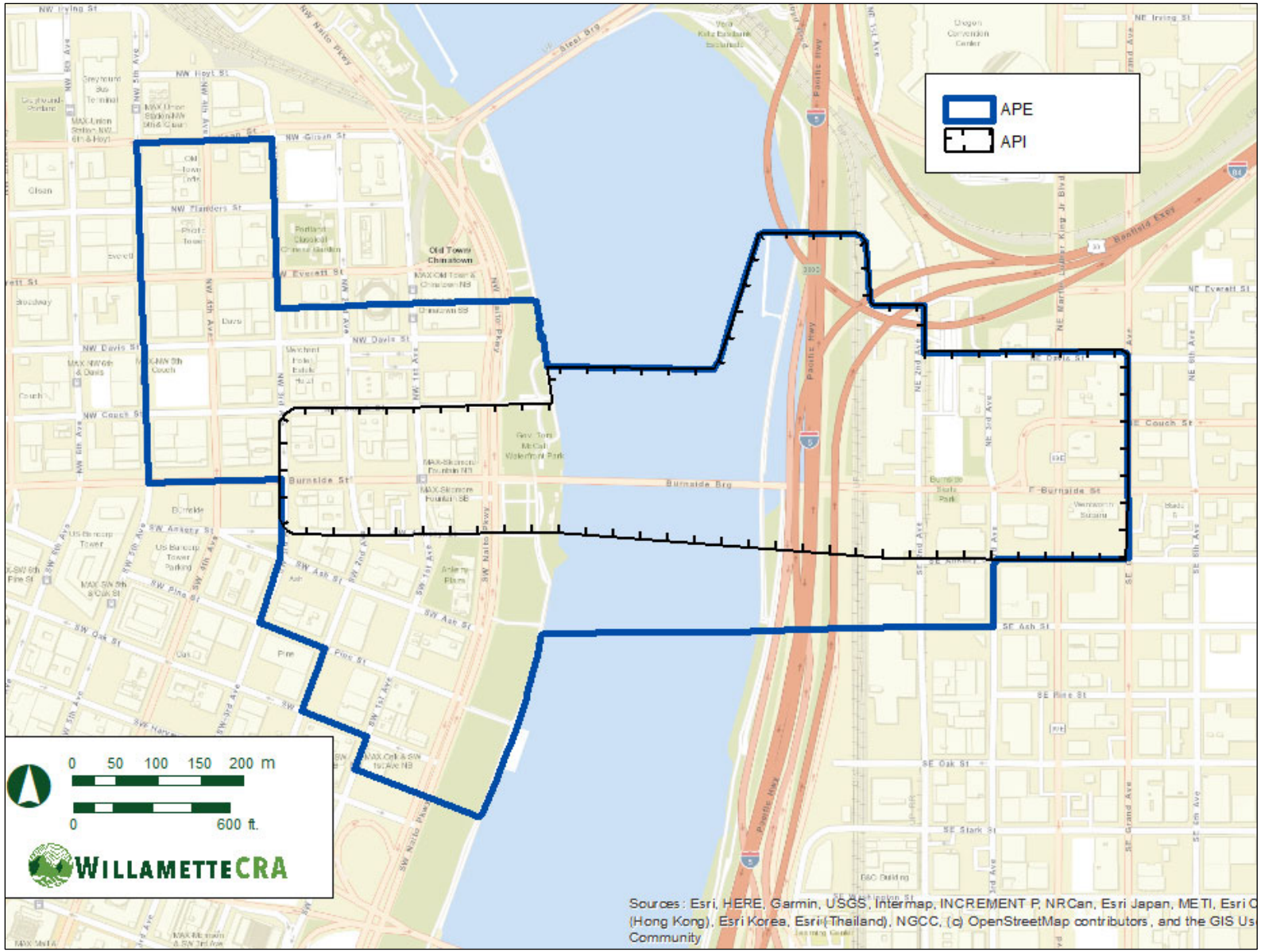
FHWA FEDERAL-AID NO. C051(111), ODOT KEY NO. 22592, SHPO CASE NO. 18-1479

CONCURRING PARTY:

DocuSigned by:
By William Shott 509BF9C6756E441... Date 7/10/2023

Frank W. Lands, Regional Director, Pacific West Regional Office, San Francisco Unit, National Park Service

FIGURE 1: AREA OF POTENTIAL EFFECTS AND AREA OF POTENTIAL IMPACTS



ATTACHMENT 1

Archaeological Identification, Monitoring, and Treatment Plan

Archaeological Identification Monitoring and Treatment Plan

Multnomah County | Earthquake Ready Burnside Bridge Project

Portland, OR

March 17, 2023

Earthquake Ready Burnside Bridge Archaeological Identification Monitoring and Treatment Plan

Prepared for

Multnomah County Transportation Division - Bridges
1403 SE Water Avenue
Portland, OR 97214

Prepared by

Willamette Cultural Resources Associates, Ltd.
2827 NE Martin Luther King Blvd
Portland, OR 97212
T (503) 281-4576

HDR
1050 SW 6th Avenue, Suite 1800
Portland, OR 97204
T (503) 423-3700

Contract# DCS-SVCSGEN-857-2019-conv
HDR Project #10144814

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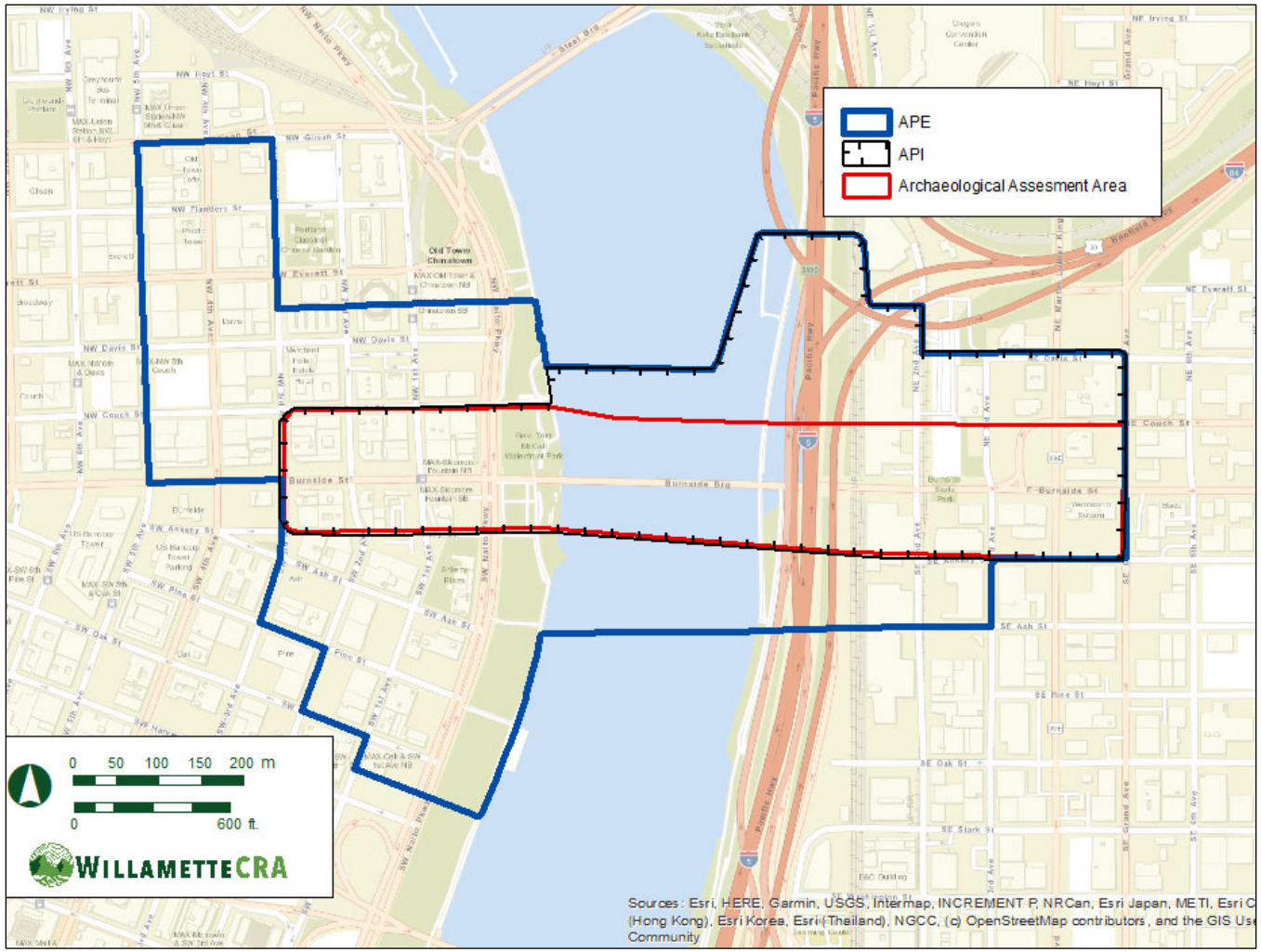
1 Project Introduction

Multnomah County (County) has proposed enhancing the seismic resiliency of the Burnside Bridge to survive a Cascadia Subduction Zone earthquake to expedite recovery efforts following such an earthquake. The bridge is located at the eastern edge of the downtown city core and links the western and eastern sides of Portland (Figure 1). The County examined multiple alternatives, with the most feasible being replacement of the bridge itself. The project will require permitting from the U.S. Army Corps of Engineers and other federal agencies and will be seeking funding from the Federal Highway Administration (FHWA). It is therefore subject to provisions of Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations, 36 CFR 800. The project is also subject to provisions of the National Environmental Policy Act (NEPA). The cultural resource studies for the project were undertaken by Willamette Cultural Resources Associates (WillametteCRA) to address archaeological and above ground historical resources. The resulting Cultural Resource Technical Report (HDR and WillametteCRA 2021) should be consulted for general cultural context and summary of known resources in the project vicinity.

Much of the proposed ground-disturbing activity associated with this project will be within active roadways in the Portland commercial core. These areas are currently paved and may have (at a minimum) several feet of fill. Even where pavement and recent fill are not present, a complex array of underground utilities crisscrosses the area, creating a dense, and often poorly documented, network of pipes, cables, and wires. As a result, a program of archaeological identification completed weeks or months prior to construction using traditional techniques (shovel probing, backhoe trenching, etc.) is simply not possible in most parts of the Area of Potential Impact (API). These areas are also busy, active city streets. Archaeological discoveries can severely disrupt construction schedules, and more importantly, local business, traffic, and residential activities in unpredictable ways. Post-find coordination, evaluation, and mitigation efforts can dramatically extend this timeline creating serious ramifications for local business and commuters.

The solution outlined here is threefold. First, we will identify where precontact and different types of historic-era archaeological material are most likely to be encountered in the API and undertake a rapid, focused investigation (Section 2: Rapid Identification) of these locales just before construction begins. Second, more traditional archaeological monitoring (Section 4: Monitoring Plan) will be used in those areas where the rapid identification does not occur. Third, regardless of whether the preliminary, rapid identification or more traditional monitoring is employed, we will deploy a standardized procedure for quickly assessing the significance and integrity of historic-era deposits as they are uncovered, to identify those deposits that are eligible for listing on the National Register of Historic Places (NRHP; Section 3: Rapid Evaluation). All precontact, ethnohistoric- era deposits, or historic-era materials used or repurposed by Native peoples will be considered significant. This Rapid Evaluation process will essentially be a continuous process during all construction excavation. Deposits determined significant will be the focus of immediate data recovery, allowing construction to proceed when completed.

Figure 1. Location Map Showing API and APE



Note: The red box is the Archaeological Assessment Area.

Archaeological monitoring of pre Project and Project ground-disturbing activities, such as geo-technical investigations and construction, will be undertaken by professional archaeologists and supervised by individuals who meet the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation (48 FR 44716 as revised), following existing standards and guidelines for archaeology and historic preservation activities established by the Oregon State Historic Preservation Office (SHPO). When requested, Tribal cultural resource staff will be accommodated alongside the project monitors.

The ODOT archaeologist shall ensure that contractors involved in the implementation of all phases of the project are aware of, and comply with the Archaeological Identification, Monitoring, and Treatment Plan (AIMTP). Compliance with the AIMTP is required as part of the project undertaking and will be written into project contracts. The County, construction contractors and sub-contractors, archaeological monitors, and the ODOT archaeologist shall ensure the terms of the AIMTP are implemented for all potentially ground-disturbing pre-construction and construction activities. Copies of the AIMTP will be provided to all construction contractors and sub-contractors and referenced in bid and contracting materials and other relevant project materials.

2 Rapid Identification Field Methods

This section outlines the proposed methods for the initial, rapid identification of archaeological materials prior to construction in the Burnside Bridge API. This section is closely related to the third section, which covers rapid evaluation methods. Note that the field methods covered here are mostly large-scale construction related approaches. Appendix A provides a detailed discussion of the archaeological sensitivity of the project area as well as the identification of high probability areas based on research presented therein and in the Cultural Resource Technical Report (HDR and WillametteCRA 2021). Appendix B discusses a set of historic period research questions that underlie the rapid identification and rapid evaluation field activities. An overview of the more specific hand excavation methods is covered in Appendix C, while the Inadvertent Discovery Plan (IDP) is in Appendix D.

Once the design and construction plans for where ground disturbance will occur are further developed, those locations will be overlaid on our probability maps presented below. Where those planned disturbance areas overlay or are near residential properties, vacant parcels or areas between buildings, or stores/businesses related to personal services such as restaurant or cleaners, a program of initial rapid identification, inventory and evaluation will be undertaken. The selection of these areas is discussed in greater detail in Appendix A: Archaeological Sensitivity and Probability Mapping, These rapid identification efforts will occur days instead of weeks or months prior to construction. We will investigate the entire impact area when the impact area is within or adjacent to high probability areas (HPAs) identified in Figure 2 and Figure 3.

Moreover, in some parts of the API, precontact materials, ethnohistoric -era materials or historic-era materials used or repurposed by Native peoples could be found at relatively shallow depths. The probability of these types of materials are therefore almost exclusively defined based on the contact between native sediment and historic/modern

fill. We can, however, identify those areas that have a greater potential for historic-era archaeological materials across the API based on existing records. This allows for the rapid, focused investigation of these locales just before construction begins. The rapid identification and assessment procedure presented here will be employed in some areas, other areas will be subject to more traditional monitoring methods.

The rapid identification and evaluation processes are described below independently for clarity. But these processes will be operating at the same time. That is, the process of identification cannot be completely separated from evaluation because the mechanics of identification will, by necessity, result in the removal of deposits from the construction area. Thus, as the identification process proceeds, evaluation will also have to occur.

Additionally, the project will provide construction equipment operators areas where rapid assessment will occur. Areas will be closed to public access and fenced. The rapid assessment schedule will depend on the size of the area being investigated as well as what is found but will likely take at least 3-6 days at each location.

Figure 2. Summary of HPAs in the West Side Archaeological Assessment Area

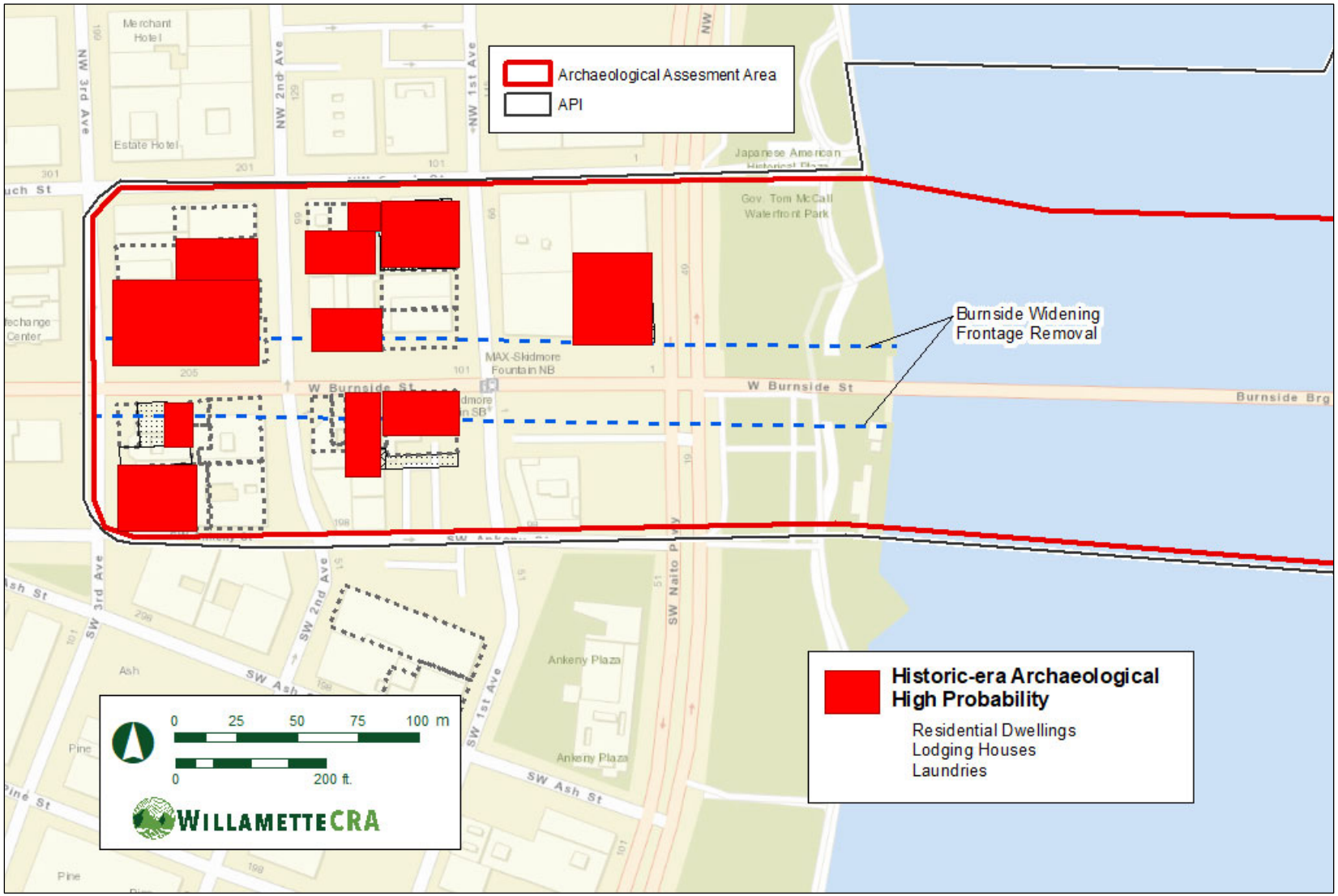
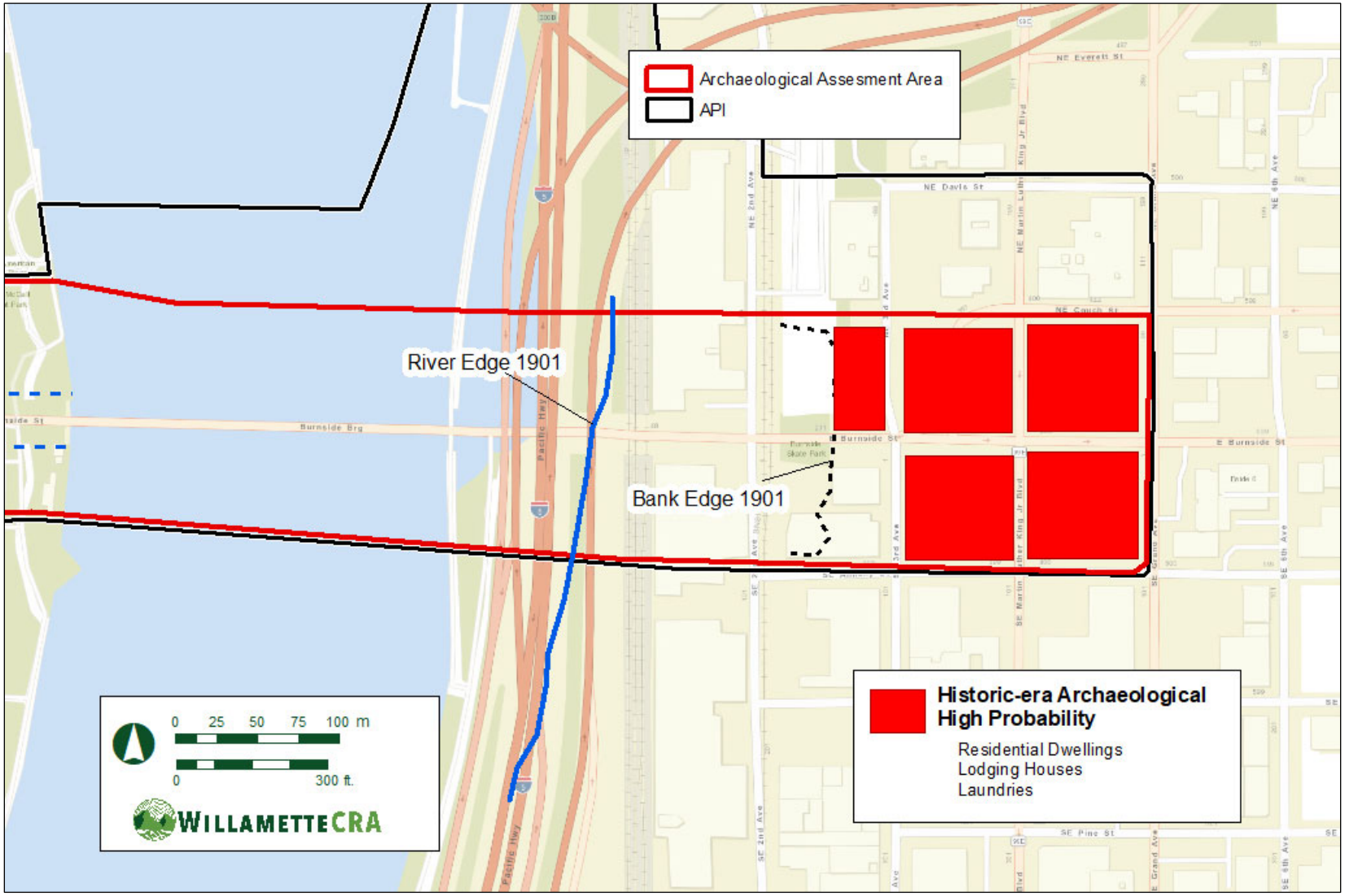


Figure 3. Summary of HPAs in the East Side Archaeological Assessment Area



Some of the rapid identification process will depend on the shape and size of construction excavations. Several basic observations guide the work:

1. Much of the API is covered with hard surfaces such as asphalt. Moreover, it is likely that most areas will have at least 1 to 2 feet of fill under the hard surface. Much of this fill will probably consist of heavily compacted sediments and large amounts of gravel.
2. Archaeological materials that are relatively shallow could still be several feet below the surface, buried under dense, coarse gravels or debris.
3. Even where archaeological materials are found near the surface, there will still be potential for additional archaeological materials to be found below, deeper in the excavations.
4. Most of the sediments that are present in the API will likely be fill with large amounts of historic-era materials (wood, brick, concrete and glass fragments, foundation fragments, or road remnants, etc.). These deposits are archaeological in the sense that they are old and deposited by humans but will probably not be significant. These deposits will be mixed or highly fragmentary, representing single dumping episodes of fill. These types of deposits will be common but cannot be linked easily to important historic research questions or specific occupation or use events.

These basic observations suggest that, in many cases, the zones of archaeological interest will be difficult to access because the materials are covered by hard surfaces, fill, or both. As a result, the primary exploratory tool should be heavy construction equipment such as a large backhoe or track hoe. Bucket size should be relatively narrow (about 2 feet) but is also dependent on the size and shape of the construction footprint. That is, if the construction impact area is a 30-foot square area, a larger bucket can be used, but narrow buckets are more suitable for smaller or more narrow excavations. For archaeological exploration, however, a bucket without teeth is needed, at least after the surficial asphalt or concrete is removed.

This work will likely take more than one archeologist. It is possible several teams of archaeologists will be engaged in the rapid assessment work, possibly at different locations. But here a single archaeologist will be referenced for simplicity. The construction excavation conducted for identification will be directed by a Field Director, who will be a highly experienced archaeologist, versed in historic artifact identification and familiar with contexts and research designs for this project. Moreover, the overseeing archaeologist will have closely reviewed the Sanborn map overlays previously prepared for the project work area and will be equipped with a basic set of expectations for what may be encountered.

2.1 Two Types of Construction Excavations

We envision two distinct types of construction excavation. The first are trench excavations, which are long and narrow. The second type is area excavations, which are large, somewhat rectangular excavations. Excavations will be similar in both types and will proceed in a structured fashion, with input and direction from the overseeing archaeologist. Work for both types of construction excavations will entail construction crews removing asphalt and recent fill gravels. This exposed surface will be examined

and if necessary (and possible), exploratory probes will be hand-excavated by the overseeing archaeologist.

2.1.1 Trench Excavations (Long and Narrow)

For trench excavations, small, approximately 6-inch-deep exploratory divots will be excavated with the bucket blade. Divots will be spaced approximately 6 feet apart along the trench. If potential archaeological deposits are not found in the divot, then excavation will proceed horizontally across the work area, removing sediment in approximately 6-inch lifts along the trench. The process is illustrated in Figure 4. Because of the trench shape, it is likely that the trench will be explored in segments, with one segment completed before another is opened. The size of the segments will depend on the trench length and equipment reach.

As this work proceeds, the overseeing archaeologist will document stratigraphy and material identified. Artifacts may also be gathered from profiles or surfaces and examined. The overseeing archaeologist, at their discretion based on conditions in the field, may choose to hand excavate small probes into surfaces or sidewalls, screening the sediment to gather additional artifacts from a location or stratigraphic unit. Examination will focus on temporally diagnostic items to provide estimated dates for the stratigraphic units, as temporal position is a major element of evaluation. In general, this material will not be collected but will be documented in a general manner. This documentation is part of the rapid evaluation described below.

2.1.2 Area Excavations (Wide, Rectangular)

For long and wide work, excavation will start at one side of the work area, where a narrow, approximately 6-inch-deep trench (bucket width) will be excavated. If potential archaeological deposits are not found in the trench, then excavation will proceed horizontally across the work area, removing sediment in approximately 6-inch lifts across the entire area. More aggressive sediment removal may be possible as local stratigraphic structure is clarified, but only at the direction of the overseeing archaeologist. This process will be repeated as the excavation gets deeper, with successive lifts removed until the base of construction excavation is reached or potential archaeological deposits are found.

This process is schematically illustrated in Figure 5; the T1 schematic shows the asphalt overlaying gravel, with unconsolidated, historic-period fill (scattered glass and brick fragments) below. At some unknown depth is a potential archaeological deposit. Essentially, T1 is a schematic of what an idealized construction profile may look like before excavation begins.

In Figure 5 (T2), the asphalt and gravel have been removed and the underlying sediment will be mechanically cleared and inspected. In some cases, archaeological materials will be present directly under the asphalt and gravels. If no archaeological materials that require further investigation are present, an approximately 6-inch deep, narrow exploratory trench is excavated along one side of the construction area. If archaeological materials requiring further investigation are not identified in the narrow, exploratory trench, then the remaining sediment adjacent to the exploratory trench is removed in a

6-inch lift. This process is repeated (see Figure 5, T3 and T4) until the base of construction excavation is reached or potential archaeological deposits are found.

If archeological deposits that need further investigation are located (see Figure 5, T4), the upper surface will be mechanically exposed, and the exploratory trench will be deepened in ca. 6-inch lifts (see Figure 5, T5). Exposing the surface will allow identification of possible features or structural elements. Continuing the exploratory trench will show the overall thickness of the deposit and allow examination of its profile. Hand-excavated archaeological units can proceed on the cleared archaeological deposit surface with the knowledge obtained through the deeper exploratory trench.

Figure 4. Schematic Diagram of the Identification Process in a Construction Area that is Long and Narrow (Trenches)

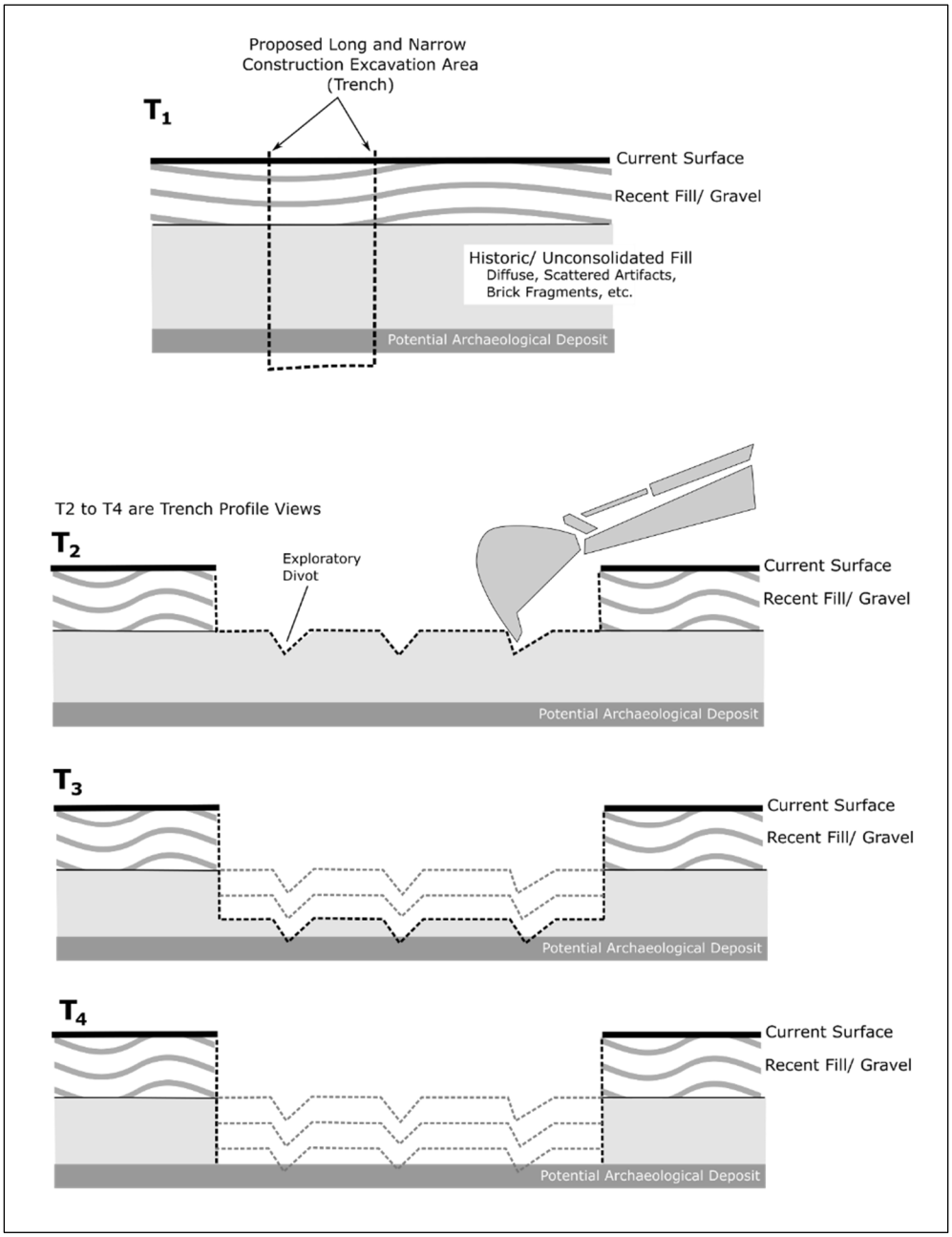
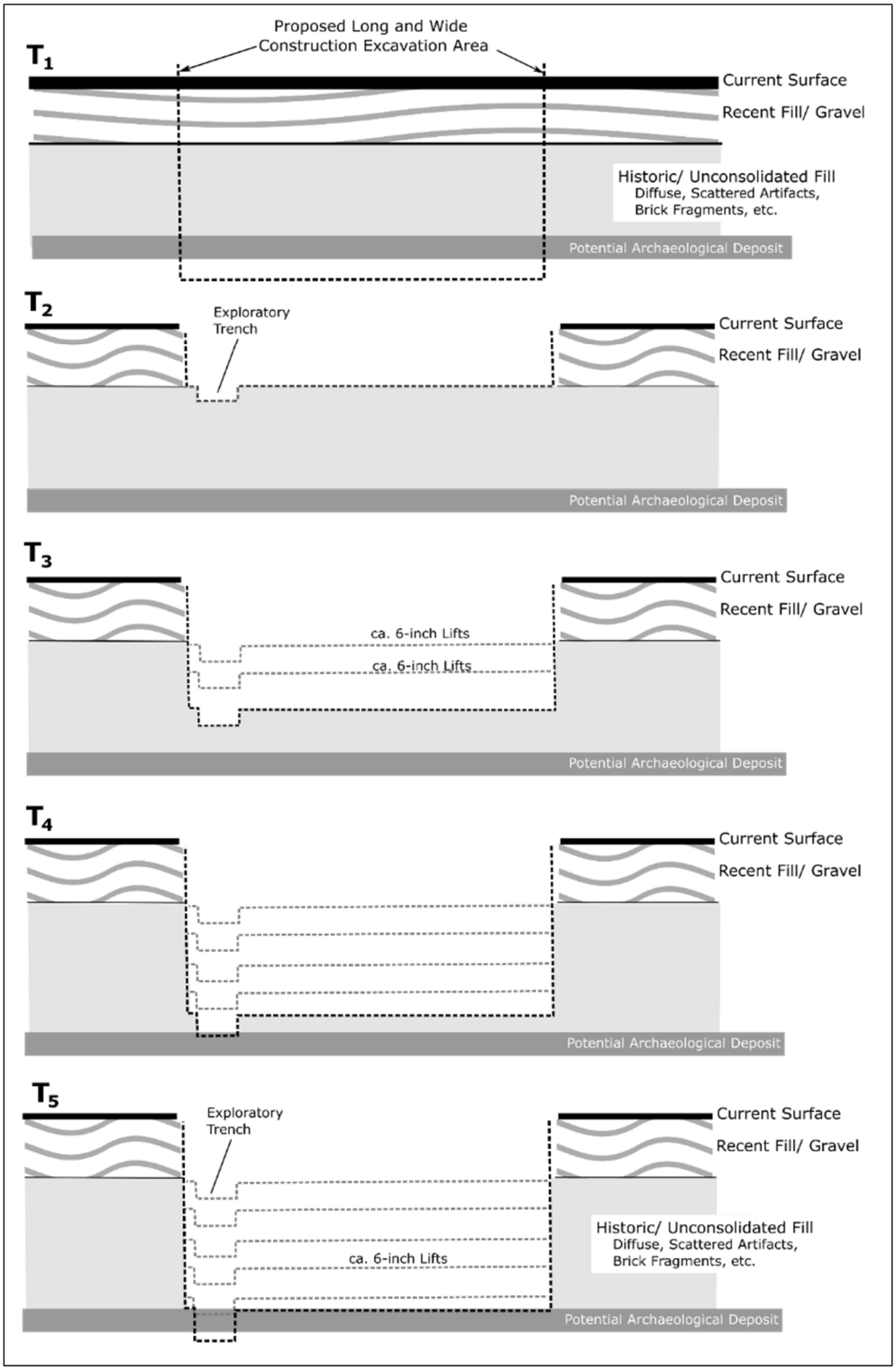


Figure 5. Schematic Diagram of the Identification Process in a Construction Area that is Long and Wide



3 Rapid Evaluation Background and Methods

This section outlines the rapid evaluation process. The rapid evaluation is a standardized procedure for quickly assessing the significance and integrity of deposits as they are uncovered to identify those deposits that are eligible for listing on the NRHP. The rapid evaluation process will take place during all project-related ground disturbance. The process will be used during the rapid identification excavations as well as during all, more traditional construction monitoring when archaeological deposits are encountered. An overview of specific hand excavation methods that may also be employed is covered in Appendix B.

As noted above, excavation during the Rapid Identification process will result in removal of sediments. Likewise, standard construction excavation (which will be monitored by archaeologists) also results in the removal of sediments. Most of these sediments will likely be fill with large amounts of historic-era materials (wood, brick, concrete and glass fragments, foundations, or road remnants, etc.) and not significant. Linking these deposits to important historic research questions, people, or events, will be difficult or impossible.

At a broad level, archaeologists are more interested in denser, more complex deposits that have relatively tight chronological indicators. These types of deposits are more likely to be significant and fall into two broad categories. The first are clear, spatially bounded artifact concentrations. These deposits will be spatially discrete, often surrounded by a different matrix, probably with noticeably fewer artifacts. The deposits may also be bounded by wood or brick and represent shafts or pit features like privies or trash pits.

The second are broader, less spatially bounded scatters of artifacts. These may be dense and likely have (but not always) complex internal stratigraphy. The top and bottom boundaries will probably be clear and discrete, but horizontal boundaries may be diffuse and unclear. These deposits represent middens or debris scattered over an area (such as a yard) or activity areas.

While relatively clear conceptually, the difference in the field between non-significant and significant deposits will not be as simple. But we need a process by which we segregate the (probably more extensive) generalized historic fill deposits from significant deposits in the field as excavation continues. This process needs to be simple and standardized.

Our solution is that as the identification process outlined above proceeds, the overseeing archaeologist will also be conducting continuous documentation of the deposits. This continuing documentation will allow tracking and examination of the general types, ages, and densities of artifacts in various deposits.

3.1 Concepts for Structuring Rapid Evaluation

The following concepts were employed for structuring the rapid evaluation.

In general, older archaeological materials are more likely to be significant because older (precontact and early historic period) archaeological deposits are simply rarer. Moreover, the age of the deposits is the first step in identifying the appropriate context or section of context needed to link material remains to research questions.

The rapid evaluation will be structured by the geoarchaeological analysis because the stratigraphic units are inherently temporal. That is, older deposits underlie younger deposits. Thus, different stratigraphic units (and the archeological materials contained therein) are relatively older or younger simply based on where they are in relation to other stratigraphic units in the same horizontal locations. The principal archaeological marker identified in the geoarchaeological assessment is the interface between native sediments and fill. This interface is the original landform surface at contact (assuming it has not been excavated away). This is the upper boundary for precontact deposits but also marks the greatest likelihood for ethnohistoric and early historic-period materials. But other geomorphological boundaries are also important because the boundaries between stratigraphic units represent surfaces that were potentially available for occupation, use, and construction. Many of these surfaces were probably only available for short periods of time and most will not have artifacts, but some undoubtedly will, and it is on these surfaces that most archaeological deposits (regardless of age) will be found.

Focusing on documenting age and stratigraphy across the project area will allow stratigraphic units that consist of fill or generalized debris and do not contain significant archaeological deposits to still be useful. This is because even non-significant deposits can provide vertical and hence temporal markers that can be tracked across spatially discontinuous project excavations.

The identification process outlined above is partially observational. Observing construction excavation (for whatever reason) is often a passive process as excavations occur. For this project, the work will be active. The focus should be on actively tracking and documenting stratigraphic units across the work areas as they are exposed and using stratigraphic position and content to characterize and date stratigraphy. Tracking stratigraphic units will inherently place more observational focus on the interface between stratigraphic units. These interfaces represent surfaces and therefore the most likely place for significant archaeological deposits.

The rapid evaluation should be conservative in designating significant deposits. That is, we are better off designating something as significant and moving directly towards mitigation (most likely excavation) than designating something as not significant and losing the deposits and information.

Archaeological materials that are determined not significant and hence not eligible for listing in the National Register of Historic Places (NRHP) or contributing to materials that are eligible, does not mean those materials lack information. That is, not significant does not mean no information. Thus, the rapid identification and evaluation process should be geared towards collecting information which in aggregate can provide useful contextual or supporting information about the development of the Portland urban core.

3.2 Rapid Evaluation Methods

As noted above, the overseeing archaeologist will be an experienced archaeologist versed in historic artifact identification and familiar with contexts, research designs, and expectations for this project. The overseeing archaeologist will photograph and sketch the stratigraphic profile as it is exposed in excavation side walls, identifying, and

designating stratigraphic units as work proceeds. Table 1 outlines the basic information monitors will continuously collect concerning stratigraphy.

Since a foundational element of determining significance is the age of the deposits, a heavy focus will be on tracking temporally diagnostic artifacts and their stratigraphic relationships. As noted above, artifacts will be pulled from sidewalls or excavation floors for inspection. Small 30-cm-diameter probes may be excavated into walls or floors and the soil screened to provide more temporally diagnostic artifacts as needed. These items will not be formally collected, but rather described at a general level (e.g., item, material, age, count).

3.3 Significance

Significance of the deposits will be based on the context created for the project (HDR and WillametteCRA 2021), which includes the National Historic Landmark (NHL) themes such as peopling places, expressing cultural values and developing the American economy appropriate to the materials. The identified materials will be compared to the information collected and shown in Table 1. Significance will be assessed based on deposit age, deposit relationship, and deposit content. It is discussed in more detail below.

In general, older materials are more likely to be significant simply because they are older and probably rarer. Note that deposit age will be assessed based on both the artifacts within the deposit and the age of the surrounding stratigraphy to avoid problems of redeposited materials.

Deposits related to residential occupations (e.g., dwellings, lodgings), and some commercial, mainly retail occupations (e.g., personal services, restaurants) will be more likely to be significant than those related to industrial or office use.

Deposits with diverse assemblages are more likely to be significant than those that are homogenous. This is because deposits that lack diversity are more likely the result of a single activity or episode of use. Homogenous deposits are more likely in industrial situations such as lumber yards.

Table 1. Proposed Information Collected by Overseeing Archaeologist

Item	Description	Example
Work Area	Construction Designated Area, Parcel, Station, etc.	Sta. 100+23 to Sta. 100+32
Monitor	Monitor's Name (No Initials)	Amy Smith
Date	Month/Day/Year	5/2/2021
Stratigraphic Unit Designation	Numeric Designation for Stratigraphic Unit	1
Subunit Designation (if needed)	Letter Designation for Stratigraphic Subunit	A
Top Elevation	Highest elevation encountered. Probably tied to construction elevation but may be below surface.	25 cm

Item	Description	Example
Upper Boundary Description	Is boundary distinct and easily visible, or diffuse? Boundary shape (level, sloping, wavy). Is the boundary marked by color differences?	Indistinct and diffuse, slightly darker gray silt, wavy and irregular, but gradual transition into gravel above.
Upper Boundary Artifacts	Artifacts associated with upper boundary	Thin layer of brick fragments and some gravel mark boundary. No glass, ceramics, or bone.
Associated Age of Diagnostic Artifacts	Temporally diagnostic artifacts associated with boundary	~10 Plastic, 1 Clorox finger ring fragments, 2, beer cans with church key openings
Upper Boundary Age Span	Likely age span of boundary	1920s to 1940s, mixed with modern
Bottom Elevation (if known)	Lowest elevation found	85 cm
Lower Boundary Description	Is boundary distinct and easily visible, or diffuse? Boundary shape (level, sloping, wavy). Is the boundary marked by color differences?	Distinct and level. Marked by large amounts of wood, probably lumber. Disorganized.
Lower Boundary Artifacts	Artifacts associated with lower boundary	Wood, nails. No glass, ceramics, or bone.
Associated Age Diagnostic Artifacts	Temporally diagnostic artifacts associated with boundary	Scattered cobalt glass fragments, 2, flat pocket tobacco tins
Lower Boundary Age Span	Likely age span of boundary	1890s to 1920s
Sediment Color	Color	Gray
Sediment Characteristics	Type of sediment in simple descriptors (silt, sand, gravel, silty sand, etc.)	Gray sand with scattered small, rounded pebbles
Sediment Content	Artifacts, distribution, and structure in stratigraphic unit	Highly scattered brick fragments, several glass fragments, disorganized, no internal structure.
Comments and Summary	This stratigraphic unit appears to be a massive fill episodes wooden demolition debris dating to ca. 1890s or 1920.the upper boundary dates to the 1920s to modern. The unit is capped by gravel and pavement.	
Materials Denoting Specific Function?	Activities indicated	Demolition, filling
Linked to Sanborn Maps?	Can the deposits be linked to specific elements shown on Sanborn Maps?	Close to 1899 residential property edge, but no evidence of this use.

Note: cm = centimeters

As noted above, not significant does not mean no information. The outlined rapid identification and evaluation process outlined above will provide a strategy and

framework for collecting a wide range of information on a diverse suite of historic-era deposits in the API. We fully expect this information, when aggregated after the fieldwork is completed, will provide useful contextual information on Portland's development.

4 Monitoring Plan

This plan outlines the details and process of archaeological monitoring. As noted previously, the Project Area is heavily developed. To minimize impacts to businesses and commuters during the work, a rapid identification process will occur just before the start of actual construction. This rapid identification effort will occur days instead of weeks or months prior to construction and will provide valuable time for dealing with archaeological issues. In those areas where the rapid identification is not undertaken, more traditional archaeological monitoring of construction activities will take place.

Both the rapid identification and traditional construction monitoring will employ a standardized procedure (the rapid evaluation process described above) for quickly assessing the significance and integrity of historic-era deposits as they are uncovered, to identify those deposits that are eligible for listing in the NRHP. This section outlines the monitoring process.

4.1 Pre-Construction Monitoring of Invasive Investigations

Archaeological monitoring will initially occur for any Project-related invasive preconstruction environmental and geo-technical work. This is differentiated from construction phase monitoring because the intent is to identify, evaluate, and mitigate significant resources prior to construction. Archaeological monitoring of invasive work related to engineering design and environmental borings for the Project will help characterize high probability areas for containing archaeological materials in support of the discussions in this document.

Ground-disturbing environmental/geo-technical investigations within areas covered with impervious surfaces typically include mechanical trenching using an excavator, or environmental probing using a Geoprobe, sonic drill, or similar drilling machine wherein the core or spoils can be analyzed to identify archaeological materials and/or culturally modified soils.

Demolition of existing structures and paved surfaces may also be required. Given the potential for previously undocumented archaeological resources to be exposed during the removal of foundation elements and paved surfaces, an archaeologist will be present to monitor these phases of the demolition process in accordance with the procedures outlined below.

4.2 Construction Monitoring

It is anticipated that archaeological monitoring of construction activities (either for the rapid identification process or traditional archaeological monitoring of construction activities) will further inform recommendations for monitoring during later phases of construction. Monitoring objectives and protocol will remain the same and be conducted in accordance with the procedures outlined below.

4.2.1 Archaeological Monitoring Plan

As stated previously, there is a high likelihood that archaeological materials will be encountered during construction. This action describes the process that will be followed if archaeological resources are identified during monitoring.

4.2.2 Construction Worker Training

Prior to commencement of ground-disturbing activities associated with the Project, ODOT or its designee will conduct a brief training for construction workers for Project excavation contractors. Training sessions will inform construction personnel of the potential presence and nature of significant archaeological resources and human remains in the Project Area; of the laws protecting these resources, and associated penalties; and of the procedures to follow should they discover cultural resources during Project-related work.

4.2.3 Methods

The on-site archaeological monitor(s) will follow and observe earth-moving equipment (e.g., backhoes and excavators) and examine excavated soils, profiles, and exposed surfaces for evidence of buried archaeological resources.

The monitor will regularly need to stop the equipment and enter the trench to clean and examine profiles and surfaces. The monitor will communicate directly with the ODOT Inspector and the equipment operator to halt and restart excavation. The monitor may need excavation to proceed in a more limited, specific manner to expose or explore specific deposits. The monitor will communicate directly with the equipment operator.

The archaeological monitor will complete an archaeological information collection form (see Table 1 (above) for the data to be collected) to track excavation-specific stratigraphy. The archaeological monitor will also complete a Daily Monitoring Log, which documents the day's activities, work stoppages or redirects, communications with construction personnel and any archaeological discoveries.

If construction personnel identify what they think may be an archaeological resource, then construction activities in the vicinity of the find will halt. The archaeological monitor will determine whether the material is an archaeological resource or not, and work will not resume in that location until directed by the archaeological monitor.

4.2.4 Archaeological Discovery

As discussed above in the Rapid Assessment section, the monitoring archaeologist will be conducting continuous documentation of the deposits as construction proceeds. This continuing documentation will allow tracking and examination of the general types, ages, and densities of artifacts in various deposits.

Periodically, the monitoring archaeologists will need to halt work to enter the excavation to examine the stratigraphy and deposits. Employing the process outlined in the Rapid Assessment section, the monitoring archaeologist will determine if the deposits are not significant or require more detailed examination or even limited excavations to establish significance. If the deposits are determined not significant, construction excavation will

continue. The results of the investigations will be summarized in an abbreviated determination of eligibility form (DOE) (see Attachment C). The DOE will include a summary of the artifacts identified, depositional environment, approximate site boundaries (vertical and horizontal), integrity as well as a Statement of Significance and discussion of the NRHP Criteria. This abbreviated DOE will be submitted daily to the ODOT archaeologist, who will route to SHPO and Tribes.

If the deposits are determined significant, the monitoring archaeologist will inform the construction supervisor and ODOT archaeologist. The ODOT archaeologist will notify SHPO and Federally Recognized Tribes (Tribes). Archaeological data recovery will commence immediately upon determining a deposit is significant.

4.2.5 Regular Archaeological Monitoring Updates

The archaeological contractor, working in conjunction with the ODOT archaeologist, will provide weekly updates on the work to SHPO, Tribes, and ODOT archaeologist. These updates will be short summaries discussing where monitoring occurred, what was found, and actions taken as well as the next week's schedule.

4.2.6 Final Archaeological Resources Report

The archaeological consultant will submit to the ODOT Archaeologist a Draft and Final Archaeological Resources Report that evaluates the historical significance of any discovered archaeological resource and describes the archaeological and historical research methods employed in the archaeological testing/monitoring/data recovery program(s) undertaken. The ODOT archaeologist will provide this report to SHPO and Tribes.

5 Treatment Plan

The archaeological monitoring efforts will be focused on identifying archaeological deposits that need further investigation. If deposits are found that require further investigation to establish significance more intensive fieldwork to evaluate the significance of the deposits will occur. If the deposits are determined significant, in consultation with SHPO and the ODOT archaeologist, data recovery excavations will begin immediately.

Artifacts will generally not be collected during the identification phase of work, but precontact, ethnohistoric-era materials, or historic-era materials used or repurposed by Native peoples will be collected. Artifacts will be collected during the evaluation phase of work, particularly if this evaluation entails excavation of formal excavation units (e.g., 1x1-m test units) and during data recovery excavations.

If artifacts are found in contaminated soil, these may not be collected, and collection methods will be coordinated with ODOT, FHWA, SHPO, the University of Oregon Museum of Natural and Cultural History, and the ODOT archaeologist.

Many different classes and types of artifacts may be encountered during the Project. Some of these materials, such as embossed glass, porcelain, and other recognizable cultural materials, are important because they can be associated with a relatively narrow

range of dates; others, such as scattered brick fragments, metal, and wood tend to yield less data of importance due to their broad distribution and longer time frames of use. In recognition of this, some types of artifacts may be recovered throughout the proposed testing as they are encountered; these include, but are not limited to, the following:

- Whole or fragmentary embossed glass
- Transferware or embossed porcelain or ceramics
- Pre-contact artifacts including stone tools, waste flakes or fire modified rock
- Any other type or class of artifact not yet represented in the catalog of materials thus far recovered during construction

In contrast, the types of artifacts or materials for which a sample might provide adequate representation include, but is not limited to, the following:

- Rock, brick rubble, and sand used as fill material
- Wood fragments from building material
- Glass or ceramic fragments without embossment
- Nails and miscellaneous metal fragments
- Fragmentary cultural material that is non-diagnostic in nature

5.1 Evaluation Criteria

As discussed in detail in Sections 3.1, 3.3, and 4.2.4, if an archaeological resource is identified, the archaeological contractor will assess significance of the resource by drafting an abbreviated DOE that applies all four of the NRHP Criteria for Evaluation (NPS 1995, 1997). The archaeological contractor will submit the DOE to the ODOT archaeologist who will submit to SHPO and Tribes.

6 Resolving Adverse Effects

Avoidance or redesign will rarely be realistic options to avoid adverse effect to resources for this undertaking. As a result, two types of actions are planned for the resolution of adverse effects: actions for immediate resolution and actions for longer-term resolution. The principal actions for the immediate resolution of adverse effects to resources identified during the rapid identification process will be data recovery.

- In the event the archaeological monitor determines through the rapid identification/assessment process that significant archaeological materials will be adversely affected by construction, the ODOT archaeologist will initiate consultation with SHPO and Tribes.
- Resolving adverse effects in consultation with SHPO and Tribes will, by necessity, occur after construction has begun and data recovery has been completed.
- An Oregon SHPO excavation permit will be obtained for the project. Construction will not stop to obtain a separate SHPO permit for data recovery each time the rapid assessment identifies significant archaeological materials.

- Data recovery includes field excavations, artifact analysis, reporting and curation of materials as appropriate.
- Data recovery will have occurred as part of the rapid identification/assessment excavations over a period estimated not to exceed approximately 6 days.
- Analysis and reporting of the data recovered will constitute part of the agreement with SHPO and the Tribes for resolving the adverse effect to the eligible archaeological site and will include full DOEs for all archaeological resources adversely affected.

However, additional longer-term, more comprehensive mitigation commensurate with the adverse effects the project may incur is also necessary. This is because data recovery is inherently a destructive process and the extent of the significant deposits outside the direct impact area is unknown. It is difficult to place deposits of unknown extent into the proper context and it is also challenging to fully make use of relatively small archaeological collections.

- In the event of an adverse effect to significant archaeological deposits, mitigation will also include development of a historic context and research design focused on Portland's urban core to be used for future projects.
- This context / research design should outline specifically what archaeologists are attempting to learn and what types of materials, in what amounts is needed from archaeological investigations.
- Multnomah County/ODOT will reach a mutually agreeable mitigation package with SHPO, FHWA, and the Tribes within six (6) months after construction has begun to resolve any adverse effects to eligible archaeological sites impacted by the project.
- In consultation with SHPO, Tribes and consulting parties, additional mitigation may be developed based on the resources encountered.

7 References

Multnomah County

2021. EQRB Cultural Resources Technical Report. https://www.multco.us/earthquake-ready-burnside-bridge/project-library

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1997. *How to Complete the National Register Registration Form*. National Register Bulletin. USDI, National Park Service, Washington, D.C.

1995. *How to Apply the National Register Criteria for Evaluation*. National Register Bulletin 15. USDI, National Park Service, Washington, D.C.

Appendix A. Archaeological Sensitivity and Probability Mapping

Introduction

This document outlines the methods that will be used to identify precontact and historic-era archaeological resources and evaluate historic-era resources during ground-disturbing construction of the Burnside Bridge. This project presents unique challenges for archaeological resources, which render most traditional archaeological approaches unfeasible across the Area of Potential Impact (API) (Figure A-1). In response to these challenges, we have developed a series of interrelated procedures.

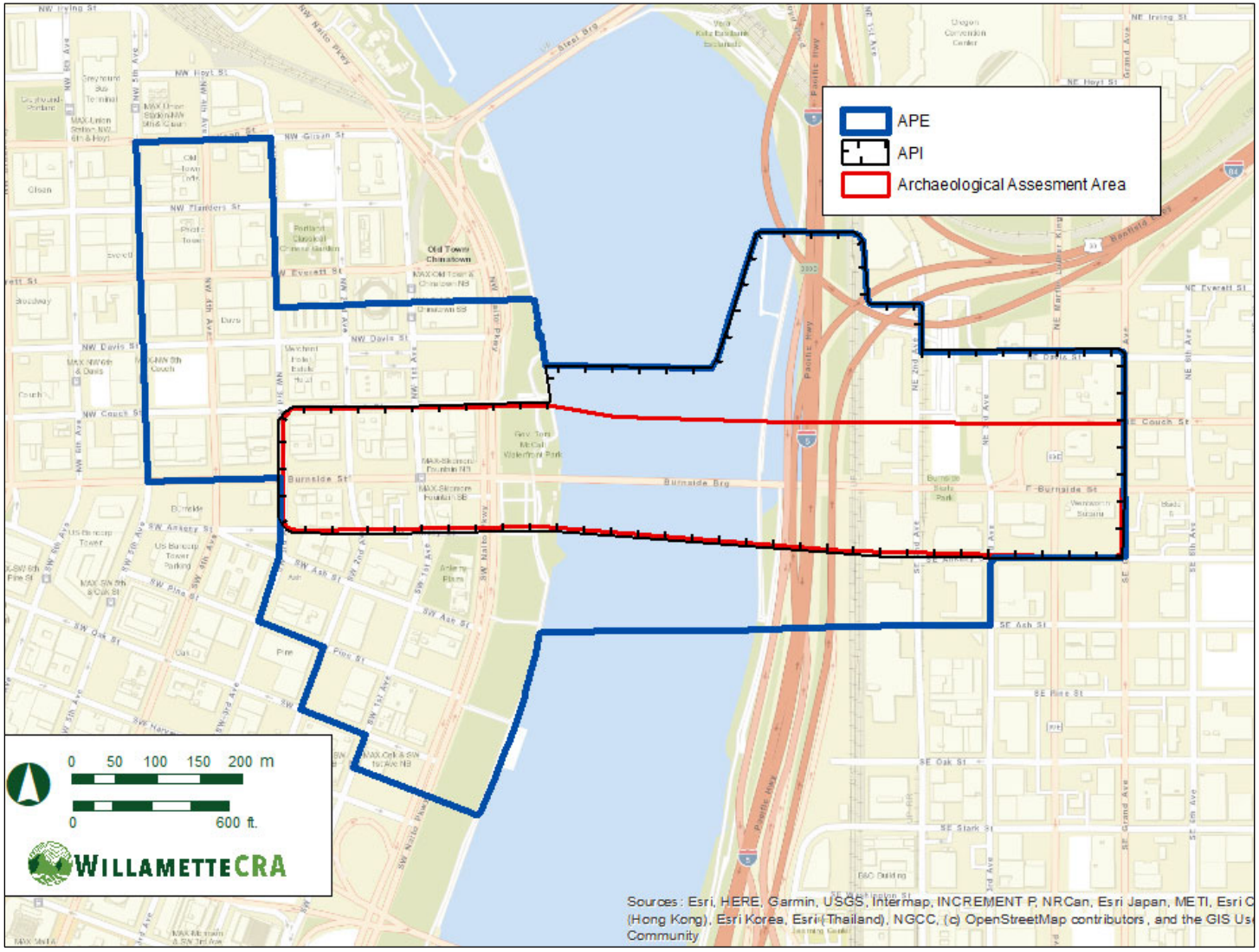
Aside from including busy, active city streets, the API is currently paved and may have several feet of fill. Even where pavement and historic fill are not present, a complex array of underground utilities crisscrosses the area, creating a dense, and often poorly documented, network of active and abandoned pipes, cables, and wires. As a result, a standard program of archaeological identification using traditional techniques (shovel probing, backhoe trenching, etc.) completed weeks or months prior to construction is unreasonable in most parts of the API.

Archaeological monitoring during construction is often the fallback method used in these situations. But even this approach presents problems. Potential discoveries are difficult to quantify and plan for and post-find coordination, evaluation, and mitigation efforts can extend out the timeline for weeks or even months, severely disrupting construction schedules and local business, traffic, and residential activities in unpredictable ways. Finally, the treatment of archaeological materials identified during construction monitoring is often rushed and suboptimal despite the best efforts of all involved. Our solution to these issues is three-fold:

1. We have identified where most precontact and different types of historic-era archaeological material are most likely to be encountered in the API. This is accomplished using the geoarchaeological assessment combined with historic-era maps of the area. This step focuses on an Archaeological Assessment Area which is about one block around the actual bridge. This area is where most direct construction impacts are expected.
2. We will compare those areas presented here with the greatest likelihood for archaeological resources to the finalized construction plans and undertake a rapid identification effort at these locations just prior to the start of actual construction. In this scenario, and to minimize impacts to businesses and commuters, identification efforts will occur days instead of weeks or months prior to construction. Identifying archaeological resources several days before construction can provide valuable time for dealing with these issues. Those areas where the rapid identification is not undertaken will be the focus of more traditional archaeological monitoring.
3. All precontact, ethnohistoric-era materials, or historic-era materials used or repurposed by Native peoples will be considered significant. However, both the rapid identification and traditional construction monitoring will deploy a standardized procedure presented here for quickly assessing the significance and integrity of historic-era deposits as they are uncovered, to identify those deposits that are eligible for listing in the NRHP. Below, these three topics are discussed in more detail. In addition, we have included three appendices. Appendix B is a summary of

the historic-era research topics, while Appendix C is an overview of the basic archaeological field methods that may be used. Appendix D the Inadvertent Discovery Plan.

Figure A-1. Location Map Showing API and APE



Note: The red box is the Archaeological Assessment Area.

Archaeological Potential

This section outlines the likelihood that different types of precontact and historic-era archaeological materials may be found across the API. Archaeological potential can be usefully divided into vertical and horizontal probability. Much of the vertical probability for all resources is framed by Hodges' (2021) geoarchaeological study, while horizontal probability for historic-era material is derived principally from historic-era images and maps.

The overarching goal of the geoarchaeological study was to develop a preliminary understanding of the stratigraphy underlying the study area. The two specific objectives were to (1) create a model of the interface between native sediment and fill material (essentially the original ground surface of the landform) and (2) identify the more complex stratigraphy and stratigraphic relationships of the deposits both above and below the interface of native and fill material. That is, if possible, provide an understanding of the depositional sequence of native sediments to better frame the potential for precontact materials and identify and understand the later episodes of historic-era filling and use.

The most useful and specific source for identifying historic-era archaeological deposits are the Sanborn Fire Insurance maps, which are available for the API from 1889 to about 1908-1909 (a version of the 1908 map, updated in 1950, is also available but its use is limited because it is close to current conditions) (HDR and WillametteCRA 2021). Overlaying these maps on the contemporary block grid provides relatively precise information on building locations and use, as well as how these changed over time in relation to the current street grid. These maps, however, do not overlay the current block grid perfectly, and some error and variation in building locations is inherent in the process.

It is important to note that the probability that resources are present is very different from the likelihood that a resource is significant or NRHP-eligible, particularly when comparing precontact and historic archaeological resources. The general rarity of precontact deposits in the broader area will suggest a relatively low bar for significance (at least under Criteria A and D). Thus, most precontact deposits will likely be significant simply because they are infrequent in the Portland core. Additionally, the entire API will contain historic-era debris of various densities and thicknesses. These deposits are archaeological in the sense that they were historically deposited by people. But much of this material (even very old historic material) will not be significant as it consists of fill, demolition debris, foundation remnants and fragments, etc., that are ubiquitous in the city's downtown urban core.

Precontact Materials

At a broad, landscape scale, the Willamette riverbanks have a moderate to high probability for precontact archaeological resources simply because the location is a lowland adjacent to the mainstem of a major river. But at the more fine-grained landform scale, the API has a lower probability for precontact resources because the east and west riverbanks at this location lack complexity created by features such as tributary

drainages, wetlands, and river islands. Newspaper accounts from the late 1800s note Indian burials with European American items being found at the foot of Flanders Street and along First Street between SW Taylor and SW Yamhill. Overall, archaeological, ethnographic, or historic sources provide little evidence for precontact archaeological resources in the Area of Potential Effect (APE) or the API.

Precontact Probability West API

On the west side of the Willamette River, geoarchaeological study identified the interface between fill and native sediments (Figure A-2). This line represents the top of the zone with potential for precontact materials. It is not the base of the zone for historic-era deposits, but it is likely that most historic-era materials will be found above this line. Below this interface is Holocene flood alluvium, overlaying several large gravel-based fining-up strata that are interpreted to represent either flood couplets or normally graded bedding associated with the Missoula Floods, overlaying Troutdale Formation deposits.

The specific age of the Holocene alluvium is unknown, but it is possible much of this unit was deposited during the early to middle Holocene before about 5,600 years ago. Thus, the entire Holocene alluvium stratigraphic unit has the potential for precontact materials, but this potential increases moving upwards through the profile, with the very upper part of this stratigraphic unit possibly including ethnohistoric or early historic materials.

Horizontally, the geoarchaeological study shows the depth of fill (the interface between native sediments and historic-era fill) is, as expected, greatest from under Naito Parkway eastward to the riverbank and rapidly shallows west of the parkway. Even with the coarse-grained sampling borehole density, the rapid change in thickness is obvious and can be used to mark the approximate shoreward extent of the seawall construction limits (Figure A-3).

Precontact Probability East API

The eastern side of the project area may have a slightly greater potential for precontact archaeological resources given its proximity to Sullivan’s Gulch. At a finer-grained view, its probability is also low. Here, the original river’s edge was a series of low sand and gravel bars paralleling the main shoreline that was likely geomorphologically active, often wet or flooded. To the east was a 30-foot-high steep bank. The top of this bank was some distance from the main river channel (Figure A-4). The greatest probability for precontact materials on in the East API is probably from SE/NE 2nd to Martin Luther King Boulevard, which is the historical top of the riverbank to the easternmost project area.

Figure A-2. Summary of the Vertical Probability for Precontact and Historic-era Materials based on the Geoarchaeological Study

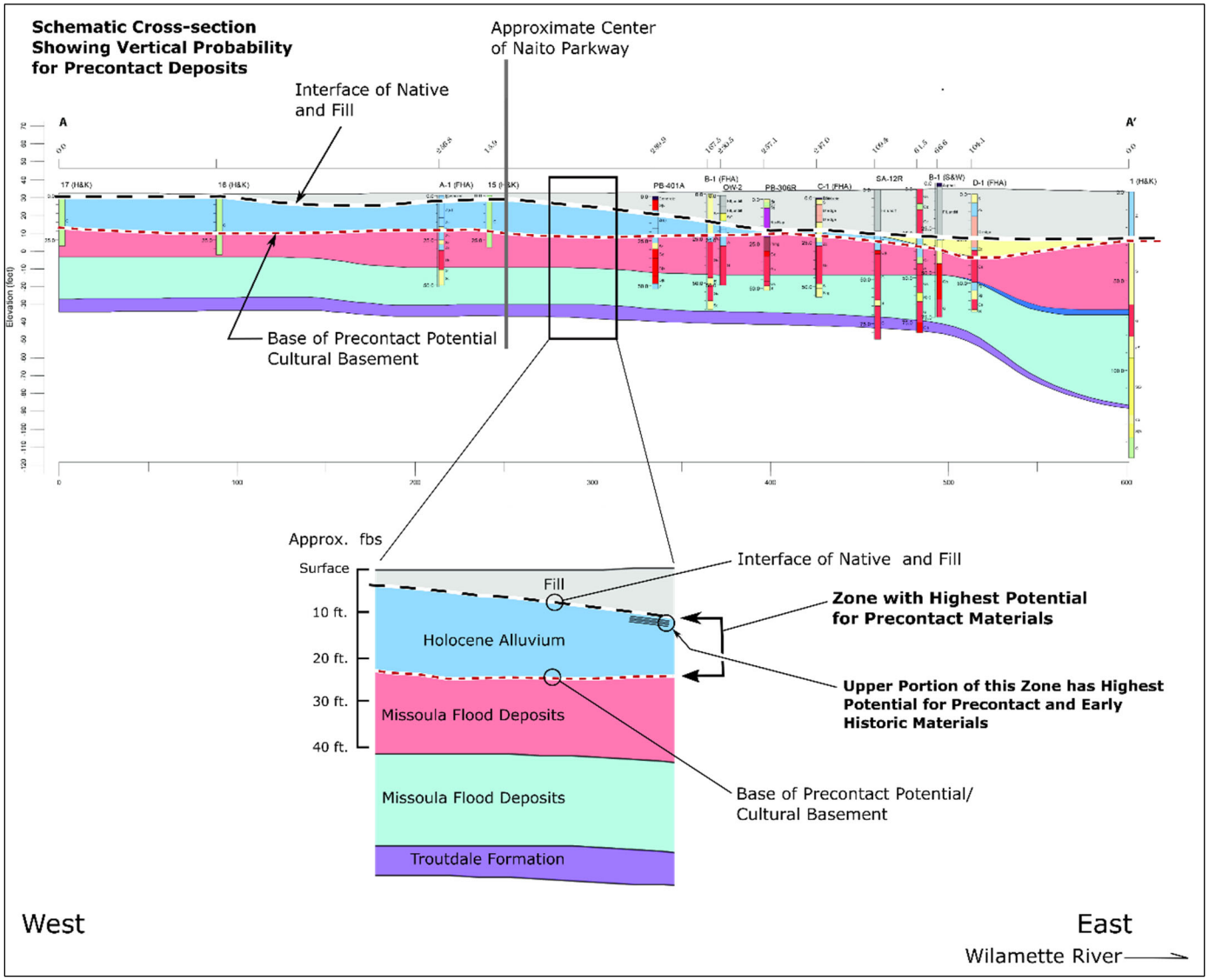
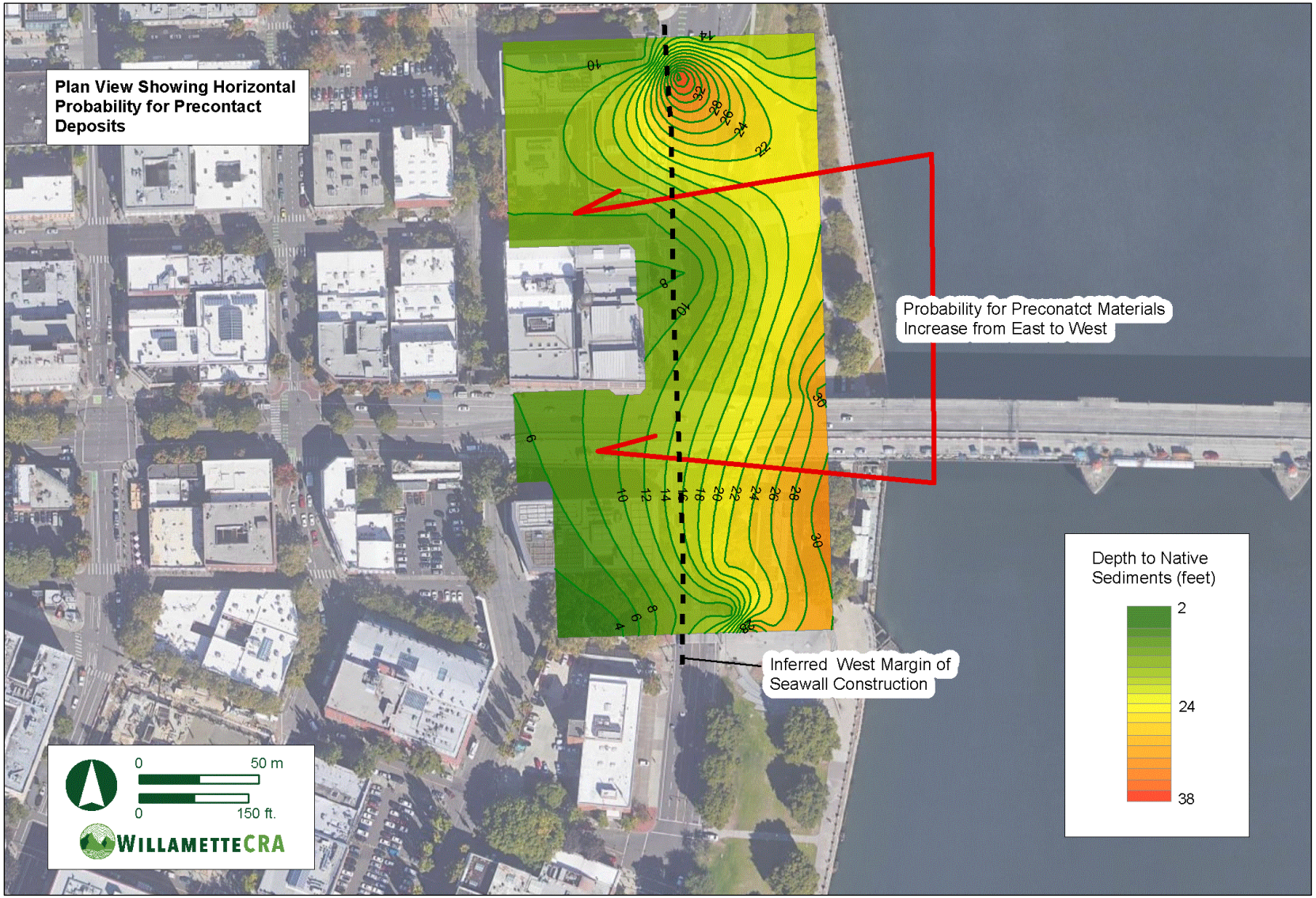
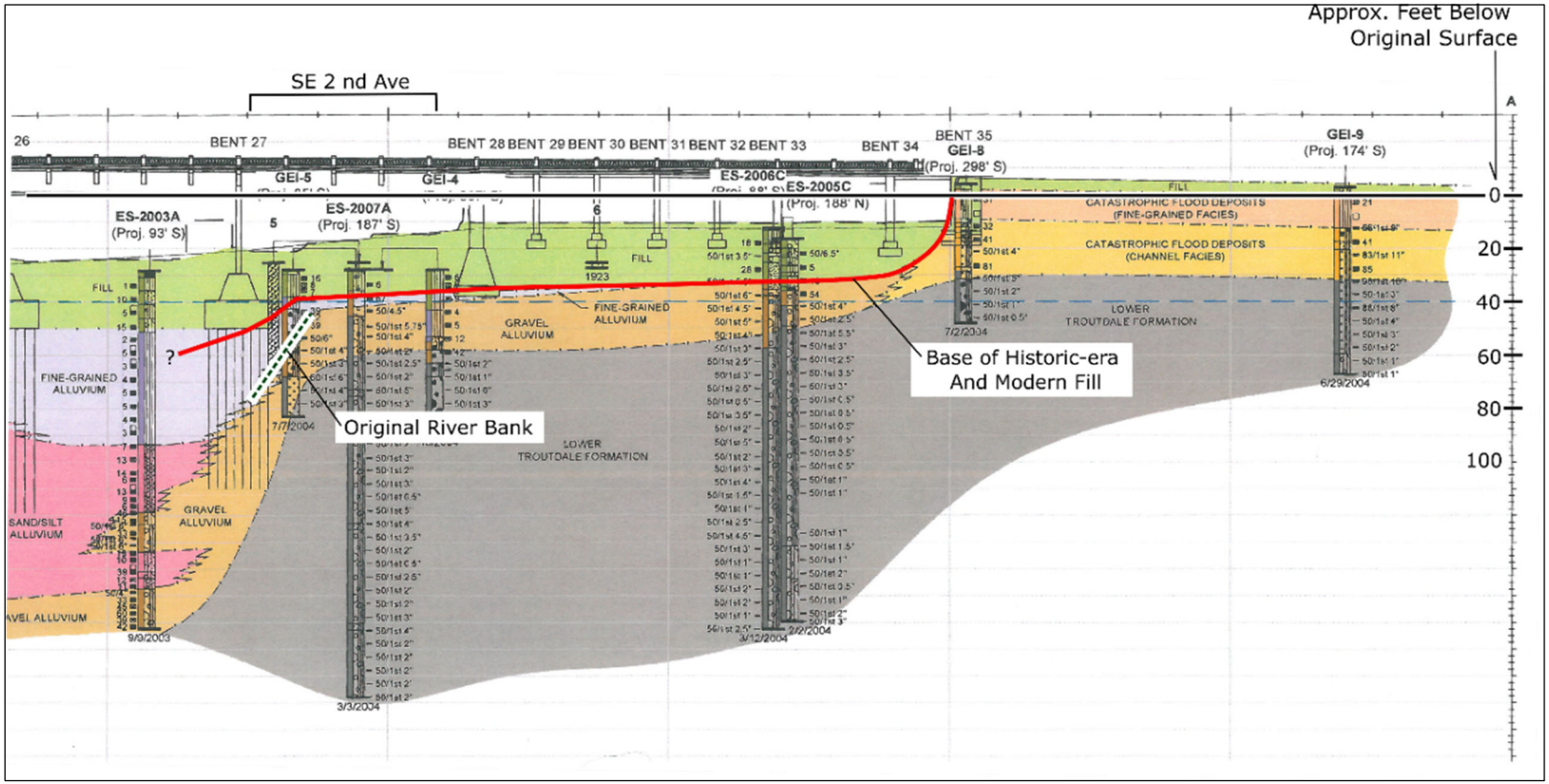


Figure A-3. Fill Thickness Map Overlaying a Recent Aerial Photograph



Fill is thickest in the east along the seawall and thins to the west. The inferred west margin of seawall construction fill placement is also shown.

Figure A-4. Cross-section of the Geological Structure of the East API



Note: Cross-section of the geological structure of the east API showing depth of historic-era fill and the approximate location of the original steep riverbank.

Historic-period Materials

The entire API (particularly the west side API) may be best conceptualized as a single, large, historic-era archaeological site in that historic-period deposits cover the area. However, most of this material will be fill material and demolition debris. Specific areas of archaeological potential are derived from historic images and birds eye lithographs, but mostly by overlaying Sanborn Fire Insurance Maps on the current street grid.

We have overlain the Sanborn maps on the current street grid. We then created a simple classification of building/lot usage shown on the Sanborn maps to capture the broad differences in archaeological potential in various locations (Table A-1).

Table A-1. Classification of Historic-era (ca. 1880 to 1920) Use for the API

Class	Subclass	Type	Examples	Archaeological Potential
Commercial	Industrial	Warehouse/ Wholesale	Warehouse	Low, debris
Commercial	Industrial	Warehouse/ Wholesale	Lumber Yard	Low, debris
Commercial	Industrial	Warehouse/ Wholesale	Fabrication	Low, debris
Commercial	Industrial	Warehouse/ Wholesale	Plumber	Low, debris
Commercial	Industrial	Warehouse/ Wholesale	Wholesale Sales	Low, debris
Commercial	Industrial	Warehouse/ Wholesale	Machinist	Low, debris
Commercial	Office	Office	Banks	Low
Commercial	Office	Office	Government Office	Low
Commercial	Office	Office	Shipping/ Receiving	Low
Commercial	Retail	Store	-	Moderate
Commercial	Retail	Restaurant	-	Moderate
Commercial	Retail	Entertainment	Theater	Low
Commercial	Retail	Personal Services	Laundry	Low
Commercial	Retail	Personal Services	Tailor	Low/Unknown
Commercial	Lodging	Hotel/Lodging House	-	Low - High
Residential	Dwelling	Dwelling	-	High
Residential	Dwelling	(Sheds)	Sheds near Dwelling	High/Unknown
Both	Dwelling/ Commercial	Usually, Dwellings with Stores and Restaurants		Low - High
Vacant	Building but no tenant or use			High
Open	Open Land	No Buildings		Low - High
Open	Open with Sheds	Sheds may be present		Low – High
Infrastructure	Road-related	Pavers		Common, but lack information
Infrastructure	Utilities	Waterlines, powerlines, etc.		Low

Note: cm = centimeters

Blocks are divided up into use Class, either Commercial, Residential, Both (e.g., lodging over restaurant), Vacant (building not occupied), or Open (no buildings, but sheds may be present). These classes (mainly the Commercial Class) were separated into more specific Subclasses based on specific use (see Figure A-10 - Figure A-12 and Figure A-13 - Figure A-15, below)

These designations were then used to create expectations for the archaeological potential of the parcel according to the map date. Most parcels in Commercial or Industrial use categories may have little associated archaeological debris aside from structural remains but may also have relatively high levels of debris and material, for example a lumber yard.

One vital piece of information that was nearly absent from written, photographic, or mapped sources was if buildings had basements. Obviously, basement excavation results in the removal of older sediments and deposits, which has clear implications for archaeology. By 1870 (Figure A-5) some buildings in the API had docks or wharves with two levels to accommodate high and low river levels, which may have linked to corresponding basements nearby. While the Sanborn Fire Insurance maps note where docks have more than one level, they do not note basements in structures. Most historical photographs are of building frontages, which sometimes depict possible vault lights (also known as sidewalk prisms or pavement lights). The best evidence for basements is in photographs during construction of the Harbor Wall, after docks and wharves were removed but before wall construction began. These photos indicate many of the buildings—but not all—had basements or some open space under the main building accessible only from the river side and presumably from the building interior. Some of these photos also indicate debris of varying types and quantities were present on the shoreline following demolition. This debris was probably buried under the dredged fill behind the Harbor Wall.

West Side Historic Probability

The geoarchaeological study identified the interface between fill and native sediments in the west side API (see Figure A-2). This line represents a base of the zone for most historic-era deposits, but there is some potential immediately below this line from basement excavations or historic-era flood deposits and hence early historic materials.

At the time of European American settlement, the west bank in the immediate project area was 10–15 feet high and forested with some gaps or openings facing the river. By 1852, the west bank was already occupied by wharves and a few commercial/industrial buildings, at least upriver of the future alignment of Burnside Street. Some of these were of relatively modest wood construction, but larger buildings of masonry and cast-iron construction occupied the riverfront by the late 1860s. By 1870, much of the current API west of SW/NW Front was open space or occupied by residential and small commercial buildings (Figure A-6). Throughout the 1870s, more intensive commercial development occurred with a concomitant decrease in residential use (Figure A-7). The 1889 Sanborn maps suggest residential use of the API was much more limited than it was in 1870 (Figure A-8). This probably reflects the area's increasing commercial character, with warehouses and light industry such as wholesalers for hats, liquor, furniture makers, or chandlers. Commercial lodging was limited to the north and west part of the API, as were the stores (of unknown type) and the few restaurants and personal services, such as a

Chinese tailor. Several undeveloped lots were present away from the river, often containing sheds and were likely used for a variety of activities. Residential dwellings are found only at the southwest end of the API, and generally appear to be two-story, wood-framed structures (Figure A-8). The 1901 Sanborn map is not dramatically different than the previous map, but it does support the general trajectory for the area towards increased commercial use (Figure A-9). By 1908 use in the API seems to homogenize with nearly all parcels used for commercial use, no residential use, and a drop in the number of lodging houses and restaurants (Figure A-10). The number of stores had increased dramatically, although what they were selling is unknown.

Through most of the twentieth century, the west side API was dominated by commercial and industrial uses. From the late 1920s into the 1940s, buildings were demolished along Front Street as the city's central business district shifted away from the river. It is evident this demolition process left substantial quantities of historic-period debris and possibly some structural remains; almost 50% of the approximately 130 geotechnical borings in the API and immediate vicinity recorded bricks, wood, pieces of concrete, and other "miscellaneous debris." The boring logs routinely encountered these deposits between 3 and 6 meters (10–20 feet) deep and up to 11 meters (35 feet) deep.

Figure A-5. Clearance of Docks and Wharves in Preparation of Construction of the Harbor Wall, with the Burnside Bridge to the North. Photo dated January 31, 1928.

Figure A-6. The 1870 Panorama of Portland with the API Outlined

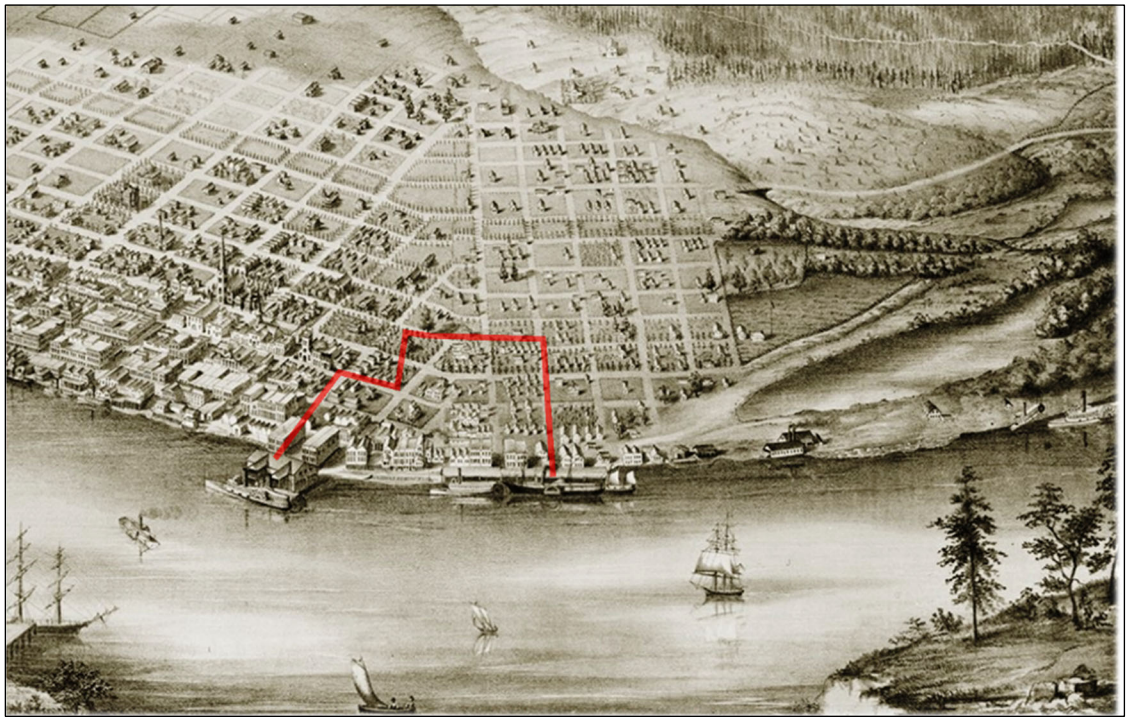


Figure A-7. Close-up of the West Burnside Area from the 1879 Panorama.

Figure A-8. 1889 Sanborn features overlain on a current street grid for the western API Archaeological Assessment Area. Also depicted is the portion of buildings removed during the widening of Burnside.

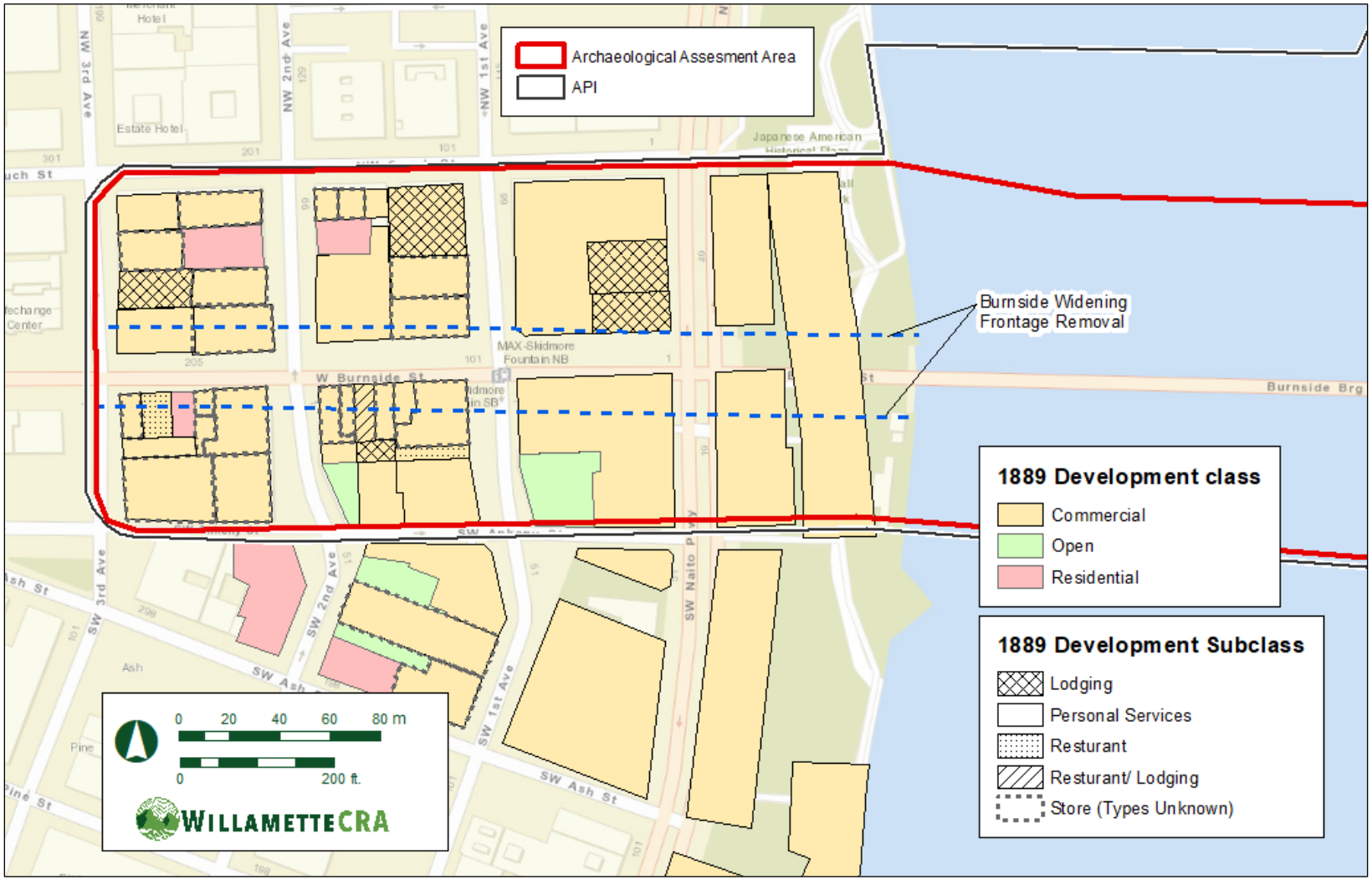
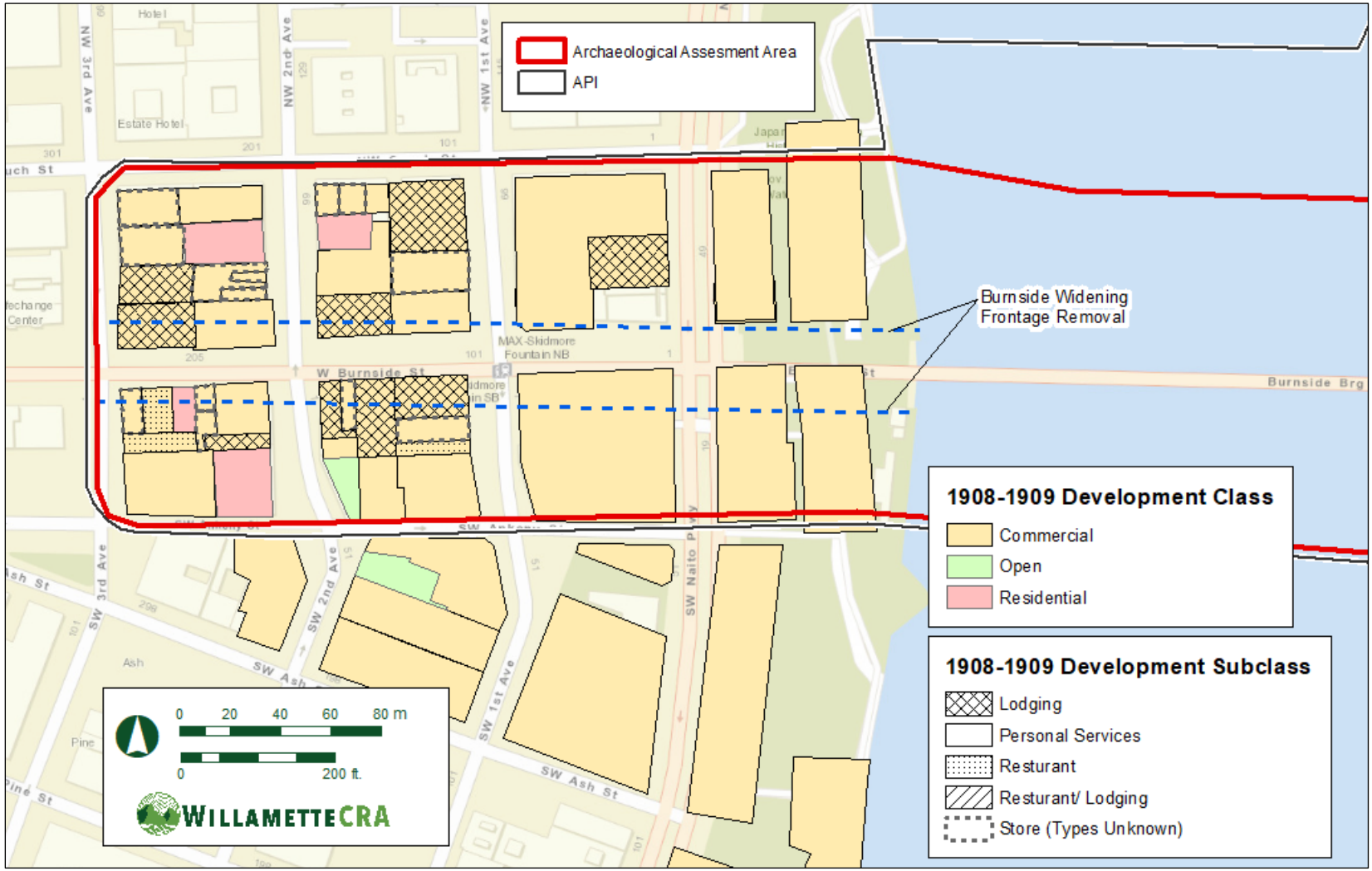
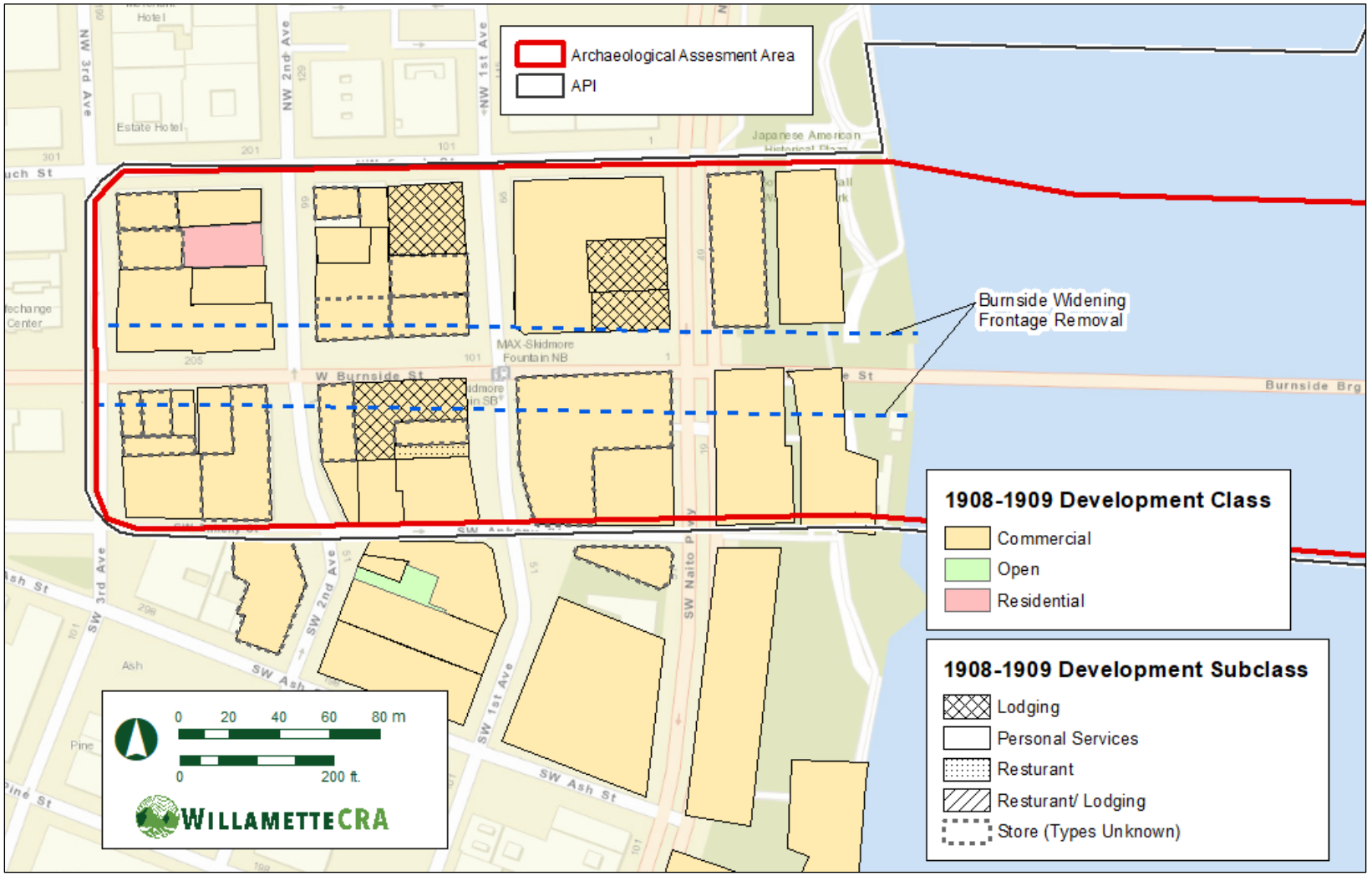


Figure A-9. 1901 Sanborn features overlain on a current street grid for the western API Archaeological Assessment Area.



Note: Also depicted is the portion of buildings removed during the widening of Burnside.

Figure A-10. 1908-1909 Sanborn features overlain on a current street grid for the western API Archaeological Assessment Area. Also depicted is the portion of buildings removed during the widening of Burnside.



Construction of the first Burnside Bridge will probably have had little or no effect on historic-period archaeological resources; however, construction of the new bridge in 1926 required widening and consequently removing building frontages from existing buildings from NW/SW 2nd to the river. W Burnside was widened in the early 1930s west from NW/SW 2nd, which required removing frontages of those buildings as well (see Figure A-8 - Figure A-10; Figure A-11).

There are a few photographs that constitute virtually the only record of the direct impacts of these removals. It is therefore unknown how truncating the frontages affected the portions of basements under the frontages of those buildings with basements. We suspect the basements were simply and conveniently backfilled with demolition debris There was similar widening on the east side both for construction of the 1926 bridge and later widening of E Burnside, but fewer buildings were affected on the east side than on the west. This is evident in the geotechnical boring logs on the east side within the APE, where only 3 of 145 logs (2%) reference encountering debris such as bricks, woody debris, or “rubble.”

East Side Historic Probability

At the time of European American settlement, the east side of the river was low in elevation and characterized by sloughs and shoals, behind which was a steep bank 30 feet high. This bank was broken on the north by the entrance to Sullivan’s Gulch and the small drainage that flowed through the gulch (which had been created during the Missoula Floods).

Because of the sloughs, bars, and steep bank along the river’s eastern shore, it evolved historically in very different ways from the west side (Figure A-12 and Figure A-13), lacking wharves, docks, and associated warehouses. The east side did benefit briefly from construction of the Oregon & California Railroad in 1868, providing rail access on the east side before the west side had access. Construction of the railroad required placement of substantial fill along the river, which also increased development in this area (Figure A-12 and Figure A-13).

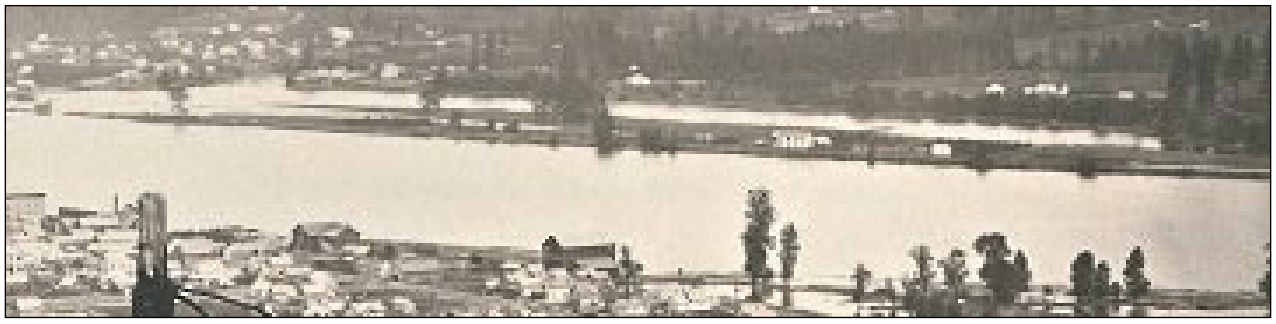
The 1889 Sanborn map (Figure A-14) shows no development other than the railroad and a small shed, between Second Street (labeled “not opened”) and the river. Many lots are open and undeveloped, but the area has a scattering of residential properties. By 1901 residential development became denser, with many larger lots subdivided and more houses appearing (Figure A-15). Stores and apartment buildings were more common, and several locations near the river had small sheds or cabins. The 1908-1909 Sanborn maps show an increasing shift from residential to commercial uses, although dwellings remained common (Figure A-16). Commercial development included lumber mills near the railroad, as well as stores and some personal

services, such as a Chinese Laundry. There is a moderate probability for historic-period archaeological deposits on the east side from SE/NE 2nd east to Martin Luther King Boulevard, the projected eastward limit of direct project effects at this time.

Figure A-11. Photograph of the Widening of Burnside

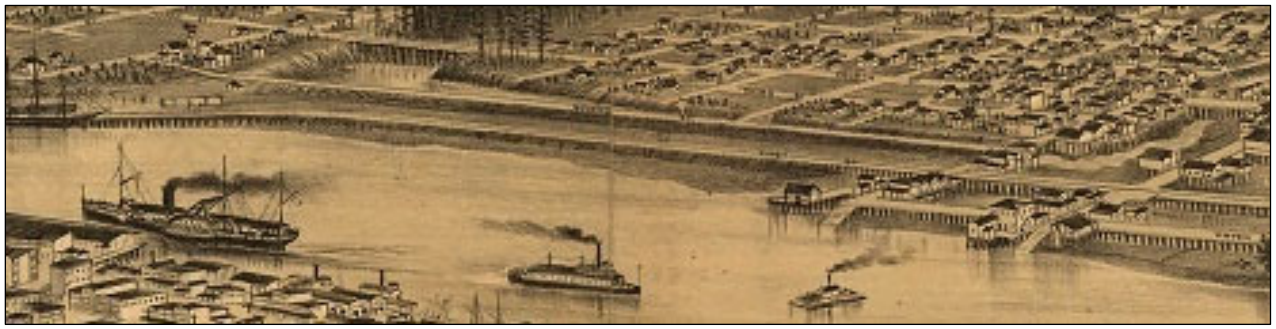
Note: The new façade for the Willamette Tent & Awning Building is behind the scaffolding. The bottom floor of the Skidmore Block has not yet been trimmed back.

Figure A-12. 1867 Watkins panorama of Portland showing slough and gravel/sand bar on east side of the river.



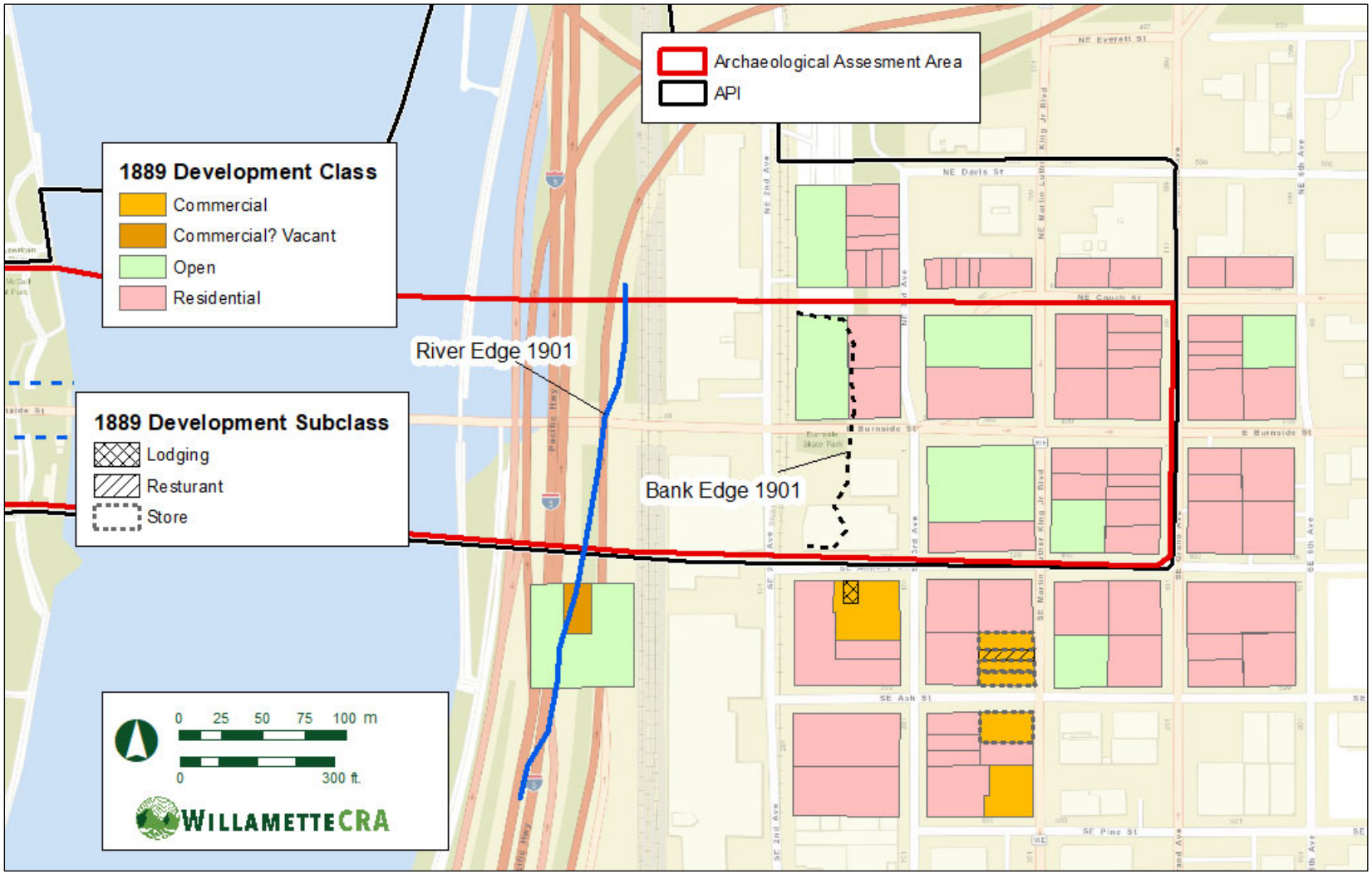
Note: The mouth of Sullivan's Gulch is at the upper left.

Figure A-13. Close-up from 1879 panorama showing the eastern waterfront in the current project area.



Note: The mouth of Sullivan's Gulch is on the left and the side channel has been filled (compare with Figure 8).

Figure A-14. 1889 Sanborn map features overlain on a current street grid of the eastside API Archaeological Assessment Area.



Note: The river's edge and top of bank depicted on the 1901 Sanborn maps are also shown.

Figure A-15. 1901 Sanborn map features overlain on a current street grid of the eastside API Archaeological Assessment Area.

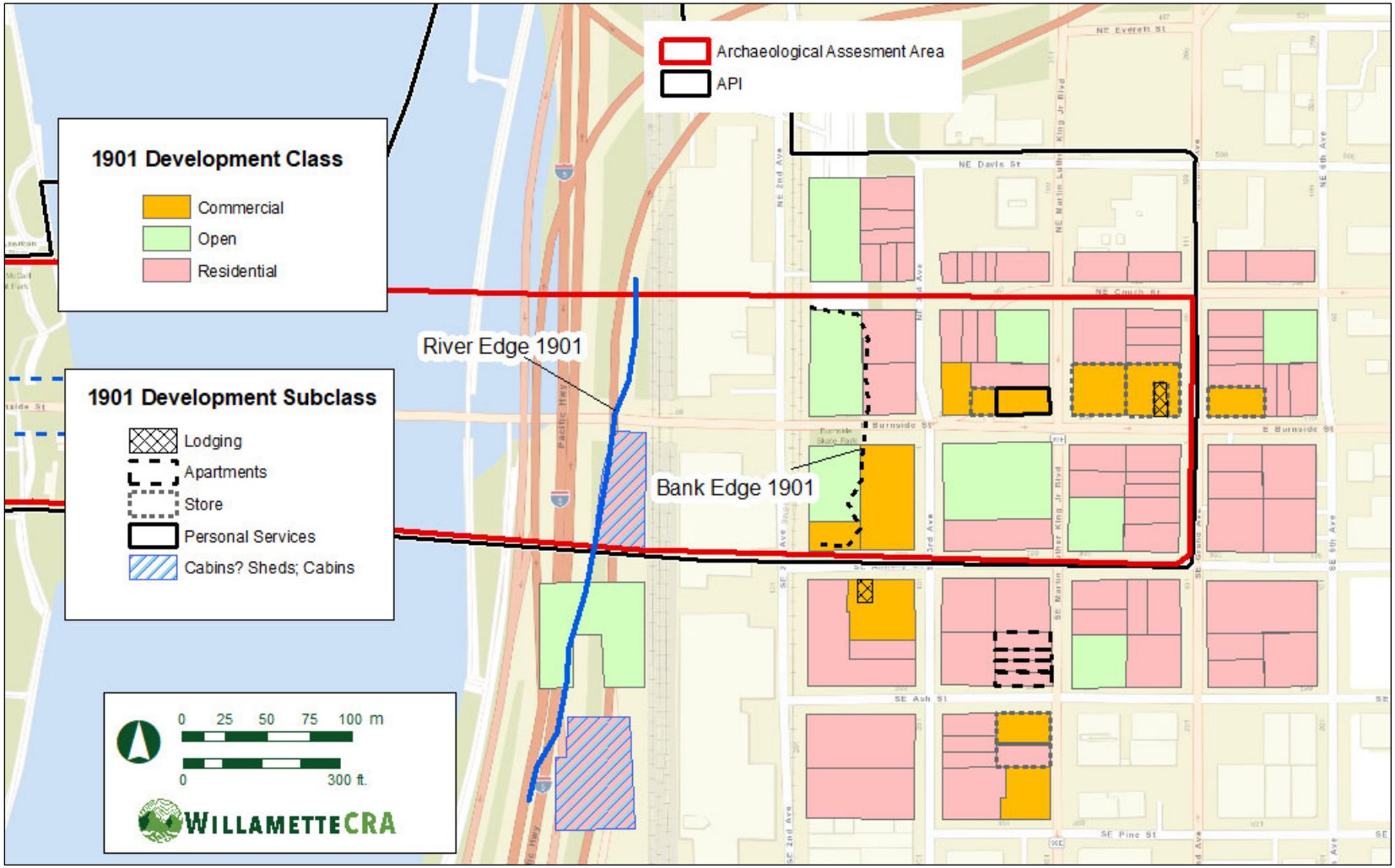
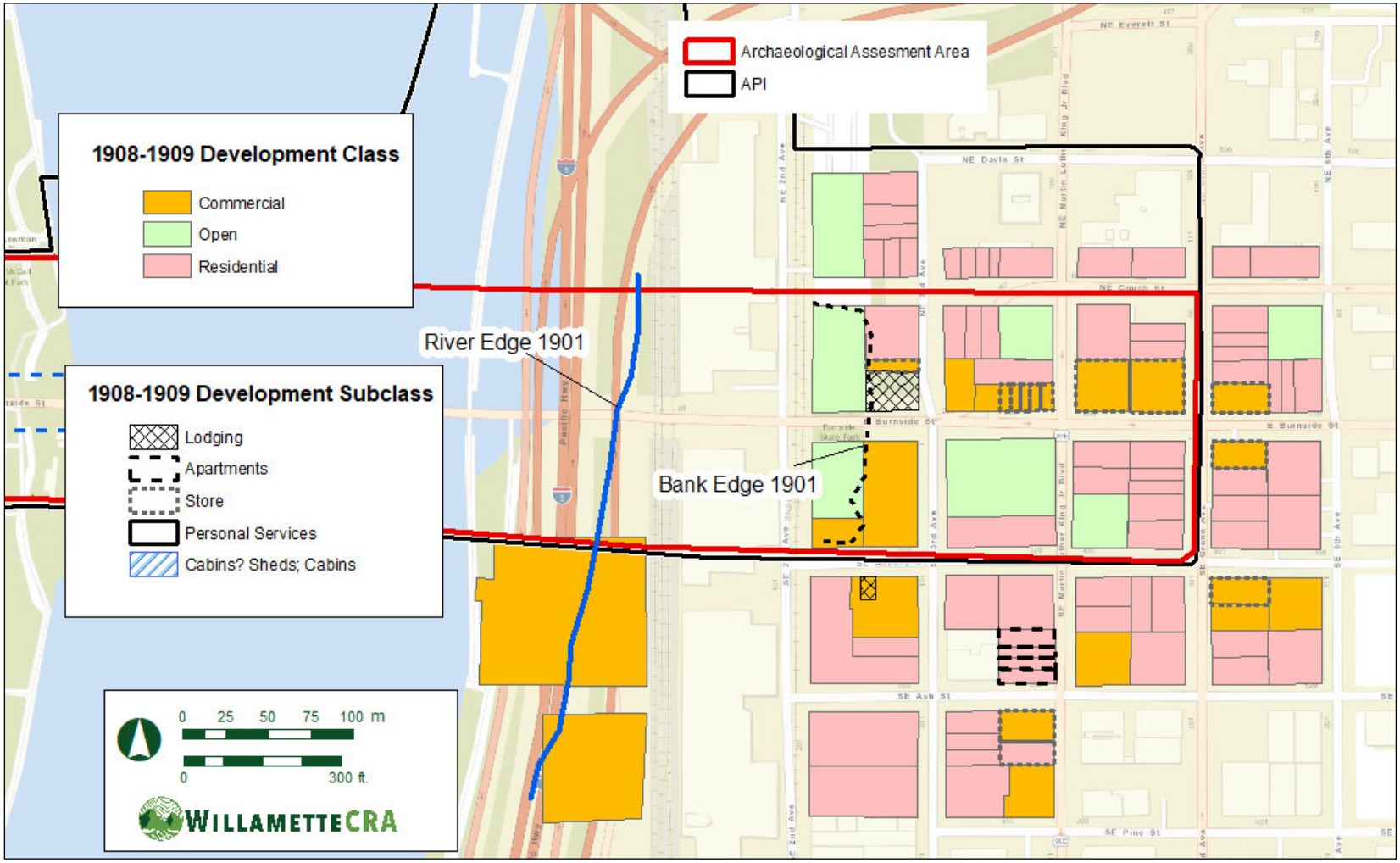


Figure A-16. 1908-1909 Sanborn map features overlain on a current street grid of the eastside API Archaeological Assessment Area.



Summary

A cross section summary schematic of the above information is provided in Figure A-17 (Note that this graphic is an idealized image and the scale approximate only), while plan views are shown in Figure A-18 and Figure A-19). The figure shows the progression of development and filling in the West and East API over time, from its largely natural configuration just prior to contact (Figure A-17, Precontact, top) to its present structure that was in place by about 1925 (Figure A-17, 1925, bottom). The schematic summarizes the likely locations for precontact and historic-era materials in relation to the landforms, individual components, and episodes of filling.

As discussed above, both the west side and east side APIs have low potential for precontact archaeological materials. In this area, both sides of the river lack the micro landscape features that attracted Native peoples. In the West Side API, the geoarchaeological study suggests the interface between naturally deposited (native soils) and human deposited fill varies from 1 to about 10 feet below the current surface west of Naito Parkway (Figure A-2, Figure A-17). East of Naito Parkway this original ground surface becomes more deeply buried, varying from less than 10 feet below the current surface to nearly 25 feet deep adjacent to the Willamette River. Note, however, that these depths, particularly east of Naito Parkway are approximate and the actual contact with native sediments can vary.

The East Side API may have a slightly greater potential for precontact archaeological resources given its proximity to Sullivan's Gulch, but the river's eastern bank was historically a 30-foot tall, steep bank (Figure A-3, Figure A-17). The main channel was separated from this bank by bars and sloughs that were low, wet, and active. Greater probability for precontact archaeological material is somewhat more likely at the top of the bank to the east, although it remains relatively low (Figure A-17).

The potential for historic-era materials in the West Side API varies. The area may have had early historic-era occupation, which we will expect at or immediately above the original ground surface. Thus, while early historic archaeological material (i.e., pre ca. 1880) is more likely than precontact material, the locational probability for both is similar and these materials could be found with little vertical separation (Figure A-17).

The potential for post ca. 1880 archaeological material is broadly related to the different types of use depicted on Figure A-8 - Figure A-10 and historic filling (Figure A-18). Those parcels that were residential or vacant or had stores or businesses related to personal services such as restaurant or cleaners, have a greater potential for archaeological deposits than those parcels with more industrial or office use.

Figure A-17. Progression of Development and Filling in the West and East API Over Time

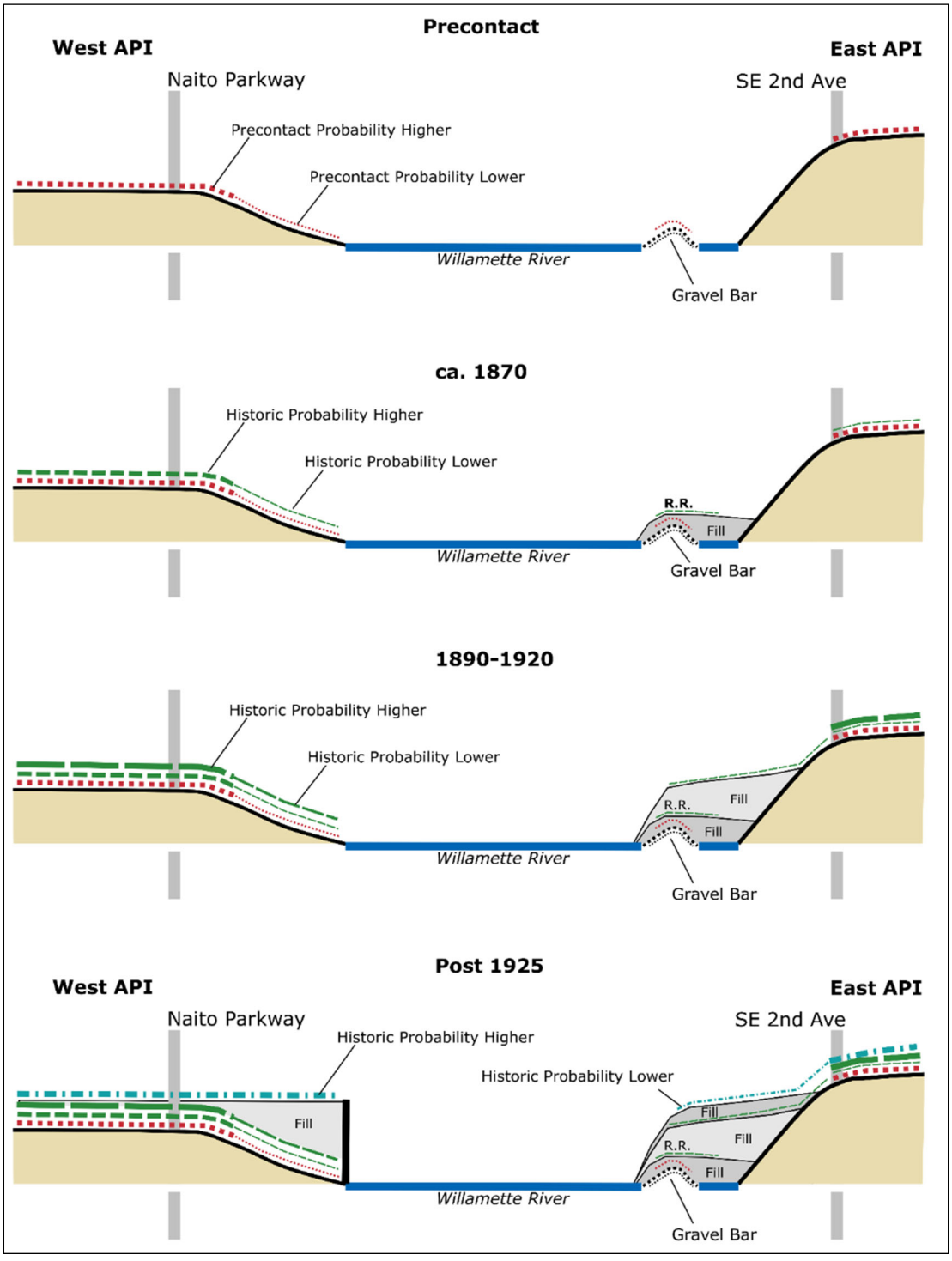
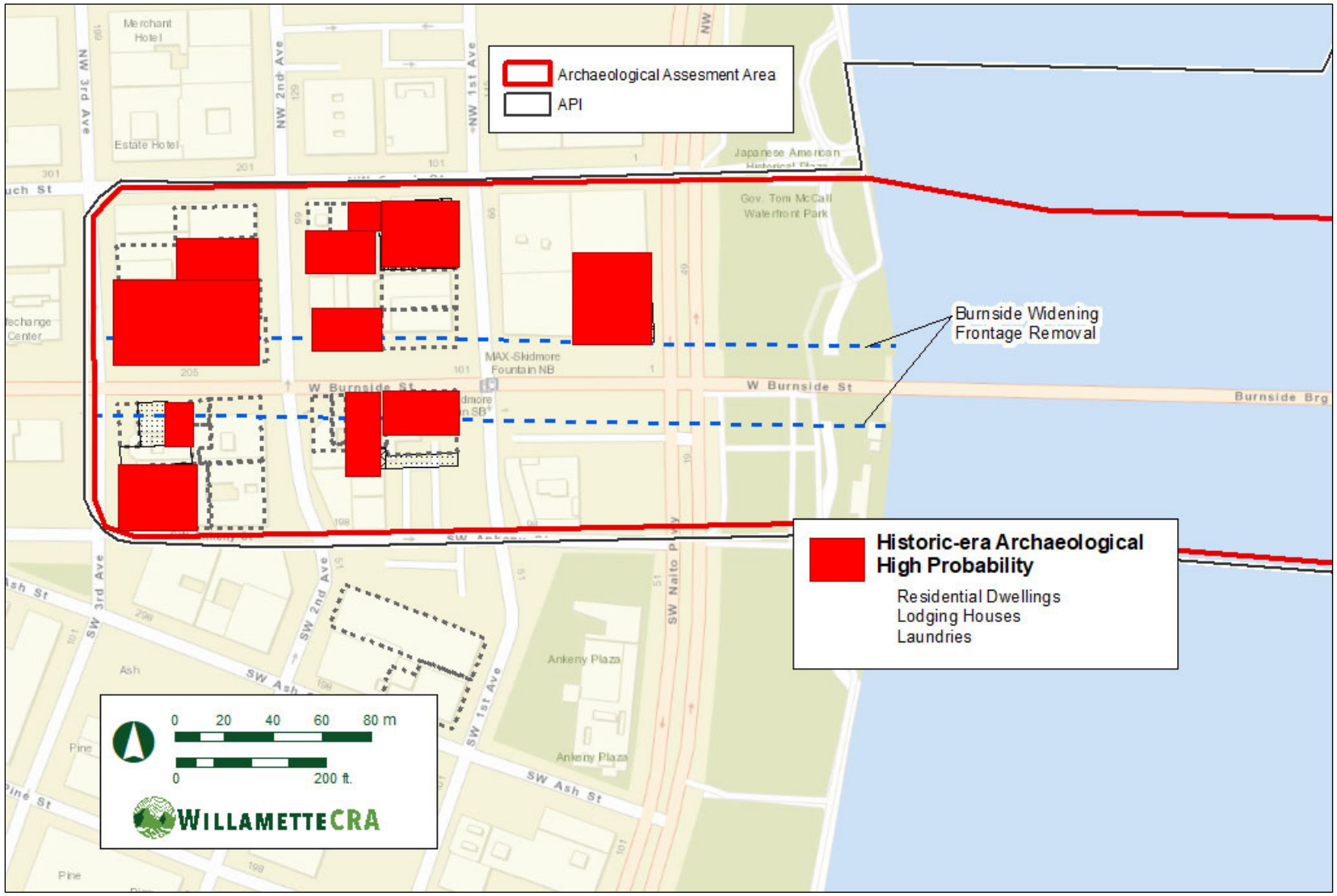
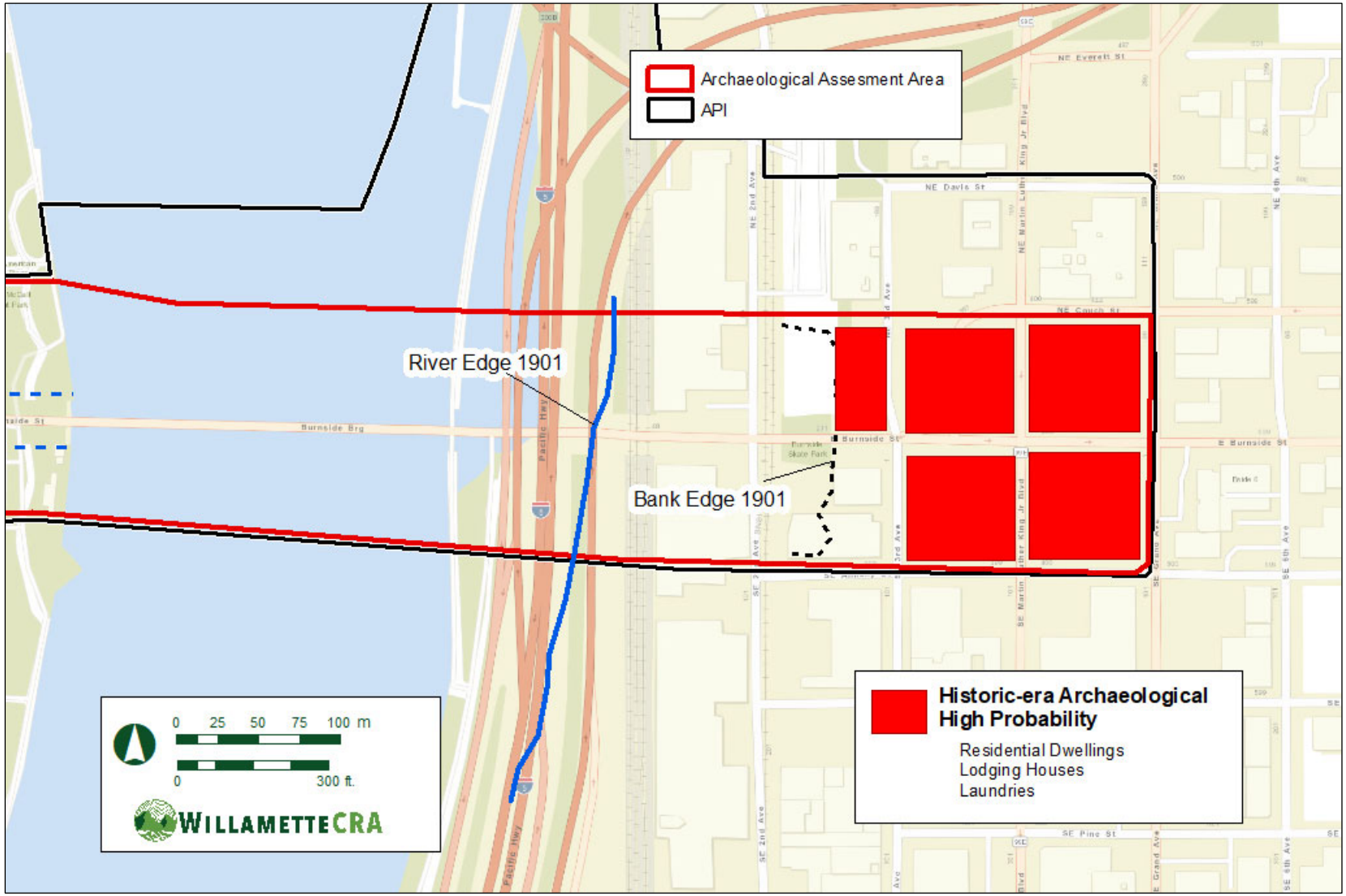


Figure A-18. Summary of High Probability Areas in the West Side Archaeological Assessment Area.



Note: High probability are those parcels with High Archaeological Potential in Table A-1.

Figure A-19. Summary of High Probability Areas in the East Side Archaeological Assessment Area



Note: High probability are those parcels with High Archaeological Potential in Table A-1.

Appendix B. Historic Period Research Questions

Historic Period Research Questions

The orignal project context and reseach design (Ellis et al. 2019) provided a series of research questions. Research questions are focused on reconstructing consumer choice, material use, and lifeways in the early core of Portland through the material culture of various communities that worked and inhabited this center. What is the archaeological evidence of the activities that are reported in the written record of early Portland, from the frontier of “the clearing” to a booming industrial city?

East Side API

1. Is there any archaeological evidence of early historic residence or land use associated with land claims prior to the introduction of the Oregon and California Railroad in the 1860s?
2. What evidence of warehousing is present in the east side API? Are there deposits of identical or repetitive goods that will have been produced or stored in buildings along the east waterfront? Are there personal artifacts here that may reflect the lives and activities of industrial workers?
3. Is there evidence of the residential use of the east side API? Three residences were present between 1889 and 1920 in an area identified for archaeological potential at the southeast corner of SE 3rd and SE Davis. Here, WillametteCRA identified a historic period isolate. Are there refuse deposits associated with other dwellings in the east API, and do items reflect the activities of single families?

West Side API

1. Are there artifacts that can be associated with early land claims on the west side of the city? For example, tools or goods associated with bulk shipping from the waterfront wharf at the base of W Burnside? Items such as hand-wrought hardware or rudimentary hand-blown glass vessels may represent early commercial storage and shipping in the artifact assemblage. Are there bottles or jars that indicate the storage of foods or other items at a commercial scale?
2. Are there personal or distinctive items present that indicate the activities of workers at the Flanders Warehouse on the west side of the Burnside Bridge area? These might include specialized or decorated wares for food consumption, personal accoutrements like fasteners or jewelry (items lost), or items consistent with commerce and activity such as coins, keys, etc.
3. Are there artifacts that serve as ethnic markers? A substantial population of Chinese residents lived on the west side near the waterfront. As early as the 1850s, many worked in the iron, paper, and textile industries centered on the west side. The community originally settled on the south side of W Burnside Street where, by the 1870s, they had established stores, washhouses, and medical offices (Mickel et al. 2008:58; Northwest Heritage Property Associates 1989:Section 8, 1-2). Artifacts indicative of their presence, entrepreneurship, community, and transnational identities may include Chinese import ceramics; traditional tablewares; food,

medicine, health, and grooming bottles marked with Chinese characters; ceramic rice wine vessels; and Chinese imported opium paraphenila, lamps, pipes, or tin containers.

Waterfront Park

The most expansive and currently undeveloped area in the APE is Waterfront Park, which varies in width from approximately 220 to 225 feet between the Harbor Wall and Naito Parkway. Other than sidewalks, paved plazas, and a few other amenities, the park is undeveloped. It will therefore appear to have considerable potential for archaeological resources, especially as it fronts the river and was the location of the earliest historical development of the city. From the 1850s to 1928, the western waterfront was lined with industrial and commercial buildings, many of which had associated warehouses and wharves constructed on piers and pilings over the river.

1. Is there any evidence of the earliest buildings, associated businesses, and docks along the west side waterfront in the location of Waterfront Park? These will have been wood post and beam construction built in the late 1840s–1850s.
2. Are there archaeological refuse deposits associated with the later brick buildings on the east side of Front Street from SW Ash Street to NW Davis Street that were constructed between 1873 and 1892? The docks during this period were most likely constructed in two levels to accommodate movement of goods at both low and high river levels. These were abandoned during the first three decades of the 1900s. Site 35MU122 was recorded in 2004 within Waterfront Park. The site consists of historic-period features and artifacts to a depth of 29 feet below the surface. The features included pilings with a concrete slab on top, which supported a stem wall of basalt blocks. Domestic debris of ceramic and glass fragments appeared to represent refuse deposited over the Willamette River riverbank (Minor 2004).
3. Is there evidence of the restaurant, store, and lodging house that will have been along W Burnside within present-day Waterfront Park by at least 1889? By 1908, Sanborn maps depict a “Chinese Clubhouse” on the second floor. Are there distinctive Chinese items present in subsurface deposits here? Particularly items of vice related to drinking, smoking, prostitution, or gambling? Can we ascertain the demography of lodgers on this block based on an artifact assemblage?

Artifacts

In the framework of this research design, the analysis will be focused on the following artifacts:

1. All marked or decorated ceramics will be analyzed, date of manufacture determined where possible, and type identified when possible (e.g., cup, saucer, plate, etc.). Whiteware fragments that cannot be dated or are too fragmentary to define type will only be counted in the field.
2. Historic-era items used or repurposed by Native Peoples. For example, knapped glass.

3. Glass items clearly associated with artifact type, aside from unknown vessel fragments, will be collected. Small glass fragments, especially of colorless, amber, and green glass, that cannot be dated or assigned function will be counted but not otherwise analyzed. Structural or architectural glass fragments such as window glass or those from lighting fixtures will be counted but not otherwise analyzed.
4. Only distinct metal items like those that represent tools, utensils, cookware, toys, jewelry, clothing fasteners, coins, cans or can fragments, or bottle lids that provide information on food or other contents will be collected and analyzed. Hand-made hardware such as wrought nails will be collected. Machine-cut and wire nails will not be collected, but will be counted in the field due to their predominance at historic period sites that have experienced substantial construction.
5. All faunal remains will be identified to the family, genus, or species level where possible. Any evidence of butchering will be recorded.
6. Other artifact types will be analyzed to the extent they contribute to the research questions.

Important Temporal Artifact Markers

- Glass trade beads, copper tools, and accoutrements—for example copper roll fragments (Contact Period)
- Hand-forged nails/hardware (early 1800s)
- Black (dark amber) glass (1820-1880)
- Hole-in-Cap can (1823-c1940)
- Hole-and-Cap can (c1810-1900s+)
- Transfer-printed spodeware common at outposts like Fort Vancouver (1829-1860)
- Flow-blue ceramic (popular peak 1844-1870s)
- Hinged-shoulder dip mold bottles (1800s)
- Pontil scar on bottle bases (c1870)
- Three-piece bottle mold (1820s-1910s)
- Prosser ceramic buttons (orange peel texture) (1840-1900s)
- China ceramic marbles (1840-c1903+)
- Duncan McDougall and Company—popular maker of kaolin tobacco pipes (1847-)
- “Frozen Charlotte” white bisque porcelain dolls (circa 1850s-1920s)
- Aqua glass (circa 1870s-1930s)
- Rubber bottle cork (1871-)
- First Portland cement used in US (1876-)
- Knowles, Taylor, and Knowles ceramics (1879-1904)
- Hand-applied finish on bottles (c1840s-1880s)

- Hand-blown mold glass bottles (irregular shapes, asymetrical, glass imperfections like large blisters and seed bubbles) (Late 19th-Early 20th century)
- Post-bottom molded bottles (c1870s-1920s)
- Turn-mold bottles (most commonly wine, champagne) (1870s-1920s)
- Hand-cut glass marbles (1881-1920s)
- Sun-colored amethyst glass (manganese additive) (circa 1880-1920)
- Lightning stopper for canning jars (1882-)
- Boom of patent medicine industry (1880s)
- Knob and tube wiring (porcelain insulating tubes) (1880s-1930s)
- Hand-tooled finishes on glass bottles (evidenced by vanishing side-seam in bottle neck) (1890s-1910s)
- Bromo-seltzer cobalt bottles (1891-)
- Coca-cola bottles (1899)
- Milk glass (peak) (1890s-1960s)
- Cobalt glass (peak) (1890s-1960s)
- Press-and-blow bottle machine (c1900-c1940s+)
- Automatic bottling machine (1904-)
- Flat pocket tobacco tin (1892-c1920)
- Crown cap and bottle finish (1892+)
- Sanitary Can (1904+)
- Pressed carnival glass (1905+)
- Kestner bisque porcelain dolls (circa 1890s-1910s)
- Applied color label (1934-c1965)
- Finger ring handles on bleach bottles (chlorox, purex) (1930s)
- Cone top beer cans (1935-1957)
- Flat top beverage (all steel) (1935-1970s)
- Church key opened cans (1935+)
- Plastic buttons (1935+)
- Clothing zippers (1920+)
- Machine made glass marbles (1920+)
- Continuous thread finish (1924+)
- Round valve mark on base of wide-mouth jars, bottles (circa 1940s+)
- Duraglass mark (1941+)

- “Federal law forbids sale or reuse of this bottle” (1932-1964)
- Plastic liners in crown caps (1955+)
- “No Deposit No Return” (1965-1971)
- Plastic bottles (1978+)

Appendix C. Field Methods

Proposed Field Methods

Hand excavation is expected to occur during this project. Because of how little we know about the deposits, however, we cannot simply outline a limited suite of excavation units and techniques. That is, the field methods will need to be flexible. But there are some general approaches that will be used. Overall, fieldwork will conform to the Oregon SHPO guidelines.

Some shovel probing or robust profile cleaning and sampling may be necessary, but most hand excavation will occur in square or rectangular units of varying sizes, most commonly 50 cm2, 1 m2, and 1 x 0.5-m in size. Hand excavation units (of varying sizes) may be placed together in blocks for controlled excavation of larger areas. Sediments will be excavated in 10-cm levels within stratigraphic units when possible. Hand excavated sediments will be screened through ¼-inch mesh, with standardized subsampling when appropriate.

Features will be excavated separately from the surrounding matrix and drawn and photographed at various stages of excavation. The basic process is to expose the feature in plan view and subsequently bisect the feature in at least one direction. Feature excavation methods are geared towards recovering information pertinent to feature function and use-history, such as size, shape, surface of origin, evidence for in situ burning, boundary definition and the structure of feature contents. A standardized amount of feature fill (or fills) will be collected for later analysis such as macrobotanical analysis. All collected artifacts will be taken to a local laboratory for further processing, analysis, and preparation for permanent curation. The WillametteCRA field crew will record all excavations on field forms, describing the sediment, identifying stratigraphic layers and their depths, and cataloguing and collecting all cultural material. Excavation unit locations will be mapped. A representative sample of excavation unit profiles will be drawn and photographed.

Appendix D. Inadvertent Discovery Plan

WillametteCRA Inadvertent Discovery Plan

This document serves as the primary guidance tool for the treatment of human remains or suspected archaeological resources discovered during project activities. Archaeological materials include, but are not limited to human remains, funerary objects, historic-period artifacts, precontact artifacts, and features that constitute a resource that is potentially eligible for listing in the National Register of Historic Places (NRHP). It is important that any “discovered” human remains and associated cultural materials and deposits be treated with care and respect and protected from further disturbance and exposure to weather. It is also important that any inadvertent finds may be kept confidential as authorized under ORS 192.345(11).

This IDP is intended to provide guidance to the project team and their contractors/subcontractors so they can:

- Comply with any applicable Federal and State laws and regulations;
- Describe to regulatory and review agencies the procedures to be followed;
- Provide direction and guidance to project personnel for the proper procedures to be followed should an inadvertent discovery occur; and
- Provide current contact information for notification upon discovery.

To assure compliance with federal (36 CFR 800), and Oregon State (ORS 97.740 et seq., 358.905 et seq., 390.235 et seq.) archaeological and cultural resource laws and regulations, the following procedures have been developed to address potential inadvertent discoveries of cultural materials and deposits and Indian burials and human remains during ground-disturbing activities at the project location.

Procedures for the Discovery of Human Skeletal Material

If Native American ancestral remains, funerary objects, sacred objects, and objects of cultural patrimony are discovered during the proposed work, they will be treated with respect, secured, and protected until such time as the appropriate action had been determined. The monitoring archaeologist shall immediately notify the ODOT archaeologist and construction supervisor of the discovery. All work adjacent to the discovery shall cease immediately and the appropriate contacts be notified (Attachment A and C). Do not disturb these remains or objects in any way. Do not call 911. Do not speak with the media. Secure the location. Do not take photos.

As the find is in the State of Oregon, the ODOT archaeologist will immediately notify Oregon State Police, SHPO, appropriate Tribes, Legislative Commission on Indian Services (LCIS), and Multnomah County Medical Examiner in accordance with Oregon Revised Statutes (ORS) 97.740-.994, 358.905-.961, and 146.090 and the Treatment of Native American Human Remains Discovered Inadvertently or Through Criminal Investigation on Private and Non-Federal Public Lands in Oregon, drafted in 2006 and updated 12/9/2021.

A 50 ft. (15 m) diameter work stoppage area shall be maintained around the discovery to provide for the total security, protection, and integrity of the human skeletal remains. Any spoils piles or dump trucks that may contain soils, bone, and/or artifacts from the vicinity of the remains will be secured and left on site so they can be examined before removal. The remains will not be touched, moved, or further disturbed, and will be protected from exposure to the sun and weather. Only proper law enforcement personnel, professional archaeologists, Tribal representatives and SHPO staff shall be authorized direct access to the human remains after the area is secured.

Procedures for Other Inadvertent Discoveries

If any project worker suspects that they have uncovered an archaeological artifact or other potential archaeological resource (Attachment B for examples), they should immediately notify the ODOT archaeologist or monitoring archaeologist. All work within a 30 ft. (~9 m) radius of the discovery shall cease immediately. Protect the discovery with flagging, safety fencing, or other appropriate barriers, and in the case of inclement weather, protect the find with tarps or other barriers for wind, water, or snow, etc. Collection of any archaeological materials by employees, construction personnel or others with access to the project is prohibited by state laws.

If the monitoring archaeologist determines the discovery is a potentially significant archaeological resource, work in the 30 ft. (~9 m) radius around the find will continue to be paused temporarily for consultation with the appropriate parties to occur, and possibly further archaeological investigation. Any spoils piles or dump trucks that may contain soils and/or artifacts from the location of the find will be secured and left on site so they can be examined by the monitoring archaeologist before removal. If directed, work can proceed outside the 30 ft. (~9 m) buffer area so long as the resource is secure and protected. The monitoring archaeologist will begin work to determine the boundaries of the discovery and record the find. Concurrently, the monitoring archaeologist will immediately notify the ODOT archaeologist who will notify SHPO and the consulting Tribes within 24 hours. As soon as practical following this initial assessment, the monitoring archaeologist will provide the ODOT archaeologist with a written description of the discovery, as well as a preliminary recommendation regarding potential NRHP eligibility. The ODOT archaeologist will convey this information to SHPO and the consulting Tribes, requesting concurrence.

During the consultation and investigation process, no ground-disturbing work that may cause additional disturbance to the discovery may occur. The monitoring archaeologist and/or ODOT archaeologist will enforce appropriate security measures to prevent vehicles, equipment, or unauthorized personnel from disturbing the find and inform all parties that they are not to pick up, touch, or disturb the archaeological resource.

If it is necessary for the monitoring archaeologist to enter any excavations to better examine a find or possible find and those excavations are deeper than four feet below the surface, the contractor will provide appropriate shoring or implement other measures to ensure compliance with all applicable state and federal safety requirements. The monitoring archaeologist will not enter any excavations until these requirements are met.

Confidentiality

The National Historic Preservation Act, as amended (Section 304 [16 U.S.C. 470s-3]), and Oregon State law (ORS 192.345(11)) establishes that the location of archaeological sites, both on land and underwater, shall be confidential. Oregon's Public Records law allows for exemption of archaeological site locations from disclosure. To comply, the project team shall make their best efforts, in accordance with these laws, to ensure that its appropriate personnel and contractors keep confidential the discovery of any found or suspected human remains, other cultural items, and potential historic properties. The project team and their contractor(s) are prohibited from contacting the media or any third party or otherwise sharing information regarding the discovery with any member of the public. The ODOT archaeologist is to be immediately notified of any inquiry from the media or public. Prior to any release, the project team, in consultation with SHPO and the consulting Tribes, shall redact any sensitive information, if any, from records to be released to the public, any third party, and the media to the extent permitted by law.

Attachment A. Contact Information for Inadvertent Discovery Plan

Tribe/Agency/Organization	Contact Name	Email Address	Phone Number
ODOT Archaeologist	Roy Watters	roy.watters@odot.oregon.gov	503-983-0960
ODOT Cultural Resources Program Coordinator	Tobin Bottman	tobin.c.bottman@odot.oregon.gov	503-986-3783
ODOT Lead Inspector			
ODOT Assistant Project Manager			
ODOT/SHPO Archaeology Liaison	Kurt Roedel	Kurt.w.roedel@oprd.oregon.gov	971-273-8073
Oregon SHPO	John Pouley	John.pouley@oprd.oregon.gov	5034809164
Oregon State Police	Sgt. Craig Heuberger	cheuber@osp.oregon.gov	503-508-0779
Multnomah County Medical Examiner's Office			
Legislative Commission on Indian Services	Patrick Flanagan Adrienne Fisher	LCIS@oregonlegislature.gov	503-986-1068
Legislative Commission on Indian Services	Elissa Bullion, State Physical Anthropologist	Elissa.bullion@oregonlegislature.gov	503-986-1067
The Cowlitz Indian Tribe	Seth Russell	Srussell@cowlitz.org	360-353-9957
The Confederated Tribes of Grand Ronde	Briece Edwards	briece.edwards@grandronde.org	503-879-2084
Nez Perce Tribe	Pat Baird	keithb@nezperce.org	208-621-3851
Confederated Tribes of Siletz Indians	Robert Kentta Peter Hatch	kentankyla@outlook.com peterh@ctsi.nsn.us	541-351-0148 541-444-8319
Confederated Tribes of the Umatilla Indian Reservation	Ashley Morton	ashleymorton@ctuir.org	541-429-7231
Confederated Tribes of Warm Springs	Christian Nauer	christian.nauer@ctwsbnr.org	541-553-2026
Yakama Nation	Noah Oliver	noah_oliver@yakama.com	509-865-5121 x4726

Attachment B. Examples of Archaeological Resources

A cultural resource discovery could be prehistoric or historic and consist of, but not be limited to:

- areas or bands of charcoal or charcoal-stained soil and stones; burned earth that is orange in color;
- stone tools or waste flakes (i.e., an arrowhead, or stone chips);
- buried fire pits or ovens, clusters of fire cracked rock;
- clusters of shell and/or animal bones, especially if associated with burned rocks, fire cracked rock, charcoal and/or stone tools; and
- prepared surfaces that suggest temporary stability, such as a corduroy road, a flat lying layer of brick, a plastered surface, a plank surface;
- old privies; wood pipes or infrastructure older than 50 years;
- buried foundations or intact walls;
- a cluster of cans or bottles, logging, industrial or agricultural equipment older than 50 years.

Collection of any archaeological materials by employees, construction personnel or others with access to the project is prohibited by state and federal laws.

Attachment C. Example of a Mini DOE Form

Mini Determination of Eligibility Form

Site Number: insert trinomial (field designation # if applicable)

Site Type: insert site type

Date Identified: insert date identified

Identified By: insert name **Title:** insert title

Description of Artifacts/Features:
Include location and size of the site and a brief description of artifacts and/or features.

Meets NRHP Criteria? (check box if yes, shade if unknown)

- ☐ **A - Discussion:** Detail why the site is, or is not, eligible under Criterion A.
- ☐ **B - Discussion:** Detail why the site is, or is not, eligible under Criterion B.
- ☐ **C - Discussion:** Detail why the site is, or is not, eligible under Criterion C.
- ☐ **D - Discussion:** Detail why the site is, or is not, eligible under Criterion D.

Discussion of Integrity:
Discuss if artifacts/features identified do or do not retain integrity of design, setting, workmanship, feeling, or association as well as overall condition of the site.

Statement of Significance:
Discuss site significance based on the information gathered above and make recommendations (including further work needed).

Actions Taken:
Discuss actions taken (e.g., avoided, excavated, basic documentation, no further action, other)

Maps and Photographs should be attached.

ATTACHMENT 2

Identification, Protection, and Treatment of Built Historic Resources During the Reconstruction of the Burnside Bridge

Attachment 2

Identification, Protection, and Treatment of Built Historic Resources During the Reconstruction of the Burnside Bridge

1. Historic Properties Identified in the Area of Potential Effect (APE)

    a. Skidmore/Old Town Historic District National Historic Landmark

    A portion of the Project will occur within the boundaries of the Skidmore/Old Town Historic District, which was listed in the NRHP in 1975 and designated as a National Historic Landmark (NHL) in 1977.

    The Skidmore/Old Town Historic District NHL flanks the Burnside Bridge and is bounded roughly by NW Davis Street to the north, the Willamette River to the east, SW Stark Street to the south, and NW 3rd Avenue to the west.

    The following properties contribute to the Skidmore/Old Town Historic District NHL:

    - Bates Building: 101-117 W Burnside Street, Portland, Oregon (NW corner of NW 1st Avenue and west approach of Burnside Bridge)
    - Burnside Hotel: 2-12 NW 2nd Avenue, Portland, Oregon (NE corner of NW 2nd Avenue and west approach of Burnside Bridge)
    - Salvation Army Building: 134 W Burnside Street, Portland, Oregon (SE corner of SW 2nd Avenue and west approach of Burnside Bridge)
    - White Stag Block: 5 NW Naito Parkway, Portland, Oregon (north side of west approach of Burnside Bridge between NW 1st Avenue and NW Naito Parkway)

    These four properties are located immediately adjacent to the west approach of the Burnside Bridge, which will be removed and replaced as part of the Undertaking, and no adverse effects to these buildings have been identified.

    b. Historic Properties Not Located in Historic Districts

    The following property was individually listed in the NRHP in 1989:

    - Frigidaire Building: 230 E Burnside Street, Portland Oregon (SW corner of SE 3rd Avenue and east approach of Burnside Bridge)

    This property is located immediately adjacent to the east approach of the Burnside Bridge. The Frigidaire Building will have no adverse effect.

    The following properties have been determined eligible for listing in the NRHP:

    - Ankeny Pump Station: 30 NW Naito Parkway, Portland Oregon (West bank of the Willamette River and south of the Burnside Bridge)
    - Burnside Skatepark: E Burnside Street and NE/SE 2nd Avenue (East of NE/SE 2nd Avenue and underneath the east approach of the Burnside Bridge)

- Central Fire Station: 55 SW Ash Street (On the west side of Naito Parkway and south of the Burnside Bridge)
- Oregon & California Railroad/Union Pacific Railroad (UPRR): Railroad right-of-way (Linear alignment oriented north south and located east of Interstate-5 and underneath the east approach of the Burnside Bridge.
- Portland Harbor Wall/Seawall: Foot of SW Jefferson Street to foot of NW Glisan Street (West bank of the Willamette River and underneath the Burnside Bridge)
- Starks Vacuum Building: 107 NE Grand Avenue (On the northeast corner of NE Grand and NE Couch)
- White Stag Sign: On the roof of the White Stag Block (referenced above)

2. General Guidelines for Construction related to the Undertaking Within the Skidmore/Old Town Historic District NHL

    a. In order to avoid adverse effects to historic properties pursuant to 36 CFR 800.5, potential new construction within the Skidmore/Old Town Historic District NHL shall not directly or indirectly alter any of the characteristics of the Skidmore/Old Town Historic District NHL that qualify the property for inclusion in the NRHP in a manner that would diminish the historic district's integrity of location, design, setting, materials, workmanship, feeling, or association.

    b. In general, potential new construction within the boundaries of the Skidmore/Old Town Historic District NHL shall be sympathetic to, and not detract from, the historic district. The new construction shall be clearly differentiated from, but compatible with, historic buildings, structures, and objects within the Skidmore/Old Town Historic District NHL. The use of brightly colored or highly polished materials, such as chrome metal, glass, and stainless steel shall be avoided or kept to an absolute minimum. Additionally, potential new construction within the Skidmore/Old Town Historic District NHL shall meet the Secretary of the Interior's *Standards for Rehabilitation* (https://www.nps.gov/tps/standards/rehabilitation.htm, accessed April 2022). All 10 of the standards are equally important, but Standards 2, 3, 9, and 10 are particularly applicable to potential new construction within the Skidmore/Old Town Historic District NHL:

        - Standard 2: The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.
        - Standard 3: Each property shall be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken.

- Standard 9: New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.
- Standard 10: New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

In addition to the Secretary of the Interior's *Standards for Rehabilitation*, the City of Portland Bureau of Planning and Sustainability 2016 document, *Skidmore/Old Town Historic District Guidelines* (https://www.portland.gov/sites/default/files/2019-07/skidmore-ot-design-guidelines_adopted-06012016-web.pdf, accessed April 2022) also provides specific design guidelines for new construction within the Skidmore/Old Town Historic District NHL. The potential new construction shall also adhere to these design guidelines, which are regulated by the City of Portland Landmarks Commission.

3. General Guidelines for New Bridge Components Within the Skidmore/Old Town Historic District NHL

   a. Views Within the Skidmore/Old Town Historic District NHL

   In addition to adhering to Stipulation V, paragraph 2, General Guidelines for New Construction Within the Skidmore/Old Town Historic District NHL, the portion of the new Burnside Bridge and west approach located within the Skidmore/Old Town Historic District NHL shall also allow for views of the historic district from the sidewalks along the bridge structure. For the purposes of this Undertaking, designs that provide for maximum views of the historic district and conform to Stipulation V, paragraph 2, General Guidelines for New Construction Within the Skidmore/Old Town Historic District NHL, shall constitute no adverse effect to the Skidmore/Old Town Historic District NHL.

   To the maximum extent allowed by building codes and structural requirements, the design of the guardrails located along the outermost edge of the sidewalks shall be as transparent as possible. This is particularly important for portions of guardrails that extend higher than 36 inches above the sidewalk level, in order to allow for views for children, wheelchair users, and other users of short stature.

   In addition to the guardrail design, the addition of cantilevered sidewalk standoffs or viewing platforms may also be considered as a means to allow sidewalk users to view and appreciate the Skidmore/Old Town Historic District NHL. These cantilevered areas may also provide a location for interpretative panels or other informative signage required as mitigation for other adverse effects related to the Undertaking.

   b. Materials and Color

   In addition to adhering to Stipulation V, paragraph 2, General Guidelines for New Construction Within the Skidmore/Old Town Historic District NHL, the portion of the new

Burnside Bridge and west approach located within the Skidmore/Old Town Historic District NHL shall also adhere to the guidelines for materials and color contained in the City of Portland Bureau of Planning and Sustainability 2016 document, *Skidmore/Old Town Historic District Guidelines* (https://www.portland.gov/sites/default/files/2019-07/skidmore-ot-design-guidelines_adopted-06012016-web.pdf, accessed April 2022). These design guidelines are regulated by the City of Portland Landmarks Commission. For the purposes of this Undertaking, the use of materials and color that meet these design guidelines shall constitute no adverse effect to the Skidmore/Old Town Historic District NHL.

4. Guidelines for the Protection of Historic Features During Demolition and Construction

    a. In order to avoid adverse effects to historic properties pursuant to 36 CFR 800.5, all historic features of buildings and structures either listed in the NRHP or eligible for listing in the NRHP (Historic Properties) shall be preserved *in situ* and protected from damage during the entire duration of the Undertaking. In locations where demolition and construction will occur adjacent to Historic Properties, the following general guidelines for the protection of historic features shall be followed:

        i. The Contractor shall be responsible for preventing damage to Historic Properties during the entire duration of the Undertaking.
        ii. The Contractor shall visit the Project location and thoroughly familiarize themselves with the existing conditions of all Historic Properties located adjacent to the Burnside Bridge, which shall be protected during demolition and construction.
        iii. The Contractor shall document the existing conditions of all Historic Properties located adjacent to the Burnside Bridge prior to the commencement of demolition and construction.
        iv. The Contractor shall prepare a Protection Plan for all Historic Properties located adjacent to the Burnside Bridge. The proposed protection measures shall meet the Secretary of the Interior's *Standards for the Treatment of Historic Properties* (https://www.nps.gov/tps/standards/treatment-guidelines-2017.pdf, accessed April 2022). In general, the protection measures must be temporary, removable, and shall not be installed in such a manner that causes damage to the underlying historic features. The Protection Plan shall be prepared by Secretary of the Interior-qualified personnel and included with the 100 percent design package. The Protection Plan shall be sent to SHPO for concurrence and NPS for review prior to implementation. The Protection Plan shall be followed during the entire duration of the Undertaking. SHPO and NPS shall have 30 calendar days to review and comment on the Protection Plan. ODOT shall send the final Protection Plan to interested consulting parties and the Protection Plan will be the subject of a briefing meeting with interested consulting parties. No demolition-related activity or associated ground-disturbing activity that could result in impacts to historic buildings should be undertaken until the Protection Plan has been reviewed by NPS and reviewed and approved by SHPO.
        v. The Contractor shall install the protection measures prior to the commencement of demolition and/or construction.

vi. At locations where existing concrete sidewalks or bridge structural elements immediately adjacent to Historic Properties will be removed, the Contractor shall use hand tools to remove any existing expansion joints, adhesives, mastics, sealants, or other materials that may exist between the concrete and the facades of Historic Properties.

vii. The Contractor shall carefully probe the opened joint between the concrete and facades of Historic Properties to detect any mechanical attachment between the concrete and the facades of Historic Properties. Any existing mechanical attachments shall be carefully cut or disengaged using hand tools or handheld electric power tools.

viii. The Contractor shall saw cut or core drill the existing concrete sidewalk and/or bridge structural elements at least 18 inches away from the building front, so that sections of existing material may be cleanly detached and removed. During the saw cut or core drill process, the Contractor shall exercise extreme caution to physically protect all the features of Historic Properties around the active work area.

ix. The Contractor shall promptly notify Multnomah County of any damage to Historic Properties that may occur during demolition and construction. Multnomah County shall then notify ODOT and SHPO of the damage to Historic Properties and shall notify NPS of damage to Historic Properties within the Skidmore/Old Town Historic District NHL. SHPO shall have an opportunity to review and concur with any repairs/replacements of features damaged during the course of demolition and construction.

x. The Contractor shall repair or replace in kind, at the Contractor's expense, any features of Historic Properties damaged during the course of demolition and construction. The Contractor shall be responsible for locating sources of replacement materials damaged during demolition and construction. Any and all repairs shall meet the Secretary of the Interior's *Standards for the Treatment of Historic Properties* (https://www.nps.gov/tps/standards/treatment-guidelines-2017.pdf, accessed April 2022).

xi. Following the demolition of existing concrete sidewalks and bridge structural elements, the Contractor shall prepare a report documenting and illustrating the condition of the Historic Properties after the completion of demolition and before the commencement of construction. This report shall be submitted to Multnomah County, ODOT, SHPO, and NPS.

xii. An expansion joint shall be placed at all locations where new concrete sidewalks will be constructed adjacent to Historic Properties.

xiii. Following the completion of construction, the Contractor shall prepare a report documenting and illustrating the condition of the Historic Properties during the Project Closeout phase. This report shall be submitted to Multnomah County, ODOT, SHPO, and NPS.

ATTACHMENT 3

List of Historic Unreinforced Masonry Buildings Within 500 Feet of Construction-related Vibration Activities

Attachment 3: List of Unreinforced Masonry Buildings within 500 of Construction-related Vibration Activities

Address	Building Name	NRHP/NHL Status	Year Built
223-225 SW Ash Street	Bickel Building (Wachsmuch Building)	Contributing	1892
223-225 SW Ash Street	Bickel Building (Wachsmuch Building)	Contributing	1892
50 SW 2nd Avenue	New Market Theater	Contributing	1872
10-26 SW Third Avenue	Unnamed in NHL	Noncontributing	1908
131 SW Ankeny Street	Young's Marble Works (Salvation Army Building)	Contributing	1880
134 W Burnside	Salvation Army Buildings	Contributing	1904
108 W Burnside	Unnamed in NHL	Noncontributing	1890
14-18 NW Third Avenue	Glade Hotel	Contributing	1900
18-22 NW 4th Avenue	Tung Sang (Pulos-Karabelas Saloon)	Sec. Contributing NCJ	1910
28 NW 4th Avenue	Suzie Wong Restaurant	Sec. Significant	c. 1905
20 NW Third Avenue	Unnamed in NHL	Noncontributing	1938
22 NW Third Avenue	Unnamed in NHL	Noncontributing	1938
105 NW Third Avenue	Sinnott House (Florence McDonnell Bldg, Simon Bldg)	Contributing	1883
205 NW Couch Street	Rich Hotel (Rich Block)	Contributing	1914
110 NW Second Avenue	Oregon Leather Company	Noncontributing	c. 1900
115 NW First Avenue	Fleischner Building (Norcrest China Co.)	Contributing	1906
222 NW Davis Street	Merchant Hotel	Contributing	1884
58-66 SW Second Avenue	New Market Annex (New Market West)	Contributing	1889
75-83 SW First Avenue	New Market, South Wing (New Market Alley Bldg)	Contributing	1871

Sources: National Historic Register of Historic Places, National Historic Landmarks, City of Portland, modified by Willamette Cultural Resources.